



APPENDIX **C**

Setting Up and Using a Cisco Unified IP Phone as a Cisco IPICS Push-to-Talk Device

Cisco IPICS provides the Cisco IPICS service, which allows several Cisco Unified IP Phone models to communicate on PTT channels and participate in channels and VTGs.

Before a user can access the Cisco IPICS service, Cisco IPICS must be configured as a phone service for Cisco Unified Communications Manager or for Cisco Unified Communications Manager Express. In addition, users in a deployment that includes Cisco Unified Communications Manager must subscribe to the Cisco IPICS service by using the Cisco Unified Communications Manager User Options application

The total number of Cisco Unified IP Phones, LMR and multicast ports, IDC clients, dial users, and ops views cannot exceed the number that is specified in your Cisco IPICS license. For more information about licenses, see the [“Managing Licenses” section on page 2-75](#).

This appendix includes the following topics:

- [Configuring Cisco IPICS as a Phone Service for Cisco Unified Communications Manager, page C-1](#)
- [Configuring Cisco IPICS as a Phone Service for Cisco Unified Communications Manager Express, page C-3](#)
- [Subscribing to the Cisco IPICS Service, page C-3](#)
- [Moving the Logout Softkey Location on a Cisco Unified IP Phone, page C-3](#)
- [Using the Cisco IPICS Service on a Cisco Unified IP Phone, page C-4](#)

Configuring Cisco IPICS as a Phone Service for Cisco Unified Communications Manager

This section describes how to configure the Cisco IPICS service in Cisco Unified Communications Manager. After you configure Cisco IPICS as an available service, IP phone users can subscribe to the service by using the Cisco Unified Communications Manager User Options web site. When users subscribe to the Cisco IPICS service, the Cisco Unified IP Phone Services menu displays Cisco IPICS as an option.

For additional information about Cisco Unified Communications Manager Administration and about setting up phone services, see the Cisco Unified IP Phone Services configuration information in *Cisco Unified Communications Manager Administration Guide* for your Cisco Unified Communications Manager version.

You can configure whether the Cisco IPICS service requires users to log in before accessing the service from a Cisco Unified IP Phone. If there are users who you do not want to require to log on, you can configure a separate service that bypasses the log in for each of these users.

To configure the Cisco IPICS service as an available service in Cisco Unified Communications Manager, perform the following procedure:

Procedure

-
- Step 1** From Cisco Unified Communications Manager Administration, take one of these actions:
- For Cisco Unified CallManager 3.x or 4.x—Choose **Feature > Cisco IP Phone Services**.
 - For Cisco Unified Communications Manager 5.x or later—Choose **Device > Device Settings > Phone Services**.
- Step 2** In the page for configuring IP phone services, enter the following information:
- a. In the **Service Name** field, enter **Cisco IPICS**.
This field specifies the name that displays for the service on the Cisco Unified IP Phone.
 - b. In the **Service Description** field, enter **Access to the Cisco IPICS System**, or a similar description.
This field contains a description of the content that the Cisco IPICS service provides. You can enter any appropriate description.
 - c. Cisco Unified Communications Manager 5.x only: In the ASCII Service Name field, enter **Cisco IPICS**.
This field designates the name of the service to display if a phone cannot display Unicode.
 - d. In the **Service URL** field, enter the URL of the Cisco IPICS service in either of the following format.
If you are using the Cisco IPICS high availability feature, enter the URL twice, once for the primary server and once for the secondary server. If a failover occurs, the system attempts to redirect requests from the Cisco Unified IP Phone to the new active server. If the system is unable to do so, the phone user must select the alternate server from the phone manually.
 - If you want to require users to log in before accessing the service, enter:
http://<ipics server IP address>/ipics_server/servlet/IPPhoneManager
 Replace *ipics server IP address* with the IP address of the Cisco IPICS server.
 - If you do not want to require a user to log in before accessing the service, enter the following for the user:
http://<ipics server IP address>/ipics_server/servlet/IPPhoneManager?method=LOGIN&user=<userID>&PIN=<pin>
 Replace *ipics server IP address* with the IP address of the Cisco IPICS server, *userID* with the digit ID of the user, and *pin* with the digit password (PIN) of the user who will not need to log in.
- Step 3** (Optional) If you are configuring a service for a user who does not have to log in to use it, configure these parameters in the Service Parameter Information area:
- **method**—Set this parameter to LOGIN and designate it as required.
 - **user**—Set this parameter to the Cisco IPICS digit ID of the user and designate it as required.
 - **PIN**—Set this parameter to the Cisco IPICS digit password (PIN) of the user and designate it as required.
-

Configuring Cisco IPICS as a Phone Service for Cisco Unified Communications Manager Express

To configure Cisco IPICS as an available service in Cisco Unified Communications Manager Express, perform the following procedure:

Procedure

-
- Step 1** Log in to the Cisco IOS router that runs Cisco Unified Communications Manager Express.
- Step 2** Type this command to access the enable prompt:
- ```
Router> enable
```
- Step 3** Enter the following commands to provision a router that is running Cisco Unified Communications Manager Express with the URL of the Cisco IPICS IP Phone service so that Cisco Unified IP Phones can function as Cisco IPICS PTT devices:
- ```
Router# configure terminal
Router(config)# telephony-service
Router(config-telephony)# url services http://
<ipics server IP address>/ipics_server/servlet/IPPhoneManager
```
- (replace *ipics server IP address* with the IP address of the Cisco IPICS server)
- Step 4** Press **Ctrl-Z** to return to the enable prompt.
- Step 5** Enter this command to save your configuration:
- ```
Router# write running-config startup-config
```
- Step 6** Log out of the Cisco IOS router.
- 

## Moving the Logout Softkey Location on a Cisco Unified IP Phone

When a Cisco Unified IP Phone user finishes using the Cisco IPICS service, the user presses the **Logout** softkey on the phone. By default, a user must press the **Back** softkey after exiting a channel or VTG to access the **Logout** softkey. However, you can configure a phone to display the **Logout** softkey when a user is connected to a channel or VTG. To do so, add the following parameter to the Cisco IPICS Service URL:

buttonLayout=logoutOnPTT



### Note

If you configure this parameter, a user may need to press the **More** softkey on some phone models to see **Logout**.

## Subscribing to the Cisco IPICS Service

Cisco Unified IP Phone users in a deployment that includes Cisco Unified Communications Manager must subscribe to the Cisco IPICS service before they can access the service from a phone.

The information in this section does not apply to users in a deployment that includes Cisco Unified Communications Manager Express. Cisco Unified Communications Manager Express supports one active service and users are subscribed to that service automatically.

Before a user can subscribe to the Cisco IPICS service, the service must be configured as described in the [“Configuring Cisco IPICS as a Phone Service for Cisco Unified Communications Manager”](#) section on page C-1.

To subscribe to the Cisco IPICS service, perform the following procedure:

#### Procedure

- 
- Step 1** Log in to the Cisco Unified Communications Manager User Options web site.
- For more information about accessing the Cisco Unified Communications Manager User Options web site, and for additional information about the phone features for your phone model, see the Cisco Unified IP Phone documentation.
- Step 2** From the Cisco Unified Communications Manager User Options Menu, choose your device type or profile from the drop-down list.
- Step 3** From the Cisco Unified Communications Manager User Options Menu, choose **Configure your Cisco IP Phone Services**.
- Cisco Unified Communications Manager displays a list of subscribed services and allows you to choose from a list of available services.
- Step 4** Choose the **Cisco IPICS** service from the Available Services drop-down list, then click **Continue**.
- Step 5** To subscribe to the Cisco IPICS service, click **Subscribe**.
- The information that is configured in Cisco Unified Communications Manager Administration, such as the service description, the IP address of the Cisco IPICS server, and the path to the service, displays in this window.
- Step 6** Click **Log Off**.
- 

## Using the Cisco IPICS Service on a Cisco Unified IP Phone

This section describes how to use the Cisco IPICS service from a Cisco Unified IP Phone. Before a user can access the Cisco IPICS service from a Cisco Unified IP Phone, the prerequisites that are described in [Table C-1](#) must be met:

**Table C-1** Prerequisites for Using the Cisco IPICS Service

| Prerequisite                            | Reference                                                                                                                                                                                                                                                                   |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cisco IPICS service must be configured. | See the <a href="#">“Configuring Cisco IPICS as a Phone Service for Cisco Unified Communications Manager”</a> section on page C-1 or the <a href="#">“Configuring Cisco IPICS as a Phone Service for Cisco Unified Communications Manager Express”</a> section on page C-3. |

**Table C-1** Prerequisites for Using the Cisco IPICS Service

| Prerequisite                                                                                           | Reference                                                                                                                                                                                                                                                                                                                               |
|--------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Login credentials must be configured for the user.                                                     | <p>A Cisco IPICS user can configure personal login credentials as described in the <a href="#">“Managing Your User Profile”</a> section on page 4-2.</p> <p>A Cisco IPICS operator can configure login credentials for a user as described in the <a href="#">“Managing Dial Login Information for a User”</a> section on page 3-9.</p> |
| Users in a Cisco Unified Communications Manager environment must subscribe to the Cisco IPICS service. | See the <a href="#">“Subscribing to the Cisco IPICS Service”</a> section on page C-3.                                                                                                                                                                                                                                                   |

In addition, users should be aware of the following guidelines:

- To obtain help with using the Cisco IPICS service on a Cisco Unified IP Phone, press the **Help** softkey.
- The Cisco IPICS operator configures the digit ID and digit password (PIN) that are used to log into the Cisco IPICS service, or configures the system so that these login credentials are not required. For more information, see the [“Managing Dial Login Information for a User”](#) section on page 3-9.
- The channels and VTGs that display in the menu are those that are available for a user when the Cisco IPICS service starts. To view an updated list of channels, press the **Update** softkey. The Cisco IPICS server does not automatically download channel or VTG information to the phone.
- Channels returned from Cisco IPICS to a Cisco Unified IP Phone must have a multicast connection defined in the Default Location field in the Dial Login tab for the user. (For more information about this tab, see the [“Managing Dial Login Information for a User”](#) section on page 3-9.) Channels that do not meet this requirement do not display on the phone.
- A Cisco Unified IP Phone receives a list that is composed of associated channels in alphabetized order, followed by a list of associated VTGs in alphabetical order.
- A Cisco Unified IP Phone does not receive direct two-way channels or direct dial channels because these channels require SIP unicast connections.
- By default, a phone automatically logs out of the Cisco IPICS service after 30 minutes of inactivity. (You can configure this setting in the Administration > Options window. For more information, see the [“Managing Cisco IPICS Options”](#) section on page 2-89.)
- A Cisco IPICS user can be logged in to the Cisco IPICS service with the same login credentials on two or more phones simultaneously. In this case, the user can send and receive audio on all of the phones.
- If a phone loses connectivity to the Cisco IPICS server while the phone user is logged in to the Cisco IPICS service, the service retains its current state and the user can continue to use the PTT functionality for the channel or VTG that is currently selected. However, the phone cannot connect to other channels or VTGs until connectivity to the server is re-established.
- When the Cisco Unified Wireless IP Phone 7921 is connected to an active Cisco IPICS channel or VTG, the phone goes into continuous listening mode. In this mode, the phone remains in an active receive state even if Cisco IPICS is not transmitting audio. In this state, the phone continues to draw power from the battery, which limits the battery life to approximately eight hours of talk time. (When the channel or VTG is deactivated, the phone enters standby mode to conserve power.) To ensure that you have adequate power supply for your Cisco Unified Wireless IP Phone 7921,

Cisco recommends that you maintain a backup battery for use with your phone. For more information about the Cisco Unified Wireless IP Phone 7921, see the Cisco Unified IP Phone documentation.

- You can customize the softkeys on the Cisco Unified Wireless IP Phone 7920/7921 to enable direct access to the Services menu. For details, see the Cisco Unified Communications Manager documentation.
- The PTT button on the Cisco Unified Wireless IP Phone 7921 does not require any special configuration. A user can use either this button or the PTT softkey to communicate in a VTG or a channel. The PTT button cannot be used to latch a channel. To latch a channel, you must press the **Latch** softkey.

To access the Cisco IPICS service from a Cisco Unified IP Phone, perform the following procedure:

#### Procedure

- 
- Step 1** Access the Services menu on the phone.
- The procedure for accessing the Service menu varies by phone model. See your Cisco IP Phone documentation for specific instructions.
- Step 2** Choose the **Cisco IPICS** service, then press the **Select** softkey.
- If the Cisco IPICS service is configured to prompt for login credentials, continue to [Step 3](#).
- If the Cisco IPICS service is not configured to prompt for login credentials and if more than one channel or VTG is assigned to you and activated for your use, Cisco IPICS displays the list of these channels and VTGs. In this case, go to [Step 4](#).
- If the Cisco IPICS service is not configured to prompt for login credentials and if only one channel or VTG is assigned to you and activated for your use, the channel or VTG becomes active automatically. In this case, go to [Step 5](#).
- Step 3** Enter your digit ID and digit password (PIN); then, press the **Submit** softkey.
- If more than one channel or VTG is assigned to you and activated for your use, Cisco IPICS displays the list of these channels and VTGs. In this case, continue to [Step 4](#).
- If only one channel or VTG is assigned to you and activated for your use, it becomes active automatically. In this case, go to [Step 5](#).
- Step 4** To participate in a channel or VTG, use the Navigation button to scroll to the channel or VTG in which you want to participate; then, press the **Select** softkey.
- When you choose a channel or VTG, it becomes active on your Cisco Unified IP Phone.
- Step 5** To talk on the channel or VTG, press and hold the **PTT** softkey.
- If you want to latch, or lock in, the channel or VTG, press the **Latch** softkey on the Cisco Unified IP Phone. You can disengage the latch by pressing the **Stop** softkey. (On some phone models, you must press the **More** softkey to see **Latch**.)
- Step 6** When you are done talking, release the **PTT** softkey to return to listen-only mode.
- Step 7** When you are done using the Cisco IPICS service, take one of these actions:
- If the **Logout** softkey appears, press that key. On some phone models, you must press the **More** softkey to see **Logout**.
  - Press the **Back** softkey and then press the **Logout** softkey.
-