



Configure Digital Media Encoders

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About Cisco Digital Media Encoders

Features on the Digital Media Encoders tab help you manage how Cisco Show and Share live event users use the Cisco Digital Media Encoders (DMEs).

Cisco DMEs enable you to stream live events through Cisco Show and Share. You can also use them to manually submit videos for transcoding.

As a system administrator, you must configure the encoding formats and profiles for the Live Event Administrators to use when setting up a live event.



Tip

See the “Live Events” chapter in the [User Guide for Cisco Show and Share](#) on Cisco.com to understand concepts that resolve these questions:

- How does live video differ from video-on-demand?
 - How do pull and push encoder profiles differ?
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About Encoding Formats (Presets)

Cisco Show and Share is preconfigured with the recommended DME encoding formats. Encoding formats are named collections of settings—or presets—used when configuring a live event.

Encoding formats specify:

- Media output type.
- Dimensions, such as 640x480, that are suitable for the playback device.
- Bandwidth consumption rate that is optimized for the expected network capacity.
- Overall quality (bitrate, frame rate, and more).

“Default” Encoding Formats

When you first start to use *Show and Share Administration*, you can recognize the predefined and preferred formats in the Encoding Formats list. The word “default” is appended to the name.



Note

There can be only one default format for each supported video format.

You can create new encoding formats, edit the currently defined formats, and delete formats. You can also change the two encoding formats that the DME should use as the defaults.

About Encoder Profiles

There are two types of encoding profiles: pull configurations and push configurations.

With a Pull configuration, you define a port for the Cisco DME to publish the stream to. Clients or streaming servers pull the stream from DME on that port.

With a Push configuration, you supply the credentials and publishing point information for your streaming server and the Cisco DME pushes the stream to that publishing point. Video clients access the video stream from the streaming server.

Procedures

- [Create Encoder Profiles, page 15-3](#)
- [Create and Edit Encoding Formats \(Presets\), page 15-7](#)

Create Encoder Profiles

You must create encoder profiles for the DMEs before Cisco Show and Share can use them.

- [Create the Encoder Profile for a Pull Configuration, page 15-3](#)
- [Create the Encoder Profile for a Push Configuration, page 15-6](#)

Create the Encoder Profile for a Pull Configuration

You can configure Cisco Show and Share to use a DME in pull mode.

Before You Begin

Set up and connect the encoder according to the procedures in the encoder documentation.

Procedure

- Step 1** Choose **Administration** from the global navigation.
- Step 2** Choose **Setup > Digital Media Encoders > Encoders and Pull Configurations**.



- Step 3** Click **Add a New Encoder**.

Step 4 Enter the encoder IP address or hostname in the **Encoder IP Address/Hostname** field.



Tip

If you do not know the encoder's routable IP address or DNS-resolvable hostname, go to the DME front panel, and then choose **Menu > Setup System > Network > 100 Mbit (or 1,000 Mbit) > View Settings > IP Address(es)**.

Step 5 Click **Discover Encoder**, and then wait until the discovery process is finished.

Step 6 Enter a name and description for the encoder profile.



Tip

You will add the encoder profile as an option in a list. You—and other live event users in your Cisco Show and Share community—can then choose and use it.

Step 7 Choose options in the Default Encoder Input Settings area to identify the input settings that you will use most often.

Step 8 Choose **Pull mode** as your most common method to publish live events from this encoder profile.

Step 9 Click **Add a Pull Configuration** to add the streaming server pull configurations for the encoder profile.

We recommend that you use a port number in the range from 6000 to 7000. The default is 6990.



Tip

When you use pull mode, a configuration called “test only (encoder-direct, port 6990)” is automatically created. You can use the test configuration to verify streams that use the encoder profile.

Step 10 Click **Save Pull Configuration**.

Step 11 Click **Save this Encoder**.

A message in your browser confirms that Cisco Show and Share saved the profile.

Create the Encoder Profile for a Push Configuration

You can configure Cisco Show and Share to use a DME in push mode.



Note

Cisco Show and Share supports push mode only with **Windows Media**.

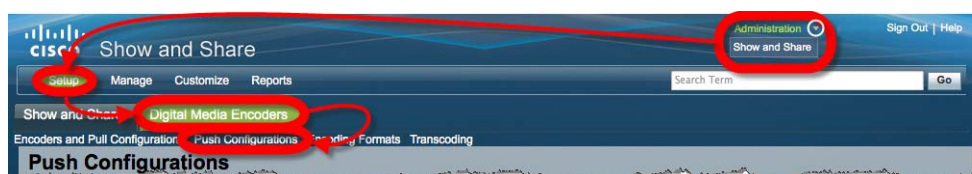
Before You Begin

Set up and connect the DME according to the procedures in the encoder documentation.

Procedure

Step 1 Choose **Administration** from the global navigation.

Step 2 Choose **Setup > Digital Media Encoders > Push Configurations**.



Step 3 Click **Add a New Encoder**.

Step 4 Enter a name and description for the encoder profile.



Tip

You will add the encoder profile as an option in a list. You—and other live event users in your Cisco Show and Share community—can then choose and use it.

Step 5 Create an entry for the streaming server.

- a. Enter the streaming server base URL and port number.
- b. Enter the name of the streaming server publishing point.



Note

DO NOT USE the encoder URL unless you are conducting a brief test with no more than two viewers.

- c. (Optional) If the streaming server authenticates its users, enter a valid username and password.

Step 6 Click **Save**.

A message in your browser confirms that Cisco Show and Share saved this encoder profile.

Create and Edit Encoding Formats (Presets)

You can add or edit an encoding format.



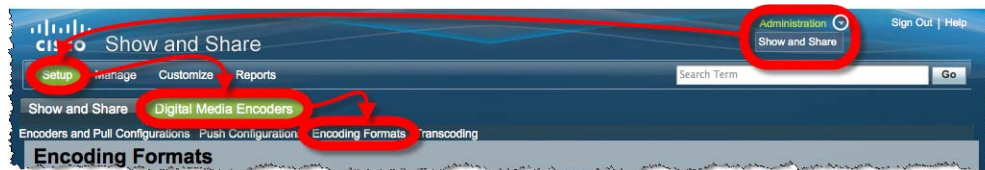
Note

Flash format support has been deprecated. However, it still appears in the encoding format interface.

Procedure

Step 1 Choose **Administration** from the global navigation.

Step 2 Choose **Setup > Digital Media Encoders > Encoding Formats**.



Step 3 Do one of the following.

- To define a new encoding format, click **Add a new Encoding Format**.
- To edit an existing encoding format, click the format name in the list.



Step 4 Enter or choose the required values. See [Reference, page 15-9](#), for information about each field.

Please enter your VideoFormat and click "save" when finished

Encoding Format Name

Profile Description

Set as a default format *

* If selected, this Encoding Format will automatically be used when "Default Settings" is selected on the Create a Live Event page.

Format: Windows Media Flash

Video Settings

Dimensions:

Pixel Proportion:

Audio Settings

Audio Capture: On Off

Windows Media Capture Profiles

Step 5 Click Save.

Reference

Navigation Path

Administration > Setup > Digital Media Encoders > Encoding Formats

Table 15-1 **Encoding Formats Page**

Element	Description
Encoding Format Name	Enter a unique and meaningful name for the encoding format.
Profile Description	Enter a description.
Set as a Default Format	Check the check box if Cisco Show and Share should use the encoding format automatically when live event users choose the “Use Default Streaming Settings” option.
Format	Windows Media. Do not change this setting. The Flash format support has been deprecated.

Video Settings

Dimensions	Choose an option from the list or choose Custom to enter dimensions.
Pixel Proportion	Standard (square pixel) is the correct choice for most applications.

Audio Settings

Audio Capture	{ On Off } — Enable or disable audio capture.
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Windows Media Capture Profiles

Windows Media Capture Profiles	Choose an option to limit bandwidth usage. See the “Live Events” chapter in the User Guide for Cisco Show and Share on Cisco.com for more information about the supported WMV capture profiles.
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