Cisco Voice Provisioning Tool User and Phone Management Guide

Release 1.0

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Cisco Voice Provisioning Tool User and Phone Management Guide

Preface

This preface describes the purpose, audience, organization, and conventions for this guide and provides information on how to obtain related documentation:

Purpose

The *Cisco Voice Provisioning Tool User and Phone Management Guide* provides information on the following topics:

- Procedures and tips for provisioning users, phones, and device profiles for Cisco CallManager and Cisco Unity.
- Procedures and tips for provisioning users, phones, and device profiles by using the bulk provisioning functionality.
- Troubleshooting tips for addressing a problem that occurs when performing provisioning tasks.

Tip For more information on the topics that are provided in this guide, see the "Organization" section on page ii.

Audience

The *Cisco Voice Provisioning Tool User and Phone Management Guide* supports administrators that perform user and phone provisioning tasks for Cisco CallManager and Cisco Unity in the Cisco Voice Provisioning Tool.

Organization

Table 1 provides a list of chapters and chapter descriptions for this guide.

Table 1 Chapters in the Cisco Voice Provisioning Tool User and Phone Management Guide

Chapter	Description
Chapter 1, "Cisco Voice Provisioning Tool Overview"	Provides a basic overview of how you configure users in the Cisco Voice Provisioning Tool; provides a checklist for configuration tasks. Provides a basic overview of how you configure phones in the Cisco Voice Provisioning Tool; provides a checklist for configuration tasks. Provides basic information about device profiles. Describes how to resolve conflicts that are associated with the user configuration.
Management	
Chapter 2, "Management Overview"	Provides a list of provisioning privileges that you need to perform management tasks on product systems. Describes how to how to find, add, update, or delete single or multiple users in the Cisco Voice Provisioning Tool. Describes how to find, add, modify, and delete single or multiple phones/device profiles in the Cisco Voice Provisioning Tool.
Chapter 3, "Managing Users"	Provides procedures on how to find, add, update, or delete single or multiple users in the Cisco Voice Provisioning Tool. Provides procedures on how to add a phone on a user page; provides procedures on how to add a device profile on a user page; provides procedures on how to associate a user with a phone; provides procedures on how to delete an association.
Chapter 4, "Managing Phones or Device Profiles"	Provides procedures on how to find, add, modify, and delete single or multiple phones in the Cisco Voice Provisioning Tool; provides procedures on how to add, modify, or delete single or multiple device profiles.
Templates	
Chapter 5, "Template Overview"	Provides a list of the provisioning privileges that you need to perform template tasks on product systems. Describes how to find, view, add, update, delete, and apply user, phone, or device profile templates in the Cisco Voice Provisioning Tool.

Table 1 Chapters in the Cisco Voice Provisioning Tool User and Phone Management Guide

Chapter	Description
Chapter 6, "Using User Templates"	Provides procedures on how to find, view, add, update, and delete a user template in the Cisco Voice Provisioning Tool.
Chapter 7, "Using VPT Phone or Device Profile Templates"	Provides procedures on how to find, view, add, modify, or delete a phone/device profile template.
Bulk Provisioning	
Chapter 8, "Bulk Provisioning Overview"	Describes bulk import and export operations; describes the CSV file that is used for import and export operations; describes bulk provisioning states; provides procedures on related bulk administration tasks that you can perform for users or phones/device profiles (for example, downloading a CSV file).
Chapter 9, "Performing Bulk Operations for Users"	Provides procedures on how you can add or modify users by using the Cisco Voice Provisioning Tool bulk operation functionality; provides procedures on how to import and export users by using bulk operations.
Chapter 10, "Performing Bulk Operations for Phones and Device Profiles"	Provides procedures on how you can add or modify phone and device profiles by using the Cisco Voice Provisioning Tool bulk operation functionality; provides procedures on how to import and export phones/device profiles by using bulk operations.
Configuration Settings	
Chapter 11, "User Configuration Settings"	Describes configuration settings for user templates, user management, and bulk provisioning.
Chapter 12, "Phone Configuration Settings"	Describes configuration settings for phone templates, phone management, and bulk provisioning.
Chapter 13, "Device Profile Configuration Settings"	Describes configuration settings for device profile templates, device profile management, and bulk provisioning.

Related Documentation

See the following documents for more information on the Cisco Voice Provisioning Tool, Cisco CallManager, and Cisco Unity:

- *Cisco Voice Provisioning Tool Installation and Upgrade Guide*

  This document describes how to install and upgrade the Cisco Voice Provisioning Tool.

- *Cisco Voice Provisioning Tool System Management and Security Guide*

This guide provides descriptions of the Cisco Voice Provisioning Tool and its components, as well as step-by-step instructions for configuring and managing the tool itself—accessing and monitoring the system, creating and managing administrators, roles, and product systems, and configuring system security.

- *Cisco CallManager Documentation Guides for Release 4.1(x)*

  These documents provide lists of Cisco CallManager documents that are available with the 4.1(x) releases. The documents also provide URLs so that you can locate the documents on the web. To obtain these documentation guides, click the following URL:

  http://www.cisco.com/univercd/cc/td/doc/product/voice/c_callmg/4_1/doc_gd/index.htm

- *Cisco Unity Documentation Guide*

  This document provides a list of Cisco Unity documents that are available with the 4.0(x) release. The document also provides URLs so that you can locate the documents on the web. To obtain this documentation guide, click the following URL:

  http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products_documentation_roadmaps_list.html

Conventions

Consider the following documentation conventions as you review this guide.

Table 2 Documentation Conventions

Convention	Description
boldface screen font	Information that you must enter displays in **boldface** screen font.
blue text	Information acts as a hyperlink; click the blue text to go to the step, URL, chapter section, and so on.

Notes use the following conventions:

Note Means take note. Notes contain helpful suggestions or references to material not covered in the publication.

Timesavers use the following conventions:

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

Tips use the following conventions:

Tip Means the information contains useful tips.

Cautions use the following conventions:

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

Warnings use the following conventions:

Warning **Means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, you must be aware of the hazards involved with electrical circuitry and familiar with standard practices for preventing accidents.**

Obtaining Documentation

Cisco documentation and additional literature are available on Cisco.com. Cisco also provides several ways to obtain technical assistance and other technical resources. These sections explain how to obtain technical information from Cisco Systems.

Cisco.com

You can access the most current Cisco documentation at this URL:

http://www.cisco.com/univercd/home/home.htm

You can access the Cisco website at this URL:

http://www.cisco.com

You can access international Cisco websites at this URL:

http://www.cisco.com/public/countries_languages.shtml

Ordering Documentation

You can find instructions for ordering documentation at this URL:

http://www.cisco.com/univercd/cc/td/doc/es_inpck/pdi.htm

You can order Cisco documentation in these ways:

- Registered Cisco.com users (Cisco direct customers) can order Cisco product documentation from the Ordering tool:

  http://www.cisco.com/en/US/partner/ordering/index.shtml

- Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco Systems Corporate Headquarters (California, USA) at 408 526-7208 or, elsewhere in North America, by calling 1 800 553-NETS (6387).

Documentation Feedback

You can send comments about technical documentation to bug-doc@cisco.com.

You can submit comments by using the response card (if present) behind the front cover of your document or by writing to the following address:

Cisco Systems, Inc.
Attn: Customer Document Ordering
170 West Tasman Drive
San Jose, CA 95134-9883

We appreciate your comments.

Obtaining Technical Assistance

For all customers, partners, resellers, and distributors who hold valid Cisco service contracts, Cisco Technical Support provides 24-hour-a-day, award-winning technical assistance. The Cisco Technical Support Website on Cisco.com features extensive online support resources. In addition, Cisco Technical Assistance Center (TAC) engineers provide telephone support. If you do not hold a valid Cisco service contract, contact your reseller.

Cisco Technical Support Website

The Cisco Technical Support Website provides online documents and tools for troubleshooting and resolving technical issues with Cisco products and technologies. The website is available 24 hours a day, 365 days a year, at this URL:

http://www.cisco.com/techsupport

Access to all tools on the Cisco Technical Support Website requires a Cisco.com user ID and password. If you have a valid service contract but do not have a user ID or password, you can register at this URL:

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

Note Use the Cisco Product Identification (CPI) tool to locate your product serial number before submitting a web or phone request for service. You can access the CPI tool from the Cisco Technical Support Website by clicking the **Tools & Resources** link under Documentation & Tools. Choose **Cisco Product Identification Tool** from the Alphabetical Index drop-down list, or click the **Cisco Product Identification Tool** link under Alerts & RMAs. The CPI tool offers three search options: by product ID or model name; by tree view; or for certain products, by copying and pasting **show** command output. Search results show an illustration of your product with the serial number label location highlighted. Locate the serial number label on your product and record the information before placing a service call.

Submitting a Service Request

Using the online TAC Service Request Tool is the fastest way to open S3 and S4 service requests. (S3 and S4 service requests are those in which your network is minimally impaired or for which you require product information.) After you describe your situation, the TAC Service Request Tool provides recommended solutions. If your issue is not resolved using the recommended resources, your service request is assigned to a Cisco TAC engineer. The TAC Service Request Tool is located at this URL:

http://www.cisco.com/techsupport/servicerequest

For S1 or S2 service requests or if you do not have Internet access, contact the Cisco TAC by telephone. (S1 or S2 service requests are those in which your production network is down or severely degraded.) Cisco TAC engineers are assigned immediately to S1 and S2 service requests to help keep your business operations running smoothly.

To open a service request 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 list of Cisco TAC contacts, go to this URL:

http://www.cisco.com/techsupport/contacts

Definitions of Service Request Severity

To ensure that all service requests are reported in a standard format, Cisco has established severity definitions.

Severity 1 (S1)—Your network is "down," or there is a critical impact to your business operations. You and Cisco will commit all necessary resources around the clock to resolve the situation.

Severity 2 (S2)—Operation of an existing network is severely degraded, or significant aspects of your business operation are negatively affected by inadequate performance of Cisco products. You and Cisco will commit full-time resources during normal business hours to resolve the situation.

Severity 3 (S3)—Operational performance of your network is impaired, but most business operations remain functional. You and Cisco will commit resources during normal business hours to restore service to satisfactory levels.

Severity 4 (S4)—You require information or assistance with Cisco product capabilities, installation, or configuration. There is little or no effect on your business operations.

Obtaining Additional Publications and Information

Information about Cisco products, technologies, and network solutions is available from various online and printed sources.

- Cisco Marketplace provides a variety of Cisco books, reference guides, and logo merchandise. Visit Cisco Marketplace, the company store, at this URL:

  http://www.cisco.com/go/marketplace/

- The Cisco *Product Catalog* describes the networking products offered by Cisco Systems, as well as ordering and customer support services. Access the Cisco Product Catalog at this URL:

  http://cisco.com/univercd/cc/td/doc/pcat/

- *Cisco Press* publishes a wide range of general networking, training and certification titles. Both new and experienced users will benefit from these publications. For current Cisco Press titles and other information, go to Cisco Press at this URL:

  http://www.ciscopress.com

- *Packet* magazine is the Cisco Systems technical user magazine for maximizing Internet and networking investments. Each quarter, Packet delivers coverage of the latest industry trends, technology breakthroughs, and Cisco products and solutions, as well as network deployment and troubleshooting tips, configuration examples, customer case studies, certification and training information, and links to scores of in-depth online resources. You can access Packet magazine at this URL:

  http://www.cisco.com/packet

- *iQ Magazine* is the quarterly publication from Cisco Systems designed to help growing companies learn how they can use technology to increase revenue, streamline their business, and expand services. The publication identifies the challenges facing these companies and the technologies to help solve them, using real-world case studies and business strategies to help readers make sound technology investment decisions. You can access iQ Magazine at this URL:

  http://www.cisco.com/go/iqmagazine

- *Internet Protocol Journal* is a quarterly journal published by Cisco Systems for engineering professionals involved in designing, developing, and operating public and private internets and intranets. You can access the Internet Protocol Journal at this URL:

  http://www.cisco.com/ipj

- World-class networking training is available from Cisco. You can view current offerings at this URL:

  http://www.cisco.com/en/US/learning/index.html

Cisco Voice Provisioning Tool Overview

This chapter contains information on the following topics:

Understanding Cisco Voice Provisioning Tool Tasks

The Cisco Voice Provisioning Tool, a provisioning tool that works in conjunction with Cisco CallManager 4.1(3) and Cisco Unity 4.0(5) systems, allows you to perform the following provisioning tasks:

For Users

- Add, find, modify, and delete Cisco CallManager users
- Add, find, modify, and delete Cisco Unity users

- Configure Cisco Voice Provisioning Tool user templates and apply template settings to Cisco CallManager and Cisco Unity users
- Add and modify Cisco CallManager and Cisco Unity users through bulk provisioning
- Associate a device profile or phone with a user

For Phones

- Add, find, modify, and delete phones
- Subscribe or unsubscribe phones to IP Phone services that are configured in Cisco CallManager Administration
- Add, find, modify, and delete lines
- Add, find, modify, and delete shared lines
- Configure Cisco Voice Provisioning Tool phone templates and apply template settings to phones
- Add or modify phones (and lines) through bulk provisioning

For Device Profiles

- Add, modify, and delete device profiles
- Add configured IP Phone services to device profiles
- Add and modify line configuration that supports device profiles
- Configure Cisco Voice Provisioning Tool device profile templates and apply template settings to device profiles
- Add or modify device profiles (and line configuration) through bulk provisioning

Considerations for the Cisco Voice Provisioning Tool Graphical User Interface

Consider the following information as you perform tasks in the Cisco Voice Provisioning Tool. Use the information in conjunction with the descriptions and procedures that are discussed in this guide.

The Cisco Voice Provisioning Tool uses pop-up windows. Ensure that your browser is configured to accept pop-up windows.

The Refresh button that displays in your browser does not refresh the contents in the current configuration page in the Cisco Voice Provisioning Tool. Instead, clicking the Refresh button in your browser takes you to the Cisco Voice Provisioning Tool home page. To refresh the contents in the current page, click the current node in the navigation pane.

When you want to move to backward or forward in the Cisco Voice Provisioning Tool, particularly in a wizard, do not click the browser Forward or Back buttons. In fact, we recommend that you do not use these buttons when you perform any tasks in the Cisco Voice Provisioning Tool.

Clicking the Stop button on your browser does not stop the task that is occurring on the Cisco Voice Provisioning Tool server. The Stop button only controls the browser, not the server. Be aware that task results will not display in the browser if you click the Stop button.

You can navigate to pages via the navigation pane or via the hyperlinks that display in the configuration pages themselves. Likewise, the Cisco Voice Provisioning Tool may provide buttons that allow you to navigate throughout the tool.

If you cannot perform certain tasks because you do not have the appropriate provisioning privileges, most often the configuration options that are associated with the tasks, including the buttons, menus, hyperlinks, and so on, do not display in the graphical user interface (GUI). If the option displays for some reason and you do not have the appropriate provisioning privileges, the GUI displays a message that insufficient privileges exist and that the tool does not permit the action. For example, if you have the appropriate provisioning privileges to delete users on one product system and not another system, the delete button displays. The Cisco Voice Provisioning Tool only allows you to delete the users for the product systems where you have the appropriate provisioning privileges.

If a single configuration option relies on other configuration options, the single option appears disabled until you configure the related configuration options.

The Cisco Voice Provisioning Tool does not automatically validate all configuration options. When the tool validates the configuration and identifies an error, the tool displays a message that provides corrective actions. The tool does not validate template settings because you can enter a subset of the information that is required for the field, for example, part of the MAC address. An exception to this rule is the template name. The Cisco Voice Provisioning Tool verifies that you enter a valid template name.

Many factors determine whether an operation takes a short or long time to complete. Whenever possible, the Cisco Voice Provisioning Tool tries to anticipate when an operation will take a long time, and the tool alerts the administrator by displaying a warning. For example, attempting to delete or modify many users at the same time may take a considerable amount of time; therefore, the tool alerts you to this fact. When you search for users or phones, the tool does not display a warning.

Provisioning operations, including additions, modifications, and deletions, may result in a partial failure; that is, a portion of the operation may succeed and a portion may fail. Whenever possible, the tool indicates the portion of the configuration that failed or succeeded, displays a message on the page when a failure occurs, and also writes detailed information about the failure to the audit log.

If the tool or the product system times out for any reason and the product system has not received the data, the Cisco Voice Provisioning Tool does not try to send the information again to the product system. Error messages and audit logs provide details if the tool or system times out.

Understanding Users

This section contains information on the following topics:

Understanding Cisco CallManager Users

Cisco CallManager 4.1 uses the Data Connection Directory (DC-Directory) as an embedded LDAP directory, unless you choose to integrate Cisco CallManager with other enterprise directories, as described in *Installing the Cisco Customer Directory Configuration Plugin for Cisco CallManager Release 4.1(3)*.

DC-Directory stores authentication and authorization information about users and comes standard with Cisco CallManager; that is, it does not require any special configuration or installation. Authentication establishes the user right to access the system, while authorization identifies the telephony resources that a user is permitted to use, such as a specific phone extension.

You can access the user directory information from the user configuration pages in the Cisco Voice Provisioning Tool, which allow you to add, search, display, and maintain information about Cisco CallManager users.

Generally, for Cisco CallManager, completing user information remains optional; the devices function regardless of whether you complete this information. However, Directory Services, Cisco CallManager Attendant Console, Cisco IPMA, Cisco CallManager Extension Mobility, and the Cisco IP Phone User Options Pages access user information that you configure. If you want to provide these features for your users, you must configure users.

When you add a user, you can add a phone or device profile and then associate the phone or device profile with the user.

Understanding Cisco Unity Users

Anyone with an account on Cisco Unity is a subscriber, otherwise known as a user in this guide. Unlike Cisco CallManager, Cisco Unity considers user configuration mandatory.

Tip The following section lists in order the issues that you must consider before creating user accounts in the Cisco Voice Provisioning Tool. Be aware that you do not perform the following tasks in the Cisco Voice Provisioning Tool.

Cisco Unity Configuration and Permissions

For information on this topic, see the *Cisco Voice Provisioning Tool System Management and Security Guide*.

Licenses

Confirm that you have the Cisco Unity user licenses that are required for the type of subscriber (user) accounts that you plan to create. You can view the number of licenses purchased, and the number that are used and unused on your system, from the **System > Licensing** page in the Cisco Unity Administrator. If you need additional licenses, contact your reseller. If you need to upgrade your licenses, see the *Cisco Unity Reconfiguration and Upgrade Guide*, which is available at the following URL:

http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/rug/ex/index.htm

Account Policies

Account policies govern user passwords and account lockouts for all Cisco Unity user accounts. Account policies allow you to secure how users access Cisco Unity. For information on this setting up account policies, see the *Cisco Unity System Administration Guide (With Microsoft Exchange), Release 4.0(5)*.

Each account policy has default settings that you can modify in the Cisco Unity Administrator.

Enhanced Phone Security

You can set up Cisco Unity user accounts to use a secure logon method when subscribers access Cisco Unity by phone. For information on how to perform this task, see the *Cisco Unity System Administration Guide (With Microsoft Exchange), Release 4.0(5)*. If you choose to set up enhanced phone security, you must also create a new class of service or modify an existing one for the subscribers who will use enhanced phone security.

Classes of Service

A class of service (COS) defines limits and permissions for subscribers who use Cisco Unity. For example, a COS for Cisco Unity:

- Controls access to the Cisco Unity Administrator and to features such as Text to Speech e-mail.
- Controls how subscribers interact with Cisco Unity. For example, a COS dictates the maximum length of subscriber messages and greetings, whether subscribers can choose to be listed in directory assistance, whether subscribers use a secure logon method to access Cisco Unity by phone, and whether subscribers can send messages to a public distribution list.
- Specifies the restriction table used to control the phone numbers that subscribers can use for fax delivery, message notification, call transfer, and other tasks.

In the Cisco Unity Administrator, a COS is specified in each subscriber template; thus, a user is assigned to the COS that is specified in the template on which the user account is based. Cisco Unity includes predefined classes of service, which you can modify. You can also create new classes of service. For information on how to modify or create a new class of service, see the *Cisco Unity System Administration Guide (With Microsoft Exchange), Release 4.0(5)*.

Restriction Tables

Restriction tables in the Cisco Unity Administrator allow you to control the phone numbers that subscribers and administrators can use for:

- Transferring calls
- Recording and playback by phone from Cisco Unity applications, when the phone is the designated recording and playback device in the Media Master (the Media Master is available in the Cisco Unity Administrator, the Cisco Unity Assistant, the Cisco Unity Inbox, and ViewMail for Microsoft Outlook)
- Delivering faxes to a fax machine
- Sending message notifications
- Sending AMIS messages
- System transfers

Each class of service specifies a restriction table for call transfers, one for message notification, and one for fax deliveries. Cisco Unity comes with predefined restriction tables, which you can modify. For information on modifying restriction tables, see the *Cisco Unity System Administration Guide (With Microsoft Exchange), Release 4.0(5)*.

Public Distribution Lists

Public distribution lists are used to send voice messages to multiple users at the same time. Cisco Unity assigns new users to the public distribution lists that are specified in the template on which the user account is based. The class of service associated with a user account dictates whether that user can use Cisco Unity to send messages to public distribution lists. For information on this topic, see the *Cisco Unity System Administration Guide (With Microsoft Exchange), Release 4.0(5)*.

Subscriber Templates

In the Cisco Unity Administrator, you can specify settings for a group of users by using a subscriber template. The settings from the template you choose are applied to all user accounts as the accounts are created. Cisco Unity comes with a default subscriber template, which you can modify, and you can create an unlimited number of additional templates.

Subscriber templates contain settings that are applicable for users of a particular type, such as a department. Subscriber template settings also include default phone passwords for users, which are known as PINs in the Cisco Voice Provisioning Tool. If you want to do so, you can change the PIN in the Cisco Voice Provisioning Tool.

Bridge Networking Option

If your Cisco Unity installation includes the Bridge Networking option, confirm that you performed the necessary tasks so that Cisco Unity users can send messages to and receive messages from users on the Octel servers with which Cisco Unity communicates. You cannot perform these tasks by using the Cisco Voice Provisioning Tool. To perform these tasks, you must use either the Cisco Unity Administrator or the Cisco Unity Bulk Import wizard.

User Configuration Checklist

Table 1-1 describes the tasks that you perform when you configure a user in the Voice Provisioning Tool.

Table 1-1 User Directory Configuration Checklist

Configuration Steps		Related Procedures and Topics
Step 1	Review the descriptive information on Cisco CallManager and Cisco Unity users. This information provides an overview and/or a list of tasks that you perform before you configure a user.	• Understanding Cisco CallManager Users, page 1-3 • Understanding Cisco Unity Users, page 1-4
Step 2	Verify that you configured the product system(s) in the Cisco Voice Provisioning Tool.	*Cisco Voice Provisioning Tool System Management and Security Guide*
Step 3	If you have not already done so, add the user(s).	• Using User Templates, page 6-1 • Managing Users, page 3-1 • Performing Bulk Operations for Users, page 9-1
Step 4	If you have not already done so, configure the device profiles for the user(s).	Configuring Phones and Device Profiles for Users, page 3-5
Step 5	If you have not already done so, associate the user with a device.	Configuring Phones and Device Profiles for Users, page 3-5
Step 6	Notify users of the phone and voice mail features that are available for use.	See the Cisco IP Phone and Cisco Unity documentation for instructions on how users access features on the phone.

Where to Find More Information on Users

- Using User Templates, page 6-1
- Managing Users, page 3-1
- Configuring Phones and Device Profiles for Users, page 3-5
- Performing Bulk Operations for Users, page 9-1
- User Configuration Settings, page 11-1
- *Cisco CallManager Administration Guide*

- *Cisco CallManager System Guide*
- *Cisco CallManager Features and Services Guide*
- *Cisco Unity System Administration Guide (With Microsoft Exchange), Release 4.0(5)*
- *Cisco Voice Provisioning Tool System Management and Security Guide*
- *Cisco Unity Reconfiguration and Upgrade Guide*

Understanding Phones

This section contains information on the following topics:

Supported Cisco IP Phone Models

The Voice Provisioning Tool supports the following phones types:

Cisco IP Phone 7900 Family

The Cisco IP Phone 7900 family includes such phone models as the 7970, 7960, 7940, 7920, 7912, 7910, 7905, and 7902.

To identify the phones that are supported in the Cisco Voice Provisioning Tool, choose a product system from the Phone System drop-down list box on the specific Add New Phone or Manage Phone/Profiles <phone name> configuration page; then, choose **Phone** in the Device Class drop-down list box. In the Device Type drop-down list box, view the phone models that display.

Cisco IP Phone 7914 Expansion Module

Cisco IP Phone 7914 Expansion Module extends the functionality of the Cisco IP Phone 7960 by providing 14 additional buttons. To configure these buttons as lines or speed dials, make sure that you configure the phone button template in Cisco CallManager Administration.

The Cisco IP Phone 7914 Expansion Module includes an LCD to identify the function of the button and the line status. You can daisy chain two Cisco IP Phone 7914 Expansion Modules to provide 28 additional lines or speed-dial and feature buttons.

Tip You cannot configure speed-dial buttons in the Cisco Voice Provisioning Tool.

Cisco IP Conference Station 7935 and 7936

The Cisco IP Conference Station 7936 is a full-featured, IP-based, hands-free conference station for use on desktops and offices and in small to medium-sized conference rooms. Available features include Call Park, Call Pick Up, Group Call Pick Up, Transfer, and Conference (Ad Hoc and Meet-Me).

Cisco IP Communicator

Cisco IP Communicator is a software-based application that allows users to place and receive phone calls by using their personal computers. Cisco IP Communicator depends upon the Cisco CallManager call processing system to provide telephony features and voice-over-IP capabilities.

Cisco IP Communicator provides the same functionality as a full-featured Cisco IP Phone, while providing the portability of a desktop application. Additionally, you administer Cisco IP Communicator like you do other phone devices, that is, by accessing the phone configuration pages in the Cisco Voice Provisioning Tool.

Phone Restrictions

Use the following information in conjunction with the information that is described in the phone configuration chapters in this guide.

To achieve full feature support for the phone, you must perform some tasks in Cisco CallManager Administration.

The Cisco Voice Provisioning Tool may not support all phones that are available with Cisco CallManager 4.1(3).

All Cisco IP Phone models in the Cisco Voice Provisioning Tool do not support all features and services. For example, you can configure the device security mode for Cisco IP Phone models 7970, 7960, and 7940, but you cannot configure the device security mode for the Cisco IP Phone 7912. For the latest information on features and services that your phone models support, see the following documentation: phone administration or user documentation that supports the phone model and the version of the phone system that you specify in the Cisco Voice Provisioning Tool, firmware release notes for your phone model, and Cisco CallManager release notes.

Although you can configure the phone feature in the Cisco Voice Provisioning Tool, be aware that some phone features rely on a compatible phone firmware load, which may not automatically install with the Cisco CallManager version that runs in your cluster. If the compatible phone firmware load is not available with Cisco CallManager or on the Cisco IP Phone software download page, the feature does not work until you install a compatible firmware load. To obtain the latest firmware loads and related firmware readme files and/or release notes, go to the Cisco IP Phone software download page on www.cisco.com.

In the Cisco Voice Provisioning Tool, you cannot move a phone from one product system to another product system. To move a phone, you must delete the device, add the device again, and choose a different product system when you configure the device.

Phone Configuration Checklist

Table 1-2 describes the tasks that you perform to configure the phones in the Cisco Voice Provisioning Tool.

Table 1-2 Phone Configuration Checklist

Configuration Steps		Procedures and Related Topics
Step 1	Verify that you configured the product system(s) in the Cisco Voice Provisioning Tool.	*Cisco Voice Provisioning Tool System Management and Security Guide*
Step 2	Verify that you reviewed the restrictions for the phone configuration.	Phone Restrictions, page 1-8
Step 3	Ensure that you performed configuration tasks in Cisco CallManager Administration for the phone system that you want to use. For example, configure the following settings: • Phone button template, if you want to use a setting other than the default • Device pool, if you want to use a setting other than the default • Softkey template • Cisco IP Phone Services, if you want to use them • Calling Search Space, AAR Calling Search Space, and Logout Profile if Cisco CallManager Extension Mobility is enabled • Certificate Authority Proxy Function (CAPF), if you want to issues certificates to security-supported phones If you want to choose a user or network locale other than locales associated with English_United States, install the Cisco IP Telephony Locale Installer, as described in the locale installer documentation.	*Cisco CallManager Administration Guide*
Step 4	Gather information about the phone, for example, • Model • MAC address • Physical location of the phone • Cisco CallManager user to associate with the phone • Partition, calling search space, and location information, if used • Phone button template and device pool • Number of lines and associated DNs to assign to the phone	*Cisco CallManager System Guide*

Table 1-2 Phone Configuration Checklist (continued)

Configuration Steps		Procedures and Related Topics
Step 5	If you have not already done so, configure the phone.	• Using VPT Phone or Device Profile Templates, page 7-1 • Managing Phones or Device Profiles, page 4-1 • Performing Bulk Operations for Phones and Device Profiles, page 10-1 • Phone Configuration Settings, page 12-1
Step 6	If you have not already done so, add Cisco IP Phone services to the device.	• Using VPT Phone or Device Profile Templates, page 7-1 • Managing Phones or Device Profiles, page 4-1 • Performing Bulk Operations for Phones and Device Profiles, page 10-1 • Phone Configuration Settings, page 12-1
Step 7	If you have not already done so, add and configure lines (DNs) on the phone. You can also configure phone features such as call park, call forward, and call pickup.	• Configuring IP Phone Services and Lines, page 4-5 • Performing Bulk Operations for Phones and Device Profiles, page 10-1 • Phone Configuration Settings, page 12-1
Step 8	Associate user with the phone (if required).	Configuring Phones and Device Profiles for Users, page 3-5
Step 9	If you have not already done so, assign services to phone buttons, if required.	*Cisco CallManager Administration Guide*
Step 10	If you have not already done so, configure speed-dial buttons.	*Cisco CallManager Administration Guide*
Step 11	Provide power, install, verify network connectivity, and configure network settings for the Cisco IP Phone.	*Cisco IP Phone Administration Guide for Cisco CallManager*
Step 12	Make calls with the Cisco IP Phone.	See the user guide for your Cisco IP Phone.

Where to Find More Information on Phones

- Using VPT Phone or Device Profile Templates, page 7-1
- Managing Phones or Device Profiles, page 4-1
- Configuring Phones and Device Profiles for Users, page 3-5
- Performing Bulk Operations for Phones and Device Profiles, page 10-1
- Phone Configuration Settings, page 12-1
- *Cisco CallManager Administration Guide*
- *Cisco CallManager System Guide*
- *Cisco CallManager Features and Services Guide*
- *Cisco IP Phone Administration Guide for Cisco CallManager*

Understanding Device Profiles

A device profile comprises the set of attributes (services and/or features) that are associated with a particular device. Device profiles include name, description, phone button template, add-on modules, softkey templates, multilevel precedence and preemption (MLPP) information, directory numbers, subscribed services, and speed-dial information. You can assign the user device profile to a user so that when the user logs in to a device, the user device profile that you have assigned to that user loads onto that device as a default login device profile. After a user device profile is loaded onto the phone, the phone picks up the attributes of that device profile.

You can also assign a user device profile to be the default logout device profile for a particular device. When a user logs out of a phone, for example, the logout device profile loads onto the phone and gives that phone the attributes of the logout device profile. In Cisco CallManager Administration, you can create, modify, or delete the user device profile. If a user device profile is used as the logout device profile, you cannot delete the user device profile.

Tip The Cisco Voice Provisioning Tool treats device profiles like phones; that is, in the GUI, you configure device profiles the same way that you configure phones. This document combines procedures for device profiles and phones whenever possible. Phones and device profiles have individual configuration setting chapters because different settings may display for phones.

This section contains information on the following topics:

Device Profiles for Cisco IP Phone Models

The Cisco Voice Provisioning Tool supports the device profiles for the following phones types:

Cisco IP Phone 7900 Family

You configure device profiles for Cisco IP Phone models, for example, the 7970, 7960, 7940, 7912, and 7905.

To identify whether a device profile exists for a Cisco IP Phone model, choose a product system from the Phone System drop-down list box on the specific Add New Phone or Manage Phone/Profile <profile name> configuration page; then, choose **Device Profile** in the Device Class drop-down list box. In the Device Type drop-down list box, view the options that display.

Cisco IP Communicator

If you want to do so, you can configure a device profile for Cisco IP Communicator, which is a software-based application that allows users to place and receive phone calls by using their personal computers. Cisco IP Communicator depends upon the Cisco CallManager call processing system to provide telephony features and Voice-over-IP capabilities.

Cisco IP Communicator provides the same functionality as a full-featured Cisco IP Phone, while providing the portability of a desktop application. Additionally, you administer Cisco IP Communicator like you do other phone devices, that is, by using the phone configuration pages in the Cisco Voice Provisioning Tool.

Device Profile Configuration Checklist

Table 1-2 describes the tasks that you perform to configure a device profile.

Table 1-3 Device Profile Configuration Checklist

Configuration Steps		Procedures and Related Topics
Step 1	Verify that you configured the product system(s) in the Cisco Voice Provisioning Tool.	*Cisco Voice Provisioning Tool System Management and Security Guide*
Step 2	Configure the device profile(s).	• Using VPT Phone or Device Profile Templates, page 7-1 • Managing Phones or Device Profiles, page 4-1 • Performing Bulk Operations for Phones and Device Profiles, page 10-1 • Device Profile Configuration Settings, page 13-1
Step 3	Add or search for a user.	• Using User Templates, page 6-1 • Managing Users, page 3-1 • Performing Bulk Operations for Users, page 9-1 • User Configuration Settings, page 11-1
Step 4	If you have not already done so, associate the user with the device profile (if required).	Configuring Phones and Device Profiles for Users, page 3-5
Step 5	Notify users of the features that they have available for use.	See the phone documentation for information on how users access features on the Cisco IP Phone.

Where to Find More Information on Device Profiles

- Configuring Phones and Device Profiles for Users, page 3-5
- Using VPT Phone or Device Profile Templates, page 7-1
- Managing Phones or Device Profiles, page 4-1
- Performing Bulk Operations for Phones and Device Profiles, page 10-1
- Device Profile Configuration Settings, page 13-1
- *Cisco CallManager Administration Guide*
- *Cisco CallManager System Guide*
- *Cisco CallManager Features and Services Guide*
- *Cisco IP Phone Administration Guide for Cisco CallManager*

Understanding Provisioning Privileges

To perform tasks in the Cisco Voice Provisioning Tool, a role or administrator must have the provisioning privilege for the product system; the Full Provisioning and superadmin roles by default are set up to have all provisioning privileges.

See the following sections for information on the provisioning privileges that you need to perform a task:

- Overview for Management Provisioning Privileges, page 2-2
- Overview for Provisioning Privileges for Templates, page 5-1
- Overview of Bulk Provisioning Privileges, page 8-2

Tip For information on roles and administrators, see the *Cisco Voice Provisioning Tool System Management and Security Guide*.

Resolving Conflicts That Display in the Cisco Voice Provisioning Tool

Tip Use the following information in conjunction with other information that is provided throughout this document.

Whenever possible, the Cisco Voice Provisioning Tool attempts to identify issues with the configuration. The Cisco Voice Provisioning Tool does not automatically fix the problem that it identifies. If the tool identifies a problem with the configuration that you performed in the tool (for example, you did not enter the mandatory settings when you configured the user), you can fix the problem on the specific configuration page in the tool.

If the tool identifies conflicts with the data that multiple product systems present (for example, in the Manage User search results page), the conflicts display in red. These type of conflicts occur between one Cisco CallManager and other Cisco CallManager systems, between Cisco CallManager and Cisco Unity systems, and between one Cisco Unity and other Cisco Unity systems.

Tip If you cannot resolve a conflict in the Cisco Voice Provisioning Tool, you must go to the version of the application that you specified for your product system; for example, browse to the Cisco CallManager 4.1(3) publisher database server if you specified that server for your product system.

The following examples describe conflicts that the Cisco Voice Provisioning Tool identifies, and how to resolve the conflicts:

- A user with the same user ID exists on multiple Cisco CallManager or Cisco Unity product systems; for example, jsmith exists on vpt-ccm2 and vpt-ccm3 at the same time.

To resolve this conflict, you must evaluate whether the user ID exists for one person or two different people. If the user ID exists for one person, it should only exist in one Cisco Unity product system and/or one Cisco CallManager product system. To resolve the conflict, you can delete the user from the product system by using the Cisco Voice Provisioning Tool, or you can access the product system to delete the user.

- A user with the same user ID does not have the same first name or same last name; for example, user ID jsmith exists for John Smith and Joe Smith.

To resolve this conflict, click the user on the Manage User search results page; after the record displays, update the user information to ensure that no conflict exists.

Tip If you attempt to view an ambiguous user record, a message states that you must choose a product system for the user.

- In the Cisco Voice Provisioning Tool, you perform a search for phones. The phones display in the Manage Phone/Profile search results page; while the search results page displays, the phones are deleted from the Cisco CallManager product system(s). Clicking the phone on the search results page displays an error message that the phone was not found.

To resolve this conflict, run the search again to view the latest data available. The deleted phones should not display.

- In the Cisco Voice Provisioning Tool, you display a specific phone configuration page and update the settings; at the same time, another administrator updates the settings on the product system. Because the Cisco Voice Provisioning Tool displays data from the product system database, you may not have the latest data available.

To resolve this conflict, refresh the page. To refresh the contents in the current page, click the current node in the navigation pane.

Management Overview

In the Cisco Voice Provisioning Tool, you can find, view, add, update or delete users for Cisco CallManager and Cisco Unity; likewise, you can find, view, add, update or delete phones or device profiles for Cisco CallManager. Review the information in this chapter if you need to find, view, add, update, or delete a single user, phone, or device profile. This chapter also applies if you need to find, view, update, or delete multiple users, phones, or device profiles at the same time.

Tip This chapter does not provide procedures for finding, adding, updating, deleting, and applying users, phones, and device profiles. For information on these topics, see the "Where to Find More Information on User, Phone, and Device Profile Management" section on page 2-11.

This chapter, which provides a basic overview of user, phone, and device management, contains information on the following topics:

Overview for Management Provisioning Privileges

To perform the management tasks that are described in this chapter, a role or administrator must have the provisioning privilege for the product system; the Full Provisioning and superadmin roles by default are set up to have all provisioning privileges.

Table 2-1 describes the provisioning privileges that you must have to perform management tasks for the product system.

Tip Having a privilege for a phone/profile does not mean that you have the privilege for the user.

Tip The View privilege, which includes View Phone/Device Profile, View User, View User Template, or View Phone/Device Profile Template, is required for searching for and viewing specific configuration pages. If you have the View privilege but do not have the Modify privilege, which includes Modify Phone/Device Profile, Modify User, Modify User Template, or Modify Phone Template, you can view the specific configuration page but you cannot save any updates for the configuration.

Table 2-1 Provisioning Privileges for Tasks

Task	Provisioning Privilege
Phone/Device Profile Management	
Finding a Phone/Device Profile	View Phone/Device Profile
Adding a Phone/Device Profile	Add Phone/Device Profile
Updating a Phone/Device Profile	Modify Phone/Device Profile
Deleting a Phone/Device Profile	Delete Phone/Device Profile
User Management	
Finding a User	View User
Adding a User	Add User

Table 2-1 Provisioning Privileges for Tasks (continued)

Task	Provisioning Privilege
Updating a User	Modify User
Deleting a User	Delete User

Note For information on roles and administrators, see the *Cisco Voice Provisioning Tool System Management and Security Guide*.

Overview for Finding a User, Phone, or Device Profile

For an overview for finding users or phones/device profiles, see the following sections:

- For Finding Users, Phones, and Device Profiles, page 2-3
- For Finding Users Only, page 2-4
- For Finding Phones/Device Profiles Only, page 2-4

For Finding Users, Phones, and Device Profiles

Tip The following information applies when you search for users, phones, or device profiles.

The Cisco Voice Provisioning Tool allows you to either search for users or phones/device profiles, but it does not allow you to search for users and phones/device profiles at the same time. After a search results page displays, you can access specific configuration records for users or phone/device profiles, immediately view some information about records, reset multiple phones for phone records, or update several configuration records at the same time.

By default, when you perform a search for a user or phone/device profile, the system searches across all product systems for which you have privileges. Searching across several product systems may cause performance degradation. We recommend that you narrow your search when you search for multiple users/phones/device profiles or if you search for a single user/phone/device profile across several product systems; for example, we recommend that you specify the product systems where you want the tool to search.

Search results depend on the following factors:

- The plug-in that is installed on the Cisco Voice Provisioning Tool; the plug-in defines the possible types of data that display for the columns.
- The presence of the user/phone/device profile on the product system; for example, if the user is not configured for the product system, the user does not display in the search results.
- The search criteria that you specified.

Depending on the type of search you perform and the type of Cisco Voice Provisioning Tool plug-in installed on the server, different columns display in the search results. For example, if you search for a Cisco Unity user on a server that contains Cisco CallManager and Cisco Unity plug-ins, columns display for Cisco CallManager and Cisco Unity, but search results display only in the columns that are defined by the Cisco Unity plug-in.

If you perform an advanced search and then switch back to a basic search, the system searches based on the basic search criteria that you configure.

The tool only displays results that are returned by responding product systems. If one or more servers do not respond, a specific error message for each server that did not respond displays in the GUI.

Depending on your browser settings, the browser may cache the search results. If you click the Back button to go to a previous search results page, the tool may present outdated search results because the data was cached by the browser. For example, if you navigate to the Manage Users page after clicking the Back button, the following message displays: "Cached Results: <number of records> records," to indicate that the search results may be outdated. To see the latest search results available, click the Go button.

After the results display, you can sort the information in the columns by clicking the column headers in the table.

For Finding Users Only

Tip The following information applies only for user configuration.

When you search by user ID, you must enter the entire user ID because Is Exactly is the only option for user IDs; the tool may display no results or incorrect results if you enter partial information.

When searching for Cisco Unity users, the tool only displays results for users that use Internet or Exchange subscriber types.

If a primary extension is configured for the user, it displays in the search results.

For Finding Phones/Device Profiles Only

Tip The following information applies only for phone/device profile configuration.

You can search for a phone or device profile by using the search criteria that the GUI displays, for example, phone name, phone description, device type, and so on. If you do not specify search criteria, the tool searches all product systems, all phones, and all device profiles.

The tool can display all device types when you perform a search, but the device name does not display as a hyperlink if the tool does not support the device type. You can delete phones or device profiles that the tool does not support, but you cannot modify the records.

If you want to do so, you can reset phones from the Manage Phones/Profiles page.

Overview for Adding a User, Phone, or Device Profile

The Cisco Voice Provisioning Tool allows you to add a single user, phone, or device profile. For overview information on these tasks, see the following sections:

- For Adding a User, Phone, or Device Profile, page 2-5
- For Adding a Phone Only, page 2-6
- For Adding a Device Profile Only, page 2-6

For Adding a User, Phone, or Device Profile

Tip The following information applies if you are adding a user, phone or device profile.

Initial parameters, which includes the product system and template name drop-down list boxes, display when you open a specific user, phone, or device profile configuration page. After you enter the data for the initial parameters, the page refreshes and displays more settings for you to complete.

After you save the information, the tool validates that you completed all mandatory settings and that you entered the data correctly. If the information is correct, the tool sends the information to the Cisco CallManager and/or Cisco Unity server that you specified for the product system.

Mandatory settings are marked with an asterisk (*). If you save the page before you configure all mandatory settings, the GUI displays an error message.

For information on applying a template to a user, phone, or device profile record, see the "Overview for Applying a Template to a Specific Configuration Page" section on page 5-4.

Clicking the Cancel button before you save the configuration automatically changes the configured settings to the default.

If an error occurs, the tool displays which portion of the operation failed, for example, specifying that the line configuration failed. If part of the operation succeeds and part of it fails, the GUI displays the portion that succeeded and the portion that failed, for example, specifying that you successfully added the phone to the database, but the line configuration failed. Even if one part of the configuration fails, the tool attempts to add the other configuration settings to the product system database.

If the product system goes down when the tool attempts to save the data, the tool cannot determine whether the information was stored in the product system database. If the operation times out, the tool assumes that the operation failed; an error message displays in the GUI and the Add New page continues to display.

For Adding a User Only

Tip The following information applies only for user configuration.

When you add a user through the Cisco Voice Provisioning Tool, you can perform the following sets of tasks if both the Cisco CallManager and Cisco Unity plug-ins exist on the Cisco Voice Provisioning Tool server:

- Add data for a user to single or multiple product systems
- Add data for a user to the product system(s) and associate existing phones with the user
- Add data for a user to the product system(s), create new phones, and then associate the new phones with the user

The Cisco Voice Provisioning Tool does not support importing of existing Microsoft Exchange users. When you use a Cisco Unity server to add a user, the Cisco Unity server creates the Unity PIN and password and allocates it to the user. The Cisco Voice Provisioning Tool does not allow you to specify a Cisco Unity password when you add or modify a user record, although you may set the Unity PIN.

If you specify Cisco Unity for your Message System, you must configure a user; if you do not want to configure a user, choose Not Selected from the Message System drop-down list box.

For Cisco CallManager product systems, you can add the user data, add phones, associate the user with the phones, and specify a primary extension and default profile, if you want to do so. Although Cisco CallManager requires that you configure the mandatory settings for the user, it does not require that you add the phone, associate the user to the phone, or specify a primary extension and default profile.

If the user ID that you enter already exists for the Cisco CallManager and/or Cisco Unity product system, the operation fails.

If you exceed the licensing limits for the Cisco Unity servers, the operation fails for Cisco Unity.

For Adding a Phone Only

Tip The following information applies only for phone configurations.

When you add a phone, you configure basic phone settings, such as the MAC address and the phone button template. On the Add a Phone/Profile page, you can also subscribe to IP phone services that you installed, configure lines (directory numbers), and set advanced settings, such as security, locales, and music on hold audio sources.

The configuration that you specify for the Cisco Voice Provisioning Tool phone template, phone system, device class, and device type affect the settings that display when you add a phone. The features and phones that are supported for a particular Cisco CallManager version affect which settings display in the GUI. Likewise, the option that you choose for the Cisco Voice Provisioning Tool phone template affects the options that display for the phone system, device class, and device type drop-down list boxes. The phone system selection affects the device class, and the device class affects the options that display in the Device Type drop-down list box.

If the tool cannot add the phone to the database, the tool does not attempt to add the line configuration. If all line information for the phone is not added, the GUI highlights the settings that you must reconfigure.

After you add the phone, reset the phone for the changes to take effect.

For Adding a Device Profile Only

When you add a device profile, you configure basic device profiles settings, such as the device profile name and the phone button template. On the Add New Phone/Profile page, you can also subscribe to IP phone services that you configured in Cisco CallManager Administration, configure lines (directory numbers), and set advanced settings, such as security, locales, and music on hold audio sources.

Overview for Updating a Single User, Phone, or Device Profile

When you update a single user, phone, or device profile record, the Cisco Voice Provisioning Tool retrieves the data from the product system database(s) and automatically populates the settings with the data.

Use the information in the "Overview for Finding a User, Phone, or Device Profile" section on page 2-3 in conjunction with the information in this section. All information in the "Overview for Finding a User, Phone, or Device Profile" section on page 2-3 applies.

For overview information on updating a single user, phone, or device profile, see the following sections:

- For Updating a Single User, Phone, or Device Profile, page 2-7
- For Updating a Single User Only, page 2-7

- For Updating a Single Phone or Device Profile Only, page 2-7

For Updating a Single User, Phone, or Device Profile

Tip The following information applies for users, phone, and device profile configuration.

When errors occur, the modification fails, and the GUI displays an error message.

Some settings display as read only and therefore cannot be modified; for example, you cannot modify the user ID, and you cannot modify the product system if it was previously chosen.

For information on applying templates when you update a single configuration record, see the "Overview for Applying a Template to a Specific Configuration Page" section on page 5-4.

For Updating a Single User Only

Tip The following information applies only for user configuration.

If you did not choose a product system when you added the user, those product system settings do not display when you update the record; for example, Cisco Unity settings do not display if a Message system was not chosen when you added the user.

You cannot update information for a user that exists on more than one product system if the first and last name of the user do not match on all systems. For example, if the user ID jsmith displays for CCM 1 and Unity 1 but the first name on the two systems is Jon and John respectively, you cannot modify the record unless you specify the product system type. If the discrepancy displays for two servers of the same product system type, for example, Jon and John display for CCM 1 and CCM 2 respectively, you must update the user for one server at a time. In this example, when you update the user information, you must choose CCM 1, update the information, click Save, and then you must choose CCM 2, update the information, and click Save. The tool does not update the information simultaneously for both systems.

You cannot apply a Cisco Unity subscriber template when you update a user record. If you configured Cisco CallManager settings for the user but no Cisco Unity settings when you initially added the user record, the Cisco Unity settings display on the Add New User page. If you configured Cisco CallManager and Cisco Unity settings for the user when you initially added the user record, a subset of settings display.

When you update a user record, the CCM password, CCM PIN, and Unity PIN fields display as encrypted text. To change these settings on this page, you must click the Reset button.

If you did not choose a product system when you added the user, you can choose the product system when you modify the user record.

After you choose a Phone System, Message system, and user ID for a user, you cannot update the information or move the user from one server to another server.

For Updating a Single Phone or Device Profile Only

Tip The following information applies only for phone and device profile configuration.

When you update a phone or device profile, the settings in the Phone System, Device Class, and Device Type drop-down list boxes display as read only, and therefore cannot be modified.

Clicking Cancel before you save the data automatically displays the data that the tool retrieved from Cisco CallManager. If you modified line information and clicked Cancel before you saved the information, the tool displays the default settings.

For phones only, always reset/restart the phone for the updates to take effect.

Overview for Updating Multiple Users, Phones, or Device Profiles

The Cisco Voice Provisioning Tool allows you to update multiple users, phones, or device profiles at the same time; by using this functionality, you can update multiple phones, users, or device profiles, but not all three types at the same time.

Use the information in the "Overview for Finding a User, Phone, or Device Profile" section on page 2-3 in conjunction with the information in this section. All information in the "Overview for Finding a User, Phone, or Device Profile" section on page 2-3 applies.

For overview information on updating multiple users, phones, or device profiles, see the following sections:

For Updating Multiple Users, Phones, or Device Profiles

Tip The following information applies for user, phone, and device profile configuration.

The Cisco Voice Provisioning Tool allows you to update multiple users, phones, or device profiles at the same time; by using this functionality, you can update multiple phones, users, or device profiles, but not all three types at the same time.

When you modify multiple users, phones, o r device profiles at the same time, the tool provides a wizard so that you can choose several records, choose one or more settings/attributes to update, update the settings, and then apply the settings to the chosen records.

In the wizard, the Multi-Modify button appears disabled until you check the check box for the users, phones, or device profiles. If you fail to choose any settings for modification, the tool disables the Next button, and you cannot proceed with the modification.

Clicking the Cancel button during the configuration causes a confirmation dialog box to display in the wizard. Clicking Yes in the dialog box automatically deletes the data and displays the first page of the wizard; that is, the search results page where you choose the records that you want to modify.

All settings do not display in the wizard, but the settings that you update apply to all users (or phones or device profiles) in the list. You cannot update individual records by using the wizard. If the setting does not display in the wizard, you must go to the individual configuration record to modify the attribute.

If the tool fails to save the information for a single user, phone, or device profile in the list, the saving operation does not stop. After the tool attempts to save the configuration information, the first page of the wizard displays and shows any errors that the tool identified.

Tip Do not use the procedures for updating multiple users, phones, or device profiles if you plan to modify a large number of users, phones, or device profiles. Consider using the procedure if you want to modify 10 or fewer users, phones, or device types. For updating a large number of users, phones, or device profiles, consider using the bulk provisioning functionality in the Cisco Voice Provisioning Tool.

For Updating Multiple Users Only

Tip The following information applies only for user configuration.

When the chosen users exist on one server for each product system type, for example, the users exist on CCM 1 and Unity 2, or Unity 1 and CCM 2, you can modify multiple users at the same time.

When the chosen users exist on more than one server of the same product system type, for example, the users exist on CCM 1 and CCM 2, or Unity 1 and Unity 2, the tool does not allow you to modify multiple users at the same time. Under these circumstances, an error message displays in the GUI to alert you to the restriction.

After the user list displays in the wizard, the product system settings are read only.

For Updating Multiple Phones Only

Tip The following information applies only for phone configuration.

You can update multiple phone records at the same time if you specified a particular phone system when you performed a search for the phones.

The chosen phones must exist on the same Cisco CallManager system, and the Cisco Voice Provisioning Tool must support the device type. If a problem occurs, an error message displays in the GUI to alert you to the restrictions.

The Cisco Voice Provisioning Tool does not allow you to update some settings when you update multiple phones; for example, you cannot update the following settings:

- Line Settings
- Phone button template
- Extension mobility settings
- Display Internal Caller ID
- Owner User ID
- Expansion module settings
- IP Phone service settings

If you choose more than one device type to modify, the tool displays only the settings that are common amongst the phone models. For example, if you choose to modify a Cisco IP Phone 7970 and a Cisco IP Phone 7940, only common settings (for example, device security mode) display in the GUI.

The Phone System setting displays as read only because the tool does not support moving phones from one Cisco CallManager to another Cisco CallManager.

After you make the modifications, reset/restart the phones. The phones do not receive the changes until you perform this task.

For Updating Multiple Device Profiles Only

Tip The following information applies only for device profile configuration.

To update multiple device profiles at the same time, the chosen device profiles must exist on the same Cisco CallManager system, and the Cisco Voice Provisioning Tool must support the device type. If a problem occurs, an error message displays in the GUI to alert you to the restriction.

The Cisco Voice Provisioning Tool does not allow you to update some settings when you update multiple device profiles; for example, you cannot update the following settings:

- Line Settings
- Phone button template
- IP Phone service settings

If you choose more than one device type to modify, the tool displays only the settings that are common amongst the types. For example, if you choose to modify a device profile for a Cisco IP Phone 7970 and a Cisco IP Phone 7940, only common settings display in the GUI.

The Phone System setting displays as read only because the tool does not support moving device profiles from one Cisco CallManager to another Cisco CallManager.

Overview for Deleting a Single User, Phone, or Device Profile from a Specific Configuration Page

If you want to do so, you can delete a user, phone, or device profile on a specific configuration page. After you search for the user, phone, or device profile and display the corresponding configuration page, click the Delete button.

Tip All lines that are associated with a phone/device profile are deleted when you delete the device, unless the line is configured as a shared line. If the line is shared with another phone, you can delete the chosen device, but you cannot delete the line because the other phone uses it.

For more information on deletions, see the following sections:

- Deleting Users, page 3-10
- Deleting a Phone or Device Profile, page 4-14

Overview for Deleting Users, Phones, or Device Profiles from a Search Results Page

You can delete single or multiple users, phones, or device profiles from the search results page that displays after you perform a search. Remember that searches are performed for users, phones, or device profiles, not all types at the same time. Therefore, deletions on the search results page are performed for users, phones, or device profiles, not all types at the same time.

On the search results page, the Delete button appears disabled until you check the check boxes for the users, phones, or device profiles.

Tip All lines that are associated with a phone/device profile are deleted when you delete the device, unless the line is configured as a shared line. If the line is shared with another phone, you can delete the chosen device, but you cannot delete the line because the other phone uses it.

For more information on deletions, see the following sections:

- Deleting Users, page 3-10
- Deleting a Phone or Device Profile, page 4-14

Overview for Applying a Template to a User, Phone, or Device Profile

For information on applying a template, see the "Overview for Applying a Template to a Specific Configuration Page" section on page 5-4.

Overview for Applying IP Phone Services to Phones and Device Profiles

For information on applying IP Phone services to phones and device profiles, see the "Configuring IP Phone Services and Lines" section on page 4-5.

Overview for Configuring Lines for Phones and Device Profiles

After you choose the phone button template for the phone or device profile, you can configure lines for phones or device profiles. For information on configuring line settings for phones and device profiles, see the "Configuring IP Phone Services and Lines" section on page 4-5.

Where to Find More Information on User, Phone, and Device Profile Management

- Management Overview, page 2-1
- Managing Users, page 3-1
- Managing Phones or Device Profiles, page 4-1
- User Configuration Settings, page 11-1
- Phone Configuration Settings, page 12-1
- Device Profile Configuration Settings, page 13-1

Managing Users

The Cisco Voice Provisioning Tool allows you to find, add, update, or delete a user. If you want to do so, you can find, update, or delete multiple users at the same time.

Use the information in this chapter in conjunction with the "Management Overview" section on page 2-1, which provides descriptive information and important caveats for managing your users.

This chapter contains information on the following topics:

Finding and Viewing a User

To find and view a user, perform the following procedure.

To Find and View a User

Step 1 In the Cisco Voice Provisioning Tool, choose **Users > Manage Users**.

Tip We recommend that you narrow your search before you click Go. If many users and product systems exist for the search, performance degradation may occur.

Step 2 In the Phone System and Message System drop-down list boxes, specify the search criteria.

Step 3 If you want to do so, narrow the search criteria for your choices in the drop-down list boxes by choosing additional search parameters, or click **Advanced Search** to expand the search criteria and enter the search information.

Step 4 Click **Go**.

Step 5 To navigate through the search results, perform the following tasks as applicable:

- In the Rows Per Page drop-down list box, choose the number of rows that you want to display on the page.
- In the Page field, enter the page that you want to display, then click **Go**.
- To go to the last page of results, click the forward double-arrow button.
- To go to the next page of results (for example, to go from page 1 to page 2), click the forward single-arrow button.
- To go to the first page of results, click the backward double-arrow button.
- To go to the preceding page (for example, to go from page 2 to page 1), click the backward single-arrow button.

Tip To sort the columns, click the column header at the top of the table.

Step 6 Perform one of the following tasks:

- If you want to view only one user record, click the User ID link for the specific user. The user record displays. If you want to update a single user record after the record displays, see the "Updating a Single User" section on page 3-3.
- If you want to update multiple user records at the same time, see the "Updating Multiple Users at the Same Time" section on page 3-4.
- If you want to delete the user record(s), see the "Deleting Users" section on page 3-10.

Adding a User

To add a user, perform the following procedure.

To Add a User

Step 1 In the Cisco Voice Provisioning Tool, choose **Users > Add New User**.

Step 2 If you want to apply a Voice Provisioning user template to the user, choose a template from the Template-Name drop-down list box.

Step 3 Enter the basic user configuration settings, as described in the "User Parameters (Basic User Settings)" section on page 11-1.

Step 4 Choose a phone system type and voice mail system type from the Phone System and Message System drop-down list boxes, respectively.

If you chose a Cisco Voice Provisioning Tool user template from the Template Name drop-down list box, your settings for that template display in the system drop-down list boxes.

You must choose at least one system type.

The Cisco CallManager and Cisco Unity settings for users display after the page refreshes.

Tip To expand the CallManager User Information and/or the Unity User Information sections so that all settings display at the same time, choose **Shortcut > Expand All Sections**.

To display the CallManager User Information settings, choose **Shortcut > CallManager User Information**. If the Unity User Information was displayed before you used the shortcut, the Cisco Unity information now becomes hidden.

To display the Unity User Information settings, choose **Shortcut > Unity User Information**. If the CallManager User Information was displayed before you used the shortcut, the Cisco CallManager information now becomes hidden.

To display the Basic settings, choose **Shortcut > Basic User Information**. The GUI takes you immediately to the Basic User Information section.

Step 5 Configure the CallManager User Information or Unity User Information settings, as described in the following sections:

- CallManager User Information Settings, page 11-3
- Cisco Unity User Information Settings, page 11-4

Step 6 If you want to add a phone or device profile, see the following sections:

- To add a phone, see the "Adding a Phone from a User Page" section on page 3-6.
- To add a device profile, see the "Adding a Device Profile on a User Page" section on page 3-6.

Step 7 If you want to associate a device or a device profile with the user, see the "Associating a Phone or Device Profile to a User" section on page 3-8.

Step 8 When you complete the configuration, click the **Save** button or choose **Action > Save**.

Updating a Single User

To update a single user, perform the following procedure.

To Update a Single User

Step 1 Find a user, as described in the "Finding and Viewing a User" section on page 3-1. The user record displays.

Step 2 To apply a Cisco Voice Provisioning Tool user template to the user, choose the template from the Template Name drop-down list box.

Step 3 To configure basic user settings, see the "User Parameters (Basic User Settings)" section on page 11-1.

Step 4 If you have not previously chosen a phone system type and voice mail system type, choose the product systems from the Phone System and Message System drop-down list boxes, respectively.

Tip To expand the CallManager User Information and/or the Unity User Information sections so that all settings display at the same time, choose **Shortcut > Expand All Sections**.

To display the CallManager User Information settings, choose **Shortcut > CallManager User Information**. If the Unity User Information was displayed before you used the shortcut, the Cisco Unity information now becomes hidden.

To display the Unity User Information settings, choose **Shortcut > Unity User Information**. If the CallManager User Information was displayed before you used the shortcut, the Cisco CallManager information now becomes hidden.

To display the Basic settings, choose **Shortcut > Basic User Information**. The GUI takes you immediately to the Basic User Information section.

Step 5 To update CallManager User Information or Unity User Information configuration settings, see the following sections:

- CallManager User Information Settings, page 11-3
- Cisco Unity User Information Settings, page 11-4

Tip You can reset the CCM User Password, CCM PIN, and PIN by clicking the **Reset** button for each field. After you click the Reset button, the page refreshes and displays the applicable fields where you can enter the updated information.

Step 6 If you want to add a phone or device profile, see the following sections:

- To add a phone, see the "Adding a Phone from a User Page" section on page 3-6.
- To add a device profile, see the "Adding a Device Profile on a User Page" section on page 3-6.

Step 7 If you want to associate a device or a device profile with the user, see the "Associating a Phone or Device Profile to a User" section on page 3-8.

Step 8 After you update the settings, click the **Save** button or choose **Action > Save**.

Updating Multiple Users at the Same Time

To modify multiple users at the same time, perform the following procedure.

To Update Multiple Users at the Same Time

Step 1 Find the users, as described in the "Finding and Viewing a User" section on page 3-1.

Step 2 On the Manage User search results page, check the check boxes for multiple user records that you want to modify.

After you check the check boxes, the Delete and Multi-Modify buttons become active.

Step 3 Click the **Multi-Modify** button or choose **Action > MultiModify**.

The system validates that the users belong to the same server list; an error message displays in the GUI if a problem is identified.

The chosen users display on the Manage Users page.

Step 4 Perform one of the following tasks:

- To add more users to the list that you want to modify, see Step 5 through Step 7.
- To remove users from the list that you want to modify, see Step 8.
- To modify the attributes for the users, see Step 9.

Step 5 To add more users to the list that you want to modify, click the **Add More** button.

Step 6 The search page for managing users displays. Click **Go**, and the users that belong to the same server list display.

Step 7 Check the check boxes for the users that you want to add to the list, and click the **Add Users** button. The complete list of users display.

Step 8 To remove users from the list of users that you want to modify, check the check boxes for the users that you want to remove from the modification list, and click the **Remove** button.

Step 9 To modify the settings for the users in the list through the Manage Users wizard, click **Next**.

Step 10 A list of settings that you can modify for multiple users displays. Check the check boxes for the settings that you want to edit for all users in the list.

Step 11 The list of users and the settings that you want to update display. Update the settings, as described in the following sections:

- CallManager User Information Settings, page 11-3
- Cisco Unity User Information Settings, page 11-4

The user settings that display in the table are read only; use these settings as a reference when you make your updates. In the table, you can sort the settings by clicking the column header, or you can drag and drop the vertical and horizontal scroll bars to expand or narrow the column width.

Configuring Phones and Device Profiles for Users

If you want to do so, you can add a phone or device profile on the user page and then associate the phone/device profile with the user. This section contains information on the following topics:

- Adding a Phone from a User Page, page 3-6
- Adding a Device Profile on a User Page, page 3-6
- Associating a Phone or Device Profile to a User, page 3-8
- Deleting an Association, page 3-9

Adding a Phone from a User Page

To add a phone on a specific Add New or Manage <user ID> configuration page, perform the following procedure.

To Add a Phone on a User Page

Step 1 Find the user, as described in the "Finding and Viewing a User" section on page 3-1.

Step 2 After you click the user in the search results page and the specific user configuration page displays, click the **Add Phone/Profile** button.

Step 3 If you want to apply a Cisco Voice Provisioning Tool phone template, choose the template name from the VPT Phone Template drop-down list box.

Step 4 From the Device Class drop-down list box, choose **Phone**.

Step 5 From the Device Type drop-down list box, choose the phone model that you want to add.

Tip To display Basic and Advanced configuration settings at the same time, choose **Shortcuts > Expand All Sections**.

Step 6 Wait for the basic configuration settings to display. Configure basic phone settings, as described in the "Basic Phone Settings" section on page 12-3.

Step 7 If you want to subscribe services to the phone, click the **Add IP Phone Service** button, and see the "Configuring IP Phone Services and Lines" section on page 4-5.

Step 8 To configure advanced phone settings, click the **Advanced Phone/Profile Configuration**, and use the "Advanced Phone Settings" section on page 12-5 as a reference to configure the settings.

Step 9 If you want to assign lines (directory numbers) to the phone, see the following sections:

- Configuring IP Phone Services and Lines, page 4-5
- Basic Line Configuration Settings for Phones, page 12-12
- Advanced Line Configuration Settings for Phones, page 12-18

Step 10 After you complete the configuration, click **Save**.

If the tool identifies errors with the configuration, the GUI displays an error message.

Step 11 Reset or restart the phone, as described in the "Resetting/Restarting a Phone" section on page 4-15.

Adding a Device Profile on a User Page

In Cisco CallManager, a device profile comprises the set of attributes (services and/or features) that are associated with a particular device. Device profiles include name, description, phone button template, add-on modules, softkey templates, multilevel precedence and preemption (MLPP) information, directory numbers, subscribed services, and speed-dial information. You can assign the user device profile to a user so that when the user logs in to a device, the user device profile that you have assigned to that user loads onto that device as a default login device profile. After a user device profile is loaded onto the phone, the phone picks up the attributes of that device profile.

Before You Begin

Before you configure the device profile, verify that you performed the following tasks:

- Configured a phone button template, softkey template, and user hold audio source in Cisco CallManager Administration, as described in the *Cisco CallManager Administration Guide*
- Installed the Cisco IP Telephony Locale Installer on every server in the cluster, as described in the Cisco IP Telephony Locale Installer documentation

Adding a Device Profile on a User Page

Step 1 Find a user, as described in the "Finding and Viewing a User" section on page 3-1.

Step 2 After you click the user in the search results page and the specific user configuration page displays, click the **Add Phone/Profile** button.

Step 3 If you want to apply a Cisco Voice Provisioning Tool device profile template, choose the template name from the VPT Profile Template drop-down list box.

Step 4 From the Device Class drop-down list box, choose **Device Profile**.

Step 5 From the Device Type drop-down list box, choose the phone model where you want to apply the profile.

Step 6 Enter a unique name in the User Device Profile Name field. You can enter up to 50 characters.

Step 7 Enter a description of the user device profile in the Description field. Enter any text that describes this particular user device profile.

Step 8 From the Phone Button Template drop-down list box, choose the phone button template that you want to apply to the phone.

Step 9 To specify the audio source that plays when a user initiates a hold action, choose the audio source from the User Hold Audio Source drop-down list box.

If you do not specify an audio source in the Cisco CallManager database, Cisco CallManager uses the audio source that is defined in the device pool, or the system default if the device pool does not specify an audio source ID.

Step 10 From the User Locale drop-down list box, choose the language in which the device displays.

Step 11 To configure call display restrictions and ignore any presentation restriction that is received for internal calls, choose Enabled from the Ignore Presentation Indicators drop-down list box.

Tip Use this configuration in conjunction with the calling line ID presentation and connected line ID presentation configuration at the translation pattern-level. Together, these settings allow you to configure call display restrictions to selectively present or block calling or connected line display information for each call. For more information about call display restrictions, see the *Cisco CallManager Features and Services Guide*.

Step 12 From the Softkey Template drop-down list box, choose the softkey template that you want to use for the phone.

Step 13 You can configure one or two expansion modules for this device profile by choosing phone templates from the expansion module drop-down lists in the expansion module fields.

Step 14 To use the user device profile for MLPP precedence calls, enter a hexadecimal value between 0 and FFFFFF in the MLPP Domain field. If you leave this field blank, this device profile inherits its MLPP domain from the value set for the MLPP Domain Identifier enterprise parameter in Cisco CallManager Administration.

Step 15 To use the user device profile for MLPP precedence calls, assign an MLPP Indication setting to the device profile. This setting specifies whether the MLPP-supported device will play precedence tones when it places an MLPP precedence call.

From the drop-down list box, choose a setting to assign to this device profile from the following options:

- **Default**—This device profile inherits its MLPP indication setting from the device pool of the associated device.
- **Off**—This device does not handle or process indication of an MLPP precedence call.
- **On**—This device profile does handle and process indication of an MLPP precedence call.

Note Do not configure a device profile with the following combination of settings: MLPP Indication is set to *Off or Default* (when default is *Off*) while MLPP Preemption is set to *Forceful*.

Step 16 To use the user device profile for MLPP precedence calls, assign an MLPP Preemption setting to the device profile. This setting specifies whether the MLPP-supported device will preempt calls in progress when it places an MLPP precedence call.

From the drop-down list box, choose a setting to assign to this device profile from the following options:

- **Default**—This device profile inherits its MLPP preemption setting from the associated device pool for the device.
- **Disabled**—This device does not allow preemption of lower-precedence calls to take place when necessary for completion of higher-precedence calls.
- **Forceful**—This device allows preemption of lower-precedence calls to take place when necessary for completion of higher-precedence calls.

Note Do not configure a device profile with the following combination of settings: MLPP Indication is set to *Off or Default* (when default is *Off*) while MLPP Preemption is set to *Forceful*.

Step 17 Enter a valid login user ID in the Login User ID field.

Note If the user device profile is used as a logout profile, specify the login user ID that will be associated with the phone. After the user logs out from this user device profile, the phone will automatically log in to this login user ID.

Note You can obtain help in finding a valid login user ID by choosing the **Select Login User ID** link next to the Login User ID field.

Step 18 Click **Save**.

Associating a Phone or Device Profile to a User

With the correct provisioning privileges for the product systems, you can associate a phone or device profile to a user when you add or modify a user record, as long as the phone or device profile exist in the product database.

Associating Phones

In Cisco CallManager, associating devices to a user gives the user control over specified devices. Users control some devices, such as phones. Applications that are identified as users control other devices, such as CTI ports. When users control a phone, they can control certain settings for that phone, such as speed dials and call forwarding.

If a device has multiple extensions that are associated with it, each line extension appears in the list. You need to choose only one line extension to choose all the lines that are associated with that device.

Associating Device Profiles

Before you associate a device profile, make sure that you added the device profile for the Cisco CallManager product system.

To associate a device profile or phone to a user, perform the following procedure:

To Associate a Phone or Device Profile With a User

Step 1 Find a user, as described in the "Finding and Viewing a User" section on page 3-1.

Step 2 After you click the user in the search results page and the specific user configuration page displays, click the **Associate Phone/Profile** button. The Associate Phone/Profile page displays.

Step 3 Choose the search criteria for the devices that you want to display, and click **Go**. The user records display.

Step 4 Check the check boxes for the devices that you want to associate with the user.

Step 5 Click the **Associate** button. The Manage User <user ID> page displays. The associated device information displays in the device association table.

Step 6 If you configured a line for the device or device profile, the directory number displays in the Primary Extension drop-down list box. If you want to do so, choose an extension from the drop-down list box. The option that you choose serves as the primary extension for user.

Step 7 From the Default Profile drop-down list box, choose the profile that you want to serve as the default for the user.

Deleting an Association

If you want to delete the phone or device profile association while you delete the user, see the information in the "Deleting Users" section on page 3-10.

Timesaver On a specific Add New User or Manage User <user ID> configuration page, you can disassociate the devices or profiles for a user by checking the check box next to the device and clicking the **Delete Selected Row** button. Disassociating a device or profile from a user does not remove the device or profile from the Cisco CallManager database.

Deleting Users

Before you delete a Cisco CallManager user, the tool displays the device class that is associated with the user, if you associated devices/device profiles with the user. If you check the user record check box, you delete all user data, including the phone/device profile association.

For Cisco Unity, deleting the user removes all user data from the Cisco Unity system.

If the system cannot delete the user, the GUI displays an error message.

Tip To remove a phone or device profile association without deleting the Cisco CallManager user, see the "Deleting an Association" section on page 3-9.

For more information, see the following sections:

- Deleting a Single User, page 3-10
- Deleting Multiple Users at the Same Time, page 3-11

Deleting a Single User

You can delete a single user on the Manage User search results page or a specific Manage User <user ID> configuration page. Use the following procedures in conjunction with the "Deleting Users" section on page 3-10.

To delete a single user on the Manage User search results page, you must check the check boxes for the user (and, if you choose to do so, any corresponding phone/device profile associations) that you want to delete.

The following procedure allows you to delete more than one user at the same time.

To Delete a User from the Manage User Search Results Page

Step 1 Find the users that you want to display in the Manage User search results page, as described in the "Finding and Viewing a User" section on page 3-1.

Step 2 On the Manage User search results page, check the check boxes for the users that you want to delete. The Delete button becomes active.

Step 3 Click the **Delete** button or choose **Action > Delete**.

Step 4 Check the deletion check boxes that apply.

Step 5 Click the **Delete** button.

Step 6 To proceed, click **OK**.

On a specific Manage User <user ID> configuration page, you can delete a single user (and, if you choose to do so, any phone/device profile associations).

To Delete a User on a Specific Manage User <User ID> Configuration Page

Step 1 Find the user, as described in the "Finding and Viewing a User" section on page 3-1.

Step 2 On the Manage User search results page, click the User ID link for the user that you want to delete.

Step 3 After the specific user configuration record displays, click the **Delete** button or choose **Action > Delete**.

Step 4 After the confirmation dialog box displays, click **OK**.

Step 5 On the Manage Users page, check the check boxes that apply. After you click all applicable check boxes, click **Delete**.

Step 6 To proceed, click **OK** in the confirmation dialog box.

Deleting Multiple Users at the Same Time

To delete multiple users at the same time on the Manage User search results page, you must have the appropriate provisioning privileges for the product system(s) for which you plan to perform the task. If you do not have the correct administrative privileges to delete users from any product systems where user data exists, the GUI displays a message that indicates the systems for which you do not have adequate privileges. If you do not have the correct privileges, the check boxes for the users display but appear disabled.

You cannot delete specific associated devices/device profiles by using this procedure. For example, you cannot delete phone with MAC address 123456789102 for user jsmith, but you can delete all phones that are associated with user jsmith by checking the Delete Associated Phones check box.

To Delete Multiple Users at the Same Time

Step 1 Find the user that you want to display in the Manage User search results page, as described in the "Finding and Viewing a User" section on page 3-1.

Step 2 On the Manage User search page, check the check boxes for the users that you want to delete.

Step 3 Click the **Delete** button or choose **Action > Delete**.

Step 4 Check the check boxes for the configuration that you want to delete.

Step 5 Click the **Delete** button or choose **Action > Delete**.

Step 6 To proceed, click **OK**.

Obtaining Information on User Configuration Settings

For information on user configuration settings, see the "User Configuration Settings" section on page 11-1.

Managing Phones or Device Profiles

The Cisco Voice Provisioning Tool allows you to find, view, add, update, delete, or reset a phone. You can also find, view, add, update, and delete a device profile. If you want to do so, you can find, view update, delete, or reset multiple phones or device profiles at the same time.

Use the information in this chapter in conjunction with the "Management Overview" section on page 2-1, which provides descriptive information and important caveats for managing your phones or device profiles.

This chapter contains information on the following topics:

Finding and Viewing a Phone or Device Profile

To find and view a phone or device profile, perform the following procedure.

To Find and View a Phone or Device Profile

Step 1 In the Cisco Voice Provisioning Tool, choose **Phones > Manage Phones/Profiles**.

Tip If many phones, device profiles, and product systems exist, performance degradation may occur. We recommend that you narrow your search before you click Go.

Step 2 In the Phone System drop-down list box, choose the search criteria.

Step 3 If you want to do so, narrow the search criteria for your choices in the drop-down list boxes by choosing additional search parameters, or click **Advanced Search** to expand the search criteria and enter the search information.

Step 4 Click **Go**.

Tip To locate a device profile, see the Device Profile option in the Device Class column.

Step 5 To navigate through the search results, perform the following tasks:

- In the Rows Per Page drop-down list box, choose the number of rows that you want to display.
- In the Page field, enter the page that you want to display, and then click **Go**.
- To go to the last page of results, click the forward double-arrow button.
- To go to the next page of results (for example, to go from page 1 to page 2), click the forward single-arrow button.
- To go to the first page of results, click the backward double-arrow button.
- To go to the preceding page (for example, to go from page 2 to page 1), click the backward single-arrow button.

Tip To sort the columns, click the column header at the top of the table.

Step 6 Perform one of the following tasks:

- If you want to view only one phone or device profile record, click the device name link for the phone or device profile. The phone or device profile record displays. If you want to update a single phone or device profile record after the record displays, see the "Updating a Single Phone or Device Profile" section on page 4-3.
- If you want to update multiple phone or device profile records at the same time, see the "Updating Multiple Phones or Device Profiles at the Same Time" section on page 4-4.
- If you want to delete the phone or device profile record(s), see the "Deleting a Phone or Device Profile" section on page 4-14.
- If you want to reset the phones, see the "Resetting/Restarting a Phone" section on page 4-15.

Adding a Single Phone or Device Profile

To add a single phone or device profile, perform the following procedure.

To Add a Single Phone or Device Profile

Step 1 In the Cisco Voice Provisioning Tool, choose **Phones > Add New Phone/Profile**.

Step 2 If you want to apply a Cisco Voice Provisioning Tool template to the record, choose a template from the VPT Phone or Profile Template drop-down list box.

Step 3 In the Phone System drop-down list box, choose the Cisco CallManager product system where you want to add the phone or device profile.

Step 4 In the Device Class drop-down list box, choose **Phone** or **Device Profile**, depending on which option applies.

Step 5 In the Device Type drop-down list box, choose the phone model that you want to configure for the record.

The phone model that you choose determines the settings that display.

The page refreshes and displays the settings.

Tip To display Basic and Advanced configuration settings at the same time, choose **Shortcuts > Expand All Sections**.

Step 6 Wait for the basic configuration settings to display, or choose **Shortcuts > Basic Phone/Profile Configuration**.

Step 7 Configure basic settings, as described in the following sections:

- Basic Phone Settings, page 12-3
- Basic Device Profile Settings, page 13-3

Step 8 If you want to apply IP Phone services to the phone or device profile, click the **Add IP Phone Service** button and see the "Configuring IP Phone Services and Lines" section on page 4-5.

Step 9 To configure advanced settings, click the **Advanced Phone/Profile Configuration** link or choose **Shortcuts > Advanced Phone/Profile Configuration**; then, use the following sections as a reference when you configure the settings:

- Advanced Phone Settings, page 12-5
- Advanced Device Profile Settings, page 13-3

Step 10 If you want to configure lines (directory numbers) to the phone or device profile, see the following sections:

- Configuring a Line, page 4-9
- Basic Line Configuration Settings for Phones, page 12-12
- Advanced Line Configuration Settings for Phones, page 12-18
- Basic Line Configuration Settings for Device Profiles, page 13-5
- Advanced Line Configuration Settings for Device Profiles, page 13-13

Step 11 After you complete the configuration, click the **Save** button or choose **Action > Save**.

Step 12 For phones only, reset or restart the phone as described in the "Resetting/Restarting a Phone" section on page 4-15.

Updating a Single Phone or Device Profile

To update a single phone or device profile, perform the following procedure.

To Update a Single Phone or Device Profile

Step 1 Find the phone or the device profile that you want to update, as described in the "Finding and Viewing a Phone or Device Profile" section on page 4-1.

Step 2 After you click the phone or device profile in the Manage Phone/Profile search results page and the record displays, update the configuration as described in the following steps.

Step 3 To apply a VPT template to the phone or device profile, choose the template from the VPT Phone or Profile Template drop-down list box.

Tip To display Basic and Advanced configuration settings at the same time, choose **Shortcuts > Expand All Sections**.

Step 4 Wait for the basic configuration settings to display, or choose **Shortcuts > Basic Phone/Profile Configuration**.

Step 5 Configure basic settings, as described in the following sections:

- Basic Phone Settings, page 12-3
- Basic Device Profile Settings, page 13-3

Step 6 If you want to apply IP Phone services to the phone or device profile, click the **Add IP Phone Service** button and see the "Configuring IP Phone Services and Lines" section on page 4-5.

Step 7 To configure advanced settings, click the **Advanced Phone/Profile Configuration** link or choose **Shortcuts > Advanced Phone/Profile Configuration**; then, use the following sections as a reference when you configure the settings:

- Advanced Phone Settings, page 12-5
- Advanced Device Profile Settings, page 13-3

Step 8 If you want to configure lines (directory numbers) for the phone or device profile, see the following sections:

- Configuring a Line, page 4-9
- Basic Line Configuration Settings for Phones, page 12-12
- Advanced Line Configuration Settings for Phones, page 12-18
- Basic Line Configuration Settings for Device Profiles, page 13-5
- Advanced Line Configuration Settings for Device Profiles, page 13-13

Step 9 After you complete the configuration, click the **Save** button or choose **Action > Save**.

Step 10 For phones only, reset or restart the phone as described in the "Resetting/Restarting a Phone" section on page 4-15.

Updating Multiple Phones or Device Profiles at the Same Time

To modify multiple phones or device profiles at the same time, perform the following procedure.

To Update Multiple Phones or Device Profiles at the Same Time

Step 1 Find the phones or device profiles, as described in the "Finding and Viewing a Phone or Device Profile" section on page 4-1.

Step 2 On the Manage Phone/Profiles search results page, check the check boxes for the multiple phone or device profile records that you want modify.

Step 3 Click the **Multi-Modify** button or choose **Action > MultiModify Selected**.

The system validates that the phones or the device profiles belong to the same phone system; an error message displays in the GUI if a problem is identified.

The chosen phones or device profiles display on the Manage Phones/Profiles page.

Step 4 Perform one of the following tasks:

- To add more phones or device profiles to the list of phones or device profiles that you want to modify, see Step 5 through Step 7.
- To remove phones or device profiles from the list of phones or device profiles that you want to modify, see Step 8.
- To modify the settings for the phones or the device profiles, see Step 9.

Step 5 To add more phones or device profiles to the list of phones or device profiles that you want to modify, click the **Add More** button.

Step 6 The search page for managing phones/profiles displays. Click **Go**, and the phones or device profiles that belong to the same phone system display.

Step 7 Check the check boxes for the phones or device profiles that you want to add, and click the **Add More** button. The complete list of phones display.

Step 8 To remove a phone or device profile from the list of phones or device profiles that you want to modify, check the check boxes for the phones or device profiles, and click the **Remove** button.

Step 9 To modify the settings for the phones or device profiles through the wizard, click **Next**.

Step 10 A list of common settings that you can modify for multiple phones or device profiles displays. Check the check boxes for the settings that you want to edit for all phones or device profiles in the list.

Step 11 The list of phones or device profiles and the settings that you want to update display. The settings that display in the Current Values table are read only; use these settings as a reference when you make your updates. In the table, you can sort the settings by clicking the column header, or you can drag and drop the vertical and horizontal scroll bars to expand or narrow the column width.

Step 12 Update the settings, as described in the following sections, and click the **Save** button:

- Basic Phone Settings, page 12-3
- Advanced Phone Settings, page 12-5
- Basic Device Profile Settings, page 13-3
- Advanced Device Profile Settings, page 13-3

Step 13 For phones only, reset or restart the phones as described in the "Resetting/Restarting a Phone" section on page 4-15.

Configuring IP Phone Services and Lines

The Cisco Voice Provisioning Tool allows you to apply configured IP Phone services to phones, device profiles, phone templates, and device profile templates. You can also configure lines for phones and device profiles; if you want to do so, you can configure some line settings for phone and device templates.

This section contains information on the following topics:

- Subscribing to IP Phone Services, page 4-6
- Updating a Subscription, page 4-7

Subscribing to IP Phone Services

Cisco IP Phone Services comprise Extensible Markup Language (XML) applications that enable the display of interactive content with text and graphics on Cisco IP Phone. Cisco CallManager provides sample Cisco IP Phone Services applications, but you can also create customized Cisco IP Phone applications for your site.

By using Cisco CallManager Administration, you define and maintain the list of Cisco IP Phone Services to which users can subscribe. After the list of services is configured, you can add services to phones and device profiles by using the Cisco Voice Provisioning Tool, or users can log in to the Cisco CallManager User Options Pages and subscribe to these services for their Cisco IP Phones, as described in *Customizing Your Cisco IP Phone On the Web*. If you want to do so, you can assign these services to speed-dial buttons in Cisco CallManager Administration, so users have one-button access to the services. For information on how to perform these tasks in Cisco CallManager Administration, see the *Cisco CallManager Administration Guide*.

Only those IP Phone services that are configured in Cisco CallManager Administration display in the Cisco Voice Provisioning Tool. For information on configuring Cisco IP Phone Services in Cisco CallManager Administration, see the *Cisco CallManager Administration Guide*.

After the IP Phone services are configured in Cisco CallManager Administration, you can add the service to the phone or device profile by accessing the specific Add or Manage Phone/Profiles configuration page. The tool does not allow you to add or update subscriptions to several phones/device profiles at the same time.

Tip All phones or device profiles that display in the Cisco Voice Provisioning Tool do not support IP Phone services. If the services configuration pane does not display on the Add or Manage Phone/Profiles page, you cannot add services to the phone/device profile.

After you add the service(s) to the phone and click the Save button, the tool forms a URL by using all of the parameter information that you entered in the configuration. The tool then submits the URL to the phone system that you specified in the Phone System drop-down list box. Do not exceed 512 characters for the URL, which includes the name of the parameters and any special characters. If the URL exceeds 512 characters, the GUI displays an error message.

To apply IP Phone services to a phone or device profile, perform the following procedure:

To Apply IP Phone Services to a Phone or Device Profile

Step 1 Find the device profile or phone that you want to update, as described in the "Finding and Viewing a Phone or Device Profile" section on page 4-1.

Step 2 After you click the device profile or phone in the Manage Phone/Profiles search results page and the record displays, click the **Add IP Phone Service** button.

The Available IP Phone Service window displays a list of available services that you can apply to the device profile or phone. If a service does not display, ensure that you added it to the version of Cisco CallManager Administration that supports the product system.

Step 3 Choose the service to which you want to subscribe the device profile, and click **Subscribe**. The Service Parameter window for the IP Phone service displays.

Step 4 After the Service Parameter window displays, enter the following information:

- **Service Display Name**—Enter the name of the service as it will display on the menu of available services in the Cisco IP Phone User Options application. Enter up to 32 characters for the service name. If you want to do so, you can change the service name. If you change the name, it displays in the Subscribed IP Services pane after you click Save in the Service Parameter window.
- **Service Display Description**—A read-only description explains the purpose of the service. You cannot change this description.
- **Value for the service parameters** —Default values automatically display in the fields. For information on a parameter, click the Description link.

Tip The GUI displays an asterisk (*) next to all required service parameters.

Step 5 For device profiles and phones that you do not want to reset/restart immediately, save the entire configuration by clicking the **Save** button or clicking **Action > Save**. The configuration is not saved until you click the Save button or choose Action > Save.

Step 6 To save the phone configuration and restart the phone immediately, click the **Save and Restart** button.

Tip For the changes to take effect on the phone, you must reset or restart the phone.

Updating a Subscription

To update a subscription for a phone or device profile, perform the following procedure:

To Update a Subscription for a Phone or Device Profile

Step 1 Find the device profile or the phone that you want to update, as described in the "Finding and Viewing a Phone or Device Profile" section on page 4-1.

Step 2 After you click the device profile in the Manage Phones/Profiles search results page and the record displays, click the Cisco IP Phone Service name, the hyperlink, that displays in the Subscribed IP Services pane.

The Service Parameter window for the chosen service displays.

Step 3 Update the configuration, as described in the following bullets:

- **Service Display Name**—Enter the name of the service as it will display on the menu of available services in the Cisco IP Phone User Options application. Enter up to 32 characters for the service name. If you change the name, it displays in the Subscribed IP Services pane after you click Save in the Service Parameter window.
- **Service Display Description**—A read-only description explains the purpose of the service. You cannot change this description.
- **Value for the service parameters**—Default values automatically display in the fields. For information on the parameter, click the Description link.

Tip The GUI displays an asterisk (*) next to all required service parameters.

Step 4 In the Service Parameter window, click **Save**.

Step 5 For device profiles and phones that you do not want to reset/restart immediately, save the entire configuration by clicking the **Save** button or choosing **Action > Save**. The configuration is not saved until you click the Save button or choose Action > Save.

Step 6 To save the phone configuration and restart the phone immediately, click the **Save and Restart** button.

Tip For the changes to take effect on the phone, you must reset or restart the phone.

Unsubscribing to Cisco IP Phone Services

To remove the service from a phone or device profile, perform the following procedure.

To Remove IP Phone Services From the Phone or Device Profile

Step 1 Find a device profile or phone, as described in the "Finding and Viewing a Phone or Device Profile" section on page 4-1.

Step 2 After you click the device profile/phone in the Manage Phones/Profiles page and the record displays, scroll to the Subscribed IP Services section on the specific Manage Phone/Profiles <profile name/phone name> configuration page.

Step 3 Check the check box(es) for the Cisco IP Phone service(s) which you want to remove from the device profile or phone.

Step 4 Click the **Unsubscribe Selected IP Phone Service** button.

Step 5 For device profiles and phones that you do not want to reset/restart immediately, save the entire configuration by clicking the **Save** button or clicking **Action > Save**. The configuration is not saved until you click the Save button or choose Action > Save.

Step 6 To save the phone configuration and restart the phone immediately, click the **Save and Restart** button.

Tip For the changes to take effect on the phone, you must reset or restart the phone.

Configuring a Line

Tip Line settings take precedence over settings that you configure at the device level (basic and advanced). For example, if you configure the calling search space "building" for the device and the calling search space "campus" for the line, Cisco CallManager uses the line setting, "campus," to route calls.

The Cisco Voice Provisioning Tool requires that you enter a directory number and choose a partition before the other line settings on the page are enabled. After you save the configuration, the tool sends the information to the Cisco CallManager that you specified in the Phone System drop-down list box.

Tip You do not configure the extension number or the partition in VPT phone or device profile templates. If you apply a template to a phone or device profile, make sure that you configure the extension number or the partition on the specific Add or Manage Phone/Device Profile configuration page.

If you add multiple lines at the same time and then save the information, be aware that the tool may identify that some line configuration succeeds and other line configuration fails. If a failure occurs, the tool continues to save the remaining configuration before it displays an error message.

For information on line support in Cisco CallManager Administration, including shared line restrictions and interactions, see the *Cisco CallManager System Guide*.

Adding a Line

To add a line to a device profile or phone, perform the following procedure:

To Add a Line to a Phone or Device Profile

Step 1 Find the device profile or phone that you want to update, as described in the "Finding and Viewing a Phone or Device Profile" section on page 4-1.

Step 2 After you click the device profile/phone in the Manage Phones/Profiles search results page and the record displays, click the applicable line hyperlink (for example, Line 1 or Line 2), and see the following sections to configure basic and advanced line settings:

- Basic Line Configuration Settings for Phones, page 12-12
- Advanced Line Configuration Settings for Phones, page 12-18

- Basic Line Configuration Settings for Device Profiles, page 13-5
- Advanced Line Configuration Settings for Device Profiles, page 13-13

Step 3 After you configure the line(s), click the **Save** button or choose **Action > Save**.

Updating a Line

To update a line for a device profile or phone, perform the following procedure:

To Update a Line for a Phone or Device Profile

Step 1 Find the device profile or phone that you want to update, as described in the "Finding and Viewing a Phone or Device Profile" section on page 4-1.

Step 2 After you click the device profile/phone in the Manage Phone/Profiles search results page and the record displays, click the applicable line hyperlink.

Step 3 To update lines for the device profile or phone, see the following sections:

- Basic Line Configuration Settings for Device Profiles, page 13-5
- Advanced Line Configuration Settings for Device Profiles, page 13-13
- Basic Line Configuration Settings for Device Profiles, page 13-5
- Advanced Line Configuration Settings for Device Profiles, page 13-13

Step 4 After you update the configuration for the line(s), click the **Save** button or choose **Action > Save**.

Deleting a Line

To delete a line for a device profile or phone, perform the following procedure:

To Delete a Line for a Phone or Device Profile

Step 1 Find the device profile or phone that you want to update, as described in the "Finding and Viewing a Phone or Device Profile" section on page 4-1.

Step 2 After you click the device profile/phone in the Manage Phones/Device Profiles search results page and the record displays, click the applicable line hyperlink.

Step 3 Click the **Unassign Line** button.

Step 4 Depending on what you want to accomplish, click one of the following buttons:

- **Unassign**—Disassociates/removes the line from the device profile but does not delete the line from the Cisco CallManager database.
- **Delete**—Disassociates/removes the line from the device profile and deletes the line from the Cisco CallManager database.
- **Cancel**—Takes no action.

Step 5 The dialog box describes whether the action proved successful. Click **Close**.

Step 6 Click the **Save** button or choose **Action > Save**.

Applying Internal Caller ID to All Lines on a Phone

Tip The following procedure does not apply for device profiles.

To apply internal caller ID to all lines on a phone, perform the following procedure.

To Apply Internal Caller ID to All Lines on a Phone

Step 1 Find the phone where you want to apply the Internal Caller ID to other lines, as described in the "Finding and Viewing a Phone or Device Profile" section on page 4-1.

Step 2 After you click the phone record in the Manage Phone/Profiles search results page and the record displays, enter the appropriate information for the Display (Internal Caller ID) setting that displays.

Tip Leave this field blank to have Cisco CallManager display the extension. To have the system display a name, enter a maximum of 30 alphanumeric characters. Typically, use the user name or the directory number (if using the directory number, the person receiving the call may not receive the proper identity of the caller).

Step 3 To apply this configuration, click the **Apply to All Lines** button.

Clicking this button copies the configuration to all lines for this phone.

Step 4 Click the **Save** button or choose **Action > Save**.

Configuring a Shared Line Between Devices

You can set up one or more lines to create a shared line appearance. Cisco CallManager considers a directory number to be a shared line if it appears on more than one device in the same partition. For example, if directory number 9600 on phone A is in the partition called Dallas and on phone B is in the partition called Texas, that directory number is not a shared line appearance. (The directory number 9600 for phone A and phone B must be in the same partition, for example, Dallas.)

To review shared line interactions and restrictions for Cisco CallManager, see the *Cisco CallManager System Guide*.

To configure the same directory number/line for multiple phones or device profiles that exist in the same partition, perform the following procedure.

To Configure a Shared Line Between Devices

Step 1 Find the phone or device profile where you want to create a shared line, as described in the "Finding and Viewing a Phone or Device Profile" section on page 4-1.

Step 2 After you click the phone/device profile in the Manage Phone/Profiles search results page and the record displays, click the line hyperlink to display the line configuration settings.

Step 3 After the line configuration page displays, enter the same directory number in the Extension Number field that exists for the other device/device profile that will share the line.

Step 4 Choose the same partition where the other (sharing) device/device profile exists.

Step 5 If you want to share the line, click **OK** after the confirmation dialog box displays.

After the phone or device profile configuration page refreshes, the following updates display in the GUI:

- The line hyperlink indicates that the line is shared by more than one device/device profile; for example, the GUI displays Line 1: ext. 1234 (Shared Line).
- The View Shared Lines button displays on the page. For information on viewing shared lines, see the "Viewing Phones or Device Profiles That Share the Same Line" section on page 4-12.
- The page categorizes the line settings into shared settings, non-shared settings, and propagated settings.

  Shared settings apply to all devices that share the line; if you configure or update the setting for one device, you configure the setting for all devices that share the line.

  Non-shared settings affect only the line for the device that is currently displayed in the GUI.

  Propagated settings normally affect only the current line, but if you choose to do so, you can propagate the configuration to other devices that share the line.

Viewing Phones or Device Profiles That Share the Same Line

To view all devices that share the same line, perform the following procedure.

To View Phones or Device Profiles That Share the Same Line

Step 1 Find a phone/device profile that uses a shared line, as described in the "Finding and Viewing a Phone or Device Profile" section on page 4-1.

Step 2 After you click the phone/device profile in the Manage Phone/Profile search results page and the record displays, click the line hyperlink for a line that is shared.

Step 3 After the line configuration page displays, click the **View Shared Lines** button.

A window displays a list of all devices that share the line.

Step 4 After you view the list, close the window.

Updating a Shared Line

After you configure a shared line for phones/device profiles, line configuration settings are placed in the following categories:

- Shared Settings—Configuration updates apply to all devices that share the line; if you configure or update the setting for one device, you configure the setting for all devices that share the line.
- Non-shared Settings—Configuration updates affect only the line for the device that is currently displayed in the GUI.
- Propagated Settings—Updates normally affect only the current line, but if you choose to do so, you can propagate the configuration to other devices that share the line.

  If the phone supports the configuration settings, you can propagate the following settings for shared lines between devices:

  - Display (Internal Caller ID)
  - Line Text Label
  - External Phone Number Mask
  - Message Waiting Lamp Policy
  - Ring Setting (Phone Idle)
  - Ring Setting (Phone Active)

Tip For information on these settings, see the "Advanced Line Configuration Settings for Phones" section on page 12-18.

To update a shared line, perform the following procedure.

To Update a Shared Line

Step 1 Find the phone/device profile where you want to update a shared line, as described in the "Finding and Viewing a Phone or Device Profile" section on page 4-1.

Step 2 After you click the phone/device profile in the Manage Phone/Profiles search results page and the record displays, click the line hyperlink to display the line configuration settings. The hyperlink contains the phrase "(Shared Line)."

Step 3 Update the shared, non-shared, or propagated settings, as described in the following sections:

- Basic Line Configuration Settings for Device Profiles, page 13-5
- Advanced Line Configuration Settings for Device Profiles, page 13-13
- Basic Line Configuration Settings for Device Profiles, page 13-5
- Advanced Line Configuration Settings for Device Profiles, page 13-13

Step 4 To propagate a setting to all devices that share the line, check the **Propagate Setting** check box in the Propagate Settings section. The settings are propagated only after you save the configuration.

Step 5 Click the **Save** button or choose **Action > Save**.

Removing Shared Lines Between Devices

To remove a shared line between devices, perform the following procedure.

To Remove Shared Lines Between Devices

Step 1 Find a phone/device profile that shares the line that you want to remove, as described in the "Finding and Viewing a Phone or Device Profile" section on page 4-1.

Step 2 After you click the phone/device profile in the Manage Phone/Profiles search results page and the record displays, click the line hyperlink that indicates the line is shared, as indicated by the phrase "(Shared Line)."

Step 3 After the line configuration page displays, enter a different directory number and/or choose a different partition so that the devices do not share the settings. If you do not want the device to share the line with any other devices, ensure that you enter a directory number that does not exist in the Cisco CallManager database.

Step 4 After the confirmation dialog box displays, click **Cancel** to indicate that you want to remove the shared line.

After the page refreshes, the following updates occur in the GUI:

- The link hyperlink no longer contains the phrase "(Shared Line)."
- The View Shared Lines button no longer displays in the GUI.
- The line settings are categorized into basic and advanced settings (as opposed to shared, non-shared, and propagated settings, as with shared lines).

Deleting a Phone or Device Profile

All lines that are associated with a phone or device profile are deleted when you delete the phone/device profile, unless the line is configured as a shared line. If the line is shared with another phone/device profile, you can delete the chosen phone/device profile, but you cannot delete the line because the other phone/device profile uses it.

From the Manage Phone/Profiles Search Results Page

The following procedure allows you to delete one or more phones or device profiles at the same time.

If the tool fails to delete the information for a single phone or device profile in the list, the operation does not stop; the tool attempts to delete the other phones/device profiles and the related phone configuration. After the tool attempts to delete the phone information, the tool displays any errors that occurred.

To Delete a One or More Phones or Device Profiles

Step 1 Find the phone(s) or device profile(s) that you want to delete, as described in the "Finding and Viewing a Phone or Device Profile" section on page 4-1.

Step 2 On the Manage Phone/Profiles search results page, check the check box(es) next to the Device Name link(s).

Tip The Delete button appears disabled until you check the check box(es) next to the Device Name link(s).

Step 3 Click the **Delete** button or choose **Action > Delete Selected**.

Step 4 When the confirmation dialog box displays, click **OK**.

To Delete a Phone or Device Profile From a Specific Manage Phone/Profile <phone name/device profile name> Configuration Page

Timesaver To delete the phone or device profile from a specific Manage Phone/Profile <phone name/device profile> page, click the **Delete** button or choose **Action > Delete Phone/Profile**.

Resetting/Restarting a Phone

Tip The following information applies for phones only.

When you add or update a phone record, you must reset or restart the phone for the changes to take effect. Resetting or restarting a phone does not save the settings that you configure. Before you reset or restart a phone, always save the data in the Cisco Voice Provisioning Tool so that the phone receives the latest configuration information.

The following procedure allows you to reset or restart one or more phone at the same time.

To Reset One or Multiple Phones

Step 1 Find the phone(s) that you want to reset/restart, as described in the "Finding and Viewing a Phone or Device Profile" section on page 4-1.

Step 2 On the Manage Phones/Profiles search results page, check the check box(es) next to the Device Name link(s).

Step 3 Click the **Reset/Restart** button or choose **Action > Reset/Restart**.

Step 4 After the confirmation dialog box displays, click one of the following buttons:

- Reset the Phone—Shuts down the chosen devices and brings them back up (performs a complete shutdown and reinitialization of the phones).
- Restart the Phone—Restarts the chosen devices without shutting them down (reregisters the phones with Cisco CallManager).

To Reset a Phone From a Specific Manage Phone/Profile <phone name> Configuration Page

Timesaver To reset or restart the phone from a specific Manage Phone/Profile <phone name> configuration page, click the **Reset/Restart** button. Resetting the phone shuts down the chosen devices and brings them back up (performs a complete shutdown and reinitialization of the phones). Restarting the phone restarts the chosen devices without shutting them down (reregisters the phones with Cisco CallManager).

Obtaining Information on Phone or Device Profile Configuration Settings

For information on settings that you configure for phones, see the "Phone Configuration Settings" section on page 12-1.

For information on settings that you configure for device profiles, see the "Device Profile Configuration Settings" section on page 13-1.

Template Overview

If you want to do so, you can configure templates in the Cisco Voice Provisioning Tool; although template configuration/application is optional, it allows you to update specific configuration records quickly by applying the template, and hence, any configured template settings. After you apply a template to a specific configuration record, the record is updated to match the configuration in the template. For example, you could configure common configuration settings in a VPT phone template for Cisco CallManager 4.1(3) and then apply the template to phone configuration records in the Cisco Voice Provisioning Tool. Performing this task ensures that you do not have to configure these common settings for each phone.

In the Cisco Voice Provisioning Tool, you can configure the following template types: users, phones, and device profiles.

This chapter, which provides a basic overview of Cisco Voice Provisioning Tool templates, contains information on the following topics:

Tip This chapter does not provide procedures for finding, adding, updating, deleting, and applying templates. For information on these topics, see the "Where to Find More Information on User, Phone, and Device Profile Templates" section on page 5-5.

Overview for Provisioning Privileges for Templates

To perform the tasks that are described in this chapter, a role or administrator must have the provisioning privilege for the product system; the Full Provisioning and superadmin roles by default are set up to have all provisioning privileges.

Table 5-1 describes the provisioning privileges that you must have to perform the task for the product system.

Tip Having a privilege for a phone/profile template does not mean that you have the privilege for the user template.

Tip The View privilege, which includes View Phone/Device Profile, View User, View User Template, or View Phone/Device Profile Template, is required for searching for and viewing specific configuration pages. If you have the View privilege but do not have the Modify privilege, which includes Modify Phone/Device Profile, Modify User, Modify User Template, or Modify Phone Template, you can view the specific configuration page but you cannot save any updates for the configuration.

Table 5-1 Provisioning Privileges for Tasks

Task	Provisioning Privilege
Phone/Device Profile Template Management	
Finding a Phone/Device Profile Template	View Phone/Device Profile Template
Adding a Phone/Device Profile Template	Add Phone/Device Profile Template
Updating a Phone/Device Profile Template	Modify Phone/Device Profile Template
Deleting a Phone/Device Profile Template	Delete Phone/Device Profile Template
User Template Management	
Finding a User Template	View User Template
Adding a User Template	Add User Template
Updating a User Template	Modify User Template
Deleting a User Template	Delete User Template

Note For information on roles and administrators, see the *Cisco Voice Provisioning Tool System Management and Security Guide*.

Overview for Finding a Template

The Cisco Voice Provisioning Tool allows you to search for user templates or phone/device profile templates, but you cannot search for all template types at the same time.

When you find a template in the Cisco Voice Provisioning Tool, the search results page displays a list of all templates in a table format, which includes columns for the template name, template description, and the product system type that is configured for the Cisco Voice Provisioning Tool template (for example, Cisco CallManager or Cisco Unity). The template name displays as a hyperlink.

Although more than one Cisco Voice Provisioning Tool template can simultaneously display on the search results page, you cannot modify more than one Cisco Voice Provisioning Tool template at a time; however, on this page, you can delete more than one Cisco Voice Provisioning Tool template at a time.

Overview for Adding a Template

When you add a Cisco Voice Provisioning Tool template, you must enter a unique template name; if you want to do so, you can also enter a template description. You also must associate a product system type, for example, Cisco CallManager, with the template. (For user templates, you can specify Cisco CallManager and Cisco Unity product systems. For phones and device profiles, you specify a Cisco CallManager product system.)

When you configure the Cisco Voice Provisioning Tool template, you can leave all configuration settings except for the template name blank. After you click Save, the tool validates that you entered a unique template name that contains no more than 255 alphanumeric or special characters. Because you can enter partial data for fields (for example, half of a MAC address or half of a phone number), and because the system does not consider all fields mandatory for template creation, the tool does not validate any other configuration information besides the template name.

Tip For phone and device profile templates, you can apply configured IP Phones services or configure line configuration. For more information on how to perform these tasks, see the "Applying IP Phone Services to VPT Phone or Device Profile Templates" section on page 7-4 and the "Configuring Line Settings for VPT Phone or Device Profile Templates" section on page 7-7.

For information on applying a template when you add a user, phone, or device profile, see the "Overview for Applying a Template to a Specific Configuration Page" section on page 5-4.

Overview for Updating a Template

You can update only one Cisco Voice Provisioning Tool template at a time. When you update the template, you can leave all configuration settings except for the template name blank. Because you can enter partial data for fields (for example, half of a MAC address or half of a phone number), and because the system does not consider all fields mandatory for Cisco Voice Provisioning Tool template creation, the tool does not validate any other configuration information besides the template name.

For information on updating a template after you apply it to the specific configuration record, see the "Overview for Applying a Template to a Specific Configuration Page" section on page 5-4.

Overview for Deleting a Template

The Cisco Voice Provisioning Tool allows you to delete the template either on the template configuration page or on the template search results page. If you want to do so, you can delete more than one template on the template search results page, but you cannot delete user and phone/device profile templates at the same time.

For information on deleting a template after you apply it to the specific configuration record, see the "Overview for Applying a Template to a Specific Configuration Page" section on page 5-4.

Overview for Applying a Template to a Specific Configuration Page

In the Cisco Voice Provisioning Tool, you apply user templates to specific user configuration records, phone templates to specific phone configuration records, and device profile templates to specific device profile configuration records. For example, you cannot apply a device profile template to a specific phone configuration record; likewise, you cannot apply a user template to a specific phone configuration record.

For Users

When you add a user, you can apply a template that exists in the Cisco Voice Provisioning Tool. On the Add New User page, the Template Name drop-down list box displays. If you choose Not Selected, which is the default setting, no template settings apply to the user. If you choose a Cisco Voice Provisioning Tool user template on the Add New User page, the template settings display in the configuration after the page refreshes. You can update any of the template settings on the Add New User page, but any changes you make to the settings apply only to that specific user; the Cisco Voice Provisioning Tool template does not change.

When you update a user, all user templates do not display in the Template Name drop-down list box on the specific Manage User <user ID> configuration page. Only the user templates that do not conflict with the product system on which a user exists will display. Settings that you specified in a template automatically apply to the updated user record when you choose the template from the Template Name drop-down list box. After you apply a template, you can modify any of the configuration settings, including applied template settings. However, note that if you apply a template, but then change your mind and choose Not Selected from the Template Name drop-down list box, the applied template settings will not be automatically removed from the fields.

If you modify or delete a user template after you apply it to the specific configuration record, the record where you applied the template does not change.

For Phones

When you add a phone, you can apply a VPT phone template that exists in the Cisco Voice Provisioning Tool. On the Add New Phone page, the Template Name drop-down list box displays. If you choose Not Selected, which is the default setting, no template settings apply to the phone. If you choose a Cisco Voice Provisioning Tool template on the Add New Phone page, the template settings display for the configuration after the page refreshes. You can update any of the template settings on the Add New Phone page, but any changes you make to the settings apply only to that specific phone; the Cisco Voice Provisioning Tool template does not change.

When you update a phone, all phone templates do not display in the VPT Phone Template drop-down list box on the specific Manage Phone/Profiles <phone name> configuration page. Only the phone templates that match the phone system, device class, and device type for the existing phone will display. Settings that you configured in a Cisco Voice Provisioning Tool template automatically apply to the updated phone record when you choose the template from the Template Name drop-down list box. After you apply a template, you can modify any of the configuration settings, including applied template settings. However, note that if you apply a template, but then change your mind and choose Not Selected from the VPT Template Phone drop-down list box, the applied template settings will not be automatically removed from the fields.

If you modify or delete a VPT p hone template after you apply it to the specific configuration record, the record where you applied the template does not change.

For Device Profiles

When you add a device profile, you can apply a VPT profile template that exists in the Cisco Voice Provisioning Tool. On the Add New Phone/Profile page, the Template Name drop-down list box displays. If you choose Not Selected, which is the default setting, no template settings apply to the phone. If you choose a template on the Add New Phone/Profile page, the template settings display after the page refreshes. You can update any of the template settings on Add New Phone/Profile page, but changes you make to the settings apply only to that specific device profile; the Cisco Voice Provisioning Tool template does not change.

When you update a device profile, all device profile templates do not display in the VPT Profile Template drop-down list box on the specific Manage Phone/Profile <profile name> configuration page. Only the device profile templates that match the phone system, device class, and device type for the existing profile will display. Settings that you specified in a Cisco Voice Provisioning Tool template automatically apply to the updated device profile record when you choose the template from the VPT Profile Template drop-down list box. After you apply a template, you can modify any of the configuration settings, including applied template settings. However, note that if you apply a template, but then change your mind and choose Not Selected from the VPT Profile Template drop-down list box, the applied template settings will not be automatically removed from the fields.

If you modify or delete a VPT profile template after you apply it to the specific configuration record, the record where you applied the template does not change.

Where to Find More Information on User, Phone, and Device Profile Templates

- Using User Templates, page 6-1
- Using VPT Phone or Device Profile Templates, page 7-1
- User Configuration Settings, page 11-1
- Phone Configuration Settings, page 12-1
- Device Profile Configuration Settings, page 13-1

Using User Templates

If you want to do so, you can configure templates in the Cisco Voice Provisioning Tool; although template configuration/application is optional, it allows you to update specific configuration records quickly by applying the template, and hence, any configured template settings. After you apply a template to a specific configuration record, the record is updated to match the configuration in the template. For example, you could configure common configuration settings in a VPT user template for Cisco CallManager 4.1(3) and then apply the template to user configuration records in the Cisco Voice Provisioning Tool. Performing this task ensures that you do not have to configure these common settings for each user.

Use the information in this chapter in conjunction with the "Template Overview" section on page 5-1, which provides descriptive information and important caveats for managing templates.

This chapter contains information on the following topics:

Finding a User Template

To find a user template, perform the following procedure:

To Find a User Template

Step 1 In the Cisco Voice Provisioning Tool, choose **Templates > User Templates > Manage User Template**. The list of templates displays.

Step 2 To navigate through the search results, perform the following tasks:

- In the Rows Per Page drop-down list box, choose the number of rows that you want to display.
- In the Page field, enter the page that you want to display; then, click **Go**.
- To go to the last page of results, click the forward double-arrow button.
- To go to the next page of results (for example, to go from page 1 to page 2), click the forward single-arrow button.

- To go to the first page of results, click the backward double-arrow button.
- To go to the preceding page (for example, to go from page 2 to page 1), click the backward single-arrow button.

Tip To sort the columns, click the header that is displayed at the top of each column.

Step 3 To display the configuration for a specific Cisco Voice Provisioning Tool user template, click the **Template Name** link.

Step 4 If you want to update the settings for the Cisco Voice Provisioning Tool user template, see the "Updating a User Template" section on page 6-3.

Step 5 If you want to delete the Cisco Voice Provisioning Tool user template, see the "Deleting a User Template" section on page 6-4.

Adding a User Template

To add a user template, perform the following procedure.

To Add a User Template

Step 1 In the Cisco Voice Provisioning Tool, choose **Templates > User Templates > Add New User Template**. The Add New User Template page displays.

Step 2 Configure the basic settings, as described in the "User Parameters (Basic User Settings)" section on page 11-1.

Step 3 Click the **Save** button or choose **Action > Save**.

Tip To expand the CallManager User Information and/or the Unity User Information sections so that all settings display at the same time, choose **Shortcut > Expand All Sections**.

To display the CallManager User Information settings, choose **Shortcut > CallManager User Information**. If the Unity User Information was displayed before you used the shortcut, the Cisco Unity information now becomes hidden.

To display the Unity User Information settings, choose **Shortcut > Unity User Information**. If the CallManager User Information was displayed before you used the shortcut, the Cisco CallManager information now becomes hidden.

To display the Basic settings, choose **Shortcut > Basic User Information**. The GUI takes you immediately to the Basic User Information section.

Step 4 Configure the CallManager User Information and/or Unity User Information settings, as described in the following sections:

- CallManager User Information Settings, page 11-3
- Cisco Unity User Information Settings, page 11-4

Tip When you add a template, configuring the CallManager User and Unity User Information settings is optional, unless the GUI marks the setting with an asterisk (*).

Step 5 After you configure the settings that you want to use for the Cisco Voice Provisioning Tool user template, click the **Save** button or choose **Action > Save**.

Updating a User Template

To update a Cisco Voice Provisioning Tool user template, perform the following procedure.

To Update a User Template

Step 1 Find the Cisco Voice Provisioning Tool user template that you want to update, as described in the "Finding a User Template" section on page 6-1.

Step 2 After you click the template in the Manage User Template search results page and the record displays, update the Phone System and Message System drop-down list boxes, if applicable.

Tip To expand the CallManager User Information and/or the Unity User Information sections so that all settings display at the same time, choose **Shortcut > Expand All Sections**.

To display the CallManager User Information settings, choose **Shortcut > CallManager User Information**. If the Unity User Information was displayed before you used the shortcut, the Cisco Unity information now becomes hidden.

To display the Unity User Information settings, choose **Shortcut > Unity User Information**. If the CallManager User Information was displayed before you used the shortcut, the Cisco CallManager information now becomes hidden.

To display the Basic settings, choose **Shortcut > Basic User Information**. The GUI takes you immediately to the Basic User Information section.

Step 3 Update the CallManager User Information and/or Unity User Information settings, as described in the following sections:

- CallManager User Information Settings, page 11-3
- Cisco Unity User Information Settings, page 11-4

Step 4 Click the **Save** button or choose **Action > Save**.

Deleting a User Template

Timesaver To delete the Cisco Voice Provisioning Tool template from a specific Manage User Template <template name> configuration page, click the **Delete** button.

To delete one or more user templates at the same time, perform the following procedure.

To Delete a User Template

Step 1 Find the Cisco Voice Provisioning Tool user template that you want to delete, as described in the "Finding a User Template" section on page 6-1.

Step 2 In the Manage User Template search results page, check the check box(es) next to the Template Name link(s).

Tip The Delete button appears disabled until you check the check box(es) next to the Template Name link(s).

Step 3 Click the **Delete** button or choose **Action > Delete**.

Step 4 When the confirmation dialog box displays, click **OK**.

Applying a User Template

For information on applying a user template to a specific user configuration page, see the "Overview for Applying a Template to a Specific Configuration Page" section on page 5-4.

Obtaining Information on User Configuration Settings

For information on user configuration settings, see the "User Configuration Settings" section on page 11-1.

Using VPT Phone or Device Profile Templates

If you want to do so, you can configure templates in the Cisco Voice Provisioning Tool; although template configuration/application is optional, it allows you to update specific configuration records quickly by applying the template, and hence, any configured template settings. After you apply a template to a specific configuration record, the record is updated to match the configuration in the template. For example, you could configure common configuration settings in a VPT phone template for Cisco CallManager 4.1(3) and then apply the template to phone configuration records in the Cisco Voice Provisioning Tool. Performing this task ensures that you do not have to configure these common settings for each phone.

Use the information in this chapter in conjunction with the "Template Overview" section on page 5-1, which provides descriptive information and important caveats for managing templates.

This chapter contains information on the following topics:

Finding a VPT Phone or Device Profile Template

To find a VPT phone or device profile template, perform the following procedure:

To Find a VPT Phone or Device Profile Template

Step 1 In the Cisco Voice Provisioning Tool, choose **Templates > Phone Templates > Manage Phone Template**. The list of templates displays.

Step 2 To navigate through the search results, perform the following tasks:

- In the Rows Per Page drop-down list box, choose the number of rows that you want to display.
- In the Page field, enter the page that you want to display; then click **Go**.

- To go to the last page of results, click the forward double-arrow button.
- To go to the next page of results (for example, to go from page 1 to page 2), click the forward single-arrow button.
- To go to the first page of results, click the backward double-arrow button.
- To go to the preceding page (for example, to go from page 2 to page 1), click the backward single-arrow button.

Tip To sort the columns, click the header that displays at the top of each column.

Step 3 To display the configuration for a specific VPT template, click the **Template Name** link.

Step 4 If you want to update the settings for the VPT template, see the "Updating a VPT Phone or Device Profile Template" section on page 7-3.

Step 5 If you want to delete the VPT profile template, see the "Deleting a VPT Phone or Device Profile Template" section on page 7-8.

Adding a VPT Phone or Device Profile Template

To add a VPT phone or device profile template, perform the following procedure.

To Add a VPT Phone or Device Profile Template

Step 1 In the Cisco Voice Provisioning Tool, choose **Templates > Phone Templates > Add New Phone Template**.

The Add New Phone/Profile Template page displays.

Step 2 Enter a **Template Name** and **Template Description**.

For the template name and template description, enter no more than 255 characters in each field. The system validates the template name and displays an error message in the GUI if a problem exists.

Step 3 In the Phone System drop-down list box, choose the product system that you want to support the Cisco Voice Provisioning Tool template.

The product system that you choose determines the settings that display.

Step 4 In the Device Class drop-down list box, choose **Phone** or **Device Profile**, depending on the type of template that you want to configure.

Step 5 In the Device Type drop-down list box, choose the phone model that you want to use for the Cisco Voice Provisioning Tool Profile template.

The phone model that you choose determines the settings that display for the template.

The page refreshes and displays the template settings.

Tip To display Basic and Advanced configuration settings at the same time, choose **Shortcuts > Expand All Sections**.

Tip When you add a template, configuring the basic and advanced settings is optional, unless the GUI marks the setting with an asterisk (*).

Step 6 Wait for the basic configuration settings to display, or choose **Shortcuts > Basic Phone/Profile Configuration**. For descriptions of basic settings, see the following sections:

- Basic Phone Settings, page 12-3
- Basic Device Profile Settings, page 13-3

Step 7 If you want to add IP Phone services to the template, click the **Add IP Phone Service** button and see the "Applying IP Phone Services to VPT Phone or Device Profile Templates" section on page 7-4.

Step 8 To configure advanced settings for the template, click **Advanced Phone/Profile Configuration** or choose **Shortcuts > Advanced Phone/Profile Configuration**, and see the following sections to configure the settings:

- Advanced Phone Settings, page 12-5
- Advanced Device Profile Settings, page 13-3

Step 9 To configure lines for the template, see the following sections:

- Configuring Line Settings for VPT Phone or Device Profile Templates, page 7-7
- Basic Line Configuration Settings for Phones, page 12-12
- Advanced Line Configuration Settings for Phones, page 12-18
- Basic Line Configuration Settings for Device Profiles, page 13-5
- Advanced Line Configuration Settings for Device Profiles, page 13-13

Step 10 After you configure the settings that you want to use for the VPT template, click the **Save** button or choose **Action > Save**.

Updating a VPT Phone or Device Profile Template

To update a VPT template, perform the following procedure.

To Update a VPT Phone or Device Profile Template

Step 1 Find the VPT template that you want to update, as described in the "Finding a VPT Phone or Device Profile Template" section on page 7-1.

Step 2 After you click the template in the Manage Phone/Profile Template search results page and the record displays, update the Phone System system from the drop-down list box, if applicable.

Tip To display Basic and Advanced configuration settings at the same time, choose **Shortcuts > Expand All Sections**.

Step 3 Wait for the basic configuration settings to display, or choose **Shortcuts > Basic Phone/Profile Configuration**.

Step 4 Update basic settings, as described in the following sections:

- Device Profile Parameters, page 13-2
- Basic Device Profile Settings, page 13-3
- Phone Parameters, page 12-2
- Basic Phone Settings, page 12-3

Step 5 If you want to subscribe services to the device profile, click the **Add IP Phone Service** button and see the "Applying IP Phone Services to VPT Phone or Device Profile Templates" section on page 7-4.

Step 6 To configure advanced device profile settings, click **Advanced Phone/Profile Configuration** or choose **Shortcuts > Advanced Phone/Profile Configuration**, and use the following sections to configure the settings:

- Advanced Phone Settings, page 12-5
- Advanced Device Profile Settings, page 13-3

Step 7 To configure lines for the template, see the following sections:

- Configuring Line Settings for VPT Phone or Device Profile Templates, page 7-7
- Basic Line Configuration Settings for Phones, page 12-12
- Advanced Line Configuration Settings for Phones, page 12-18
- Basic Line Configuration Settings for Device Profiles, page 13-5
- Advanced Line Configuration Settings for Device Profiles, page 13-13

Step 8 Click the **Save** button or choose **Action > Save**.

Applying IP Phone Services to VPT Phone or Device Profile Templates

The Cisco Voice Provisioning Tool allows you to add IP Phone services when you add or modify VPT phone and device profile templates. If you apply the template to the specific configuration record, as described in the "Overview for Applying a Template to a Specific Configuration Page" section on page 5-4, the phone or device profile uses the Cisco IP Phone services that you configured in the template.

Tip Before you can apply the IP phone services to the template, ensure that the IP Phone services exist in Cisco CallManager Administration.

If you modify IP Phone services in the template after you apply the template to the specific configuration record, the record does not change. If you remove the IP Phone services from the template after you apply the template to the specific configuration record, the record does not change.

For more information on applying IP Phone services to the phone or device profile template, see the following sections:

- Applying IP Phone Services to a VPT Phone or Device Profile Template, page 7-5
- Updating a Subscription in a VPT Phone or Device Profile Template, page 7-6
- Removing IP Phone Services From a VPT Phone or Device Profile Template, page 7-6

Applying IP Phone Services to a VPT Phone or Device Profile Template

The Cisco Voice Provisioning Tool allows you to add Cisco IP Phone services to VPT phone and device profile templates. If you apply the template to the phone or device profile, as described in the "Overview for Applying a Template to a Specific Configuration Page" section on page 5-4, the phone/device profile subscribes to the Cisco IP Phone services.

Tip Before you perform the following procedure, ensure that the Cisco IP Phone services exist in Cisco CallManager Administration.

To Apply IP Phone Services to a VPT Phone or Device Profile Template

Step 1 Find the VPT template that you want to update, as described in the "Finding a VPT Phone or Device Profile Template" section on page 7-1.

Step 2 After you click the template in the Manage Phone/Profile Template search results page and the record displays, click the **Add IP Phone Service** button.

The Available IP Phone Service window displays a list of available services that you can apply to the template. If a service does not display, ensure that you added it to the version of Cisco CallManager Administration that supports the phone/device profile product system.

Step 3 Choose the service to which you want to subscribe the phone/device profile, and click **Subscribe**.

The Service Parameter window for the Cisco IP Phone Service displays.

Step 4 After the Service Parameter window displays, enter the following information:

- **Service Display Name**—Enter the name of the service as it will display on the menu of available services in the Cisco IP Phone User Options application. Enter up to 32 characters for the service name. If you want to do so, you can change the service name. If you change the name, it displays in the Subscribed IP Services pane after you click Save in the Service Parameter window.
- **Service Display Description**—A read-only description explains the purpose of the service. You cannot change this description.
- **Value for the service parameters** —Default values automatically display in the fields. For information on a parameter, click the Description link.

Tip The GUI displays an asterisk (*) next to all required service parameters.

Step 5 Click the **Save** button in the Service Parameter configuration window.

Step 6 Save the entire configuration by clicking the **Save** button or clicking **Action > Save**.

Updating a Subscription in a VPT Phone or Device Profile Template

To update a subscription in a VPT phone or device profile template, perform the following procedure.

To Update a Subscription in a VPT Phone or Device Profile Template

Step 1 Find the Cisco Voice Provisioning Tool phone or device profile template that you want to update, as described in the "Finding a VPT Phone or Device Profile Template" section on page 7-1.

Step 2 After you click the template in the Manage Phone/Profile Template search results page, click the IP Phone Service name that displays in the Subscribed IP Services pane.

The Service Parameter window for the chosen service displays.

Step 3 Update the configuration as follows:

- **Service Display Name**—Enter the name of the service as it will display on the menu of available services in the Cisco IP Phone User Options application. Enter up to 32 characters for the service name. If you change the name, it displays in the Subscribed IP Services pane after you click Save in the Service Parameter window.
- **Service Display Description**—A read-only description explains the purpose of the service. You cannot change this description.
- **Value for the service parameters** —Default values automatically display in the fields. For information on a parameter, click the Description link.

Tip The GUI displays an asterisk (*) next to all required service parameters.

Step 4 Click **Save** in the Service Parameter window.

Step 5 Save the entire configuration by clicking the **Save** button or clicking **Action > Save**.

Removing IP Phone Services From a VPT Phone or Device Profile Template

To delete a Cisco IP Phone service from a template, perform the following procedure:

To Remove IP Phone Services From a VPT Phone or Device Profile Template

Step 1 Find the Cisco Voice Provisioning Tool phone or device profile template that you want to update, as described in the "Finding a VPT Phone or Device Profile Template" section on page 7-1.

Step 2 After you click the template in the Manage Phone/Profile Template search results page and the record displays, scroll to the Subscribed IP Services section on the specific Manage Phone/Profiles configuration page.

Step 3 Check the check box(es) for the Cisco IP Phone service(s) that you want to remove from the template.

Step 4 Click the Unsubscribe **Selected IP Phone Service** button.

Configuring Line Settings for VPT Phone or Device Profile Templates

If you want to do so, you can configure line settings for VPT phone and device profile templates. After the template is applied to the specific configuration record, as described in "Overview for Applying a Template to a Specific Configuration Page" section on page 5-4, the line settings for the record are updated to match the configuration in the template.

If you modify line settings in the template after you apply the template to the specific configuration record, the record does not change. If you delete the line settings from the template after you apply the template to the specific configuration record, the record does not change.

For phone and device profile templates, you do not configure the extension number or the partition when you configure the line settings. After you apply a template to a phone or device profile, you must configure the extension number or partition on the specific Add or Manage Phone/Profile configuration page.

Unlike phones and device profiles, the Unassign Line button does not display for phone and device profile templates; therefore, you cannot delete the line configuration for a VPT phone or device profile template as you can for a phone or device profile. If you want to remove the line configuration from the template, you must delete the configuration for the settings or change the settings to the default.

For more information on configuring lines for VPT phone or device profile templates, see the following sections:

- Adding Line Configuration to a VPT Phone or Device Profile Template, page 7-7
- Updating Line Configuration for a VPT Phone or Device Profile Template, page 7-8

Adding Line Configuration to a VPT Phone or Device Profile Template

To add line configuration to a VPT phone or device profile template, perform the following procedure:

To Add Line Configuration to a VPT Phone or Device Profile Template

Step 1 Find the VPT phone or device profile template that you want to update, as described in the "Finding a VPT Phone or Device Profile Template" section on page 7-1.

Step 2 After you click the template in the Manage Phone/Profile Template search results page and the record displays, click the applicable line hyperlink, for example, Line 1 or Line 2.

Step 3 To configure line settings for the VPT phone template, see the following sections:

- Basic Line Configuration Settings for Phones, page 12-12
- Advanced Line Configuration Settings for Phones, page 12-18
- Basic Line Configuration Settings for Device Profiles, page 13-5
- Advanced Line Configuration Settings for Device Profiles, page 13-13

Step 4 After you configure the line configuration, click the **Save** button or choose **Action > Save**.

Updating Line Configuration for a VPT Phone or Device Profile Template

To update the line configuration for a VPT phone or device profile template, perform the following procedure:

To Update Line Configuration in a VPT Phone or Device Profile Template

Step 1 Find the VPT phone or device profile template that you want to update, as described in the "Finding a VPT Phone or Device Profile Template" section on page 7-1.

Step 2 After you click the template in the Manage Phone/Profile Template search results page and the record displays, click the applicable line hyperlink.

Step 3 To configure line settings for the VPT phone template, see the following sections:

- Basic Line Configuration Settings for Phones, page 12-12
- Advanced Line Configuration Settings for Phones, page 12-18
- Basic Line Configuration Settings for Device Profiles, page 13-5
- Advanced Line Configuration Settings for Device Profiles, page 13-13

Step 4 After you update the configuration for the line(s), click the **Save** button or choose **Action > Save**.

Deleting a VPT Phone or Device Profile Template

Timesaver To delete the Cisco Voice Provisioning Tool template from a specific Manage Phone/Profile Template configuration page, click the **Delete** button after the template displays.

To delete one or more VPT phone or device profile templates at the same time, perform the following procedure.

To Delete a VPT Phone or Device Profile Template

Step 1 Find the VPT template that you want to delete, as described in the "Finding a VPT Phone or Device Profile Template" section on page 7-1.

Step 2 In the Manage Phone/Profiles Template search results page, check the check box(es) next to the Template Name link(s).

Tip The Delete button appears disabled until you check the check box(es) next to the Template Name link(s).

Step 3 Click **Delete Template**.

Step 4 When the confirmation dialog box displays, click **OK**.

Applying a VPT Phone or Device Profile Template

For information on applying a VPT phone or device profile template to a specific phone or device profile record, see the "Overview for Applying a Template to a Specific Configuration Page" section on page 5-4.

Obtaining Information on Phone or Device Profile Template Configuration Settings

For information on device profiles configuration settings, see the following sections:

- Phone Configuration Settings, page 12-1
- Device Profile Configuration Settings, page 13-1

Bulk Provisioning Overview

Bulk provisioning functionality in the Cisco Voice Provisioning Tool allows you to add or modify a large number of users or a large number of phones/device profiles (and the corresponding configuration settings). Before you perform any bulk operations, review the "Overview of the Comma Separated Value (CSV) File" section on page 8-5, which describes the CSV file format and caveats for the CSV file.

Caution Because bulk operations typically take a long time to complete and because bulk operations may adversely affect processing performance, we recommend that you perform bulk operations during off-hours. If you want to do so, you can schedule the bulk operation to occur at a time when the system will be minimally impacted.

This chapter contains information on the following topics:

Tip This chapter does not provide procedures on how to perform bulk import and export operations. For information on these procedures, see the "Where to Find More Information on Bulk Provisioning" section on page 8-10.

Overview of Bulk Provisioning Privileges

For information on bulk provisioning privileges, see the Cisco Voice Provisioning Tool Release Notes.

Overview of Bulk Import Operations

Caution If you schedule a bulk operation and do not have the appropriate privileges, the bulk operation fails. The Cisco Voice Provisioning Tool does not validate that you have the appropriate privileges when you perform a bulk operation.

Bulk imports rely on a valid CSV file that contains the data you want to import into the database. Before you schedule a bulk import operation, perform the following tasks:

- Update the CSV file.
- Save the CSV file to a location that you remember.
- Ensure that the CSV file meets the guidelines that are described in the "Overview of the Comma Separated Value (CSV) File" section on page 8-5.

On the Manage Bulk Tasks page, you can modify a bulk import operation that exists in the Scheduled, Pending, Finished, or Aborted state. You cannot modify bulk import operations that exist in the Running state, but you can view import operations in the Running state.

By using the bulk provisioning functionality in the Cisco Voice Provisioning Tool, you can perform the following bulk import operations:

User Import Operations

- Apply User Template(s) to a User

  After you specify a Cisco Voice Provisioning Tool user template in the CSV file, the product system setting in the CSV file becomes optional. You can specify additional product systems as long as you specify a product system type that is not used by the Cisco Voice Provisioning Tool template. For example, if you apply a Cisco Voice Provisioning Tool template that supports Cisco CallManager, you can apply a Cisco Unity product system for the product system setting. However, you cannot apply a template for Cisco CallManager and then add another Cisco CallManager product system to the product system field.

  Any information that you specify in the CSV file automatically overwrites the settings that you specify in the Cisco Voice Provisioning Tool template.

- Add Users

  During bulk add operations, the Cisco Voice Provisioning Tool automatically applies default values from the Cisco Voice Provisioning Tool GUI if you leave the setting blank.

- Modify Users

  The Cisco Voice Provisioning Tool does not apply default values during bulk modify operations unless you specify the default setting.

- Associate a User with the Phone

  You can associate a phone/device profile with a user in the CSV file. When you perform this task, you must specify the product system, user ID, user last name, user password, user PIN, and the device name or profile.

To generate the device name for phones, the Cisco Voice Provisioning Tool prepends the letters SEP to the beginning of the MAC address. When you enter names of the associated devices, make sure to enter the entire device name, including the SEP prefix; for example, enter SEP123456665432.

If you associate a device profile with a user, enter the user device profile name exactly as it displays in Cisco CallManager Administration or the Cisco Voice Provisioning Tool.

Because the tool does not support additions and updates in the same CSV file, you cannot add a phone/device profile and associate the phone/device profile to an existing user by using the same CSV file. You must use two CSV files, one for adding the phone/device profile and another to associate the phone/device profile to the existing user. The addition of the phone/device profile supports bulk add operations for phones/device profile, and the association of the phone/device profile to the user supports the bulk modify operations for users.

Tip A single CSV file supports both phones and device profiles.

Timesaver Before you associate a user to the phone/device profile, ensure that the phone/device profile exists in the Cisco CallManager database. Verifying that the phone/device profile configuration exists before the association minimizes the number of tasks that you must perform for bulk operations. For example, if you want to add two phones, add a new user, and associate the phones with the users, you must create one CSV file for the phones and another for the users. When you schedule the bulk operations, always schedule the phone/device profile operation first and then follow it by the user operation.

Phone Import Operations

- Apply a VPT Phone Template to a Phone

  If you apply a template in the CSV file, leave the product system setting blank.

  Any information that you specify in the CSV file automatically overwrites the settings that you specify in the Cisco Voice Provisioning Tool template.

- Add Phones

  During bulk add operations, the Cisco Voice Provisioning Tool automatically applies default values from the Cisco Voice Provisioning Tool GUI if you leave the setting blank.

  With bulk administration functionality, you cannot add a phone that already exists for the phone system that you specify. If you attempt to do so, the operation for the phone fails.

- Modify Phones

  The Cisco Voice Provisioning Tool does not apply default values during bulk modify operations unless you specify the default setting.

  With bulk administration functionality, you cannot modify a phone that does not exist for the phone system that you specify. If you attempt to do so, the operation for the phone fails.

- Add or Update Lines for a Phone

  You can configure line settings in bulk add or modify operations. When you perform either operation, the line that you configure automatically is added to the phone if the line does not exist for another phone in the Cisco CallManager database. If the line does exist, the phone that you specify in the CSV file is associated with the line that exists (shared line). Likewise, any line settings that you specify in the CSV file are automatically applied to the existing line.

If you add or update a line during a bulk modify operation, you must specify the extension number in the CSV file; otherwise, the tool ignores the settings when the bulk operation runs. The tool only updates line settings that you specify in the CSV file. All other line settings retain the configuration that you specify on the Add or Manage Phone/Profiles configuration pages.

If you want to disassociate a line from a phone during a bulk modify operation, enter vpt_clear in the ccm_lineX_entension number column; specifying this information does not delete the line from the Cisco CallManager database.

Device Profile Import Operations

- Apply a VPT Profile Template to a Device Profile

  If you apply a Cisco Voice Provisioning Tool template in the CSV file, leave the product system setting blank.

  Any information that you specify in the CSV file automatically overwrites the settings that you specify in the Cisco Voice Provisioning Tool template.

- Add Device Profiles

  During bulk add operations, the Cisco Voice Provisioning Tool automatically applies default values from the Cisco Voice Provisioning Tool GUI if you leave the setting blank.

- Modify Device Profiles

  The Cisco Voice Provisioning Tool does not apply default values during bulk modify operations unless you specify the default setting.

  With bulk administration functionality, you cannot modify a device profile that does not exist for the phone model that you specify. If you attempt to do so, the operation for the device profile fails.

- Add or Update Lines for a Device Profile

  You can configure line settings in bulk add or modify operations. When you perform either operation, the line that you configure automatically is added to the phone if the line does not exist for another phone in the Cisco CallManager database. If the line does exist, the phone that you specify in the CSV file is associated with the line that exists (shared line). Likewise, any line settings that you specify in the CSV file automatically are applied to the existing line.

  If you add or update a line during a bulk modify operation, you must specify the extension number in the CSV file; otherwise, the tool ignores the settings when the bulk operation runs. The tool only updates line settings that you specify in the CSV file. All other line settings retain the configuration that you specify on the Add or Manage Phone/Profiles configuration pages.

  If you want to disassociate a line from a phone during a bulk modify operation, enter vpt_clear in the ccm_lineX_entension number column; specifying this information does not delete the line from the Cisco CallManager database.

Overview of Bulk Export Operations

Caution If you schedule a bulk operation and do not have the appropriate privileges, the bulk operation fails. The Cisco Voice Provisioning Tool does not validate that you have the appropriate privileges when you perform a bulk operation.

If you want to do so, you can export users, phone, and device profiles that exist in product system database(s) to a CSV file. You can export only one record type, for example phones/device profiles or users, but not both at the same time. You must export at least one item, even if you export an empty file.

On the Manage Bulk Tasks page, you can modify a bulk operation that exists in the Scheduled, Pending, Finished, or Aborted state. You cannot modify bulk operations that exist in the Running state, but you can view operations in the Running state.

When you export users, the phone and device profile association information automatically is exported as part of the user record, but the other phone and device profile configuration information is not exported.

For security reasons, the Cisco Voice Provisioning Tool does not export passwords or PINs.

For phone and device profiles, you can check up to 36 lines in the attributes settings pane that displays during the bulk export configuration.

Overview of Bulk Provisioning States

By using the bulk provisioning functionality in the Cisco Voice Provisioning Tool, an administrator with the appropriate privileges for the product system(s) can provision many users at the same time by creating a CSV file and importing the file into the Cisco Voice Provisioning Tool.

The Cisco Voice Provisioning Tool supports one bulk operation at a time, but each operation exists in one of the following states:

- Scheduled—Operation will run at a specified time in the future.
- Pending—Operation is scheduled to run at the current time, but another bulk operation is already in progress.

  If you schedule several operations to execute at the same time, the tool queues the operations in the order that you specified, moves the pending operation to the Pending state, and completes the operation that is already in progress.
- Running—The bulk operation is in progress.
- Finished—Operation is complete, and a log file exists. A message displays that indicates whether the operation succeeded or failed.
- Aborted—The administrator canceled the bulk operation, and the Cisco Voice Provisioning Tool creates a log file.

Overview of the Comma Separated Value (CSV) File

When you use the bulk administration functionality to import phone configuration information into the Cisco Voice Provisioning Tool, you must use a comma separated value (CSV) file that uses an ASCII or Unicode (UTF8 encoded) file format. A standard text editor or spreadsheet application that handles CSV files, for example Microsoft Excel, allows you to create a row for each record that you want to add or modify. The CSV file categorizes data into column sets, which are predefined, related sets of data. The phone/device profile CSV file, which is specific to the device type, contains a column set for the phone configuration settings and a column set for each line that is configured for the phone. You can combine multiple phone systems into a single CSV file.

The CSV file must contain either all additions or all updates; it cannot contain a combination of both operation types.

You cannot perform bulk operations for phones/device profiles and users at the same time, but you can perform bulk operations for phones and device profiles at the same time. You must use a CSV file to import phones/device profiles and a different CSV file to import users. Likewise, you cannot configure bulk export operations for phones/device profiles and users at the same time.

Not all settings that display in the CSV file are considered required settings.

You can combine phone/device profile configuration settings with line configuration settings in the same CSV file.

The Cisco Voice Provisioning Tool does not validate the format of the file. If the file format is corrupt or does not match the file encoding that you specify in the Cisco Voice Provisioning Tool, the bulk operation fails and reports the reasons for failure in the log file.

In addition to the previous information, consider the following guidelines when you create the CSV file:

- The order of the columns does not matter in the CSV file.
- The order of rows is important, because the tool adds or modifies the configuration based on the order that you specify for the rows.
- Make sure that all column header names are unique. If you repeat a header name, the information in the column on the left side of the file is overwritten by the information in the column on the right side of the file.

Caution The bulk provisioning functionality ignores the case for the following parameters that you specify in the CSV file: On/Off, Disabled/Enabled, True/False, and options that display in drop-down list boxes; that is, it does not matter to the tool whether you enter upper case or lower case letters in the CSV file. For example, you can enter either “On” or “on.”

The bulk provisioning functionality requires that you match the case for fields where you enter specific information for the configuration: for example, the user ID or user last name in the CSV file must match the configuration that displays in the GUI. If the case does not match for fields where you enter a specific configuration, the operation may fail.

- You can complete some optional fields and leave other optional fields blank. For example, if you want to specify the device security mode for a Cisco IP Phone model 7970 but you do not want to specify the mode for a different 7970, the tool accepts the configuration because the field is considered optional for the device.
- Any errors that are encountered for a row of data result in the row failing; if the row fails, the bulk operation continues with the next row.
- Any setting that you leave blank in the CSV file is not changed from its current value.
- If a setting allows or requires multiple values, enter a semicolon (;) between the values to separate the data.
- For all check boxes that display in the GUI, enter either true or false in the CSV file. The word “true” equals checked, and the word “false” equals unchecked.
- For all settings in the GUI, use the same terminology in the CSV file; for example, if you want to configure Cisco Extension Mobility for the phone, enter Enabled in the cell, just as you would choose Enabled from the drop-down list box on the specific Add or Manage Phone/Profiles configuration pages.
- For some settings, you can delete the configuration by entering vpt_clear in the cell. If you enter vpt_clear for a setting that cannot be cleared, the row fails during the import operation.

- Do not use the comma (,) in column cells because the tool uses the comma to separate rows. Instead, use the tilde (~). The tool converts the tilde to a comma when you import or export the data. If you want the tool to use the tilde character instead of converting it to a comma, enter a forward slash (/) before the tilde; for example, /~. The tool recognizes that you want to use the tilde character and not the comma, and the tool removes the forward slash during the operation.
- If you use Microsoft Excel as your text editor, consider the following information:
  - Microsoft Excel removes leading zeroes from any field in the CSV file when it loads the CSV file. After you save the file, the leading zeroes are not saved, which may corrupt the data if the leading zeroes are important.
  - If you perform a bulk export operation and specify UTF-8 encoding during the configuration, Microsoft Excel does not load the file correctly if you click the hyperlink and choose the option for opening the file with Excel. Therefore, for UTF-8 files, you must first save them to disk before you open them with Microsoft Excel.
  - Microsoft Excel converts long numbers into scientific format when it loads the CSV file, for example, MAC addresses, long directory numbers, and so on. After you save the file, the scientific notation is stored as is, which corrupts the CSV file. To alleviate this problem, make sure that you change the format of the columns with long numbers before you save the file; for example, consider using a decimal number format with zero decimal places.
  - Be aware that Microsoft Excel limits the number of columns in the CSV file to 256. If the file contains more columns than can fit into a single Excel worksheet, you can spread the configuration across worksheets within the Excel workbook; then, you can save each worksheet as a CSV file and use a utility such as csved to merge the files into a single CSV file that you can import.

    For example, workbook1 contains worksheet1, worksheet2, and worksheet3. Worksheet1 contains basic and advanced phone configurations and phoneline1, phoneline2, phoneline3 configurations; worksheet2 contains phoneline4, phoneline5, phoneline6 configurations; worksheet3 contains phoneline7, phoneline8, phoneline8 configurations.

    You can save worksheet1 as a CSV file, worksheet2 as a CSV file, and worksheet3 as a CSV file.

    After you save all worksheets, you can use a utility such as csved to merge worksheet2 and worksheet3 to worksheet1. You can then import this new file by using the bulk import functionality in the Cisco Voice Provisioning Tool.
  - For additional information about Microsoft Excel, see the Microsoft documentation for the application.

Related Bulk Administration Tasks

Bulk import and export operations are the main provisioning tasks that you perform in the Cisco Voice Provisioning Tool; for information on these tasks, see the "Overview of Bulk Import Operations" section on page 8-2 and the "Overview of Bulk Export Operations" section on page 8-4.

In addition to bulk import and export operations, you can perform the following bulk administration tasks for users, phones, or device profiles:

- Download the bulk CSV file—Downloading the Bulk CSV File, page 8-8
- Delete a bulk operation—Deleting a Bulk Operation, page 8-8
- Abort a running operation—Aborting a Running Bulk Operation, page 8-8
- View bulk operations—Viewing Bulk Operations, page 8-9

- Review the bulk operation logs—Reviewing the Bulk Operation Logs, page 8-10

Downloading the Bulk CSV File

When the bulk operation exists in the running state, you cannot download the CSV file. After the bulk operation completes, you can download the bulk import file for import operations or the bulk export file for export operations.

To Download the Bulk CSV File

Step 1 Choose **Voice Provisioning > Bulk Provisioning > Manage Bulk Tasks**.

Step 2 On the Manage Bulk Tasks page, click the CSV file that you want to download.

Step 3 Choose the location on the client machine where you want to download the file.

If the file is not available for download, an error message displays.

Deleting a Bulk Operation

Because the tool does not remove bulk operations, you must delete operations that you no longer use. You can delete operations that exist in any state, except for the running state. Deleting the operation removes all associated files, including the import or export CSV file and the log files.

To delete the bulk operation, you must have the appropriate provisioning privileges for the product system(s) for which you plan to perform the task.

To Delete a Bulk Operation

Step 1 Choose **Voice Provisioning > Bulk Provisioning > Manage Bulk Tasks**.

Step 2 On the Manage Bulk Tasks page, check the check boxes for the operations that you want to delete.

Step 3 Click the **Delete** button or choose **Action > Delete**.

Step 4 A confirmation dialog box displays. Click **OK**.

Step 5 You can view the audit log output as described in the "Reviewing the Bulk Operation Logs" section on page 8-10.

Aborting a Running Bulk Operation

You can abort bulk operations that exist in the running state only. After you abort the operation, you may modify it, save the updates, and run the operation at a later time. If you choose to update and save the operation after you abort it, the tool discards the files for the aborted operation and creates a new log file for the update.

To Abort a Running Bulk Operation

Step 1 Choose **Voice Provisioning > Bulk Provisioning > Manage Bulk Tasks**.

Step 2 For the running bulk operation that you want to abort, click the **Abort** button.

Step 3 After the confirmation dialog box displays, click **Yes**.

Step 4 The page refreshes and indicates that the operation exists in an aborted state. You can click the link to modify the operation or download the log file.

Step 5 If you want to view the audit output log, see the "Reviewing the Bulk Operation Logs" section on page 8-10.

Viewing Bulk Operations

To view bulk operations (including running, pending, scheduled, completed, and aborted operations) by accessing the Manage Bulk Tasks page, you must have the appropriate provisioning privileges for the product system(s) for which you plan to perform the task. Although you cannot search for specific operations, you can specify the number of rows that you want to display on a single page or specify the page that you want to view. When you view bulk operations, the following information displays per operation:

- Bulk operation name, as provided by the administrator
- Bulk operation description, as provided by the administrator
- Name of the CSV file, which is either the import or export file name, depending on the type of operation that you performed
- Status of the operation; for example, Scheduled, Pending, Running, and so on

  If the operation status equals Running, the Abort button displays under the word, Running, in the cell. If the operation status equals Finished, the words, Successfully or With Failures, display under the word, Failed, in the cell.
- Log file with the .log extension
- Date/Time

  This column supports all operation types. For example, if you scheduled an operation that has not occurred, the information reflects the date and time when you scheduled the operation.
- User ID for the administrator that initiated the operation

Tip You can delete any of the bulk operation rows that display by checking the check box next to the Bulk Name column and clicking the **Delete** button.

To sort a column in the table, click the column header at the top of the table.

Reviewing the Bulk Operation Logs

Each bulk operation, like other provisioning actions, produces an audit log that you can view by choosing VPT **Administration > View Audit Log** and then clicking the name of the CSV file that displays on the page. The bulk operation audit log shows who specified the operation, when it began, when it ended, and any warning or errors that got generated during the operation. For more information on audit logs, see the *Cisco Voice Provisioning Tool System Management and Security Guide*.

In addition to the audit log, each bulk operation produces a separate log file that contains all auditing output for that bulk operation. Immediately after the bulk operation is completed or aborted, you can download and view this log file, which is translated into the same language that you use to browse in the Cisco Voice Provisioning Tool. The log file contains the following sections:

- Summary
  - The operation name
  - Description
  - Scheduled execution time
  - Number of rows that were successful
  - Number of rows that encountered problems
  - Status of the operation; for example, running, aborted, and so on
  - Total elapsed time for the operation
- Detailed

  This portion of the log looks like the audit log output that the Cisco Voice Provisioning Tool provides after you click the audit CSV file link on the View Audit Log page. You can save the detailed log output and use a text editor to create a spreadsheet that you can modify.

Tip To access the log file that contains the auditing output for the bulk operation, choose **Voice Provisioning > Bulk Provisioning > Manage Bulk Tasks**. After the results display on the Manage Bulk Tasks page, locate the Log File column and click the hyperlink for the log that you want to view.

Where to Find More Information on Bulk Provisioning

- Performing Bulk Operations for Users, page 9-1
- Performing Bulk Operations for Phones and Device Profiles, page 10-1
- User Settings for Bulk Provisioning, page 11-7
- Phone Settings for Bulk Provisioning, page 12-22
- Line Settings for Phone Bulk Provisioning, page 12-39
- Device Profile Configuration Settings for Bulk Provisioning, page 13-16
- Line Settings for Device Profile Bulk Provisioning, page 13-21

Performing Bulk Operations for Users

Bulk provisioning functionality in the Cisco Voice Provisioning Tool allows you to add or modify a large number of users or a large number of phones/device profiles (and the corresponding configuration settings). Before you perform any bulk operations, review the "Overview of the Comma Separated Value (CSV) File" section on page 8-5, which describes the CSV file format and caveats for the CSV file.

Caution Because bulk operations typically take a long time to complete and because bulk operations may adversely affect processing performance, we recommend that you perform bulk operations during off-hours. You can schedule the bulk operation to occur at a time when the system will be minimally impacted.

This chapter contains information on the following topics:

Importing Users in Bulk

To import users in bulk, perform the following procedure:

To Import Users in Bulk

Step 1 In the Cisco Voice Provisioning Tool, choose **Voice Provisioning > Bulk Provisioning > Bulk Import**.

Step 2 From the Operation Type drop-down list box, choose the applicable bulk operation.

Step 3 In the Task Name field, enter a name for the bulk operation.

Step 4 In the Description field, enter a description for the bulk operation.

Step 5 In the File field, enter the name of the CSV file, or browse to the file location by clicking the **Browse** button.

After you click Save, the CSV file is uploaded to the Cisco Voice Provisioning Tool server.

Step 6 From the File Encoding drop-down list box, choose the type of format that your file supports.

If the file does not support the option that you choose, the bulk operation fails.

Step 7 If you want to schedule the bulk operation for another time, click the first radio button. If you want to start the bulk operation immediately, click the Execute Now radio button.

Tip In the Current Server Time Is field, the time zone for the Cisco Voice Provisioning Tool server displays.

Step 8 If you scheduled the bulk operation, enter the day and time by using the formats that display next to the settings in the GUI.

Step 9 Click the **Save** button or choose **Action > Save**.

Modifying Bulk Import Operations

On the Manage Bulk Tasks page, you can modify a bulk operation that exists in the Scheduled, Pending, Finished, or Aborted state. You cannot modify bulk operations that exist in the Running state, but you can click view operations in the Running state.

To Modify Bulk Import Operations

Step 1 Choose **Voice Provisioning > Bulk Provisioning > Manage Bulk Tasks**.

Step 2 In the Bulk Name column, click the hyperlink for the bulk operation that you want to modify.

Step 3 In the Task Name field, enter a name for the bulk operation.

Step 4 In the Description field, enter a description for the bulk operation.

Step 5 In the File field, enter the name of the CSV file, or browse to the file location by clicking the **Browse** button.

Step 6 From the File Encoding drop-down list box, choose the type of format that your file supports.

If the file does not support the option that you choose, the bulk operation fails.

Step 7 If you want to schedule the bulk operation for another time, click the first radio button. If you want to start the bulk operation immediately, click the Execute Now radio button.

Tip In the Current Server Time Is field, the time zone for the Cisco Voice Provisioning Tool server displays.

Step 8 If you scheduled the bulk operation, enter the day and time by using the formats that display next to the settings in the GUI.

Step 9 Click the **Save** button or choose **Action > Save**.

If the operation moved into the Running state while you modified it, a message displays that you cannot modify the operation unless you abort it.

If the operation exists in the Aborted or Finished state, a message displays that the existing log file is discarded when the operation begins.

Exporting Users in Bulk

You can export only one record type, for example phones or users, but not both at the same time. You must export at least one item, even if you export an empty file.

The Cisco Voice Provisioning Tool does not export passwords or PINs.

Tip When you export user records, the phone association configuration automatically is exported with the record. No other phone information is exported.

To Export Users in Bulk

Step 1 In the Cisco Voice Provisioning Tool, choose **Voice Provisioning > Bulk Provisioning > Bulk Export**.

Step 2 Click the **User** radio button; then click **Next** or choose **Action > Next**.

Step 3 To export specific users, check the check box(es) for the user(s) that you want to export, and click **Add Selected**.

Step 4 To add more users to the list, click the **Add More** button or choose **Action > Add More**.

Step 5 After the search page displays, narrow or widen the search by configuring the search parameters; then, click **Go**.

Step 6 Check the check boxes for the users that you want to add. Click **Add Selected**.

Step 7 After you specify all users that you want to export and the users display on the Bulk Export page, click **Next**.

Step 8 Check the check boxes for the attributes that you want to export. The check boxes that you check determine the header row for the export file. The attributes apply for all users that you export. After you choose the attributes, click **Next**.

Step 9 Enter a task name and description in the corresponding fields.

Step 10 From the File Encoding drop-down list box, choose the file encoding type that you want to use, for example, UTF8 or ASCII.

Step 11 Configure the time you want the Cisco Voice Provisioning Tool to export the information.

Step 12 Click **Save** or choose **Action > Export**.

Step 13 You can download the bulk CSV file as described in the "Obtaining Information on the Bulk Provisioning User Configuration Settings" section on page 9-4.

Modifying Bulk Export Operations

On the Manage Bulk Tasks page, you can modify a bulk operation that exists in the Scheduled, Pending, Finished, or Aborted state. You cannot modify bulk operations that exist in the Running state, but you can click view operations in the Running state.

To Modify Bulk Export Operations

Step 1 Choose **Voice Provisioning > Bulk Provisioning > Manage Bulk Tasks**.

Step 2 In the Bulk Name column, click the hyperlink for the bulk operation that you want to modify.

Tip To remove users from the list that displays, check the check box next to the user that displays; click the **Remove** button or choose **Action > Remove**.

Step 3 To add more users to the list that displays, click the **Add More** button or choose **Action > Add More**.

Step 4 After the search page displays, narrow or widen the search by configuring the search parameters; then, click **Go**.

Step 5 Check the check boxes for the users that you want to add. Click **Add Selected**.

Tip You can modify the selection if you choose to do so.

Step 6 After you specify all users that you want to export and the users display on the Bulk Export page, click **Next** or choose **Action > Next**.

Step 7 Check the check boxes for the attributes that you want to export. The check boxes that you check determine the header row for the export file. You can uncheck the check boxes for attributes that are already selected. The attributes that you choose affect all users that you export. After you choose the attributes, click **Next**.

Step 8 Enter a task name and description in the corresponding fields.

Step 9 From the File Encoding drop-down list box, choose the file encoding type that you want to use, for example, UTF8 or ASCII.

Step 10 Configure the time you want the Cisco Voice Provisioning Tool to export the information.

Step 11 Click **Save**.

If the operation moved into the Running state while you modified it, a message displays that you cannot modify the operation unless you abort the it.

If the operation exists in the Aborted or Finished state, a message displays that the existing log file is discarded when the operation begins.

Obtaining Information on the Bulk Provisioning User Configuration Settings

For information on user configuration settings, see the "User Configuration Settings" section on page 11-1.

CHAPTER 10

Performing Bulk Operations for Phones and Device Profiles

Bulk provisioning functionality in the Cisco Voice Provisioning Tool allows you to add or modify a large number of users or a large number of phones/device profiles (and the corresponding configuration settings). Before you perform any bulk operations, review the "Overview of the Comma Separated Value (CSV) File" section on page 8-5, which describes the CSV file format and caveats for the CSV file.

Caution Because bulk operations typically take a long time to complete and because bulk operations may adversely affect processing performance, we recommend that you perform bulk operations during off-hours. You can schedule the bulk operation to occur at a time when the system will be minimally impacted.

This chapter contains information on the following topics:

Importing Phones or Device Profiles in Bulk

To import phones or device profiles in bulk, perform the following procedure:

To Import Phones or Device Profiles in Bulk

Step 1 In the Cisco Voice Provisioning Tool, choose **Voice Provisioning > Bulk Provisioning > Bulk Import**.

Step 2 From the Operation Type drop-down list box, choose the applicable bulk operation (**Bulk Add Phones** or **Bulk Updates Phones**).

Step 3 In the Task Name field, enter a name for the bulk operation.

Step 4 In the Description field, enter a description for the bulk operation.

Step 5 In the File field, enter the name of the CSV file, or browse to the file location by clicking the **Browse** button.

After you click Save, the CSV file is uploaded to the Cisco Voice Provisioning Tool server.

Step 6 From the File Encoding drop-down list box, choose the type of format that your file supports.

If the file does not support the option that you choose, the bulk operation fails.

Tip In the Current Server Time Is field, the time zone for the Cisco Voice Provisioning Tool server displays.

Step 7 If you want to schedule the bulk operation for another time, click the first radio button. If you want to start the bulk operation immediately, click the **Execute Now** radio button.

Step 8 If you scheduled the bulk operation, enter the day and time by following the formats that display next to the settings in the GUI.

Step 9 Click the **Save** button or choose **Action > Save**.

Modifying Bulk Import Operations for Phones or Device Profiles

On the Manage Bulk Tasks page, you can modify a bulk operation that exists in the Scheduled, Pending, Finished, or Aborted state. You cannot modify bulk operations that exist in the Running state, but you can view operations in the Running state.

To Modify Bulk Import Operations for Phones or Device Profiles

Step 1 Choose **Voice Provisioning > Bulk Provisioning > Manage Bulk Tasks**.

Step 2 In the Bulk Name column, click the hyperlink for the bulk operation that you want to modify.

The Bulk Import page displays; the Operation Type displays as read only.

Step 3 In the Task Name field, enter a name for the bulk operation.

Step 4 In the Description field, enter a description for the bulk operation.

Step 5 In the File field, enter the name of the CSV file, or browse to the file location by clicking the **Browse** button.

Step 6 From the File Encoding drop-down list box, choose the type of format that your file supports.

If the file does not support the option that you choose, the bulk operation fails.

Step 7 If you want to schedule the bulk operation for another time, click the first radio button. If you want to start the bulk operation immediately, click the **Execute Now** radio button.

Tip In the Current Server Time Is field, the time zone for the Cisco Voice Provisioning Tool server displays.

Step 8 If you scheduled the bulk operation, enter the day and time by using the formats that display next to the settings in the GUI.

Step 9 Click the **Save** button or choose **Action > Save**.

If the operation moved into the Running state while you modified it, a message displays that you cannot modify the operation unless you abort it.

If the operation exists in the Aborted or Finished state, a message displays that the existing log file is discarded when the operation begins.

Exporting Phones or Device Profiles in Bulk

You can only export one record type, for example phones/device profiles or users, but not both at the same time. You must export at least one item, even if you export an empty file.

For phone and device profile attributes, you can check up to 36 lines in the attributes settings pane that displays during the export. The Cisco Voice Provisioning Tool does not export passwords or PINs.

To Export Phones or Device Profiles in Bulk

Step 1 In the Cisco Voice Provisioning Tool, choose **Voice Provisioning > Bulk Provisioning > Bulk Export**.

Step 2 Click the **Phone** radio button; then, click **Next** or choose **Action > Next**.

Step 3 On the Bulk Exports pop-up page, enter the search criteria for the phones/device profiles that you want to display; then, click **Go**. To export specific phones/device profiles, check the check box(es) for the phones/device profiles that you want to export, and click **Add Selected**.

Step 4 To add more phones/device profiles to the bulk export list, click the **Add More** button; after the Add More Phones/Profiles pop-up page displays, check the check boxes for the phones/device profiles that you want to add. Click **Add Selected**.

Step 5 After you specify all phones/device profiles that you want to export and the phones/device profiles display on the Bulk Export page, click **Next**.

Step 6 Check the check boxes for the attributes that you want to export; for example, basic/advanced phone settings and basic/advanced line settings. The check boxes that you check determine the header row for the export file.

If you choose to export line settings, check all lines that you want to export. If you check the Lines to Export check box, the tool automatically checks all line check boxes that display below the Lines to Export check box.

If you choose lines for export, you must check the check boxes for the line settings that you want to export. Checking a check box for a line setting automatically exports that setting for all lines that you choose to export. Line setting check boxes appear disabled until you check the check boxes for the lines themselves.

After you choose the attributes and lines, click **Next** or choose **Action > Next**.

Step 7 Enter a task name and description in the corresponding fields.

Step 8 From the File Encoding drop-down list box, choose the file encoding type that you want to use, for example, UTF8 or ASCII.

Step 9 Configure the time you want the Cisco Voice Provisioning Tool to export the information.

Step 10 Click **Export**.

Modifying Bulk Export Operations for Phones or Device Profiles

On the Manage Bulk Tasks page, you can modify a bulk operation that exists in the Scheduled, Pending, Finished, or Aborted state. You cannot modify bulk operations that exist in the Running state, but you can click view operations in the Running state.

To Modify Bulk Export Operations for Phones or Device Profiles

Step 1 Choose **Voice Provisioning > Bulk Provisioning > Manage Bulk Tasks**.

Step 2 In the Bulk Name column, click the hyperlink for the bulk operation that you want to modify.

Step 3 To add more phones/device profiles to the list that displays, click the **Add More** button or choose **Action > Add More**.

Step 4 After the Bulk Export pop-up page displays, specify your search criteria; then, click **Go**. Check the check boxes for the phones that you want to add. Click **Add Selected**.

Tip To remove phones from the list on the Bulk Export page, check the check box next to the phone or device profile; click the **Remove** button or choose **Action > Remove**.

Step 5 After you specify all phones/device profiles that you want to export and the phones /device profiles display on the Bulk Export page, click the **Next** button or choose **Action > Next**.

Step 6 Check the check boxes for the attributes that you want to export, for example, basic/advanced phone settings and basic/advanced line settings.

If you choose to export line settings, check all lines that you want to export. If you check the Lines to Export check box, the tool automatically checks all line check boxes that display below the Lines to Export check box. The basic and advanced line configuration settings appear disabled until you check the lines that you want to export.

The check boxes that you check determine the header row for the export file. After you choose the attributes and lines, click **Next** or choose **Action > Next**.

Step 7 Enter a task name and description in the corresponding fields.

Step 8 From the File Encoding drop-down list box, choose the file encoding type that you want to use, for example, UTF8 or ASCII.

Step 9 Configure the time you want the Cisco Voice Provisioning Tool to export the information.

Step 10 Click **Save** or choose **Action > Export**.

If the operation moved into the Running state while you modified it, a message displays that you cannot modify the operation unless you abort it.

If the operation exists in the Aborted or Finished state, a message displays that the existing log file is discarded when the operation begins.

Obtaining Information on Bulk Provisioning Phone and Device Profile Configuration Settings

For information on settings that you enter in the CSV file for bulk operations, see the "Phone Configuration Settings" section on page 12-1.

User Configuration Settings

This chapter contains settings that you configure when you add and update users. After you become familiar with the Cisco Voice Provisioning Tool, consider printing this chapter to use as a reference.

This chapter contains information on the following topics:

Considerations for User Settings

Consider the following information before you review the user configuration settings:

- Most settings in the tables are considered optional; that is, you do not need to configure them to add or update a user (or user template).
- For required settings, such as the CCM User Password, Confirm Password, CCM PIN, and Confirm PIN fields, an asterisk (*) displays next to the setting in the GUI.
- For templates, you can leave most field(s) blank; enter partial data (for example, the area code only for the phone number); or specify the exact information as you want it to display for individual users.
- Because some settings do not display in the GUI when you add a user or update a user, the order in the tables may not reflect the order of the settings in the GUI. This document does not distinguish the settings for additions or modifications; if the setting does not display on the page, you cannot configure it.

User Parameters (Basic User Settings)

Use Table 11-1 in conjunction with the following sections:

Template Pages

- Adding a User Template, page 6-2
- Updating a User Template, page 6-3

User Pages

- Adding a User, page 3-2
- Updating a Single User, page 3-3
- Updating Multiple Users at the Same Time, page 3-4

Table 11-1 User Parameters (Basic User Settings)

Setting	Description
For Template Pages	
Template Name	Enter a maximum of 255 characters to create a unique template name. The Cisco Voice Provisioning Tool validates that the template name does not exist. If the name exists, the GUI displays an error message.
Template Description	Enter a maximum of 255 characters to describe the Cisco Voice Provisioning Tool template. The Cisco Voice Provisioning Tool does not validate this setting.
Phone System	From the drop-down list box, choose the Cisco CallManager that you want to associate with the Cisco Voice Provisioning Tool template.
Messaging System	From the drop-down list box, choose the Cisco Unity that you want to associate with the Cisco Voice Provisioning Tool template.
For User Pages	
Template Name	If you want to apply a Cisco Voice Provisioning Tool template to the user, choose the template name from the drop-down list box.
User ID	Enter a maximum of 20 alphanumeric and special characters, which in this case include ‘, ~ , !, @, #, $, %, ^, &, -, _, {}, accent mark, and . (period). When you update a user record, this information displays as read only.
First Name	Enter a maximum of 24 characters.
Last Name	Enter a maximum of 24 characters.
Phone System	This setting displays as read only after you choose a phone system for the user and configure the mandatory settings. When you add a user, the Cisco Voice Provisioning Tool validates that you chose at least one product system (phone or voice mail). It also validates that you completed the mandatory settings that are associated with the system. From the drop-down list box, choose the Cisco CallManager that you want to associate with the user.
Message System	This setting displays as read only after you choose a voice mail system for the user and configure the mandatory settings. When you add a user, the Cisco Voice Provisioning Tool validates that you chose at least one product system (phone or voice mail). It also validates that you completed the mandatory settings that are associated with the system. From the drop-down list box, choose the Cisco Unity that you want to associate with the user.

CallManager User Information Settings

Use Table 11-2 in conjunction with the following sections:

Template Pages

- Adding a User Template, page 6-2
- Updating a User Template, page 6-3

User Pages

- Adding a User, page 3-2
- Updating a Single User, page 3-3
- Updating Multiple Users at the Same Time, page 3-4

Table 11-2 CallManager Settings for Users

Setting	Description
CCM User Password	Enter a unique password that is at least 5 but no more than 20 alphanumeric or special characters. When you update a user record, this password displays as encrypted text. To change the password, click the Reset button.
Reset	This button displays for user updates only. Click this button if you want to change the CCM User Password or CCM PIN.
Confirm Password	Enter the same password that you entered in the CCM User Password field. This field displays when you add a CCM User Password for the first time and when you click the Reset button to change the CCM User Password (for user updates only). After you enter information in the CCM User Password or New Password fields, you must complete this setting.
New Password	When you update a user record and click the Reset button for the CCM User Password setting, this field displays. Enter a unique password that is at least 5 but no more than 20 alphanumeric or special characters.
CCM PIN	Enter a unique Personal Identification Number that is at least 5 but no more than 20 numeric characters. This field displays when you add a CCM PIN for the first time and when you click the Reset button to change the CCM PIN (for user updates only).
Confirm PIN	Enter the same PIN that you entered in the CCM PIN field.
New PIN	When you update a user record and click the Reset button for the CCM PIN setting, this field displays. Enter a unique Personal Identification Number that is at least 5 but no more than 20 numeric characters.
Dept.	Enter the user department information, for example, the department number or name. Ensure that the information entered is no more than 30 alphanumeric characters.

Table 11-2 CallManager Settings for Users (continued)

Setting	Description
Manager's User ID	Enter the name of the user manager ID. The manager user ID that you enter must already exist in the directory (Cisco CallManager Administration) as a user. For the ID, enter no more than 30 alphanumeric characters. Do not include the following characters: spaces, =, +, < >, #, ;, \, or ".
Telephone No	Enter the user phone number, which must be no more than 24 digits. You may use the following special characters: (,), and - .
CTI Application Use	If you want the user to be able to use Computer Telephony Integration (CTI) applications, choose **Enabled**.
Calling Party Number Modification	Choosing **Enabled** allows an application such as Cisco Emergency Responder (CER) to change the calling number when it initiates a feature request from an application programming interface (API). For more information, see the Cisco Emergency Responder documentation.
Call Park Retrieval	If you want users to be able to retrieve parked calls, choose **Enabled**.
Authentication Proxy	If you want Cisco CallManager Extension Mobility users to have authentication proxy rights, choose **Enabled**. For more information on Cisco CallManager Extension Mobility, see the *Cisco CallManager Features and Services Guide*.
Associate Phone/Profile	Click this button if you want to associate a phone or device profile with the user.
Add Phone/Profile	Click this button if you want to add a phone or device profile from the user page.
Primary Extension	From the drop-down list box, choose the directory number that will serve as the primary extension for user.
Default Profile	From the drop-down list box, choose the profile that you want to serve as the default for the user.

Cisco Unity User Information Settings

Most settings in Table 11-3 are optional. For required settings, an asterisk (*) displays next to the setting in the GUI. You can leave the field(s) blank; enter partial data (for example, the area code only for the phone number); or specify the exact information as you want it to display for individual users.

The Cisco Voice Provisioning Tool does not support importing of existing Microsoft Exchange users. When you use a Cisco Unity server to add a user, the Cisco Unity server creates the Unity PIN and password and allocates it to the user. The Cisco Voice Provisioning Tool does not allow you to specify a Cisco Unity password when you add or modify a user record, although you may set the Unity PIN.

Use Table 11-3 in conjunction with the following sections:

Template Pages

- Adding a User Template, page 6-2
- Updating a User Template, page 6-3

User Pages

- Adding a User, page 3-2
- Updating a Single User, page 3-3

- Updating Multiple Users at the Same Time, page 3-4

Table 11-3 Unity Settings for Users

Setting	Description
PIN	Enter a password by using digits 0 through 9. To help protect Cisco Unity from unauthorized access and toll fraud, enter a long—eight or more digits—and non-trivial password. To have Cisco Unity prompt the subscriber to set a new password, also check the User Must Change Password at Next Login check box. The information that you enter in this field displays as encrypted text. When you update a user record, click the Reset button to change the PIN.
PIN	Enter the new password again to confirm the entry. The information that you enter in this field displays as encrypted text.
Message Extension	From the drop-down list box, choose the number that callers dial to reach the subscriber. Message Extension options include extensions for all phones associated with the user plus the Custom Extension options. If you choose a different product system after configuring this setting, this setting reverts to the default.
Custom Extension	If you want to use a different extension for voice mail than the extension that is designated for the phone, enter the value in this field. Disabled by default, this field appears enabled when you choose Custom Extension for the Extension setting. If you did not choose a Cisco CallManager product system or did not associate a phone or profile with the user, you must configure the Custom Extension setting. Because the Cisco Voice Provisioning Tool does not validate whether the extension is used by another Cisco Unity user, verify that the extension is not used by another user in Cisco Unity before you enter the information in this field.
Display name	Cisco Unity creates a default display name for the subscriber, which you can modify. This is the name as displayed in the Cisco Unity Administrator, Exchange, Windows, and subscriber reports. In most cases, only the first 40 characters are displayed.
Fax ID	Enter the number that callers dial to send a fax to the subscriber. This number may be the same as the subscriber extension. The Cisco Voice Provisioning Tool does not validate whether the value exists.

Table 11-3 Unity Settings for Users (continued)

Setting	Description
Subscriber Type	Choose the subscriber type that applies to the user. • **Exchange**—Regular subscribers have an Exchange mailbox and a Windows domain account. Cisco Unity creates the mailbox and Windows domain account at the same time that it creates the subscriber. Exchange 5.5 mailboxes are created in the Recipients container in the site; Exchange 2000 and Exchange 2003 mailboxes are created in the domain and organizational unit (OU) that you specified in the Cisco Unity Server Configuration Wizard during Setup. The user object for the subscriber in Active Directory or the Exchange 5.5 directory contains Cisco Unity-specific attributes. If you choose this type, you must enter a value either in the Extension or Custom Extension fields. • **Internet**—Internet subscribers do not have mailboxes on the local Exchange network. When Cisco Unity creates the Internet subscriber account, it creates an Active Directory contact (or Exchange 5.5 custom recipient) with Cisco Unity-specific attributes. The Extension field becomes optional when you check this check box.
Subscriber Template	From the drop-down list box, choose a subscriber template that is supported on the Cisco Unity product system that you chose for the user configuration.
SMTP Address	Disabled by default, this field appears enabled when you choose Internet Subscriber for the Subscriber Type. Enter up to 128 characters for the e-mail (SMTP) address that is assigned to the Internet subscriber. If the remote message recipient that the Internet subscriber corresponds to uses Cisco Unity, enter the remote address in the following format: VOICE:<Delivery Location Dial ID>_<Remote Primary Extension> (for example, VOICE:123_5678) If the remote message recipient does not use Cisco Unity, specify the e-mail (SMTP) address to which messages to the Internet subscriber will be sent: SMTP:alias@domain.com (for example, aabade@cisco.com)
Exchange Server	Choose the Exchange server (also referred to as the home server) where the subscriber messages are stored.
MailStore ID	Choose the mailbox store where subscriber messages are stored.

Table 11-3 Unity Settings for Users (continued)

Setting	Description
Class of Service	A class of service (COS) defines limits and permissions for using Cisco Unity. For example, a COS: • Controls access to the Cisco Unity Administrator and to features, such as Text to Speech e-mail or live reply. • Controls how subscribers interact with Cisco Unity. For example, a COS dictates the maximum length of subscriber messages and greetings, whether subscribers can choose to be listed in directory assistance, and whether subscribers can send messages to a public distribution list. • Specifies the restriction table used to control the phone numbers subscribers can use for fax delivery, message notification, call transfer, and other tasks. A COS is specified in each subscriber template; thus, a subscriber is assigned to the COS that is specified in the template upon which the subscriber account is based. The Cisco Voice Provisioning Tool does not validate this setting.
User Must Change Password at Next Login	Check this check box when you have set a temporary phone password, and want the subscriber to set a new password the next time that the subscriber logs on to Cisco Unity by phone. Encourage subscribers to specify long—eight or more digits—and non-trivial passwords as a way to help protect their accounts from unauthorized access and toll fraud.
User Cannot Change Password	Check this check box to prevent the subscriber from changing the phone password. Use of this setting is most applicable for accounts that can be accessed by more than one person. When you check this check box, also check the Password Never Expires check box. If you leave this check box unchecked, subscribers can use the Cisco Unity phone conversation or the Cisco Unity Assistant to set their phone passwords. Encourage them to specify long—eight or more digits—and non-trivial passwords as a way to help protect their accounts from unauthorized access and toll fraud. The Cisco Voice Provisioning Tool does not validate this setting.
Password Never Expires	Check this check box for low-security subscribers or for accounts that can be accessed by more than one person. The Cisco Voice Provisioning Tool does not validate this setting.

User Settings for Bulk Provisioning

Table 11-4 describes the user configurations settings that you can include in the CSV file for bulk provisioning tasks. Use Table 11-4 in conjunction with the following sections:

- Importing Users in Bulk, page 9-1
- Modifying Bulk Import Operations, page 9-2
- Exporting Users in Bulk, page 9-3
- Modifying Bulk Export Operations, page 9-3

- Overview of the Comma Separated Value (CSV) File, page 8-5
- Overview of Bulk Import Operations, page 8-2
- Overview of Bulk Export Operations, page 8-4

Table 11-4 User Configuration Settings in the CSV File

Column	Description	Important Notes
vpt_productSystems	Enter the product systems that correlates to a row of data. You may enter several product systems or types, but separate each system by entering a semicolon (;) between each system; for example, vpt-ccm1; vpt-unity1.	If you specify a Cisco Voice Provisioning Tool template in the CSV file, leave the product system information blank. When you add or modify a user, configuring this setting is required, unless you specify information for the vpt_templateName field. Entering vpt_clear does not delete the configuration for this setting.
vpt_templateName	Enter the Cisco Voice Provisioning Tool user template name that you want to use when you add or update the user. The values in the template are applied only when the values are not specified in the CSV file.	If you specify a Cisco Voice Provisioning Tool user template in the CSV file, leave the product system information blank. When you add or modify a user, configuring this setting is required, unless you specify information for the vpt_productSystems field. Entering vpt_clear does not delete the configuration for this setting. If you specify a setting in the CSV file and it is different than the setting that you specified in the Cisco Voice Provisioning Tool template, the value that you specify in the CSV file takes precedence.
vpt_user_userID	Enter a maximum of 20 alphanumeric and special characters, which, in this case, include ‘, ~, !, @, #, $, %, ^, &, -, _, {}, accent mark, and . (period). When you update a user record, this information displays as read only.	When you add or modify a user, configuring this setting is required. Entering vpt_clear does not delete the configuration for this setting.
vpt_user_firstName	Enter a maximum of 24 characters.	When you add or modify a user, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
vpt_user_lastName	Enter a maximum of 24 characters.	When you add a user, configuring this setting is required; when you modify a user, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.

Table 11-4 User Configuration Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_user_password	Enter a unique password that is at least 5 but no more than 20 alphanumeric or special characters.	When you add a user, configuring this setting is required; when you modify a user, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_user_pin	Enter a unique Personal Identification Number that is at least 5 but no more than 20 numeric characters.	When you add a user, configuring this setting is required; when you modify a user, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_user_managersUserID	Enter the name of the user manager ID. The manager user ID that you enter must already exist in the directory (Cisco CallManager Administration) as a user. For the ID, enter no more than 30 alphanumeric characters. Do not include the following characters: spaces, =, +, < >, #, ;, \, or “. The Cisco Voice Provisioning Tool does not validate that you entered a valid ID.	When you add or modify a user, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_user_department	Enter the user department information; for example, the department number or name. Ensure that the information entered is no more than 30 alphanumeric characters.	When you add or modify a user, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_user_telephoneNo	Enter the user phone number, which must be no more than 24 digits. You may use the following special characters: (,), and - . The Cisco Voice Provisioning Tool does not validate whether this setting exists.	When you add or modify a user, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_user_ctiApplicationUse	If you want user to be able to use Computer Telephony Integration (CTI) applications, enter Enabled. If you do not want the user to use CTI applications, enter Disabled. The Cisco Voice Provisioning Tool does not validate this setting.	When you add or modify a user, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.

Table 11-4 User Configuration Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_user_authenticationProxy	If you want Cisco CallManager Extension Mobility users to have authentication proxy rights, enter Enabled. If you do not want the Cisco CallManager Extension Mobility users to have authentication proxy rights, enter Disabled. The Cisco Voice Provisioning Tool does not validate this setting. For more information on Cisco CallManager Extension Mobility, see the *Cisco CallManager Features and Services Guide*.	When you add or modify a user, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_user_callingPartyNumberModification	Entering **Enabled** allows an application such as Cisco Emergency Responder (CER) to change the calling number when it initiates a feature request from an application programming interface (API). For more information, see the Cisco Emergency Responder documentation. Entering Disabled disallows this functionality. The Cisco Voice Provisioning Tool does not validate this setting.	When you add or modify a user, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_user_callParkRetrieval	If you want users to be able to retrieve parked calls, enter Enabled. If you do not want users to be able to retrieve parked calls, enter Disabled. The Cisco Voice Provisioning Tool does not validate this setting.	When you add or modify a user, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_user_primaryExt	Enter the primary extension for the device that you want to associate with the user.	When you add or modify a user, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_user_defaultProfile	Enter the default profile that you want to associate with the user.	When you add or modify a user, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting. The default profile is cleared when you remove all profiles.

Table 11-4 User Configuration Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_user_associatedDeviceNames	Enter all device names, including phones and profiles, that you want to associate with this user.	When you add or modify a user, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting. The list that you enter replaces the devices/profiles that are currently associated with the device. Removal of associations does not delete the devices from the database. A one-to-one match must exist between device names and device classes.
ccm_user_associatedDeviceClasses	Enter either phone or device profile configuration for each device. A one-to-one match must exist between device names and device classes.	When you add or modify a user, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
unity_user_cos	A class of service (COS) defines limits and permissions for using Cisco Unity. For example, a COS: • Controls access to the Cisco Unity Administrator and to features, such as Text to Speech e-mail or live reply. • Controls how subscribers interact with Cisco Unity. For example, a COS dictates the maximum length of subscriber messages and greetings, whether subscribers can choose to be listed in directory assistance, and whether subscribers can send messages to a public distribution list. • Specifies the restriction table used to control the phone numbers subscribers can use for fax delivery, message notification, call transfer, and other tasks. A COS is specified in each subscriber template; thus, a subscriber is assigned to the COS that is specified in the template upon which the subscriber account is based. The Cisco Voice Provisioning Tool does not validate this setting.	Configuring this setting, which applies when you modify users only, is optional. Entering vpt_clear does not delete the configuration for this setting. If you choose a different product system during the modification, the value that you entered in this field reverts to the default setting.

Table 11-4 User Configuration Settings in the CSV File (continued)

Column	Description	Important Notes
unity_user_displayName	Cisco Unity creates a default display name for the subscriber, which you can modify. This is the subscriber name that displays in the Cisco Unity Administrator, Exchange, Windows, and subscriber reports. In most cases, only the first 40 characters display. Enter the user display name.	When you add or modify a user, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
unity_user_exchangeServer	Enter the Exchange server (also referred to as the home server) where the subscriber messages are stored. The Cisco Voice Provisioning Tool does not validate this setting.	When you add or modify a user, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
unity_user_extension	Enter the number that callers dial to reach the subscriber. Enter numerals only, according to the extension numbering plan for your organization. The number must be unique among all extensions on the local Cisco Unity server and within the dialing domain, if there is one. However, a subscriber extension can be the same number as the subscriber Fax ID. Note that many phone system integration features, such as MWI and call forward to personal greeting, require that the Cisco Unity number plan match that of the phone system. Enter any combination of digits from 0 to 9, up to a maximum of 40 digits.	When you add a user, configuring this setting is required; when you modify a user, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting. Because the Cisco Voice Provisioning Tool does not validate whether the extension is used by another Cisco Unity user, verify that the extension is not used by another user in Cisco Unity before you enter the information in this field. If you choose a different product system, the value in that you entered in this field reverts to the default setting.
unity_user_faxID	Enter the number that callers dial to send a fax to the subscriber. This number may be the same as the subscriber extension. The Cisco Voice Provisioning Tool does not validate whether the value exists.	When you add or modify a user, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
unity_user_mailstoreID	Enter the mailbox store where subscriber messages are stored. The Cisco Voice Provisioning Tool does not validate this setting.	When you add or modify a user, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 11-4 User Configuration Settings in the CSV File (continued)

Column	Description	Important Notes
unity_user_pin	Enter a password by using digits 0 through 9. To help protect Cisco Unity from unauthorized access and toll fraud, enter a long—eight or more digits—and non-trivial password. To have Cisco Unity prompt the subscriber to set a new password, also configure the unity_user_pwMustChange setting.	When you add or modify a user, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
unity_user_pwCantChange	Enter True if you want to prevent the user from changing the phone password; enter False if you want the user to be able to change the password. Use of this setting applies for accounts that more than one person accesses. When you enter True for this setting, also enter True for the unity_user_pwDoesntExpire setting. If you enter False for this setting, subscribers can use the Cisco Unity phone conversation or the Cisco Unity Assistant to set their phone passwords. Encourage them to specify long—eight or more digits—and non-trivial passwords as a way to help protect their accounts from unauthorized access and toll fraud. The Cisco Voice Provisioning Tool does not validate this setting.	Configuring this setting, which applies only when you modify a user, is optional. Entering vpt_clear does not delete the configuration for this setting.
unity_user_pwDoesntExpire	Enter True if you do not want the password to expire; enter False if the password can expire. Enter True for low-security subscribers or for accounts that can be accessed by more than one person. The Cisco Voice Provisioning Tool does not validate this setting.	Configuring this setting, which applies only when you modify a user, is optional. Entering vpt_clear does not delete the configuration for this setting.

Table 11-4 User Configuration Settings in the CSV File (continued)

Column	Description	Important Notes
unity_user_pwMustChange	Enter True if the user must change the password; enter False if the user is not required to change the password. Enter True when you set a temporary phone password and want the subscriber to set a new password the next time that the subscriber logs on to Cisco Unity by the phone. Encourage subscribers to specify long—eight or more digits—and non-trivial passwords as a way to help protect their accounts from unauthorized access and toll fraud. The Cisco Voice Provisioning Tool does not validate this setting.	Configuring this setting, which applies only when you modify a user, is optional. Entering vpt_clear does not delete the configuration for this setting.
unity_user_smtpAddress	Disabled by default, you can enable this setting enter Internet Subscriber for the Subscriber Type. Enter up to 128 characters for the e-mail (SMTP) address that is assigned to the Internet subscriber. If the remote message recipient that the Internet subscriber corresponds to uses Cisco Unity, enter the remote address in the following format: VOICE:<Delivery Location Dial ID>_<Remote Primary Extension> (for example, VOICE:123_5678) If the remote message recipient does not use Cisco Unity, specify the e-mail (SMTP) address to which messages to the Internet subscriber will be sent: SMTP:alias@domain.com (for example, aabade@cisco.com)	When you add or modify a user, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.

Table 11-4 User Configuration Settings in the CSV File (continued)

Column	Description	Important Notes
unity_user_subscriberTemplate	Enter a subscriber template that is supported on the Cisco Unity product system that you chose for the user configuration.	Configuring this setting, which applies only when you add a user, is required. Entering vpt_clear does not delete the configuration for this setting.
unity_user_subscriberType	Enter the subscriber type that applies to the user. • Exchange—Regular subscribers have an Exchange mailbox and a Windows domain account. Cisco Unity creates the mailbox and Windows domain account at the same time that it creates the subscriber. Exchange 5.5 mailboxes are created in the Recipients container in the site; Exchange 2000 and Exchange 2003 mailboxes are created in the domain and organizational unit (OU) that you specified in the Cisco Unity Server Configuration Wizard during Setup. The user object for the subscriber in Active Directory or the Exchange 5.5 directory contains Cisco Unity-specific attributes. If you choose this type, you must enter a value either in the Extension or Custom Extension fields. • Internet—Internet subscribers do not have mailboxes on the local Exchange network. When Cisco Unity creates the Internet subscriber account, it creates an Active Directory contact (or Exchange 5.5 custom recipient) with Cisco Unity-specific attributes. The Extension field becomes optional when you check this check box.	Configuring this setting, which applies only when you add a user, is required. Entering vpt_clear does not delete the configuration for this setting.

Phone Configuration Settings

This chapter contains settings that you configure when you add and update phones (or VPT phone templates). After you become familiar with how the Cisco Voice Provisioning Tool works, consider printing this chapter to use as a reference. This chapter contains information on the following topics:

VPT Phone Template and Phone Pages

Bulk Provisioning

Considerations for Phone Settings

Consider the following information before you review the phone configuration settings:

- Most settings in the tables are considered optional; that is, you do not need to configure them to add or update a phone (or phone template).
- For required settings, an asterisk (*) displays next to the setting in the GUI.
- For templates, you can leave most fields blank; enter partial data (for example, half of a MAC address); or specify the exact information as you want it to display for individual phones.
- Because some settings do not display in the GUI when you add a phone or update a phone, the order in the tables may not reflect the order of the settings in the GUI. This document does not distinguish the settings for additions or modifications; if the setting does not display on the page, you cannot configure it.

Phone Parameters

The parameters in Table 12-1 allow you to specify the phone model that you want to configure and the applicable Cisco CallManager product system for the phone. Use Table 12-1 in conjunction with the following sections:

Template Pages

- Adding a VPT Phone or Device Profile Template, page 7-2
- Updating a VPT Phone or Device Profile Template, page 7-3

Phone Pages

- Adding a Single Phone or Device Profile, page 4-2
- Updating a Single Phone or Device Profile, page 4-3
- Updating Multiple Phones or Device Profiles at the Same Time, page 4-4

Table 12-1 Phone Parameters

Setting	Description
Template Pages	
Template Name	Enter a maximum of 255 characters to create a unique template name. The Cisco Voice Provisioning Tool validates that the template name does not exist in the Cisco Voice Provisioning Tool database. If the name exists, the GUI displays an error message.
Template Description	Enter a maximum of 255 characters to describe the Cisco Voice Provisioning Tool template.
Phone System	From the drop-down list box, choose the Cisco CallManager that you want to associate with the Cisco Voice Provisioning Tool phone template.
Device Class	From the drop-down list box, choose the type of Cisco Voice Provisioning Tool template that you want to create. To create a phone template, choose **Phone**.
Device Type	From the drop-down list box, choose the phone model for which you want to create the Cisco Voice Provisioning Tool template. Because all phones do not support the same features, the phone model that you choose determines the settings that display for the Cisco Voice Provisioning Tool template.
Phone Pages	
VPT Phone Template	If you want to do so, choose a Cisco Voice Provisioning Tool template to apply the template settings to the device.
Phone System	From the drop-down list box, choose the Cisco CallManager that you want to associate with the phone.
Device Class	From the drop-down list box, choose **Phone**.
Device Type	From the drop-down list box, choose the phone model that you want to configure. Because all phones do not support the same features, the phone model that you choose determines the settings that display in the GUI.

Basic Phone Settings

Use Table 12-2 in conjunction with the following sections:

Template Pages

- Adding a VPT Phone or Device Profile Template, page 7-2
- Updating a VPT Phone or Device Profile Template, page 7-3

Phone Pages

- Adding a Single Phone or Device Profile, page 4-2
- Updating a Single Phone or Device Profile, page 4-3
- Updating Multiple Phones or Device Profiles at the Same Time, page 4-4

Table 12-2 Basic Phone Settings

Setting	Description
MAC Address	Enter the Media Access Control (MAC) address that identifies Cisco IP Phones (hardware phones only). Make sure that the value comprises 12 hexadecimal characters. To access your MAC address on the phone, see the Cisco IP Phone Administration Guide that supports the version of Cisco CallManager that runs in the cluster.
Description	Identify the purpose of the device. You can enter the user name (such as John Smith) or the phone location (such as Lobby) in this field.
Device Pool	Choose the device pool to which you want this phone assigned. The device pool defines sets of common characteristics for devices, such as region, date/time group, softkey template, and MLPP information. Before options other than the default setting display in the drop-down list box, you must configure the setting in Cisco CallManager Administration. For information on how to perform this task, see the *Cisco CallManager Administration Guide*.
Phone Button Template	Choose the appropriate phone button template, which is required for line configuration in the Cisco Voice Provisioning Tool. The phone button template determines the configuration of buttons on a phone and identifies which feature (line, speed dial, and so on) is used for each button. Before options other than the default setting display in the drop-down list box, you must configure the setting in Cisco CallManager Administration. For information on how to perform this task, see the *Cisco CallManager Administration Guide*.
Calling Search Space	From the drop-down list box, choose the appropriate calling search space (CSS). A calling search space comprises a collection of partitions that are searched to determine how a dialed number should be routed. The calling search space for the device and the calling search space for the directory number are used together. The directory number CSS takes precedence over the device CSS. Before options other than the default setting display in the drop-down list box, you must configure the setting in Cisco CallManager Administration. For information on how to perform this task, see the *Cisco CallManager Administration Guide*.

Table 12-2 Basic Phone Settings (continued)

Setting	Description
AAR Calling Search Space	Choose the appropriate calling search space for the device to use when it performs automated alternate routing (AAR). The AAR calling search space specifies the collection of route partitions that are searched to determine how to route a collected (originating) number that is otherwise blocked due to insufficient bandwidth. Before options other than the default setting display in the drop-down list box, you must configure the setting in Cisco CallManager Administration. For information on how to perform this task, see the *Cisco CallManager Administration Guide*.
Enable Extension Mobility Feature	Check this check box if this phone supports extension mobility.
Log Out Profile	This field specifies the device profile that the device uses when no one is logged into the device by using Cisco CallManager Extension Mobility. Choose an option from the drop-down selection box. Options include Use Current Device Settings and Select a User Device Profile. When you choose Select a User Device Profile, a configuration window displays for you to choose the user device profile that was already configured.
Display (Internal Caller ID)	Leave this field blank to have Cisco CallManager display the extension. To have the system display a name, enter a maximum of 30 alphanumeric characters. Typically, use the user name or the directory number (if using the directory number, the person receiving the call may not see the proper identity of the caller).
Apply to All Lines	Click this button to ensure that the information in the Display (Internal Caller ID) field applies to all lines (directory numbers) that you configure for this device.
Certificate Operation	From the drop-down list box, choose one of the following options if you want to use certificates in the phones: • No Pending Operation—Displays when no certificate operation is occurring (default setting). • Install/Upgrade—Installs a new or upgrades an existing locally significant certificate in the phone. • Delete—Deletes the locally significant certificate that exists in the phone. • Troubleshoot—Retrieves the locally significant certificate (LSC) or the manufacture installed certificate (MIC), so you can view the certificate credentials in the CAPF trace file. If both certificate types exist in the phone, Cisco CallManager creates two trace files, one for each certificate type. By choosing the Troubleshooting option, you can verify that a LSC or MIC exists in the phone.
Authentication Mode	This field allows you to choose the method in which you want the phone to authenticate with CAPF. Use this field if you want to install/upgrade, delete, or troubleshoot a locally significant certificate or authenticate by a manufacture installed certificate. From the drop-down list box, choose one of the following options: • By Authentication String • By Null String • By Existing Certificate (Precedence to LSC) • By Existing Certificate (Precedence to MIC) **Tip** The *Cisco CallManager Security Guide* provides details and caveats for these settings. See that document before you configure the authentication mode.

Table 12-2 Basic Phone Settings (continued)

Setting	Description
Authentication String	If you chose the By Authentication String option in the Authentication Mode drop-down list box, this field applies. Manually enter a string that can only be used once. Ensure that the string contains 4 to 10 digits. To install, upgrade, delete, or troubleshoot a locally significant certificate, the phone user or administrator must enter the authentication string on the phone.
Key Size (bits)	From the drop-down list box, choose the key size for the certificate. The default setting equals 1024. Other options include 512 and 2048.
Operation Completes by**	This field, which supports the all options for the Certificate Operations setting, specifies the date and time in which you must complete the operation. The values that display are for the publisher database server.
Certificate Operation Status	This field displays the progress of the certificate operation, for example, <operation type> pending, failed, or successful, where operating type equals the Install/Upgrade, Delete, or Troubleshoot Certificate Operation options. You cannot change the information that displays in this field.

Advanced Phone Settings

Use Table 12-3 in conjunction with the following sections:

Template Pages

- Adding a VPT Phone or Device Profile Template, page 7-2
- Updating a VPT Phone or Device Profile Template, page 7-3

Phone Pages

- Adding a Single Phone or Device Profile, page 4-2
- Updating a Single Phone or Device Profile, page 4-3
- Updating Multiple Phones or Device Profiles at the Same Time, page 4-4

Table 12-3 Advanced Phone Configuration Settings

Setting	Description
Owner User ID	Enter the user ID of the person who is assigned to this phone. The user ID is recorded in the call detail record (CDR) for calls that are made from this device. **Note** Do not configure this field if you are using extension mobility because it does not support device owners.

Table 12-3 Advanced Phone Configuration Settings (continued)

Setting	Description
Media Resource Group List	Choose the appropriate Media Resource Group List. A Media Resource Group List comprises a prioritized grouping of media resource groups. An application chooses the required media resource, such as a Music On Hold server, from the available media resources according to the priority order that is defined in a Media Resource Group List. If you do not choose an option, Cisco CallManager uses the Media Resource Group that is defined in the device pool. Before options other than the default setting display in the drop-down list box, you must configure the setting in Cisco CallManager Administration. For information on how to perform this task, see the *Cisco CallManager Administration Guide*.
Network Hold Audio Source	To specify the audio source that is played when the network initiates a hold action, choose an audio source from the drop-down list box. If you do not choose an audio source, Cisco CallManager uses the audio source that is defined in the device pool or the system default if the device pool does not specify an audio source ID. Before options other than the default setting display in the drop-down list box, you must configure the setting in Cisco CallManager Administration. For information on how to perform this task, see the *Cisco CallManager Administration Guide*.
User Hold Audio Source	To specify the audio source that plays when a user puts the call on hold, choose an audio source from the list that displays. If you do not choose an audio source, Cisco CallManager uses the audio source that is defined in the device pool or the system default if the device pool does not specify an audio source ID. Before options other than the default setting display in the drop-down list box, you must configure the setting in Cisco CallManager Administration. For information on how to perform this task, see the *Cisco CallManager Administration Guide*.
Location	Choose the appropriate location for this Cisco IP Phone. The location specifies the total bandwidth that is available for calls to and from this location. A location setting of Not Selected indicates that the location feature does not track the bandwidth that the Cisco IP Phone consumes. Before options other than the default setting display in the drop-down list box, you must configure the setting in Cisco CallManager Administration. For information on how to perform this task, see the *Cisco CallManager Administration Guide*.
Ignore Presentation Indicators (internal calls only)	From the drop-down list box, choose **Enabled** to configure call display restrictions on a call-by-call basis. When you enable this setting, Cisco CallManager ignores any presentation restriction that is received for internal calls. Use this configuration in combination with the callingline ID presentation and connected line ID presentation configuration at the translation pattern level. Together, these settings allow you to configure call display restrictions to selectively present or block calling and/or connected line display information for each call. For information on how configure translation patterns, see the *Cisco CallManager Administration Guide*.
Network Locale	From the drop-down list box, choose the locale that is associated with the phone. The network locale contains a definition of the tones and cadences that the phone in a specific geographic area uses. If no network locale is specified, Cisco CallManager uses the network locale that is associated with the device pool. If country-specific tones must play on the phone, verify that the locale is installed before configuring the network locale. See the Cisco IP telephony locale installer documentation.

Table 12-3 Advanced Phone Configuration Settings (continued)

Setting	Description
User Locale	From the drop-down list box, choose the locale that is associated with the phone user interface. The user locale identifies a set of detailed information to support users, including language and font. Cisco CallManager makes this field available only for phone models that support localization. If no user locale is specified, Cisco CallManager uses the user locale that is associated with the device pool. If the users require information to be displayed on the phone in any language other than English, verify that the locale installer is installed before configuring user locale. See the Cisco IP telephony locale installer documentation.
Built In Bridge	Enable or disable the built-in conference bridge for the barge feature by using the Built In Bridge drop-down list box (choose On, Off, or Default). For more configuration information, see the *Cisco CallManager Features and Services Guide*.
Device Security Mode	Use this setting to configure security for the phone. From the drop-down list box, choose the mode that you want to set for the device: • Use System Default—The phone uses the value that you specified for the enterprise parameter, Device Security Mode. • Non-secure—No security features exist for the phone. A TCP connection opens to Cisco CallManager. • Authenticated—Cisco CallManager provides integrity and authentication for the phone. A TLS connection using NULL/SHA opens. • Encrypted—Cisco CallManager provides integrity, authentication, and encryption for the phone. A TLS connection using AES128/SHA opens.
Signal Packet Capture Mode	This setting exists for troubleshooting encryption only; packet capturing may cause high CPU usage or call-processing interruptions. Choose one of the following options from the drop-down list box: • Real-Time Mode—Cisco CallManager sends decrypted or nonencrypted messages over a secure channel to analyzing devices. A TLS connection opens between Cisco CallManager and the TAC debugging tool. After authentication occurs, Cisco CallManager sends the SCCP messages to all connected real-time debugging tools; this action occurs only for the chosen devices where you configured packet capturing. This mode eliminates sniffing over the network. • Batch Processing Mode—Cisco CallManager writes the decrypted or nonencrypted messages to file, and the system encrypts each file. On a daily basis, the system creates a new file with a new encryption key. Cisco CallManager, which stores the file for seven days, also stores the keys that encrypt the file in a secure location. Cisco CallManager stores the file in C:\Program Files\Cisco\PktCap. A single file contains the time stamp, source IP address, destination IP address, SCCP message length, and the SCCP message. The debugging tool uses HTTPS, administrator username and password, and the specified day to request a single encrypted file that contains the captured packets. Likewise, the tool requests the key information to decrypt the encrypted compressed file. **Tip** For more information on these options, see the *Cisco CallManager Security Guide*.

Table 12-3 Advanced Phone Configuration Settings (continued)

Setting	Description
Packet Capture Duration	This setting, which works in conjunction with the Signal Packet Capture mode setting, exists for troubleshooting encryption only; packet capturing may cause high CPU usage or call-processing interruptions. This field specifies the maximum number of minutes that is allotted for one session of packet capturing. The default setting equals 60.
Privacy	For each phone that wants Privacy, choose **On** in the Privacy drop-down list box. For more information, see the *Cisco CallManager Features and Services Guide*.
Retry Video Call as Audio	This check box applies only to video endpoints that receive a call. If this phone receives a call that does not connect as video, the call tries to connect as an audio call. By default, the system checks this check box to specify that this device should immediately retry a video call as an audio call (if it cannot connect as a video call) prior to sending the call to call control for rerouting. If you uncheck this check box, a video call that fails to connect as video does not try to establish as an audio call. The call then fails to call control, and call control routes the call via Automatic Alternate Routing (AAR) and/or route/hunt list.
Softkey Template	Choose the appropriate softkey template. The softkey template determines the configuration of the softkeys on Cisco IP Phones. Leave this field blank if the device pool contains the assigned softkey template.
Module 1	Choose the appropriate expansion module or none.
Module 2	Choose the appropriate expansion module or none.
Phone Load Name	Enter the custom software firmware load for the Cisco IP Phone. The value that you enter overrides the default value for the current model. For more information on device default values, see the *Cisco CallManager Administration Guide*.
Module 1 Load Name	Enter the custom software for the appropriate expansion module, if applicable. The value that you enter overrides the default value for the current model. Ensure the firmware load matches the module load.
Module 2 Load Name	Enter the custom software for the second expansion module, if applicable. The value that you enter overrides the default value for the current model. Ensure the firmware load matches the module load.
Information	Enter the location (URL) of the help text for the information (i) button. To accept the default setting, do not change the text.
Services	Enter the location (URL) for Cisco IP Phone Services. To accept the default setting, do not change the text.
Directory	Enter the server from which the phone obtains directory information.To accept the default setting, do not change the text.
Authentication Server	Enter the URL that the phone uses to validate requests that are made to the phone web server. If you do not provide an authentication URL, the advanced features on the Cisco IP Phone that require authentication do not function. By default, this URL accesses a Cisco IP Phone User Options page that was configured during the Cisco CallManager installation. To accept the default setting, do not change the text.

Table 12-3 Advanced Phone Configuration Settings (continued)

Setting	Description
Messages	Leave this field blank (not used by Cisco CallManager).
Proxy Server	Enter the host and port (for example, proxy.cisco.com:80) that are used to proxy HTTP requests for access to non-local host addresses from the phone HTTP client. If the phone receives a URL such as www.cisco.com in a service and the phone is not configured in the cisco.com domain, the phone uses the proxy server to access the URL. If the phone is configured in cisco.com domain, the phone accesses the URL without using the proxy because the phone is in the same domain as the URL. If you do not configure this URL, the phone attempts to connect directly to the URL. Leave this field blank to accept the default setting.
Idle	Enter the URL that displays on the Cisco IP Phone display when the phone has not been used for the time that is specified in the Idle Timer field. For example, you can display a logo on the LCD when the phone has not been used for 5 minutes. Leave this field blank to accept the default setting.
Idle Timer (seconds)	Enter the time (in seconds) that you want to elapse before the URL that is specified in the Idle field displays. Leave this field blank to accept the value of the Idle URL Timer enterprise parameter in Cisco CallManager Administration.
MLPP Domain (e.g., “0000FF”)	Enter a hexadecimal value between 0 and FFFFFF for the MLPP domain that is associated with this device. If you leave this field blank, this device inherits its MLPP domain from the value set from the device pool that is configured for the phone. If the device pool does not have an MLPP domain setting, this device inherits its MLPP domain from the value set for the MLPP Domain Identifier enterprise parameter.
MLPP Indication	If available, this setting specifies whether a device that supports precedence tones will play the tones when it places an MLPP precedence call. Choose one of the following options to assign to this device: • Default—This device inherits its MLPP indication setting from its device pool. • Off—This device does not handle nor process indication of an MLPP precedence call. • On—This device does handle and process indication of an MLPP precedence call. **Note** Do not configure a device with the following combination of settings: MLPP Indication is set to Off or Default (when default is Off) while MLPP Preemption is set to Forceful. **Note** Turning on MLPP Indication (at the enterprise parameter, device pool, or device level) disables normal Ring Setting behavior for the lines on a device, unless MLPP Indication is turned off (overridden) for the device.

Table 12-3 Advanced Phone Configuration Settings (continued)

Setting	Description
MLPP Preemption	This setting specifies whether a device that supports preempting calls in progress will use the capability when it places an MLPP precedence call. Choose one of the following options: • Default—This device inherits its MLPP preemption setting from its device pool. • Disabled—This device does not allow preemption of lower precedence calls to take place when necessary for completion of higher precedence calls. • Forceful—This device allows preemption of lower precedence calls to take place when necessary for completion of higher precedence calls. **Note** Do not configure a device with the following combination of settings: MLPP Indication is set to Off or Default (when default is Off) while MLPP Preemption is set to Forceful.
Disable Speakerphone	This setting disable only the speakerphone functionality. Disabling speakerphone functionality will not affect the headset. You can use lines and speed dials with headset/handset. The default setting equals Off.
Disable Speakerphone and Headset	This setting disables all speakerphone functions and headset microphone. The default setting equals Off.
Forwarding Delay	This setting indicates whether the internal switch begins forwarding packets between the PC port and switched port on your phone when your phone becomes active. When you set forwarding delay to Disabled, the internal switch begins forwarding packets immediately. When you set forwarding delay to Enabled, the internal switch waits 8 seconds before forwarding packets between the PC port and the SW port. Set Forwarding Delay to Enabled when you connect both ports to switches for redundant uplinks or when you daisy chain phones together. The default setting equals Disabled.
Settings Access	This setting indicates whether the Settings button on the phone is functional. When you enable Settings Access, you can change the phone network configuration, ring type, and volume on the phone. When you disable Settings Access, the Settings button is completely disabled; no options appear when you press the button. Also, you cannot adjust the ringer volume or save any volume settings. When Settings Access is restricted, you can only access User Preferences and volume settings. By default, Settings Access is enabled.
PC Port	This setting indicates whether the PC port on the phone is enabled or disabled. The port labeled “10/100 PC” on the back of the phone connects a PC or workstation to the phone so they can share a single network connection. The default setting equals Enabled.
PC Voice VLAN Access	This setting indicates whether the phone allows a device attached to the PC port to access the Voice VLAN. Disabling this setting prevents the attached PC from sending and receiving data on the Voice VLAN. It will also prevent the PC from receiving data sent and received by the phone. Enable this setting if an application is being run on the PC that requires monitoring of the phones traffic; for example. monitoring and recording applications and network monitoring software for analysis purposes. The default setting equals Enabled.
Gratuitous ARP	This setting indicates whether the phone will learn MAC addresses from Gratuitous ARP responses. Disabling the phone’s ability to accept Gratuitous ARP prevent s voice-stream monitoring and recording applications from working. If you do not need to monitor voice streams, set the setting to Disabled. The default setting equals Enabled.

Table 12-3 Advanced Phone Configuration Settings (continued)

Setting	Description
Video Capabilities	When enabled, this setting indicates that the phone participates in video calls when connected to a PC that is equipped for video calls. The default setting equals Disabled.
Auto Line Select	When enabled, this setting indicates that the phone shifts the call focus to incoming calls on all lines. When disabled, the phone only shifts the focus to incoming calls on the currently used line. The default setting equals Disabled.
Web Access	This parameter indicates whether the phone accepts connections from a web browser or other HTTP client. Disabling the web server functionality of the phone blocks access to the phones internal web pages. These pages provide statistics and configuration information. Features, such as QRT (Quality Report Tool), do not function properly without access to the phones web pages. This setting also affects any serviceability application that relies on web access; CiscoWorks2000. The default setting equals Enabled.
Display On Time	This field indicates the time of day the display is to automatically turn itself on for days listed in the off schedule. Enter the value by using a 24 hour format where 0:00 is the beginning of the day and 23:59 is the end of the day. Leaving this field blank activates the display at the beginning of the day; that is, 0:00. To set the display to turn on at 7:00AM, enter 07:00. To turn the display on at 2:00PM, enter 14:00 without the quotes. The default equals 07:30. The maximum length of characters equals 5.
Display On Duration	This field indicates the amount of time the display is to be active when it is turned on. No value indicates the end of the day. Maximum value equals 24 hours. Enter a value that exists in free form hours and minutes; for example, 1:30 activates the display for one hour and 30 minutes. The default setting equals 10:30. The maximum length of characters equals 5.
Display Idle Timeout	This field indicates how long to wait before the display is turned off after it is turned on by user interaction. This inactivity timer continually resets during user activity. Leaving this field blank makes the phone use a predetermined default value of one hour. Maximum value equals 24 hours. Enter a value that exists in free form hours and minutes; for example, 1:30 turns off the display after one hour and 30 minutes of inactivity. The default setting equals 01:00. The maximum length of characters equals 5.
Days Display Not Active	This field allows the user to specify the days that the backlight is to remain off by default. Typically this would be Saturday and Sunday for US corporate customers. The list contains all of the days of the week. The default setting equals Sunday.
Span to PC Port	This setting indicates whether the phone forwards packets transmitted and received on the Phone Port to the PC Port. Choose **Enabled** if an application is being run on the PC Port that requires monitoring of the IP Phone's traffic; for example, a monitoring and recording applications (common in call center environments) or network packet capture tools used for diagnostic purposes. To use this feature, you must enable the PC Voice VLAN access setting. The default setting equals Disabled.
The Following Settings Support Cisco IP Communicator Only	
IP Address Autodetection URL	Enter a fully-qualified URL so that other phones can detect the Cisco IP Communicator's address. Consider this setting required for compatibility with NATs, non-Cisco VPN clients, and other similar network topologies. To use this option, you must first install and configure an address detection web page.

Table 12-3 Advanced Phone Configuration Settings (continued)

Setting	Description
RTP Port Range Start	This setting specifies the lowest port number to use for transmitting and receiving RTP audio packets, expressed in decimal notation. This option proves useful for compatibility with NATs, firewalls, and other network topologies that require applications to use a well known set of ports. If no port is specified, the default value of 24576 (0x6000) is used. The minimum value equals 1. The maximum value equals 65535.
RTP Port Range End	This setting specifies the highest port number to use for transmitting and receiving RTP audio packets, expressed in decimal notation. This option is useful for compatibility with NATs, firewalls, and other network topologies that require applications to use a well-known set of ports. If no port is specified, the default value of 32768 (0x8000) is used. The minimum value equals 1. The maximum value equals 65535.
LDAP Server Information File	This setting specifies the location of the LDAP server information file on the TFTP server. (If unspecified, the default equals Communicator/LdapServers.xml.) This file contains a list of LDAP directories for use in directory dialing as described in the *Cisco IP Communicator Administration Guide*.
Verify Software Versions	The setting indicates whether the Cisco IP Communicator application verifies the authenticity and completeness of its installed software components when it is upgraded or started. If this option is set to On Upgrade (the default), the application launches quickly but does not automatically repair itself if any of its files are deleted or modified by the user. If this option is set to At Startup, the application launches slowly but detects and repairs most modifications or a corruption. The default setting equals On Upgrade.

Basic Line Configuration Settings for Phones

Use Table 12-4 in conjunction with the following sections:

Phone Pages

- Configuring a Line, page 4-9
- Adding a Line, page 4-9
- Updating a Line, page 4-10
- Configuring a Shared Line Between Devices, page 4-11
- Updating a Shared Line, page 4-13

Table 12-4 Basic Line Configuration Settings

Setting	Description
Directory Number	Enter a phone number that can be dialed. Values can include numeric characters and route pattern wildcards and special characters except for (.) and (@). **Note** When a pattern is used as a directory number, the display on the phone and the caller ID that display on the dialed phone will both contain characters other than digits. To avoid this, we recommend that you provide a value for Display (Internal Caller ID), Line text label, and External phone number mask. The directory number that you enter can appear in more than one partition. However, if a JTAPI or TAPI application controls or monitors a device, you should not configure multiple instances of the same DN (with different partitions) on that device. **Tip** You cannot configure this setting for VPT phone templates.
Partition	Choose the partition where the directory number belongs. Make sure that the directory number that you enter in the Directory Number field is unique within the partition that you choose, unless you want to configure a shared line. If you do not want to restrict access to the directory number, choose <None> for the partition. **Tip** If the directory number is not unique within the partition, a message states that the line is already used by another phone. If you specify that you want to continue to use it, the line becomes a shared line. You can configure the number of partitions that display in this drop-down list box by using the Max List Box Items enterprise parameter in Cisco CallManager Administration. In Cisco CallManager Administration, if more partitions exist than the Max List Box Items enterprise parameter specifies, the ellipsis button (...) displays next to the drop-down list box. Click the ... button to display the Select Partition window. Enter a partial partition name in the List Items Where Name Contains field. Click the desired partition name in the list of partitions that displays in the Select item to use box and click OK. **Tip** You cannot configure this setting for VPT phone templates.
Voice Mail Profile	Choose from list of Voice Mail Profiles that are defined on the Voice Mail Profile Configuration page in Cisco CallManager Administration. The first option specifies <None>, which is the current default Voice Mail Profile that is configured in the Voice Mail Profile Configuration.

Table 12-4 Basic Line Configuration Settings (continued)

Setting	Description
Calling Search Space	From the drop-down list box, choose the appropriate calling search space. A calling search space comprises a collection of partitions that are searched for numbers that are called from this directory number. The value that you choose applies to all devices that are using this directory number. Changes result in an update of the numbers that are listed in the Call Pickup Group field. You can configure calling search space for Forward All, Forward Busy, Forward No Answer, and Forward on Failure directory numbers. The value that you choose applies to all devices that are using this directory number. If you set the Forward All Calling Search Space field to <None>, Cisco CallManager uses the calling search spaces of the line and the phone when the user forwards calls by using the Cisco IP Phone User Options Pages or the CFwdAll softkey on the phone. If you want to restrict users from forwarding calls on their phones, you must choose a restrictive calling search space from the Forward All Calling Search Space field; for example, you have two calling search spaces: Building and PSTN. The Building calling search space only allows users to call within the building, while the PSTN calling search space allows users to call within and outside the building. You assign the phone to the Building calling search space and the line on your phone to the PSTN calling search space. If you set the Call Forward All calling search space to <None>, Cisco CallManager can forward calls to any number within the PSTN or building calling search spaces. To prevent the user from forwarding calls to numbers outside the building, set the Call Forward All calling search space to Building.
Forward All	The following settings specify the forwarding treatment for calls to this directory number if the directory number is set to forward all calls. Specify the following values: • Voice Mail—Check this check box to use settings in the Voice Mail Profile Configuration window. When this check box is checked, Cisco CallManager ignores the settings in the Coverage/Destination box and Calling Search Space. • Coverage/Destination—This setting indicates the directory number to which all calls are forwarded. Use any dialable phone number, including an outside destination. • Calling Search Space—This setting applies to all devices that are using this directory number.

Table 12-4 Basic Line Configuration Settings (continued)

Setting	Description
Forward Busy Internal	The following settings specify the forwarding treatment for internal calls to this directory number if the directory number is busy. Specify the following values: • Voice Mail—Check this check box to use settings in the Voice Mail Profile Configuration window for internal calls. When this check box is checked, Cisco CallManager ignores the settings in the Coverage/Destination box and Calling Search Space. When this check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls. • Coverage/Destination—Use any dialable phone number, including an outside destination. When you enter a coverage/destination value for internal calls, the system automatically copies this value to the Coverage/Destination field for external calls. If you want external calls to forward to a different destination, you must enter a different value in the Coverage/Destination field for external calls. • Calling Search Space—This setting applies to all devices that are using this directory number. When you choose a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls. If you want external calls to forward to a different calling search space, you must choose a different setting in the Calling Search Space drop-down list box for external calls.
Forward Busy External	The following settings specify the forwarding treatment for external calls to this directory number if the directory number is busy. Specify the following values: • Voice Mail—Check this check box to use settings in the Voice Mail Profile Configuration window for external calls. When this check box is checked, Cisco CallManager ignores the settings in the Coverage/Destination box and Calling Search Space. When the Voice Mail check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls. • Coverage/Destination—Use any dialable phone number, including an outside destination. When you enter a coverage/destination value for internal calls, the system automatically copies this value to the Coverage/Destination field for external calls. If you want external calls to forward to a different destination, you must enter a different value in the Coverage/Destination field for external calls. • Calling Search Space—This setting applies to all devices that are using this directory number. When you choose a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls. If you want external calls to forward to a different calling search space, you must choose a different setting in the Calling Search Space drop-down list box for external calls.

Table 12-4 Basic Line Configuration Settings (continued)

Setting	Description
Forward No Answer Internal	The following settings specify the forwarding treatment for internal calls to this directory number if the directory number does not answer. Specify the following values: • Voice Mail—Check this check box to use settings in the Voice Mail Profile Configuration window. When this check box is checked, Cisco CallManager ignores the settings in the Coverage/Destination box and Calling Search Space. When this check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls. • Coverage/Destination—This setting indicates the directory number to which an internal call is forwarded when the call is not answered. Use any dialable phone number, including an outside destination. When you enter a coverage/destination value for internal calls, the system automatically copies this value to the Coverage/Destination field for external calls. If you want external calls to forward to a different destination, you must enter a different value in the Coverage/Destination field for external calls. • Calling Search Space—This setting applies to all devices that are using this directory number. When you choose a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls. If you want external calls to forward to a different calling search space, you must choose a different setting in the Calling Search Space drop-down list box for external calls.
Forward No Answer External	The following settings specify the forwarding treatment for external calls to this directory number if the directory number does not answer. Specify the following values: • Voice Mail—Check this check box to use settings in the Voice Mail Profile Configuration window. When this check box is checked, Cisco CallManager ignores the settings in the Coverage/Destination box and Calling Search Space. When this check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls. • Coverage/Destination—This setting indicates the directory number to which an external call is forwarded when the call is not answered. Use any dialable phone number, including an outside destination. When you enter a coverage/destination value for internal calls, the system automatically copies this value to the Coverage/Destination field for external calls. If you want external calls to forward to a different destination, you must enter a different value in the Coverage/Destination field for external calls. • Calling Search Space—This setting applies to all devices that are using this directory number. When you choose a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls. If you want external calls to forward to a different calling search space, you must choose a different setting in the Calling Search Space drop-down list box for external calls.

Table 12-4 Basic Line Configuration Settings (continued)

Setting	Description
Forward No Coverage Internal	This field applies only to CTI route points and CTI ports. The following settings specify the forwarding treatment for internal calls to this CTI route point or CTI port if the CTI route point or CTI port has no coverage. Specify the following values: • Voice Mail—Check this check box to use settings in the Voice Mail Profile Configuration window. When this check box is checked, Cisco CallManager ignores the settings in the Coverage/Destination box and Calling Search Space. When this check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls. • Coverage/Destination—This setting specifies the directory number to which an internal nonconnected call is forwarded when an application that controls that directory number fails. Use any dialable phone number, including an outside destination. When you enter a coverage/destination value for internal calls, the system automatically copies this value to the Coverage/Destination field for external calls. If you want external calls to forward to a different destination, you must enter a different value in the Coverage/Destination field for external calls. • Calling Search Space—This setting applies to all devices that are using this directory number. When you choose a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls. If you want external calls to forward to a different calling search space, choose a different setting in the Calling Search Space for external calls.

Table 12-4 Basic Line Configuration Settings (continued)

Setting	Description
Forward No Coverage External	This field applies only to CTI route points and CTI ports. The following settings specify the forwarding treatment for external calls to this CTI route point or CTI port if the CTI route point or CTI port has no coverage. Specify the following values: • Voice Mail—Check this check box to use settings in the Voice Mail Profile Configuration window. When this check box is checked, Cisco CallManager ignores the settings in the Coverage/Destination box and Calling Search Space. When this check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls. • Coverage/Destination—This setting specifies the directory number to which an internal nonconnected call is forwarded when an application that controls that directory number fails. Use any dialable phone number, including an outside destination. When you enter a coverage/destination value for internal calls, the system automatically copies this value to the Coverage/Destination field for external calls. If you want external calls to forward to a different destination, you must enter a different value in the Coverage/Destination field for external calls. • Calling Search Space—This setting applies to all devices that are using this directory number. When you choose a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls. If you want external calls to forward to a different calling search space, choose a different setting in the Calling Search Space for external calls.

Advanced Line Configuration Settings for Phones

Table 12-5 describes the advanced line configuration settings. Use Table 12-5 in conjunction with the following sections:

- Configuring a Line, page 4-9
- Adding a Line, page 4-9
- Updating a Line, page 4-10
- Configuring a Shared Line Between Devices, page 4-11
- Updating a Shared Line, page 4-13

Table 12-5 Advanced Line Configuration Settings

Setting	Description
User Hold Audio Source	Choose the audio source that plays when a user initiates a hold action.
Network Hold Audio Source	Choose the audio source that plays when the network initiates a hold action.

Table 12-5 Advanced Line Configuration Settings (continued)

Setting	Description
AAR Group	Choose the automated alternate routing (AAR) group for this device. The AAR group provides the prefix digits that are used to route calls that are otherwise blocked due to insufficient bandwidth. An AAR group setting of None specifies that Cisco CallManager will not attempt rerouting of blocked calls.
Auto Answer	Choose one of the following options to activate the Auto Answer feature for this directory number: • Auto Answer Off <Default> • Auto Answer with Headset • Auto Answer with Speakerphone (Intercom) **Note** Make sure that the headset or speakerphone is not disabled when you choose Auto Answer with headset or Auto Answer with speakerphone. **Note** Do not configure Auto Answer for devices that have shared lines.
No Answer Ring Duration (seconds)	Used in conjunction with Call Forward No Answer Destination, this field sets the timer for how long the phone will ring before it is forwarded. Leave this setting blank to use the value that is set in the Cisco CallManager service parameter, Forward No Answer Timer. **Caution** By default, Cisco CallManager makes the time for the T301 timer longer than the No Answer Ring Duration time; if the set time for the T301 timer expires before the set time for the No Answer Ring Duration expires, the call ends, and no call forwarding can occur. If you want to do so, you can configure the time for the No Answer Ring Duration to be greater than the time for the T301 timer. For more information on the T301 timer for the Cisco CallManager service, click the i button that displays on the Service Parameter page in Cisco CallManager Administration.
Call Pickup Group	Choose the number that can be dialed to answer calls to this directory number (in the specified partition).
MLPP Target	Enter the number to which MLPP precedence calls should be directed if this directory number receives a precedence call and neither this number nor its call-forward destination answers the precedence call. Values can include numeric characters and octothorpe (#) and asterisk (*).
Calling Search Space	From the drop-down list box, choose the calling search space to associate with the alternate party target (destination) number.
MLPP No Answer Ring Duration (seconds)	Enter the number of seconds (between 4 and 60) after which an MLPP precedence call will be directed to this directory number's alternate party if this directory number and its call-forwarding destination have not answered the precedence call. Leave this setting blank to use the value that is set in the Cisco CallManager enterprise parameter, Precedence Alternate Party Timeout.

Table 12-5 Advanced Line Configuration Settings (continued)

Setting	Description
Alerting Name	Enter a name that you want to display on the phone of the caller. This setting, which supports the Identification Services for the QSIG protocol, applies to shared and nonshared directory numbers. If you configure an alerting name for a directory number with shared-line appearances, when the phone rings at the terminating PINX, the system performs the following tasks: • Forwards the name of the caller that is assigned to the directory number. • Applies the Connected Name Restrictions (CONR) that are configured for the translation pattern (if restrictions exist); the originating PINX may modify the CONR, depending on the route pattern configuration. If you do not configure an alerting name, "Name Not Available" may display on the caller phone. If you do not enter a name for the Display (Internal Caller ID) field, the information in the Alerting Name field displays in the Display (Internal Caller ID) field.
Display (Internal Caller ID)	Leave this field blank to have the system display the extension. To have the system display a name, enter a maximum of 30 alphanumeric characters. Typically, use the user name or the directory number (if using the directory number, the person receiving the call may not see the proper identity of the caller).
Line Text Label	Use this field only if you do not want the directory number to show on the line appearance. Enter text that identifies this directory number for a line/phone combination. Suggested entries include boss's name, department's name, or other appropriate information to identify multiple directory numbers to secretary/assistant who monitors multiple directory numbers.
External Phone Number Mask	Enter the phone number (or mask) that is used to send Caller ID information when a call is placed from this line. You can enter a maximum of 24 number and "X" characters. The Xs represent the directory number and must appear at the end of the pattern. For example, if you specify a mask of 972813XXXX, an external call from extension 1234 displays a caller ID number of 9728131234.
Message Waiting Lamp Policy	Use this field to configure the handset lamp illumination policy. Choose one of the following options: • Use System Policy (The directory number refers to the service parameter, Message Waiting Lamp Policy.) • Light and Prompt • Prompt Only • Light Only • None

Table 12-5 Advanced Line Configuration Settings (continued)

Setting	Description
Ring Setting (Phone Idle)	Use this field to configure the ring setting for the line appearance when an incoming call is received and no other active calls exist on that device. Choose one of the following options: • Use system default • Disable • Flash only • Ring once • Ring **Note** Turning on MLPP Indication (at the enterprise parameter, device pool, or device level) disables normal Ring Setting behavior for the lines on a device, unless MLPP Indication is turned off (overridden) for the device.
Ring Setting (Phone Active)	From the drop-down list box, choose the ring setting that is used when this phone has another active call on a different line. Choose one of the following options: • Use system default • Disable • Flash only • Ring once • Ring • Beep only **Note** Turning on MLPP Indication (at the enterprise parameter, device pool, or device level) disables normal Ring Setting behavior for the lines on a device, unless MLPP Indication is turned off (overridden) for the device.
Maximum Number of Calls (1-200)	You can configure up to 200 calls for a line on a device, with the limiting factor being the total number of calls that are configured on the device. As you configure the number of calls for one line, the calls that are available for another line decrease. The default specifies 4. If the phone does not allow multiple calls for each line, the default specifies 2. For CTI route points, you can configure up to 10,000 calls for each port. The default specifies 5000 calls. Use this field in conjunction with the Busy Trigger field. **Tip** To review how this setting works for devices with shared line appearances, see the *Cisco CallManager System Guide*.
Busy Trigger (<=Max. calls)	This setting, which works in conjunction with Maximum Number of Calls and Call Forward Busy, determines the maximum number of calls to be presented on the line. If maximum number of calls is set for 50 and the busy trigger is set to 40, then incoming call 41 is rejected with a busy cause (and will be forwarded if Call Forward Busy is set). If this line is shared, all the lines must be busy before incoming calls are rejected. The default specifies 2 calls. Use this field in conjunction with Maximum Number of Calls for CTI route points. **Tip** To review how this setting works for devices with shared line appearances, see the *Cisco CallManager System Guide*.
Caller Name	Checking this check box will cause the caller name to display upon call forward.
Redirected Number	Checking this check box will cause the number that was redirected to display upon call forward.

Table 12-5 Advanced Line Configuration Settings (continued)

Setting	Description
Caller Number	Checking this check box will cause the caller number to display upon call forward.
Dialed Number	Checking this check box will cause the original dialed number to display upon call forward.

Phone Settings for Bulk Provisioning

Table 12-6 describes the phone settings that you may use when you create or modify a CSV file during an add or modify bulk operation. Use Table 12-6 in conjunction with the following sections:

- Overview of the Comma Separated Value (CSV) File, page 8-5
- Overview of Bulk Import Operations, page 8-2
- Importing Phones or Device Profiles in Bulk, page 10-1
- Modifying Bulk Import Operations for Phones or Device Profiles, page 10-2
- Exporting Phones or Device Profiles in Bulk, page 10-3
- Modifying Bulk Export Operations for Phones or Device Profiles, page 10-4

Table 12-6 Phone Settings in the CSV File

Column	Description	Important Notes
vpt_productSystems	Enter the list of product systems that you want to apply to a row of data. You may enter a single system or several systems, each separated by a semicolon (;) in a list.	If you specify a Cisco Voice Provisioning Tool template for the vpt_templateName setting, you do not need to specify a product system.
vpt_templateName	Enter a Cisco Voice Provisioning Tool phone template name.	Configuring this setting is optional if you specify a product system for the vpt_productSystems setting. If you specify an attribute that exists both in the Cisco Voice Provisioning Tool template and in the CSV file, the value that you specified in the CSV file takes precedence. You cannot delete this setting.
ccm_device_deviceClass	You must complete this setting when you add a phone or profile. Enter **Phone**.	When you add or modify a phone, configuring this setting is required.
ccm_device_deviceType	You must complete this setting when you add a phone or profile. Enter the phone model; for example, Cisco 7902.	When you add or modify a phone, configuring this setting is required.
ccm_device_deviceDescription	Identify the purpose of the device by entering a partial or complete description. You can enter the user name (such as John Smith) or the phone location (such as Lobby) in this field.	Configuring this setting is optional; you may delete this setting.

Table 12-6 Phone Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_device_phoneButtonTemplate	Enter the appropriate phone button template, which is required for line configuration in the Cisco Voice Provisioning Tool. The phone button template determines the configuration of buttons on a phone and identifies which feature (line, speed dial, and so on) is used for each button.	When you add or modify a phone, configuring this setting is required. You cannot delete this setting.
ccm_phone_name	Because the phone name is always generated from the MAC address, this setting is ignored by the Cisco Voice Provisioning Tool during bulk add operations.	When you add a phone, the Cisco Voice Provisioning Tool ignores this setting. When you modify a phone or associate a device, configuring this setting is required; enter the device name by using the format SEP (prefix) followed by the MAC address; for example, SEP123456678912. You cannot delete this setting.
ccm_phone_macAddress	The Cisco Voice Provisioning Tool uses this setting as the required unique identifier for phones during bulk add operations but considers the setting optional for bulk modify operations. Enter the Media Access Control (MAC) address that identifies Cisco IP Phones (hardware phones only). Make sure that the value comprises 12 hexadecimal characters. To access your MAC address on the phone, see the Cisco IP Phone Administration Guide that supports the version of Cisco CallManager that runs in the cluster.	When you add a phone, you must configuring this setting. When you modify a phone, configuring this setting is optional. You cannot delete this setting.
ccm_phone_devicePool	Enter the device pool to which you want this phone assigned. The device pool, which is a required setting, defines sets of common characteristics for devices, such as region, date/time group, softkey template, and MLPP information.	When you add a phone, you must configure this setting. When you modify a phone, configuring this setting is optional. You cannot delete this setting.

Table 12-6 Phone Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_phone_callingSearchSpace	Enter the appropriate calling search space (CSS). A calling search space comprises a collection of partitions that are searched to determine how a dialed number should be routed. The calling search space for the device and the calling search space for the directory number are used together. The directory number CSS takes precedence over the device CSS.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_phone_logOutProfile	Enter the name of the logout profile that you want to use in conjunction with Cisco CallManager Extension Mobility. If you configure the special pre-defined value, $ccm_useCurrentDeviceSettings, a logout profile is used based on the current devices settings. This profile is automatically generated as required.	When you add or modify a phone, configuring this setting is optional, unless you enable Cisco CallManager Extension Mobility. If Cisco CallManager Extension Mobility is disabled, this setting is ignored during the bulk operation.
ccm_phone_arrCallingSearchSpace	Enter the appropriate calling search space for the device to use when it performs automated alternate routing (AAR). The AAR calling search space specifies the collection of route partitions that are searched to determine how to route a collected (originating) number that is otherwise blocked due to insufficient bandwidth.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_phone_enableExtensionMobility Feature	Enter **Enabled** to turn on Cisco Extension Mobility functionality for the device. Enter **Disabled** to turn off Cisco Extension Mobility functionality for the device.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_phone_logOutProfile	This field specifies the device profile that the device uses when no one is logged into the device by using Cisco CallManager Extension Mobility. Enter the profile that is configured in Cisco CallManager Administration.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 12-6 Phone Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_device_subscribedServiceName	Enter a list of Cisco IP Phone subscription names, the display names, that are used for the device. Separate each name by a semicolon. For example, <subscriptionname1>;<subscription name2>;<subscriptionname3> Any configuration specified in Cisco CallManager Administration or the Cisco Voice Provisioning Tool is overwritten by the list that you specify in the CSV file. If you enter vpt_clear, the device unsubscribes to all services.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_device_subscribedServiceUrl	Enter a list of Cisco IP Phone service URLs which correspond to each Cisco IP Phone service. A one-to-one ratio must exist; that is, for each subscribed service entered, a subscribed service URL must be entered. Separate each name by a semicolon. For example, <URL1>;<URL2>;<URL3>	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_device_ipPhoneServiceName	Enter a list of Cisco IP Phone service names, the actual names not the display names, to which the device is subscribed. Separate each by named by a semicolon. Any configuration specified in Cisco CallManager Administration or the Cisco Voice Provisioning Tool is overwritten by the list that you specify in the CSV file.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_phone_ownerUserID	Enter the user ID of the person who is assigned to this phone. The user ID is recorded in the call detail record (CDR) for calls that are made from this device. **Note** Do not configure this field if you are using extension mobility because it does not support device owners.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 12-6 Phone Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_phone_mediaResourceGroupList	Enter the appropriate Media Resource Group List, which comprises a prioritized grouping of media resource groups. An application chooses the required media resource, such as a Music On Hold server, from the available media resources according to the priority order that is defined in a Media Resource Group List. If you do not enter an option, Cisco CallManager uses the Media Resource Group that is defined in the device pool.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_phone_networkHoldAudioSource	Enter the audio source that specifies the audio that is played when the network puts a call on hold. If you do not enter an audio source, Cisco CallManager uses the audio source that is defined in the device pool or the system default if the device pool does not specify an audio source ID.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_device_userHoldAudioSource	Enter an audio source that specifies the audio that is played when a user puts a call on hold. If you do not enter an audio source, Cisco CallManager uses the audio source that is defined in the device pool or the system default if the device pool does not specify an audio source ID.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_phone_location	Enter the appropriate location for this Cisco IP Phone. The location specifies the total bandwidth that is available for calls to and from this location. A location setting of Not Selected means that the locations feature does not keep track of the bandwidth that the Cisco IP Phone consumes.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_phone_networkLocale	Enter the locale that is associated with the phone. The network locale contains a definition of the tones and cadences that the phone in a specific geographic area uses. If no network locale is specified, Cisco CallManager uses the network locale that is associated with the device pool.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 12-6 Phone Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_device_userLocale	Enter the locale that is associated with the phone user interface. The user locale identifies a set of detailed information to support users, including language and font. If no user locale is specified, Cisco CallManager uses the user locale that is associated with the device pool.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_device_ignorePresentation Indicators	Enter **Enabled** to configure call display restrictions on a call-by-call basis. When you enable this setting, Cisco CallManager ignores any presentation restriction that is received for internal calls. Use this configuration in combination with the callingline ID presentation and connected line ID presentation configuration at the translation pattern level. Together, these settings allow you to configure call display restrictions to selectively present or block calling and/or connected line display information for each call. For information on how configure translation patterns, see the *Cisco CallManager Administration Guide*.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_phone_builtInBridge	To enable the built-in conference bridge for the Barge feature, enter On. To disable the built-in conference bridge for the Barge feature, enter Off. To use the default setting, enter Default. For more configuration information, see the *Cisco CallManager Features and Services Guide*.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.

Table 12-6 Phone Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_phone_deviceSecurityMode	Enter one of the following options: • Use System Default—The phone uses the value that you specified for the enterprise parameter, Device Security Mode. • Non-secure—No security features exist for the phone. A TCP connection opens to Cisco CallManager. • Authenticated—Cisco CallManager provides integrity and authentication for the phone. A TLS connection using NULL/SHA opens. • Encrypted—Cisco CallManager provides integrity, authentication, and encryption for the phone. A TLS connection using AES128/SHA opens.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_phone_signalPacketCaptureMode	This setting exists for troubleshooting encryption only; packet capturing may cause high CPU usage or call-processing interruptions. For more information on the options that you can enter, see the *Cisco CallManager Security Guide*.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_phone_packetCaptureDuration	This setting, which works in conjunction with the Signal Packet Capture mode setting, exists for troubleshooting encryption only; packet capturing may cause high CPU usage or call-processing interruptions. This field specifies the maximum number of minutes that is allotted for one session of packet capturing. The default setting equals 60.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_phone_privacy	For each phone where you want to configure privacy, enter On. To turn off the Privacy feature, enter Off. If you want to use the default setting, enter Default.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.

Table 12-6 Phone Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_phone_retryVideoCallAsAudio	Enter **Enabled** if you want a call that cannot connect as video to connect as audio. This check box applies only to video endpoints that receive a call. If you enter Disabled for this setting, a video call that fails to connect as video does not try to establish as an audio call. Call control routes the call via Automatic Alternate Routing (AAR) and/or route/hunt list.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_device_softkeyTemplate	Enter the appropriate softkey template. The softkey template determines the configuration of the softkeys on Cisco IP Phones. Leave this field blank if the device pool contains the assigned softkey template.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_device_module1	Enter the name of the appropriate expansion module. If you want to do so, enter None, which indicates that the phone does not use an expansion module.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_device_module2	Enter the name of the appropriate expansion module. If you want to do so, enter None, which indicates that the phone does not use an expansion module.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_phone_phoneLoadName	Enter the custom software firmware load for the Cisco IP Phone. The value that you enter overrides the default value for the current model. For more information on device default values, see the *Cisco CallManager Administration Guide*.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_phone_module1LoadName	Enter the custom software for the appropriate expansion module, if applicable. The value that you enter overrides the default value for the current model. Ensure the firmware load matches the module load.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_phone_module2LoadName	Enter the custom software for the appropriate expansion module, if applicable. The value that you enter overrides the default value for the current model. Ensure the firmware load matches the module load.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 12-6 Phone Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_phone_information	Enter the location (URL) of the help text for the information (i) button.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_phone_services	Enter the location (URL) for Cisco IP Phone Services.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_phone_directory	Enter the server from which the phone obtains directory information.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_phone_authenticationServer	Enter the URL that the phone uses to validate requests that are made to the phone web server. If you do not provide an authentication URL, the advanced features on the Cisco IP Phone that require authentication do not function. By default, this URL accesses a Cisco IP Phone User Options page that was configured during the Cisco CallManager installation.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_phone_messages	Leave this field blank (not used by Cisco CallManager).	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_phone_proxyServer	Enter the host and port (for example, proxy.cisco.com:80) that are used to proxy HTTP requests for access to non-local host addresses from the phone HTTP client. If the phone receives a URL such as www.cisco.com in a service and the phone is not configured in the cisco.com domain, the phone uses the proxy server to access the URL. If the phone is configured in cisco.com domain, the phone accesses the URL without using the proxy because the phone is in the same domain as the URL. If you do not configure this URL, the phone attempts to connect directly to the URL. Leave this field blank to accept the default setting.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 12-6 Phone Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_phone_idle	Enter the URL that displays on the Cisco IP Phone display when the phone has not been used for the time that is specified in the Idle Timer field. For example, you can display a logo on the LCD when the phone has not been used for 5 minutes. Leave this field blank to accept the default setting.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_phone_idleTimer	Enter the time (in seconds) that you want to elapse before the URL that is specified in the Idle field displays. Leave this field blank to accept the value of the Idle URL Timer enterprise parameter in Cisco CallManager Administration.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_phone_certificateOperation	Enter one of the following options if you want to use certificates in the phones: • No Pending Operation—Displays when no certificate operation is occurring. (default setting) • Install/Upgrade—Installs a new or upgrades an existing locally significant certificate in the phone. • Delete—Deletes the locally significant certificate that exists in the phone. • Troubleshoot—Retrieves the locally significant certificate (LSC) or the manufacture installed certificate (MIC), so you can view the certificate credentials in the CAPF trace file. If both certificate types exist in the phone, Cisco CallManager creates two trace files, one for each certificate type. By choosing the Troubleshooting option, you can verify that a LSC or MIC exists in the phone.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 12-6 Phone Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_phone_authenticationMode	This field allows you to choose the method in which you want the phone to authenticate with CAPF. Use this field if you want to install/upgrade, delete, or troubleshoot a locally significant certificate or authenticate by a manufacture installed certificate. Enter one of the following options: • By Authentication String • By Null String • By Existing Certificate (Precedence to LSC) • By Existing Certificate (Precedence to MIC) **Tip** *Cisco CallManager Security Guide* provides details and caveats for these settings. See that document before you configure the authentication mode.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_phone_authenticationString	If you enter By Authentication String option for the Authentication Mode setting, this field applies. Manually enter a unique string thatcontains 4 to 10 digits. To install, upgrade, delete, or troubleshoot a locally significant certificate, the phone user or administrator must enter the authentication string on the phone.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_phone_keySize	From the drop-down list box, choose the key size for the certificate. The default setting equals 1024. Other options include 512 and 2048.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_phone_operationCompletesBy	This field, which supports all options for the Certificate Operations setting, specifies the date and time in which you must complete the operation. The values that you enter are for the publisher database server. Use the following formula when you enter the date and time: YYYY:MM:DD:HH, where YYYY equals the year, MM equals the month, DD, equals the day, and HH equals the hour.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 12-6 Phone Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_device_mlppDomain	Enter a hexadecimal value between 0 and FFFFFF for the MLPP domain that is associated with this device. If you leave this field blank, this device inherits its MLPP domain from the value set from the device pool that is configured for the phone. If the device pool does not have an MLPP domain setting, this device inherits its MLPP domain from the value set for the MLPP Domain Identifier enterprise parameter.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_device_mlppIndication	This setting specifies whether a device that supports precedence tones will play the tones when it places an MLPP precedence call. Enter one of the following options to assign to this device: • Default—This device inherits its MLPP indication setting from its device pool. • Off—This device does not handle nor process indication of an MLPP precedence call. • On—This device does handle and process indication of an MLPP precedence call. **Note** Do not configure a device with the following combination of settings: MLPP Indication is set to Off or Default (when default is Off) while MLPP Preemption is set to Forceful. **Note** Turning on MLPP Indication (at the enterprise parameter, device pool, or device level) disables normal Ring Setting behavior for the lines on a device, unless MLPP Indication is turned off (overridden) for the device.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.

Table 12-6 Phone Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_device_mlppPreemption	This setting specifies whether a device that supports preempting calls in progress will use the capability when it places an MLPP precedence call. Enter one of the following options: • Default—This device inherits its MLPP preemption setting from its device pool. • Disabled—This device does not allow preemption of lower precedence calls to take place when necessary for completion of higher precedence calls. • Forceful—This device allows preemption of lower precedence calls to take place when necessary for completion of higher precedence calls. Do not configure a device with the following combination of settings: MLPP Indication is set to Off or Default (when default is Off) while MLPP Preemption is set to Forceful.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_phone_disableSpeakerPhone	Enter **true** to disable the speakerphone functionality. Disabling the speakerphone functionality does not affect the headset. You can use lines and speed dials with headset/handset.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_phone_disableSpeakerPhoneAndHeadset	Enter **true** to disable all speakerphone functions and headset microphone.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_phone_autoLineSelect	Enter **Enabled** to indicate that the phone will shift the call focus to incoming calls on all lines. Enter Disabled to indicate that the phone will only shift the focus to incoming calls on the currently-used line. The default setting equals Disabled.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.

Table 12-6 Phone Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_phone_forwardingDisplay	This setting indicates whether the internal switch begins forwarding packets between the PC port and switched port on your phone when your phone becomes active. When you enter Disabled for this setting, the internal switch begins forwarding packets immediately. When you enter **Enabled** for this setting, the internal switch waits 8 seconds before forwarding packets between the PC port and the SW port. Set Forwarding Delay to Enabled when you connect both ports to switches for redundant uplinks or when you daisy chain phones together.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_phone_videoCapabilities	Entering **Enabled** for this setting indicates that the phone participates in video calls when it is connected to a PC that is equipped for video calls. Entering Disabled indicates that you do not want the phone to participate in video calls. The default setting equals Disabled.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_phone_settingsAccess	This setting indicates whether the Settings button on the phone is functional. When you enter **Enabled** for this setting, you can change the phone network configuration, ring type, and volume on the phone. When you enter Disabled for this setting, the Settings button is completely disabled; no options appear when you press the button. Likewise, you cannot adjust the ringer volume or save any volume settings. When Settings Access is restricted, you can only access User Preferences and volume settings. By default, Settings Access is enabled.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_phone_gratuitousARP	This setting indicates whether the phone will learn MAC addresses from Gratuitous ARP responses. When you enter Disabled for this setting, applications which use GARP for monitoring and recording voice streams do not work. If a monitoring capability is not needed, enter Disabled.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.

Table 12-6 Phone Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_phone_webAccess	This setting indicates whether the phone will accept connections from a web browser or other HTTP client. Disabling the web server functionality for the phone blocks access to the phones internal web pages, which provide statistics and configuration information. Features, such as the Cisco QRT (Quality Report Tool), do not function properly without access to the phones web pages. Disabling this setting also affects any serviceability application that relies on web access; for example, CiscoWorks 2000.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_phone_PCport	This setting indicates whether the PC port on the phone is enabled or disabled. The port labeled "10/100 PC" on the back of the phone connects a PC or workstation to the phone so they can share a single network connection. Enter **Enabled** to share the connection; enter **Disabled** to disallow the connection.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_phone_PCVoiceVLANAccess	This setting indicates whether the phone will allow a device attached to the PC port to access the Voice VLAN. Entering Disabled for this setting prevents the attached PC from sending and receiving data on the Voice VLAN. Disabling the functionality also prevents the PC from receiving data sent and received by the phone. Enter **Enabled** for this setting if an application is being run on the PC that requires monitoring of the phones traffic; for example, monitoring and recording applications or network monitoring applications that analyze data.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_phone_displayOnTime	This setting indicates the time of day the display is to automatically turn itself on for days listed in the off schedule. The value should be in a 24 hour format, where 0:00 is the beginning of the day and 23:59 is the end of the day. Leaving this field blank activates the display at the beginning of the day, that is, 0:00. To set the display to turn on at 7:00AM, enter 07:00. To turn on the display at 2:00PM, enter 14:00. The default value equals 07:30. The maximum number of characters equals 5.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 12-6 Phone Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_phone_displayonDuration	This field indicates the amount of time the display is to be active for the programmed schedule. No value indicates the end of the day. Maximum value is 24 hours. This value is in free form hours and minutes; for example, 1:30 activates the display for one hour and 30 minutes. The default value equals 10:30. The maximum number of characters equals 5.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_phone_dispayIdleTimeout	This field indicates how long to wait before the display is turned off after it is activated by a user activity. This inactivity timer continually resets itself during user activity. Leaving this field blank makes the phone use a pre-determined default value of one hour. The maximum value equal 24 hours. This value appears in free form hours and minutes; for example, 1:30 turn off the display after one hour and 30 minutes if no activity occurs on the phone. The default value equals 01:00. The maximum number of characters equals 5.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_phone_daysDisplayNotActive	This setting specifies the days that the backlight is to remain off by default. Typically, you turn the backlight off on Saturday and Sunday for US corporate customers. Enter the days that you want the backlight to remain off. The default value equals Sunday.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_phone_spanToPcPort	The setting indicates whether the phone will forward packets transmitted and received on the Phone Port to the PC Port. Enter **Enabled** if an application is being run on the PC Port that requires monitoring of the IP Phone's traffic, such as monitoring and recording applications (common in call center environments) or network packet capture tools that are used for diagnostic purposes. To use this feature, PC Voice VLAN access must be enabled.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.

Table 12-6 Phone Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_phone_ipAddressAutodetection URL	Enter a fully-qualified URL so that other phones can detect the Cisco IP Communicator's address. Consider this setting required for compatibility with NATs, non-Cisco VPN clients, and other similar network topologies. To use this option, you must first install and configure an address detection web page.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_phone_ rtpPortRangeStart	This setting specifies the lowest port number to use for transmitting and receiving RTP audio packets, expressed in decimal notation. This option proves useful for compatibility with NATs, firewalls, and other network topologies that require applications to use a well known set of ports. If no port is specified, the default value of 24576 (0x6000) is used. The minimum value equals 1. The maximum value equals 65535.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_phone_ rtpPortRangeEnd	This setting specifies the highest port number to use for transmitting and receiving RTP audio packets, expressed in decimal notation. This option is useful for compatibility with NATs, firewalls, and other network topologies that require applications to use a well-known set of ports. If no port is specified, the default value of 32768 (0x8000) is used. The minimum value equals 1. The maximum value equals 65535.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 12-6 Phone Settings in the CSV File (continued)

Column	Description	Important Notes
ldapServerInformationFile	This setting specifies the location of the LDAP server information file on the TFTP server. (If unspecified, the default equals Communicator/LdapServers.xml.) This file contains a list of LDAP directories for use in directory dialing as described in the *Cisco IP Communicator Administration Guide*.	When you add or modify a phone, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
verifySoftwareVersions	The setting indicates whether the Cisco IP Communicator application verifies the authenticity and completeness of its installed software components when it is upgraded or started. If this option is set to On Upgrade (the default), the application launches quickly but does not automatically repair itself if any of its files are deleted or modified by the user. If this option is set to At Startup, the application launches slowly but detects and repairs most modifications or a corruption. The default setting equals On Upgrade.	When you add a phone, configuring this setting is required. When you modify a phone, configuring this setting is optional. Entering vpt_clear does delete the configuration for this setting.

Line Settings for Phone Bulk Provisioning

Table 12-7 describes line configuration settings that you enter use when you create or modify the CSV file for bulk provisioning. The settings in Table 12-7 show you the headers to enter for Line 1. If you want to configure other lines in the CSV file, enter the line number where you see the number 1 in the table; for example, if you configure the extension number for Line 2 in the CSV file, enter the following setting: ccm_line 2_extensionNumber.

Use Table 12-7 in conjunction with the following sections:

- Overview of the Comma Separated Value (CSV) File, page 8-5
- Overview of Bulk Import Operations, page 8-2
- Overview of Bulk Export Operations, page 8-4
- Importing Phones or Device Profiles in Bulk, page 10-1
- Modifying Bulk Import Operations for Phones or Device Profiles, page 10-2
- Exporting Phones or Device Profiles in Bulk, page 10-3
- Modifying Bulk Export Operations for Phones or Device Profiles, page 10-4

Table 12-7 Line Settings in the CSV File

Column	Description	Important Notes
ccm_line1_extensionNumber	Enter a phone number that can be dialed. Values can include numeric characters and route pattern wildcards and special characters except for (.) and (@). **Note** When a pattern is used as a directory number, the display on the phone and the caller ID that display on the dialed phone will both contain characters other than digits. To avoid this, we recommend that you provide a value for Display (Internal Caller ID), Line text label, and External phone number mask. The directory number that you enter can appear in more than one partition. However, if a JTAPI or TAPI application controls or monitors a device, you should not configure multiple instances of the same DN (with different partitions) on that device.	When you add or modify a line, configuring this setting is required. Entering vpt_clear for this setting removes the line from the phone; it does not delete the line.

Table 12-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_partition	Enter the partition where the directory number belongs. Make sure that the directory number that you enter in ccm_line1_extensionNumber is unique within the partition that you choose. If you do not want to restrict access to the directory number, enter None for the partition. You can configure the number of partitions that display in this drop-down list box by using the Max List Box Items enterprise parameter in Cisco CallManager Administration. In Cisco CallManager Administration, if more partitions exist than the Max List Box Items enterprise parameter specifies, the ellipsis button (...) displays next to the drop-down list box. Click the ... button to display the Select Partition window. Enter a partial partition name in the List Items Where Name Contains field. Click the desired partition name in the list of partitions that displays in the Select item to use box and click OK.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_voicemailprofile	Enter a Voice Mail profile that is defined on the Voice Mail Profile Configuration page in Cisco CallManager Administration. The default setting specifies <None>.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 12-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_lineCallingSearchSpace	Enter the appropriate calling search space, which comprises a collection of partitions that are searched for numbers that are called from this directory number. The value that you choose applies to all devices that are using this directory number. Changes result in an update of the numbers that are listed in the Call Pickup Group field. You can configure calling search space for Forward All, Forward Busy, Forward No Answer, and Forward on Failure directory numbers. The value that you choose applies to all devices that are using this directory number. If you set the Forward All Calling Search Space field to <None>, Cisco CallManager uses the calling search spaces of the line and the phone when the user forwards calls by using the Cisco IP Phone User Options Pages or the CFwdAll softkey on the phone. If you want to restrict users from forwarding calls on their phones, you must choose a restrictive calling search space from the Forward All Calling Search Space field; for example, you have two calling search spaces: Building and PSTN. The Building calling search space only allows users to call within the building, while the PSTN calling search space allows users to call within and outside the building. You assign the phone to the Building calling search space and the line on your phone to the PSTN calling search space. If you set the Call Forward All calling search space to <None>, Cisco CallManager can forward calls to any number within the PSTN or building calling search spaces. To prevent the user from forwarding calls to numbers outside the building, set the Call Forward All calling search space to Building.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 12-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_forwardAllVoiceMail	This setting specifies the forwarding treatment for calls to this directory number if the directory number is set to forward all calls. Enter **true** to use settings in the Voice Mail Profile Configuration window. If you do not want to use this functionality, enter false. When you enter true, Cisco CallManager ignores the settings for Coverage/Destination and Calling Search Space.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_line1_forwardAllDestination	Enter the directory number to which all calls are forwarded. Use any dialable phone number, including an outside destination.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_forwardAllCallingSearch Space	Enter the calling search space that applies to all devices that are using this directory number.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_forwardBusyInternalVoice Mail	Enter **true** to use settings in the Voice Mail Profile Configuration window for internal calls. If you do not want to use this functionality, enter false. When you enter true for this setting, Cisco CallManager ignores the settings for Coverage/Destination and Calling Search Space. When you enter true for this setting, the system automatically checks the Voice Mail check box for external calls on the line configuration page. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.

Table 12-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_forwardBusyInternal Destination	Enter any dialable phone number, including an outside destination. When you enter a coverage/destination value for internal calls, the system automatically copies this value to the Coverage/Destination field for external calls on the line configuration page. If you want external calls to forward to a different destination, you must enter a different value in the Coverage/Destination field for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_forwardBusyInternal CallingSearchSpace	Enter the calling search space that applies to all devices that are using this directory number. When you enter a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls on the line configuration page. If you want external calls to forward to a different calling search space, you must choose a different setting in the Calling Search Space drop-down list box for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_forwardBusyExternal VoiceMail	Enter **true** to use settings in the Voice Mail Profile Configuration window for external calls. When you enter true for this setting, Cisco CallManager ignores the settings for Coverage/Destination and Calling Search Space. When the Voice Mail check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls on the line configuration page. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls on the line configuration page.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.

Table 12-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_forwardBusyExternal Destination	Enter any dialable phone number, including an outside destination. When you enter a coverage/destination value for internal calls, the system automatically copies this value to the Coverage/Destination field for external calls on the line configuration page. If you want external calls to forward to a different destination, you must enter a different value in the Coverage/Destination field for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_forwardBusyExternal CallingSearchSpace	Enter a calling search space that applies to all devices that are using this directory number. When you enter a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls on the line configuration page. If you want external calls to forward to a different calling search space, you must choose a different setting in the Calling Search Space drop-down list box for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_forwardNoAnswerInternal VoiceMail	Enter **true** to use settings in the Voice Mail Profile Configuration window. When you enter true for this setting, Cisco CallManager ignores the settings in the Coverage/Destination box and Calling Search Space. When this check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls on the line configuration page. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.

Table 12-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_forwardNoAnswerInternal Destination	Enter a directory number to which an internal call is forwarded when the call is not answered. Use any dialable phone number, including an outside destination. When you enter a coverage/destination value for internal calls, the system automatically copies this value to the Coverage/Destination field for external calls on the line configuration page. If you want external calls to forward to a different destination, you must enter a different value in the Coverage/Destination field for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_forwardNoAnswerInternal CallingSearchSpace	Enter a calling search space that applies to all devices that are using this directory number. When you enter a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls on the line configuration page. If you want external calls to forward to a different calling search space, you must choose a different setting in the Calling Search Space drop-down list box for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_forwardNoAnswerExternal VoiceMail	Enter **true** to use settings in the Voice Mail Profile Configuration window. When you enter true for this setting, Cisco CallManager ignores the settings in the Coverage/Destination box and Calling Search Space. When this check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls on the line configuration page. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.

Table 12-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_forwardBusyExternal Destination	Enter a directory number to which an external call is forwarded when the call is not answered. Use any dialable phone number, including an outside destination. When you enter a coverage/destination value for internal calls, the system automatically copies this value to the Coverage/Destination field for external calls on the line configuration page. If you want external calls to forward to a different destination, you must enter a different value in the Coverage/Destination field for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_forwardBusyExternal CallingSearchSpace	Enter a calling search space that applies to all devices that are using this directory number. When you choose a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls on the line configuration page. If you want external calls to forward to a different calling search space, you must choose a different setting in the Calling Search Space drop-down list box for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_forwardNoAnswerInternal VoiceMail	Enter **true** to use settings in the Voice Mail Profile Configuration window. When you enter true for this setting, Cisco CallManager ignores the settings for Coverage/Destination and Calling Search Space. When this check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls on the line configuration page. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.

Table 12-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_forwardNoAnswerInternal Destination	Enter a directory number to which an internal nonconnected call is forwarded when an application that controls that directory number fails. Use any dialable phone number, including an outside destination. When you enter a coverage/destination value for internal calls, the system automatically copies this value to the Coverage/Destination field for external calls on the line configuration page. If you want external calls to forward to a different destination, you must enter a different value in the Coverage/Destination field for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_forwardNoAnswerInternal CallingSearchSpace	Enter a calling search space that applies to all devices that are using this directory number. When you enter a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls on the line configuration page. If you want external calls to forward to a different calling search space, enter a different setting in the Calling Search Space for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 12-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_forwardNoAnswerExternal VoiceMail	This field applies only to CTI route points and CTI ports. The following settings specify the forwarding treatment for external calls to this CTI route point or CTI port if the CTI route point or CTI port has no coverage. Enter **true** to use settings in the Voice Mail Profile Configuration window. When you enter true for this setting, Cisco CallManager ignores the settings for Coverage/Destination and Calling Search Space. When this check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls on the line configuration page. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_line1_forwardNoAnswerExternal Destination	Enter the directory number to which an external call is forwarded when the call is not answered. Use any dialable phone number, including an outside destination. When you enter a coverage/destination value for internal calls, the system automatically copies this value to the Coverage/Destination field for external calls on the line configuration page. If you want external calls to forward to a different destination, you must enter a different value in the Coverage/Destination field for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_forwardNoAnswerExternal CallingSearchSpace	Enter the Calling Search Space that applies to all devices that are using this directory number. When you choose a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls on the line configuration page. If you want external calls to forward to a different calling search space, choose a different setting in the Calling Search Space for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 12-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_forwardNoCoverage InternalVoiceMail	This field applies only to CTI route points and CTI ports. The following settings specify the forwarding treatment for internal calls to this CTI route point or CTI port if the CTI route point or CTI port has no coverage. Enter **true** to use settings in the Voice Mail Profile Configuration window. When you enter true for this setting, Cisco CallManager ignores the settings in the Coverage/Destination box and Calling Search Space. When this check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls on the line configuration page. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_line1_forwardNoCoverage InternalDestination	Enter the directory number to which an internal nonconnected call is forwarded when an application that controls that directory number fails. Use any dialable phone number, including an outside destination. When you enter a coverage/destination value for internal calls, the system automatically copies this value to the Coverage/Destination field for external calls. If you want external calls to forward to a different destination, you must enter a different value in the Coverage/Destination field for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_forwardNoCoverage InternalCallingSearchSpace	Enter a Calling Search Space that applies to all devices that are using this directory number. When you choose a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls on the line configuration page. If you want external calls to forward to a different calling search space, choose a different setting in the Calling Search Space for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 12-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_forwardNoCoverage ExternalVoiceMail	This field applies only to CTI route points and CTI ports. The following settings specify the forwarding treatment for external calls to this CTI route point or CTI port if the CTI route point or CTI port has no coverage. Enter **true** to use settings in the Voice Mail Profile Configuration window. When you set true for this setting, Cisco CallManager ignores the settings in the Coverage/Destination box and Calling Search Space. When this check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_line1_forwardNoCoverage ExternalDestination	Enter the directory number to which an internal nonconnected call is forwarded when an application that controls that directory number fails. Use any dialable phone number, including an outside destination. When you enter a coverage/destination value for internal calls, the system automatically copies this value to the Coverage/Destination field for external calls on the line configuration page. If you want external calls to forward to a different destination, you must enter a different value in the Coverage/Destination field for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_forwardNoCoverage ExternalCallingSearchSpace	Enter the Calling Search Space that applies to all devices that are using this directory number. When you choose a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls. If you want external calls to forward to a different calling search space, choose a different setting in the Calling Search Space for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 12-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_lineUserHoldAudioSource	Enter the audio source that plays when a user initiates a hold action.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_lineNetworkHoldAudio Source	Enter the audio source that plays when the network initiates a hold action.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_lineAARGroup	Enter the automated alternate routing (AAR) group for this device. The AAR group provides the prefix digits that are used to route calls that are otherwise blocked due to insufficient bandwidth. An AAR group setting of None specifies that Cisco CallManager will not attempt rerouting of blocked calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_autoAnswer	Enter one of the following options to activate the Auto Answer feature for this directory number: • Auto Answer Off <Default> • Auto Answer with Headset • Auto Answer with Speakerphone (Intercom) **Note** Make sure that the headset or speakerphone is not disabled when you enter Auto Answer with headset or Auto Answer with speakerphone. **Note** Do not configure Auto Answer for devices that have shared lines.	When you add a line, configuring this setting is required; when you modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 12-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_noAnswerRingDuration	Used in conjunction with Call Forward No Answer Destination, this field sets the timer for how long the phone will ring before it is forwarded. Leave this setting blank to use the value that is set in the Cisco CallManager service parameter, Forward No Answer Timer. **Caution** By default, Cisco CallManager makes the time for the T301 timer longer than the No Answer Ring Duration time; if the set time for the T301 timer expires before the set time for the No Answer Ring Duration expires, the call ends, and no call forwarding can occur. If you want to do so, you can configure the time for the No Answer Ring Duration to be greater than the time for the T301 timer. For more information on the T301 timer for the Cisco CallManager service, click the i button that displays on the Service Parameter page in Cisco CallManager Administration.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_callPickupGroup	Enter the number that can be dialed to answer calls to this directory number (in the specified partition).	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_mlppTarget	Enter the number to which MLPP precedence calls should be directed if this directory number receives a precedence call and neither this number nor its call-forward destination answers the precedence call. Values can include numeric characters and octothorpe (#) and asterisk (*).	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_mlppCallingSearchSpace	Enter the calling search space to associate with the alternate party target (destination) number.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 12-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_mlppNoAnswerRing Duration	Enter the number of seconds (between 4 and 60) after which an MLPP precedence call will be directed to this directory number's alternate party if this directory number and its call-forwarding destination have not answered the precedence call. Leave this setting blank to use the value that is set in the Cisco CallManager enterprise parameter, Precedence Alternate Party Timeout.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_alertingName	Enter a name that you want to display on the phone of the caller. This setting, which supports the Identification Services for the QSIG protocol, applies to shared and nonshared directory numbers. If you configure an alerting name for a directory number with shared-line appearances, when the phone rings at the terminating PINX, the system performs the following tasks: • Forwards the name of the caller that is assigned to the directory number. • Applies the Connected Name Restrictions (CONR) that are configured for the translation pattern (if restrictions exist); the originating PINX may modify the CONR, depending on the route pattern configuration. If you do not configure an alerting name, "Name Not Available" may display on the caller phone. If you do not enter a name for the Display (Internal Caller ID) field, the information in the Alerting Name field displays in the Display (Internal Caller ID) field.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_displayInternalCallerID	Leave this field blank to have the system display the extension. To have the system display a name, enter a maximum of 30 alphanumeric characters. Typically, use the user name or the directory number (if using the directory number, the person receiving the call may not see the proper identity of the caller).	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 12-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_lineTextLabel	Use this field only if you do not want the directory number to show on the line appearance. Enter text that identifies this directory number for a line/phone combination. Suggested entries include boss's name, department's name, or other appropriate information to identify multiple directory numbers to secretary/assistant who monitors multiple directory numbers.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_externalPhoneNumberMask	Enter the phone number (or mask) that is used to send Caller ID information when a call is placed from this line. You can enter a maximum of 24 number and "X" characters. The Xs represent the directory number and must appear at the end of the pattern. For example, if you specify a mask of 972813XXXX, an external call from extension 1234 displays a caller ID number of 9728131234.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_messageWaitingLamp Policy	Use this field to configure the handset lamp illumination policy. Enter one of the following options: • Use System Policy (The directory number refers to the service parameter, Message Waiting Lamp Policy.) • Light and Prompt • Prompt Only • Light Only • None	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 12-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_ringSetingPhoneIdle	Use this field to configure the ring setting for the line appearance when an incoming call is received and no other active calls exist on that device. Enter one of the following options: • Use system default • Disable • Flash only • Ring once • Ring Turning on MLPP Indication (at the enterprise parameter, device pool, or device level) disables normal Ring Setting behavior for the lines on a device, unless MLPP Indication is turned off (overridden) for the device.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_ringSettingPhoneActive	Enter one of the following options to configure a ring setting that is used when this phone has another active call on a different line. • Use system default • Disable • Flash only • Ring once • Ring • Beep only Turning on MLPP Indication (at the enterprise parameter, device pool, or device level) disables normal Ring Setting behavior for the lines on a device, unless MLPP Indication is turned off (overridden) for the device.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 12-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_maximumNumberOfCalls	You can configure up to 200 calls for a line on a device, with the limiting factor being the total number of calls that are configured on the device. As you configure the number of calls for one line, the calls that are available for another line decrease. The default specifies 4. If the phone does not allow multiple calls for each line, the default specifies 2. For CTI route points, you can configure up to 10,000 calls for each port. The default specifies 5000 calls. Use this field in conjunction with the ccm_line1_busyTrigger setting.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_busyTrigger	This setting, which works in conjunction with Maximum Number of Calls and Call Forward Busy, determines the maximum number of calls to be presented on the line. If maximum number of calls is set for 50 and the busy trigger is set to 40, then incoming call 41 is rejected with a busy cause (and will be forwarded if Call Forward Busy is set). If this line is shared, all the lines must be busy before incoming calls are rejected. Use this field in conjunction with Maximum Number of Calls for CTI route points. The default specifies 4500 calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_callerName	Entering **true** for this setting causes the caller name to display upon call forward.	When you add a line, configuring this setting is required; when you modify a line, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_line1_redirectedNumber	Entering **true** for this setting causes the number that was redirected to display upon call forward.	When you add a line, configuring this setting is required; when you modify a line, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.

Table 12-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_callerNumber	Entering **true** for this setting causes the caller number to display upon call forward.	When you add a line, configuring this setting is required; when you modify a line, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_line1_dialedNumber	Entering **true** for this setting causes the original dialed number to display upon call forward.	When you add a line, configuring this setting is required; when you modify a line, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.

Device Profile Configuration Settings

This chapter contains settings that you configure when you add and update device profiles (or device profile templates). After you become familiar with how the Cisco Voice Provisioning Tool works, consider printing this chapter to use as a reference.

This chapter contains information on the following topics:

Device Profile Template and Device Profile Pages

Bulk Provisioning

Considerations for Device Profile Settings

Consider the following information before you review the device profile configuration settings:

- Most settings in the tables are considered optional; that is, you do not need to configure them to add or update a device profile (or device profile template).
- For required settings, an asterisk (*) displays next to the setting in the GUI.
- For templates, you can leave most fields blank, enter partial data, or specify the exact information as you want it to display for individual device profiles.
- Because some settings do not display in the GUI when you add a device profile or update a device profile, the order in the tables may not reflect the order of the settings in the GUI. This document does not distinguish the settings for additions or modifications; if the setting does not display on the page, you cannot configure it.

Device Profile Parameters

Use Table 13-1 in conjunction with the following sections:

Template Pages

- Adding a VPT Phone or Device Profile Template, page 7-2
- Updating a VPT Phone or Device Profile Template, page 7-3

Device Profile Pages

- Adding a Single Phone or Device Profile, page 4-2
- Updating a Single Phone or Device Profile, page 4-3
- Updating Multiple Phones or Device Profiles at the Same Time, page 4-4

Table 13-1 Device Profile Parameters

Setting	Description
Template Pages	
Template Name	Enter a maximum of 255 characters to create a unique template name. The Cisco Voice Provisioning Tool validates that the template name does not exist in the Cisco Voice Provisioning Tool database. If the name exists, the GUI displays an error message.
Template Description	Enter a maximum of 255 characters to describe the Cisco Voice Provisioning Tool template.
Phone System	From the drop-down list box, choose the Cisco CallManager that you want to associate with the Cisco Voice Provisioning Tool device profile template.
Device Class	From the drop-down list box, choose the type of Cisco Voice Provisioning Tool template that you want to create. To create a device profile template, choose **Device Profile**.
Device Type	From the drop-down list box, choose the phone model for which you want to create the Cisco Voice Provisioning Tool template. Because all phones do not support the same features, the phone model that you choose determines the settings that display for the Cisco Voice Provisioning Tool template.
Device Profile Pages	
VPT Profile Template	If you want to do so, choose a Cisco Voice Provisioning Tool template to apply the template settings to the device profile.
Phone System	From the drop-down list box, choose the Cisco CallManager that you want to associate with the device profile.
Device Class	To create a device profile, choose **Device Profile**.
Device Type	From the drop-down list box, choose the phone model that you want to configure. Because all phones do not support the same features, the phone model that you choose determines the settings that display in the GUI.

Basic Device Profile Settings

Use Table 13-2 in conjunction with the following sections:

Template Pages

- Adding a VPT Phone or Device Profile Template, page 7-2
- Updating a VPT Phone or Device Profile Template, page 7-3

Device Profile Pages

- Adding a Single Phone or Device Profile, page 4-2
- Updating a Single Phone or Device Profile, page 4-3
- Updating Multiple Phones or Device Profiles at the Same Time, page 4-4

Table 13-2 Basic Device Profile Configuration Settings

Setting	Description
User Device Profile Name	Enter a unique name in the User Device Profile Name field. This name can comprise up to 50 characters in length.
Device Profile Description	Enter a description of the user device profile in the Description field. For text, enter any alphanumeric characters that describes this particular user device profile.
Phone Button Template	Choose the appropriate phone button template, which is required for line configuration in the Cisco Voice Provisioning Tool. The phone button template determines the configuration of buttons on a phone and identifies which feature (line, speed dial, and so on) is used for each button. Before options other than the default setting display in the drop-down list box, you must configure the setting in Cisco CallManager Administration. For information on how to perform this task, see the *Cisco CallManager Administration Guide*.

Advanced Device Profile Settings

Use Table 13-3 in conjunction with the following sections:

Template Pages

- Adding a VPT Phone or Device Profile Template, page 7-2
- Updating a VPT Phone or Device Profile Template, page 7-3

Device Profile Pages

- Adding a Single Phone or Device Profile, page 4-2
- Updating a Single Phone or Device Profile, page 4-3
- Updating Multiple Phones or Device Profiles at the Same Time, page 4-4

Table 13-3 Advanced Device Profile Settings

Setting	Description
User Hold Audio Source	To specify the audio source that plays when a user puts the call on hold, choose an audio source from the list that displays. If you do not choose an audio source, Cisco CallManager uses the audio source that is defined in the device pool or the system default if the device pool does not specify an audio source ID. Before options other than the default setting display in the drop-down list box, you must configure the setting in Cisco CallManager Administration. For information on how to perform this task, see the *Cisco CallManager Administration Guide*.
User Locale	From the drop-down list box, choose the locale that is associated with the phone user interface. The user locale identifies a set of detailed information to support users, including language and font. If no user locale is specified, Cisco CallManager uses the user locale that is associated with the device pool. If the users require information to be displayed on the phone in any language other than English, verify that the locale installer is installed before configuring user locale. See the Cisco IP telephony locale installer documentation.
Ignore Presentation Indicators (internal calls only)	From the drop-down list box, choose **Enabled** to configure call display restrictions on a call-by-call basis. When you enable this setting, Cisco CallManager ignores any presentation restriction that is received for internal calls. Use this configuration in combination with the callingline ID presentation and connected line ID presentation configuration at the translation pattern level. Together, these settings allow you to configure call display restrictions to selectively present or block calling and/or connected line display information for each call. For information on how configure translation patterns, see the *Cisco CallManager Administration Guide*.
Softkey Template	Choose the appropriate softkey template. The softkey template determines the configuration of the softkeys on Cisco IP Phones. Leave this field blank if the device pool contains the assigned softkey template.
Module 1	Choose the appropriate expansion module or none.
Module 2	Choose the appropriate expansion module or none.
MLPP Domain (e.g., “0000FF”)	Enter a hexadecimal value between 0 and FFFFFF for the MLPP domain that is associated with this device. If you leave this field blank, this device inherits its MLPP domain from the value set from the device pool that is configured for the phone. If the device pool does not have an MLPP domain setting, this device inherits its MLPP domain from the value set for the MLPP Domain Identifier enterprise parameter.

Table 13-3 Advanced Device Profile Settings (continued)

Setting	Description
MLPP Indication	If available, this setting specifies whether a device that supports precedence tones will play the tones when it places an MLPP precedence call. Choose one of the following options to assign to this device: • Default—This device inherits its MLPP indication setting from its device pool. • Off—This device does not handle nor process indication of an MLPP precedence call. • On—This device does handle and process indication of an MLPP precedence call. **Note** Do not configure a device with the following combination of settings: MLPP Indication is set to Off or Default (when default is Off) while MLPP Preemption is set to Forceful. **Note** Turning on MLPP Indication (at the enterprise parameter, device pool, or device level) disables normal Ring Setting behavior for the lines on a device, unless MLPP Indication is turned off (overridden) for the device.
MLPP Preemption	This setting specifies whether a device that supports preempting calls in progress will use the capability when it places an MLPP precedence call. Choose one of the following options: • Default—This device inherits its MLPP preemption setting from its device pool. • Disabled—This device does not allow preemption of lower precedence calls to take place when necessary for completion of higher precedence calls. • Forceful—This device allows preemption of lower precedence calls to take place when necessary for completion of higher precedence calls. **Note** Do not configure a device with the following combination of settings: MLPP Indication is set to Off or Default (when default is Off) while MLPP Preemption is set to Forceful.
Login User ID	Enter a valid login user ID. **Tip** If the user device profile is used as a logout profile, specify the login user ID that will be associated with the phone. After the user logs out from this user device profile, the phone will automatically log in to this login user ID.

Basic Line Configuration Settings for Device Profiles

Use Table 13-4 in conjunction with the following sections:

Template Pages

- Adding a VPT Phone or Device Profile Template, page 7-2
- Updating a VPT Phone or Device Profile Template, page 7-3

Device Profile Pages

- Configuring a Line, page 4-9
- Adding a Line, page 4-9
- Updating a Line, page 4-10

Table 13-4 Basic Line Configuration Settings

Setting	Description
Directory Number	Enter a phone number that can be dialed. Values can include numeric characters and route pattern wildcards and special characters except for (.) and (@). **Note** When a pattern is used as a directory number, the display on the phone and the caller ID that display on the dialed phone will both contain characters other than digits. To avoid this, we recommend that you provide a value for Display (Internal Caller ID), Line text label, and External phone number mask. The directory number that you enter can appear in more than one partition. However, if a JTAPI or TAPI application controls or monitors a device, you should not configure multiple instances of the same DN (with different partitions) on that device. **Tip** You cannot configure this setting for VPT profile templates.
Partition	Choose the partition where the directory number belongs. Make sure that the directory number that you enter in the Directory Number field is unique within the partition that you choose, unless you want to configure a shared line. If you do not want to restrict access to the directory number, choose <None> for the partition. **Tip** If the directory number is not unique within the partition, a message states that the line is already used by another phone. If you specify that you want to continue to use it, the line becomes a shared line. You can configure the number of partitions that display in this drop-down list box by using the Max List Box Items enterprise parameter in Cisco CallManager Administration. In Cisco CallManager Administration, if more partitions exist than the Max List Box Items enterprise parameter specifies, the ellipsis button (...) displays next to the drop-down list box. Click the ... button to display the Select Partition window. Enter a partial partition name in the List Items Where Name Contains field. Click the desired partition name in the list of partitions that displays in the Select item to use box and click OK. **Tip** You cannot configure this setting for VPT profile templates.
Voice Mail Profile	Choose from list of Voice Mail Profiles that are defined in the Voice Mail Profile Configuration page in Cisco CallManager Administration.

Table 13-4 Basic Line Configuration Settings (continued)

Setting	Description
Calling Search Space	From the drop-down list box, choose the appropriate calling search space. A calling search space comprises a collection of partitions that are searched for numbers that are called from this directory number. The value that you choose applies to all devices that are using this directory number. Changes result in an update of the numbers that are listed in the Call Pickup Group field. You can configure calling search space for Forward All, Forward Busy, Forward No Answer, and Forward on Failure directory numbers. The value that you choose applies to all devices that are using this directory number. If you set the Forward All Calling Search Space field to <None>, Cisco CallManager uses the calling search spaces of the line and the phone when the user forwards calls by using the Cisco IP Phone User Options Pages or the CFwdAll softkey on the phone. If you want to restrict users from forwarding calls on their phones, you must choose a restrictive calling search space from the Forward All Calling Search Space field; for example, you have two calling search spaces: Building and PSTN. The Building calling search space only allows users to call within the building, while the PSTN calling search space allows users to call within and outside the building. You assign the phone to the Building calling search space and the line on your phone to the PSTN calling search space. If you set the Call Forward All calling search space to <None>, Cisco CallManager can forward calls to any number within the PSTN or building calling search spaces. To prevent the user from forwarding calls to numbers outside the building, set the Call Forward All calling search space to Building.
Forward All	The following settings specify the forwarding treatment for calls to this directory number if the directory number is set to forward all calls. Specify the following values: • Voice Mail—Check this check box to use settings in the Voice Mail Profile Configuration window. When this check box is checked, Cisco CallManager ignores the settings in the Coverage/Destination box and Calling Search Space. • Coverage/Destination—This setting indicates the directory number to which all calls are forwarded. Use any dialable phone number, including an outside destination. • Calling Search Space—This setting applies to all devices that are using this directory number.

Table 13-4 Basic Line Configuration Settings (continued)

Setting	Description
Forward Busy Internal	The following settings specify the forwarding treatment for internal calls to this directory number if the directory number is busy. Specify the following values: • Voice Mail—Check this check box to use settings in the Voice Mail Profile Configuration window for internal calls. When this check box is checked, Cisco CallManager ignores the settings in the Coverage/Destination box and Calling Search Space. When this check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls. • Coverage/Destination—Use any dialable phone number, including an outside destination. When you enter a coverage/destination value for internal calls, the system automatically copies this value to the Coverage/Destination field for external calls. If you want external calls to forward to a different destination, you must enter a different value in the Coverage/Destination field for external calls. • Calling Search Space—This setting applies to all devices that are using this directory number. When you choose a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls. If you want external calls to forward to a different calling search space, you must choose a different setting in the Calling Search Space drop-down list box for external calls.

Table 13-4 Basic Line Configuration Settings (continued)

Setting	Description
Forward Busy External	The following settings specify the forwarding treatment for external calls to this directory number if the directory number is busy. Specify the following values: • Voice Mail—Check this check box to use settings in the Voice Mail Profile Configuration window for external calls. When this check box is checked, Cisco CallManager ignores the settings in the Coverage/Destination box and Calling Search Space. When the Voice Mail check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls. • Coverage/Destination—Use any dialable phone number, including an outside destination. When you enter a coverage/destination value for internal calls, the system automatically copies this value to the Coverage/Destination field for external calls. If you want external calls to forward to a different destination, you must enter a different value in the Coverage/Destination field for external calls. • Calling Search Space—This setting applies to all devices that are using this directory number. When you choose a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls. If you want external calls to forward to a different calling search space, you must choose a different setting in the Calling Search Space drop-down list box for external calls.

Table 13-4 Basic Line Configuration Settings (continued)

Setting	Description
Forward No Answer Internal	The following settings specify the forwarding treatment for internal calls to this directory number if the directory number does not answer. Specify the following values: • Voice Mail—Check this check box to use settings in the Voice Mail Profile Configuration window. When this check box is checked, Cisco CallManager ignores the settings in the Coverage/Destination box and Calling Search Space. When this check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls. • Coverage/Destination—This setting indicates the directory number to which an internal call is forwarded when the call is not answered. Use any dialable phone number, including an outside destination. When you enter a coverage/destination value for internal calls, the system automatically copies this value to the Coverage/Destination field for external calls. If you want external calls to forward to a different destination, you must enter a different value in the Coverage/Destination field for external calls. • Calling Search Space—This setting applies to all devices that are using this directory number. When you choose a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls. If you want external calls to forward to a different calling search space, you must choose a different setting in the Calling Search Space drop-down list box for external calls.

Table 13-4 Basic Line Configuration Settings (continued)

Setting	Description
Forward No Answer External	The following settings specify the forwarding treatment for external calls to this directory number if the directory number does not answer. Specify the following values: • Voice Mail—Check this check box to use settings in the Voice Mail Profile Configuration window. When this check box is checked, Cisco CallManager ignores the settings in the Coverage/Destination box and Calling Search Space. When this check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls. • Coverage/Destination—This setting indicates the directory number to which an external call is forwarded when the call is not answered. Use any dialable phone number, including an outside destination. When you enter a coverage/destination value for internal calls, the system automatically copies this value to the Coverage/Destination field for external calls. If you want external calls to forward to a different destination, you must enter a different value in the Coverage/Destination field for external calls. • Calling Search Space—This setting applies to all devices that are using this directory number. When you choose a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls. If you want external calls to forward to a different calling search space, you must choose a different setting in the Calling Search Space drop-down list box for external calls.

Table 13-4 Basic Line Configuration Settings (continued)

Setting	Description
Forward No Coverage Internal	This field applies only to CTI route points and CTI ports. The following settings specify the forwarding treatment for internal calls to this CTI route point or CTI port if the CTI route point or CTI port has no coverage. Specify the following values: • Voice Mail—Check this check box to use settings in the Voice Mail Profile Configuration window. When this check box is checked, Cisco CallManager ignores the settings in the Coverage/Destination box and Calling Search Space. When this check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls. • Coverage/Destination—This setting specifies the directory number to which an internal nonconnected call is forwarded when an application that controls that directory number fails. Use any dialable phone number, including an outside destination. When you enter a coverage/destination value for internal calls, the system automatically copies this value to the Coverage/Destination field for external calls. If you want external calls to forward to a different destination, you must enter a different value in the Coverage/Destination field for external calls. • Calling Search Space—This setting applies to all devices that are using this directory number. When you choose a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls. If you want external calls to forward to a different calling search space, choose a different setting in the Calling Search Space for external calls.

Table 13-4 Basic Line Configuration Settings (continued)

Setting	Description
Forward No Coverage External	This field applies only to CTI route points and CTI ports. The following settings specify the forwarding treatment for external calls to this CTI route point or CTI port if the CTI route point or CTI port has no coverage. Specify the following values: • Voice Mail—Check this check box to use settings in the Voice Mail Profile Configuration window. When this check box is checked, Cisco CallManager ignores the settings in the Coverage/Destination box and Calling Search Space. When this check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls. • Coverage/Destination—This setting specifies the directory number to which an internal nonconnected call is forwarded when an application that controls that directory number fails. Use any dialable phone number, including an outside destination. When you enter a coverage/destination value for internal calls, the system automatically copies this value to the Coverage/Destination field for external calls. If you want external calls to forward to a different destination, you must enter a different value in the Coverage/Destination field for external calls. • Calling Search Space—This setting applies to all devices that are using this directory number. When you choose a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls. If you want external calls to forward to a different calling search space, choose a different setting in the Calling Search Space for external calls.

Advanced Line Configuration Settings for Device Profiles

Table 13-5 describes the advanced line configuration settings. Use Table 13-5 in conjunction with the following sections:

Template Pages

- Adding a VPT Phone or Device Profile Template, page 7-2
- Updating a VPT Phone or Device Profile Template, page 7-3

Device Profile Pages

- Configuring a Line, page 4-9
- Adding a Line, page 4-9
- Updating a Line, page 4-10

Table 13-5 Advanced Line Configuration Settings

Setting	Description
User Hold Audio Source	Choose the audio source that plays when a user initiates a hold action.
Network Hold Audio Source	Choose the audio source that plays when the network initiates a hold action.
AAR Group	Choose the automated alternate routing (AAR) group for this device. The AAR group provides the prefix digits that are used to route calls that are otherwise blocked due to insufficient bandwidth. An AAR group setting of None specifies that Cisco CallManager will not attempt rerouting of blocked calls.
Auto Answer	Choose one of the following options to activate the Auto Answer feature for this directory number: • Auto Answer Off <Default> • Auto Answer with Headset • Auto Answer with Speakerphone (Intercom) **Note** Make sure that the headset or speakerphone is not disabled when you choose Auto Answer with headset or Auto Answer with speakerphone. **Note** Do not configure Auto Answer for devices that have shared lines.
No Answer Ring Duration (seconds)	Used in conjunction with Call Forward No Answer Destination, this field sets the timer for how long the phone will ring before it is forwarded. Leave this setting blank to use the value that is set in the Cisco CallManager service parameter, Forward No Answer Timer. **Caution** By default, Cisco CallManager makes the time for the T301 timer longer than the No Answer Ring Duration time; if the set time for the T301 timer expires before the set time for the No Answer Ring Duration expires, the call ends, and no call forwarding can occur. If you want to do so, you can configure the time for the No Answer Ring Duration to be greater than the time for the T301 timer. For more information on the T301 timer for the Cisco CallManager service, click the i button that displays on the Service Parameter page in Cisco CallManager Administration.
Call Pickup Group	Choose the number that can be dialed to answer calls to this directory number (in the specified partition).
MLPP Target	Enter the number to which MLPP precedence calls should be directed if this directory number receives a precedence call and neither this number nor its call-forward destination answers the precedence call. Values can include numeric characters and octothorpe (#) and asterisk (*).
Calling Search Space	From the drop-down list box, choose the calling search space to associate with the alternate party target (destination) number.

Table 13-5 Advanced Line Configuration Settings (continued)

Setting	Description
MLPP No Answer Ring Duration (seconds)	Enter the number of seconds (between 4 and 60) after which an MLPP precedence call will be directed to this directory number's alternate party if this directory number and its call-forwarding destination have not answered the precedence call. Leave this setting blank to use the value that is set in the Cisco CallManager enterprise parameter, Precedence Alternate Party Timeout.
Alerting Name	Enter a name that you want to display on the phone of the caller. This setting, which supports the Identification Services for the QSIG protocol, applies to shared and nonshared directory numbers. If you configure an alerting name for a directory number with shared-line appearances, when the phone rings at the terminating PINX, the system performs the following tasks: • Forwards the name of the caller that is assigned to the directory number. • Applies the Connected Name Restrictions (CONR) that are configured for the translation pattern (if restrictions exist); the originating PINX may modify the CONR, depending on the route pattern configuration. If you do not configure an alerting name, "Name Not Available" may display on the caller phone. If you do not enter a name for the Display (Internal Caller ID) field, the information in the Alerting Name field displays in the Display (Internal Caller ID) field.
Display (Internal Caller ID)	Leave this field blank to have the system display the extension. To have the system display a name, enter a maximum of 30 alphanumeric characters. Typically, use the user name or the directory number (if using the directory number, the person receiving the call may not see the proper identity of the caller).
Line Text Label	Use this field only if you do not want the directory number to show on the line appearance. Enter text that identifies this directory number for a line/phone combination. Suggested entries include boss's name, department's name, or other appropriate information to identify multiple directory numbers to secretary/assistant who monitors multiple directory numbers.
External Phone Number Mask	Enter the phone number (or mask) that is used to send Caller ID information when a call is placed from this line. You can enter a maximum of 24 number and "X" characters. The Xs represent the directory number and must appear at the end of the pattern. For example, if you specify a mask of 972813XXXX, an external call from extension 1234 displays a caller ID number of 9728131234.
Message Waiting Lamp Policy	Configure the handset lamp illumination policy.
Ring Setting (Phone Idle)	Configure the ring setting for the line appearance when an incoming call is received and no other active calls exist on that device. Turning on MLPP Indication (at the enterprise parameter, device pool, or device level) disables normal Ring Setting behavior for the lines on a device, unless MLPP Indication is turned off (overridden) for the device.

Table 13-5 Advanced Line Configuration Settings (continued)

Setting	Description
Ring Setting (Phone Active)	From the drop-down list box, choose the ring setting that is used when this phone has another active call on a different line. Turning on MLPP Indication (at the enterprise parameter, device pool, or device level) disables normal Ring Setting behavior for the lines on a device, unless MLPP Indication is turned off (overridden) for the device.
Maximum Number of Calls (1-200)	You can configure up to 200 calls for a line on a device, with the limiting factor being the total number of calls that are configured on the device. As you configure the number of calls for one line, the calls that are available for another line decrease. The default specifies 4. If the phone does not allow multiple calls for each line, the default specifies 2. For CTI route points, you can configure up to 10,000 calls for each port. Use this field in conjunction with the Busy Trigger field. **Tip** To review how this setting works for devices with shared line appearances, see the *Cisco CallManager System Guide*.
Busy Trigger (<=Max. calls)	This setting, which works in conjunction with Maximum Number of Calls and Call Forward Busy, determines the maximum number of calls to be presented on the line. If maximum number of calls is set for 50 and the busy trigger is set to 40, then incoming call 41 is rejected with a busy cause (and will be forwarded if Call Forward Busy is set). If this line is shared, all the lines must be busy before incoming calls are rejected. Use this field in conjunction with Maximum Number of Calls for CTI route points. The default specifies 2 calls. **Tip** To review how this setting works for devices with shared line appearances, see the *Cisco CallManager System Guide*.
Caller Name	Checking this check box will cause the caller name to display upon call forward.
Redirected Number	Checking this check box will cause the number that was redirected to display upon call forward.
Caller Number	Checking this check box will cause the caller number to display upon call forward.
Dialed Number	Checking this check box will cause the original dialed number to display upon call forward.

Device Profile Configuration Settings for Bulk Provisioning

Table 13-2 describes the device profile settings that you may enter during an add or modify bulk operation. Remember that you cannot use the same CSV file to perform both add and modify bulk operations. Use Table 13-2 in conjunction with the following sections:

- Overview of the Comma Separated Value (CSV) File, page 8-5
- Importing Phones or Device Profiles in Bulk, page 10-1
- Modifying Bulk Import Operations for Phones or Device Profiles, page 10-2

- Exporting Phones or Device Profiles in Bulk, page 10-3
- Modifying Bulk Export Operations for Phones or Device Profiles, page 10-4

Table 13-6 Device Profile Configuration Settings

Setting	Description	Important Notes
ccm_phone_templateName	Enter a VPT profile template name.	When you add or modify a device profile, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting. If you specify an attribute that exists both in the VPT profile template and in the CSV file, the value that you specified in the CSV file takes precedence.
ccm_device_deviceClass	You must complete this setting when you add a phone or profile. Enter **Device Profile**.	When you add or modify a device profile, configuring this setting is required. The system ignores vpt_clear for this setting.
ccm_device_deviceType	You must complete this setting when you add a phone or profile. Enter a phone model that supports the device profile you are configuring. **Tip** Not all phone models support device profiles.	When you add or modify a device profile, configuring this setting is required. The system ignores vpt_clear for this setting.
ccm_profile_name	Enter a unique name in the User Device Profile Name field. This name can comprise up to 50 characters in length.	When you add or modify a device profile, configuring this setting is required. Entering vpt_clear does not delete the configuration for this setting.
ccm_device_deviceDescription	Enter a description of the user device profile in the Description field. For text, enter anything that describes this particular user device profile.	When you add or modify a device profile, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_device_phoneButtonTemplate	Enter the appropriate phone button template, which is required for line configuration in the Cisco Voice Provisioning Tool. The phone button template determines the configuration of buttons on a phone and identifies which feature (line, speed dial, and so on) is used for each button.	When you add a device profile, configuring this setting is required; when you modify a device profile, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.

Table 13-6 Device Profile Configuration Settings (continued)

Setting	Description	Important Notes
ccm_device_subscribedServiceName	Enter a list of Cisco IP Phone subscription names, the display names, that are used for the device. Separate each name by a semicolon. For example, <subscriptionname1>;<subscription name2>;<subscriptionname3>	When you add or modify a device profile, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting. If you enter vpt_clear, the device unsubscribes to all services in the list. Any configuration that is specified in Cisco CallManager Administration or the Cisco Voice Provisioning Tool is overwritten by the list that you specify in the CSV file.
ccm_device_subscribedServiceUrl	Enter a list of Cisco IP Phone service URLs which correspond to each Cisco IP Phone service. A one-to-one ratio must exist; that is, for each subscribed service entered, a subscribed service URL must be entered. Separate each name by a semicolon. For example, <URL1>;<URL2>;<URL3>	When you add or modify a device profile, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_device_ipPhoneServiceName	Enter a list of Cisco IP Phone service names, the actual names not the display names, to which the device is subscribed. Separate each by named by a semicolon.	When you add or modify a device profile, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting. Any configuration that is specified in Cisco CallManager Administration or the Cisco Voice Provisioning Tool is overwritten by the list that you specify in the CSV file.
ccm_device_userHoldAudioSource	Enter an audio source that specifies the audio that is played when a user puts a call on hold. If you do not enter an audio source, Cisco CallManager uses the audio source that is defined in the device pool or the system default if the device pool does not specify an audio source ID.	When you add or modify a device profile, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 13-6 Device Profile Configuration Settings (continued)

Setting	Description	Important Notes
ccm_device_userLocale	Enter the locale that is associated with the phone user interface. The user locale identifies a set of detailed information to support users, including language and font. If no user locale is specified, Cisco CallManager uses the user locale that is associated with the device pool. If the users require information to be displayed on the phone in any language other than English, verify that the locale installer is installed before configuring user locale. See the Cisco IP telephony locale installer documentation.	When you add or modify a device profile, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_device_ignorePresentation Indicators	From the drop-down list box, enter **Enabled** to configure call display restrictions on a call-by-call basis. When you enable this setting, Cisco CallManager ignores any presentation restriction that is received for internal calls. Use this configuration in combination with the callingline ID presentation and connected line ID presentation configuration at the translation pattern level. Together, these settings allow you to configure call display restrictions to selectively present or block calling and/or connected line display information for each call. For information on how configure translation patterns, see the *Cisco CallManager Administration Guide*.	When you add or modify a device profile, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_device_softkeyTemplate	Enter the appropriate softkey template. The softkey template determines the configuration of the softkeys on Cisco IP Phones. Leave this field blank if the device pool contains the assigned softkey template.	When you add or modify a device profile, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_device_module1	Enter the name of the appropriate expansion module. If you want to do so, enter None, which indicates that the phone does not use an expansion module.	When you add or modify a device profile, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 13-6 Device Profile Configuration Settings (continued)

Setting	Description	Important Notes
ccm_device_module2	Enter the name of the appropriate expansion module. If you want to do so, enter None, which indicates that the phone does not use an expansion module.	When you add or modify a device profile, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_device_mlppDomain	Enter a hexadecimal value between 0 and FFFFFF for the MLPP domain that is associated with this device. If you leave this field blank, this device inherits its MLPP domain from the value set from the device pool that is configured for the phone. If the device pool does not have an MLPP domain setting, this device inherits its MLPP domain from the value set for the MLPP Domain Identifier enterprise parameter.	When you add or modify a device profile, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_device_mlppIndication	This setting specifies whether a device that supports precedence tones will play the tones when it places an MLPP precedence call. Enter one of the following options to assign to this device: • Default—This device inherits its MLPP indication setting from its device pool. • Off—This device does not handle nor process indication of an MLPP precedence call. • On—This device does handle and process indication of an MLPP precedence call. **Note** Do not configure a device with the following combination of settings: MLPP Indication is set to Off or Default (when default is Off) while MLPP Preemption is set to Forceful. **Note** Turning on MLPP Indication (at the enterprise parameter, device pool, or device level) disables normal Ring Setting behavior for the lines on a device, unless MLPP Indication is turned off (overridden) for the device.	When you add or modify a device profile, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.

Table 13-6 Device Profile Configuration Settings (continued)

Setting	Description	Important Notes
ccm_device_mlppPreemption	This setting specifies whether a device that supports preempting calls in progress will use the capability when it places an MLPP precedence call. Enter one of the following options: • Default—This device inherits its MLPP preemption setting from its device pool. • Disabled—This device does not allow preemption of lower precedence calls to take place when necessary for completion of higher precedence calls. • Forceful—This device allows preemption of lower precedence calls to take place when necessary for completion of higher precedence calls. Do not configure a device with the following combination of settings: MLPP Indication is set to Off or Default (when default is Off) while MLPP Preemption is set to Forceful.	When you add or modify a device profile, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_profile_loginUserID	Enter a valid login user ID. **Tip** If the user device profile is used as a logout profile, specify the login user ID that will be associated with the phone. After the user logs out from this user device profile, the phone will automatically log in to this login user ID.	When you add or modify a device profile, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Line Settings for Device Profile Bulk Provisioning

Table 13-7 describes line configuration settings that you enter use when you create or modify the CSV file for bulk provisioning. The settings in Table 13-7 show you the headers to enter for Line 1. If you want to configure other lines in the CSV file, enter the line number where you see the number 1 in the table; for example, if you configure the voice mail profile for Line 2 in the CSV file, enter the following setting: ccm_line2_voicemailprofile.

- Overview of the Comma Separated Value (CSV) File, page 8-5
- Overview of Bulk Import Operations, page 8-2
- Importing Phones or Device Profiles in Bulk, page 10-1
- Modifying Bulk Import Operations for Phones or Device Profiles, page 10-2

- Exporting Phones or Device Profiles in Bulk, page 10-3
- Modifying Bulk Export Operations for Phones or Device Profiles, page 10-4

Table 13-7 Line Settings in the CSV File

Column	Description	Important Notes
ccm_line1_voicemailprofile	Enter a Voice Mail profile that is defined in the Voice Mail Profile Configuration page in Cisco CallManager Administration. The default setting specifies <None>.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_lineCallingSearchSpace	Enter the appropriate calling search space, which comprises a collection of partitions that are searched for numbers that are called from this directory number. The value that you choose applies to all devices that are using this directory number. Changes result in an update of the numbers that are listed in the Call Pickup Group field.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_forwardAllVoiceMail	This setting specifies the forwarding treatment for calls to this directory number if the directory number is set to forward all calls. Enter **true** to use settings in the Voice Mail Profile Configuration window. If you do not want to use this functionality, enter false. When you enter true, Cisco CallManager ignores the settings for Coverage/Destination and Calling Search Space.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_line1_forwardAllDestination	Enter the directory number to which all calls are forwarded. Use any dialable phone number, including an outside destination.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_forwardAllCallingSearch Space	Enter the calling search space that applies to all devices that are using this directory number.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 13-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_forwardBusyInternalVoice Mail	Enter **true** to use settings in the Voice Mail Profile Configuration window for internal calls. If you do not want to use this functionality, enter false. When you enter true for this setting, Cisco CallManager ignores the settings for Coverage/Destination and Calling Search Space. When you enter true for this setting, the system automatically checks the Voice Mail check box for external calls on the line configuration page. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_line1_forwardBusyInternal Destination	Enter any dialable phone number, including an outside destination. When you enter a coverage/destination value for internal calls, the system automatically copies this value to the Coverage/Destination field for external calls on the line configuration page. If you want external calls to forward to a different destination, you must enter a different value in the Coverage/Destination field for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_forwardBusyInternal CallingSearchSpace	Enter the calling search space that applies to all devices that are using this directory number. When you enter a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls on the line configuration page. If you want external calls to forward to a different calling search space, you must choose a different setting in the Calling Search Space drop-down list box for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 13-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_forwardBusyExternalVoice Mail	Enter **true** to use settings in the Voice Mail Profile Configuration window for external calls. When you enter true for this setting, Cisco CallManager ignores the settings for Coverage/Destination and Calling Search Space. When the Voice Mail check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls on the line configuration page. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls on the line configuration page.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_line1_forwardBusyExternal Destination	Enter any dialable phone number, including an outside destination. When you enter a coverage/destination value for internal calls, the system automatically copies this value to the Coverage/Destination field for external calls on the line configuration page. If you want external calls to forward to a different destination, you must enter a different value in the Coverage/Destination field for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_forwardBusyExternal CallingSearchSpace	Enter a calling search space that applies to all devices that are using this directory number. When you enter a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls on the line configuration page. If you want external calls to forward to a different calling search space, you must choose a different setting in the Calling Search Space drop-down list box for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 13-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_forwardNoAnswerInternal VoiceMail	Enter **true** to use settings in the Voice Mail Profile Configuration window. When you enter true for this setting, Cisco CallManager ignores the settings in the Coverage/Destination box and Calling Search Space. When this check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls on the line configuration page. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_line1_forwardNoAnswerInternal Destination	Enter a directory number to which an internal call is forwarded when the call is not answered. Use any dialable phone number, including an outside destination. When you enter a coverage/destination value for internal calls, the system automatically copies this value to the Coverage/Destination field for external calls on the line configuration page. If you want external calls to forward to a different destination, you must enter a different value in the Coverage/Destination field for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_forwardNoAnswerInternal CallingSearchSpace	Enter a calling search space that applies to all devices that are using this directory number. When you enter a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls on the line configuration page. If you want external calls to forward to a different calling search space, you must choose a different setting in the Calling Search Space drop-down list box for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 13-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_forwardNoAnswerExternal VoiceMail	Enter **true** to use settings in the Voice Mail Profile Configuration window. When you enter true for this setting, Cisco CallManager ignores the settings in the Coverage/Destination box and Calling Search Space. When this check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls on the line configuration page. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_line1_forwardBusyExternal Destination	Enter a directory number to which an external call is forwarded when the call is not answered. Use any dialable phone number, including an outside destination. When you enter a coverage/destination value for internal calls, the system automatically copies this value to the Coverage/Destination field for external calls on the line configuration page. If you want external calls to forward to a different destination, you must enter a different value in the Coverage/Destination field for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_forwardBusyExternal CallingSearchSpace	Enter a calling search space that applies to all devices that are using this directory number. When you choose a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls on the line configuration page. If you want external calls to forward to a different calling search space, you must choose a different setting in the Calling Search Space drop-down list box for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 13-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_forwardNoAnswerInternal VoiceMail	Enter true to use settings in the Voice Mail Profile Configuration window. When you enter true for this setting, Cisco CallManager ignores the settings for Coverage/Destination and Calling Search Space. When this check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls on the line configuration page. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_line1_forwardNoAnswerInternal Destination	Enter a directory number to which an internal nonconnected call is forwarded when an application that controls that directory number fails. Use any dialable phone number, including an outside destination. When you enter a coverage/destination value for internal calls, the system automatically copies this value to the Coverage/Destination field for external calls on the line configuration page. If you want external calls to forward to a different destination, you must enter a different value in the Coverage/Destination field for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_forwardNoAnswerInternal CallingSearchSpace	Enter a calling search space that applies to all devices that are using this directory number. When you enter a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls on the line configuration page. If you want external calls to forward to a different calling search space, enter a different setting in the Calling Search Space for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 13-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_forwardNoAnswerExternal VoiceMail	This field applies only to CTI route points and CTI ports. The following settings specify the forwarding treatment for external calls to this CTI route point or CTI port if the CTI route point or CTI port has no coverage. Enter true to use settings in the Voice Mail Profile Configuration window. When you enter true for this setting, Cisco CallManager ignores the settings for Coverage/Destination and Calling Search Space. When this check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls on the line configuration page. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_line1_forwardNoAnswerExternal Destination	Enter the directory number to which an external call is forwarded when the call is not answered. Use any dialable phone number, including an outside destination. When you enter a coverage/destination value for internal calls, the system automatically copies this value to the Coverage/Destination field for external calls on the line configuration page. If you want external calls to forward to a different destination, you must enter a different value in the Coverage/Destination field for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_forwardNoAnswerExternal CallingSearchSpace	Enter the Calling Search Space that applies to all devices that are using this directory number. When you choose a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls on the line configuration page. If you want external calls to forward to a different calling search space, choose a different setting in the Calling Search Space for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 13-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_forwardNoCoverage InternalVoiceMail	This field applies only to CTI route points and CTI ports. The following settings specify the forwarding treatment for internal calls to this CTI route point or CTI port if the CTI route point or CTI port has no coverage. Enter true to use settings in the Voice Mail Profile Configuration window. When you enter true for this setting, Cisco CallManager ignores the settings in the Coverage/Destination box and Calling Search Space. When this check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls on the line configuration page. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_line1_forwardNoCoverage InternalDestination	Enter the directory number to which an internal nonconnected call is forwarded when an application that controls that directory number fails. Use any dialable phone number, including an outside destination. When you enter a coverage/destination value for internal calls, the system automatically copies this value to the Coverage/Destination field for external calls. If you want external calls to forward to a different destination, you must enter a different value in the Coverage/Destination field for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_forwardNoCoverage InternalCallingSearchSpace	Enter a Calling Search Space that applies to all devices that are using this directory number. When you choose a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls on the line configuration page. If you want external calls to forward to a different calling search space, choose a different setting in the Calling Search Space for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 13-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_forwardNoCoverage ExternalVoiceMail	This field applies only to CTI route points and CTI ports. The following settings specify the forwarding treatment for external calls to this CTI route point or CTI port if the CTI route point or CTI port has no coverage. Enter true to use settings in the Voice Mail Profile Configuration window. When true for this setting, Cisco CallManager ignores the settings in the Coverage/Destination box and Calling Search Space. When this check box is checked for internal calls, the system automatically checks the Voice Mail check box for external calls. If you do not want external calls to forward to the voice-messaging system, you must uncheck the Voice Mail check box for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_line1_forwardNoCoverage ExternalDestination	Enter the directory number to which an internal nonconnected call is forwarded when an application that controls that directory number fails. Use any dialable phone number, including an outside destination. When you enter a coverage/destination value for internal calls, the system automatically copies this value to the Coverage/Destination field for external calls on the line configuration page. If you want external calls to forward to a different destination, you must enter a different value in the Coverage/Destination field for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_forwardNoCoverage ExternalCallingSearchSpace	Enter the Calling Search Space that applies to all devices that are using this directory number. When you choose a Calling Search Space for internal calls, the system automatically copies this setting to the Calling Search Space setting for external calls. If you want external calls to forward to a different calling search space, choose a different setting in the Calling Search Space for external calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 13-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_lineUserHoldAudioSource	Enter the audio source that plays when a user initiates a hold action.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_lineNetworkHoldAudio Source	Enter the audio source that plays when the network initiates a hold action.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_lineAARGroup	Enter the automated alternate routing (AAR) group for this device. The AAR group provides the prefix digits that are used to route calls that are otherwise blocked due to insufficient bandwidth. An AAR group setting of None specifies that Cisco CallManager will not attempt rerouting of blocked calls.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_autoAnswer	Enter one of the following options to activate the Auto Answer feature for this directory number: • Auto Answer Off <Default> • Auto Answer with Headset • Auto Answer with Speakerphone (Intercom) **Note** Make sure that the headset or speakerphone is not disabled when you enter Auto Answer with headset or Auto Answer with speakerphone. **Note** Do not configure Auto Answer for devices that have shared lines.	When you add a line, configuring this setting is required; when you modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 13-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_noAnswerRingDuration	Used in conjunction with Call Forward No Answer Destination, this field sets the timer for how long the phone will ring before it is forwarded. Leave this setting blank to use the value that is set in the Cisco CallManager service parameter, Forward No Answer Timer. **Caution** By default, Cisco CallManager makes the time for the T301 timer longer than the No Answer Ring Duration time; if the set time for the T301 timer expires before the set time for the No Answer Ring Duration expires, the call ends, and no call forwarding can occur. If you want to do so, you can configure the time for the No Answer Ring Duration to be greater than the time for the T301 timer. For more information on the T301 timer for the Cisco CallManager service, click the i button that displays on the Service Parameter page in Cisco CallManager Administration.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_callPickupGroup	Enter the number that can be dialed to answer calls to this directory number (in the specified partition).	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_mlppTarget	Enter the number to which MLPP precedence calls should be directed if this directory number receives a precedence call and neither this number nor its call-forward destination answers the precedence call. Values can include numeric characters and octothorpe (#) and asterisk (*).	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_mlppCallingSearchSpace	Enter the calling search space to associate with the alternate party target (destination) number.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 13-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_mlppNoAnswerRing Duration	Enter the number of seconds (between 4 and 60) after which an MLPP precedence call will be directed to this directory number's alternate party if this directory number and its call-forwarding destination have not answered the precedence call. Leave this setting blank to use the value that is set in the Cisco CallManager enterprise parameter, Precedence Alternate Party Timeout.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_alertingName	Enter a name that you want to display on the phone of the caller. This setting, which supports the Identification Services for the QSIG protocol, applies to shared and nonshared directory numbers. If you configure an alerting name for a directory number with shared-line appearances, when the phone rings at the terminating PINX, the system performs the following tasks: • Forwards the name of the caller that is assigned to the directory number. • Applies the Connected Name Restrictions (CONR) that are configured for the translation pattern (if restrictions exist); the originating PINX may modify the CONR, depending on the route pattern configuration. If you do not configure an alerting name, "Name Not Available" may display on the caller phone. If you do not enter a name for the Display (Internal Caller ID) field, the information in the Alerting Name field displays in the Display (Internal Caller ID) field.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_displayInternalCallerID	Leave this field blank to have the system display the extension. To have the system display a name, enter a maximum of 30 alphanumeric characters. Typically, use the user name or the directory number (if using the directory number, the person receiving the call may not see the proper identity of the caller).	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 13-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_lineTextLabel	Use this field only if you do not want the directory number to show on the line appearance. Enter text that identifies this directory number for a line/phone combination. Suggested entries include boss's name, department's name, or other appropriate information to identify multiple directory numbers to secretary/assistant who monitors multiple directory numbers.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_externalPhoneNumberMask	Enter the phone number (or mask) that is used to send Caller ID information when a call is placed from this line. You can enter a maximum of 24 number and "X" characters. The Xs represent the directory number and must appear at the end of the pattern. For example, if you specify a mask of 972813XXXX, an external call from extension 1234 displays a caller ID number of 9728131234.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_messageWaitingLamp Policy	Use this field to configure the handset lamp illumination policy. Enter one of the following options: • Use System Policy (The directory number refers to the service parameter, Message Waiting Lamp Policy.) • Light and Prompt • Prompt Only • Light Only • None	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 13-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_ringSetingPhoneIdle	Use this field to configure the ring setting for the line appearance when an incoming call is received and no other active calls exist on that device. Enter one of the following options: • Use system default • Disable • Flash only • Ring once • Ring Turning on MLPP Indication (at the enterprise parameter, device pool, or device level) disables normal Ring Setting behavior for the lines on a device, unless MLPP Indication is turned off (overridden) for the device.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_ringSettingPhoneActive	Enter one of the following options to configure a ring setting that is used when this phone has another active call on a different line. • Use system default • Disable • Flash only • Ring once • Ring • Beep only Turning on MLPP Indication (at the enterprise parameter, device pool, or device level) disables normal Ring Setting behavior for the lines on a device, unless MLPP Indication is turned off (overridden) for the device.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.

Table 13-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_maximumNumberOfCalls	You can configure up to 200 calls for a line on a device, with the limiting factor being the total number of calls that are configured on the device. As you configure the number of calls for one line, the calls that are available for another line decrease. The default specifies 4. If the phone does not allow multiple calls for each line, the default specifies 2. For CTI route points, you can configure up to 10,000 calls for each port. The default specifies 5000 calls. Use this field in conjunction with the ccm_line1_busyTrigger setting.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_busyTrigger	This setting, which works in conjunction with the Maximum Number of Calls and Call Forward Busy settings, determines the maximum number of calls to be presented on the line. If maximum number of calls is set for 50 and the busy trigger is set to 40, then incoming call 41 is rejected with a busy cause (and will be forwarded if Call Forward Busy is set). If this line is shared, all the lines must be busy before incoming calls are rejected. The default specifies 2.	When you add or modify a line, configuring this setting is optional. Entering vpt_clear deletes the configuration for this setting.
ccm_line1_callerName	Entering true for this setting causes the caller name to display upon call forward.	When you add a line, configuring this setting is required; when you modify a line, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_line1_redirectedNumber	Entering true for this setting causes the number that was redirected to display upon call forward.	When you add a line, configuring this setting is required; when you modify a line, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.
ccm_line1_callerNumber	Entering true for this setting causes the caller number to display upon call forward.	When you add a line, configuring this setting is required; when you modify a line, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.

Table 13-7 Line Settings in the CSV File (continued)

Column	Description	Important Notes
ccm_line1_dialedNumber	Entering true for this setting causes the original dialed number to display upon call forward.	When you add a line, configuring this setting is required; when you modify a line, configuring this setting is optional. Entering vpt_clear does not delete the configuration for this setting.

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