



## Associate Users with Endpoints

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### Users to Endpoints Association Overview

This chapter describes how to associate devices with end users and application users. End users can control the devices that you associate with them. Applications that are identified as users can control devices, such as phones and Computer Telephony Integration (CTI) ports.

### Associate Users with Endpoints Prerequisites

Configure end users and application users before you associate them with endpoints. See [Associate End Users with Devices, on page 1](#) and [Associate Application Users with Devices, on page 4](#).

### Users and Devices Configuration Task Flow

#### Procedure

	Command or Action	Purpose
Step 1	<a href="#">Associate End Users with Devices, on page 1.</a>	Associate end users with devices.
Step 2	<a href="#">Associate Application Users with Devices, on page 4.</a>	Associate application users with devices.

### Associate End Users with Devices

Cisco Unified Communications Manager does not allow duplicate end user IDs.

## Procedure

- Step 1** From Cisco Unified CM Administration, choose **User Management > End User**.
- Step 2** From the **Find and List Application Users** window, click **Find**.
- Step 3** From the window that displays a list of end users, click the link for the relevant end user.
- Step 4** From the **End User Configuration** window, scroll down to the **Device Information** area and select the devices that you want to associate with the end user. In the **Available Devices** box, choose a device that you want to associate with the application user and click the down arrow below the box.
- Note** If no devices exist in the **Device Information** area, click the **Device Association** button to open the **User Device Association** window. Select one or multiple devices and click the **Save Selected/Changes** button. The selected devices appear in the **Controlled Devices** list box of the **Device Information** area. Then, follow Steps 1 to 4 and associate a device.
- Step 5** (Optional) To associate a line appearance to an end user for presence and to enable the on-the-phone status information to IM and Presence clients when this line appearance is off-hook, click the **Line Appearance Association from Presence** button. The **Line Appearance Association for Presence** window appears from where you can choose product type, device name, directory, partition, or description. The choices available in this window depend on the lines associated with the controlled devices. Click **Save**.
- Step 6** Configure the fields from the **End User Configuration** window. See the Related Topics section for more information about the fields and their configuration options.
- Step 7** Click **Save**.

## End User and Device Configuration Settings

*Table 1: User Information*

Field	Description
User ID	Enter the end user identification name. Cisco Unified Communications Manager does not permit modifying the user ID after it is created. You may use the following special characters: =, +, <, >, #, ;, \, "", and blank spaces.
Password	Enter five or more alphanumeric or special characters for the end user password. You may use the following special characters: =, +, <, >, #, ;, \, "", and blank spaces
PIN	Enter five or more numeric characters for the Personal Identification Number.
Last Name	Enter the end user last name. You may use the following special characters: =, +, <, >, #, ;, \, "", and blank spaces

Field	Description
Middle Name	Enter the end user middle name. You may use the following special characters: =,+,<,>,#,;,\\,“”, and blank spaces
First Name	Enter the end user first name. You may use the following special characters: =,+,<,>,#,;,\\,“”, and blank spaces

**Table 2: Device Associations**

Field	Description
Product Type	From the drop-down list, choose the type of device to associate with this end user.
MAC Address	Enter a unique MAC address for the new device that you are associating with the new user. The MAC address comprises exactly 12 hexadecimal digits (0 to 9, A to F).
Calling Search Space DN	From the drop-down list, choose the calling search space for the directory number that you are associating with this user and device.
Calling Search Space Phone	From the drop-down list, choose the calling search space for the phone that you are associating with this user and device.
External Phone Number Mask	Specify the mask that is used to format caller ID information for external (outbound) calls that are made from the associated device. <ul style="list-style-type: none"> <li>• The mask can contain up to 24 characters. Valid characters specify 0 to 9, *, #, and X.</li> <li>• Enter the literal digits that you want to appear in the caller ID information and use Xs to represent the directory number of the associated device.</li> <li>• If you specify a mask of 972813XXXX, an external call from extension 1234 displays a caller ID number of 9728131234 if the Use External Phone Number Mask option is checked on the route pattern that is used to make the external call. If you specify a mask of all literal digits, such as 9728135000 to represent a main attendant number, that literal number (9728135000) displays as the caller ID for an external call from any associated device.</li> </ul>

Field	Description
Extension	Enter an extension for the new user and phone. You may use the following characters: 0 to 9, ?, [, ], +, -, *, ^, #, !.  This field represents the primary directory number for the end user. End users can have multiple lines on their phones.
Route Partition	From the drop-down list, choose a partition for the directory number that you specified in the Extension field.
Voice Mail Profile	From the drop-down list, choose a voice mail profile for the directory number.  Choose None to use the system default.
Enable Extension Mobility	Check this check box to enable extension mobility.  After you add the new user, you can use the <b>User Management &gt; End User</b> menu option to choose an Extension Mobility profile.

## Associate Application Users with Devices

You can associate devices over which application users have control. Application users can control devices, such as phones. Applications that are identified as users can control other devices, such as CTI ports. When application users have control of a phone, they can control certain settings for that phone, such as speed dial and call forwarding.

### Before you begin

[Associate End Users with Devices, on page 1.](#)

### Procedure

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- Step 1** From Cisco Unified CM Administration, choose **User Management > Application User**. appears.
- Step 2** From the **Find and List Application Users** window, click **Find**.
- Step 3** From the list of application users, click the link for the relevant Application User.
- Step 4** From the **Application User Configuration** window, scroll down to the **Device Information** area. In the **Available Devices** box, choose a device that you want to associate with the application user and click the down arrow below the box.  
The device is moved to the **Controlled Devices** box.
- Step 5** To add to the list of available devices, click one of the following buttons:
- **Find more Phones**—To find the phones to associate with this application user.
  - **Find more Route Points**—To find the CTI route points to associate with this application user.

- **Find more Pilot Points**—To find the pilot points to associate with this application user.

**Step 6** Repeat Step 5 for each device that you want to assign to the application user.

**Step 7** Click **Save**.

# Interactions and Restrictions for Associating Users with Endpoints

## Interactions for Associating Users with Endpoints

*Table 3: Users with Endpoints Association Interactions*

Feature	Interaction
Non-CTI-controllable devices	For devices that are not CTI-controllable, such as H.323 devices, an asterisk (*) appears next to the device icon in the list of available devices.
Cisco Extension Mobility	Use Cisco Extension Mobility feature to configure a Cisco IP Phone to temporarily display as the phone of an end user. The end user can sign in to a phone, and the Extension Mobility profile (including line and speed-dial numbers) for the end user resides on the phone. This feature applies primarily in environments where end users are not permanently assigned to physical phones.
IM and Presence Service	Use Cisco Unified Communications Manager Administration to assign end users to IM and Presence Service server nodes and clusters for end users to receive the availability and Instant Messaging services of IM and Presence Service.

## Restrictions for Associating Users with Endpoints

*Table 4: Users with Endpoints Association Restrictions*

Restriction	Description
Modification of end user information	You can modify end user information only if synchronization with an LDAP server is not enabled. To check whether synchronization with an LDAP server is enabled, choose <b>System &gt; LDAP &gt; LDAP System</b> .

