



Cisco Voice Provisioning Tool Overview

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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, page 1-3](#)
- [Understanding Cisco Unity Users, page 1-4](#)
- [User Configuration Checklist, page 1-6](#)
- [Where to Find More Information on Users, page 1-6](#)

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.	<ul style="list-style-type: none"> • 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.	<i>Cisco Voice Provisioning Tool System Management and Security Guide</i>
Step 3	If you have not already done so, add the user(s).	<ul style="list-style-type: none"> • 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, page 1-7](#)
- [Phone Restrictions, page 1-8](#)
- [Phone Configuration Checklist, page 1-9](#)
- [Where to Find More Information on Phones, page 1-10](#)

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.	<i>Cisco Voice Provisioning Tool System Management and Security Guide</i>
Step 2	Verify that you reviewed the restrictions for the phone configuration.	Phone Restrictions, page 1-8
Step 3	<p>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:</p> <ul style="list-style-type: none"> • 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 <p>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.</p>	<i>Cisco CallManager Administration Guide</i>
Step 4	<p>Gather information about the phone, for example,</p> <ul style="list-style-type: none"> • 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 	<i>Cisco CallManager System Guide</i>

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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.	<i>Cisco CallManager Administration Guide</i>
Step 10	If you have not already done so, configure speed-dial buttons.	<i>Cisco CallManager Administration Guide</i>
Step 11	Provide power, install, verify network connectivity, and configure network settings for the Cisco IP Phone.	<i>Cisco IP Phone Administration Guide for Cisco CallManager</i>
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, page 1-11](#)
- [Device Profile Configuration Checklist, page 1-12](#)

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.	<i>Cisco Voice Provisioning Tool System Management and Security Guide</i>
Step 2	Configure the device profile(s).	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • 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.