



CHAPTER 26

Redistribute Live TV

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- [Reference, page 26-6](#)



Audience

We prepared this material with specific expectations of you.

- ✓ You will use Cisco Cast to deliver live television feeds to presentation systems at high-bandwidth sites.
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Concepts

- [Guidelines, page 26-1](#)
- [Restrictions, page 26-2](#)

Guidelines

- [Site Assessment for Live Video Programming, page 26-1](#)

Site Assessment for Live Video Programming

Organizations that use *Cisco Cast* tend to show live video programming at their sites with the greatest bandwidth capacity, such as their main site. Live video programming is not suitable for remote branch offices with low bandwidth capacity.

When you plan how many TV channels to configure, consider the actual bandwidth capacity in your WAN and at each remote site where you will use *Cisco Cast*. The typical rate of bandwidth consumption will be in the range from 2 Mbps to 16 Mbps per channel, per site.

Restrictions

- [User Permissions Restrictions, page 26-2](#)
- [Channel Count Restrictions, page 26-2](#)
- [Codec Restrictions, page 26-2](#)

User Permissions Restrictions

**Note**

Features of Cisco Cast are hidden from you until your user role assignment is **APPLICATION MANAGER** and you have explicit **WRITE** permissions (CSCtr05337).

Channel Count Restrictions

Features of this *Cisco Cast* release support 99 or fewer channels of live broadcast programming and VoD programming, combined.

Codec Restrictions

Any digital encoders that you use for live broadcast channels must adhere to the MPEG2-TS standard for streaming and must support at least one of these codecs:

- MPEG1
- MPEG2
- MPEG4/h.264 (supported on DMP 4400G endpoints only)

For this reason, we recommend that you use a Scientific Atlanta 9032SD encoder or 9050HD encoder to encode the video streams that your DMPs use for *Cisco Cast* channels.

Procedures

- [Add Channels, page 26-3](#)
- [Edit Channels, page 26-3](#)
- [Reassign Channel Numbers, page 26-4](#)
- [Delete Channels, page 26-5](#)
- [List Only the Defined \(Active\) or Undefined \(Inactive\) TV Channels, page 26-5](#)

Add Channels

You can define many attributes for a new TV channel in your lineup. Permitted channel assignments range from 1 to 99.

Procedure

- Step 1** Click the **TV Channels** tab.
- Step 2** In the Channel Number column, identify the channel to be defined and then, in the corresponding row, click **Set Up Channel** in the Actions column.
- The Add a New Channel dialog box opens.
- Step 3** Choose the options or enter the values that meet your requirements.
- Step 4** Click **Add a Channel** to save your entries.

OR

- Click **Cancel** to discard your entries.
- Step 5** Stop. You have completed this procedure.
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Related Topics

- [Elements to Manage TV Channels, page 26-6](#)

Edit Channels

Procedure

- Step 1** Click the **TV Channels** tab.
- Step 2** Notice where the Channel Number column intersects a row that describes the targeted channel
- Step 3** Click the arrow (▼) in that row's Actions column
- The Actions menu expands so that you can see and choose among its options.
- Step 4** Click **Edit Channel Setting**.
- The Edit an Existing Channel dialog box opens.
- Step 5** Choose the options or enter the values that meet your requirements.
- Step 6** Click **Update Channel** to save your entries.

OR

- Click **Cancel** to discard your entries.
- Step 7** Stop. You have completed this procedure.
-

Related Topics

- [Elements to Manage TV Channels, page 26-6](#)

Reassign Channel Numbers

Procedure


Step 1 Click the **TV Channels** tab.

Step 2 In the Channel Number column, identify the channel to be edited.

Step 3 Do one of the following.


- *Would you like to reassign this channel to the nearest unused number?*

When you will use the nearest number

- a. Click the up () arrow to associate this channel definition with whichever *lower-numbered* channel is nearest among the undefined channels.

(The arrow points up because lower rows are reserved for lower-numbered channels.)

OR


Click the down () arrow to associate this channel definition with whichever *higher-numbered* channel is nearest among the undefined channels.

(The arrow points down because higher rows are reserved for higher-numbered channels).

- b. Proceed to [Step 4](#).

- *Would you like to specify the number for this channel?*

When you will choose a specific number

- a. Notice where the Channel Number column intersects a row that describes the targeted channel.
- b. Click the arrow () in that row's Actions column.

The Actions menu expands so that you can see and choose among its options.

- c. Click **Reassign to Any Unused Channel**.
- d. Choose from the list in the Actions column which channel number to assign to the targeted channel.
- e. Proceed to [Step 4](#).

Step 4 Stop. You have completed this procedure.

Related Topics

- [Elements to Manage TV Channels, page 26-6](#)
- “Reassign to Nearest Unused Channel” (in [Table 26-1 on page 26-7](#))

Delete Channels

Procedure

- Step 1** Click the **TV Channels** tab.
- Step 2** In the Channel Number column, identify the channel to be deleted; then, click the arrow (⌵) in the Actions column for that row.
- The Actions menu expands so that you can see and choose among its options.
- Step 3** Click **Delete This Channel**.
- The Delete Confirmation dialog box opens.
- Step 4** Click **Yes** to delete the channel.
- OR**
- Click **No** to retain the channel.
- Step 5** Stop. You have completed this procedure.
-

Related Topics

- [Elements to Manage TV Channels, page 26-6](#)

List Only the Defined (Active) or Undefined (Inactive) TV Channels

You can filter the TV Channels table so that it describes defined channels only or undefined channels only. By default, the table describes all channels.

Procedure

- Step 1** Click the **TV Channels** tab.
- Step 2** From the Channel View list above the column headings, choose one option.
- All Channels (default)—Shows the combination of all defined and undefined channels.
 - Active Channels—Shows only the defined channels.
 - Inactive Channels—Shows only the channels that are not yet defined.
- Step 3** Stop. You have completed this procedure.
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Related Topics

- [Elements to Manage TV Channels, page 26-6](#)

Reference

- [Software UI and Field Reference Tables, page 26-6](#)

Software UI and Field Reference Tables

- [Elements to Manage TV Channels, page 26-6](#)

Elements to Manage TV Channels

Navigation Path






Cast > TV Channels

The TV Channels table describes the defined and undefined TV channels for your network and includes features that help you to manage these channels.

Table 26-1 *Elements of the TV Channels Table*

Element	Description
Channel View list	<p>Enables or disables a filtered view of which channels this table describes, based on which option you choose:</p> <ul style="list-style-type: none"> • All Channels—Shows the combination of all defined and undefined channels. • Active Channels—Shows only the defined channels. • Inactive Channels—Shows only the channels that are not yet defined.
Channel Number	<p>One numeral per row, in the range from 1 to 99, where any numeral can be the TV channel number that you associate with a particular multicast stream. The default behavior for this table is that it shows all 99 possible channel numbers, one per row.</p> <p>Your choice from the Channel View list might limit how many rows the table contains, and this can affect indirectly how many channel numbers you see.</p> <p>When you sort the table by clicking a column heading, channel numbers might be rearranged temporarily into an unrecognizable sequence. To sort channels back into the expected sequence if their sequence has become unrecognizable, click the Channel Number column heading.</p>
Channel Name	<p>Blank when the corresponding row describes an undefined TV channel. Otherwise, shows a value that you entered or an option that you chose from a list when you defined the channel. To understand these values, see Table 26-2 on page 26-8.</p>
Description	
Multicast Address: Port	
Call Letters for Channel	

Table 26-1 Elements of the TV Channels Table (continued)

Element	Description
Reassign to Nearest Unused Channel	<p>Two buttons, either of which can change the association between a channel definition and a channel number. The channel definition in the corresponding row becomes associated instead with the closest channel (of a higher number or a lower number, respectively) that is undefined. These buttons have no effect when every channel is already defined.</p> <p>The first row and last row of this table will only ever show one of these buttons apiece. These rows differ from all other rows in the table because you cannot use any channel number that is lower than the lowest supported channel number or higher than the highest supported channel number. The first row shows only , while the last row shows only .</p> <ul style="list-style-type: none"> • —Associates the channel definition that the corresponding row describes with whichever <i>lower-numbered</i> channel is nearest among the undefined channels. The arrow points up because table rows above this row are reserved for lower-numbered channels. • —Associates the channel definition that the corresponding row describes with whichever <i>higher-numbered</i> channel is nearest among the undefined channels. The arrow points down because table rows above this row are reserved for higher-numbered channels.
Actions	<p>One of these:</p> <ul style="list-style-type: none"> • Set Up Channel—Opens the dialog box where you can enter values and define attributes for a TV channel. This button is visible only in rows that describe undefined TV channels. • —A list from which you can choose one of the following options. This list is visible only in rows that describe defined TV channels. <ul style="list-style-type: none"> – Edit Channel Settings—Opens the dialog box where you can edit the values and attributes of a channel that is already defined. – Reassign to Any Unused Channel—Associates the channel definition that the corresponding row describes with whichever channel is nearest among the undefined channels. The new channel number might be higher or lower than whichever channel number was in effect until you changed it. – Delete This Channel—Deletes all entries and attribute values from the definition of the channel that the corresponding row describes. The relevant channel number will not be associated with any defined channel unless or until you define a new channel for it or associate an existing channel with it.

Related Topics

- [Add Channels, page 26-3](#)
- [Edit Channels, page 26-3](#)
- [Reassign Channel Numbers, page 26-4](#)

Elements to Define Channel Settings

Navigation Path


- Cast > TV Channels > Set Up Channel
- Cast > TV Channels >  > Edit Channel Settings

Table 26-2 Elements for Channel Definition

Element	Description
Your Name for This Channel	A meaningful, brief, and unique description of the channel that the corresponding row describes, such as China Central Television, Univision, Al-Jazeera, BBC-1, Star Cricket, HBO, or CNN.
Address Type	The method (multicast or HTTP) that your DMPs will use to receive the video stream for this channel. Choose an option from the list to enter the correct kind of address. Your choice determines which other fields appear on this page. The options are: <ul style="list-style-type: none"> • Multicast Address—The routable IP address and UDP port for a streaming server, as described in the “Multicast Address: Port” row elsewhere in this table. • HTTP URL—The full HTTP URL for one video file of a supported type, as described in the “HTTP URL” row elsewhere in this table.
Multicast Address: Port	The IP address and port number of the streaming server from which your DMPs will receive the multicast stream for this channel. You must specify the port number. This field is visible only after you choose Multicast Address from the Address Type list. Later, if you choose any other option from the Address Type list, <i>Cisco Cast</i> will ignore the values in this field.
HTTP URL	The exact URL and path that points to one MPEG video file on an HTTP server. You must use HTTP as the protocol and the filename extension must be MPG. This field is visible only after you choose HTTP URL from the Address Type list.
Text to Show if Program Guide is Not Available	Text that describes this channel. The electronic program guide (EPG) shows this text when no other information is available. When the EPG uses this text, it does not describe individual programs for this channel.
EPG Provider	Associates or disassociates this channel with one EPG data source and specifies the nature of that source if you associate one with this channel. You can choose whether to use any data source. The options are similar to these: <ul style="list-style-type: none"> • TMS—Your EPG will use data from Tribune Media Services to describe this channel and its programs. • <XMLTV>—Your EPG will use data in the XMLTV format to describe this channel and its programs. • Upload CSV—Your EPG will use data from a CSV file to describe this channel and its programs. • None—Your EPG will use a brief, generic statement to describe this channel and its programs. <p>Note EPG data is not required for Cisco Cast to work. You can use options at Cast > Skins Customization to enable or disable the EPG. You are not required to subscribe to any EPG data service.</p>
CSV File (Browse)	The method to find and select a CSV file that you have stored locally and will upload to your DMM appliance.
Download the CSV Template	A downloadable template file in Microsoft Excel format that you can use to define the EPG attributes for programs on one channel. This link is visible only when you have chosen Upload CSV from the EPG Provider list.

Table 26-2 *Elements for Channel Definition (continued)*

Element	Description
Call Letters for Channel	<p>A list of call letters for TV channels that your EPG subscription includes. The list is variable according to your location in the United States, the package of channels that you receive from your cable or satellite TV provider, the nature of your contract with TMS, and possibly other factors. Your list might include some or all of these call letters, possibly among others:</p> <ul style="list-style-type: none"> • ABC—American Broadcasting Company • AZA—Azteca América • CBC—Canadian Broadcasting Corporation • CBS—CBS Broadcasting • CW—The CW Television Network • FOX—Fox Broadcasting Company • MNT—MyNetworkTV • NBC—National Broadcasting Company • PAX—ION Television • PBS—Public Broadcasting Service • SRC—SRC • TEL—Telemundo • TLF—TeleFutura • TQS—Télévision Quatre Saisons • TVA—Tele Vida Abundante • UNI—Univision <p>This list is visible only after you choose Tribune Media Services from the EPG Provider list.</p>

Related Topics

- [Generic Channel Descriptions, page 28-4](#)
- [Channel Descriptions from a CSV File, page 28-4](#)
- [Channel Descriptions from a Data Subscription, page 28-4](#)
- [Add or Edit Subscriptions to Data from an EPG Provider, page 28-5](#)

