Administration Guide for Cisco Mobile 8.0 for iPhone

Revised: June 29, 2010

About Cisco Mobile 8.0

Cisco Mobile 8.0 provides iPhone users with voice over IP (VoIP) calling, visual voicemail, and access to the corporate directory while users are connected to the corporate network over Wi-Fi, either on premises or over VPN.

Cisco Mobile 8.0 is an IP telephony endpoint configured in Cisco Unified Communications Manager. It is distinct from the Cisco Mobile application that runs in conjunction with a Cisco Unified Mobility Advantage server.

Features of Cisco Mobile 8.0 include the ability to:

- Make VoIP calls from a corporate phone number using an iPhone.

Americas Headquarters:
Cisco Systems, Inc., 170 West Tasman Drive, San Jose, CA 95134-1706 USA

- Use many of the standard in-call features that Cisco Unified Communications Manager provides, including hold, transfer, conference, and park.
- Automatically launch VPN if the enterprise network is not directly available.
- Transfer an active call from the desk phone to Cisco Mobile 8.0 and vice versa.
- Seamlessly convert an active VoIP call using Cisco Mobile 8.0 to a standard mobile call on the mobile voice network (GSM) phone number of the iPhone.
- Dial numbers by raising the iPhone to the ear and speaking the name of the person to call.
- Search the corporate directory.
- Access voicemail through a visual list.

Related Documentation

- Cisco Mobile 8.0 documentation for users is available from http://www.cisco.com/go/iphone/ciscomobile/faq.
- Technical information specific to this product is available in the SRND: http://www.cisco.com/en/US/products/sw/voicesw/ps556/products_implementation_design_guides_list.html.
- Cisco Unified Communications Manager documentation for administrators is available at http://www.cisco.com/en/US/products/sw/voicesw/ps556/tsd_products_support_series_home.html.

Deployment Overview

Perform the following general steps to deploy Cisco Mobile 8.0:

Action	See
Meet system requirements.	Release Notes for this product at http://www.cisco.com/en/US/products/ps7271/prod_release_notes_list.html.
Review the list of necessary files You can collect these files now, or collect them as you need them for the procedures in this document.	Summary of Necessary Files, page 3
Depending on your version of Cisco Unified Communications Manager: Install the device COP file.	Making the Cisco Mobile 8.0 Device Available on Cisco Unified Communications Manager, page 4

Action	See
For each feature: • Verify that any prerequisites are met. • Set up any system-level settings for the features and functionality that you will deploy. • Set up any required user-level settings. • Set up the device in Cisco Unified Communications Manager. • Test your setup for each feature.	Instructions for each feature listed in How to Set Up Features, page 6
Set up SIP Digest Authentication or ensure that this security feature is not enabled.	Determining SIP Digest Authentication, page 26
Use your working setup as a template for setting up devices for other users.	Bulk Configuration of Users and Devices, page 28
Send an email message with the information users need in order to set up Cisco Mobile 8.0.	• Providing for Automatic Setup, page 28 • Giving Information to Users, page 29
Users set up Cisco Mobile 8.0 on their iPhone. The settings you entered on the device page in Cisco Unified Communications Manager are automatically entered into the application on the device. Users will enter passwords as applicable.	Documentation for users at http://www.cisco.com/go/iphone/ciscomobile/faq.

Summary of Necessary Files

The following files are necessary to set up and use Cisco Mobile 8.0. You can collect them all now, or obtain them when you are ready to use them.

File	To Obtain This File, See
Depending on your Cisco Unified Communications Manager release: Device COP file	Making the Cisco Mobile 8.0 Device Available on Cisco Unified Communications Manager, page 4.

File	To Obtain This File, See
COP file required to make Application Dial Rules and Directory Lookup Rules available to Cisco Mobile 8.0	How to Make Application Dial Rules and Directory Lookup Rules Available to Cisco Mobile 8.0, page 7
Cisco Mobile 8.0 application for iPhone	The Apple App Store. Access the App Store from within iTunes or use the App Store application on the iPhone. When you search for Cisco Mobile 8.0, be sure to distinguish this application from the Cisco Mobile application that requires a Cisco Unified Mobility Advantage server.

Making the Cisco Mobile 8.0 Device Available on Cisco Unified Communications Manager

This procedure is required only for certain Cisco Unified Communications Manager releases.

In order to make Cisco Mobile 8.0 available as a device in Cisco Unified Communications Manager, you must install a Cisco Options Package (COP) file on all of your Cisco Unified Communications Manager servers.

General information about installing COP files is available in the "Software Upgrades" chapter in the *Cisco Unified Communications Operating System Administration Guide* for your release at http://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_maintenance_guides_list.html.

Before You Begin

Determine whether this procedure is required for your release of Cisco Unified Communications Manager:

Cisco Unified Communications Manager Release	Is This Procedure Required?
7.1.3	Yes
7.1.5	No
8.0.1	Yes

Procedure

Step 1 Download the **cmterm-iphone-install-100222.cop.sgn** file from http://tools.cisco.com/support/downloads/pub/Redirect.x?mdfid=281001428.

Step 2 Place this COP file on an FTP or SFTP server.

Step 3 Select **Cisco Unified OS Administration** in the top right corner of the Cisco Unified Communications Manager Administration portal, then select **Go**.

Step 4 Select **Software Upgrades > Install/Upgrade**.

Step 5 Specify the location of the COP file in the Software Installation/Upgrade window.

Step 6 Select **Next**.

Step 7 Select the device COP file from the **Available Software** list box.

Step 8 Select **Next**.

Step 9 Select **Install**.

Step 10 Repeat this procedure for every Cisco Unified Communications Manager server in the cluster.

Step 11 Reboot all Cisco Unified Communications Manager servers at a time of low usage.

Step 12 Restart the Tomcat service on all Cisco Unified Communications Manager servers.

Use the following command from the command line interface:

```
utils service restart Cisco Tomcat
```

About Usage and Error Tracking

In order to improve our products, Cisco uses a third-party tool, Google Analytics, to collect general information about user activity and errors.

All information collected is stored by Google and is confidential. Only Cisco has access to this information. This functionality is not currently available as a reporting tool for Administrators.

You set the level of usage reporting for each user when you set up each Cisco Mobile 8.0 device in Cisco Unified Communications Manager for basic VoIP telephony.

Depending on the setting, Cisco collects the following information:

Usage and Error Tracking Setting	Information Collected
Enabled	• Errors and warnings • Page views in Cisco Mobile 8.0 (for example, how often users view their list of voice messages) • Feature activity (for example, how often users add a contact or play a voice message.) • Servers to which Cisco Mobile 8.0 is connected • Approximate geographic location, based on mobile service provider activity
Detailed	• Information collected when “Enabled” is selected. • Device IDs
Disabled	None.

The first time users launch Cisco Mobile 8.0, they see an agreement that describes the data that Cisco collects. Users must accept this agreement in order to use the application, whether or not the usage tracking feature is currently enabled.

For more information about the usage reporting tool, see http://www.google.com/analytics and http://www.google.com/privacy.html.

Related Topics

- Setting Up Voice Over IP and Standard Telephony Features, page 6

How to Set Up Features

Setting Up Voice Over IP and Standard Telephony Features

Suggested Application Dial Rules and Directory Lookup Rules

Because people are accustomed to dialing numbers differently from a mobile phone than from an office phone, consider setting up Cisco Unified Communications Manager to accommodate the different number patterns that mobile phone users will dial.

For example, users may dial numbers as follows:

- Mobile phone users may not be in the habit of dialing a 9 before they dial a number outside the company
- If the iPhone phone number is in a different area code than the desk phone number, users may dial area codes when using their mobile phone when they would not include the area code when dialing from office phones, and vice versa.
- Mobile phone users dialing an international number may begin the number with a plus sign (+).

You can set up Application Dialing Rules to successfully connect calls dialed to these numbers, and set up Directory Lookup Rules to identify calls dialed to and from these numbers, if applicable.

Consider the following:

- Create your rules so that only one rule can apply to each phone number, or order the rules so that the intended number matches before any other possible match. For example, list 54321 before 543 to ensure that 54321 does not match 543 instead of 54321.
- For Caller ID, the name in the main iPhone Address Book is displayed instead of any name provided by Cisco Unified Communications Manager or Microsoft Active Directory.

For complete information on setting up Application Dial rules and Directory Lookup rules, see the online help in Cisco Unified Communications Manager.

Related Topics

- How to Enable Transfer of Active Calls from VoIP to the Mobile Voice Network (GSM), page 16

How to Make Application Dial Rules and Directory Lookup Rules Available to Cisco Mobile 8.0

Perform this series of procedures to make all of your existing Application Dial Rules and Directory Lookup Rules available to Cisco Mobile 8.0.

You will use a Cisco Options Package (COP) file that is also used for this purpose for other Cisco products.

Note This COP file is different from the device COP file described elsewhere in this document.

If you have deployed other Cisco telephony clients and integrations, you may have used this tool already.

This series of procedures installs required XML files in a folder called CUPC at the root level of the Cisco Unified Communications Manager TFTP server. If you need different rules for Cisco Mobile 8.0 than for other clients that use this file, use the optional procedure to create a dedicated XML file for Cisco Mobile 8.0.

Note Every time you update the Application Dial Rules or Directory Lookup Rules on Cisco Unified Communications Manager, you must repeat this series of procedures to make the changes available to clients including Cisco Mobile 8.0.

Perform the following procedures in order:

- Obtaining the COP File, page 7
- Generating Copies of the Dialing Rules, page 8
- Verifying That Copies of the Dialing Rules Were Generated, page 8
- (Optional) Modify the File As Needed, page 8
- Restarting the TFTP Service, page 9

Obtaining the COP File

Procedure

Step 1 Go to the Software Downloads page for Cisco Unified Communications Integration for Microsoft Office Communicator at http://tools.cisco.com/support/downloads/go/Redirect.x?mdfid=282588075.

Step 2 Look for the Release 7.1(4) bundle that contains the Administrative Toolkit.

Step 3 Download the file.

Step 4 Unzip the file.

Step 5 Locate the **cmterm-csf-copydialingrules-0.1.cop.sgn** file in the CUCM folder.

You do not need any other files in this download.

Generating Copies of the Dialing Rules

Procedure

Step 1 Select **Cisco Unified OS Administration** in the top right corner of the Cisco Unified Communications Manager Administration portal, then select **Go**.

Step 2 Select **Software Upgrades > Install/Upgrade**.

Step 3 Specify the location of the COP file in the Software Installation/Upgrade window.

Step 4 Select **Next**.

Step 5 Select the COP file from the **Available Software** list box.

Step 6 Select **Next**.

Step 7 Select **Install**.

Step 8 Repeat this procedure for every Cisco Unified Communications Manager server that runs a TFTP server.

Verifying That Copies of the Dialing Rules Were Generated

Procedure

Step 1 Select **Software Upgrades > TFTP File Management** in the Cisco Unified Operating System Administration portal.

Step 2 Search for a directory that begins with CUPC in the TFTP File Management window.

Step 3 Verify that the following files are found:

- AppDialRules.xml
- DirLookupDialRules.xml

(Optional) Modify the File As Needed

If you require a set of dial rules or directory lookup rules that is unique to Cisco Mobile 8.0, and not used for any other devices, you can create and modify copies of these files. Rename these copies and put them in another location.

Procedure

Step 1 Navigate to the CUPC folder at the root level of the Cisco Unified Communications Manager TFTP server.

Step 2 Copy either or both of the files you want to modify for Cisco Mobile 8.0:

- AppDialRules.xml
- DirLookupDialRules.xml

Step 3 Open the files in a text editor.

Step 4 Following the example of the existing rules, modify or add rules as needed.

Step 5 Save your changes.

Step 6 Put the files on a TFTP server.

Step 7 Note the path and filenames. You will need this information later.

What To Do Next

As described later, when you add Cisco Mobile 8.0 devices to Cisco Unified Communications Manager, you must specify the path to these files, including filenames.

Restarting the TFTP Service

Perform this procedure at a time of low usage, as it may interrupt service.

For more information, see the "Starting, Stopping, Restarting, and Refreshing Status of Services in Control Center" topic in the *Cisco Unified Serviceability Administration Guide* at http://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_maintenance_guides_list.html.

Procedure

Step 1 In the top right corner of the Cisco Unified Communications Manager Administration interface, select Cisco Unified Serviceability, then select **Go**.

Step 2 Select **Tools > Control Center—Feature Services**.

Step 3 Select the server, then select **Go**.

Step 4 Select the radio button beside **Cisco Tftp** and select **Restart**.

Step 5 Repeat this procedure on every server on which you ran this COP file.

Setting Up Individual Users and Devices for Basic Settings and VoIP Service

You will create and set up a device of type Cisco Dual-Mode for iPhone device in Cisco Unified Communications Manager for each user.

Before You Begin

- Standard SIP and phone features such as the following should be set up and working independently of Cisco Mobile 8.0:
  - Music on hold
  - music for network hold

  Midcall features including:
  - hold / resume
  - call waiting
  - conference call
  - transfer

- Set up Call Park for the system:
  - So that calls are not dropped if the user inadvertently exits Cisco Mobile 8.0 during a call.
  - To allow users to use the standard Call Park feature.
  - For use by other features as described later in this document.

  See the Call Park chapter in the Cisco Unified Communications Manager Features and Services Guide at http://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_maintenance_guides_list.html.
- Conferencing calls requires g.711 unless transcoding is available. If only g729a is supported on Cisco Mobile 8.0, an external transcoder must be set up to allow transcoding from g.729a on the phone to g.711 on the conference bridge.
- Complete all procedures up to this point in this document.
- Verify that the Device Pool that you will assign to the Cisco Mobile 8.0 device is associated with a Region that includes support for all supported audio codecs.
- Determine the level of usage and error tracking for each user that you want to make available to Cisco. For information, see About Usage and Error Tracking, page 5.

Procedure

Step 1 Sign in to the Cisco Unified Communications Manager administrator portal.

Step 2 Add a new phone device with **Cisco Dual Mode for iPhone** as the Phone Type.

Step 3 Enter values including the following:

Tip Restrictions and requirements that are not specific to Cisco Mobile 8.0 may apply to these values. If you require additional information about any option on the device configuration page, see the online help in Cisco Unified Communications Manager.

Setting	Information
Device Information	
Device Name	The Device Name: • Must start with **TCT** • Must be all upper-case • Can contain up to 15 characters total • Can include A-Z, 0-9, dot (.), dash (-), or underscore (_)
Phone Button Template	Select Standard Dual Mode for iPhone.
Media Resource Group List	Complete these settings to prevent confusion for the other person on the call. These settings are not specific to this device. For information, see the Cisco Unified Communications Manager documentation.
User Hold MOH Audio Source	
Network Hold MOH Audio Source	

Setting	Information
Enable Cisco Unified Mobile Communicator	For Cisco Unified Communications Manager release 7.1.5: Select this option if the Cisco Mobile application that runs in conjunction with a Cisco Unified Mobility Advantage server is also installed on this iPhone, in order to allow both applications to run with full functionality. For all other situations and other Cisco Unified Communications Manager releases: Do not select this option.
Protocol Specific Information	
Device Security Profile	Select **Cisco Dual Mode for iPhone - Standard SIP Non-Secure Profile**. This profile has SIP digest authentication disabled.
SIP Profile	Standard SIP Profile
Other settings in the sections above	As appropriate to your deployment. Values that are not described in this document are not specific to Cisco Mobile 8.0 but may need to be completed for the device to work properly.
Product Specific Configuration Layout	
Information in this section is downloaded to the iPhone upon initial setup, to automatically set up Cisco Mobile 8.0.	
Allow End User Configuration Editing	Select **Disable** for this setting until you have successfully set up all features you want to deploy. Instructions in this document assume you have disabled End User Configuration Editing. After you have determined working settings for all features, you can specify whether you want users to be able to change their administrative settings in Cisco Mobile 8.0. If you do not allow users to change their settings: • All changes that you make in the "Product Specific Configuration Layout" section of this page are automatically updated on Cisco Mobile 8.0 at each launch, except as noted. • Exception: Users can always manually enter passwords. If you allow users to change their settings: • If you change settings on this page, users must delete their account settings from Cisco Mobile 8.0 and then set up Cisco Mobile 8.0 again from the beginning, in order for your changes to take effect. • Exception: The following settings are updated on Cisco Mobile 8.0 at each launch: – Cisco Usage and Error Tracking – On Demand VPN URL
iPhone Country Code	The E.164 international dialing code of the country where this user is located. This assists in determining caller ID names. This information is set only during initial setup of Cisco Mobile 8.0. If you need to change this setting for an existing user, the user must delete all account information from Cisco Mobile 8.0 and reenter it.

Setting	Information
Cisco Usage and Error Tracking	Enable or disable usage and error tracking, or choose Detailed to provide more useful information to Cisco. For more information, see the prerequisites for this procedure.
Disallow Shake To Lock	Users can shake the iPhone while Cisco Mobile 8.0 is running to prevent the iPhone from sleeping while Cisco Mobile 8.0 is open, so that Cisco Mobile 8.0 can receive incoming calls. Preventing the iPhone from sleeping prevents the native iPhone PIN lock from turning on when the phone is not in use, and may impact battery life. If you select Yes, Shake to Lock is not available to users. If you select No, users can choose whether or not to enable Shake to Lock.
Directory Lookup Rules URL Application Dial Rules URL	• If you move or rename the files generated by the procedure in How to Make Application Dial Rules and Directory Lookup Rules Available to Cisco Mobile 8.0, page 7, enter the path to those files. Use this format: `tftp://<ip address of TFTP server>/<pathname to the XML file>/<XML filename>` • Otherwise, leave these settings blank.
Other settings in this section	The following settings are not supported in this release. Leave these settings blank: • Normal Mode Codecs • Low Bandwidth Codecs • LDAP Photo Location • Emergency Numbers • MeetingPlace Numbers • WebEx Numbers • Contacts • XML Options • Reserved You will enter remaining settings later, when you set up other features.

Step 4 Select **Save**.

Step 5 Select **[Line *n*] - Add a new DN**.

Step 6 Enter the Directory Number of this device.

Step 7 If this device is a standalone device (not associated with a desk phone), complete these settings to forward calls when Cisco Mobile 8.0 is not running, so callers do not receive an error message:

- Forward Unregistered Internal
- Forward Unregistered External

These settings are not specific to this device, but are particularly relevant because Cisco Mobile 8.0 will often not be running. For more information about these settings, see the online help in Cisco Unified Communications Manager for the Forward All and other settings on the same page.

Step 8 Set the **No Answer Ring Duration** to 24 seconds to allow time for Cisco Mobile 8.0 to ring before calls go to voice mail.

See general restrictions in the online help in Cisco Unified Communications Manager.

Step 9 Configure other settings as appropriate for your environment. Cisco Mobile 8.0 does not require specific values.

Step 10 Select **Save**.

Step 11 Navigate to the End User page for the user.

Step 12 Associate the Cisco Dual Mode for iPhone device that you just created with this End User.

The device should now appear in the Controlled Devices box in the Device Information section.

Step 13 If this is a standalone device that runs without an associated desk phone, you may need to enter other information that is standard for all devices in your system.

What To Do Next

- Make sure the iPhone is connected to the corporate network via Wi-Fi (and not over VPN), then launch Cisco Mobile 8.0 and complete the setup wizard.
- Test basic telephony features in Cisco Mobile 8.0, such as the ability to make, receive, hold, and transfer calls.
- Set up and test voicemail for this extension, following standard procedures for any device.

Setting Up Transfer of Active Calls Between Cisco Mobile 8.0 and the Desk Phone

Set up Cisco Unified Communications Manager for desk phone integration, to allow the user to transfer calls from the desk phone to Cisco Mobile 8.0 and vice versa.

Before You Begin

- Make sure the desk phone (Primary DN) for the user is fully set up and can make and receive internal and external calls.
- Set up Call Park for the system. See the Call Park chapter in the Cisco Unified Communications Manager Features and Services Guide at http://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_maintenance_guides_list.html.

Procedure

Step 1 Sign in to the Cisco Unified Communications Manager administrator portal.

Step 2 Navigate to the End User page.

a. Add **Standard CTI Enabled** to the User Groups list in the Permissions Information section.

For 8900 and 9900 series phones, also add **Standard CTI Allow Control of Phones supporting Connected Xfer and conf**.

b. Note the User ID of this user for use later in this procedure.

c. Select **Save**.

Step 3 Navigate to the desk phone device page.

a. Make sure **Allow Control of Device from CTI** is selected.

If this option does not appear in the Device Information section of the Phone Configuration window, the phone does not support this feature.

b. Save any changes.

Step 4 Navigate to the Cisco Dual Mode for iPhone device page.

a. In the Product Specific Layout Configuration section, for **CTI Control Username**, enter the User ID from the End User page.

b. Select **Save**.

What To Do Next

- Relaunch Cisco Mobile 8.0 and step through the wizard to enter your username and password, or enter these credentials in Cisco Mobile 8.0 in **Settings > Internet Calling > Desk Phone Integration**.
- Test your settings: Make sure you can move active calls between the desk phone and Cisco Mobile 8.0. See the user documentation for instructions.

How to Enable Mobile Connect (Single Number Reach) and Add a Mobile Identity

Adding Mobile Connect and a Mobile Identity

Mobile Connect (formerly known as Single Number Reach) allows the native iPhone mobile number to ring when someone calls the office number while Cisco Mobile 8.0 is not available.

When Cisco Mobile 8.0 is running and connected to the corporate network, and thus available to receive calls, Mobile Connect is automatically inactivated.

A Mobile Identity (Mobility Identity) is required for transferring calls from VoIP in Cisco Mobile 8.0 to the mobile voice network (GSM).

Procedure

Step 1 Sign in to the Cisco Unified Communications Manager administrator portal.

Step 2 Search for and delete any existing Remote Destination or Mobile Identity that is already set up with the iPhone phone number.

Step 3 Navigate to the End User page for the user.

a. Select **Enable Mobility**.

b. Specify the **Primary User Device**.

c. Select **Save**.

Step 4 Navigate to the Cisco Dual Mode for iPhone device page.

a. Enter information:

Setting	Information
Softkey Template	Choose a softkey template that includes the Mobility button.
Mobility User ID	Select the user.
Rerouting Calling Search Space	If your Cisco Unified Communications Manager has custom partitions and multiple calling search spaces: Select a Rerouting Calling Search Space that includes the partition that applies to the iPhone mobile voice network phone number, which you will enter as a Mobile Identity.

b. Select **Save**.

Step 5 Add a new Mobile Identity with the mobile voice network (GSM) phone number of the iPhone:

a. Navigate to the Cisco Dual Mode for iPhone device page.

b. Select **Add a New Mobile Identity**.

c. Enter the native iPhone mobile voice network phone number as the Destination Number.

This number must be routable to an outbound gateway. Generally, it will be the full E.164 number.

d. Enter initial values for call timers.

These values ensure that calls are not routed to the native iPhone voicemail before they ring on the iPhone.

For more information, see the online help in Cisco Unified Communications Manager.

Setting	Suggested Initial Value
Answer Too Soon Timer	3000
Answer Too Late Timer	20000
Delay Before Ringing Timer	0 This accommodates the relatively long call setup times characteristic of mobile calls.

e. Select **Enable Mobile Connect**

f. Set up the schedule for routing calls to the mobile number.

g. Select **Save**.

Set the SIP Dual Mode Alert Timer

Increase this timer to ensure that calls are not prematurely routed to the main iPhone phone number on the mobile voice network.

Procedure

Step 1 Sign in to the Cisco Unified Communications Manager Administration portal.

Step 2 Select **System > Service Parameters.**

Step 3 Select the server.

Step 4 Select the **Cisco CallManager (Active)** service.

Step 5 Scroll to the **Clusterwide Parameters (System - Mobility)** section.

Step 6 Increase the **SIP Dual Mode Alert Timer** to 3000 milliseconds.

Step 7 Select **Save**.

What To Do Next

Test your settings: Exit Cisco Mobile 8.0 on the iPhone and call the Cisco Mobile 8.0 extension from another phone. The native iPhone mobile network phone number should ring and the call should connect when you answer it.

How to Enable Transfer of Active Calls from VoIP to the Mobile Voice Network (GSM)

Users can move an active VoIP call from Cisco Mobile 8.0 to their mobile voice network phone number on the PSTN (GSM). This is useful when a user on a call will leave the Wi-Fi network, or if there are voice quality issues over the Wi-Fi network. This feature is labeled “Use Mobile Network” in the Cisco Mobile 8.0 application.

There are several ways to implement this feature. You can also disable it.

Implementation Method	Implications	Instructions
Handoff DN	The iPhone calls Cisco Unified Communications Manager using the mobile voice network (GSM). This method requires a DID number. If you select this implementation method and it fails, the system automatically tries the Mobility Softkey and Call Park methods, in order.	See Transferring Calls to the Mobile Voice Network Phone Number: Implementing the Handoff Method, page 17
Mobility Softkey	Cisco Unified Communications Manager calls the iPhone PSTN mobile voice network phone number. If you select this implementation method and it fails, the system automatically tries the Call Park method.	See Transferring Calls to the Mobile Voice Network Phone Number: Checklist for Implementing the Mobility Softkey Method, page 19

Implementation Method	Implications	Instructions
Call Park	Cisco Mobile 8.0 attempts this method only if an attempt to use other methods fails. In the Call Park method, the iPhone makes a mobile voice network call to a Park number to retrieve the call. This method requires a DID number.	• Set up Call Park for the system. See the Call Park chapter in the Cisco Unified Communications Manager Features and Services Guide at http://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_maintenance_guides_list.html. • Set the Call Park Number in **Call Routing > Call Park** to be an E.164 (Direct Inward Dial, or DID) number.
None of the above	Disable this feature if you do not want to make it available to users.	Select **Disabled** for the **Transfer to Mobile Network** option in the "Product Specific Configuration Layout" section of the Cisco Dual Mode for iPhone device page.

Transferring Calls to the Mobile Voice Network Phone Number: Implementing the Handoff Method

Set up the Handoff Number

Before You Begin

- Determine required values. The values you will choose depend on the phone number that the gateway passes (for example, 7 digits or 10 digits).

Procedure

Step 1 Sign in to the Cisco Unified Communications Manager Administration portal.

Step 2 Select **Call Routing > Mobility Configuration**.

Step 3 Enter values for the following settings:

Setting	Description
Handoff Number	Enter the Direct Inward Dial (DID) number that the iPhone will dial to retrieve a call that the user has sent to the mobile voice network phone number. If the number is preceded by a plus sign (+), precede the plus sign with a backslash (\). For example, \+14085551234.
Handoff Number Partition	Select the partition to which the handoff direct inward dial (DID) belongs. This partition should be present in the Remote Destination inbound Calling Search Space, which points either to the inbound Calling Search Space of the Gateway or Trunk or to the Remote Destination Calling Search Space.

Remaining options on this page are not used for this feature.

Step 4 Select **Save**.

Matching Caller ID with the Mobile Identity

To ensure that only authorized phones can initiate outbound calls, such calls must be initiated from a phone that is set up in the system. To do this, the system attempts to match the Caller ID of the requesting phone number with an existing Mobile Identity (Mobility Identity).

By default, when a device initiates the Handoff feature, the Caller ID that is passed from the gateway to Cisco Unified Communications Manager must exactly match the Mobile Identity number that you entered for that device.

However, your system may be set up such that these numbers will not match exactly. For example, Mobile Identity numbers may include a country code while Caller ID does not. If so, you must set up the system to recognize a partial match.

Be sure to account for situations in which, for example, the same phone number may exist in different area codes or in different countries. Also, be aware that service providers may identify calls with a variable number of digits, which may impact partial matching. For example, local calls may be identified using 7 digits (such as 555 1234) while out-of-area calls may be identified using 10 digits (such as 408 555 6789).

Before You Begin

- Set up the Mobile Identity. See Adding Mobile Connect and a Mobile Identity, page 14.
- Determine whether you need to complete this procedure:

  Use the iPhone to dial in to the system and compare the Caller ID value with the Destination Number in the Mobile Identity. If the numbers do not match, you must perform this procedure. Repeat this procedure for iPhones issued in all expected locales and area codes.

Procedure

Step 1 Sign in to the Cisco Unified Communications Manager Administration portal.

Step 2 Select **System > Service Parameters**.

Step 3 Select the active server.

Step 4 Select the **Cisco CallManager (Active)** service.

Step 5 Scroll down to the **Clusterwide Parameters (System - Mobility)** section.

Step 6 Select **Matching Caller ID with Remote Destination** and read essential information about this value.

Step 7 Select **Partial Match for Matching Caller ID with Remote Destination**.

Step 8 Select **Number of Digits for Caller ID Partial Match** and read the essential requirements for this value.

Step 9 Enter the required number of digits to ensure partial matches.

Step 10 Select **Save**.

Checklist of Additional User and Device Settings for the Handoff Method

For each user and device, do the following:

- Set up the user and device in Cisco Unified Communications Manager as described earlier in this document, including creating the Mobile Identity.
- On the Cisco Dual Mode for iPhone device page:

  Select **Use Handoff DN Feature** for the Transfer to Mobile Network option.
- On the iPhone:

  Make sure Caller ID for the native iPhone is **On**: Tap **Settings > Phone > Show My Caller ID**.

Related Topics

- Setting Up Individual Users and Devices for Basic Settings and VoIP Service, page 9

Transferring Calls to the Mobile Voice Network Phone Number: Checklist for Implementing the Mobility Softkey Method

Complete the following settings required for this feature.

System level settings:

- Make sure the Mobility softkey appears when the phone is in the “Connected” and “On Hook” call states:

  In **Device > Device Settings > Softkey Template**, select the softkey template that you selected when you configured the device for Mobile Connect, above. Then, in the **Related Links** list box at the upper right, select **Configure Softkey Layout**, then select **Go**. Select the “Connected” state and verify that the Mobility key is in the list of selected softkeys, then do the same for the “On Hook” state.

Per-user and per-device settings in Cisco Unified Communications Manager:

- Make sure you have set up a Mobile Identity and Mobile Connect for the Cisco Dual Mode for iPhone device, as described earlier in this document.
- On the Cisco Dual Mode for iPhone device page:
  - Select the Owner User ID.
  - In the Product Specific Configuration Layout section, for the Transfer to Mobile Network option, select **Use Mobility Softkey**.

Related Topics

- Adding Mobile Connect and a Mobile Identity, page 14
- Setting Up Individual Users and Devices for Basic Settings and VoIP Service, page 9

Simplifying Voice Dialing

Voice Dialing allows users to dial a number by speaking a name in the corporate directory.

If Voice Dialing is available on your network, Cisco Mobile 8.0 users can always dial the Voice Dialing pilot number to access that feature as they would from any phone.

You can simplify voice dialing in either or both of the following ways:

- You can automatically add this number to the Favorites list in Cisco Mobile 8.0.
- You can enable gesture-activated voice dialing.

Before You Begin

Voice dialing must be set up and working on your network.

To set up voice dialing for general use, see information about directory handlers in the *System Administration Guide* and the *Reference Guide* for Cisco Unity Connection at http://www.cisco.com/en/US/products/ps6509/prod_maintenance_guides_list.html.

Procedure

Step 1 Sign in to the in Cisco Unified Communications Manager Administration portal.

Step 2 Navigate to the Cisco Dual Mode for iPhone device page for the user.

Step 3 Enter information:

Setting	Information
Enable Voice Dialing Motion	The Voice Dialing Motion feature activates the motion and proximity sensors that automatically dial the Voice Dialing pilot number when Cisco Mobile 8.0 is running and users move the iPhone to their ear with the gesture described in the user documentation for Cisco Mobile 8.0 at http://www.cisco.com/go/iphone/ciscomobile/faq. Your setting here determines whether this setting is initially on or off for the user.
Voice Dialing Phone Number	The pilot phone number for the voice dialing feature. This number is not unique to Cisco Mobile 8.0. This number is described in the Cisco Unity Connection Release 7.x documentation in the section on “Routing Calls to a Voice Directory Handler”.
Add Voice Dialing to Favorites	Specify whether or not to automatically add the voice dialing phone number to the Cisco Mobile 8.0 favorites list of the user. Your setting here determines whether this setting is initially on or off for the user.

Step 4 Select **Save**.

Step 5 Relaunch Cisco Mobile 8.0.

Adding Visual Voicemail

Note For users that also have the Cisco Mobile application that runs in conjunction with Cisco Unified Mobility Advantage, do not set up Cisco Mobile 8.0 for voicemail. For the best user experience, users of the other Cisco Mobile application should access voicemail using that Cisco Mobile application, not Cisco Mobile 8.0.

Before You Begin

- Verify that IMAP is enabled:

  See "Configuring IMAP Settings" in the *System Administration Guide for Cisco Unity Connection* at http://www.cisco.com/en/US/products/ps6509/prod_maintenance_guides_list.html.
- Collect the values in the table in this procedure.
- Consult your voicemail administrator if you have questions about any of the settings in this section.

Procedure

Step 1 Sign in to the Cisco Unified Communications Manager Administration portal.

Step 2 Navigate to the Cisco Dual Mode for iPhone device page for the user.

Step 3 Enter information:

Setting	Description
Voicemail Username	Unique username for voicemail access for this user.
Voicemail Server (include the port)	For the voicemail server, enter the hostname or IP address. For ports other than 443 or 80, include the port number. Use the format `Servername.YourCompany.com:portnumber`
Voicemail Message Store Username	Enter the username for the voicemail message store.
Voicemail Message Store	For the voicemail message store, enter the hostname or IP address. This may be the same as the voicemail server. Include the port number for ports other than 993 or 143. Use the format `YourVoiceMessageStoreServer.yourcompany.com:portnumber`.

Step 4 Select **Save**.

Step 5 Relaunch Cisco Mobile 8.0.

Step 6 Step through the wizard until you see an option to enable or confirm your messaging account.

Step 7 Tap **Yes**.

Step 8 Enter your voice messaging password.

Step 9 Tap **Save**.

Step 10 Complete the wizard.

What To Do Next

Test this feature.

Adding Support for Directory Search and Enhanced Caller Identification

By default, Cisco Mobile 8.0 identifies numbers from the native Address Book on the iPhone, and secondarily from information passed by the service provider and by Cisco Unified Communications Manager. If you add support for Microsoft Active Directory, Cisco Mobile 8.0 also attempts to identify numbers using the corporate directory.

Restrictions

In Active Directory:

- Numbers must be unformatted.
- Global Catalog must be enabled.

Before You Begin

- Make sure the telephoneNumber attribute in Active Directory (or its equivalent, if you are using a different attribute) is indexed.
- Identify relevant attributes in your Active Directory deployment, if they are different from, or additional to, the defaults.

Element	Element Name	Default Active Directory Attribute	Your Value, If Different
Unique identifier	identifier	distinguishedName	
Display name	displayName	displayName	
Email address	emailAddress	mail	
First name	firstName	givenName	
Last name	lastName	sn	
User ID	userid	userPrincipalName	
Main phone number Make sure this attribute is indexed.	mainPhoneNumber	telephoneNumber	
Home phone number We suggest indexing this attribute.	homePhoneNumber	—	
Second home phone number We suggest indexing this attribute.	homePhoneNumber2	—	

Element	Element Name	Default Active Directory Attribute	Your Value, If Different
Mobile phone number We suggest indexing this attribute.	mobilePhoneNumber	mobile	
Second mobile phone number We suggest indexing this attribute.	mobilePhoneNumber2	—	
Direct to voicemail phone number	voicemailPhoneNumber	voicemail	
Fax number	faxPhoneNumber	facsimileTelephoneNumber	
Other phone number	otherPhoneNumber	—	

- Collect the required information in the table in the procedure.
- If you have any questions about the values in these tables, consult your LDAP administrator.

Procedure

Step 1 Sign in to the in Cisco Unified Communications Manager Administration portal.

Step 2 Navigate to the Cisco Dual Mode for iPhone device page for the user.

Step 3 Enter settings:

Setting	Description
iPhone Country Code	This information assists in determining Caller ID. You configured this setting in Setting Up Voice Over IP and Standard Telephony Features, page 6.
Enable LDAP User Authentication	If users will need to enter an LDAP password in the client, select **Enabled**. If users do not need to enter LDAP credentials in the client, select **Disabled**.
LDAP Username	Do one of the following:
LDAP Password	• Enter credentials for a single read-only account that all users will use to access Active Directory. These credentials will be sent in clear text in the TFTP file. Users will not need to enter credentials into Cisco Mobile 8.0. • Enter a username with access to the directory and leave the password blank. You must give the password to each user and tell users to enter the password into the settings in Cisco Mobile 8.0. • If authentication is not required, leave these settings blank. The LDAP Username is the User Principal Name (UPN) and may be in the form of an email address (userid@example.com).

Setting	Description
LDAP Server (include the port number) Enable LDAP SSL	For the LDAP server, enter the hostname or IP address and port of your Active Directory server. Global catalog must be enabled, so use port 3269 for secure (SSL) connections and 3268 for nonsecure connections. Use the format `YourLdapServer.YourCompany.com:portnumber`. By default, if you enter no port or SSL settings, Cisco Mobile 8.0 attempts an SSL connection to port 3269.
LDAP Search Base	By default, this application uses the search base found in a RootDSE search on the "defaultNamingContext" attribute. If you need to specify a different search base, enter the Distinguished Name of the root node in your corporate directory that contains user information. Use the lowest node that includes the necessary names. Using a higher node will create a larger search base and thus reduce performance if the directory is very large. Enter the LDAP Search Base using the following format: CN=users,DC=corp,DC=yourcompany,DC=com **Tip** To help determine the optimal Search Base, you can use a utility such as Active Directory Explorer (available from Microsoft) to view your data structure.
LDAP Field Mappings	LDAP Field Mappings identify the attributes in Active Directory that hold the information to be searched and displayed for directory searches and caller and voice message identification. If your field mappings match the defaults in the table in the Before You Begin section, you do not need to enter anything here. Otherwise, enter any field mappings that do not match the default as *`name=value`* pairs. Separate each field with a semicolon (;). Example: `displayName=nickname;emailAddress=email` For the `name` value, see the Element Name column in the table in the Before You Begin section of this procedure.

Step 4 Select **Save**.

Step 5 Relaunch Cisco Mobile 8.0.

Step 6 Step through the wizard until you see the option to enable or confirm the corporate directory account settings.

Step 7 At the option to enable or confirm the corporate directory account settings, tap **Yes**.

Step 8 Enter the password, if not already entered.

Step 9 Tap **Save**, even if you make no changes.

Step 10 Complete the wizard.

What To Do Next

Test this feature.

Setting Up Automatic VPN Access

Cisco Mobile 8.0 can automatically launch VPN if:

- The corporate network is not directly available when users launch Cisco Mobile 8.0 and
- The iPhone can connect using VPN, and
- You satisfy the requirements and complete the procedure in this topic.

Before You Begin

- The iPhone must be set up for certificate-based IPSec authentication and VPN on-demand access.
- Identify a URL that is set up to launch VPN on demand.
- Enter this URL into Safari on the iPhone and verify that VPN launches automatically: You should see a VPN icon in the status bar.
- Verify that the iPhone can successfully connect to the corporate network using VPN. For example, access a web page on your corporate intranet.
- Cisco Mobile 8.0 must already be set up and able to connect directly to the corporate network.

To set up VPN for iPhone, see information at Apple.com such as:

- Information throughout the *iPhone OS Enterprise Deployment Guide* at http://support.apple.com/manuals/#iphone.
- The iPhone Configuration Utility, available from http://www.apple.com/downloads/macosx/apple/application_updates/iphoneconfigurationutility21forwindows.html.
- A list of protocols and authentication methods that are supported on the iPhone at http://support.apple.com/kb/HT1288.
- Information about setting up an iPhone to connect to VPN in the *iPhone User Guide* at http://www.apple.com/support/country/?dest=manuals.
- General information at http://www.apple.com/support/iphone/enterprise/.

Procedure

Step 1 Sign in to the in Cisco Unified Communications Manager Administration portal.

Step 2 Navigate to the Cisco Dual Mode for iPhone device page for the user.

Step 3 Scroll to the “Product Specific Configuration Layout” section

Step 4 For **On-Demand VPN URL**, enter the dummy URL that you identified in the prerequisites for this procedure.

Step 5 Select **Save**.

Step 6 Relaunch Cisco Mobile 8.0.

What To Do Next

Test this feature.

Determining SIP Digest Authentication

SIP Digest Authentication is a Cisco Unified Communications Manager security feature that authenticates devices (as distinct from users). For information, see the *Cisco Unified Communications Manager Security Guide* and the *Cisco Unified Communications Manager Administration Guide* at http://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_maintenance_guides_list.html

For Cisco Mobile 8.0, you have three options:

To	Information About This Option	Actions Required
Disable SIP Digest Authentication	Disable SIP Digest Authentication if your deployment does not use this feature.	See the Checklist for Disabling SIP Digest Authentication, page 26
Enable SIP Digest Authentication, and: Automatically load the password into Cisco Mobile 8.0	• The password is stored and sent in clear text. • Users do not have to manually enter this password. • There is less chance of entry error that prevents Cisco Mobile 8.0 from registering with Cisco Unified Communications Manager.	See the Checklist for Enabling SIP Digest Authentication with Automatic Credential Entry, page 27
Enable SIP Digest Authentication, and: Have the user manually enter the password into Cisco Mobile 8.0	• The password is not stored and sent from the TFTP server in clear text. • Users must manually enter this password.	See the Checklist for Enabling SIP Digest Authentication with Manual Credential Entry, page 27

Checklist for Disabling SIP Digest Authentication

On each device page:

- For Device Security Profile, select **Cisco Dual Mode for iPhone - Standard SIP Non-secure profile**.
- In the “Product Specific Configuration Layout” section:
  - For **Enable Sip Digest Authentication,** select **Disabled**.
  - Leave **Sip Digest Username** blank.

Checklist for Enabling SIP Digest Authentication with Automatic Credential Entry

- Establish the requirement at the system level:

  Under **System > Security > Phone Security Profile**, create a new phone security profile for Cisco Dual Mode for iPhone and:

  - Select **Enable digest authentication**.
  - Deselect **Exclude digest credentials in configuration file**.
- On each End User page:

  Enter and confirm the Digest Credentials
- On each Cisco Dual Mode for iPhone device page, in the "Protocol Specific Information" section:
  - For **Device Security Profile**, select the new secure profile you just created.
  - Select the **Digest User**.
- On the same device page, in the "Product Specific Configuration Layout" section:
  - For **Enable SIP Digest Authentication**, select Disable.
  - Leave **Sip Digest Username** blank.

Checklist for Enabling SIP Digest Authentication with Manual Credential Entry

- Establish the requirement at the system level:

  Under **System > Security > Phone Security Profile**, create a new profile for Cisco Dual Mode for iPhone and:

  - Select **Enable digest authentication**.
  - Select **Exclude digest credentials in configuration file**.
- On each End User page:

  Enter and confirm the Digest Credentials

  Note this password. You will use it (or give it to the user) later.
- On each Cisco Dual Mode for iPhone device page, in the "Protocol Specific Information" section:
  - For Device Security Profile, select the new secure profile you just created.
  - Select the Digest User.
- On the same device page, in the "Product Specific Configuration Layout" section:
  - Enable SIP Digest Authentication
  - For the SIP Digest Username, enter the Digest User you just selected.
- Relaunch Cisco Mobile 8.0 and step through the wizard again. At the option to confirm the Internet Calling settings, tap the SIP Digest Authentication password setting and enter the password you noted earlier. The password is case-sensitive.

Related Topics

- Giving Information to Users, page 29

Bulk Configuration of Users and Devices

Use the information in this document to set up individual users and devices as the basis for completing a Bulk Administration template to set up users and devices.

When you are ready for bulk processes, follow instructions in the *Bulk Administration Guide* for your release of Cisco Unified Communications Manager, available from http://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_maintenance_guides_list.html.

Note The settings in the "Product Specific Configuration Layout" section of the device configuration page are not handled as individual columns in the exported spreadsheet. Instead, all of those settings, and the information they contain, appear as XML code in a single cell for each device. If you edit user-specific information in this cell, do so cautiously.

Providing for Automatic Setup

Simplify the setup process for your users by allowing them to automatically enter settings into Cisco Mobile 8.0 by tapping a link in an email message, instead of manually entering settings into Cisco Mobile 8.0.

This link transfers the information from the Product Specific Configuration Layout section on the Phone Configuration page in Cisco Unified Communications Manager to the settings in the Cisco Mobile 8.0 application on the iPhone.

At first launch, Cisco Mobile 8.0 prompts users for any required passwords.

Procedure

Step 1 Create a unique setup link for each user. Use the following format:

`tctprov://connect?tu=<username>&td=<Cisco Dual Mode for iPhone device ID>&ts=<TFTP server IP address>`

For example:

`tctprov://connect?tu=jsmith&td=TCTJSMITH&ts=192.0.2.41`

Step 2 Set these links aside until you are ready to give all necessary information about this product to your users.

Step 3 When you have finished setting up users in Cisco Unified Communications Manager, send each user the unique link and instructions for using it to users, along with other information you need to provide.

Related Topics

- Giving Information to Users, page 29

Giving Information to Users

When you have finished setting up devices in Cisco Unified Communications Manager, give your users the following information:

- If you will send an email with an automatic setup link, include the following instructions with that link:
  a. Download and install Cisco Mobile 8.0 free from the Apple App Store.
  b. Restart your iPhone.
  c. Launch Cisco Mobile 8.0 to establish it as a trusted application.
  d. Open the setup email message on the iPhone.
  e. Tap the link to automatically set up Cisco Mobile 8.0.
- If you will not create an automatic setup link, give users:
  - Direction to download and install Cisco Mobile 8.0 free from the Apple App Store.
  - The IP address of the TFTP server.
  - The device name of their Cisco Dual Mode for iPhone device, for example TCT_JSMITH.

    This is not case-sensitive when the user enters it into Cisco Mobile 8.0.
  - Instructions to ensure that the phone is connected to the corporate Wi-Fi network, then launch Cisco Mobile 8.0 and enter settings as prompted.
- If you will enable desk phone integration, provide their CCMUser Options password.
- Documentation for users is available at http://www.cisco.com/go/iphone/ciscomobile/faq.
- Remind users to always dial emergency calls directly from the main iPhone dialer, never using Cisco Mobile 8.0, because soft phones cannot reliably provide caller location to emergency response personnel.
- If you also deploy the Cisco Mobile 7.1 application that runs in conjunction with Cisco Unified Mobility Advantage:
  - For Cisco Unified Communications Manager Release 7.1.3 or 8.0: Users must use Cisco Mobile 8.0 instead of Cisco Mobile 7.1 for dialing calls using the corporate PBX.
  - For Cisco Unified Communications Manager Release 7.1.5: Users can use either application to dial calls using the corporate PBX.
  - For all Cisco Unified Communications Manager releases: Users will access voicemail from the other Cisco Mobile instead of from Cisco Mobile 8.0, because the other Cisco Mobile has a richer feature set for voicemail, such as alerts for new voice messages.

Related Topics

- Providing for Automatic Setup, page 28

Troubleshooting

Troubleshooting Tips and Tools

- For solutions that users can perform without administrator assistance, and for tips and tricks about how the application works, see the user FAQs at http://www.cisco.com/go/iphone/ciscomobile/faq.
- See also the Release Notes for this product at http://cisco.com/en/US/products/ps7271/prod_release_notes_list.html.
- To verify the status of the connection to each enterprise server:

  In Cisco Mobile 8.0, have the user go to **Settings > Troubleshooting** and tap **Connection Status**.
- For features that are not specific to this product (for example, conferencing or transferring calls):
  - Test the feature on existing configured desk phones. If it works, compare the working device configuration to your Cisco Mobile 8.0 device configuration.
  - Check the Cisco Unified Communications Manager documentation for troubleshooting tips. See http://www.cisco.com/en/US/products/sw/voicesw/ps556/tsd_products_support_troubleshoot_and_alerts.html.
- Make sure you have entered the correct IP addresses, ports, paths, usernames, and passwords. If you have entered hostnames instead of IP addresses, enter the IP address instead.
- If users experience problems that you are unable to solve and you need to contact Cisco for support, have the users send you the client log files that capture the problem. See the following topic on obtaining logs from the client.

Obtaining Logs from the Cisco Mobile 8.0 Application

Have the user follow this procedure to send you logs from Cisco Mobile 8.0.

Procedure

Step 1 In Cisco Mobile 8.0, tap **Settings > Troubleshooting** and set **Detailed Logging** to **On**.

Step 2 Try to reproduce the problem, to capture the details in the logs.

Step 3 Tap **Settings > Troubleshooting > Problem Reporting**.

If Cisco Mobile 8.0 is failing to register, tap **About > Troubleshooting > Problem Reporting** instead.

Step 4 Select the files to include. If you are not sure, include all files.

Step 5 Tap **Email Problem Report**.

Step 6 Enter the email address of a recipient such as yourself.

Step 7 Tap the text in the message body.

Step 8 Describe the issue related to these logs.

Step 9 Tap **Send**.

What To Do Next

Be sure to have the user set Detailed Logging to Off when the detail is no longer needed.

Solutions to Specific Problems

Problems with Initial Setup

Unable to Create Cisco Mobile 8.0 Device in Cisco Unified Communications Manager

Problem "Cisco Dual Mode for iPhone" Device type is not an option.

Solution Depending on your Cisco Unified Communications Manager version, make sure you have uploaded the device COP file and restarted Cisco Unified Communications Manager. See the referenced Related Topic.

Related Topic

- Making the Cisco Mobile 8.0 Device Available on Cisco Unified Communications Manager, page 4.

Cisco Mobile 8.0 Registration Fails

Problem Cisco Mobile 8.0 registration fails.

Solution

- If registration is rejected with error 503, go to the Cisco Dual Mode for iPhone device page in Cisco Unified Communications Manager and select **Reset**, then try again.
- Enter the IP address instead of the hostname for the TFTP server in Cisco Mobile 8.0. The Cisco Unified Communications Manager server may not be correctly set up on the DNS server.
- If you have enabled SIP digest authentication, make sure you have entered the credentials correctly.

Cisco Mobile 8.0 Cannot Connect to Cisco Unified Communications Manager

Problem (For deployments with Cisco Mobile 8.0 co-resident with the Cisco Mobile application that runs in conjunction with a Cisco Unified Mobility Advantage server) After you change the device pool associated with the Mobile Identity, Cisco Mobile 8.0 can no longer connect to Cisco Unified Communications Manager.

Solution Have the user exit both Cisco Mobile applications, then relaunch the Cisco Mobile application that runs in conjunction with a Cisco Unified Mobility Advantage server before launching this Cisco Mobile 8.0 application.

Problems When Changing Initial Settings

Problem My changes are not taking effect.

Solution

If you need to change settings after a device is set up, note these caveats:

- Changing settings in the "Product Specific Configuration Layout" section of the Cisco Dual Mode for iPhone device configuration page in Cisco Unified Communications Manager:

  See the description earlier in this document for the Allow End User Configuration Editing setting on the Cisco Dual Mode for iPhone device page for important information about making changes to these settings.

- Changing the Application Dial Rules or the Directory Lookup Rules in Cisco Unified Communications Manager

  Run the COP file again to make those changes available to Cisco Mobile 8.0, then restart the TFTP service. The updated rules will be available to Cisco Mobile 8.0 the next time the user relaunches the application.

Related Topics

- Setting Up Individual Users and Devices for Basic Settings and VoIP Service, page 9
- How to Make Application Dial Rules and Directory Lookup Rules Available to Cisco Mobile 8.0, page 7

Problems with Making, Receiving, Moving, or Picking Up Calls

Calls Cannot Be Completed

Problem Numbers that should be dialable cannot be connected.

Solution

- If you have made changes to the Application Dial Rules, make sure you have run the COP file to make those changes available to Cisco Mobile 8.0, then restarted the TFTP service.
- If you have modified the dialing rules and specified an alternate location for those dialing rules in the Product Specific Configuration Layout section on the device page, make sure you have updated the custom file before restarting the TFTP service.

Related Topics

- How to Make Application Dial Rules and Directory Lookup Rules Available to Cisco Mobile 8.0, page 7

Call Incorrectly Routed to Mobile Voice Network (GSM) Phone Number

Problem An incoming call arrives momentarily in Cisco Mobile 8.0 while it is running, but then the call is terminated and diverted to the native iPhone number using Mobile Connect instead. This problem may be more evident when Cisco Mobile 8.0 is connected over VPN.

Solution In Cisco Unified Communications Manager, increase the **SIP Dual Mode Alert Timer** in **System > Service Parameters**.

Calls Incorrectly Routed to Voicemail

Problem Calls are routed directly to mobile phone voicemail.

Solution In Cisco Unified Communications Manager, modify the call timer values on the Mobile Identity (Mobility Identity) page. See the procedure in the Related Topic for specifics.

Related Topic

- Adding Mobile Connect and a Mobile Identity, page 14

Unable to Send an Active Call to the Mobile Voice Network

Problem User cannot send an active call to the mobile voice network (GSM).

Solution Try the following:

- Revisit the procedures in the section related to this topic.
- If you are using the Mobility Softkey method, verify that Mobile Connect works by exiting Cisco Mobile 8.0 and dialing the extension. If you hear a fast busy signal, make sure you have entered the Mobility Identity phone number in a routable format.
- In Cisco Unified Communications Manager: Adjust the call timers on the Mobile Identity page. See the online help in Cisco Unified Communications Manager for more information. Make sure that the **No Answer Ring Duration** on the Primary DN page is greater than the value you specified for **Answer Too Late Timer** on the Mobile Identity page.

  Note that the Answer Too Late timer starts when Cisco Unified Communications Manager receives an acknowledgment from the mobile network that the call has been accepted. Some mobile service providers subsequently send a separate alert that the dialed number is ringing; in those cases, the Answer Too Late timer restarts when Cisco Unified Communications Manager receives that alert.

  To test this for a particular mobile phone, dial the main iPhone phone number (on the mobile voice network) from an office phone and track the amount of time that passes between the time you dial the last digit and the time the call goes to voice mail.

  If you increase the **No Answer Ring Duration**, see related cautions for this setting in the online help in Cisco Unified Communications Manager.

Related Topics

- How to Enable Transfer of Active Calls from VoIP to the Mobile Voice Network (GSM), page 16

Unable to Move Call from the Mobile Voice Network (GSM) to Cisco Mobile 8.0

Problem Unable to successfully transfer a call from the mobile voice network (GSM) to Cisco Mobile 8.0.

Solution Users can transfer calls to the mobile voice network from Cisco Mobile 8.0, but not the other direction.

Unable to Pick Up Active Call After Exiting Cisco Mobile 8.0

Problem When users exit Cisco Mobile 8.0 during an active call, they should be able to retrieve the call when they relaunch Cisco Mobile 8.0, assuming the other person is still on the call. If users are unable to retrieve the parked call, it may have timed out.

Solution In Cisco Unified Communications Manager, increase the park timeout time. See information about the "Call Park Reversion Timer" in the *Cisco Unified Communications Manager Features and Services Guide*.

Problems with Voice Quality

Problem Voice quality needs improvement.

Solution Voice quality cannot be guaranteed because of variable network conditions. However, to optimize the network for voice transmission, see the Network Requirements section of the Release Notes for Cisco Mobile 8.0 at http://cisco.com/en/US/products/ps7271/prod_release_notes_list.html.

Problems with Dropped or Interrupted Calls

Problem Calls are unexpectedly interrupted or dropped while the user is on the corporate premises.

Solution Make sure your Wi-Fi network meets the Network Requirements specified in the Release Notes at http://www.cisco.com/en/US/products/ps7271/prod_release_notes_list.html.

Problems with Search or Caller Identification

- Incorrect or Missing Caller Identification, page 35
- Delayed Caller Identification, page 35
- Slow Searches, page 35
- Missing Search Results, page 35

Incorrect or Missing Caller Identification

Problem Some callers are not identified correctly.

Solution

- When you add users or change user information in Microsoft Active Directory, correct identification of callers in Recents or Voicemail in Cisco Mobile 8.0 may take up to 24 hours. This minimizes synchronization activity that could impact performance.
- If a number does not match a contact using directory lookup rules, Cisco Mobile 8.0 displays the phone number as passed by Cisco Unified Communications Manager, unmodified by any directory lookup rules.
- If you have made changes to the Directory Lookup Rules, make sure you have run the designated COP file to make those changes available to Cisco Mobile 8.0, then restarted the TFTP service. See the Related Topic for instructions.

Related Topics

- How to Make Application Dial Rules and Directory Lookup Rules Available to Cisco Mobile 8.0, page 7

Delayed Caller Identification

Problem Delays in identifying callers, dialed numbers, and voice messages, when those identifications come from the corporate directory.

Solution See the solution referenced in the Related Topic.

Related Topic

- Slow Searches

Slow Searches

Problem Slow returning search results.

Solution Verify that the LDAP port is correct. See the instructions for the LDAP settings in the Product Specific Configuration Layout section of the Device page in Cisco Unified Communications Manager, in the table in the referenced Related Topic.

Related Topic

- Setting Up Individual Users and Devices for Basic Settings and VoIP Service, page 9

Missing Search Results

Problem Directory search does not find known employees.

Solution

- If you have made changes to the Directory Lookup Rules, make sure you have run the COP file to make those changes available to Cisco Mobile 8.0, then restarted the TFTP service.

Related Topics

- How to Make Application Dial Rules and Directory Lookup Rules Available to Cisco Mobile 8.0, page 7

Problems with Voicemail

Problem User repeatedly receives “Incorrect username or password” error when attempting to access voicemail.

Solution Check the voicemail server to be sure the user account has not been locked as a result of too many incorrect attempts to sign in.

Other Problems

Problem The device icon in the Cisco Unified Communications Manager Administration pages does not appear.

Solution Restart the Tomcat service as described in the Related Topic. Then reload the device page in your browser. Clear the browser cache if necessary.

Related Topic

- Making the Cisco Mobile 8.0 Device Available on Cisco Unified Communications Manager, page 4
