



Working with Content in Cisco Vision Director

User Role: Administrator / Content Manager

This module provides information about how to use the Content screen to manage your content and an overview of the different content ingestion methods available in Cisco Vision Director.

This section includes the following topics:

- [Configuring the Default Video Channel, page 103](#)
- [Tuning Selected Media Players to a Multicast URL, page 104](#)
- [Defining Channels and Channel Guides, page 104](#)

Configuring the Default Video Channel

Specifying a default video channel allows you to quickly verify that video transmission is working after provisioning a media player without running an event script.

If the default video channel is not configured properly, or if a video channel is not available, then media players not running an event script will display a black screen. This is not necessarily a problem, but it does delay verification of proper multicast operation to the DMP.

To configure the default video channel:

1. Log into Cisco Vision Director as an administrator.
2. Go to **Tools > Management Dashboard**.
3. Go to **Dynamic Signage Director Configuration > System Configuration > Dynamic Signage Director Settings**.
4. In the **Configuration Property**, find the **Default landscape content url** and the **Default portrait content url**.
5. Type the URL for the video stream ([Figure 33 on page 104](#)).
6. Save the changes (click disk icon in bottom right of panel).
7. Reload the media players.

Figure 33 Configuring the Default Video Channel

The screenshot shows the Cisco Vision Dynamic Signage Director Management Dashboard. On the left is a navigation menu with categories like 'Monitor and Status', 'DMP and TV Controls', 'Event Viewer', and 'Dynamic Signage Director Configuration'. The 'Dynamic Signage Director Configuration' section is expanded, showing 'System Configuration (12)' and 'Dynamic Signage Director Settings (1)'. The 'Dynamic Signage Director Settings (1)' is further expanded to show 'Media File Types' and 'Global DMP Settings (6)'. The 'Global DMP Settings (6)' is expanded to show 'Networking', 'Audio/Video/Closed Caption', 'Firmware Versions', 'Time Source', 'Storage and Cache', and 'Runtime Behavior'. The main area displays the 'Dynamic Signage Director Configuration' table, which is highlighted with a red box around the 'Default landscape content URL' and 'Default portrait content URL' rows. The table has two columns: 'Configuration Property' and 'Value'.

Configuration Property	Value
Default landscape content URL	udp://239.194.0.204:4000
Default portrait content URL	udp://239.194.0.204:4000
Delay Channel	24
IP Address of Director Server	10.194.170.141:8080
Dynamic Signage Director Server locale	English (United States)
Allow Duplicate url for Channels	false

Tuning Selected Media Players to a Multicast URL

User Role: Administrator

You can tune one or more media players to a specific multicast URL in the Management Dashboard. This configuration will not remain after reboot of the devices but can be used as temporary workaround to a content issue at the venue.

To tune selected media players to a multicast URL:

1. Go to **Tools > Management Dashboard**.
2. Go to **DMP and TV Controls > TV Commands > Set Video Channel**.
3. In the **Command** panel, **Common** tab, specify the URL for the multicast group (address and port) of the video channel that you want to display on the selected media players.
4. In the **Select Devices** panel, select the media players whose TV displays should display this default channel.
5. Click the **Play** button (bottom left) to send the command to the selected DMP.

Defining Channels and Channel Guides

User Role: Administrator / Content Manager

Cisco Vision Director allows you to distribute in-house video and re-distribute external channels including over the air (OTA) local channels, satellite, and cable TV. Video can be in either high definition (HD) or standard definition (SD). There is no limit to how many channels you can offer. The channels you select will be available for viewing anywhere you have TVs connected to DMPs: in bars and restaurants, the back office, and in luxury suites. Users can change channels from the IP Phone or using the IR remote.

Figure 34 Channel Guide Lineup on TV and IP Phone

Channel Lineup Designation at the Headend

A combination of external and internal channels make up the “channel lineup” that is available throughout the venue.

Although the concept of a channel number doesn’t really exist in the IP world, channel numbers are typically assigned to each channel at the headend. These numbers are arbitrary, but can be numbered correspond to the top 15 channels that will show up on the IP phone control in the Luxury suites.

To enable channel selection at the endpoints:

- On the Cisco DCM, each (in-house or external) channel received is mapped to its unique multicast group address and UDP port number.
- In Cisco Vision Director, each unique multicast group/UDP port number pair is assigned a Vision channel number and a channel name.
- Cisco Vision Director uses this mapping to direct DMPs to specific channels and populate an electronic program guide which lists the available channels.

Note: For information about how to configure the channel lineup at the headend, see the [Cisco StadiumVision Video Headend Design and Implementation Guide](#) available to qualified Cisco Vision partners.

Defining the Master Channel List

Once channels have been defined at the headend, define a master channel list. Go to **Tools > Control Panel > Channels**.

Consider the following before you configure the master channel list:

- Channels to be offered: Decide how many in-house live video feeds you will have and which external channels you will offer.
- Channel Numbering Scheme: You may want in-house channels at the top of your numbering scheme. You may want your numbering scheme to match the area satellite or cable numbering scheme. You may choose to hide some of the channels you have in house.
- Channel Guide Appearance: Decide the channel guide descriptions that appear on the TVs in your luxury suites, bars, and restaurants and whether you want a team logo to appear on the screen.
- For each channel that should appear in the channel lineup accessed by a Cisco IP Phone or IR remote, set the “Visible in IP Phone Guide” field on the Channels panel to **Yes**.

- For each channel that is to appear in the channel lineup accessed by a third-party touch panel, set the “Visible in 3rd Party Guide” field on the Channels panel to **Yes**.

Adding Channels to the Master Channel List

User Role: Administrator / Content Manager

To add channels to the master channel list:

1. Open the Control Panel and select the **Setup > Channels**. The Master Channel List displays in the Master Channel List tab.
2. Click “+” at the top of the Master Channel List.
3. On the **Basic Info** tab, define the information listed in [Table 13 on page 106](#). The description and source ID are optional.

Note: The Channel name configured in Cisco Vision Director should be limited to 12 characters or less. Due to the space allotted for channel names on the IP Phone interface, more than 12 characters may have undesirable results.

Table 13 Adding a Channel to the Master Channel List

Field	Description
Channel Name	The name of the channel as you would like it to appear on the channel guide that appears on your video displays. A maximum of 12 characters are supported.
Description	Description of what is playing on the channel (optional). This shows up on the TV only.
Multicast Address	The multicast IP address of this channel designated at the Cisco Vision headend.
Port	The multicast port used to communicate with this channel as designated at the Cisco Vision headend.
Channel Number	The number you want to assign to this channel. This channel number will appear in the channel guides on the TVs and IP Phones.
Source ID	Placeholder for future program guide integration. Not required.
Allow Ad Wrapping	Ad wrapping refers to displaying this channel in an L-wrapper or similar screen template where advertisements play alongside the video stream.
Favorite	Specify “yes” if you want the channel to be listed as a favorite in the channel guide controlled by a 3 rd party touch panel.
Favorite Order	Enter a number (between 1 and 10) indicating the ordinal placement of this channel in the listing,

4. When you have filled in all the required fields, click **Save**. As soon as you save this channel, it will appear in the Master Channel List.

Note: You must **Save** before you add or modify another channel. As soon as you move from one channel to another without doing a save, all of your input is lost.

5. Repeat steps 3 and 4 to add all the channels you want to display in Cisco Vision Director.

Using “Favorites” (Third-Party Touch Panels Only)

In addition to the channel lineup, a maximum of 10 channels can be identified as favorites, which appear on the initial video control page of the third-party touch panels.

For each channel that should be listed as a favorite:

- In the **Favorite field**, select **Yes**.
- In the **Favorite Order field**, enter a number (between 1 and 10) indicating the ordinal placement of this channel in the listing.

Work with the third-party device integrator to determine how the favorites list should be displayed on the third-party touch panels. All installations should move to access channels directly versus indirectly through the favorites mechanism.

Sorting the Master Channel List

Click the Master Channel List column headings (Name or #) to sort the channel names alphabetically in ascending or descending order or by channel number. You can also use the filter box to see only the subset of channels that have the characters you specify in the filter. The filter is not case sensitive. For example, if you type “e” in the filter box the following channels will appear: ESPN, ESPN2, Universal, HD Theater, HDNet, HDNet Movies, and E.

Creating and Assigning Channel Guides

Once you have added channels to the Master Channel List, you can create “per-area channel guides” to display a custom channel guide in different areas of the venue. For example, you can have a different set of channels available in each of the suites, concourses, clubs, the owners suite, back offices, locker rooms, concessions and ticket windows.

The per-area channel guides are a subset of the master channel list, meaning the channels numbers and descriptions are preserved. For example, a venue may have raw in-house channels that they want to make available only to the coaching staff and not to the general public. To do this, create two channel guides: one private and one public. The private channel guide is assigned to groups/zones of DMPs that control the TVs in the coaches office and locker rooms. The public channel guide is flagged as the default channel guide and is automatically assigned to all other DMPs.

Designate one channel guide as the default channel guide. Cisco Vision Director automatically assigns this channel guide to any DMP that is not associated with a luxury suite, bar, restaurant, or other area that supports local control, or any DMP that does not have a channel guide defined.

Note: If you make changes to a channel guide that is associated with an area serviced by a third-party touch panel, the third-party device must reload the latest channel guide information. Consult the third-party device integrator (AMX or Crestron) for reload options.

Creating a Channel Guide

User Role: Administrator / Content Manager

To create a channel guide:

1. Go to **Tools > Control Panel > Setup > Channels**. For more information, see [Table 13 on page 106](#).
2. Click the **Channel Guide** tab (next to the Master Channel List tab).
3. Click the **plus (+)** above the Channel Guide and type a name and description for the new channel guide.
4. (Optional) Enable “Default Channel Guide for All Suites” to make this the default channel guide.
5. Click **Save**.

Assigning Channels to a Channel Guide

User Role: Administrator / Content Manager

To assign channels to a channel guide:

1. Go to **Tools > Control Panel > Setup > Channels**. For more information, see [Creating a Channel Guide, page 107](#).
2. Open the **Channel Guide** tab and select the per area channel guide to which you want to assign channels.
3. Click **Assign Channel**. The Master Channel list displays.
4. Select the channels you want to add to the channel guide and click **Add**. The channels you add display in the Channel Guide window.

TIP: To select multiple channels, use the keyboard Shift-click and Ctrl-click.

5. Click **Save**.

Assigning a Channel Guide to a Luxury Suite/Local Control Area

User Role: Administrator / Content Manager

Do this task after the Master Channel List and per area channel guide is created.

To assign a channel guide to a luxury suite:

1. Go to **Tool > Control Panel > Setup > Channels > Channel Guide**.
2. Select the per-area channel guide.
3. Click **Assign** (under the “**Used in Suites**” list). The list of undefined luxury suites/local control areas displays.

Note: The term “Luxury Suite” is used to define not only Luxury Suites but also any local control area.

4. Select the luxury suites/local control area to which you want to assign the custom channel guide.

TIP: To select more than one suite/local control area, use the keyboard Shift-click and Ctrl-click.

5. Click **Assign**.

By default, when the channel guide is brought up on the IP Phone, it is also displayed on the selected TV(s). You can change this behavior by setting the “`tvguide.autolaunch`” parameter to 0 in the Cisco Vision Director Management Dashboard Registry. See [Controlling the Behavior of the Channel Guide, page 110](#).

Adding Icons to the IP Phone Channel Guide

You can associate channel icons that display in the IP Phone channel guide. Channel icons must be obtained locally (the venue must obtain permission from the network) and must be a 24 x 24 PNG file. The most common is a third-party channel icon file that is a 100 X 100 PNG. [Figure 35 on page 109](#) shows some examples.

Figure 35 IP Phone Icons

Uploading a Phone Channel Icon

You can upload and tag multiple icons for the same usage type at the same time.

To upload a phone channel icon:

1. Copy the icon graphic(s) to your local drive.
2. Select **Tools > Control Panel > Setup > Channels**.
3. On the **Channels** toolbar, click the **Icon** button. The icon list displays.
4. Click **Upload Icon** and browse to the png file you want to assign as a channel icon.
5. In the Import Content dialog box, enter the following information: Under “**Keyword Tags to Apply**” select where the channel icon will be used:
 - DMP (for TV banner)
 - Phone
 - 3rd Party Remote
6. Select an expiration setting.
7. Click **Upload**. The icon you uploaded will now appear in the icon list.

Assigning a Phone Channel Icon

User Role: Administrator / Content Manager

Once you have created a master channel list and uploaded phone channel icons, assign icons to the channels.

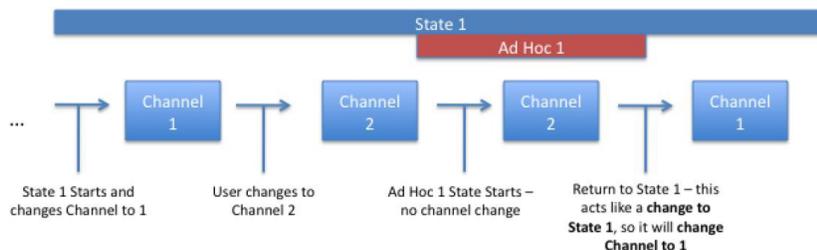
To assign a phone channel icon:

1. Select **Tools > Control Panel > Setup > Channels**.
2. On the **Channels** toolbar, click the **Icon** button. The icon list displays.
3. In the icon list, select the channel for which you want to assign an icon. The channel number displays in the Assigned Icons box.
4. Select the icon you want to assign to the channel.
5. Click **Assign Icon**.
6. Click **Save**. A message displays confirming the icon assignment was successful.

Channel Guide Behavior

- If a DMP is assigned to more than one Luxury Suite, it will use the Per-Area Channel Guide associated with the last Luxury Suite to which it was assigned. For example if a DMP is added to Suite 1 and then added to Suite 2, it will use the Channel Guide defined for Suite 2. For this reason, it is recommended that you do not assign a DMP to more than one Luxury Suite.
- If the user changes the channel via an IP phone, IR remote, or 3rd-Party remote, the channel chosen by the user will override the currently playing video playlist with the selected video.
- If the template is full screen video or 3-region video, the template will not change, but the video will change to the selected channel.
- If the template is full screen signage, the signage will be replaced with full screen video showing the selected channel.
- If the DMP is showing a playlist of video, the entire playlist will be replaced by the single video channel. For example, if the playlist contains three videos, all three videos will stop and be replaced by the selected channel.
- When the state changes on a DMP that is associated with a local control area (luxury suite, bar, restaurant, etc.), the script contents will override the user's local control.

Therefore, if you expect a DMP to be locally controlled, any states in use during that period should not change the template or channel. This is particularly important when using ad hoc states with locally controlled DMPs. Cisco Vision Director will treat the return from an ad hoc as a state change, so if the base state has a channel setting, the channel on all locally controlled DMPs will return to the base channel when the ad hoc state ends.



Controlling the Behavior of the Channel Guide

The appearance and behavior of the channel guide are controlled by parameters in the Cisco Vision Director registry. These settings control whether:

- A preview window is displayed when a channel is selected.
- The channel guide is automatically displayed on the TV when it is selected on the phone.
- The phone UI continues to display the channel guide after a channel has been selected.

For individual luxury suites, you can override the setting that controls the automatic display of the channel guide on the TV through the Control Panel.

Configuring Channel Guide Settings in the Registry

User Role: Administrator

To configure channel guide settings in the registry:

1. Go to **Tools > Management Dashboard**.

2. Go to the **Tools** drawer > **Advanced** > **Registry**. To be sure that you are displaying the current settings, click **Load**.
3. Scroll through the Registry Data list to the desired parameters.

Note: To change the phoneControl.stayOnChannelSelect parameter from its default (1), you must add the parameter using **Add Row**.

4. Click the Value field beside each parameter and enter the appropriate values.
5. Click **Apply**.

Defining a Delay Channel

User Role: Administrator / Content Manager

If you have assigned DMPs to a delay zone, then you can configure the channel you want to display on the TVs controlled by the DMPs in the delay zone during the delay event state.

If no channel is configured, the DMPs will display the default channel during the delay event state.

To define a delay channel:

1. Open the event script.
2. Click the green plus sign (+) above the Ad Hoc states panel.
3. Enable the Manual transition button (the default setting).
4. In the Ad Hoc State box, click Edit.
5. Select the delay group from the tree list.
6. Select the Set FULLSCREEN action source and drag it to the Assigned Actions list.
7. Click Region 1.
8. Select the channel you want to play during a delay from the Playlist Sources channels list.
9. Drag the channel to the Assigned Playlists.
10. Click **Apply**.
11. Click **Save**.

Defining a Non-Event Channel

User Role: Administrator / Content Manager

If you have assigned DMPs to non-event zone, you can configure the channel you want the TVs to play when no event script is running in that non-event zone.

If no channel is configured, the DMPs will display the default channel during the non-event state.

To define a non-event channel:

1. Open the event script.
2. Click the green plus sign (+) above the Ad Hoc states panel.
3. Enable the Manual transition button (the default setting).

4. In the Ad Hoc State box, click Edit.
5. Select your non-event group from the tree list.
6. Select the Set FULLSCREEN action source and drag it to the Assigned Actions list.
7. Click Region 1.
8. Select the channel you want to play when no event script is running from the Playlist Sources channels list.
9. Drag the channel to the Assigned Playlists.
10. Click **Apply**.
11. Click **Save**.

Setup: Channel Source Types

A new channel source type called **External URL** that allows you to specify an HTTP, HTTPS, or HTTP Live Streaming (HLS) source as a channel, including HTML page sources.

HLS sources are hardware-accelerated on the DMP. The content is specified as an External URL source type in the Channels setup. The system recognizes the content as an HLS source based on the Allowed HLS file formats designated in the Management Dashboard. The default extensions allowed are **m3u** and **m3u8**. See the [Cisco Vision Dynamic Signage Director Release Notes for Release 6.1](#).

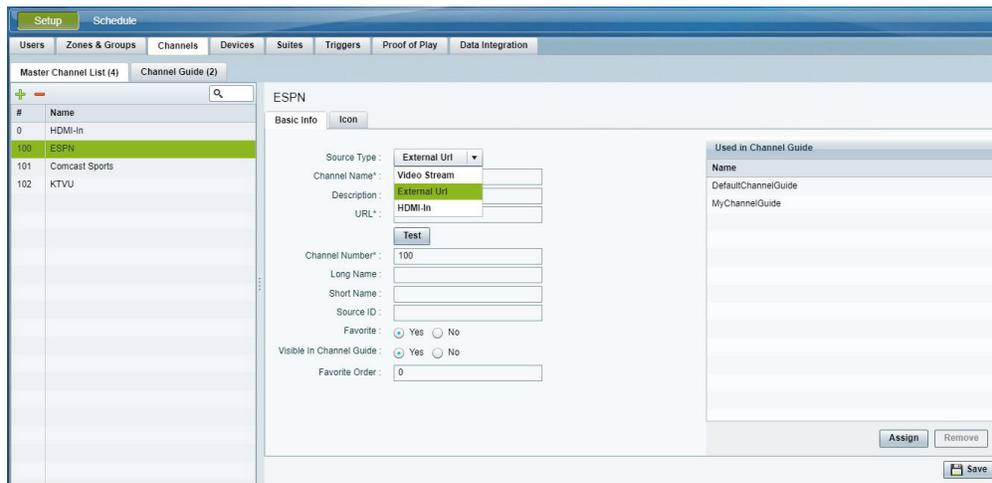
Note: This feature does not replace the existing HTML pass-through feature (**New External Content** button) from the Control Panel Content screen. HTML pass-through is recommended for content that might be considered for more temporary use in the system.

The Source Type field is available with Video Stream, External URL, and HDMI-In options ([Figure 36 on page 113](#)).

To choose a source type:

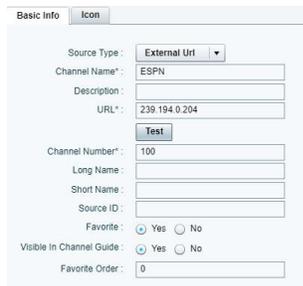
1. Go to **Tools > Control Panel > Setup > Channel**.
2. Click the **Basic Info** tab.
3. At **Source Type** pull-down, select **External URL** to choose an external url for your channel. The dialog box appears ([Figure 41 on page 114](#)).

Figure 36 Channel Source Types



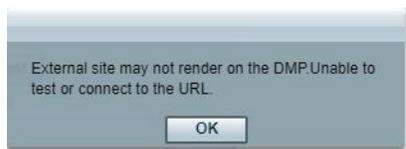
To test the external URL to see if it has X-Frame option, add the URL into the field and click **Test** (Figure 37 on page 113).

Figure 37 External URL Channel Configuration



If the URL will not render on the DMP, you may get an error message (Figure 38 on page 113). If it passes, click the Channel saved box in the upper right.

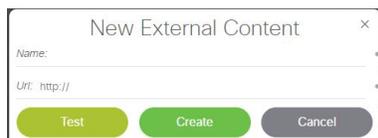
Figure 38 Testing the External URL, Error



To test a new External URL from the Library:

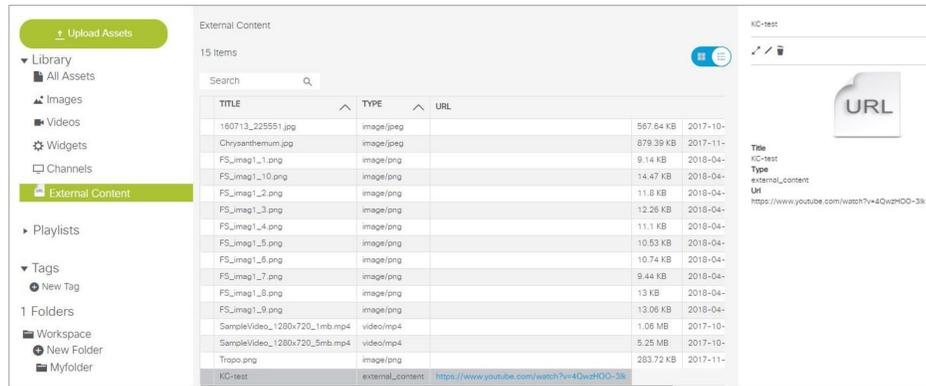
1. Right click **External Content** > **Create**. The New External Content dialog box appears (Figure 39 on page 113).

Figure 39 New External Content Dialog Box



2. Type in the Name and the URL.

3. Click **Test**. You may see an error message here if this external URL cannot render on the DMP.
4. If it passes, click **Create**. The URL will be stored and will push to the DMP (Figure 40 on page 114).

Figure 40 Test New External URL from Library

Use an external URL as a channel when you do not need synchronization of content, but you would like to be able to tune to that content from a script, User Control API, IP phone, or IR remote. External URL channels also can be streamed to a DMP-encoded multicast channel but do not support audio when streamed in that form.

Figure 41 External URL Dialog Box

Basic Info | Icon

Source Type: External Uri

Channel Name*: ESPN

Description:

URL*: 239.194.0.204

Test

Channel Number*: 100

Long Name:

Short Name:

Source ID:

Favorite: Yes No

Visible in Channel Guide: Yes No

Favorite Order: 0

The items with an asterisk (*) are required.

How to Configure HDMI-In Video Sources on the SV-4K and CV-UHD Media Players

This section includes the following topics:

- [Guidelines for Using HDMI-In on the SV-4K and CV-UHD, page 115](#)
- [Prerequisites for Using HDMI-In on the SV-4K and CV-UHD, page 115](#)
- [Restrictions for Using HDMI-In on the SV-4K and CV-UHD, page 115](#)
- [Configuring HDMI-In as a Video Source in a Region on the SV-4K and CV-UHD Media Players, page 116](#)
- [Configuring a DMP-Encoded Multicast Channel on the SV-4K and CV-UHD in Cisco Vision Director, page 118](#)
- [Starting and Stopping HDMI-In Streaming on the SV-4K and CV-UHD Media Players, page 120](#)
- [HDMI-In Streaming Versus Display Streaming, page 122](#)

- [HDMI-In Streaming, page 122](#)
- [Display Streaming, page 126](#)

Guidelines for Using HDMI-In on the SV-4K and CV-UHD

When using HDMI-In on the DMPs, consider the following guidelines:

- If using video with 4K resolution, be sure to observe the guidelines for 4K content in the [Cisco Vision Content Planning and Specification Guide](#) and use cables that are HDMI version 1.4 compliant.
- You can use different forms of local control only when using HDMI-In encoding to stream video as a multicast channel. Otherwise, use scripts to start/stop streaming.
- If you want to maintain privacy of channels, create a DMP-encoded channel per suite with a unique multicast address (from 239.193.20.0/24 range) and create a separate channel guide per suite.

For example, if you have 10 suites:

1. Create 10 separate DMP-encoded channels with unique multicast addresses.
2. Create 10 different channel guides for each DMP-encoded channel.
3. Assign each suite to a different channel guide.

Prerequisites for Using HDMI-In on the SV-4K and CV-UHD

Before you use HDMI-In on the DMPs, be sure that the following conditions are met:

- You have purchased a separate encoder software license. For more information, see the [Cisco Vision Dynamic Signage Director Release Notes for 6.1](#).
- Test the devices that you plan to connect to the DMP HDMI-In port to stream content for HDCP support.
- Most Mac OS and Windows laptops should work for HDMI-In video encoding for non-copy-protected content. It is up to the device manufacturer and OS whether or not this is supported.
- When using HDMI-In encoded video channels, be sure that you have configured the allowable multicast range 239.193.20.0/24 for this feature in the network requirements. See [Cisco Vision Dynamic Signage Solution Operation and Network Requirements](#).

Restrictions for Using HDMI-In on the SV-4K and CV-UHD

Before you use HDMI-In on the DMPs, consider the following restrictions:

IMPORTANT: The HDMI-In port on the SV-4K and CV-UHD media players can only be supported either as a source to video region or source to encoder as a channel, but not both. Therefore, you cannot have a script in a state which tunes to the HDMI-In as video source in a region, and then transition to the next state where you are streaming video from HDMI-In.

- Videos with 4K resolution are not supported for HDMI-In streaming.
- When using HDMI-In encoding to stream video content as a multicast channel:

How to Configure HDMI-In Video Sources on the SV-4K and CV-UHD Media Players

- The streaming state is synchronized only when streaming is started by script, IP phone, IR remote, or User Control API—not when started from the Management Dashboard.

This means that if you start streaming from the Management Dashboard, then the IR remote menu might not properly show which channel is streaming or not streaming.

- The DMPs playing HDMI-In encoded video stops streaming if the DMP is rebooted, even though the script is running. Start Streaming is a direct command, which is sent when the svd server changes state (like RS232 commands or tv on /off type commands). It is only executed when the state is changed, so it is not re-executed on reboot.

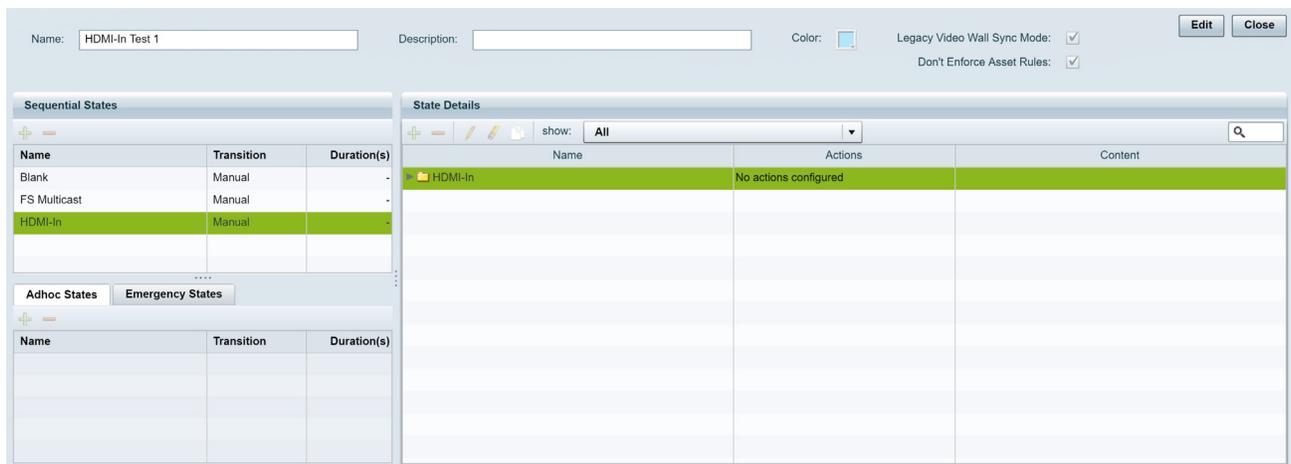
Configuring HDMI-In as a Video Source in a Region on the SV-4K and CV-UHD Media Players

User Role: Administrator / Content Manager

To configure HDMI-In as a video source in a region:

1. From the Cisco Vision Director **Main Menu**, go to: **Tools > Control Panel > Schedule** (Figure 42 on page 116).

Figure 42 Control Panel Schedule Screen



2. Create a new script by typing a name (Figure 43 on page 117).
3. Add the state named HDMIIn_State.
4. Select the group/zone where the event script runs to assign actions and content to the HDMIIN_State (Figure 44 on page 117).

Figure 43 New State Name

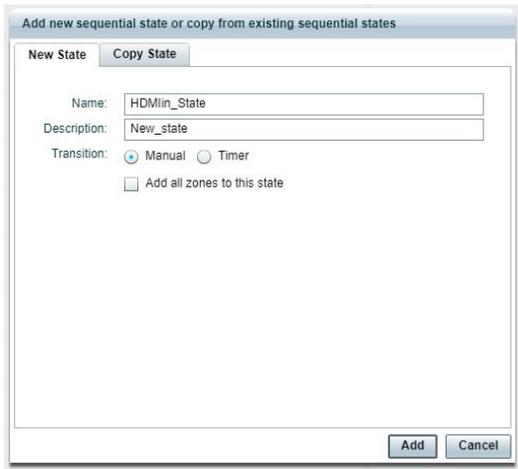
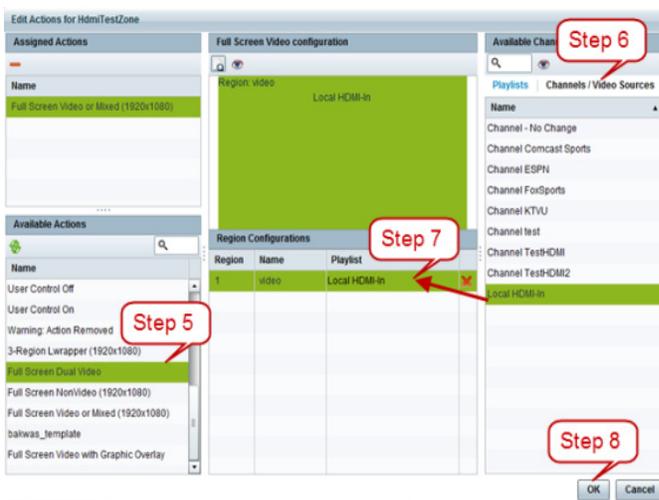


Figure 44 Script State

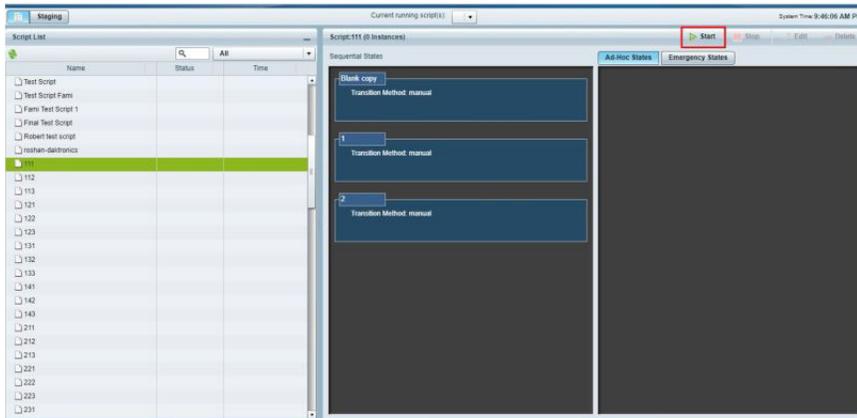
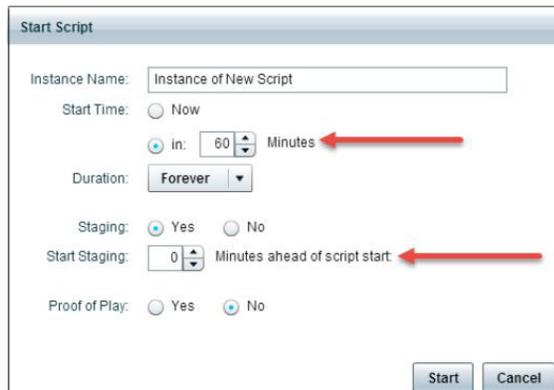


5. Select a video/mixed media template.
6. Click **Channels**.
7. Drag Local HDMI-In to a template region.
8. Click **OK** to save the script.

Verifying the Script Plays Local HDMI-In Content

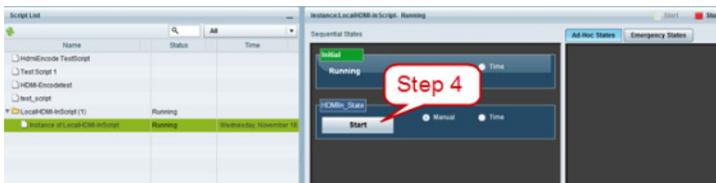
To verify that the script plays the local HDMI-In content:

1. From the Cisco Vision Director **Main Menu**, go to **Tools > Control Panel**.
2. Double-click the Local HDMI-In script that you created (Figure 45 on page 118). The Start Script dialog box appears (Figure 46 on page 118).

Figure 45 Script Verification**Figure 46 Start Script Dialog Box**

3. Add in all the parameters.

4. Click **Start**.

Figure 47 HDMIIN_State Verification

5. Start the HDMIIn_State. Verify that the TV display for the target DMP is playing the expected HDMI-In content.

Configuring a DMP-Encoded Multicast Channel on the SV-4K and CV-UHD in Cisco Vision Director

User Role: Administrator / Content Manager

To configure a DMP-encoded multicast channel on the DMPs:

1. From the Cisco Vision Director, go to **Tools > Control Panel > Setup > Channel**.
2. Select or create a channel guide where you want to include the DMP-encoded channel.

TIP: If you want to maintain privacy of channels, create a DMP-encoded channel per suite with a unique multicast address (from 239.193.20.0/24 range) and create a separate channel guide per suite.

3. From the **Basic Info** tab, configure the options shown in [Figure 48 on page 119](#) and described in [Table 14 on page 120](#).

Figure 48 DMP-Encoded Multicast Channel Example

The screenshot shows the configuration page for a channel named 'TestHDMI2'. The 'Basic Info' tab is selected. The configuration includes the following fields and values:

- Channel Name*: TestHDMI2
- Description: (empty)
- DMP-Encoded:
- Maximum Bit Rate: 40000 Kbps
- Video Mode: 1080p60
- TTL: 10
- Display Encode Bitrate: 20000 Kbps
- Protocol: udp
- Multicast Address*: 239.193.20.100
- Port*: 4000
- Channel Number*: 888
- Long Name: (empty)
- Short Name: (empty)
- Source ID: (empty)
- Favorite: Yes No

Table 14 DMP-Encoded Multicast Channel Options

Option	Description
Channel Name	Simple name for the channel that will appear in local control devices.
DMP-Encoded	(Required) Select this checkbox to configure an encoded multicast channel on the SV-4K.
Maximum Bit Rate	Two times the encode bit rate.
Video Mode	Resolution that matches the configuration of the content and TV display.
TTL	Time-to-Live for the multicast packet.
Display Encode Bitrate	Value between 2000 to 25000 Kbps.
Protocol	UDP
Multicast Address	(Required) Multicast address from range 239.193.20.0/24 according to your Connected Stadium network configuration.
Port	(Required) Multicast port.
Channel Number	Number that appears in local control.

4. Click **Save**.

Starting and Stopping HDMI-In Streaming on the SV-4K and CV-UHD Media Players

[Table 15 on page 120](#) summarizes the methods of starting and stopping streaming for HDMI-In video sources on the DMPs.

Table 15 Methods for Starting and Stopping HDMI-In Streaming by Type of HDMI-In Content Source

Method	HDMI-In as Video Source	DMP-Encoded Multicast Channel
IP Phone	No	Yes
IR Remote	No	Yes
Management Dashboard	No	Yes
Script	Yes	Yes
User Control API	No	Yes

Note: When using the Management Dashboard to start/stop streaming for a DMP-encoded multicast channel, the channel parameters are configured directly in the Management Dashboard.

Starting and Stopping Streaming by IP Phone

A luxury suite user can use a configured IP phone to select HDMI-In Broadcast on the selected DMP-encoded player. The user can select the configured DMP encoded channels or Off to start streaming or stop streaming respectively.

For more information, see the phone guide [Using a Cisco Unified IP Phone with Cisco Vision: HDMI-In Broadcast](#).

Starting and Stopping Streaming by IR Remote

A luxury suite user can use an IR Remote to broadcast HDMI-In contents. On selection of the HDMI-In Broadcast menu, the list of DMP-encoded channels for streaming are listed for selection and “Off” to stop streaming.

Starting and Stopping Streaming by Script Action

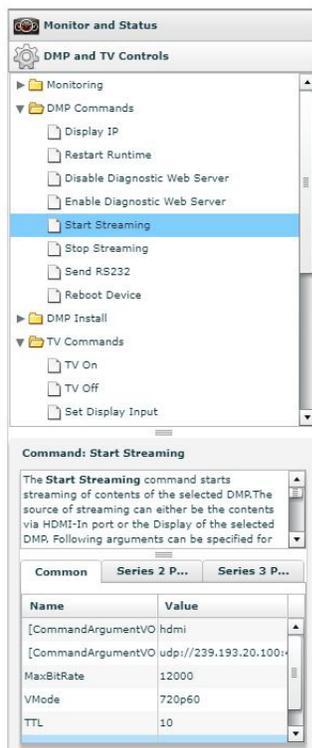
Two new actions of Start and Stop streaming can be defined as actions within a script. When the script starts running according to the defined state, either start streaming or stop streaming action will be executed.

Starting and Stopping Streaming by Management Dashboard Command

User Role: Administrator

To start and stop streaming in the Management Dashboard:

Figure 49 Start/Stop Streaming Commands in Management Dashboard



1. From the **Management Dashboard**, go to **DMP and TV Controls > DMP Commands > Start Streaming**.
2. Configure the DMP-encoded channel options in the SV-DMP Parameters.
3. Select the device where you want to start HDMI-In streaming.

4. Click the **Play** button to execute the command.
5. From the Management Dashboard Console, verify that the Start Streaming command is successful.

HDMI-In Streaming Versus Display Streaming

For HDMI-In streaming, what streams from the DMP is the audio/video from the HDMI-In port source ONLY ([Figure 50 on page 123](#)).

For Display Streaming, entire video composition (without audio) will be streamed from the DMP - i.e., an encoded rendition of what you see on the TV connected to the DMPs HDMI-out.

Display streaming can be used even when your video source is not HDMI-In, or in cases where you want to encode/stream not just HDMI-In but also other elements on the screen, or maybe an HTML5 page (you don't need a video source in display streaming). Display streaming parameters are set in channels where the DMP is the encoder (DMP encoded channels).

HDMI-In Streaming

Local HDMI-In (HDMI-In Pass-Through Supported by SV-4K and CV-UHD Players)

Script Configuration

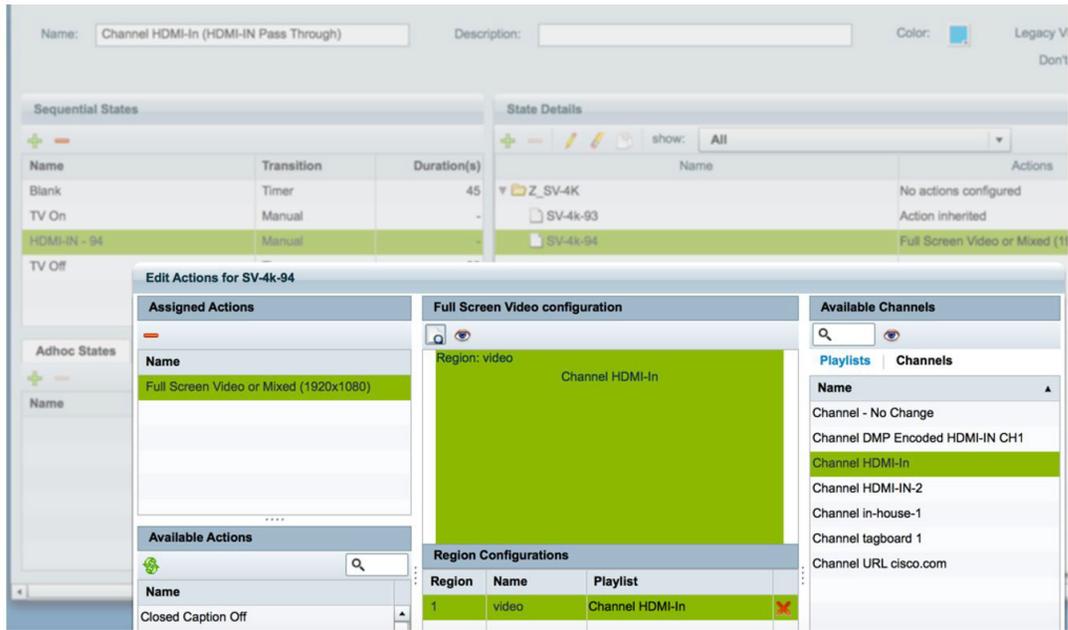
1. Assign for DMP .94 pre-defined Channel 0 “Channel HDMI-In” to action **Full Screen Mixed Video**.

When script runs, all input from HDMI-In will be streamed out to the Display via HDMI-OUT ([Figure 51 on page 123](#)).

Figure 50 HDMI Streaming



Figure 51 Full Screen Video Streaming



DMP HDMI-In Streaming

Script configuration

1. Create DMP-encoded CH1 configuration (Figure 52 on page 124).

Figure 52 Create DMP-Encoded Channel 1

Source Type: Video Stream

Channel Name*: DMP Encoded HDMI-IN CH1

Description:

DMP-Encoded:

Maximum Bit Rate: 40000 Kbps

Video Mode: 1080p50

TTL: 3

Display Encode Bitrate: 20000 Kbps

Protocol: udp

Multicast Address*: 239.192.0.200

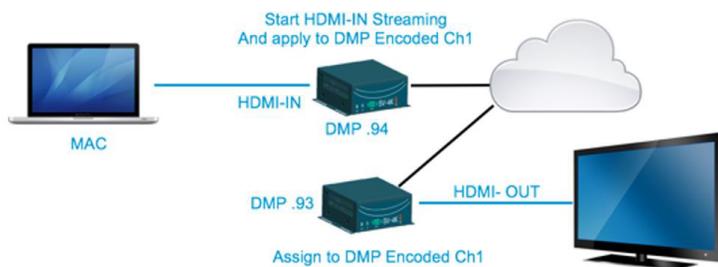
Port*: 50200

Channel Number*: 3

2. Attach video source to HDMI-IN.
3. For DMP .94 (Figure 53 on page 124): Script action Start HDMI-In Streaming and assign it to DMP encoded channel 1.
4. For DMP .93: Tune in on DMP Encoded channel 1 (Figure 54 on page 124).

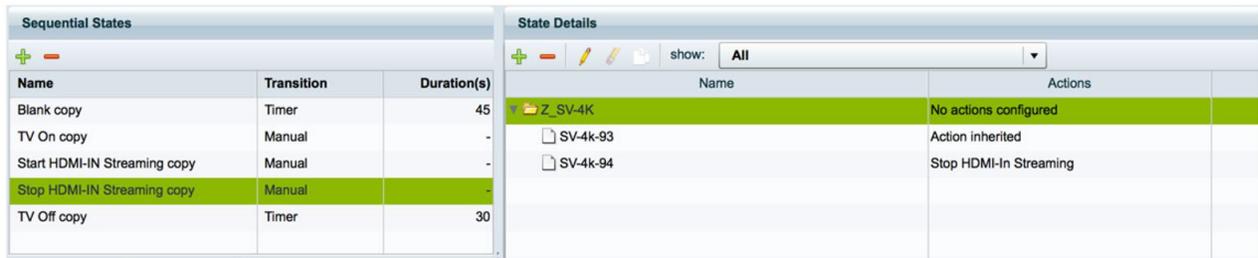
Figure 53 Start HDMI-In Streaming to DMP-Encoded Channel 1

Sequential States			State Details		
Name	Transition	Duration(s)	Name	Actions	Content
Blank copy	Timer	45	Z_SV-4K	No actions configured	
TV On copy	Manual	-	SV-4k-93	Full Screen Video or Mixed (1920x1080)	1-Channel DMP Encoded HDMI-IN CH1
Start HDMI-IN Streaming copy	Manual	-	SV-4k-94	Start HDMI-In Streaming	
Stop HDMI-IN Streaming copy	Manual	-			
TV Off copy	Timer	30			

Figure 54 DMP-Encoded Channel 1

5. On DMP .94: stop display streaming (Figure 55 on page 125).

Figure 55 Stop HDMI-In Streaming



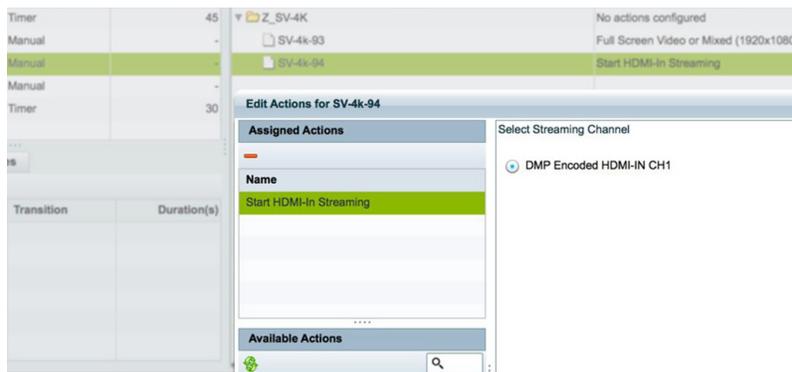
HDMI-In Streaming with External URL Source or Playlist

When you want to use the DMP HDMI-IN encoder to broadcast an External URL Script or a Playlist, there is an additional head-end DMP required (DMP .95).

Script Configuration

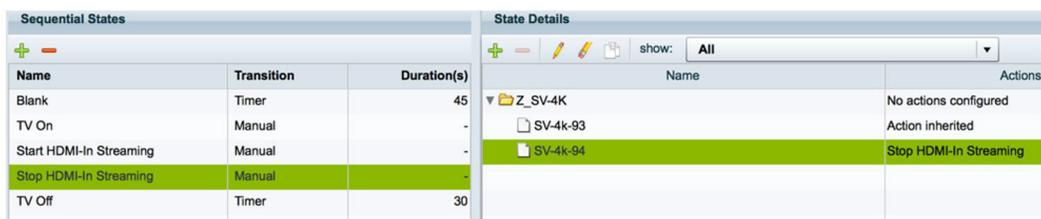
1. Create separate script and run Ex. Mixed playlist on DMP .95.
2. Connect the HDMI-OUT to the HDMI-IN of DMP .94 (Figure 56 on page 125).

Figure 56 Start HDMI-In Streaming and Assign to DMP-Encoded Channel

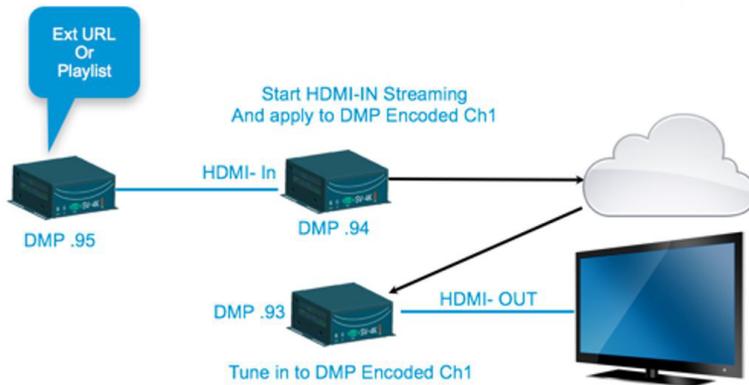


3. In DMP .94 Start HDMI-Streaming and assign to DMP encoded Channel.
4. DMP .93: Select DMP Encoded channel 1.
5. On DMP .94, stop display streaming (Figure 57 on page 125).

Figure 57 Stop HDMI-In Streaming on DMP 94



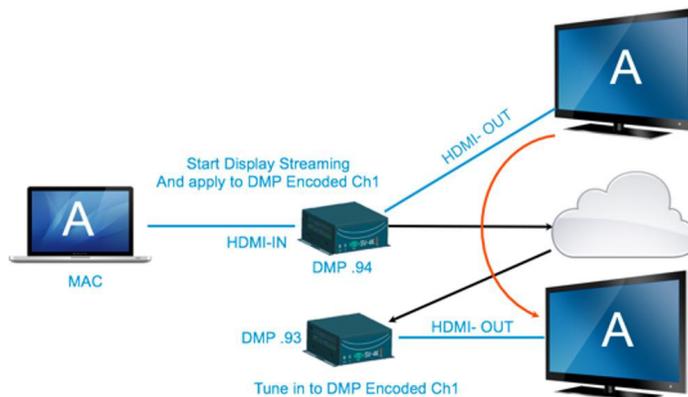
How to Configure HDMI-In Video Sources on the SV-4K and CV-UHD Media Players



Display Streaming

Display Streaming with Video Source Input on DMP HDMI-In

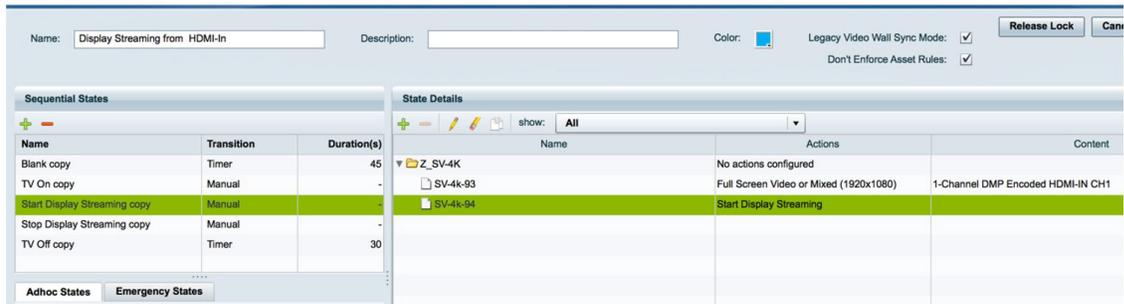
In this scenario, everything entering the HDMI-IN is displayed on the TV connected to the encoder DMP (DMP .94) and will be streamed out on DMP channel Encoded Ch1.



Script Configuration

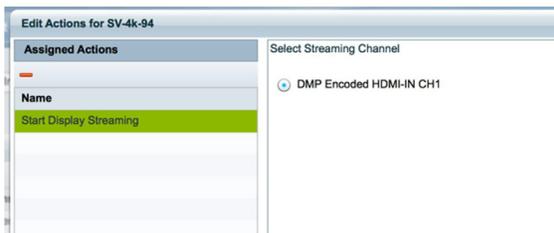
1. In DMP .94, start display streaming (Figure 58 on page 127) and assign to DMP encoded Channel 1 (Figure 59 on page 127).

Figure 58 Start Display Streaming on DMP .94



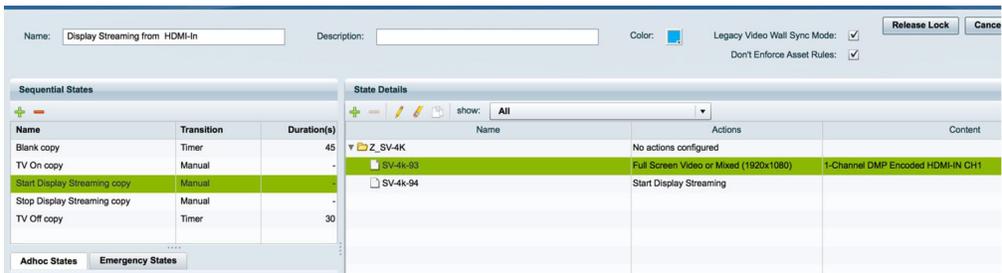
IMPORTANT: When content rules are in place, a DMP that reboots may not display the same content as other DMPs in the same group until the next state change.

Figure 59 Select Streaming Channel



- For DMP .93, tune to DMP-encoded Channel 1 (Figure 60 on page 127).

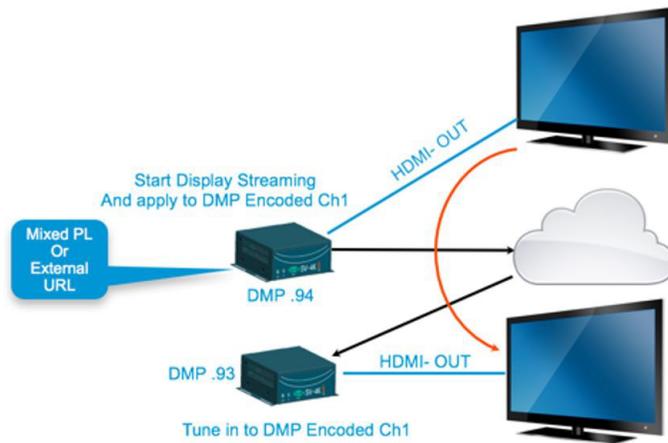
Figure 60 Start Display Streaming on DMP .93



Display Streaming with External URL or Mixed Media Playlist

In this scenario, no HDMI-IN of the DMP is used. A script in DMP 94 is setup and started. Once the script runs, “Start Display Streaming” will attach it to the DMP-encoded channel, functioning as a multicast channel.

How to Configure HDMI-In Video Sources on the SV-4K and CV-UHD Media Players



Script Configuration

1. Set up script.
2. Choose event state “Mixed PL.”
3. Assign “Full Screen Video or Mixed (1920X1080)” to DMP .94 (Figure 61 on page 128).

Figure 61 Assign DMP .94

Name: Display Streaming with source Mixed Playlist Description: Color: Legacy Video Wall Sync Mode: Release L
Don't Enforce Asset Rules:

Sequential States			State Details	
Name	Transition	Duration(s)	Name	Actions
TV On	Manual		Z_SV-4K	No actions configured
Mixed PL	Manual		SV-4k-93	Action inherited
Start Display Streaming	Manual		SV-4k-94	Full Screen Video or Mixed (1920x1080) 1-Test Mixed video
Stop Display Streaming	Manual			
TV Off	Timer	30		

4. For DMP .94, Start Display Streaming (Figure 62 on page 129) and assign it to DMP-encoded Channel 1 (Figure 63 on page 129).

Figure 62 Start Display Streaming on DMP .94

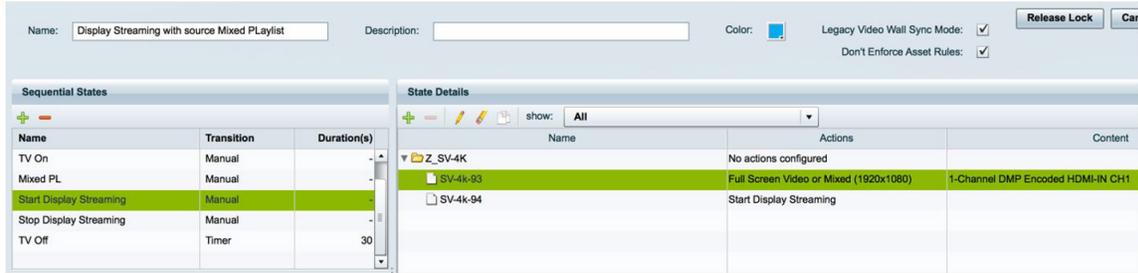
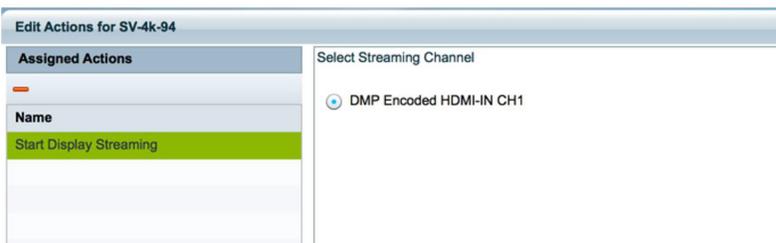
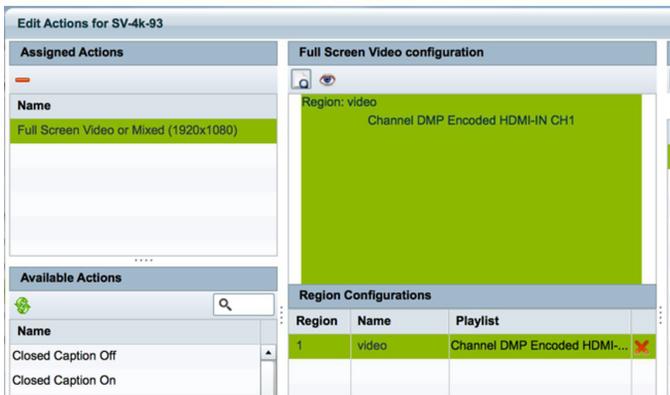


Figure 63 Select Streaming Channel



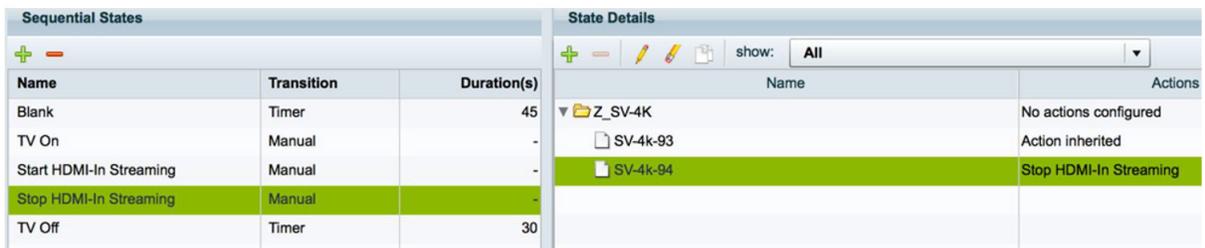
On DMP .93, choose the DMP-encoded channel 1 (Figure 64 on page 129).

Figure 64 Assign DMP .93 to Channel DMP Encoded HDMI-In Channel 1



On DMP .94, Stop HDMI-In Streaming (Figure 65 on page 129).

Figure 65 Stop HDMI-In Streaming on DMP .94



How to Manage Content (Assets)

This section includes the following topics:

- [Information About the Library \(Content\) Screen, page 130](#)
- [Library View, page 130](#)
- [Playlist View, page 131](#)
- [Asset Search Methods, page 133](#)
- [Guidelines for Asset Tags, page 134](#)
- [Getting Content Into Cisco Vision Director, page 136](#)
- [Staging Content to the Media Player, page 138](#)

Information About the Library (Content) Screen

The Library (Content) screen allows you to both manage content as well as create and modify playlists.

Use the Library menu to do the following tasks:

- Import static graphics or local video content.
- Import widgets, templates, channels, or external content.
- Add an HTML pass-through URL.
- Manage content:
 - Sort the content by name, type, URL, size, or expiration date.
 - Search for content.
 - Tag content.
 - Delete content.
 - Create folders for content.
- Create and manage playlists.

Content Screen Views

The Content screen has three views:

- [Library View, page 130](#) (default)
- [Playlist View, page 131](#)
- [Detail View](#) (content and playlist panels displayed)

The menu bar is organized based on the selected view.

Library View

[Figure 66 on page 131](#) identifies the content-related layout and task options available from the Library.

How to Manage Content (Assets)

Figure 66 Library List View

TITLE	TYPE	SIZE	LAST MODIFIED	DURATION	RESOLUTION
01 Script Manager@2x.png	image/png	587.46 KB	2018-02-04 16:00	0	4480x2600
02 Script Manager Menu@2x.png	image/png	572.82 KB	2018-02-04 16:00	0	4480x2600
03 RIGHT Horizontal.mp4	video/mp4	148.5 MB	2017-10-11 17:00	58	3840x2160
03 RIGHT Vertical.mp4	video/mp4	142.88 MB	2017-10-11 17:00	58	2160x3840
1082529-DNS-Heritage-Wall-Left.mp4	video/mp4	221.99 MB	2017-11-20 16:00	260	1920x1080
1082529-DNS-Heritage-Wall-Right.mp4	video/mp4	291.23 MB	2017-09-18 17:00	260	1920x1080
1082529-DNS-Heritage-Wall-Combined_H.265.mp4	video/mp4	565.43 MB	2017-09-18 17:00	260	3840x1080
1082529-DNS-Heritage-Wall-Right.mp4	video/mp4	291.23 MB	2017-11-07 16:00	260	1920x1080
1507815705604.png	image/png	50.56 KB	2017-11-29 16:00	0	800x500
180204 - Site Update Feb V2 SQUARE.mp4	video/mp4	21.93 KB	2018-03-18 17:00	55	1080x1080
196961-cool-oakland-raiders-wallpaper-1080x1920-for+...	image/jpeg	548.84 KB	2017-10-17 17:00	0	1900x1080
1x2_CombiMeal_Chargers_A2.mp4	video/mp4	46.51 MB	2018-03-12 17:00	30	1920x1080
1x3_MWC_SCI_A1.mp4	video/mp4	15.82 MB	2018-02-21 16:00	23	1920x1080
1x3_MWC_SCI_A2.mp4	video/mp4	26.07 MB	2018-02-21 16:00	23	1920x1080
1x3_MWC_SCI_A3.mp4	video/mp4	28.8 MB	2018-02-21 16:00	23	1920x1080
1x3_MWC_SCI_A1.mp4	video/mp4	48.9 MB	2018-02-21 16:00	61	1920x1080
1x3_MWC_SCI_A2.mp4	video/mp4	51.89 MB	2018-02-21 16:00	61	1920x1080

Asset Items Panel

Asset items display as a file list with details or as thumbnails. Use the slider in blue in the top right to change views.

By default, the Library Assets window shows List View of the following items stored in the Library:

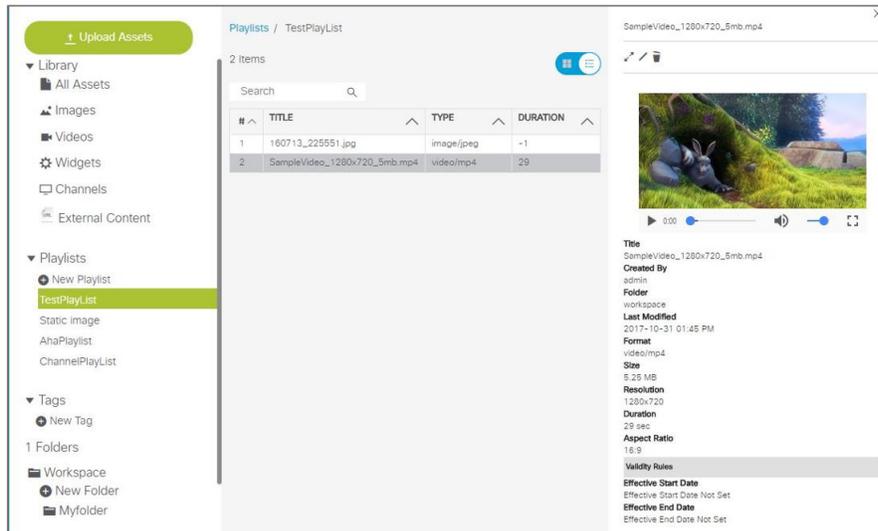
- Images (static graphics)
- Videos
- Widgets
- Channels
- External URLs
- Dynamic Menu Board gadgets (available in the **Tools** drop-down menu)

Playlist View

1. Click **Playlist** in the Library window to display your available playlists. The screen shows List View and gives the Title, Type, and Duration of your content.
2. Click any row to get the details of any content selected (Figure 67 on page 132).

How to Manage Content (Assets)

Figure 67 Playlist Detail



3. Use the pen icon to edit information for your content. The Validity Rules panel appears (Figure 68 on page 132).
4. Set the Effective Start and End Dates and Times. Click the calendar icon.
5. You can also choose **Restrict Playback** here. Set the days and times specifically as to when your content will not display.
6. Click the **Save** icon in the top of the panel.

Figure 68 Validity Rules Panel

Validity Rules

Effective Start Date

Effective Start Time

Effective End Date

Effective End Time

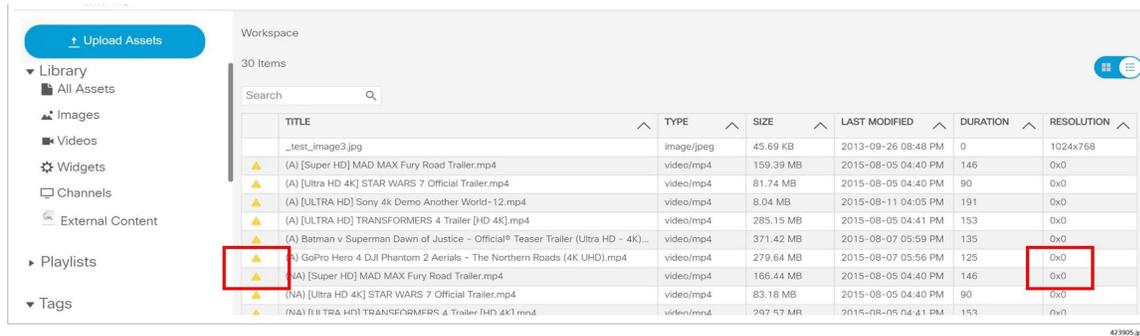
Restrict Playback

Asset (Content) Validation

If you upload a piece of content that is not supported by the DMP (Figure 69 on page 133), you get a warning message. The warning symbols means that the content may be distorted on the display. Best practice is to clear the validity of your content so it will appear as planned. Hover over the icon for information.

How to Manage Content (Assets)

Figure 69 Warning Symbol for Content Validity



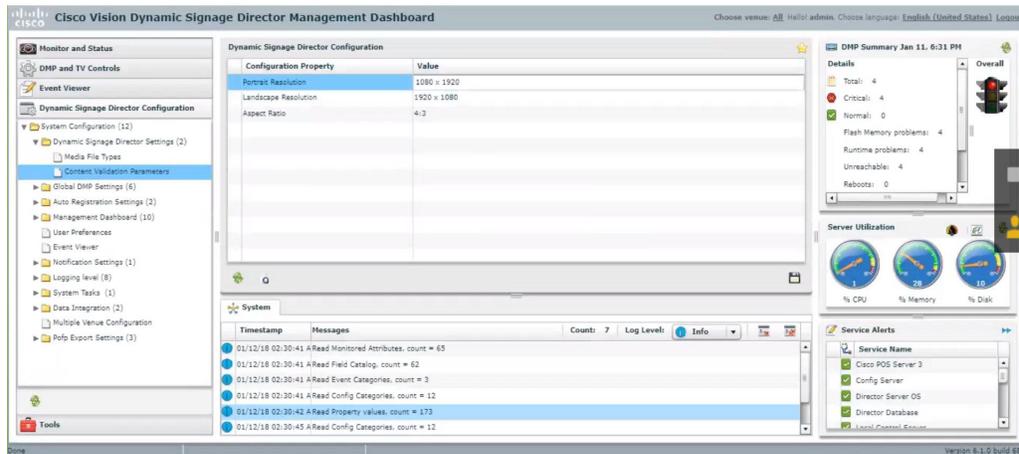
To check the validity of content:

1. Go to **Library > Tools > Management Dashboard > Dynamic Signage Configuration > System Configuration > Dynamic Signage Director Settings > Content Validation Parameters.**

Note: Since you can upload images, videos, channels and external content, each type has different issues involved in troubleshooting them. For images and videos, clear the warning here.

2. Check the resolution parameters of your assets to be certain they fall within the ranges allowed.

Figure 70 Management Dashboard Portrait Resolution Configuration Property



Asset Search Methods

Use the Playlist screen to find your asset items or playlists in multiple ways:

- Search for asset items assigned with a particular tag name by selecting the tag in the Library left pane.
- Search for asset items by name or file type using the Search box on the Playlist panel.

TIP: You can enter the first few letters of the content file name, or enter a file type such as ".jpg" in the search box.

- Search for playlists using the Search box on the Playlist panel, and by typing in the first few letters of the playlist name.

Guidelines for Asset Tags

Consider the following guidelines to create asset tags:

- Proof of Play processing requires the following naming convention:

- <tag name> **_PoP**

where <tag name> is the name for your proof of play label, and the “_PoP” suffix is required to designate the label for proof of play processing.

- The following characters are not supported in tag names: / ? < > \ : * | "
- Content in multiple playlists can use the same tag. The number of playlists that have content assigned to a tag displays under the # column in the Playlist Detail window next to the tag name.

Creating and Assigning Content Tags

User Role: Administrator / Content Manager

TIP: Consider assigning zone and group names as tags for the content files used in those areas. This allows you to type in a single search word or phrase and find all the content for a given zone or group, such as “Luxury Suite Delta” or “Concourse A.” You can also use tags that correspond to the type of content in the playlist, such as “menu.”

To create and assign content tags:

1. Click **Library > Tag** arrow. **New Tag** appears.
2. Click **New Tag**.
3. In the field, type a new name for the tag.
4. Hit **Return/Enter**. The tag name appears.

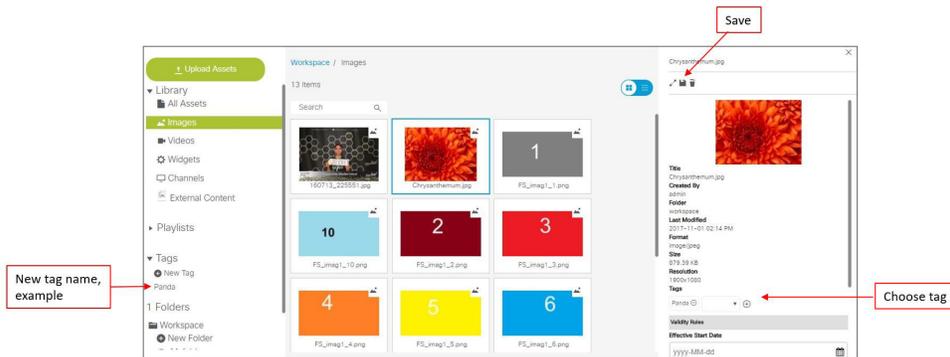
IMPORTANT: The following characters are not supported in tag names: / ? < > \ : * | " .

Note: If the tag name doesn't appear, click **Refresh**.

Be sure to include the required “_PoP” suffix in your tag name for proof of play records. For more information about Proof of Play, see the [Cisco Vision Director Proof of Play](#).

5. To assign a tag to content, select the content (asset) from the Grid or List view. The detail pane appears ([Figure 71 on page 135](#)).
6. Click the **Pen** icon to edit the metadata.
7. Select the tag name you want to attach to your content.
8. Click the **Save** icon.

Figure 71 Assigning a Tag to Content



TIP: Assign tags to content when you first upload content to the Library.

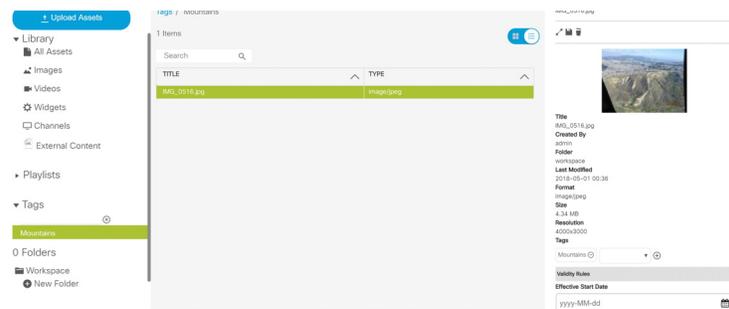
9. To verify that the content was assigned to the tag, click the tag name. The content assigned to the selected tag will display in the Content Items area.

Removing a Tag From Content

User Role: Administrator / Content Manager

When you remove a tag from content, the content will no longer be associated with that tag but the content itself remains in the Asset Library. [Figure 72 on page 135](#) summarizes the steps to remove a tag from selected content.

Figure 72 Workflow Summary to Remove a Tag From Content



To remove a tag from content:

1. In Library, select the tag name. The content items for that tag display in the Tags panel.
2. Click on the content item from which you want to remove the tag.

TIP: Use the keyboard Shift-Click function to select and untag multiple content items assigned to a tag.

3. Click the pen icon in the Detail Panel to “Edit” the tag metadata. The Tag information appears.
4. Click the tag name and the “-” symbol to remove the tag from the asset. There is no confirmation prompt. The tag is immediately removed from the content.

5. Click **Save** at the top of the Detail Panel.

Getting Content Into Cisco Vision Director

Cisco Vision Director supports a wide variety of content types and methods for ingesting content.

There are limitations and specifications for the content size and formats supported by Cisco Vision Director. These vary depending upon a number of factors including the TV display resolution, the media player used in the venue, the screen template region layout, and the TV proximity to the fans.

Before you deploy content to Cisco Vision Director, be sure that you refer to the [Cisco Vision Content Planning and Specification Guide, Dynamic Signage Director, Release 6.0](#) to be sure the content is in the correct format, is the appropriate size, and has the correct dimensions for where it will be displayed. If the content is not the correct size for the region into which it will be placed, the image will either be cropped or there will be blank space in the region.

[Table 16 on page 136](#) summarizes the different content types supported by Cisco Vision Director, the methods of how you ingest the content, and references to topics in this document and other external guides where you can find the details about how to work with that content type.

Table 16 Content Ingestion Methods by Type of Content

Type of Content	Method	For more information see:
Channel Guide	Control Panel > Setup > Channels	Configuring the Default Video Channel, page 103
Content Feeds (Atom, RSS)	Control Panel > Setup > Data Integration	Release 6.0: Cisco Vision Director Data Integration Guide
Database (MySQL or SQLServer)	Control Panel > Setup > Data Integration > Generic Data Source	Release 6.0: Cisco Vision Director Data Integration Guide
FTP Data	Control Panel > Setup > Data Integration > Generic Data Source	Release 6.0: Cisco Vision Director Data Integration Guide
HTML Pass-Through	Library > New External Content	Adding a URL for HTML Pass-Through Content, page 138
HTTP/HTTPS Data	Control Panel > Setup > Data Integration > Generic Data Source	Release 6.0: Cisco Vision Director Data Integration Guide
JSON Data	Control Panel > Setup > Data Integration > Generic Data Source	Release 6.0: Cisco Vision Director Data Integration Guide
Menu Boards Using DMB	Library > Tool> DMB Application	Cisco Vision Director Dynamic Menu Board and Store Configuration Guide
Menu Boards Using POS Data Sources	Control Panel > Setup > Data Integration	Release 6.0: Cisco Vision Director Data Integration Guide
NFL Data	Control Panel > Setup > Data Integration	Release 6.0: Cisco Vision Director Data Integration Guide
Scoreboard Controllers	Control Panel > Setup > Data Integration	Release 6.0: Cisco Vision Director Data Integration Guide
Static Graphics (Content screen)	Library > Import	Importing Local Video and Images to the Library, page 137

Type of Content	Method	For more information see:
Static Graphics (Direct upload to non-video playlist)	Library > Playlist view	Adding Static Graphics to a Non-Video Playlist by Direct Upload, page 150
TCP Data	Control Panel > Setup > Data Integration > Generic Data Source	Release 6.0: Cisco Vision Director Data Integration Guide
UDP Data	Control Panel > Setup > Data Integration > Generic Data Source	Release 6.0: Cisco Vision Director Data Integration Guide
Video (Headend)		Cisco StadiumVision Video Headend Design and Implementation Guide (Available to qualified Cisco Vision partners.)
Video (Local)	Library > Import	Importing Local Video and Images to the Library, page 137
XML	Library > Import	Release 6.0: Cisco Vision Director Data Integration Guide

Importing Local Video and Images to the Library

User Role: Administrator / Content Manager

To import local video and images from the Main Menu (Library):

1. Go to **Library > Upload Assets**.

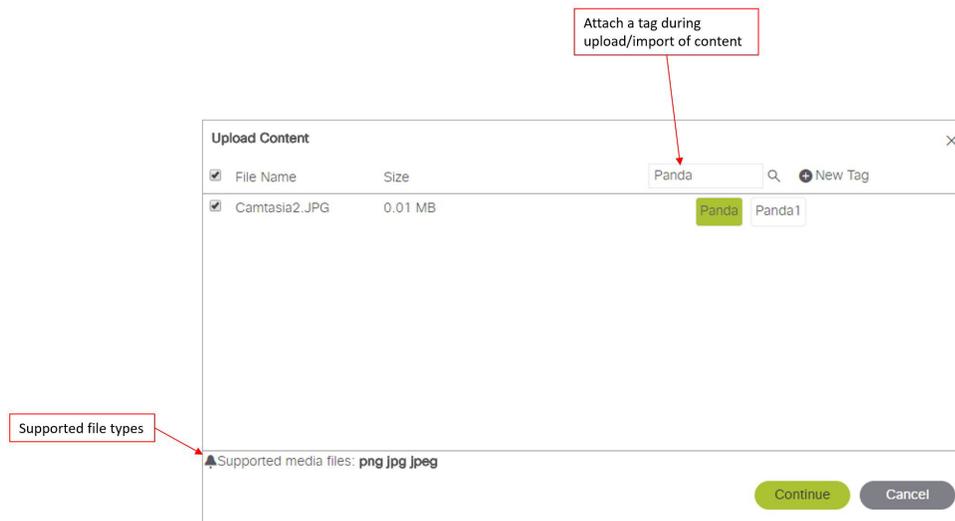
TIP: Use the keyboard Shift-Click function to select and untag multiple content items assigned to a tag.

2. Browse to the file that you want to upload.

TIP: Use the drop-down box by the File name to filter your selection by file type, including .zip files.

3. Click **Open**.

4. From the Upload Content dialog box, do the following ([Figure 73 on page 138](#)):

Figure 73 Upload Assets (Content)

- a. (Optional) Add or delete available tags.
 - b. (Optional) Select available tags to be assigned to the content that you are uploading.
5. Click **Continue**. The content uploads and appears in the Listview.

Adding a URL for HTML Pass-Through Content

User Role: Administrator / Content Manager

For HTML content guidelines, see the [Cisco Vision Content Planning and Specification Guide: Dynamic Signage Director, Release 6.1](#).

To add a URL for HTML pass-through content:

1. Go to **Tools > Control Panel > Setup > Channels > Basic Information** tab.
2. Type the name and URL for your content.
3. Click **Save**.

Staging Content to the Media Player

Once you have content uploaded to Cisco Vision Director, it must be pushed to the media player before it can be run by a script. This process of pushing content to the media player is called **content staging**.

Content staging needs to be done when:

- New custom fonts or language packs have been installed in the Software Manager.
- There have been changes to any content imported to the content Library (CMS). This includes local video and graphics files, and channels.

Note: Changes to widgets or data integration sources do not require content staging.

There are two ways that you can stage content from the Main Menu (Library):

How to Manage Content (Assets)

- Staging content manually

Manual content staging is performed outside the actual running of the script using the Staging button on the **Script Control > Staging** screen. With this method, you can stage content per script for all media players, or by selected media players.

Note: Only Administrator and Event Operator roles can stage content manually. Venue operator roles cannot stage content this way.

- Scheduling content staging

With this method, you can schedule content staging to occur at a specified number of minutes ahead of script start, or at a script start.

Staging Content Manually

User Role: Administrator / Event Operator

To stage content manually:

1. Go to **Script Control > Staging** tab (Figure 74 on page 139).
2. Select the script whose content you need to update on the media players.
3. Click the **Play** icon. The Start Manual Staging box appears (Figure 75 on page 139).

Figure 74 Staging Details

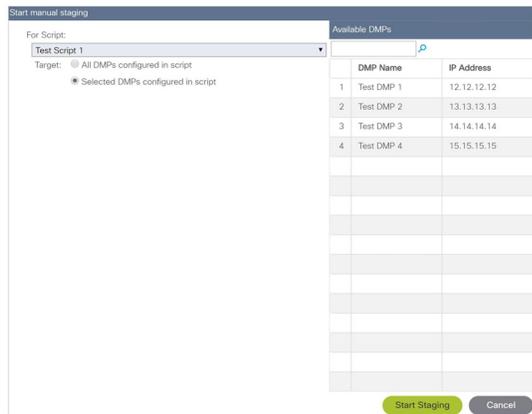
Name	Type	State	Start Time	End Time	Started by	Total Dev...	Completed	Error
Staging requested on Saturday, April 28, 2018 6:39:32 ...	content	STAGING_COMPL...	Saturday, April 28, 2018 6:39:32 ...	Saturday, April 28, 2018 6:39:34 ...	Manual TestScript	1	1	0

4. In the Staging screen, select the script you want to stage in the **For Script** field. Use the pull-down arrow.

Figure 75 Start Manual Staging Dialog Box

5. Select the target media players to receive the content updates. If you click “Selected DMPs configured in script,” a list of available media players appears (Figure 76 on page 140).

How to Manage Content (Assets)

Figure 76 Selected DMPs Configured in Script

6. Select the available media players to receive the content updates.
7. Click **Start Staging**.

Scheduling Content Staging with Script Start

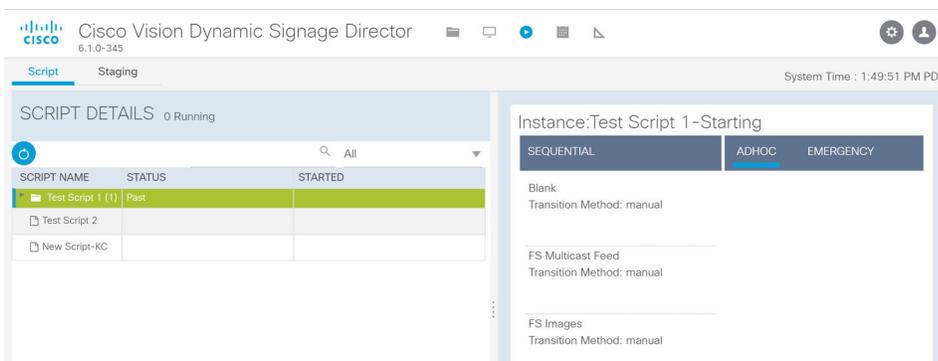
User Role: Administrator / Event Operator / Venue Operator

It is up to the user to determine how long before the script start to schedule staging. However, the script will not start until staging is complete, even if 0 minutes ahead of script start is configured.

For more information about running event scripts, see also the [Running an Event Script, page 186](#).

To schedule content staging with script start:

1. Go to **Script Control > Script** tab. The Script Details screen appears ([Figure 77 on page 140](#)) with your scripts.

Figure 77 Script Details Screen

2. Select the script.
3. Right click the script and click **Start**. The Start Script dialog box appears ([Figure 78 on page 141](#)).

Figure 78 Start Script Dialog Box

Start Script

Instance Name: Instance of Test Script 2

Start Time: Now In ___ mins

Duration: Forever

Staging: Yes No

Proof of Play: Yes No

Start Cancel

4. Set the start time as **Now** or type in the minutes.
5. Use the drop-down arrow to choose the **Duration**. The duration has values listed in seconds.
6. Click the Staging **Yes** or **No** button.
 - a. Type in the **Minutes Ahead of Script Start** to stage content to the media players (Script Start).
 - b. To run staging immediately before running the script, specify a value of 0. The script will not start until staging is complete.
7. Click **Start**.

If the script start is blocked by validation error(s), [Figure 79 on page 141](#) appears.

Figure 79 Confirm Force Script Start

Force Script Start Confirm

Script start was blocked by validation error(s). Please refer to Script Validation Panel for details. Press Yes to force start the script

Force Close

Use the drop-down arrow to see more information on your script. The Status column shows **“Starting.”** When complete, see **“Past”** and icon, as well as the date and time in the Started column.

Click **Staging** to see the details of your job.

How to Manage Content (Assets)

The screenshot shows the 'Staging' script interface in Cisco Vision Director. At the top, it says 'Script Staging' and 'System Time : 1:20:48 PM PDT'. Below this is a section titled 'STAGING DETAILS (#7)' with a search icon. The main part of the interface is a table listing staging operations. Each row includes a timestamp, a description, a status, and a 'Manual' checkbox. A red error message is displayed at the top right of the table area: '1 Error of Now: Tuesday, June 26, 2018 1:19:23 PM'. Below the error message is a table with columns 'DMP', 'IP', and 'ERROR'. The error table contains one entry: 'Small ELO 10.194.175.208 Unable to send requestSync'.

Timestamp	Description	Status	Manual
Staging requested on Thursday, June 21, 2018 10:31:0 AM	cont. STAGING_C... Thursday, June 21, 2018 ... Thursday, June 21, 2018 ...	1	1
Staging requested on Thursday, June 21, 2018 10:41:2 ...	cont. STAGING_C... Thursday, June 21, 2018 ... Thursday, June 21, 2018 ...	1	1
Staging requested on Thursday, June 21, 2018 10:42:2 ...	cont. STAGING_C... Thursday, June 21, 2018 ... Thursday, June 21, 2018 ...	1	1
Staging requested on Thursday, June 21, 2018 10:43:3 ...	cont. STAGING_C... Thursday, June 21, 2018 ... Thursday, June 21, 2018 ...	1	1
Staging requested on Thursday, June 21, 2018 10:43:5 ...	cont. STAGING_C... Thursday, June 21, 2018 ... Thursday, June 21, 2018 ...	1	1
Staging requested on Thursday, June 21, 2018 10:54:4 ...	cont. STAGING_C... Thursday, June 21, 2018 ... Thursday, June 21, 2018 ...	1	1
Staging requested on Thursday, June 21, 2018 10:54:3 ...	cont. STAGING_C... Thursday, June 21, 2018 ... Thursday, June 21, 2018 ...	1	1
Staging requested on Thursday, June 21, 2018 10:55:1 ...	cont. STAGING_C... Thursday, June 21, 2018 ... Thursday, June 21, 2018 ...	1	1
Staging requested on Thursday, June 21, 2018 10:55:3 ...	cont. STAGING_C... Thursday, June 21, 2018 ... Thursday, June 21, 2018 ...	1	1
Staging requested on Thursday, June 21, 2018 10:56:1 ...	cont. STAGING_C... Thursday, June 21, 2018 ... Thursday, June 21, 2018 ...	1	1
Staging requested on Thursday, June 21, 2018 10:56:5 ...	cont. STAGING_C... Thursday, June 21, 2018 ... Thursday, June 21, 2018 ...	1	1
Staging requested on Friday, June 22, 2018 5:00:2 AM	cont. STAGING_C... Friday, June 22, 2018 5:0... Friday, June 22, 2018 5:0... Manual Elevator Scr...	1	1
Staging requested on Friday, June 22, 2018 5:10:32 AM	cont. STAGING_C... Friday, June 22, 2018 5:1... Friday, June 22, 2018 5:1... Manual Garage Dal...	22	22
Staging requested on Saturday, June 23, 2018 5:00:2 AM	cont. STAGING_C... Saturday, June 23, 2018 ... Saturday, June 23, 2018 ... Manual Elevator Scr...	1	1
Staging requested on Saturday, June 23, 2018 5:10:23 ...	cont. STAGING_C... Saturday, June 23, 2018 ... Saturday, June 23, 2018 ... Manual Garage Dal...	22	22
Staging requested on Sunday, June 24, 2018 5:00:1 AM	cont. STAGING_C... Sunday, June 24, 2018 5... Sunday, June 24, 2018 5... Manual Elevator Scr...	1	1
Staging requested on Sunday, June 24, 2018 5:10:23 AM	cont. STAGING_C... Sunday, June 24, 2018 5... Sunday, June 24, 2018 5... Manual Garage Dal...	22	22
Staging requested on Monday, June 25, 2018 5:00:2 AM	cont. STAGING_C... Monday, June 25, 2018 5... Monday, June 25, 2018 5... Manual Elevator Scr...	1	1
Staging requested on Monday, June 25, 2018 5:10:23 AM	cont. STAGING_C... Monday, June 25, 2018 5... Monday, June 25, 2018 5... Manual Garage Dal...	22	22
Staging requested on Monday, June 25, 2018 8:33:2 AM	cont. STAGING_C... Monday, June 25, 2018 8... Monday, June 25, 2018 8... Manual	1	1
Staging requested on Monday, June 25, 2018 8:34:27 AM	cont. STAGING_C... Monday, June 25, 2018 8... Monday, June 25, 2018 8... Manual	1	1
Staging requested on Monday, June 25, 2018 8:39:0 AM	cont. STAGING_C... Monday, June 25, 2018 8... Monday, June 25, 2018 8... Manual	1	1
Staging requested on Monday, June 25, 2018 8:41:9 AM	cont. STAGING_C... Monday, June 25, 2018 8... Monday, June 25, 2018 8... Manual	1	1
Staging requested on Monday, June 25, 2018 11:29:9 AM	cont. STAGING_C... Monday, June 25, 2018 1... Monday, June 25, 2018 1... Manual Instance of ...	22	22
Staging requested on Tuesday, June 26, 2018 5:00:2 AM	cont. STAGING_C... Tuesday, June 26, 2018 ... Tuesday, June 26, 2018 ... Manual Elevator Scr...	1	1
Staging requested on Tuesday, June 26, 2018 5:10:29 ...	cont. STAGING_C... Tuesday, June 26, 2018 ... Tuesday, June 26, 2018 ... Manual Garage Dal...	22	22
Staging requested on Tuesday, June 26, 2018 1:19:20 P...	cont. STAGING_C... Tuesday, June 26, 2018 ... Tuesday, June 26, 2018 ... Manual Instance of ...	7	6

Double click the line to see how to resolve the error.