

USER MANUAL

Channel Explorer

Version 7.30 - May 2017



IPDirector





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What's New?

In the User Manual, the icon **NEW !** has been added on the left margin to highlight information on new and updated features.

The sections updated to reflect the new and modified features in Channel Explorer version 7.30 (compared to version 7.20) are listed below.

Channel letter configuration

Possibility to define the letter for each AB Roll channel, rather than just selecting a starting letter.

- See section "Configuring a New AB Roll Studio" on page 24.



1. Introduction

1.1. Product Overview

The Channel Explorer provides an overview of:

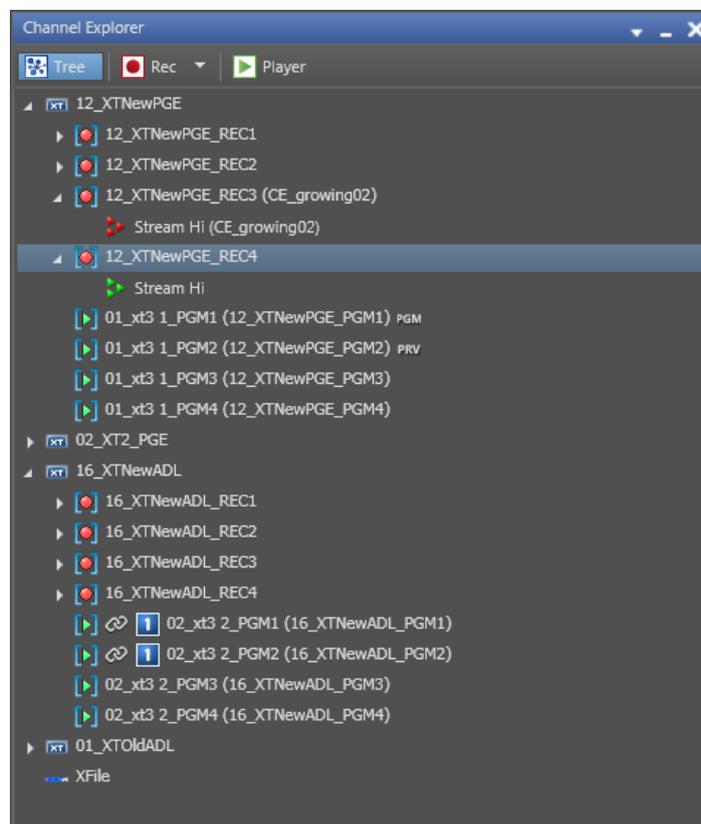
- logical XNet networks as defined in the Remote Installer, tagged as high resolution or low resolution
- EVS servers with their channel configurations (inputs and outputs).

Depending on the server configuration, with Multicam 14, up to 12 channels can be displayed, with a maximum of 12 recorder channels or 6 player channels.

- streams appear directly under the recorders as a relative path
- low resolution recorders appear under the associated high resolution recorders, after the streams
- VTRs being controlled by an IPDirector workstation

Several views are available from the Channel Explorer:

- Tree view
- Rec view
- Player view
- VTR view



Through the Channel Explorer, any IPDirector workstation can take control of one or several channels on EVS servers that are connected to the XNet network.

You can perform many operations from the Channel Explorer module, for example:

- lock channels from use by others
- start or stop an ingest
- gang multiple channels
- create specialized playback modes.

Indeed, the flexibility of IPDirector allows multiple channels to be managed together in a variety of modes:

- Ganged channels: allowing simultaneous control of several channels (recorders or players)
- Fill and Key: allowing the management of clips or playlists in Fill & Key pairing.
- Program/preview: allowing the playout of audio and video transition effects between clips, playlist elements or timeline elements.
- Lock Timeline: allowing two channels to function as Timeline Engine for use with IPEdit.
- AB Roll Playlist: allowing the control and playout of material on up to 4 channels at the same time.

See section "Channels Modes" on page 17 for more information on each association type.

1.2. Opening of Channel Explorer

To open the Channel Explorer, click the  Channel Explorer icon on the Application bar of the main window.

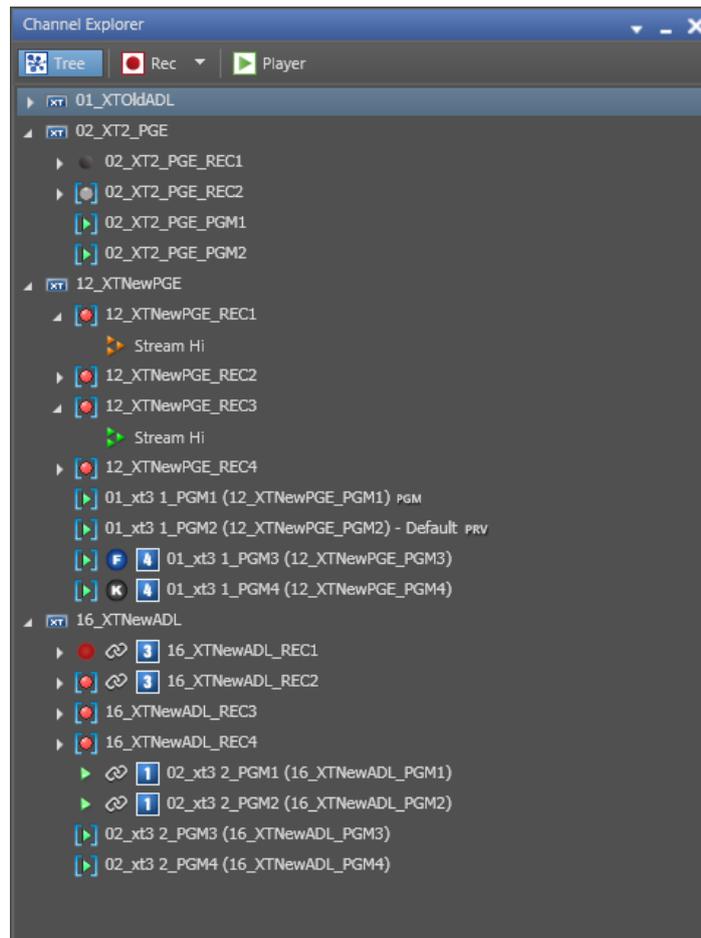
The Tree view is displayed by default when Channel Explorer opens.



2. User Interface

2.1. Tree View

Click the **Tree** button to display the Tree view:



The Tree view shows all EVS video servers from the XNet network with their recorder and player channels, related streams, controlled VTR devices, connected XF devices.

High resolution networks appear on top.

If no network is defined in Remote Installer, there will be no XNet root and the EVS servers will appear as root nodes.

A lot of information is given, by means of icons or additional text, on the hardware/device, type of server channel, resolution, connected remote devices, stream status, channels association mode... See section "Channel Explorer Icons" on page 4 for a description of all the icons.



NOTE

From version 6.55, the interface skin has slightly changed, so the color shade of some user interface elements (such as title bar, buttons) may differ from the screenshots included in the current manual.

2.2. Channel Explorer Icons

A lot of information is given in the Channel Explorer window, by means of icons or additional text, on the hardware/device, type of server channel, resolution, connected remote devices, stream status, channels association mode,...

The meaning of each icon is explained in the following tables.

Resolution Information

Icon	Description
	high resolution XNet.
	low resolution XNet.

Hardware

Icon	Description
	EVS video server connected to the XNet. The XT label is used for any type of EVS video server.
	VTR device connected to the XNet.
	XF device connected to the XNet.

Player and Recorder Channels

Icon	Description
	<p>Recorder channels.</p> <p>Icon with brackets: recorder channel not associated to a Recorder Panel.</p> <p>Icon without brackets: recorder channel associated with a Recorder Panel.</p> <p>Red icon: recorder channel being recording.</p> <p>Black icon: recorder channel stopped.</p>
	<p>Player channels</p> <p>Icon with brackets: Player channel with no associated control, Control Panel or Playlist Panel.</p> <p>Icon without brackets: Player channel associated with an IPDirector application (Control Panel, Playlist Panel, IPLogger, Database Explorer).</p>

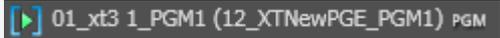
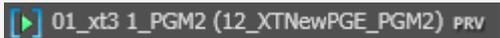


Icon	Description
	Channel locked from this workstation.
	Channel locked from another workstation.
	Player channel supporting the "Mix on one channel" functionality.
	Player channel set as default player.
	Player channel controlled by a ShuttlePRO device.
	Player channel controlled by a BEPlay device.
	Player channel connected to an IN port of a video router, itself associated to OUT ports. The name of the router OUT port(s) routed from a player channel is displayed after the player channel name.
	Recorder channel connected to an OUT port of a video router, itself associated to an IN port. The name of the router IN port routed to the recorder channel is displayed after the recorder channel name.

Streams

Icon	Description
	On-line stream (green).
	Recording stream (red).
	Off-line stream (black).
	Scheduled stream (orange).
	Warning message on the stream (yellow).

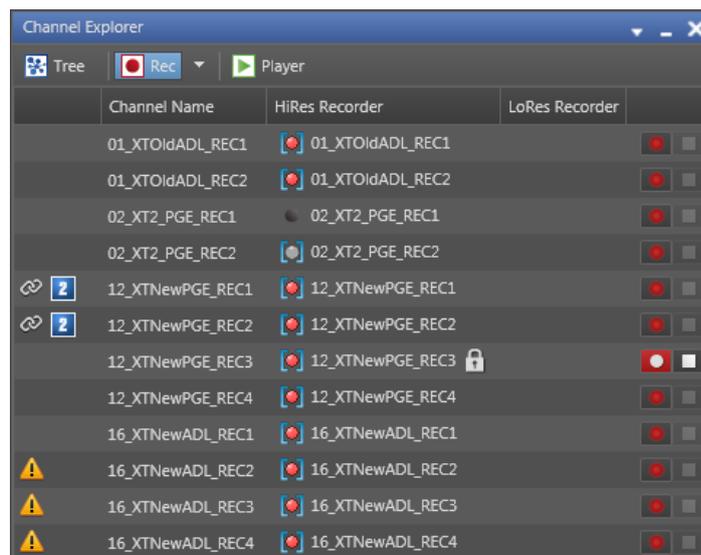
Channels Association Modes

Icon	Description
	Channel ganged with another channel as part of group 3.
	Channel has been assigned as a PGM.
	Channel has been assigned as a PRV.
	Channel set as a Fill channel in a Fill & Key association and part of group 2.
	Channel set as a Key channel in a Fill & Key association and part of group 2.
	Player channel locked for use with a timeline (Timeline mode).
	Channel assigned to a studio which has been associated with the AB Roll Playlist panel, so the channel is set to AB Roll mode.

2.3. Recorder View

Display of the Recorder View

Click the **Rec** button to display the Recorder View:



See section "Channel Explorer Icons" on page 4 for a description of all the icons displayed in the view.



Start and **Stop** buttons are available on the right for clip recording purposes.

Selection of Items to Display

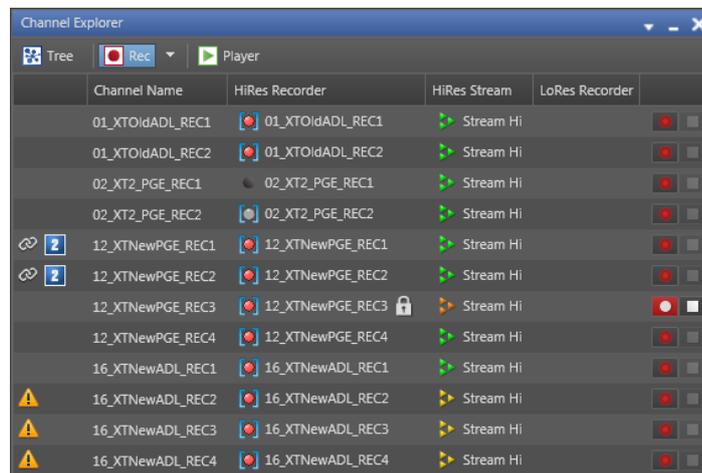
This view shows the following items:

- high resolution and low resolution recorders
- high resolution and low resolution streams

Click the arrow to the right of the **Rec** button to select which items you want to display in the Recorder view:

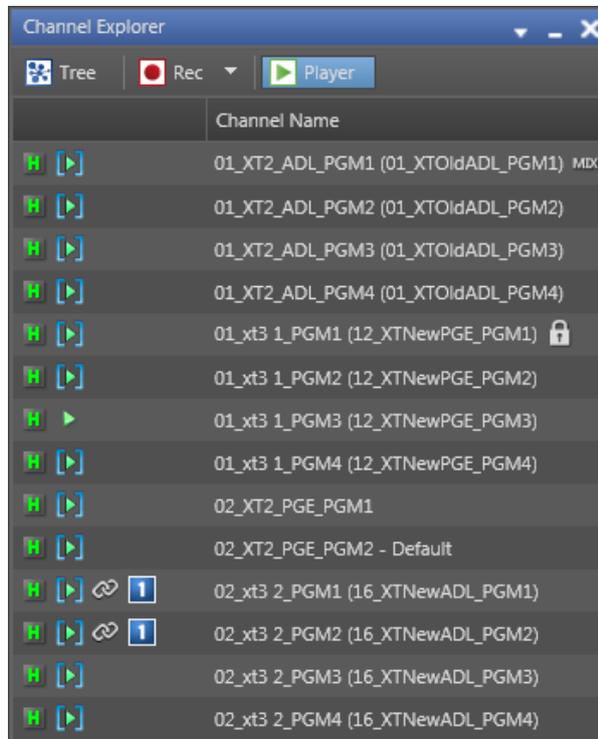
- HiRes Recorders
- HiRes Streams
- LoRes Recorders
- LoRes Streams

The following screenshot shows the view with the high resolution streams selected:



2.4. Player View

Click the **Player** button to display the Player View:



This view shows the following items:

- high resolution players
- low resolution players, if any

See section "Channel Explorer Icons" on page 4 for a description of all the icons displayed in the view.

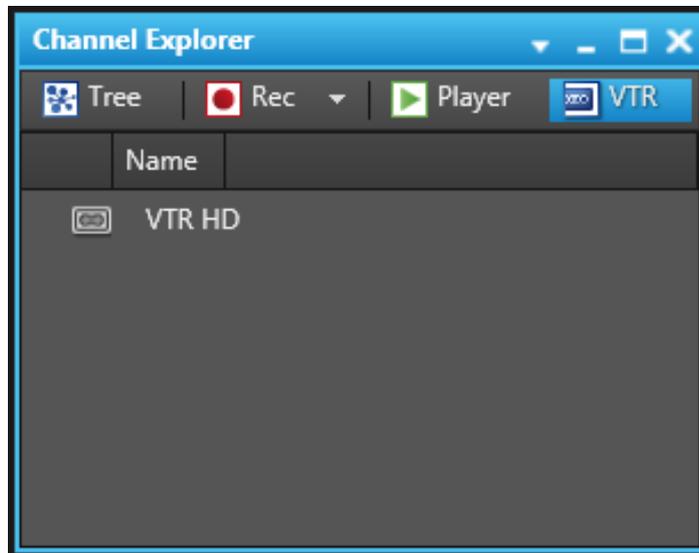


TIP

When a user renames a player channel on an EVS video server, the change is immediately reflected in the IPDirector interface.

2.5. VTR View

This view is only available if a VTR device is connected to the XTNet.



Click the **VTR** button to display the VTR View and see the available VTR devices.

From the VTR view, you can perform the following operations:

- locking a VTR device
- opening a VTR Control Panel by right-clicking a VTR name and selecting the appropriate option from the contextual menu.

2.6. Contextual Menus

Contextual menus are available when right-clicking an EVS video server, a recorder channel, a stream or a player channel.

EVS Server Contextual Menu

All the options available for an EVS video server and the sections where they are described are mentioned hereafter.

Show Server Monitoring Info

See section "How to Get Server Monitoring Information" on page 42.

Restart Server...

See section "How to Launch a Different Predefined Server Configuration" on page 43.

Configure Server...

See section "Multicam Web Setup Tool" on page 44.

Recorder Channel Contextual Menu

All the options available for a recorder channel and the sections where they are described are mentioned hereafter.

Open Recorder Panel

See section "Assigning a Recorder Channel" on page 15.

Open Ingest Scheduler (new ingest)

See section "How to Start or Stop a Server Ingest" on page 38.

Start XT Ingest

See section "How to Start or Stop a Server Ingest" on page 38.

Stop XT Ingest

See section "How to Start or Stop a Server Ingest" on page 38.

Lock

See section "Locking a Channel" on page 16.

Unlock

See section "Removing the Link between Channels" on page 23.

Gang

Gangs the selected channels.

See section "Ganging Recorder or Player Channels" on page 18.

Ungang

Removes the selected channels from the gang group.

See section "Removing the Link between Channels" on page 23.

Pgm/Prv

Not used for recorder channels.

Fill Key

See section "Associating Channels in Fill and Key Mode" on page 20.

Assign Recorder Source

See section "Assigning a Recorder Source" on page 33.

Only available when the recorder channel is connected to a video router.

Stream Contextual Menu

All the options available for a stream and the sections where they are described are mentioned hereafter.

Open Ingest Scheduler (new ingest)

See section "How to Start or Stop a Server Ingest" on page 38.

Start Hires Stream

See section "How to Start, Stop or Kill a Stream" on page 39.

Stop Stream

See section "How to Start, Stop or Kill a Stream" on page 39.

Kill Stream

See section "How to Start, Stop or Kill a Stream" on page 39.

**Set Stream Target**

Opens the Select Stream Target window to define a default target for the selected stream. See section "Defining a Default Stream Target" on page 31.

Player Channel Contextual Menu

All the options available for a player channel and the sections where they are described are mentioned hereafter.

Open Control Panel

See section "How to Assign a Player Channel or the Software Player" on page 15.

Lock

See section "Locking a Channel" on page 16.

Unlock

See section "Removing the Link between Channels" on page 23.

Gang

Gangs the selected channels.

See section "Ganging Recorder or Player Channels" on page 18.

Ungang

Removes the selected channels from the gang group.

See section "Removing the Link between Channels" on page 23.

Pgm/Prv

Associates the selected channels in PGM/PRV mode, used for the playout of a series of clips or a playlist with its transition effects.

See section "Associating Player Channels in PGM/PRV Mode" on page 20.

Fill Key

See section "Associating Channels in Fill and Key Mode" on page 20.

Lock Timeline

See section "Associating Player Channels in Timeline Mode" on page 22.

Unlock Timeline

See section "Removing the Link between Channels" on page 23.

Set as Default Player

"Setting the Default Player Channel" on page 13.

Assign Player Destination

See section "Assigning a Player Destination" on page 35.

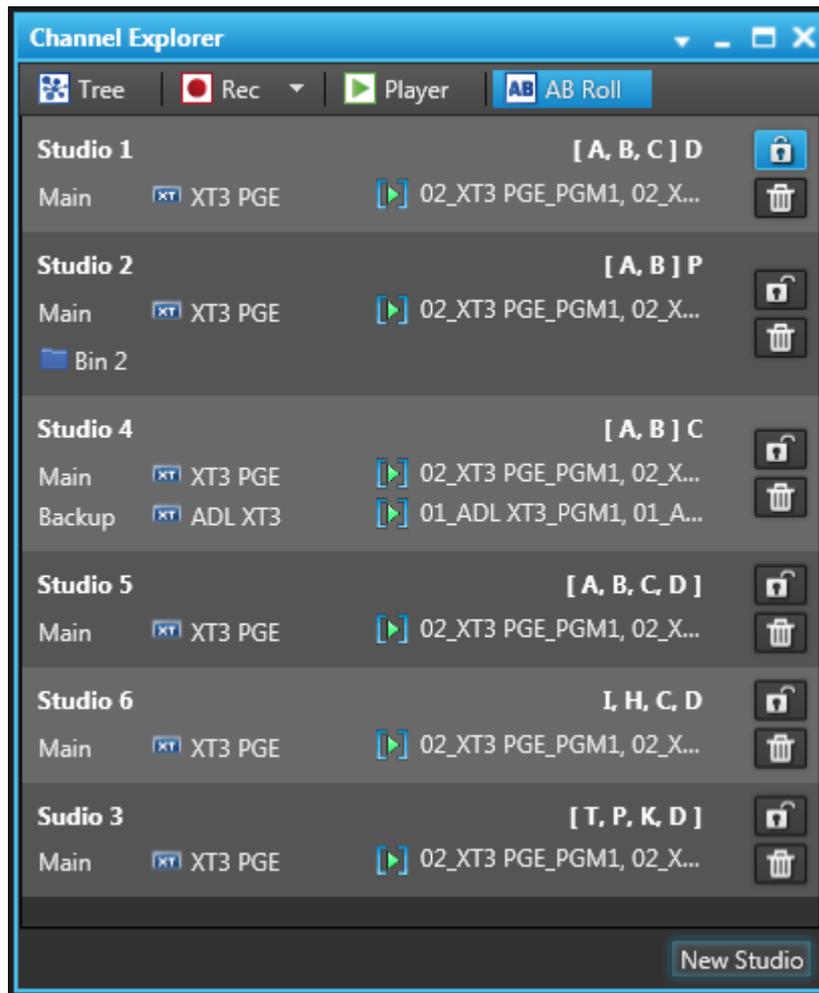
Only available when the player channel is connected to a video router.

2.7. AB Roll Tab

The AB Roll tab is used to create and configure group of player channels, called studios, to be used with the AB Roll Playlist module. See section "Configuring a New AB Roll Studio" on page 24.

It is displayed when the AB Roll service is started.

It shows all the created studios:





3. Managing Channels

3.1. Introduction

From the Channel Explorer, recorder channels can be assigned to Recorder Panels, player channels can be assigned to a Control Panel or a Playlist Panel, and a default player channel can be defined. Some of the operating procedures are described in the next sections. Please refer to the manuals related to the modules a channel can be associated with for more information.

3.2. Assigning a Player

3.2.1. Introduction

There are several ways to assign a player channel to a Database Explorer window, a Control Panel, an IPLogger window or a Playlist Panel. See section "How to Assign a Player Channel or the Software Player" on page 15.

If a default player channel has been defined from the Channel Explorer, this channel will automatically be assigned to the Database Explorer, IPLogger and the IPDirector main window when you open the application.

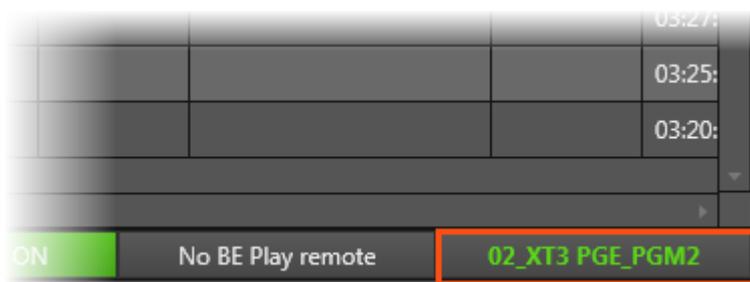
See section "Setting the Default Player Channel" on page 13 for more information on how to set and how to clear a default player channel.

3.2.2. Setting the Default Player Channel

Purpose

A default player can be defined from the Channel Explorer or from the IPDirector main window. It will automatically be assigned to the IPDirector main window at opening.

When the user will open the Database Explorer, IPLogger or IPEdit, the default player will automatically be assigned to these windows, and displayed in the Associated Channel zone, as shown in the next screenshot in the case of the Database Explorer:



**NOTE**

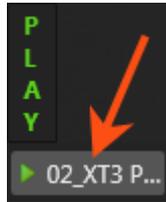
If the default channel is only accessible to the workstation the user is logged on, the default player assignment may not be accessible when the user moves to another workstation. This is due to a user rights restriction and is intentional.

How to Set the Default Player Channel from the Channel Explorer

To define the default player channel from the Channel Explorer, proceed as follows:

1. From the Tree view or the Player view of the Channel Explorer, right-click the player channel you wish to define as the default player.
2. Select **Set as Default Player** from the contextual menu.

Default is added next to the player channel name in the Channel Explorer and the name of the default player is displayed in the IPDirector Status bar.



How to Set the Default Player Channel from the IPDirector Main Window

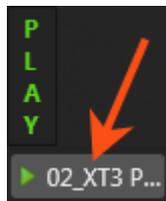
To define the default player channel from the IPDirector main window, proceed as follows:

1. Right-clicking the **Default Player Channel** field at the bottom left of the IPDirector main window.

A contextual menu is displayed.

2. Select the player channel you wish to define as the default player.

Default is added next to the player channel name in the Channel Explorer and the name of the default player is displayed in the IPDirector Status bar.



How to Clear the Default Player Channel

You can clear the default player channel, only from the IPDirector Main window, in one of the following ways:

- double-click the **Default Player Channel** field.
- right-click the **Default Player Channel** field and select **None** from the contextual menu.

 is displayed in the **Default Player** field of the Status bar.

3.2.3. How to Assign a Player Channel or the Software Player

Users can assign a player channel to a Database Explorer window, a Control Panel, an IPLogger window or a Playlist Panel from the Channel Explorer. This can be done in one of the following ways:

- Drag a player channel from the Channel Explorer window and drop it on the Database Explorer window, a Control Panel, an IPLogger window or a Playlist Panel (in the Channel Media and Transport Functions pane).

The name of the selected player is displayed in the Associated Channel zone or in the **Player** field.

- Double-click a player in the Channel Explorer.
A Control Panel opens and the player is automatically assigned to it.
- Right-click a player channel in the Channel Explorer and select **Open Control Panel** from the contextual menu.

A Control Panel opens and the player is automatically assigned to it.

When a channel is assigned to an application, the **Player** icon in the Channel Explorer window changes from  to .

3.3. Assigning a Recorder Channel

Introduction

There are several ways to assign a recorder channel to a Recorder Panel or a VTR Control Panel.

How to Assign a Recorder Channel from the Channel Explorer

Users can assign a recorder channel to a Recorder Panel or a VTR Control Panel from the Channel Explorer.

This can be done in one of the following ways:

- Double-click a recorder channel in the Channel Explorer.
A Recorder Panel opens and the recorder channel is automatically assigned to it.
- Right-click a recorder channel in the Channel Explorer and select **Open Recorder Panel** from the contextual menu.
A Recorder Panel opens and the recorder channel is automatically assigned to it.

When a recorder channel is assigned to an application, the **Recorder** icon in the Channel Explorer window changes from  to .

3.4. Locking a Channel

Purpose

It is possible to lock a recorder channel or a player channel to prevent any operation from any IPDirector user interface. However, the Remote Panel in LSM exclusive or parallel mode will maintain control or be able to regain the control if the channel has been locked from the IPDirector interface.

If a ShuttlePRO is associated to the selected channel, its functions are inactive when the channel has been locked.

Limitations

The **Lock** function is not available in the following situations:

- The selected channel has been locked by another user.
- You do not have the right to lock the selected channel.
- The Remote Panel controls the channel.
- The EVS server the channel relates to is shut down.

Locked Channel Display

A **Lock** icon or button can have different displays:



- channel locked from the current workstation



- channel locked from another workstation

How to Lock or Unlock a Channel

Locking a Channel

To lock a recorder channel or a player channel, proceed as follows:

1. Right-click a channel
2. Select **Lock** from the contextual menu.

A  icon is displayed next to the recorder channel or the player channel name.

Locking a Channel

To lock a recorder channel or a player channel, proceed as follows:

1. Right-click a channel
2. Select **Lock** from the contextual menu.

A  icon is displayed next to the recorder channel or the player channel name.

Unlocking a Channel

To unlock a recorder channel or a player channel, proceed as follows:

1. Right-click the channel
2. Select **Unlock** from the contextual menu.

If the channel was locked from the local workstation, it will be unlocked immediately.

If the channel was locked from another workstation, you will need to confirm the Unlock request in a confirmation window.

The icon disappears.

3.5. Channels Modes

3.5.1. Introduction

From the Channel Explorer, several channels can be grouped in various association types to be managed together. These associations are briefly described hereafter.

- **Ganged channels:** at least two channels can be associated in Gang mode for simultaneous control: synchronized recording for recorder channels or synchronized playback for player channels.
- **Fill & Key:** two channels can be associated in Fill & Key mode for the management of clips or playlists themselves in Fill & Key pairing.

Linked recorder channels are used to create F & K clips.

Linked player channels are used to perform synchronized clip or playlist recalls in a Fill & Key scenario (sometimes called Matte & Fill) for playback to a vision mixer (switcher) or keyable device.

- **Program/preview (PGM/PRV):** two player channels can be associated in PGM/PRV mode to allow the playout of audio and video transition effects between clips or playlist elements. This is useful when the player channels do not support the "Mix on one channel" functionality.
- **Lock Timeline:** two player channels can be associated in IPEdit mode allowing the playout of a timeline with its transition effects. This is useful when the player channels do not support the "Mix on one channel" functionality.
- **AB Roll Playlist:** up to 4 player channels can be associated in AB Roll Playlist mode to control and play material on all these channels at the same time.

3.5.2. Ganging Recorder or Player Channels

Purpose

When channels are ganged, they can be controlled simultaneously: synchronized recording by ganged recorder channels or synchronized playback by ganged player channels.

Recorder channels, or player channels, can be ganged from the Channel Explorer.

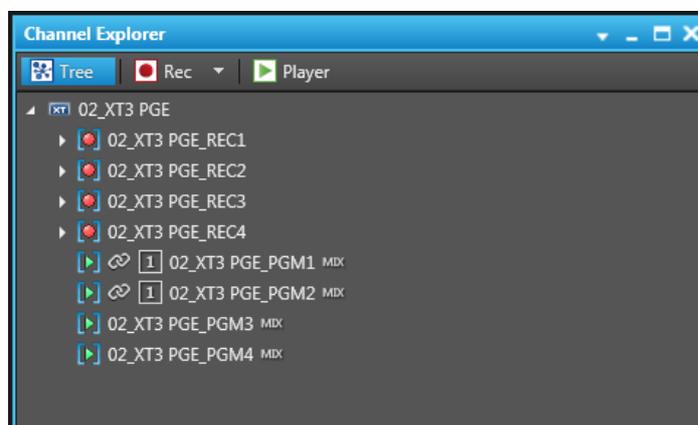
It is not possible to gang recorder channels with player channels.

How to Gang Recorder or Player Channels

To gang two or more channels, proceed as follows:

1. Select the channels with **SHIFT+click** or **CTRL+click**.
2. Do one of the following operations:
 - Right-click one of the channels and select **Gang**
 - Press **CTRL+G**.

The ganged channels will have an  icon next to them to signify their new status.

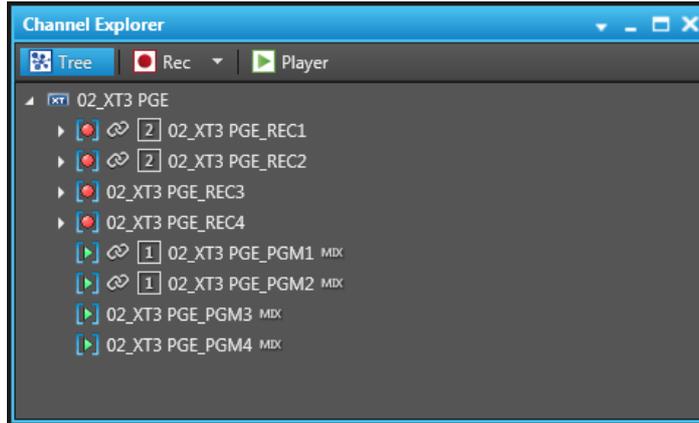


- To add more channels to a group: select all channels of the group and the new channel, right-click and select **Gang** again.

Display of Ganged Channels

In Channel Explorer, an icon is displayed next to the ganged channels.

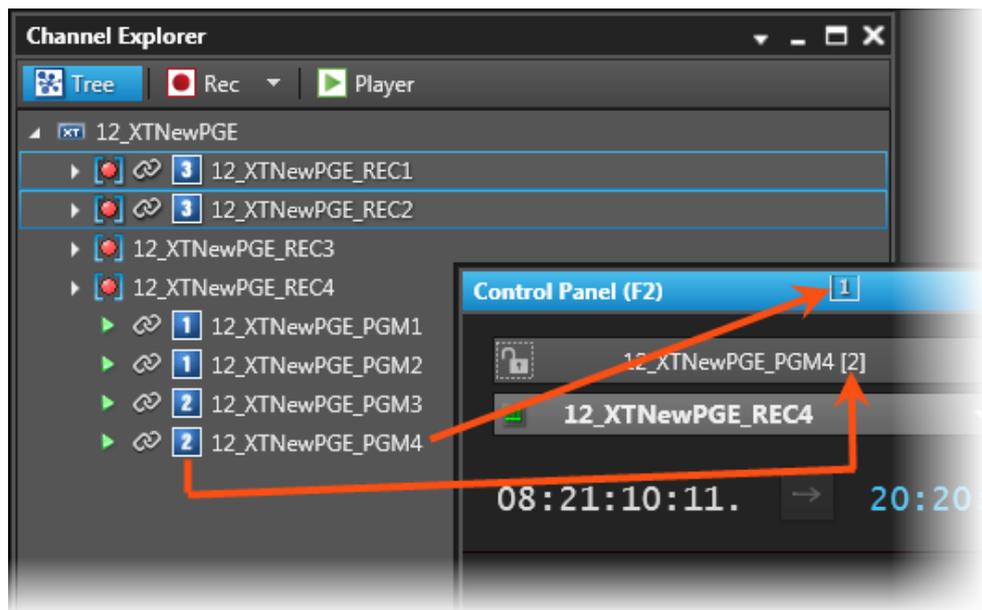
Several groups of ganged channels can coexist, performing different tasks on a production. Each of the linking icons will have a number next to it in the Channel Explorer to indicate which group the channel belongs to.



In the Control Panel and the Playlist Panel where the player channel is selected,

- the number of the Gang group is displayed next to the name of the loaded player channel
- the number of the channel in the group is displayed in the title bar

In the next example, the loaded player channel was the first channel selected to be part of Gang group 2:



3.5.3. Associating Player Channels in PGM/PRV Mode

Purpose

IPDirector is able to play a series of clips or a playlist with its transition effects. A single player channel will be sufficient if it supports the "Mix on one channel" functionality. Otherwise, two player channels must be used and they must be set to PGM/PRV mode.

The association of two player channels in PGM/PRV mode can be set from the Channel Explorer, the Control Panel and the Playlist Panel.

Any player channels cannot be associated with another one for a PGM/PRV pair. Pairs of player channels allowed for association depend on the Multicam configuration of the EVS video server. Channel Explorer only allows the authorized pairs.

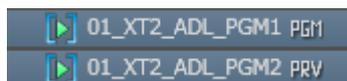
How to Associate Player Channels in PGM/PRV Mode from the Channel Explorer

To associate channels in PGM/PRV mode, proceed as follows:

1. Select two channels with **SHIFT+click** or **CTRL+click**.
2. Do one of the following operations:
 - Right-click one of the channels and select **Pgm/Prv**
 - Press **CTRL+M**.

Display of Channels in PGM/PRV Mode

In Channel Explorer, the channels are shown with the **PGM** and **PRV** icons.



In the Control Panel and the Playlist Panel where the player channel is selected, the **PGM** or **PRV** icon is displayed in the panel title bar.

3.5.4. Associating Channels in Fill and Key Mode

Purpose

Recorder channels or player channels of the EVS servers can be ganged in a specific style called Fill & Key. This mode manages assignments of clips or playlists, and forces them to recall to the appropriate channels, so as to allow you to perform synchronized clip or playlist recalls in a Fill & Key scenario (sometimes called Matte & Fill).



Constraint

The first channel you select will become the Fill and the second one the Key.

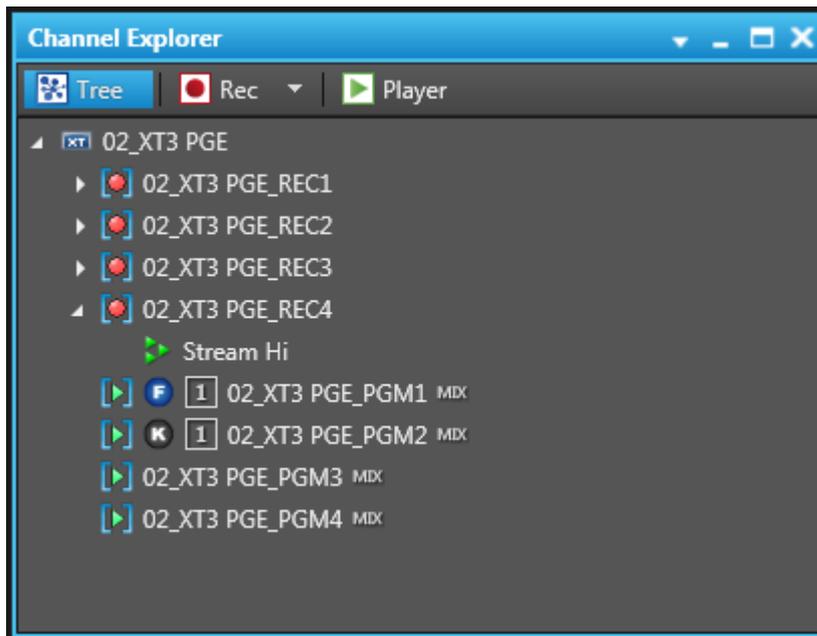
How to Associate Channels in Fill and Key Mode

To associate two channels in Fill & Key mode, proceed as follows:

1. Select two channels with **SHIFT+click** or **CTRL+click**.
2. Do one of the following operations:
 - Right-click one of the channels and select **Fill Key**
 - Press **CTRL+Y**.

Display of Channels in Fill and Key Mode

In Channel Explorer, the channels are shown with the **Fill**  and **Key**  icons:



In the Control Panel and the Playlist Panel where the player channel is selected, the **Fill** or **Key** information is displayed in the panel title bar.

3.5.5. Associating Player Channels in Timeline Mode

Purpose

IPDirector is able to play a timeline with its transition effects in the IPEdit application or in the Control Panel.

From the Control Panel, a single player channel will be sufficient if it supports the "Mix on one channel" functionality.

The IPEdit module requires two player channels to function. This pair of player channels is called the Timeline Engine. The Timeline Engine can be PGM1/PGM2 or PGM3/PGM4:

- PGM1 or PGM3 is the Timeline output channel (also called 'timeline PGM').

An external video monitor needs to be linked to PGM1 or PGM 3 for the user to preview the timeline.



Warning

If PGM1 or PGM3 is set to 'Mix on one channel', there will be no preview when the timeline is played.

- PGM2 or PGM 4 is the Player output channel (also called 'player PGM'). It can be a normal channel or a channel with the 'Mix on one channel' functionality.

The IPDirector video board (AVH) needs to be associated to PGM2 or PGM4 for the users to preview the player on the video display.

When PGM1/PGM2 are used as Timeline Engine, the LTC output of the server generates a timecode based on the TC Track. This does not work with PGM3/PGM4.

With a 12-channels EVS server, the pairs of channels may differ, depending on the Multicam configuration.

When two player channels are selected from IPEdit, the Timeline mode is automatically activated. The Timeline mode can be activated from the Channel Explorer as well.

How to Associate Player Channels in Timeline Mode

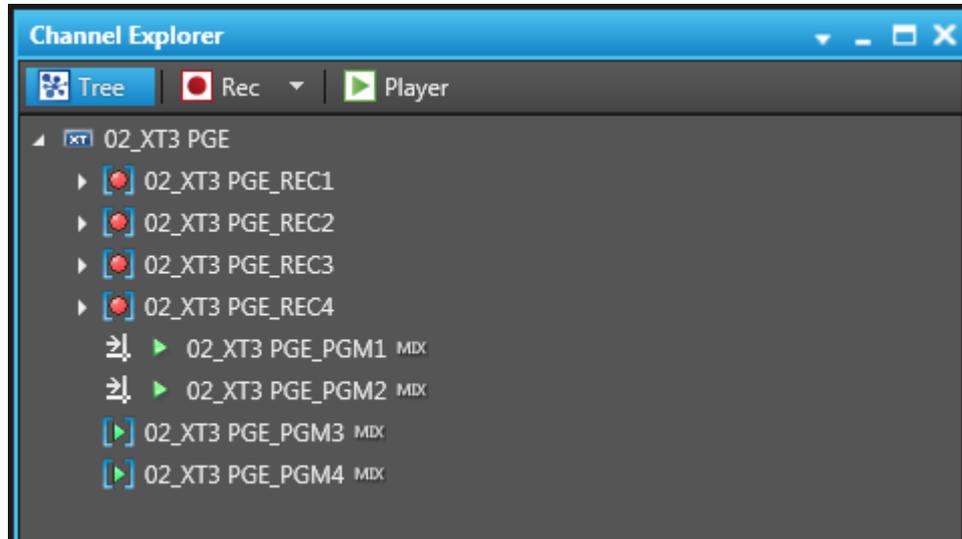
To associate channels in Timeline mode, proceed as follows from the Channel Explorer:

1. Select two channels with **SHIFT+click** or **CTRL+click**.
2. Right-click a channel.
3. Select **Lock Timeline**.

The player channels are locked for use with a timeline. This prevents you and other users from using these player channels in another mode than the Timeline mode.

Display of Channels in Timeline Mode

In the Channel Explorer, the **Timeline Mode** icon  is displayed in front of the Timeline engine channels:



In the Control Panel where one of the player channels is selected, the **Timeline Mode** icon is displayed in the panel title bar.

3.5.6. Removing the Link between Channels

How to Manually Remove the Link Between Channels

To unlink channels, would they be in Gang mode, PGM/PRV mode, Fill&Key mode, Timeline mode or AB Roll mode, proceed as follows:

1. Select the ganged channels with **SHIFT+click** or **CTRL+click**.
2. Right-click one of the channels
A contextual menu is displayed.
3. Select **Ungang** or, for the Timeline mode, select **Unlock Timeline**.



NOTE

Channels can be selected even if they are part of different ganged groups. Each selected channel will be removed from the ganged group of channels it was part of.

Automatic Unlock of Timeline Mode

When you exit IPEdit or IPDirector whereas the timeline is NOT being played out, the timeline lock is automatically removed.

When you exit IPEdit or IPDirector whereas the timeline is being played out, a message is displayed and you can decide whether to exit IPEdit or not.

3.5.7. Configuring a New AB Roll Studio

Considerations about Studio Configuration

The studio configuration is possible provided that you have the appropriate user right: AB Roll Playlist Configure Channels.

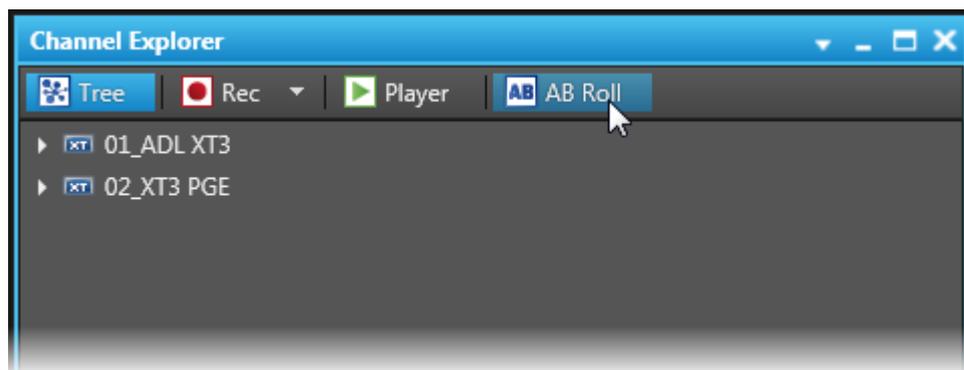
The same player channels can be assigned to different studios.

A studio configuration cannot be edited.

How to Configure a New AB Roll Studio

To create and configure an AB Roll studio,

1. Make sure that the AB Roll service is started.
2. Access the AB Roll tab in the Channel Explorer:

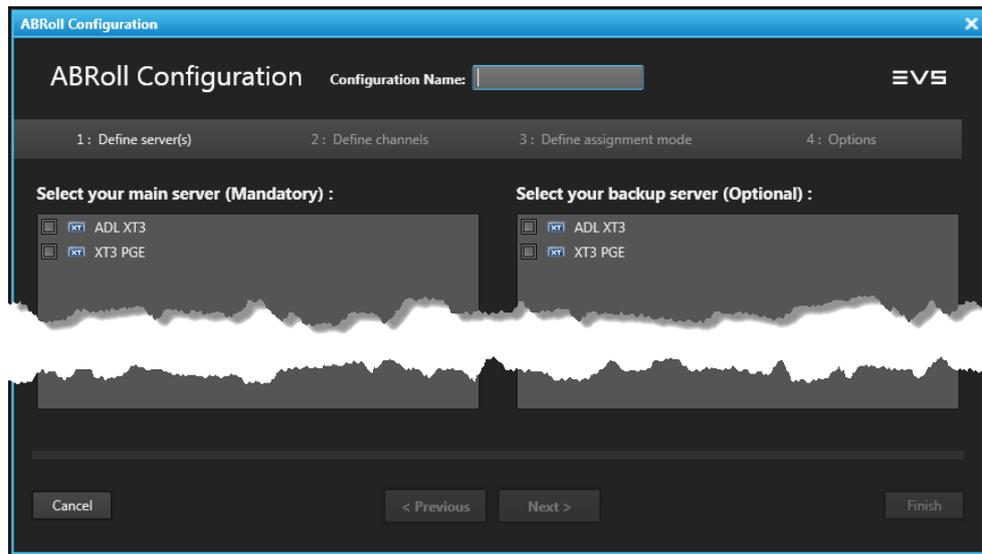


3. Click **New Studio**.

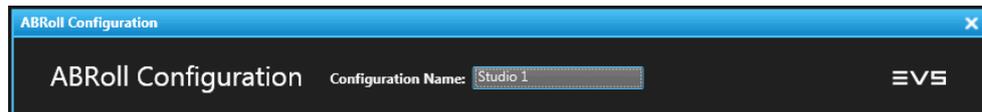




The ABRoll Configuration window opens and displays the tab 1: **Define Servers**.



4. (Mandatory) In the **Configuration Name** field, enter a name for your new studio.

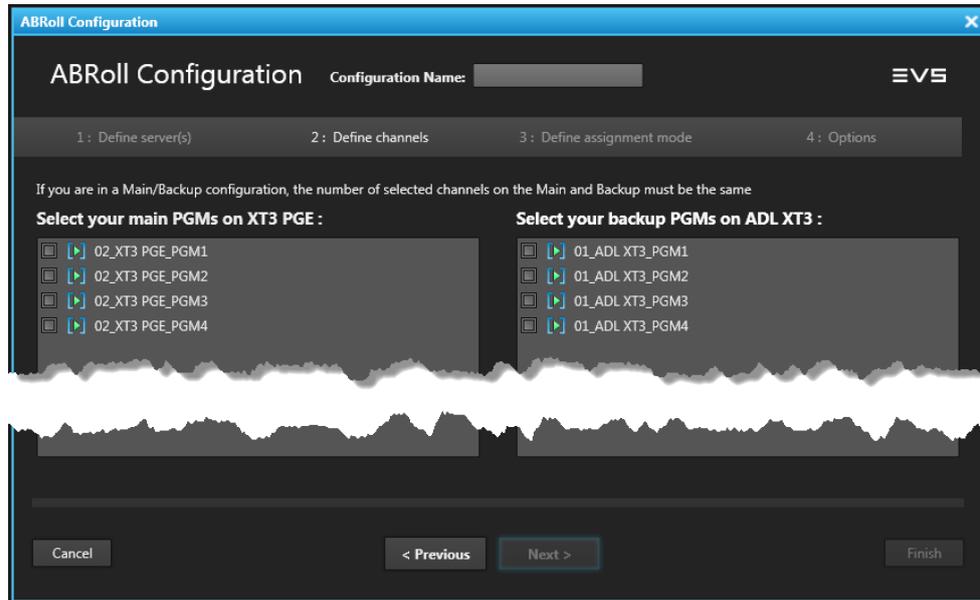


The maximum length for a configuration name is 64 characters.

5. (Mandatory) From the list of servers to the left, select your main server.
The server is grayed out in the list of servers to the right.
6. (Optional) From the list of servers to the right, select your backup server.
The server is grayed out in the list of servers to the left.

7. Click **Next** to continue.

The window displays the tab **2: Define Channels**.



The area to the left now lists the player channels of the main server you selected in the previous step. The area to the right displays the channels of the backup server. If you did not select a backup server, this area is empty.

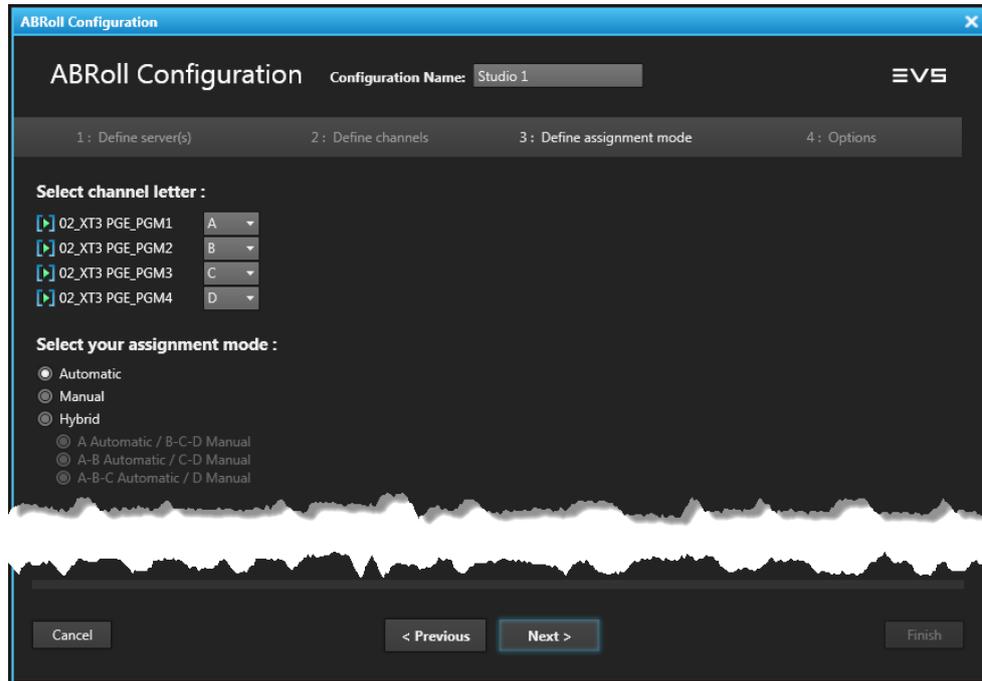
Channels already linked to another AB Roll studio are also available.

8. Select at least two and up to four channels from your main server.
9. If you are in a Main/Backup configuration, select at least two and up to four channels from your backup server. The number of selected channels on the Main and Backup servers must be the same.

10. Click **Next** to continue.

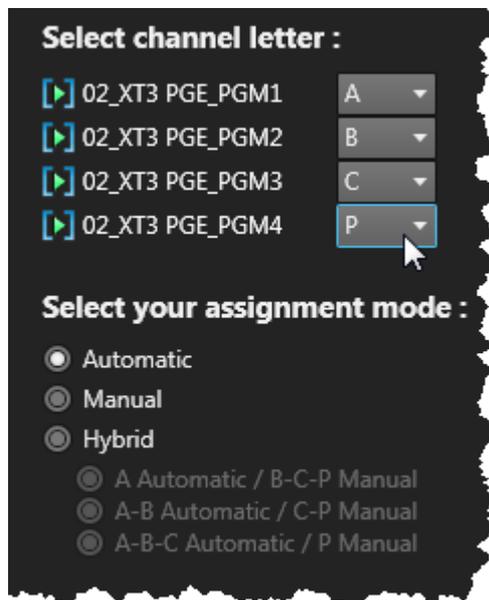
The window displays the tab **3: Define Assignment Mode**.

NEW !



NEW !

11. Select the letter for each of the AB Roll channels. By default, the letter **A, B, C, D,...** are selected.



12. Select the preferred assignment mode. You can choose between the following options:

- **Automatic:** IPDirector will automatically assign the playlist elements to a particular channel. This mode is selected by default.

Then, proceed to Step 14.

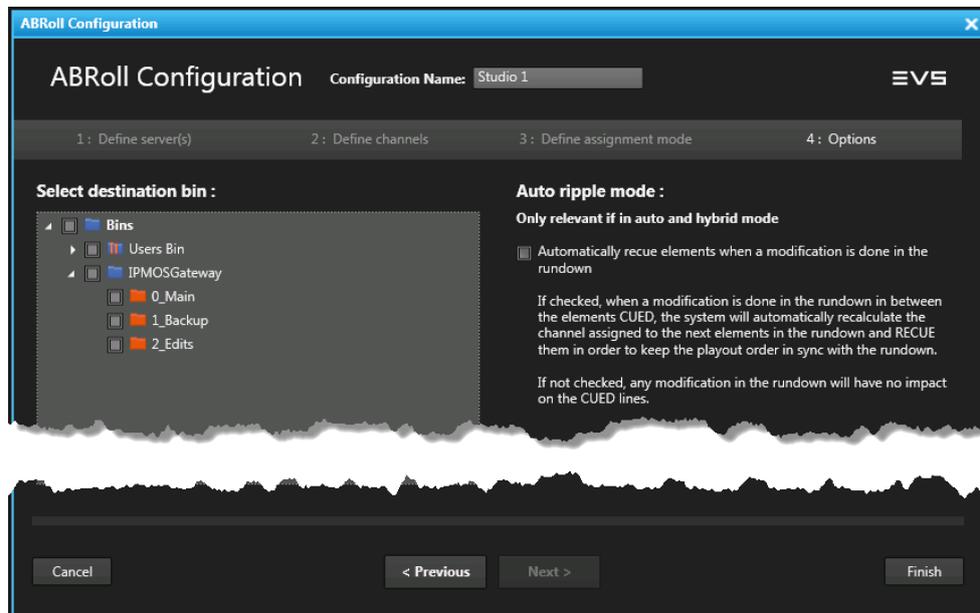
- **Manual:** The operator can manually assign a playlist element to a particular channel.
Then, proceed to Step 14.
 - **Hybrid:** Some channels will be set to Automatic mode and others will be set to Manual mode.
Then, proceed to Step 13.
13. If you have chosen the Hybrid mode, select the option corresponding to the distribution of channels between the Automatic and the Manual modes:
- If you have selected two channels in the previous tab, only one option will be available: **A Automatic / B Manual**.
 - If you have selected three channels, two options will be available:
A Automatic / B C Manual
A B Automatic / C Manual.
 - If you have selected four channels, you will be able to select the options:
A Automatic / B C D Manual
A B Automatic / C D Manual
A B C Automatic / D Manual.

NEW !**NOTE**

The letters displayed depend on the letter selected for each channel.

14. Click **Next** to continue.

The window displays the tab **4: Options**.





15. (Optional) Select the destination bin(s) where the playlists created on that studio will be sent.

This will work for playlists created from the AB Roll Playlist module and for playlists created from the NRCS and sent through the MOS gateway.

16. (Optional) Enable the Auto Ripple mode by selecting the **Automatically Recue Elements when a Modification is Done in the Rundown** option.

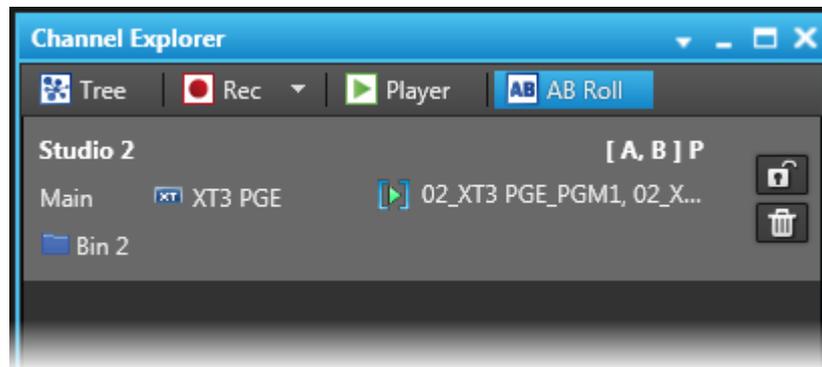
If enabled, when a modification is done in the rundown in between the cued elements, the system will automatically recalculate the channels assigned to the next elements in the rundown and recue them in order to keep the playout order in sync with the rundown.

If disabled, any modification in the rundown will have no impact on the cued lines.

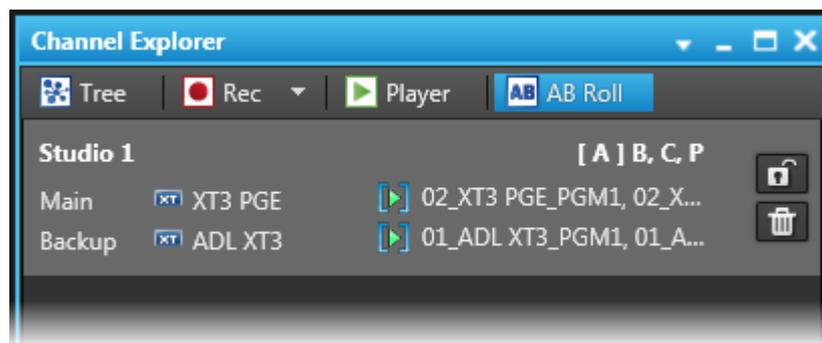
17. Click **Finish**.

The new AB Roll configuration is displayed in the AB Roll tab of the Channel Explorer and it is available from other IPDirector workstations.

- Main server only configuration:



- Main/Backup configuration:



[X] represents the letters of the channels set to automatic.

X represents the letters of the channels set to manual.

Possible Actions on Studio

Deleting a Studio Configuration

This action is possible provided that

- you have the appropriate user right: AB Roll Playlist Configure Channels.
- the player channels are not in AB Roll mode for this studio.

To delete a studio,

- Click the  button next to a studio.

Setting Studio Player Channels to AB Roll Mode

This action is possible provided that

- the AB Roll service is started
- you have the appropriate user right: AB Roll Playlist Control Channels.
- no channel of the studio is set in another mode
- no channel of the studio is set in AB Roll mode from another studio
- no channel of the studio has been locked by another user

To set all the channels of the studio to AB Roll mode, do one of the following actions:

- From the AB Roll tab of the Channel Explorer, click . The button turns to .

This does not associate the corresponding studio with the AB Roll Playlist window.



WARNING

In Main/Backup configuration, a  button means that the channels of only one of the EVS servers have been set in AB Roll mode.

-
- From the AB Roll Playlist module, channels are automatically set to AB Roll mode when you associate a studio to the AB Roll window.

Unsetting Studio Player Channels to AB Roll Mode

These actions are possible provided that

- the AB Roll service is started
- you have the appropriate user right: AB Roll Playlist Control Channels.



To unset all the channels of the studio to AB Roll mode,

- Click  next to the studio in the AB Roll tab of the Channel Explorer. The button turns to .

This will remove any existing association of the corresponding studio and the AB Roll Playlist window. So, if a playlist is loaded on that AB Roll studio, a warning message is displayed.

3.6. Defining a Default Stream Target

Introduction

To be able to record files from the material ingested by the recorders, a default target must be defined to send the stream(s) to.

If a stream does not have a default target defined, or if the corresponding target is off-line, a warning will be displayed. This does not prevent streams from being scheduled, but alerts the users that a default target does not exist.

How to Define a Stream Target

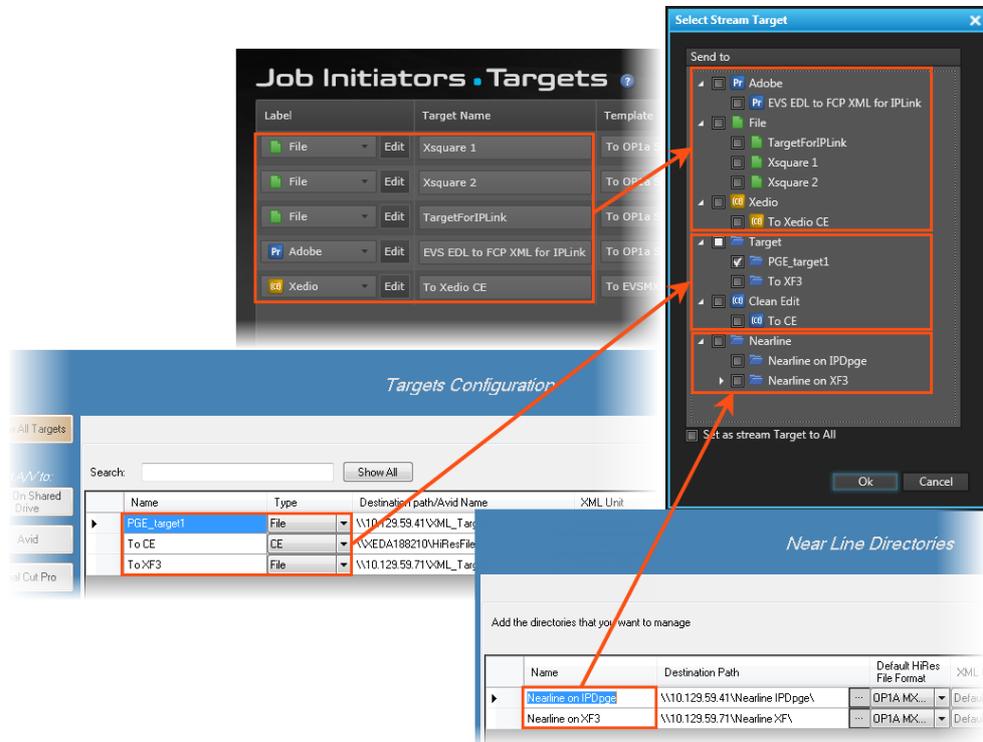
To define a target for a stream, proceed as follows:

1. Right click on a stream name or track.
A contextual menu is displayed.

2. Select **Set Stream Target**.

The Select Stream Target window opens.

It displays the targets set from the Remote Installer and the Xsquare targets set from Xsquare:



NOTE - VISIBILITY OF XSQUARE TARGETS

Xsquare targets are visible provided that

- the Xsquare has been declared in the Remote Installer and that it can be reached
- the user logged into IPDirector has an Xsquare account with the same access codes (login and password) in both applications.
- targets have been published to that user in Xsquare (or target visibility for that user is set to **All**).

3. Select the stream target.

4. To define this stream target for all the streams, select the **Set as Stream Target to All** option.

3.7. Managing the Links with a Video Router

3.7.1. Introduction

Video routers can be used with IPDirector to increase the number of incoming feeds manageable by EVS server recorder channels and/or the number of output channels able to play out the media from a player channel, depending on the configuration of the installation.

An EVS server recorder channel will be physically connected to an OUT port of the router, so the recorder channel records the feed received by the IN port of the router associated with this OUT port.

An EVS server player channel will be physically connected to an IN port of the router, so the media loaded on a player channel is sent to the OUT port(s) of the router associated with this IN port.

When a video router is used with an EVS server controlled by IPDirector, the router ports routed to the EVS server channels are shown in the IPDirector interface. So, users know exactly which router IN port is used by a recorder and to which router OUT port a player channel is routed.

Some configuration is performed from the Remote Installer regarding the communication parameters and the association of router ports physically linked to EVS server channels. Refer to the [IPDirector Technical Reference for the Remote Installer](#).

However, IPDirector users with appropriate user rights have the possibility to switch the assignment between router IN ports and router OUT ports from the IPDirector user interface.

The supported routers are those working with one of the following protocols:

- Miranda NV9000
- Probel SW-P-08
- Jupiter ES-Switch

Nevertheless, rather than communicating directly with a router, it is possible to communicate with a VSM system (broadcast control and monitoring system). Then, IPDirector will be able to work with all the routers supported by the VSM.

3.7.2. Assigning a Recorder Source

Introduction

If a recorder channel is linked to an OUT port of a router, it records the feed received by the IN port of the router associated with this OUT port.

IPDirector users with appropriate user rights have the possibility to manually switch the assignment between router IN ports and router OUT ports. So, another record train will be recorded by the server recorder channel as soon as the router IN port assigned to the channel has changed.

This operation can be done from the Channel Explorer, from the Recorder Panel, from the VTR Control Panel and from the Ingest Scheduler. A switch done from an application is automatically reflected in the other ones.

When using the Jupiter ES-Switch protocol, it is not allowed to change the association between a recorder channel and a router IN port during the recording of an ingest. Actually, the system will lock this association slightly before recording the scheduled ingest and it will unlock it slightly after the recording stops. This small period of time before and after the ingest is defined by the **Maximum Switch Latency** setting from the Remote Installer (Configure > Router Control Channels tab). This setting also defines the period of time when the system will switch to the IN port before the recording starts.

Prerequisites

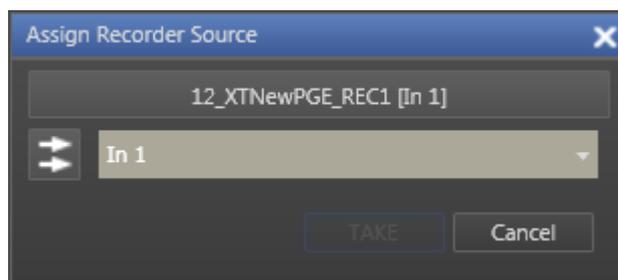
- The appropriate configuration must have been done from the Remote Installer regarding the communication parameters and the association of router OUT ports physically linked to recorder channels.
- The Router Control service is started.

How to Assign a Router IN Port to a Recorder Channel

To assign an IN port of a video router to a recorder channel from the Channel Explorer or to change the assignment, proceed as follows:

1. Right-click the recorder channel name from the Tree view or the Recorder view.
A contextual menu is displayed.
2. Select **Assign Recorder Source**.

The Assign Recorder Source window opens:

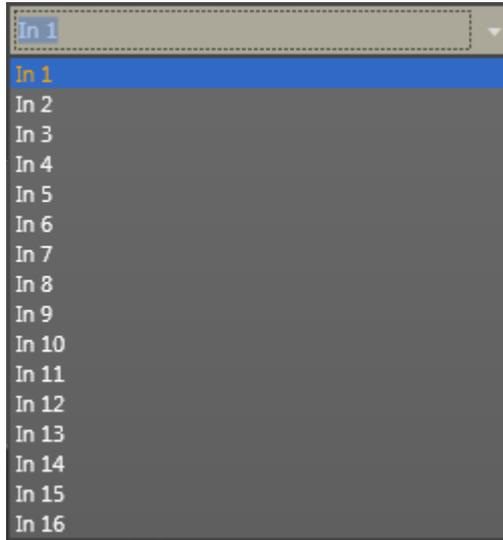


It shows the name of the router IN port already associated to the recorder channel.



3. Click the arrow next to the **Router IN Port** field.

The list of all the router IN ports is displayed:



4. Select an IN port.

The **Router IN Port** field is highlighted to warn the users that the selection has changed but has not been saved:



5. Click **TAKE** to send a command to the router service and link the router OUT port connected to the recorder channel with the selected router IN port.

The name of the IN port is displayed next to the recorder channel name.



3.7.3. Assigning a Player Destination

Introduction

If a player channel is linked to an IN port of a router, the media loaded on the player channel is sent to the OUT port(s) of the router associated to this IN port.

IPDirector users with appropriate user rights have the possibility to switch the assignment between router IN ports and router OUT ports. So, the media loaded on a server player channel will be sent to another destination as soon as the router OUT port assigned to the channel has changed. Several OUT ports can be associated to a single player channel.

This operation can be done from the Channel Explorer and from the Control Panel. A switch from an application automatically applies to the other one.

Prerequisites

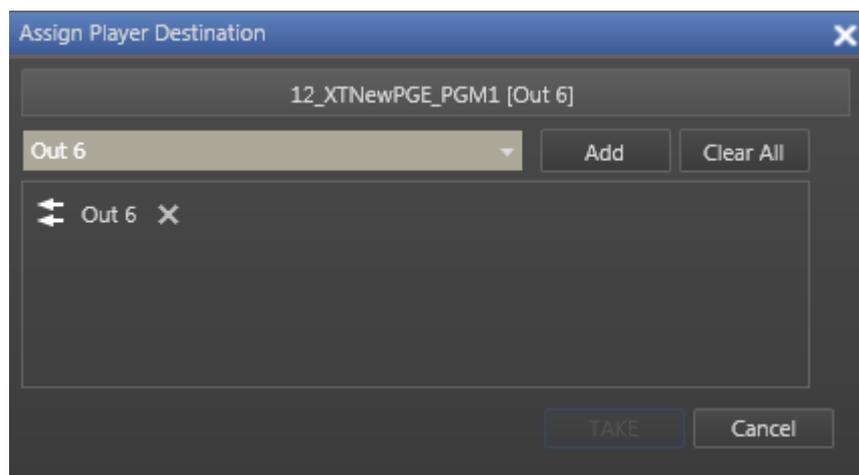
- The appropriate configuration must have been done from the Remote Installer regarding the communication parameters and the association of router IN ports physically linked to player channels.
- The Router Control service is started.

How to Assign a Router OUT Port to a Player Channel

To assign an OUT port of a video router to a player channel from the Channel Explorer or to change the assignment, proceed as follows:

1. Right-click the player channel name from the Tree view or the Player view.
A contextual menu is displayed.
2. Select **Assign Player Destination**.

The Assign Player Destination window opens:



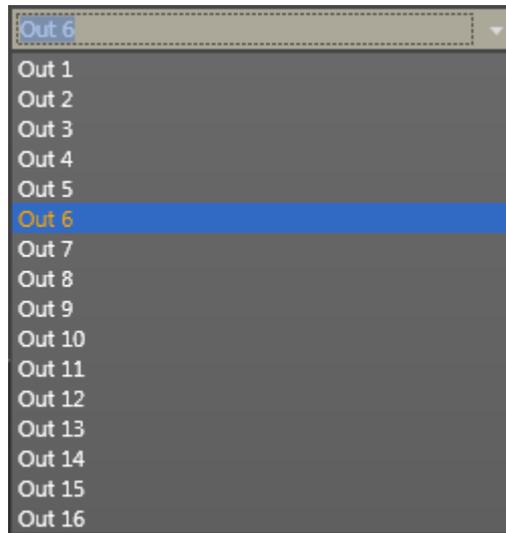
It lists all the router OUT ports already associated to the player channel.

3. To remove an association between a video router OUT port and the player channel, click the **X** button next to the OUT port name.
4. To remove the association between all the video router OUT ports and the player channel, click the **Clear All** button.



- To select an OUT port to associate to the player channel, click the arrow next to the **Router OUT Port** field.

The list of all the router OUT ports is displayed:



- Select an OUT port.

The **Router OUT Port** field is highlighted to warn the users that the selection has changed but has not been saved:



- Click **Add** to confirm the selection.

The OUT port name is displayed in the list.

- Click **TAKE** to send a command to the router service and link the router IN port connected to the player channel with the selected router OUT port.

The name of the OUT port is displayed after the player channel name.



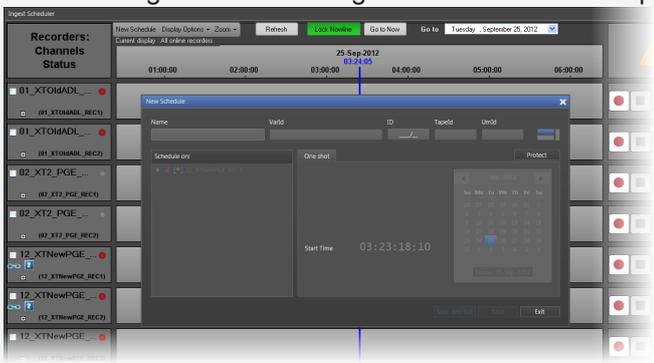
4. Starting / Stopping an Ingest

4.1. How to Start or Stop a Server Ingest

Available Options

From the Channel Explorer, you can start and stop the recording of an XT clip.

Two options are available to start the recording of an XT clip.

Menu Item	Meaning
Open Ingest Scheduler (new ingest)	The recording starts and the Ingest Scheduler window opens. 
Start XT Ingest (Tree View), or Start Ingest on Selected Channels (Recorder View)	The recording starts but the Ingest Scheduler window does not open.

In Tree View

To start/stop the recording of an XT clip from the Tree view, proceed as follows:

1. Select the desired recorder(s).
Use **SHIFT+click** or **CTRL+click** to select multiple recorders.
2. Right-click and select **Start XT Ingest**.
Depending on the settings, the clip is named automatically or the New Schedule window appears for you to enter a name.
The name of the growing clip is shown in brackets behind the recorder name.



3. To stop the recording, right-click the recorder and select **Stop XT Ingest**.



In Recorder View

To start/stop the recording of an XT clip from the Rec View, proceed as follows:

1. Select the desired recorder(s).
Use **SHIFT+click** or **CTRL+click** to select multiple recorders.
2. Right-click and select **Start Ingest on Selected Channels**.
OR
Click the **Record Now** button 
3. Depending on the settings, the clip is named automatically or the New Schedule window appears for you to enter a name.
4. To stop the recording, click the **Stop Recording** button on the right of the red **Recording** button:



4.2. How to Start, Stop or Kill a Stream

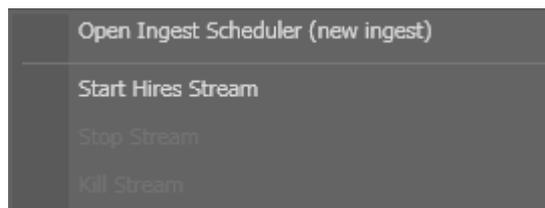
From the Channel Explorer, you can start and stop the recording of a file from a stream.

To start/stop a stream,

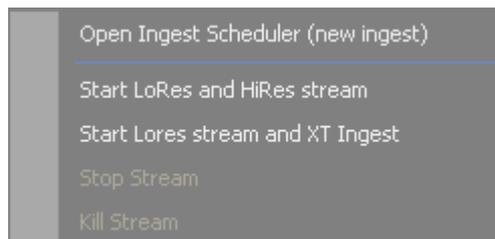
1. Right-click a stream in the Tree view.
A contextual menu is displayed.
2. Select the desired option.

The available options for starting streams (and ingests) depend on the selected stream (Hi or Lo).

Hi-res Stream

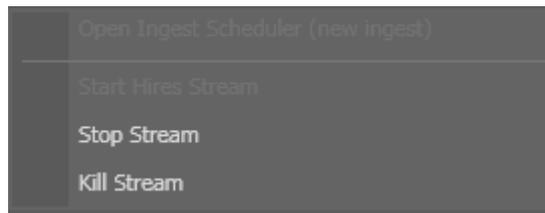


Lo-res Stream



Depending on the settings, the resulting file is named automatically or the New Schedule window appears for you to enter a name.

3. Once a stream is running, it can be stopped or killed from the Channel Explorer as well. Right-click the stream and select the desired option:





5. Displaying Information on the OSD

The information to display on screen is set in the OSD Settings window. See section ["OSD Settings" in the General Functions user manual](#).

To turn the OSD ON or OFF from the Channel Explorer, proceed as follows:

1. From the Tree view or the Player view, right-click the player channel for which you want to display the OSD information.
A contextual menu appears.
2. Select **OSD Information on Monitor**.
The information is displayed on screen.
3. To hide the information, repeat steps 1 and 2.

6. Operations on Servers

6.1. How to Get Server Monitoring Information

From the Channel Explorer, it is possible to check the EVS server monitoring information. To do so, proceed as follows:

1. Right-click a server name in the Channel Explorer.
2. Select **Show Server Monitoring Information** from the contextual menu.

The [Server Name] Information window opens:

The screenshot shows a window titled "XT3 PGE Information" with a close button (X) in the top right corner. The window is divided into several sections:

- Status:** A list of status indicators with corresponding boolean values in input fields:

Genlock Ko	False
Disk Problem	False
SDTI Connection error	True
SDTI Corruption (Used Clip Fifo)	False
SDTI Corruption (Notify Lost)	False
DB Corrupted (Local Clips)	False
DB Corrupted (Index Mismatch)	False
- Monitoring:** A list of monitoring metrics with numerical values in input fields:

BgTask average	1981
BgTask on last 100 It	1976
IRQ Divergence to µCode	0
Out of IRQ	0
Command SDTI Time Out	0
Broadcast SDTI Time Out	0
SDTI Light Traffic	255
SDTI Heavy Traffic	0
- Auto Refresh:** A checkbox labeled "Auto Refresh" which is currently unchecked.
- ItTask monitoring:** A table showing performance metrics for three ItTask operations:

	Average	Worst	Delta Average	Delta Worst
Start ItTask Send Command	87	89	61	87
Start ItTask Control Manager	141	141	141	1
End ItTask Send Command	141	167	0	1

At the bottom right of the window, there are two buttons: "Refresh" and "Close".

6.2. How to Launch a Different Predefined Server Configuration

It is possible to launch another predefined server configuration provided that you have the appropriate user right.

To do so, proceed as follows:

1. Right-click a server name in the Channel Explorer.
2. Select **Restart Server** from the contextual menu.

The Server Configuration window opens:



On the left, the Application List displays the list of applications available on the selected server and sorted in the same order as in the EVS menu.

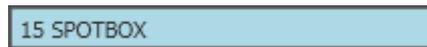
The application currently launched in Multicam is displayed in red.

On the right, the parameters corresponding to the selected configuration are displayed.

- (optional) If you want to select another server, right-click the **Server Name** field and choose a server:



- Select another configuration from the Application List.
The corresponding parameters are displayed in the Application parameters pane. The background button turns blue.



- Click the **Select and Restart Server** button to apply the new configuration.

6.3. Multicam Web Setup Tool

It is possible to access the Multicam Web Setup Tool from IPDirector.

To do so, proceed as follows:

- Right-click a server name in the Channel Explorer.
- Select **Configure Server** from the contextual menu.

The Multicam Web Setup window opens.

See the Multicam manual for more information.



7. Channel Explorer Shortcuts

Keyboard shortcuts are available to perform some operations.

They are listed in the Define Shortcuts windows which can be accessed by clicking the **Tools > Define Shortcuts** option from the menu bar of the IPDirector main window and then selecting the **[Application Name]** button on the left.

The shortcuts can be redefined to suit individual preferences.

See section "[Shortcut Definition](#)" in the [General Functions user manual](#) for more information.

Description	Current Value
Gang/Ungang selected channels	Ctrl-G
Associate channels in FILL & KEY mode	Ctrl-Y
Associate channels in PGM/PRV mode	Ctrl-M
Lock/Unlock selected channels	Ctrl-L

Corporate
+32 4 361 7000

North & Latin America
+1 973 575 7811

Asia & Pacific
+852 2914 2501

Other regional offices
www.evs.com/contact

EVS Headquarters
Liège Science Park
13, rue Bois St Jean
B-4102 Seraing
Belgium

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