



# Configuring Features, Templates, Services, and Users

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After you install Cisco IP Phones in your network, configure their network settings, and add them to Cisco CallManager, you must use the Cisco CallManager Administration application to configure telephony features, optionally modify phone templates, set up services, and assign users.

This chapter provides an overview of these configuration and setup procedures. Cisco CallManager documentation provides detailed instructions for these procedures.

For suggestions about how to provide users with information about features, and what information to provide, see [Appendix A, “Providing Information to Users Via a Website.”](#)

For information about setting up phones in non-English environments, see [Appendix B, “Supporting International Users.”](#)

This chapter includes following topics:

- [Telephony Features Available for the Phone, page 5-2](#)
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# Telephony Features Available for the Phone

After you add Cisco IP Phones to Cisco CallManager, you can add functionality to the phones. [Table 5-1](#) includes a list of supported telephony features, many of which you can configure using Cisco CallManager Administration. The Configuration Reference column lists Cisco CallManager documentation that contains configuration procedures and related information.

For information about using most of these features on the phone, refer to *Cisco IP Phone 7970 Series Guide*.

**Table 5-1 Telephony Features for the Cisco IP Phone**

Feature	Description	Configuration Reference
Abbreviated dialing	A user can configure up to 99 speed-dial entries. Speed-dial entries that are not assigned to the speed-dial buttons on the phone are used for abbreviated dialing. When a user starts dialing digits, the <b>AbbrDial</b> softkey appears, and the user can access any speed-dial entry by entering the appropriate index.	Refer to <i>Cisco CallManager Administration Guide</i> for information about abbreviated dialing and speed dialing.
Auto answer	Causes the speakerphone or headset to go off hook automatically when an incoming call is received.	<ul style="list-style-type: none"> <li>Refer to <i>Cisco CallManager Administration Guide</i>.</li> <li>Refer to <i>Cisco CallManager Features and Services Guide</i>.</li> </ul>
Barge	Allows a user to join an in-progress call on a shared line. Phones support Barge in two conference modes: <ul style="list-style-type: none"> <li>Built-in conference bridge at the target device (the phone that is being barged). This mode uses the <b>Barge</b> softkey.</li> <li>Shared conference bridge. This mode uses the <b>cBarge</b> softkey.</li> </ul>	Refer to <i>Cisco CallManager Features and Services Guide</i> .

**Table 5-1 Telephony Features for the Cisco IP Phone (continued)**

<b>Feature</b>	<b>Description</b>	<b>Configuration Reference</b>
Call park	Places the call on hold so that anyone connected to the Cisco CallManager system can retrieve the call.	<ul style="list-style-type: none"> <li>Refer to <i>Cisco CallManager Administration Guide</i>.</li> <li>Refer to <i>Cisco CallManager Features and Services Guide</i>.</li> </ul>
Call pickup	Picks up incoming calls within a group.	<ul style="list-style-type: none"> <li>Refer to <i>Cisco CallManager Administration Guide</i>.</li> <li>Refer to <i>Cisco CallManager System Guide</i>.</li> </ul>
Call waiting	Receives a second incoming call on the same line without disconnecting the first call.	<ul style="list-style-type: none"> <li>Refer to <i>Cisco CallManager Administration Guide</i>.</li> <li>Refer to <i>Cisco CallManager System Guide</i>.</li> </ul>
Caller ID	Displays the telephone number and name of the caller.	Refer to <i>Cisco CallManager Administration Guide</i> .
Cisco IP Manager Assistant (Cisco IPMA)	Enables managers and their assistants to work together more effectively by providing a call-routing service, enhancements to phone capabilities for the manager, and desktop interfaces that are primarily used by the assistant.	Refer to <i>Cisco CallManager Features and Services Guide</i> and <i>Cisco CallManager Administration Guide</i> for system requirements, installation and configuration instructions, and use information.
Conference	Initiates an ad hoc conference and then conferences in other participants one at a time.	<ul style="list-style-type: none"> <li>Refer to <i>Cisco CallManager Administration Guide</i>.</li> <li>Refer to <i>Cisco CallManager System Guide</i>.</li> </ul>
Configurable call forward display	Allows you to specify information that appears on a phone when a call is forwarded. This information can include the caller name, caller number, redirected number, and original dialed number.	Refer to <i>Cisco CallManager Administration Guide</i> .

Table 5-1 Telephony Features for the Cisco IP Phone (continued)

Feature	Description	Configuration Reference
Direct transfer	Joins two established calls (calls that are on hold or in connected state) into one call and drops the feature initiator from the call. Does not initiate a consultation call and does not put the active call on hold.	Refer to <i>Cisco CallManager System Guide</i> .
Ring setting	Identifies ring type used for a line when a phone has another active call	Refer to <i>Cisco CallManager Administration Guide</i> .  Users can adjust their ring settings from the User Options web pages by clicking <b>Change the Ring Settings for your phone</b> .
Forward	Forwards all calls to the designated directory number.	Refer to <i>Cisco CallManager Administration Guide</i> .
Group call pickup	Allows users to pick up incoming calls within their own group or in other groups.	<ul style="list-style-type: none"> <li>Refer to <i>Cisco CallManager Administration Guide</i>.</li> <li>Refer to <i>Cisco CallManager System Guide</i>.</li> </ul>
Hold	Places an active call on hold.	Requires no configuration, unless you want to use music on hold; see “Music-on-Hold” in this table for information.
Immediate Divert	Immediately diverts a call to a voice messaging system. When a call is diverted, the line becomes available to make or receive new calls.	Refer to <i>Cisco CallManager Features and Services Guide</i> .
Join	Allows a user to initiate an ad hoc conference by using the <b>Join</b> softkey.  Join does not create a consultation call and does not put the active call on hold. Join can include more than two calls, which results in a call with more than three parties. Join supports up to 16 participants in a call.	<ul style="list-style-type: none"> <li>See the “<a href="#">Configuring Softkey Templates</a>” section on <a href="#">page 5-8</a>.</li> <li>Refer to <i>Cisco CallManager Administration Guide</i>.</li> </ul>

Table 5-1 Telephony Features for the Cisco IP Phone (continued)

Feature	Description	Configuration Reference
Malicious caller identification (MCID)	Allows you to report a call of a malicious nature by requesting that Cisco CallManager identify and register the source of an incoming call in the network.	Refer to <i>Cisco CallManager Features and Services Guide</i> .
Meet-Me conference	Enables other callers to join in a conference.	Refer to <i>Cisco CallManager Administration Guide</i> .
Message waiting	Indicates that one or more voice messages are waiting for a user.	<ul style="list-style-type: none"> <li>Refer to <i>Cisco CallManager Administration Guide</i>.</li> <li>Refer to <i>Cisco CallManager System Guide</i>.</li> </ul>
Multilevel Precedence and Preemption (MLPP)	Allows properly validated users to place priority calls. If necessary, users can preempt lower-priority phone calls. Also allows the use of the call-forward alternate party (CFAP) feature for forwarding a precedence call.	Refer to <i>Cisco CallManager Features and Services Guide</i> for configuration procedures.
Music-on-hold	Plays music while callers are on hold.	Refer to <i>Cisco CallManager Features and Services Guide</i> .
Privacy	Enables or disables whether users with phones that share the same line can view call status and can barge a call.	Refer to <i>Cisco CallManager Features and Services Guide</i> for system requirements, configuration instructions, and use information.
Quality Reporting Tool	Allows users to use the <b>QRT</b> softkey on a phone to submit information about problem phone calls.	Refer to <i>Cisco CallManager Administration Guide</i> .
Redial	Redials the last number dialed on the Cisco IP Phone.	Requires no configuration.
Services	Allows you to use the Cisco IP Phone Services Configuration menu in Cisco CallManager Administration to define and maintain the list of phone services to which users can subscribe.	Refer to <i>Cisco CallManager Administration Guide</i> and to <i>Cisco CallManager System Guide</i> for more information.

Table 5-1 Telephony Features for the Cisco IP Phone (continued)

Feature	Description	Configuration Reference
Services URL button	Provides one-touch access to information services.	Refer to <i>Cisco CallManager Administration Guide</i> for configuration procedures.
Speed-dial	Dials a specified number that has been previously stored.	Refer to <i>Cisco CallManager Administration Guide</i> .
Transfer	Transfers an active call to another directory number.	Requires no configuration.
Voice messaging system	Enables callers to leave voice messages if calls are unanswered.	<ul style="list-style-type: none"> <li>Refer to <i>Cisco CallManager Administration Guide</i>.</li> <li>Refer to <i>Cisco CallManager System Guide</i>.</li> </ul>

## Configuring Corporate and Personal Directories

The **Directories** button on the Cisco IP Phone gives users access to several directories. These directories can include:

- Corporate Directory—Allows a user to look up phone numbers for co-workers.

To support this feature, you must configure corporate directories. See the [“Configuring Corporate Directories” section on page 5-6](#) for more information.

- Personal Directory—Allows a user to store a set of personal numbers.

To support this feature, you must provide the user with software to configure the personal directory. See the [“Configuring Personal Directory” section on page 5-7](#) for more information.

### Configuring Corporate Directories

Cisco CallManager uses a Lightweight Directory Access Protocol (LDAP) directory to store authentication and authorization information about users of Cisco CallManager applications that interface with Cisco CallManager.

Authentication establishes a user's right to access the system. Authorization identifies the telephony resources that a user is permitted to use, such as a specific telephone extension.

To install and set up these features, refer to *Installing and Configuring the Cisco Customer Directory Configuration Plugin*. That manual guides you through the configuration process for integrating Cisco CallManager with Microsoft Active Directory and Netscape Directory Server.

After the LDAP directory configuration completes, users can use the Corporate Directory service on your Cisco IP Phone to look up users in the corporate directory.

## Configuring Personal Directory

Personal Directory provides a personal address book stored in the Cisco CallManager Lightweight Directory Access Protocol (LDAP) directory. It also provides a Cisco IP phone synchronizer and the Personal Address Book service. The Cisco IP Phone Address Book Synchronizer allows users to synchronize Microsoft Outlook and Outlook Express address book entries with the directory in Cisco CallManager. From a Cisco IP Phone, a user can use the Personal Address Book service to look up entries, make a selection, and press a softkey to dial the selected number.

To configure Personal Directory, users must access their User Options web pages. If they want to synchronize with Microsoft Outlook, they must also install the Cisco IP Phone Address Book Synchronizer utility, provided by you.

To obtain this software, choose **Application > Install Plugins** from Cisco CallManager Administration and click **Cisco IP Phone Address Book Synchronizer**.

## Modifying Phone Button Templates

Phone button templates let you assign features to line/speed dial buttons.

Ideally, you modify templates before registering phones on the network. In this way, you can access customized phone button template options from Cisco CallManager during registration.

To modify a phone button template, choose **Device > Device Settings > Phone Button Template** from Cisco CallManager Administration. To assign a phone button template to a phone, use the Phone Button Template field in the Cisco CallManager Administration Phone Configuration page. Refer to *Cisco CallManager Administration Guide* and *Cisco CallManager System Guide* for more information.

The default Cisco IP Phone 7970 Series template uses buttons 1 and 2 for lines and assigns buttons 3 through 8 as speed dial. Access other phone features, such as call park, call forward, redial, hold, resume, voice messaging system, conferencing, and so on using softkeys on the phone.

## Configuring Softkey Templates

Using Cisco CallManager Administration, you can manage softkeys associated with applications that are supported by the Cisco IP Phone 7970 Series. Cisco CallManager supports two types of softkey templates: standard and nonstandard. Standard softkey templates include Standard User, Standard Feature, Standard IPMA Assistant, Standard IPMA Manager, and Standard IPMA Shared Mode Manager. An application that supports softkeys can have one or more standard softkey templates associated with it. You can modify a standard softkey template by making a copy of it, giving it a new name, and making updates to that copied softkey template. You can also modify a nonstandard softkey template.

To configure softkey templates, select **Device > Device Settings > Softkey Template** from Cisco CallManager Administration. To assign a softkey template to a phone, use the Softkey Template field in the Cisco CallManager Administration Phone Configuration page. Refer to *Cisco CallManager Administration Guide*, *Cisco CallManager System Guide* for more information.

## Setting Up Services

The **Services** button on the Cisco IP Phone gives users access to Cisco IP Phone Services. You can also assign services to the programmable buttons on the phone (refer to *Cisco IP Phone 7970 Series Guide* for more information). These services comprise XML applications that enable the display of interactive content with text and graphics on the phone. Examples of services include local movie times, stock quotes, and weather reports.

Before a user can access any service,

- You must use Cisco CallManager Administration to configure available services.
- The user must subscribe to services using the Cisco IP Phone User Options application. This web-based application provides a graphical user interface (GUI) for limited, end-user configuration of IP Phone applications.

Before you set up services, gather the URLs for the sites you want to set up and verify that users can access those sites from your corporate IP telephony network.

To set up these services, choose **Feature > Cisco IP Phone Services** from Cisco CallManager Administration. Refer to *Cisco CallManager Administration Guide* and *Cisco CallManager System Guide* for more information.

After you configure these services, verify that your users have access to the Cisco CallManager IP Phone Options web-based application, from which they can select and subscribe to configured services. See the [“How Users Subscribe to Services and Configure Phone Features” section on page A-3](#) for a summary of the information that you must provide to end users.

## Adding Users to Cisco CallManager

Adding users to Cisco CallManager allows you to display and maintain information about users and allows each user to perform the following actions:

- Access the corporate directory and other customized directories from a Cisco IP Phone
- Create a personal directory
- Set up speed dial and call forwarding numbers
- Subscribe to services that are accessible from a Cisco IP Phone

You can add users to Cisco CallManager using either of these methods:

- To add users individually, choose **User >Add a New User** from Cisco CallManager Administration.

Refer to *Cisco CallManager Administration Guide* for more information about adding users. Refer to *Cisco CallManager System Guide* for details about user information.

- To add users in batches, use the Bulk Administration Tool. This method also enables you to set an identical default password for all users.

Refer to *Bulk Administration Tool User Guide for Cisco CallManager* for details.