



## Managing User Directory Information

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The User option in the Cisco CallManager Administration allows the administrator to add, search, display, and maintain information about Cisco CallManager users. This chapter describes the options for managing user directory information.

Refer to [Adding a New User](#) section of the *Cisco CallManager Administration Guide* for more procedures on adding users and configuring application profiles.

Refer to the [Searching the Global Directory](#) section of the *Cisco CallManager Administration Guide* for procedures on searching for users and updating information on existing users.

This chapter includes the following topics:

- [How Cisco JTAPI Uses the Directory, page 15-2](#)
- [Searching the Global Directory, page 15-2](#)
- [Adding a User, page 15-4](#)
- [Device Association, page 15-5](#)

## How Cisco JTAPI Uses the Directory

Cisco JTAPI uses the directory to determine which devices it can control and provides an interface method for getting the MAC address of the calling party, such as a user initiating the Extension Mobility Login.

After you install Cisco JTAPI, you have access to the Cisco CallManager directory. The directory stores parameters that initialize JTAPI, user profiles, application logic, and network-specific configuration information, such as the location of network resources and system administrator authentication.

## Searching the Global Directory

The Global Directory for Cisco CallManager contains every user within a Cisco CallManager directory. Cisco CallManager uses Lightweight Directory Access Protocol (LDAP) to interface with a directory that contains user information.

You can access the Global Directory by using either a basic or an advanced user search.

Refer to the [Searching the Global Directory](#) section of the *Cisco CallManager Administration Guide* for procedures on searching for users and updating information on existing users.

For a description on adding a new user, see [“Adding a User” section on page 15-4](#).

### Related Topics:

- [Using Basic Search, page 15-3](#)
- [Using Advanced Search, page 15-3](#)

## Using Basic Search

The Basic User search utility searches the first name, last name, and user ID fields for matches of any substring that you enter as search criteria. For example, if you enter “li” in the search field, the search results would include users whose first name, last name, or user ID match that substring, as indicated in the following list:

Last Name	First Name	User ID
Johnson	Charlie	cjohnson
Ni	Liang	lni
Collins	Manny	mcollins
Lin	Mike	michaell
Ivey	Gabriel	Gabrieli

If you enter two or more substrings separated by spaces, the search will look for matches of any of the substrings in any of the three search fields.

The following procedure contains information about how to use the Global Directory Basic User Search engine.

## Using Advanced Search

The Advanced User Search utility has a built-in Boolean logic to perform more complex searches. You can enter search criteria using the following fields:

- First Name
- Last Name
- User ID
- Department Number

If you enter two or more names or substrings separated by spaces in any one field, the search will interpret the request with the OR relationship operator and will look for matches where any of your specified criteria is true. For example, if you enter “john jerry”, the search will return all users whose first names are John or Jerry.

If you enter a substring in two or more search fields, the search will interpret the request with the AND relationship operator and look for matches where all criteria is true. For example, if you enter “Ling” for first name and “Chu” for last name, the search will return the user named Ling Chu.

**Tips**

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Use ORs with multiple entries in a single field and ANDs across fields. For example, if you enter

First Name: john jane  
Last Name: jones smith  
UserID: jjones jsmith

the search will be for (firstname=”john” OR “jane”) AND lastname=”jones” OR “smith”) AND (userid=”jjones” OR “jsmith”).

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## Adding a User

Generally, completing user information is optional; the devices function whether or not you complete this information. However, information that you enter here is also accessed by Directory Services, Cisco WebAttendant, and the Cisco IP Phone User Options panes. If you want to provide these features to your users, you must complete the information in the User Information pane for all users and their directory numbers, and also for resources such as conference rooms or other areas with phones (this is useful for Cisco WebAttendant).

Refer to the chapter on [Adding a New User](#) in the *Cisco CallManager Administration Guide* for more procedures on adding users and configuring application profiles

# Application Profiles

After you add a new user, options in the Application Profile section of the User Information pane in the Cisco CallManager Administration allows you to configure the user profile. These profiles allows each user to personalize phone features, mobility, and Cisco IP SoftPhone capability.

For information on configuring Application Profiles for users, refer to the [“Configuring Application Profiles”](#) section of the *Cisco CallManager Administration Guide*.

## Device Association

Associating devices to a user gives the user control over specified devices. Users control some devices, such as phones. Applications that are identified as users control other devices, such as CTI ports. When users have control of a phone, they can control certain settings for that phone, such as speed dial and call forwarding.

The User Device Assignment window comprises a device filter section and a list of available devices.

### Available Device List Filters

The device filter allows you to limit your list of devices by entering search criteria based on all or part of the device name, description, or directory number. To limit the list of available devices to a specific selection, enter the criteria by which you want to search using the following methods:

- Choose device name, description, or directory number.
- Choose the comparison operator.
- Enter a text or number entry.

For example, to list all extensions that begin with ‘5’, you would choose ‘Directory Number’ ‘begins with’ and then enter 5 in the text box.

### Available Devices

Once you have specified the search criteria to display devices, all matching available devices appear in the Available Devices list. The list displays in groups of 20 devices and can be navigated using the buttons at the bottom of the window.

You can page through the device list by clicking **First**, **Previous**, **Next**, and **Last**, or you can jump to a specific pane by entering the page number in the pane entry box and then clicking **Page**.

If you are modifying the device assignment for an existing user, the devices previously assigned to that user appear in a group at the beginning of the device list.

You can associate one or more devices to the user by checking the checkbox next to that device. If a device has multiple extensions associated with it, each line extension appears in the list. You need to choose only one line extension to choose all the lines associated with that device.

To assign devices to a user, you must access the User Information window for that user. Refer to the [“Searching the Global Directory” section on page 15-2](#) for information on accessing information on existing users.

## Auto Attendant

The Automated Attendant (AA) service answers incoming calls and prompts the caller for a user name or extension. The directory is scanned for a match to resolve the user name or extension and transfers the caller to the appropriate endpoint.

The AA service requires a unique telephone keypad numerical representation of each user name. The mapping generates after you add a new user. The representation is an alphabetical mapping of the last name, first name, and the middle initial (LastFirstM) to corresponding keys on the telephone. Subsequently, the number is checked against the number representations of all the existing users in the user table.

If the number is unique, it is then used to find the least number of digits required to identify a user. Otherwise, if a same name or same numerical mapping occurs, a prompt returns indicating a duplicate key. At this point, you can either change the user’s name (through nicknames or removal of middle initials) or allow duplicates.

## Extension Mobility

Extension Mobility allows a user to configure a Cisco IP Phone 7940 or Cisco IP Phone 7960 to appear as that user phone temporarily. The user can log in to a phone, and the user extension mobility profile (including line and speed-dial numbers) resides on the phone. This feature applies primarily in environments where users are not permanently assigned to physical phones.

The center of the login processing is the Workflow Engine. User and device information is sent via DTMF and JTAPI to the Workflow Engine, which makes the information available within the Workflow.

User Device Profiles are used to support the Extension Mobility feature. The User Device Profile includes the following information:

- Name
- Description
- Phone template
- Add-on modules
- Directory numbers
- Device-subscribed services
- Speed Dial information

An authentication scheme authenticates the user. The Workflow sends an XML string through an HTTP post request to the Login Service. The string contains the following items:

- User name and password of the login application
- Device name based on the MAC address of the device on which the user wants their profile to reside

The result of the request returns a dialog prompt on the device of the calling user.

The logout process is also the Workflow Engine. The device name is sent to the workflow engine using JTAPI. The workflow engine sends a logout request to the login service, and the user receives a dialog prompt on the device.

## SoftPhone

You can associate a device (line) to a user as a Cisco IP SoftPhone. This will enable the user to use their desktop PC to place and receive telephone calls and to control an IP telephone.

Include the IP Address or host name in the Associated PC field.

For more information, refer to the *Cisco IP SoftPhone Administrator Guide*

[http://www.cisco.com/univercd/cc/td/doc/product/voice/c\\_ipphon/softphon/](http://www.cisco.com/univercd/cc/td/doc/product/voice/c_ipphon/softphon/)

## User Directory Guidelines and Tips

The following system requirements and limitations apply to conference bridges:

- Conference devices configured for software support G.711 codecs by default.
- The maximum limit for a software conference with IP voice media streamer is 48.
- The maximum limit for a software conference with voice media streamer on a separate non-Cisco CallManager Media Convergence Server (MCS) is 128.
- Conference devices configured for hardware provide transcoding for G.711, G.729, G.723, G711 GSM Full Rate (FR), and G711 GSM Enhanced Full Rate (EFR) codecs.
- The maximum number of full-duplex streams per MTP WS-X6608 port is 32.

# Managing User Directory Configuration Checklist

Configuration Steps		Related procedures and topics
Step 1	Search for user in the Global Directory.	<a href="#">Searching the Global Directory</a> , <i>Cisco CallManager Administration Guide</i>
Step 2	Add user.	<a href="#">Adding a New User</a> , <i>Cisco CallManager Administration Guide</i>
Step 3	Configure the Application Profiles	<a href="#">Adding a New User</a> , <i>Cisco CallManager Administration Guide</i> <a href="#">Device Profile Configuration</a> , <i>Cisco CallManager Administration Guide</i>
Step 4	Add a Conf button for Ad Hoc or MMConf button for the Meet-Me conference to the phone templates, if needed. You only need to do this for older Cisco IP Phone 12 SP, 12 SP+, and 30 VIP phones.	<a href="#">Modifying Phone Button Templates</a> , <i>Cisco CallManager Administration Guide</i>
Step 5	Notify users of the features they have available for use.	The <i>Cisco IP Phone 7960/7940 Getting Started Guide</i> contains instructions on how users access various features on the Cisco IP phone.

# Where to Find More Information

## Related Topics

- [Device Profile Configuration](#), *Cisco CallManager Administration Guide*
- [Phone Button Template Configuration](#), *Cisco CallManager Administration Guide*
- [Cisco IP Phone Configuration](#), *Cisco CallManager Administration Guide*
- [Cisco WebAttendant Configuration](#), *Cisco CallManager Administration Guide*
- [Conference Bridge Configuration](#), *Cisco CallManager Administration Guide*

## Additional Cisco Documentation

- *Cisco IP SoftPhone Administrator Guide*  
[http://www.cisco.com/univercd/cc/td/doc/product/voice/c\\_ipphon/softphon/](http://www.cisco.com/univercd/cc/td/doc/product/voice/c_ipphon/softphon/)
- *Cisco IP SoftPhone User Guide*  
[http://www.cisco.com/univercd/cc/td/doc/product/voice/c\\_ipphon/softphon/](http://www.cisco.com/univercd/cc/td/doc/product/voice/c_ipphon/softphon/)
- Cisco IP Phone user documentation and release notes (all models)  
[http://www.cisco.com/univercd/cc/td/doc/product/voice/c\\_ipphon/](http://www.cisco.com/univercd/cc/td/doc/product/voice/c_ipphon/)