



Transcoder

A transcoder is a device that takes the output stream of one codec and transcodes (converts) it from one compression type to another compression type. For example, it could take an output stream from a G.711 codec and transcode (convert) it in real time to a G.729 input stream accepted by a G.729 codec. Transcoders for this Cisco CallManager release transcode between G.711, G.723, and G.729 codecs. In addition, a transcoder provides MTP capabilities, and may be used to enable supplementary services for H.323 endpoints when required.

The Cisco CallManager invokes a transcoder on behalf of endpoint devices when the two devices are using different codecs, and would normally not be able to communicate. When inserted into a call, the transcoder converts the data streams between the two disparate codecs in order to enable communications between them.

A transcoder requires specific hardware in order to run. The same hardware can support Conference Bridges, transcoders, or PRI interfaces.

When configured as a transcoder, this hardware provides a designated number of streaming mechanisms, each of which is capable of transcoding data streams between disparate codecs, and enabling supplementary services, if required, for calls to H.323 endpoints. The transcoder registers with its specified primary Cisco CallManager, and informs that Cisco CallManager how many transcoder resources it supports.



Note

MTPs are capable of enabling supplementary services for H.323 endpoints, but they cannot transcode data streams. You cannot have both transcoders and MTPs registered with the same Cisco CallManager at the same time.

Each transcoder attempts to register with a given a list of Cisco CallManagers that are arranged in priority order. The first Cisco CallManager in the list is the primary (or publisher) Cisco CallManager. If the primary Cisco CallManager fails, it attempts to register with the next available Cisco CallManager in the list. Each transcoder can register with only one Cisco CallManager at a time. The transcoder always registers with its primary Cisco CallManager and, after a failure, it re-registers with the primary Cisco CallManager. The system may have multiple transcoders, each of which is registered to the same or many Cisco CallManager as desired, depending on how your system is configured.

Multiple transcoders may be registered with the same Cisco CallManager; however, when more than one transcoder is registered with a given Cisco CallManager, that Cisco CallManager controls the set of resources for each of the transcoders. The transcoders may be distributed across a networked system as desired.

For example, transcoder 1 is configured for 16 transcoder resources. Transcoder 2 is also configured for 16 transcoder resources. If both transcoders register with the same Cisco CallManager, that Cisco CallManager maintains both sets of resources for a total of 32 registered transcoder resources.

When the Cisco CallManager determines that the two endpoints of a call are using disparate codecs and cannot communicate directly, it inserts a transcoder into the call to transcode the datastreams between them. The transcoder is not visible to either the user or the endpoints involved in a call.

Transcoder resources are always allocated from the registered transcoder that has the most available resources.

The Cisco CallManager also uses transcoder resources as MTPs to enable supplementary services for H.323 endpoints when required. In this capacity, when the Cisco CallManager determines that an endpoint in a call requires an MTP, it allocates a transcoder resource, and inserts it into the call, where it acts like a normal MTP. The transcoder is invisible to both the users of the system, and the endpoint on whose behalf it was inserted. If a transcoder resource is not available when it is needed, the call is connected without using a transcoder resource, and supplementary services are not available on that call.

Additional Information

The following list contains additional information related to Transcoder:

- Media Termination Point, page 30-1
- Conference Bridge, page 29-1

Related Procedures

The following list contains procedures related to Transcoder:

- Configuring a Transcoder, page 33-3
- Updating a Transcoder, page 33-4
- Copying a Transcoder, page 33-5
- Deleting a Transcoder, page 33-6

Configuring a Transcoder

This section describes how to configure a Transcoder.

Procedure

- Step 1** Open Cisco CallManager Administration.
- Step 2** Click **Service > Transcoder**.
- Step 3** Enter a MAC address (must be at least 12 characters) in the MAC Address field.
The Description field is automatically generated from the MAC address you provide.
- Step 4** Enter any special load information into the Special Load Information field, or leave blank to use default.
- Step 5** Select a device pool from the drop-down menu or choose **Default** in the Device Pool field.
- Step 6** Click **Insert**.

The page refreshes showing specific information, including the status, for the transcoder you just configured. The transcoder should now be in the list on the left side of the page.

Additional Information

The following list contains additional information related to this procedure:

- Transcoder, page 33-1
- Media Termination Point, page 30-1
- Conference Bridge, page 29-1

Related Procedures

The following list contains other related procedures:

- Updating a Transcoder, page 33-4
- Copying a Transcoder, page 33-5
- Deleting a Transcoder, page 33-6

Updating a Transcoder

This section describes how to update a transcoder.

Procedure

- Step 1** Open Cisco CallManager Administration.
 - Step 2** Click **Service > Transcoder**.
 - Step 3** Select the transcoder you want to update from the list on the left side of the page. The page refreshes displaying the transcoder you selected.
 - Step 4** Make the desired changes to the transcoder and click **Update**.
The page refreshes again, showing the updated transcoder.
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Additional Information

The following list contains additional information related to this procedure:

- Transcoder, page 33-1
- Media Termination Point, page 30-1
- Conference Bridge, page 29-1

Related Procedures

The following list contains other related procedures:

- Configuring a Transcoder, page 33-3
- Copying a Transcoder, page 33-5
- Deleting a Transcoder, page 33-6

Copying a Transcoder

This section describes how to copy a transcoder.

Procedure

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- Step 1** Open Cisco CallManager Administration.
 - Step 2** Click **Service > Transcoder**.
 - Step 3** Select the transcoder you want to copy from the list on the left side of the page. The page refreshes displaying the transcoder you selected.
 - Step 4** Click **Copy**. The page refreshes again and displays the transcoder with a Copy of... name in the Current Transcoder field.
 - Step 5** Make appropriate changes to customize the new transcoder and click **Insert**.
The screen refreshes and the new transcoder appears in the transcoder list on the left side of the page.
 - Step 6** To build another transcoder that is similar to the current transcoder, click **Copy**, and repeat steps 1 through 5.
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Additional Information

The following list contains additional information related to this procedure:

- Transcoder, page 33-1
- Media Termination Point, page 30-1
- Conference Bridge, page 29-1

Related Procedures

The following list contains other related procedures:

- Configuring a Transcoder, page 33-3
- Updating a Transcoder, page 33-4
- Deleting a Transcoder, page 33-6

Deleting a Transcoder

This section describes how to delete a transcoder.

Procedure

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- Step 1** Open Cisco CallManager Administration.
- Step 2** Click **Service > Transcoder**.
- Step 3** Select the transcoder you want to delete from the list on the left side of the page. The page refreshes, displaying the transcoder you selected.
- Step 4** Click **Delete**. A message displays stating that you are about to permanently delete this transcoder and that this action cannot be undone.
- Step 5** Click **OK** if you want to continue or **Cancel** to cancel the deletion.
- When the page is refreshed, the transcoder you deleted should no longer appear in the transcoder list.
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Additional Information

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- Transcoder, page 33-1
- Media Termination Point, page 30-1
- Conference Bridge, page 29-1

Related Procedures

The following list contains other related procedures:

- Configuring a Transcoder, page 33-3
- Updating a Transcoder, page 33-4
- Copying a Transcoder, page 33-5

