



# CTI Route Point Setup

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This chapter provides information to configure CTI route points and CTI ports.

For additional information, see topics related to computer telephony integration and trusted relay points in the *Cisco Unified Communications Manager System Guide*.

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## About CTI Route Point Setup

A computer telephony integration (CTI) route point designates a virtual device that can receive multiple, simultaneous calls for application-controlled redirection.

For first-party call control, you can optionally add a CTI port for each active voice line (the CTI application determines this). Applications that use CTI route points and CTI ports include Cisco IP Softphone, Cisco Unified Communications Manager Auto-Attendant, and Cisco IP Interactive Voice Response System. After you add a CTI route point to Cisco Unified Communications Manager Administration, information from the RIS Data Collector service displays in the CTI Route Point Configuration window. When available, the IP address of the device and the name of the Cisco Unified Communications Manager with which the device registered display.



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**Note** You must not associate CTI route points with directory numbers (DNs) that are members of line groups and, by extension, that are members of hunt lists. If a DN is a member of a line group or hunt list, you cannot associate that DN with a CTI route point that you configure with the CTI Route Point Configuration window.

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For detailed instructions on how to configure CTI route points and CTI ports that are associated with these applications, see the documentation and online help that is included with these applications.

# CTI Route Point Setup

In Cisco Unified Communications Manager Administration, use the **Device > CTI Route Point** menu path to configure CTI route points.

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## CTI Route Point Configuration Tips

After you add a CTI route point to Cisco Unified Communications Manager Administration, information from the RIS Data Collector service displays in the CTI Route Point Configuration window. When available, the device IP address and the name of the Cisco Unified Communications Manager with which the device registered display.

You can add and configure directory numbers for a CTI route point.

For instructions on how to reset a CTI route point, see the descriptions of the Reset Selected and Reset buttons.

# CTI Route Point Deletions

Because you can delete a CTI route point that is assigned to one or more directory numbers, you should determine which directory numbers are using the CTI route point. To determine which directory numbers are using the CTI route point, choose Dependency Records link from the Related Links drop-down list box in the CTI Route Point Configuration window and click Go. If the dependency records are not enabled for the system, the dependency records summary window displays a message. If you try to delete a CTI route point that is in use, Cisco Unified Communications Manager displays a message.

If you delete a CTI Route Point that has a directory number assigned to it, you can find the directory number by using the Route Plan Report. You can also delete the directory number by using the Route Plan Report.

# CTI Route Point Settings

The following table describes the CTI route point settings.

**Table 1: CTI Route Point Settings**

| Field                       | Description  |
|-----------------------------|--|
| Device Name                 | Enter unique identifier for this device, from 1 to 15 characters, including alphanumeric, dot, dash, or underscores.   |
| Description                 | Enter a descriptive name for the CTI route point. The description can include up to 50 characters in any language, but it cannot include double-quotes ("), percentage sign (%), ampersand (&), back-slash (\), or angle brackets (<>).  |
| Device Pool                 | Choose the name of a Device Pool. The device pool specifies the collection of properties for this device, including Cisco Unified Communications Manager Group, Date/Time Group, Region, and Calling Search Space for auto-registration.   |
| Common Device Configuration | Choose the common device configuration to which you want this CTI route point assigned. The common device configuration includes the attributes (services or features) that are associated with a particular user. Configure common device configurations in the Common Device Configuration window.   |
| Calling Search Space        | <p>From the drop-down list box, choose a calling search space. The calling search space specifies the collection of partitions that are searched to determine how a collected (originating) number should be routed.</p> <p>You can configure the number of calling search spaces that display in this drop-down list box by using the Max List Box Items enterprise parameter. If more calling search spaces exist than the Max List Box Items enterprise parameter specifies, the Find button displays next to the drop-down list box. Click the Find button to display the Find and List Calling Search Space window, then find and choose a calling search space name.</p> <p><b>Note</b> To set the maximum list box items, choose <b>System &gt; Enterprise Parameters</b> and choose CCMAdmin Parameters.</p> |

| Field       | Description   |
|-------------|---|
| Location    | <p>Use locations to implement call admission control (CAC) in a centralized call-processing system. CAC enables you to regulate audio quality and video availability by limiting the amount of bandwidth that is available for audio and video calls over links between locations. The location specifies the total bandwidth that is available for calls to and from this location.</p> <p>From the drop-down list box, choose the appropriate location for this CTI route point.</p> <p>A location setting of Hub_None means that the locations feature does not keep track of the bandwidth that this CTI route point consumes. A location setting of Phantom specifies a location that enables successful CAC across intercluster trunks that use H.323 protocol or SIP.</p> <p>To configure a new location, use the <b>System &gt; Location</b> menu option.</p> <p>For an explanation of location-based CAC across intercluster trunks, see the <i>Cisco Unified Communications Manager System Guide</i>.</p> |
| User Locale | <p>From the drop-down list box, choose the locale that is associated with the CTI route point. The user locale identifies a set of detailed information to support users, including language and font.</p> <p>Cisco Unified Communications Manager makes this field available only for CTI route points that support localization.</p> <p><b>Note</b> If no user locale is specified, Cisco Unified Communications Manager uses the user locale that is associated with the device pool.</p> <p><b>Note</b> If the users require that information be displayed (on the phone) in any language other than English, verify that the locale installer is installed before configuring user locale. See the Cisco Unified Communications Manager locale installer that is in the <i>Cisco Unified Communications Operating System Administration Guide</i>.</p>   |

| Field                         | Description  |
|-------------------------------|--|
| Media Resource Group List     | <p>Choose the appropriate Media Resource Group List. A Media Resource Group List comprises a prioritized grouping of media resource groups. An application chooses the required media resource, such as a Music On Hold server, from the available media resources according to the priority order that is defined in a Media Resource Group List.</p> <p>If you choose &lt;none&gt;, Cisco Unified Communications Manager uses the Media Resource Group that is defined in the device pool.</p> <p>For more information, see topics related to media resource management in the <i>Cisco Unified Communications Manager System Guide</i>.</p> |
| Network Hold MOH Audio Source | <p>To specify the audio source that plays when the network initiates a hold action, click the drop-down arrow and choose an audio source from the list that displays.</p> <p>If you do not choose an audio source, Cisco Unified Communications Manager uses the audio source that is defined in the device pool or the system default if the device pool does not specify an audio source ID.</p> <p>You define audio sources in the Music On Hold Audio Source Configuration window. For access, choose <b>Media Resources &gt; Music On Hold Audio Source</b>.</p>  |
| User Hold MOH Audio Source    | <p>To specify the audio source that plays when an application initiates a hold action, click the drop-down arrow and choose an audio source from the list that displays.</p> <p>If you do not choose an audio source, Cisco Unified Communications Manager uses the audio source that is defined in the device pool or the system default if the device pool does not specify an audio source ID.</p> <p>You define audio sources in the Music On Hold Audio Source Configuration window. For access, choose <b>Media Resources &gt; Music On Hold Audio Source</b>.</p>   |

| Field                   | Description  |
|-------------------------|--|
| Use Trusted Relay Point | <p>From the drop-down list box, enable or disable whether Cisco Unified Communications Manager inserts a trusted relay point (TRP) device with this media endpoint. Choose one of the following values:</p> <ul style="list-style-type: none"> <li>• <b>Default</b>—If you choose this value, the device uses the Use Trusted Relay Point setting from the common device configuration with which this device associates.</li> <li>• <b>Off</b>—Choose this value to disable the use of a TRP with this device. This setting overrides the Use Trusted Relay Point setting in the common device configuration with which this device associates.</li> <li>• <b>On</b>—Choose this value to enable the use of a TRP with this device. This setting overrides the Use Trusted Relay Point setting in the common device configuration with which this device associates.</li> </ul> <p>A Trusted Relay Point (TRP) device designates an MTP or transcoder device that is labeled as Trusted Relay Point.</p> <p>Cisco Unified Communications Manager places the TRP closest to the associated endpoint device if more than one resource is needed for the endpoint (for example, a transcoder or RSVPAgent).</p> <p>If both TRP and MTP are required for the endpoint, TRP gets used as the required MTP. See the <i>Cisco Unified Communications Manager System Guide</i> for details of call behavior.</p> <p>If both TRP and RSVPAgent are needed for the endpoint, Cisco Unified Communications Manager first tries to find an RSVPAgent that can also be used as a TRP.</p> <p>If both TRP and transcoder are needed for the endpoint, Cisco Unified Communications Manager first tries to find a transcoder that is also designated as a TRP.</p> <p>See the <i>Cisco Unified Communications Manager System Guide</i> for a complete discussion of network virtualization and trusted relay points.</p> |

| Field  | Description  |
|--|--|
| Calling Party Transformation CSS                 | <p>This setting allows you to localize the calling party number on the device. Make sure that the Calling Party Transformation CSS that you choose contains the calling party transformation pattern that you want to assign to this device.</p> <p><b>Tip</b> Before the call occurs, the device must apply the transformation by using digit analysis. If you configure the Calling Party Transformation CSS as None, the transformation does not match and does not get applied. Ensure that you configure the Calling Party Transformation Pattern in a non-null partition that is not used for routing.</p>   |
| Geolocation                                      | <p>From the drop-down list box, choose a geolocation.</p> <p>You can choose the Unspecified geolocation, which designates that this device does not associate with a geolocation.</p> <p>You can also choose a geolocation that has been configured with the <b>System &gt; Geolocation Configuration</b> menu option.</p> <p>For an explanation of geolocations, including configuration details, see the <i>Cisco Unified Communications Manager Features and Services Guide</i>.</p> <p>For an overview and details of how logical partitioning uses geolocations, see the <i>Cisco Unified Communications Manager Features and Services Guide</i>.</p> |
| Use Device Pool Calling Party Transformation CSS | <p>To use the Calling Party Transformation CSS that is configured in the device pool that is assigned to this device, check this check box. If you do not check this check box, the device uses the Calling Party Transformation CSS that you configured in the CTI Route Point Configuration window.</p>  |

## Synchronize CTI Route Point

To synchronize a CTI route point with the most recent configuration changes, perform the following procedure, which applies any outstanding configuration settings in the least-intrusive manner possible. (For example, a reset/restart may not be required on some affected devices.)

## Procedure

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- Step 1** Choose **Device > CTI Route Point**.  
The Find and List CTI Route Points window displays.
- Step 2** Choose the search criteria to use.
- Step 3** Click Find.  
The window displays a list of CTI route points that match the search criteria.
- Step 4** Check the check boxes next to the CTI route points that you want to synchronize. To choose all CTI route points in the window, check the check box in the matching records title bar.
- Step 5** Click Apply Config to Selected.  
The Apply Configuration Information dialog displays.
- Step 6** Click OK.
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