



## Configure Deskphone Control

- [Prerequisites, page 1](#)
- [Configure Deskphone Control Workflow, page 1](#)
- [Add a CTI Service, page 2](#)
- [Enable Device for CTI, page 3](#)
- [Desk Phone Video Configuration, page 3](#)
- [Enable Video Rate Adaptation, page 5](#)
- [Configure User Associations, page 6](#)
- [Reset Devices, page 8](#)

## Prerequisites

The Cisco CTIManager service must be running in the Cisco Unified Communications Manager cluster.

## Configure Deskphone Control Workflow

### Procedure

|               | Command or Action  | Purpose  |
|---------------|--|--|
| <b>Step 1</b> | <a href="#">Add a CTI Service, on page 2</a>               | Create a CTI UC service, the information is used by Jabber to locate the CTI Server.                   |
| <b>Step 2</b> | <a href="#">Enable Device for CTI, on page 3</a>           | Allows Cisco Jabber desktop clients to control the desk phone of the user.                             |
| <b>Step 3</b> | <a href="#">Desk Phone Video Configuration, on page 3.</a> | Let users receive video transmitted to their desk phone devices on their computers through the client. |

|               | Command or Action                                       | Purpose   |
|---------------|---|---|
| <b>Step 4</b> | <a href="#">Enable Video Rate Adaptation, on page 5</a> | The client uses video rate adaptation to negotiate optimum video quality. |
| <b>Step 5</b> | <a href="#">Configure User Associations, on page 6</a>  | Associate users with devices and assign users to access control groups.   |
| <b>Step 6</b> | <a href="#">Reset Devices, on page 8</a>                | You must reset devices after you configure user associations.             |

## Add a CTI Service

The CTI service provides Jabber with the address of the UDS device service. The UDS device service provides a list of devices associated with the user.

### Procedure

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- Step 1** Open the **Cisco Unified CM Administration** interface.
- Step 2** Select **User Management > User Settings > UC Service**.  
The **Find and List UC Services** window opens.
- Step 3** Select **Add New**.  
The **UC Service Configuration** window opens.
- Step 4** In the **Add a UC Service** section, select **CTI** from the **UC Service Type** drop-down list.
- Step 5** Select **Next**.
- Step 6** Provide details for the instant messaging and presence service as follows:
- Specify a name for the service in the **Name** field.  
The name you specify displays when you add services to profiles. Ensure the name you specify is unique, meaningful, and easy to identify.
  - Specify the CTI service address in the **Host Name/IP Address** field.
  - Specify the port number for the CTI service in the **Port** field.
- Step 7** Select **Save**.
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### What to Do Next

Add the CTI service to your service profile.

## Apply a CTI Service

After you add a CTI service on Cisco Unified Communications Manager, you must apply it to a service profile so that the client can retrieve the settings.

### Before You Begin

- Create a service profile if none already exists or if you require a separate service profile for CTI.
- Add a CTI service.

### Procedure

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- Step 1** Open the **Cisco Unified CM Administration** interface.
- Step 2** Select **User Management > User Settings > Service Profile**.  
**Find and List Service Profiles** window opens.
- Step 3** Find and select your service profile.  
**Service Profile Configuration** window opens.
- Step 4** Navigate to **CTI Profile** section, and select up to three services from the following drop-down lists:
- **Primary**
  - **Secondary**
  - **Tertiary**
- Step 5** Select **Save**.
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## Enable Device for CTI

If you want Cisco Jabber desktop clients to be able to control the desk phone of the user, you must select the **Allow Control of Device from CTI** option when you create the device for the user.

### Procedure

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- Step 1** In Cisco Unified CM Administration, click **Device > Phone** and search for the phone.
- Step 2** In the **Device Information** section, check **Allow Control of Device from CTI**.
- Step 3** Click **Save**.
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## Desk Phone Video Configuration

Desk phone video capabilities let users receive video transmitted to their desk phone devices on their computers through the client.

### Set Up Desk Phone Video

To set up desk phone video, you must complete the following steps:

- 1 Physically connect the computer to the computer port on the desk phone device.

You must physically connect the computer to the desk phone device through the computer port so that the client can establish a connection to the device. You cannot use desk phone video capabilities with wireless connections to desk phone devices.


**Tip**

If users have both wireless and wired connections available, they should configure Microsoft Windows so that wireless connections do not take priority over wired connections. See the following Microsoft documentation for more information: *An explanation of the Automatic Metric feature for Internet Protocol routes*.

- 2 Enable the desk phone device for video in Cisco Unified Communications Manager.

- 3 Install Cisco Media Services Interface on the computer.

Cisco Media Services Interface provides the Cisco Discover Protocol (CDP) driver that enables the client to do the following:

- Discover the desk phone device.
- Establish and maintain a connection to the desk phone device using the CAST protocol.


**Note**

Download the **Cisco Media Services Interface** installation program from the download site on [cisco.com](http://cisco.com).

### Desk Phone Video Considerations

Review the following considerations and limitations before you provision desk phone video capabilities to users:

- You cannot use desk phone video capabilities on devices if video cameras are attached to the devices, such as a Cisco Unified IP Phone 9971. You can use desk phone video capabilities if you remove video cameras from the devices.
- You cannot use desk phone video capabilities with devices that do not support CTI.
- Video desktop sharing, using the BFCP protocol, is not supported with desk phone video.
- It is not possible for endpoints that use SCCP to receive video only. SCCP endpoints must send and receive video. Instances where SCCP endpoints do not send video result in audio only calls.
- 7900 series phones must use SCCP for desk phone video capabilities. 7900 series phones cannot use SIP for desk phone video capabilities.
- If a user initiates a call from the keypad on a desk phone device, the call starts as an audio call on the desk phone device. The client then escalates the call to video. For this reason, you cannot make video calls to devices that do not support escalation, such as H.323 endpoints. To use desk phone video capabilities with devices that do not support escalation, users should initiate calls from the client.
- A compatibility issue exists with Cisco Unified IP Phones that use firmware version SCCP45.9-2-1S. You must upgrade your firmware to version SCCP45.9-3-1 to use desk phone video capabilities.

- Some antivirus or firewall applications, such as Symantec EndPoint Protection, block inbound CDP packets, which disables desk phone video capabilities. You should configure your antivirus or firewall application to allow inbound CDP packets.

See the following Symantec technical document for additional details about this issue: *Cisco IP Phone version 7970 and Cisco Unified Video Advantage is Blocked by Network Threat Protection*.

- You must not select the **Media Termination Point Required** checkbox on the SIP trunk configuration for Cisco Unified Communications Manager. Desk phone video capabilities are not available if you select this checkbox.

### Desk Phone Video Troubleshooting

If you encounter an error that indicates desk phone video capabilities are unavailable or the desk phone device is unknown, do the following:

- 1 Ensure you enable the desk phone device for video in Cisco Unified Communications Manager.
- 2 Reset the physical desk phone.
- 3 Exit the client.
- 4 Run services.msc on the computer where you installed the client.
- 5 Restart Cisco Media Services Interface.
- 6 Restart the client.

## Enable Video Rate Adaptation

The client uses video rate adaptation to negotiate optimum video quality. Video rate adaptation dynamically increases or decreases video quality based on network conditions.

To use video rate adaptation, you must enable Real-Time Transport Control Protocol (RTCP) on Cisco Unified Communications Manager.

**Note**

RTCP is enabled on software phone devices by default. However, you must enable RTCP on desk phone devices.

## Enable RTCP on Common Phone Profiles

You can enable RTCP on a common phone profile to enable video rate adaptation on all devices that use the profile.

**Note**

RTCP is an integral component of Jabber Telephony services. Jabber will continue to send RTCP packets even when disabled.

### Procedure

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- Step 1** Open the **Cisco Unified CM Administration** interface.
  - Step 2** Select **Device > Device Settings > Common Phone Profile**.  
The **Find and List Common Phone Profiles** window opens.
  - Step 3** Specify the appropriate filters in the **Find Common Phone Profile where** field and then select **Find** to retrieve a list of profiles.
  - Step 4** Select the appropriate profile from the list.  
The **Common Phone Profile Configuration** window opens.
  - Step 5** Locate the **Product Specific Configuration Layout** section.
  - Step 6** Select **Enabled** from the **RTCP** drop-down list.
  - Step 7** Select **Save**.
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## Enable RTCP on Device Configurations

You can enable RTCP on specific device configurations instead of a common phone profile. The specific device configuration overrides any settings you specify on the common phone profile.

### Procedure

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- Step 1** Open the **Cisco Unified CM Administration** interface.
  - Step 2** Select **Device > Phone**.  
The **Find and List Phones** window opens.
  - Step 3** Specify the appropriate filters in the **Find Phone where** field and then select **Find** to retrieve a list of phones.
  - Step 4** Select the appropriate phone from the list.  
The **Phone Configuration** window opens.
  - Step 5** Locate the **Product Specific Configuration Layout** section.
  - Step 6** Select **Enabled** from the **RTCP** drop-down list.
  - Step 7** Select **Save**.
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## Configure User Associations

When you associate a user with a device, you provision that device to the user.

### Before You Begin

Create and configure Cisco Jabber devices.

## Procedure

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- Step 1** Open the **Cisco Unified CM Administration** interface.
- Step 2** Select **User Management > End User**.  
The **Find and List Users** window opens.
- Step 3** Specify the appropriate filters in the **Find User where** field and then select **Find** to retrieve a list of users.
- Step 4** Select the appropriate user from the list.  
The **End User Configuration** window opens.
- Step 5** Locate the **Service Settings** section.
- Step 6** Select **Home Cluster**.
- Step 7** Select the appropriate service profile for the user from the **UC Service Profile** drop-down list.
- Step 8** Locate the **Device Information** section.
- Step 9** Select **Device Association**.  
The **User Device Association** window opens.
- Step 10** Select the devices to which you want to associate the user. Jabber only supports a single softphone association per device type. For example, only one TCT, BOT, CSF, and TAB device can be associated with a user.
- Step 11** Select **Save Selected/Changes**.
- Step 12** Select **User Management > End User** and return to the **Find and List Users** window.
- Step 13** Find and select the same user from the list.  
The **End User Configuration** window opens.
- Step 14** Locate the **Permissions Information** section.
- Step 15** Select **Add to Access Control Group**.  
The **Find and List Access Control Groups** dialog box opens.
- Step 16** Select the access control groups to which you want to assign the user.  
At a minimum you should assign the user to the following access control groups:
- **Standard CCM End Users**
  - **Standard CTI Enabled**
- Remember** If you are provisioning users with secure phone capabilities, do not assign the users to the **Standard CTI Secure Connection** group.
- Certain phone models require additional control groups, as follows:
- Cisco Unified IP Phone 9900, 8900, or 8800 series or DX series, select **Standard CTI Allow Control of Phones supporting Connected Xfer and conf**.
  - Cisco Unified IP Phone 6900 series, select **Standard CTI Allow Control of Phones supporting Rollover Mode**.
- Step 17** Select **Add Selected**.  
The **Find and List Access Control Groups** window closes.
- Step 18** Select **Save** on the **End User Configuration** window.
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# Reset Devices

After you create and associate users with devices, you should reset those devices.

## Procedure

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- Step 1** Open the **Cisco Unified CM Administration** interface.
  - Step 2** Select **Device > Phone**.  
The **Find and List Phones** window opens.
  - Step 3** Specify the appropriate filters in the **Find Phone where** field and then select **Find** to retrieve a list of devices.
  - Step 4** Select the appropriate device from the list.  
The **Phone Configuration** window opens.
  - Step 5** Locate the **Association Information** section.
  - Step 6** Select the appropriate directory number configuration.  
The **Directory Number Configuration** window opens.
  - Step 7** Select **Reset**.  
The **Device Reset** dialog box opens.
  - Step 8** Select **Reset**.
  - Step 9** Select **Close** to close the **Device Reset** dialog box.
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