USER MANUAL

IPDirector
AB Roll Playlist

Version 8.03 | May 2023

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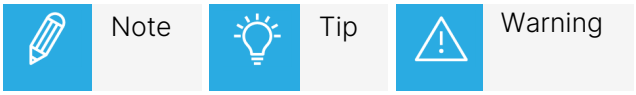
Contents

ICONOGRAPHY



What's New?

No section has been updated in version 8.03.

1. Introduction

1.1. Product Overview

The AB Roll Playlist application is used to control and play playlists with up to 500 elements on a series of channels from a staged playlist in the database.

The assignation of playlist elements to player channels can be automatic, manual, or a mix of both.

These channels may be directly managed using the companion MPlay remote.

Playlists from third party applications or rundowns from NRCS (Newsroom Computer Systems) can be used as input for the AB Roll Playlist application. IPDirector communicates with NRCS thanks to the IP MOS gateway. This latter receives editing operations made from the NRCS system and is responsible for the synchronization between the NRCS rundown and the AB Roll Playlist. It sends playout status from IPDirector to NRCS and it publishes playlist elements as MOS objects to NRCS.

If a rundown is created from the NRCS and published to the MOS gateway, a playlist is automatically created on the IPDirector side.

Unpublishing a rundown will delete the IPDirector playlist from the EVS server, except if it is loaded on a studio.

A MOS gateway dedicated setting can be used to create off-line playlists rather than on-line playlists on the IPDirector side when rundowns are created on the NRCS side. This is particularly useful when the number of playlists to create must be higher than the number of playlist positions available on the EVS video server (90 positions). The availability status of the playlist elements is synchronized between the two systems. Any update of the playlist on the NRCS side is reflected on the IPDirector side.

Such an off-line playlist becomes on-line as soon as it is loaded on an ABRoll studio.
In case the assignment mode of the channels is Full Manual on the NRCS side, a channel allocated to a rundown object in the NRCS is memorized until the IPDirector playlist becomes on-line. So, the channel allocation will be synchronized between the NRCS and the AB Roll Playliststudio.

Refer to the IP MOS Gateway Technical Reference manual for a comprehensive description.

1.2. Associated Modules

Introduction

When working with the AB Roll Playlist application, you will also use other modules like the Database Explorer and the Channel Explorer. To control the playout from the AB Roll Playlist, you can use the MPlay Remote controller.

The applications are explained briefly below, detailed instructions can be found in the user manuals related to the relevant module.

Database Explorer

The Database Explorer has been integrated into the AB Roll Playlist. It is used to organize and search all media or data available in the XNet network, as well as to search for off-line nearline files.

In the Database Explorer, you can access media and data either by using your knowledge of the "clip hierarchy" methods used in EVS servers or by using the search features (quick / advanced).

In the AB Roll Playlist, the Database Explorer provides a view on clips and playlists. Even files backed up on removable drives which have been removed (off-line nearline files) are still listed in the Database Explorer to allow easy retrieval.

Bins can be created to organize clips and playlists and bin rules can be defined to automatically copy clips or playlists within a bin, corresponding to a specific filter.

You will find detailed information on the Database Explorer in the Database Explorer user manual.

Channel Explorer

This module provides an overview on the components of the XNet network. It allows you to configure a studio of player channels and take control of one or several channels from different EVS video servers connected to the XNet.

You will find detailed information on the Channel Explorer in the Channel Explorer user manual.

MPlay Remote

The MPlay Remote is a simple remote control device, designed to control the playout of video material, mainly in the form of playlists. It is designed to control up to 4 player channels simultaneously.

You will find detailed information on the MPlay Remote in the General Functions user manual.

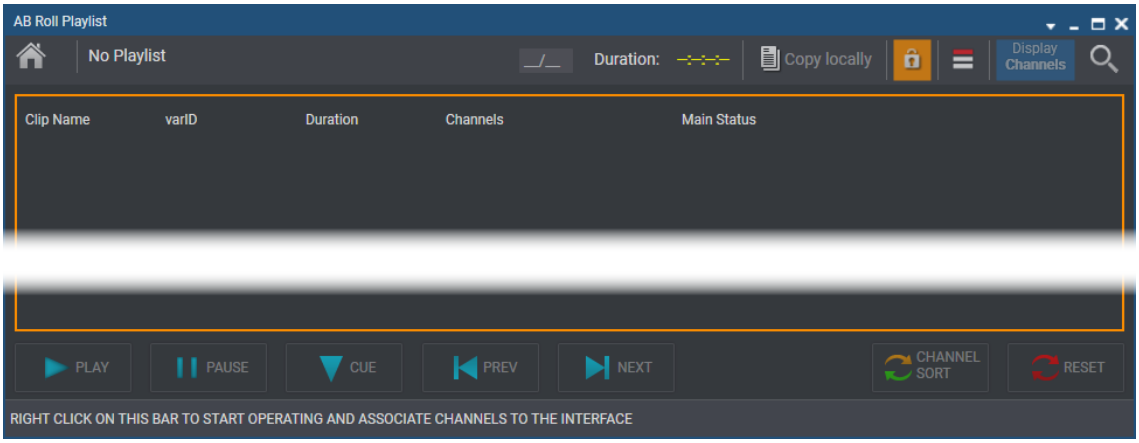
When you have assigned player channels to the MPlay Remote and configured the buttons, you can start using the device.

1. Associate the same player channels to the AB Roll Playlist.
2. Press the MPlay button corresponding to the action you want to apply.

The action is performed on the channel that is linked to the button that you pushed.

1.3. Opening AB Roll Playlist

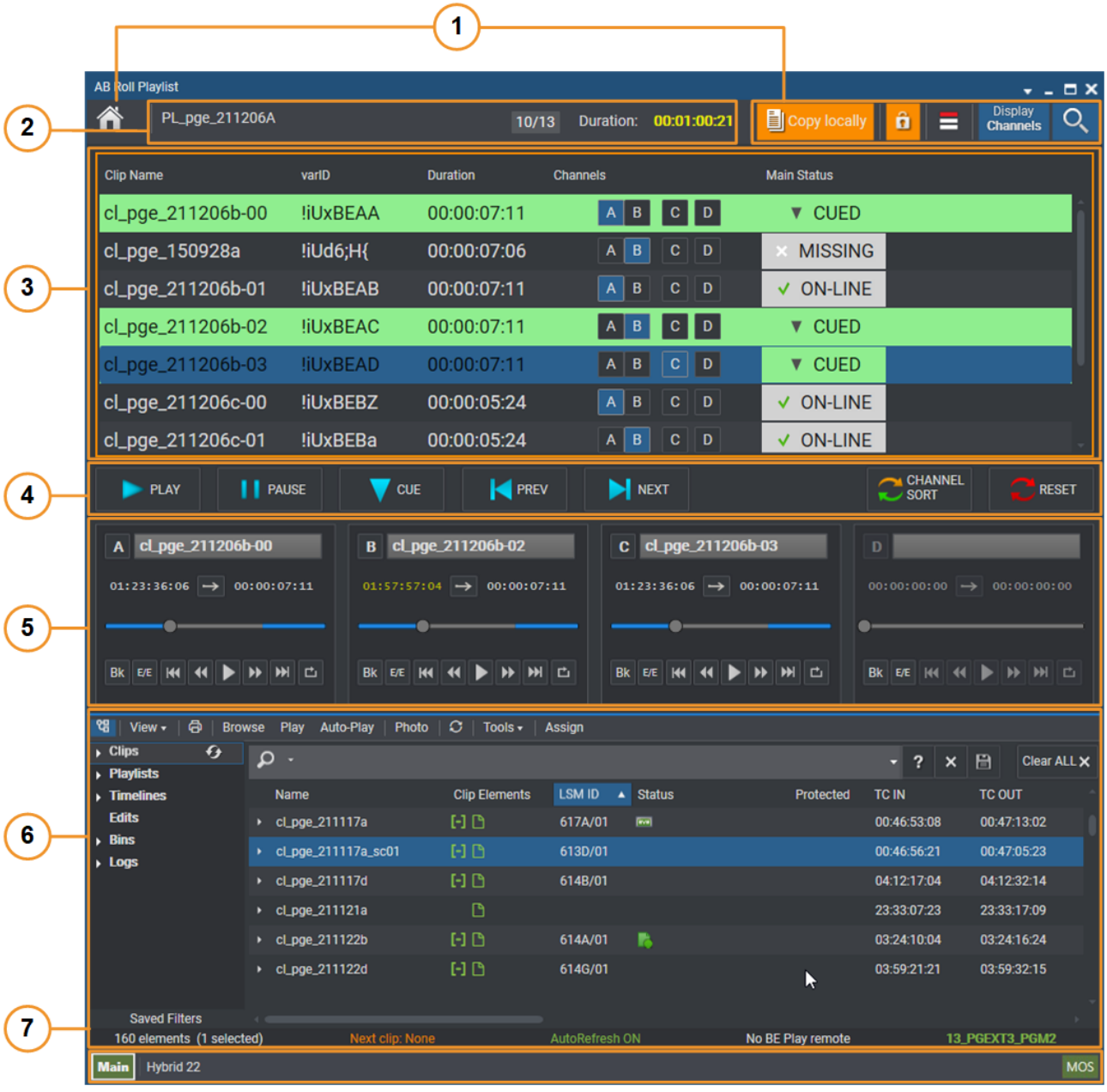
To open the AB Roll Playlist application, select the corresponding icon AB Roll Playlist on the IPDirector application bar. An instance of a AB Roll Playlist window will open.



2. Touring the ABRoll Playlist User Interface

2.1. Overview of the ABRoll Playlist Panel

The AB Roll Playlist user interface contains the areas highlighted on the screenshot below:



AB Roll Playlist Toolbar (1)

The toolbar gives access to several options and buttons for the playlist management and panes display.

See section "AB Roll Playlist Toolbar" on page 6.

Loaded Playlist Information Area (2)

This area displays various information related to the loaded playlist:

- playlist name
- playlist LSM ID
- playlist duration

Playlist Grid (3)

This area displays the content of the selected playlist.

See section "Playlist Grid" on page 9.

In Main / Backup configuration, a column shows the status of each playlist element on the backup server. See section "Redundancy" on page 113.

Transport Functions Buttons (4)

This area provides buttons to control all the required transport functions within the playlist.

See section "Using Playlist Loading and Transport Functions" on page 51.

Control Panels Area (5)

This area is shown or hidden by clicking the **Display Channels** button from the toolbar.

It displays as many AB Roll Playlist Control panels as they are channels in the associated studio and shows information related to the elements loaded on each channel. See section "AB Roll Control Panels" on page 17.

It is used to control the playout of the element loaded on the corresponding player channel.

Clip Search Pane (6)

This pane is shown or hidden by clicking the **Search** button  from the toolbar or by pressing 
+  .

It gives access to the database content.

The different areas of this pane are similar to those found in the Database Explorer. See the Database Explorer user manual for more information.

Status Bar (7)

The Status bar provides information regarding the status of the main server and the communication with the MOS gateway and NRCS. See section "Status Bar" on page 21.

A contextual menu, available from the Status bar, is used to select a studio of player channels. See section "Associating an AB Roll Studio with the AB Roll Playlist Panel" on page 32.

In Main / Backup configuration, the Status bar also provides information regarding the status of the backup server. It displays potential warning message in case of desynchronization of redundant playlists. Buttons are available to perform a manual failover between servers, and to solve conflict between redundant playlists. See section "Redundancy" on page 113.

Saving the AB Roll Playlist Window Layout

The AB Roll Playlist window layout can be saved. When the layout is saved, the following information is saved:

- window size and position
- channel associations
- the grid lock status and position
- the search window display status and vertical size
- the search window organization (grid, associated channels, etc.)

To save the window layout, proceed as described in the General Functions user manual.

2.2. AB Roll Playlist Toolbar

Playlist Menu

The **Playlist Menu** button  gives access to a menu with various options for the management of the playlist. The menu is only available when a studio has been associated with the AB Roll Playlist interface.

New Playlist

Opens the Create New Playlist window to create a new playlist.

See section "Creating Playlists" on page 37 for more information.

Unload Playlist

Unloads the playlist from the player channels of the studio associated with the AB Roll Playlist.

This action is forbidden when an element is playing.

Publish

Opens the Publish window in which you can specify the user groups, or the individual users, the selected item should be published to.

The item will be published to the selected groups, or to the individual users, provided that they have the adequate rights.

Edit/Rename

Opens the Edit a Playlist window from which the users can modify the properties of the playlist associated with the AB Roll Playlist Panel.

Remove from Bin

Removes the loaded playlist from the bin.

This option is only available if the loaded playlist is in a bin.

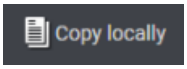
Properties

Displays information related to the owner and the groups the selected item has been published to.

Copy Locally Button

Creates a copy of all online distant elements of the selected playlist onto the local server.

In case of redundancy, the action is applied on both the main and the backup playlists.



is displayed when all the clips are local.

is displayed when some of the clips are not local.

The **Status** icon of the playlist elements changes from 

(XT clip distant to the playout EVS server) to 

(XT clip present on the local EVS server).

Lock Playlist Edition Button

This button is used to lock the interface against all edition operations on the playlist (insert, move, delete). See section "Editing Playlists".

This is to avoid corruption of the synchronization between the playlist and the rundown, as editions done on the AB Roll Playlist will not be sent to the rundown.

This button is also used to avoid the scroll through the Playlist grid during a drag-and-drop operation of a playlist element.


(default) Locked state: users are not allowed to edit the loaded playlist. No scroll of playlist elements during a drag-and-drop operation.


Unlocked state: users may edit the loaded playlist. Scroll of playlist elements during a drag-and-drop operation.

Lock Position Button

This button is used to keep the first cued or playing element always visible in the playlist grid.

Click the button to activate or de-activate the mode.

 (default) The mode is not activated: position unlocked.

When you move in the grid with the arrow keys or Page Up/Down, the selected element changes and remains visible on screen.

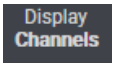
 The mode is activated: position locked.

When you move in the grid with the arrow keys or Page Up/Down, the first cued or playing element is kept visible on screen. So, the selected element may not be visible on screen.

Display Channels Button

The **Display Channels** button is used to display an area under the Playlist grid with as many small Control panels as they are channels in the associated studio.

(default) The Control panels are displayed. Click the button to hide them.



The Control panels are hidden. Click the button to display them.

Search Button

The **Search** button displays a Database Explorer pane in the lower part of the window to perform searches in the database.

 (default) The Database Explorer pane is hidden. Click the button to display it.

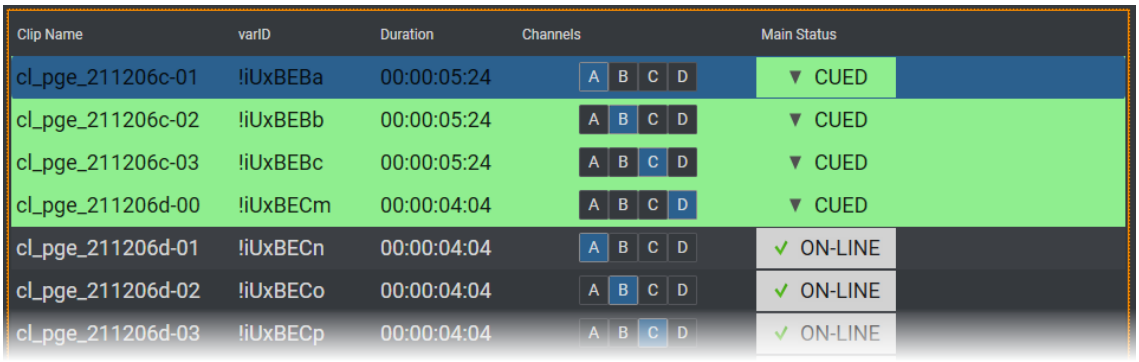
 The Database Explorer pane is displayed. Click the button to hide it.

2.3. Playlist Grid

2.3.1. Introduction

Overall Display

The Playlist grid contains the list of elements that made the playlist.



The grid contains a number of columns that show information about the playlist elements.

The organization of columns, in terms of selection, size, and order can be easily changed. See section "Managing the Playlist Grid View" on page 13.

In Main / Backup configuration, the Playlist grid always represents the elements from the playlist on the active server.

A blinking orange border is displayed around the playlist elements to warn the users when the **MOS** icon is orange. This occurs in the following situation.

The communication between IPDirector and the MOS gateway and the communication between the MOS gateway and the NRCS works properly. However, the IPDirector playlist has not been synchronized according to the NRCS rundown.

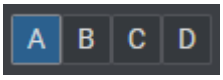
Player Channels

The Channels column shows the player channels of the studio associated with the AB Roll Playlist panel.

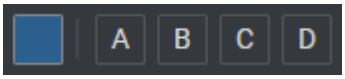
Player channels are represented by a square. Those allocated to the playlist elements are blue.

The letters displayed correspond to the letters selected for each channel during the AB Roll studio configuration. They are displayed according to the player channels order.

Player channels set to automatic (Full Automatic or Hybrid) during the configuration of the studio are represented by squares sticking together:



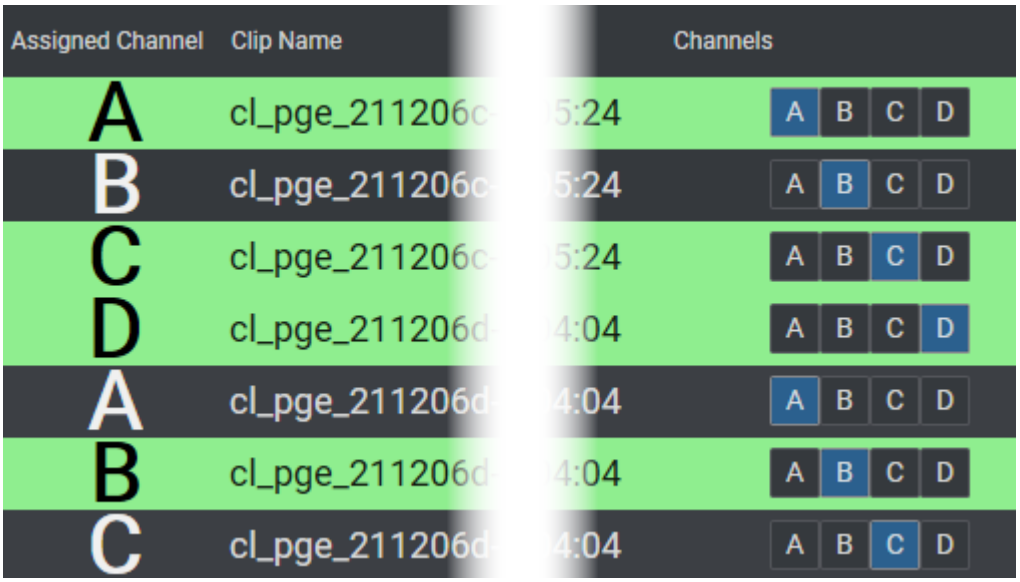
Player channels set to manual (Full Manual or Hybrid) during the configuration of the studio are represented by spaced squares:



See section "Allocating Player Channels to Playlist Elements" on page 43.

In Main / Backup configuration, the letters displayed in the Channels column are those from the active server.

For better visibility of the channels assigned to each playlist element, the Assigned Channel column can be displayed in the grid:



Playlist Element Status

The Main Status column gives information about the playback status of each playlist element, and about their availability status on an EVS server. See section "Playlist Element Statuses" on page 11.

In Main / Backup configuration, a Backup Status column is present to the right of the Main Status column and gives the status of the playlist elements from the corresponding backup playlist. See section "Redundancy Information" on page 114.

Color Code on Entire Line

On the following cases, the entire line has a colored background:

- Cued, playing or paused elements: the whole line has the color of the element playback status.
- Warnings on the element playout remaining time: the whole line has a red background. See section "Playlist Element Statuses" on page 11.

- Selected elements: the whole line has a blue background.

  For the Playing element, this will always be a blue outline.

  For the other elements, this will be a blue outline or a solid blue line, depending on the selected setting.

  See section "AB Roll Playlist Settings" on page 119.

2.3.2. Playlist Element Statuses

In the Playlist grid, the **Status** column provides two kinds of status information on the playlist element:

- Playback status
- Availability status (availability on an EVS server)

The whole line color can also give specific information.

Playback Status

Colors can be customized from the settings (Tools > Settings > Playlist > Colors).

Status Column	Description
▼ CUED	The playlist element is cued and is the next element that will be played on the channel it is associated with. The whole line is colored.
► PLAYING	The playlist element is being played. The whole line is colored.
ıı PAUSED	The playout has been paused when this playlist element was playing. The whole line is colored.
▼ STOPPED	The playout has reached the end of the playlist element, and the element remains stopped on its last frame during the **Freeze on OUT duration** defined in the User Manager settings (Configure Settings > ABRoll).
✓ PLAYED	The element is no more playing and at least 1 frame has been played. This status is displayed on the following occasions: • After the **Stopped** status, when the element has been completely played out, and the **Freeze on OUT duration** defined in the User Manager settings has been reached (Configure Settings > ABRoll). So the next element assigned to that channel has been cued. • If the **Prev** or **Next** button is clicked during the element playout and as soon as 1 frame of the element has been played.

Playout Remaining Time Warning

- When a playlist element is playing, the line becomes red when the remaining time corresponds to the value set in the **First Threshold** option of the AB Roll settings.

- When a playlist element is playing, the line blinks red when the remaining time corresponds to the value set in the **Second Threshold** option of the AB Roll settings.

See section "AB Roll Playlist Settings" on page 119.

Availability Status

Status Column	Description
ON-LINE	Local element: the playlist element is available locally, on the EVS server where the playlist is stored.
ON-LINE	Distant element: the playlist element is available on another EVS server of the XNet network. See section "AB Roll Playlist Toolbar" on page 6 to copy corresponding clips locally.
MISSING	Missing element: the playlist element is not available on an EVS server. It only exists as a file stored on a nearline folder, or as a virtual element. Black clips are also indicated as Missing in the AB Roll Playlist and will not be played. You need to restore the playlist element of type "file" to be able to play it out on a player channel. You can however play it on the Software Player but the **Playing** status will not be applied to the missing elements.
21 %	Clip being restored: as soon as a missing clip is being restored, the progress bar is displayed. It can be played.

2.3.3. Managing the Playlist Grid View

Grid Header Contextual Menu

Right-clicking the grid header displays the grid contextual menu.

The options are described in the following table:

Option	Description
Hide	Hides the selected column.
Organize	The Organize window opens and allows the users to select the columns to display and their order.
Save grid organization	Saves the organization of the grid as it is displayed (columns selection, order and size). It is saved by each user. Therefore, this organization will be retained the next time the user logs in and opens the application.
Reset grid organization	Sets back the grid to the default grid organization.
Go to position	Makes the element line for the selected position visible in the grid. This option is only displayed when the Position column has been made visible in the grid.

Organizing Columns

Columns can be resized and/or re-ordered. This new organization is automatically saved and remembered. However, it is also possible to reset the column organization to the default organization.

Resizing Columns

A column can be resized by placing the mouse pointer over columns intersection and dragging it to the right or to the left.

Selecting Columns to Display

To select the columns to display in the grid,

1. Right-click the column header area.
2. Select **Organize**.

   The Select Columns window opens and the right pane shows the list of columns currently displayed in the current order.

3. To select the column(s) you wish to add to the view, do one of the following actions:
    - in the left pane, double-click the column(s) you wish to add to the view
    - select them in the left pane and click the right arrow
    - drag them onto the Visible Columns area.

    Metadata profiles and their corresponding user fields are listed in the left column. So, columns corresponding to user fields are hidden by default. You can choose to display them in the Elements grid. When a metadata profile is moved to the Visible Columns pane, all its user fields will be displayed in separate columns in the Elements grid.

    Use **CTRL + click** to select a list of non-contiguous columns.

    Use **SHIFT + click** to select a list of contiguous columns.
4. To select the column(s) you wish to remove from the view, do one of the following actions:
    - on the right pane, double-click the column(s) you wish to remove from the view
    - select them on the right pane and click the left arrow
    - drag them onto the left pane.

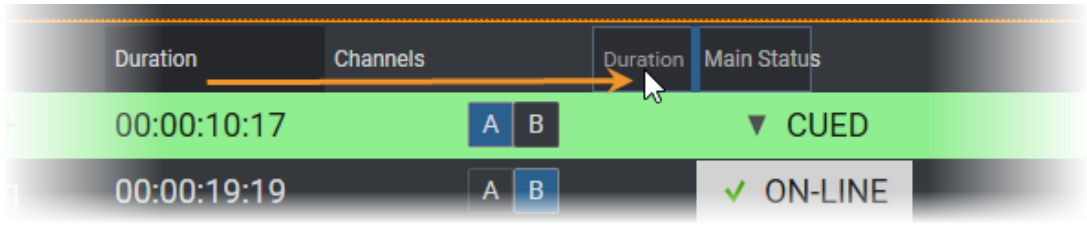
    Use **CTRL + click** to select a list of non-contiguous columns.

    Use **SHIFT + click** to select a list of contiguous columns.
5. Click **OK**.

Ordering Columns

To change the columns order, proceed in one of the following ways

- Select a column header and drag it to the left or right to the required place:



OR

1. Right-click the column header area.
2. Select **Organize**.

    The Select Columns window opens and the right pane shows the list of columns currently displayed in the current order.
3. Drag the selected column to the required position in the Visible Columns pane.

    A thick blue line shows the location where the column will be dropped.
4. Click **OK**.

Resetting the Column Organization to the Default One

Users can reset the column organization to the default one (columns selection, order, size,...).

1. Right-click the column headers area.
2. Select **Reset Grid Organization**.

Resetting the List of Columns back to the Default One

Users can reset the list of columns displayed in the grid to the default one.

1. Right-click the column header area.
2. Select **Organize**.

   The Select Columns window opens.
3. Click **Back to Default**.

Go to Element Position

Context of Use

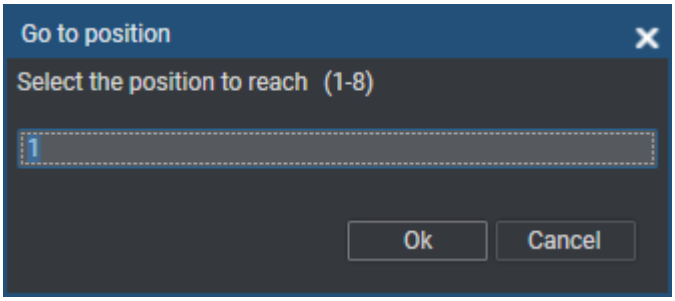
When the playlist contains quite a lot of elements, the **Go to Position** function will help you to quickly display an element line without scrolling.

The Position column must have been made visible in the grid for the function to be available.

Go to Go to an Element Position

To display a selected element position in the grid,

1. Do one of the following actions:
   - Right-click the grid header and select **Go to position**.
   - Press Shift + Ctrl + G.
2. Enter the position to see in the field:



3. Click **OK**.

The element will not be selected nor cued. It will be present in the visible part of the grid.

2.3.4. Playlist Element Contextual Menu

Right-clicking a playlist element displays a contextual menu. The table below describes all the available options.

Cue elements from this position

Cues the selected element on its IN point, on its assigned channel, and cues the next elements assigned to all the other channels.

See section "Cue the Elements from the Selected Element Position" on page 62.

Remove element

Removes one or more selected elements from the playlist.

If a group is part of the selection, all elements of the group will be removed.

Remove all element occurrences

Removes all the occurrences of the selected element(s), based on the VarID, from the open playlist.

This applies to clip, virtual element, black clip , white clip.

Loop

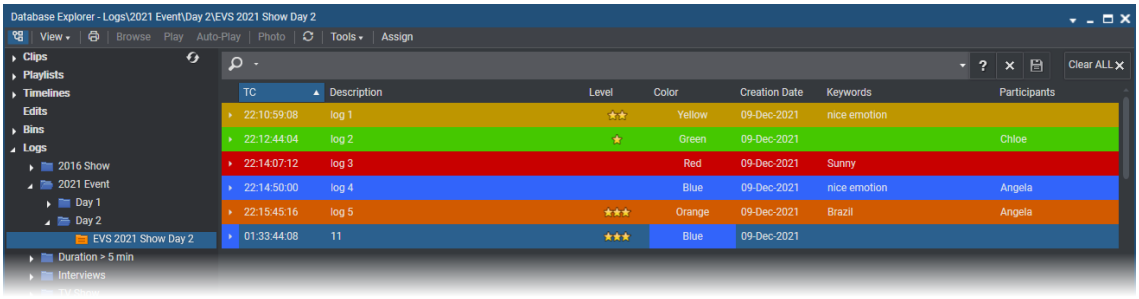
Opens the Define Loop window to defines a partial loop within the playlist, so the selected playlist elements will be played several times or indefinitely.

See section "Looping Playlist Elements During Playout" on page 66.

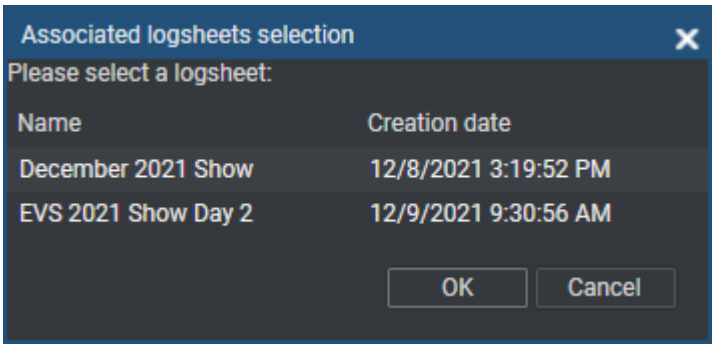
Open Associated Logsheets

When a clip contains a log timecode, it is associated with the logsheet this log belongs to.

The **Open Associated Logsheets** option opens a Database Explorer window focused on the logsheet associated with the playlist element.



If the clip covers several logs belonging to different logsheets, the **Open Associated Logsheets** option first opens a window with the list of associated logsheets:

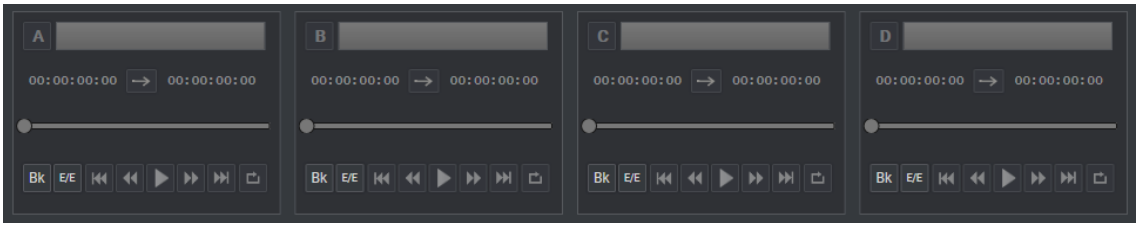


- The first opened Database Explorer window is used to open the associated logsheet. If no Database Explorer window is open, a warning message is displayed.
- The log with the timecode closest to the clip TC IN is selected.

2.4. AB Roll Control Panels

Default Display

This area is displayed by default under the Playlist grid as soon as a studio is associated with the AB Roll Playlist panel. It contains as many AB Roll Playlist Control panels as they are channels in the associated studio. At that time, no element is loaded and all the Control panels are grayed out:

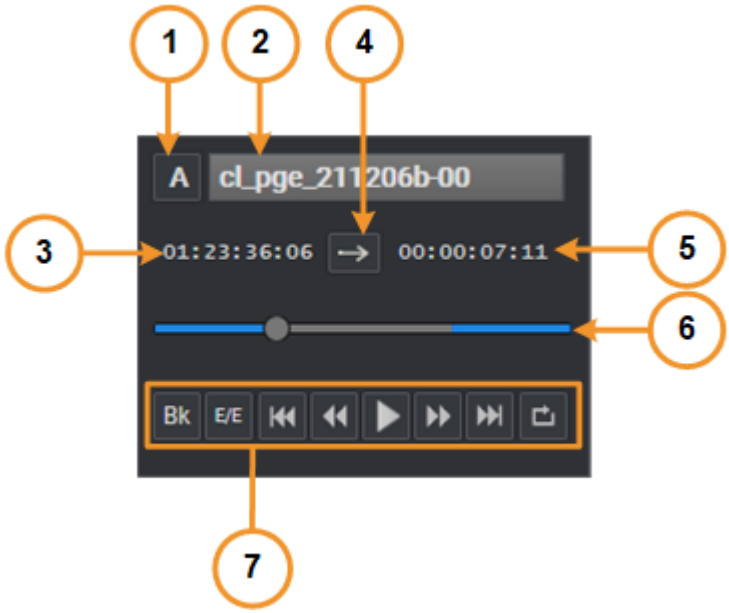


To hide the AB Roll Playlist Control Panels area, click Display Channels, and to show it, click Display Channels from the toolbar.

Overview of an AB Roll Playlist Control Panel

The AB Roll Playlist Control panel is used to control the playout of the element loaded on the corresponding player channel.

As soon as playlist elements are cued on player channels, the AB Roll Playlist Control panels display the related information.

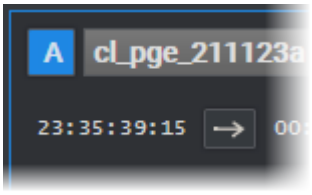


Player Channel Letter (1)

Letter corresponding to the player channel, as it has been set during the studio configuration.

Focus on a Control Panel

When the focus is on a Control Panel, the player channel letter is highlighted and the whole panel is surrounded by a blue line:



Then, applied keyboard shortcuts will have an effect on the player channel associated with this Control panel. See section "Using Playlist Loading and Transport Functions" on page 51.

Player Channel Controlled by a ShuttlePRO

The **ShuttlePRO** icon is shown next to the **Loaded Media Name** field if the player is controlled by a ShuttlePRO.

Loaded Media Name (2)

Name of the playlist element currently loaded on the player channel.

TC IN Point (3)

TC IN point of the loaded playlist element.

In case of stolen channel, this timecode is:

- the TC IN point of a loaded clip
- the current timecode of a train.

Loop Button (4)

Button used to apply an infinite loop on the element currently loaded on the player channel.

See section "Looping Playlist Elements During Playout" on page 66.

Remaining Time (5)

Countdown corresponding to the remaining time until the end of the loaded element.

Jog Bar (6)

The jog bar allows you to browse through the media loaded on the player channel.

Transport Buttons (7)

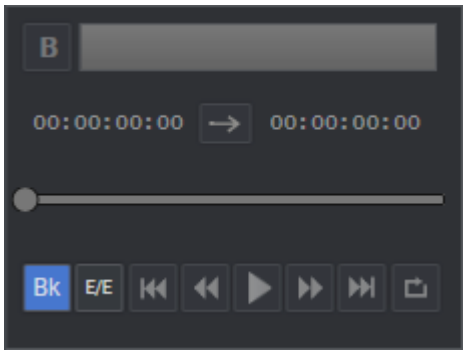
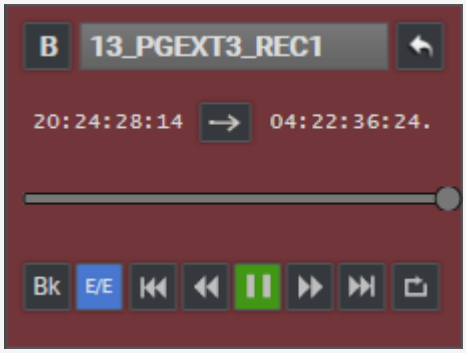
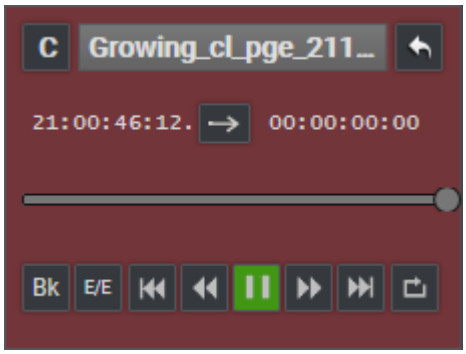
Buttons used to control the element loaded on the corresponding AB Roll Playlist Control panel.

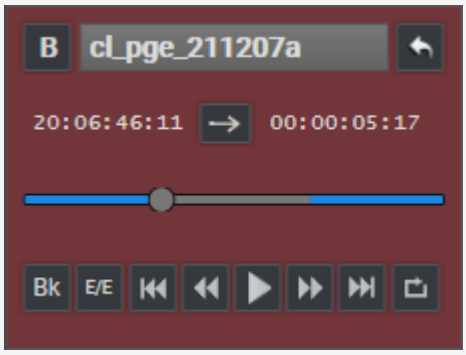
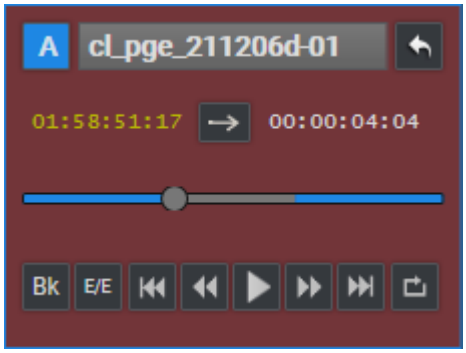
See section "Using Playlist Loading and Transport Functions" on page 51.

The **Bk** button is used to display a black screen on the corresponding player channel. See section "Displaying a Black Screen on a Player Channel" on page 71.

The **E/E** button is used to play a live train or recording feed instead of a playlist element. It is described in section "Stealing a Player Channel to Play a Live Train or Recording Ingest" on page 98.

Particular Displays

Display	Meaning
	Channel put to black and displaying a black screen. See section "Displaying a Black Screen on a Player Channel" on page 71.
	Channel stolen to play a train. See section "Stealing a Player Channel to Play a Live Train or Recording Ingest" on page 98.
	Channel stolen to play a growing clip. E/E workflow. See section "Stealing a Player Channel to Play a Live Train or Recording Ingest" on page 98.

Display	Meaning
	Channel stolen to play a clip. Steal & Cue workflow. See section "Stealing a Player Channel to Load a Clip" on page 101.
	Channel stolen to review a playlist element. Review workflow. See section "Stealing a Player Channel to Review a Playlist Element" on page 105.

2.5. Status Bar

When no Main / Backup configuration is involved, the Status bar contains the areas highlighted on the screenshot below.

In Main / Backup configuration, additional information is displayed. See section "Redundancy Information" on page 114 for more information.

Main Server Status (1)

The color of this area indicates whether the server is working properly.

- green: the server is running and its player channels are in AB Roll mode.
- orange: the server is running but its player channels are not in AB Roll mode.
- red: the server cannot be reached

Studio Name (2)

This area displays the name of the studio associated with the ABRoll interface.

See section "Associating an AB Roll Studio with the AB Roll Playlist Panel" on page 32.

Communication Status with MOS Gateway and NRCS (3)

The color of this area gives indication on the status of the communication with the MOS gateway and the NRCS, as well as the status of the synchronization between the IPDirector playlist and the NRCS rundown. A tooltip, displayed when the mouse is over the **MOS** icon, gives more precise information on the status.

MOS Icon	Possible Meanings
MOS	• The communication between IPDirector and the MOS gateway and the communication between the MOS gateway and the NRCS works properly. The IPDirector playlist has been synchronized according to the NRCS rundown: editions (insert/move/delete) of the rundown have been applied to the IPDirectorplaylist. If editions of the IPDirector playlist have not applied to the NRCS rundown, the system is not able to detect the de-synchronization and this is not reflected in the Status.
MOS	• The communication with the MOS gateway works properly but the communication with the NRCS server does not. • The communication with the MOS gateway does not work. • The IPDirector playlist has not been synchronized according to the NRCS rundown: editions (insert/move/delete) of the rundown have not been applied to the IPDirectorplaylist.
MOS	• The communication between IPDirector and the MOS gateway and the communication between the MOS gateway and the NRCS works properly. The IPDirector playlist has not been synchronized according to the NRCS rundown: editions (insert/move/delete) of the rundown have not been applied to the IPDirector playlist. In addition to the blinking orange **MOS** icon, a blinking orange border is displayed around the playlist elements to warn the users.

3. Creating and Configuring a Studio

3.1. Introduction

Before you can use the AB Roll Playlist, you need to configure a studio made of a group of player channels. Then, you will have to assign that studio to the AB Roll Playlist.

Up to 4 player channels can be associated in an AB Roll Playlist mode to control and play material on all these channels at the same time.

These operations are explained in sections "Configuring a New AB Roll Studio" on page 23 and "Associating an AB Roll Studio with the AB Roll Playlist Panel" on page 32.

3.2. Configuring a New AB Roll Studio

Considerations about Studio Configuration

The studio configuration is possible provided that you have the appropriate user rights:

- Player channels visibility (a selection or all of them)
- AB Roll Playlist Configure Channels.

The same player channels can be assigned to different studios.

A studio configuration cannot be edited once it has been saved.

During the studio configuration, you will have to choose the assignment mode of the studio **Automatic**, **Manual** or **Hybrid** (Automatic and Manual). This is taken into account when a playlist is loaded on the AB Roll Playlist window to determine whether the playlist elements are, or are not, automatically allocated to player channels. See section "Assignment Modes" on page 43 for a comprehensive description of the modes.

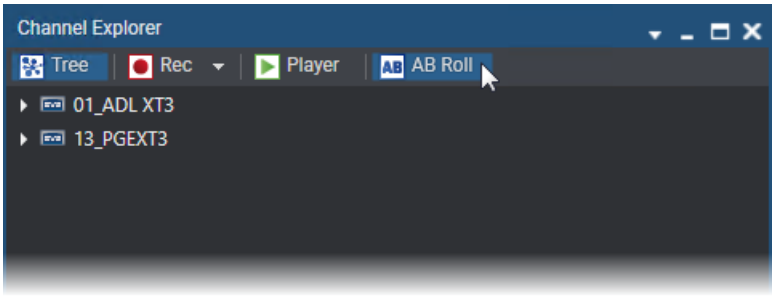
Then, for Manual or Hybrid modes, you will have to choose the Still/Start mode that will be applied between consecutive elements loaded on the same manual player channel. See section "Playing Consecutive Elements on the Same Manual Player Channel" on page 69.

The Still/Start mode is only available with Multicam version 16.01 or higher.

How to Configure a New AB Roll Studio

To create and configure an AB Roll Playlist,

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

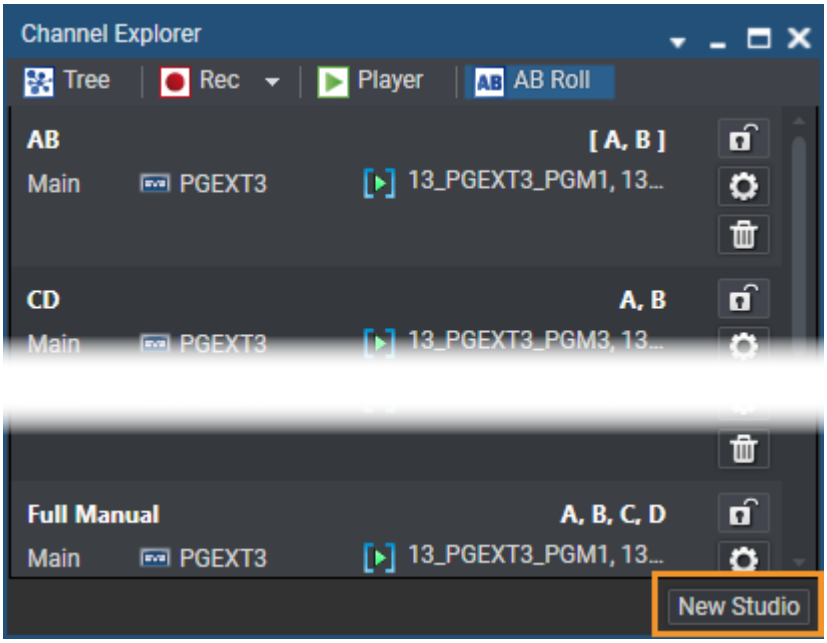


   - Directly from the Channel Explorer.
   - From the AB Roll Playlist window:

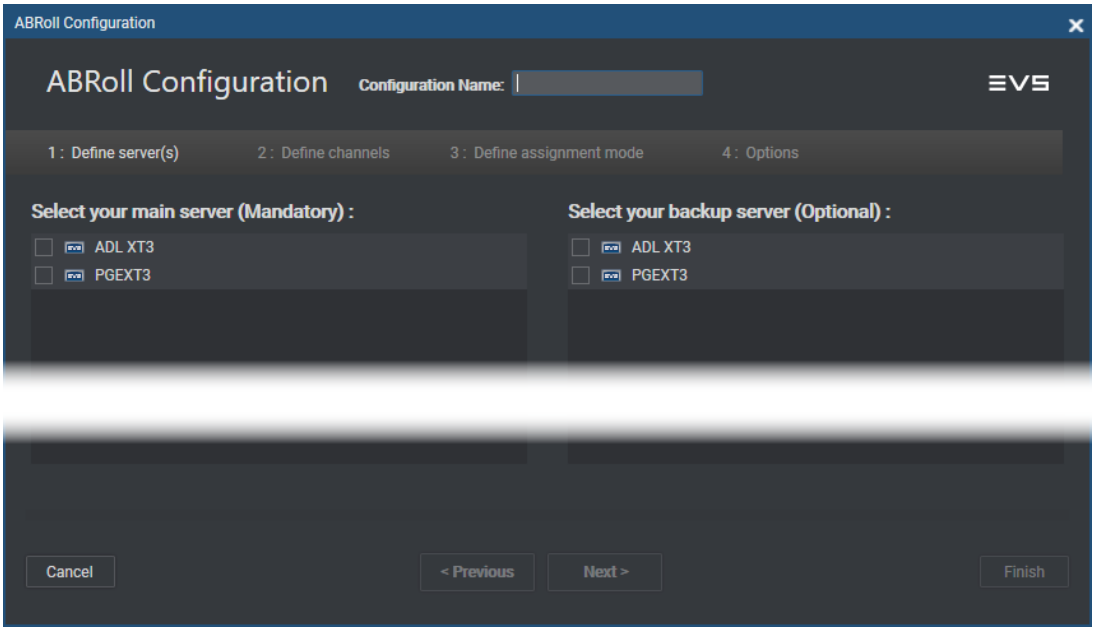
     a. Right-click the Status bar at the bottom of the AB Roll Playlist window.

     b. Select **AB Roll Channels Management** from the contextual menu.

3. Click **New Studio**.



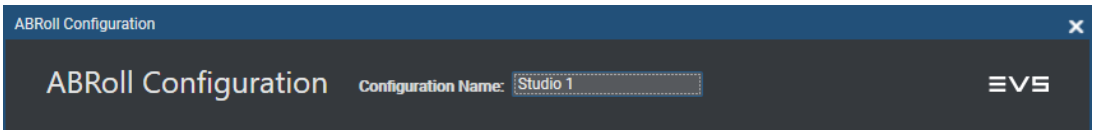
The ABRoll Configuration window opens and displays the tab **1: Define Servers**.



Servers will be displayed on this window provided that you have the appropriate user rights:

- Player channels visibility
- AB Roll Playlist Configure Channels.

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.

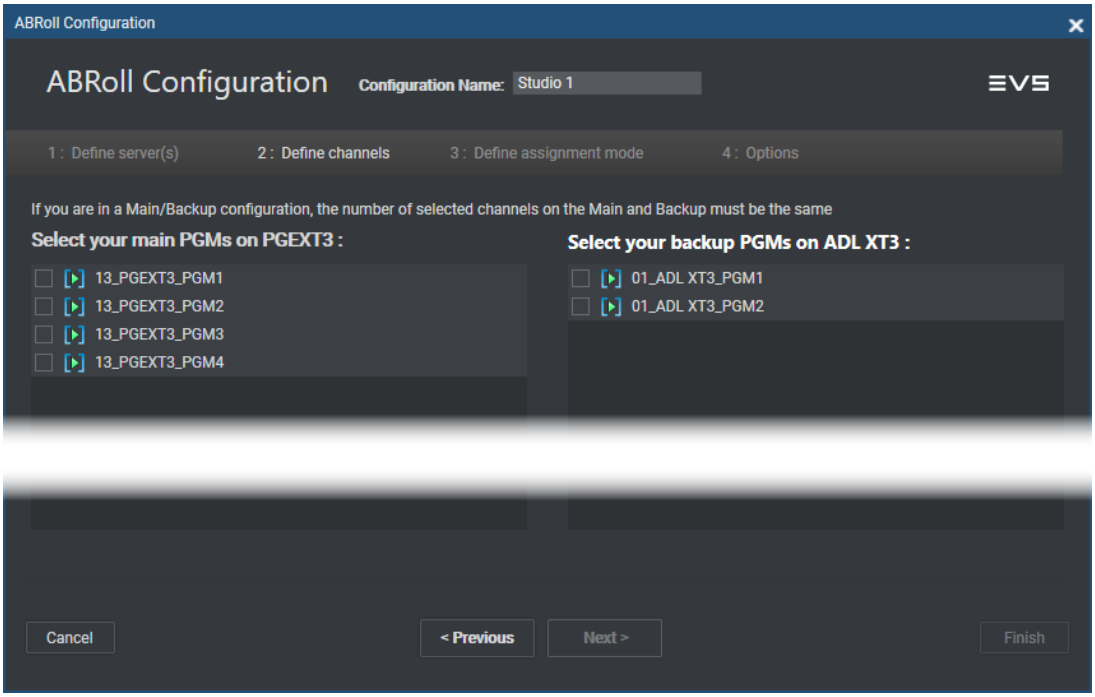
   The server is grayed out in the list of servers to the right.

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.

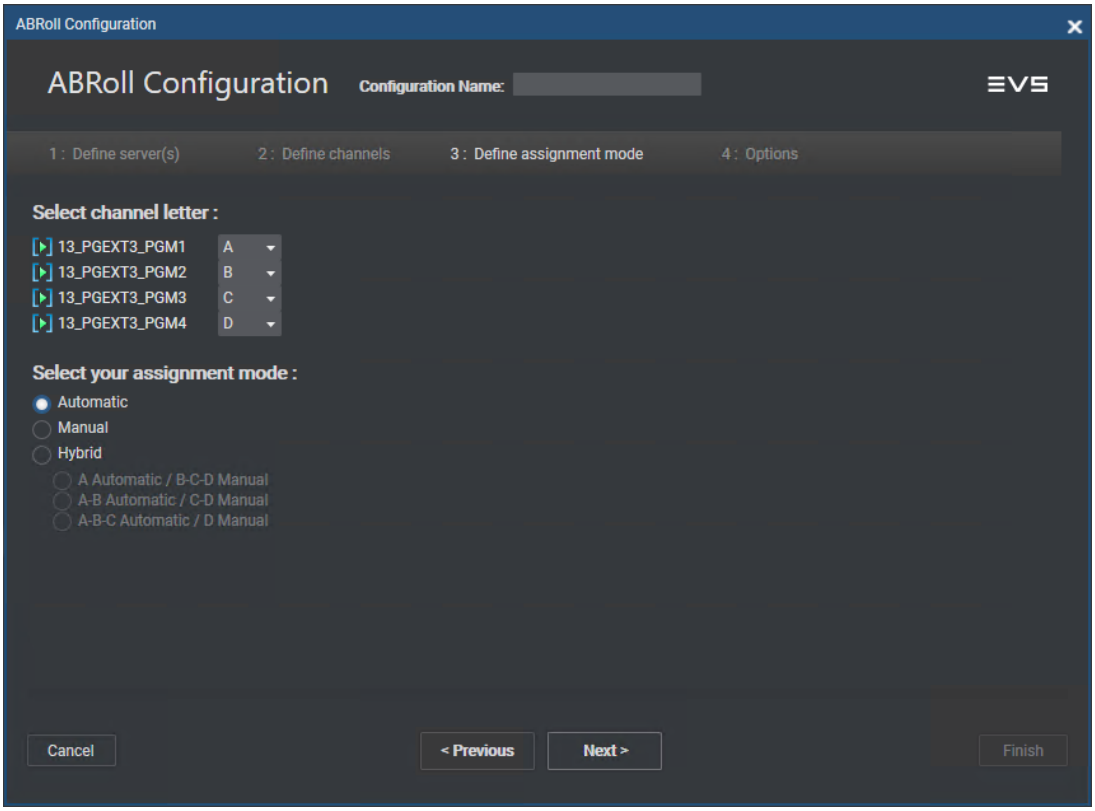
Players will be displayed on this window provided that you have the appropriate user rights:

- Player channels visibility
- AB Roll Playlist Configure Channels.

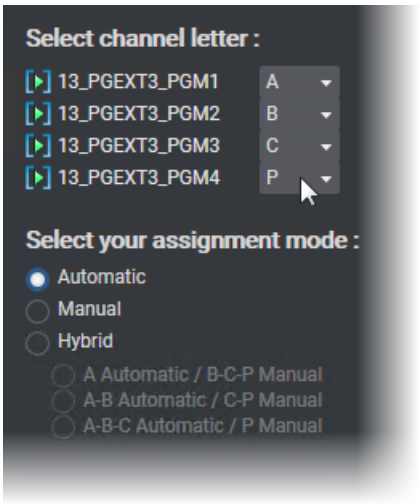
8. Select at least two and up to four channels from your main server.
9. If you are in a Main/Backup configuration, select at least two and up to four channels from your backup server. The number of selected channels on the Main and Backup servers must be the same.

10. Click **Next** to continue.

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



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



12. Select the assignment mode. See section "Assignment Modes" on page 43 for more details. Choose one of the following options:

    - **Automatic:**IPDirector will automatically assign the playlist elements to a particular channel when the playlist is loaded on the AB Roll Playlist panel. This mode is selected by default.

      Then, proceed to Step 14.

    - **Manual:** The operator will have to 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

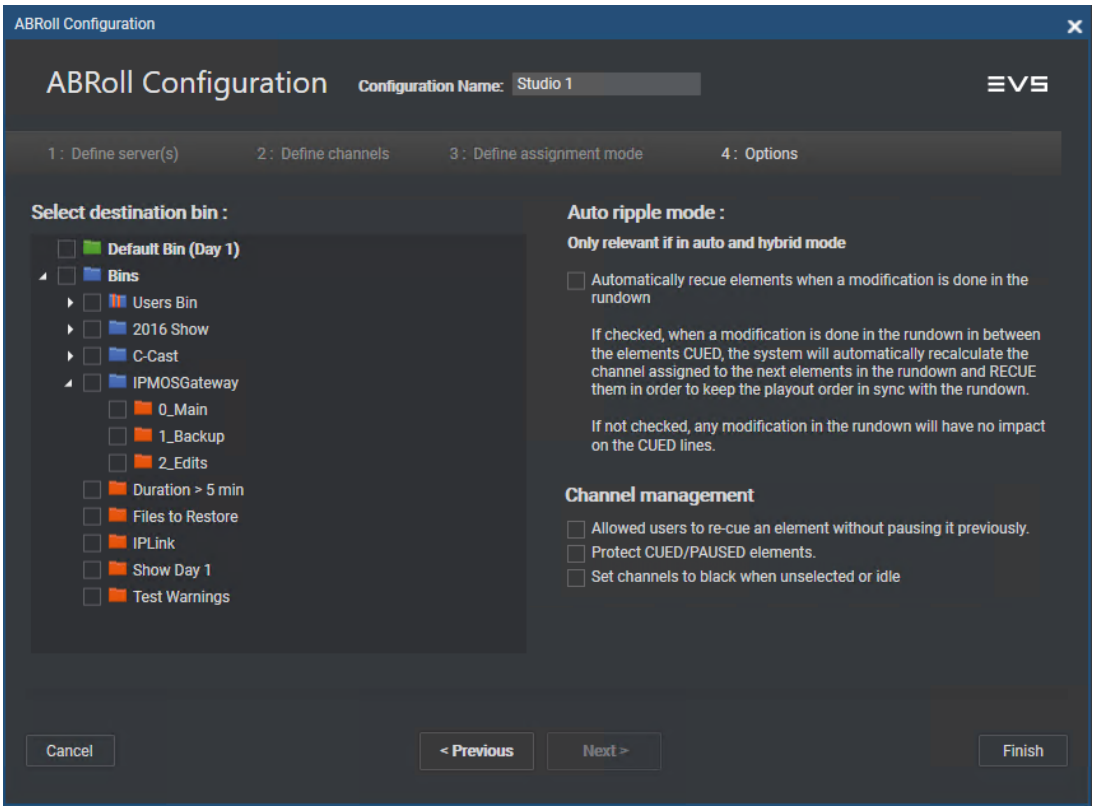
      A B Automatic / C D Manual

      A B C Automatic / D Manual.

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.

The **Automatically Recue Elements when a Modification is Done in the Rundown** option is only available with Automatic and Hybrid assignment modes.

17. (Optional) To allow the users to recue a playing element without pausing it, select the option **Allow users to recue an element without pausing it previously**.

    By default, this option is not selected and a playing element can only be recued after pausing it.

The **Allow users to recue an element without pausing it previously** option can only be used with Multicam 16.3 or higher.

18. (Optional) To prevent cued or paused elements from being removed or being uncued due to channel reassignment, select the **Protect CUED/PAUSED elements** option.

    By default, this option is not selected.

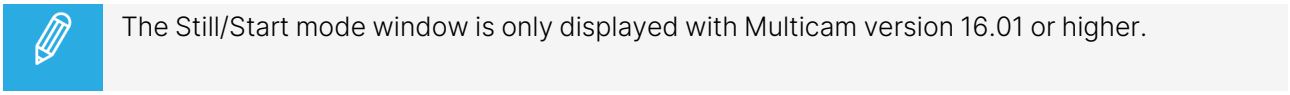
The **Protect CUED/PAUSED elements** option is only available with Manual and Hybrid assignment modes.

19. (Optional) To set the channels to black, rather than idle, in any of the following situations, select the **Set channels to black when unselected or idle** option.
    - anytime the configured ABRoll channel goes to IDLE
    - when an empty ABRoll playlist is loaded
    - when an empty ABRoll playlist is loaded without any channel selected
    - when a story is floated in iNews
    - if a channel is not assigned to a story and the **CUE elements from this position** option is used.

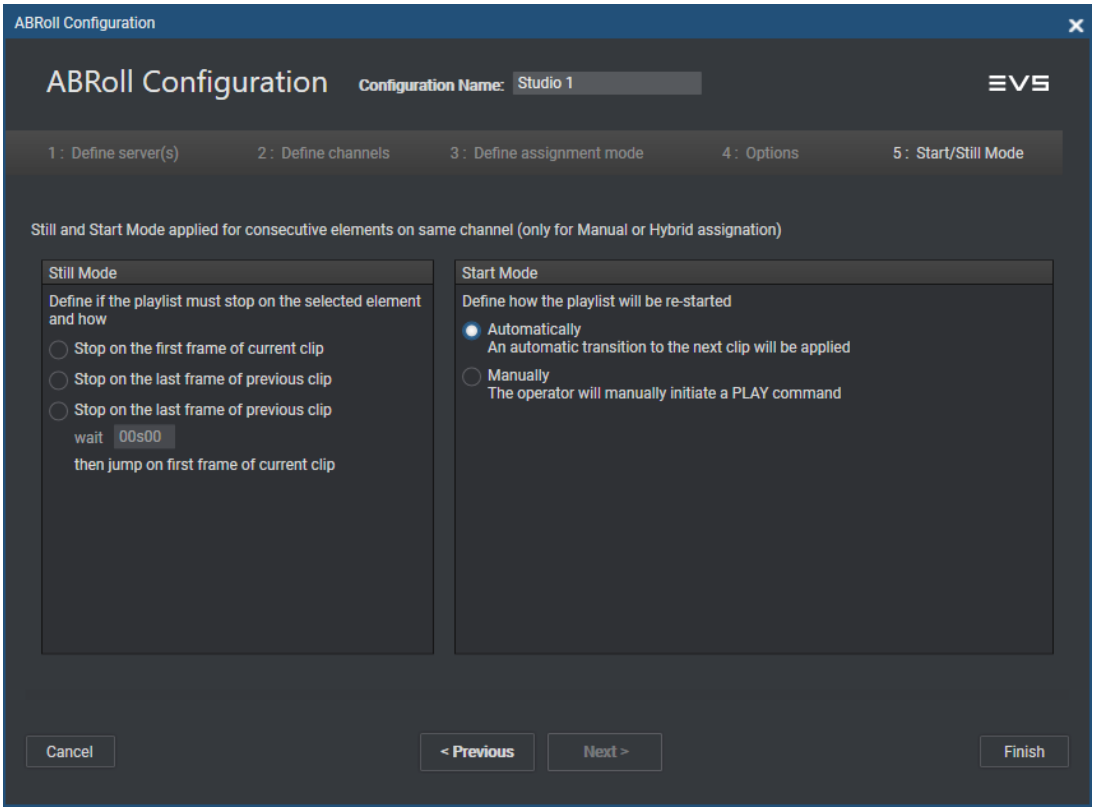
    By default, this option is not selected.

20. Depending on the assignment mode, do one of the following actions:
    - For a studio with Automatic assignment mode, click **Finish** and proceed with step 21.
    - For a studio with Manual or Hybrid assignment mode, click **Next** to continue as explained hereafter.

      The window displays the tab **5: Start/Still Mode**.



The Still/Start mode window is only displayed with Multicam version 16.01 or higher.



21. Set the Still/Start mode. See section "Playing Consecutive Elements on the Same Manual Player Channel" on page 69 for more details.

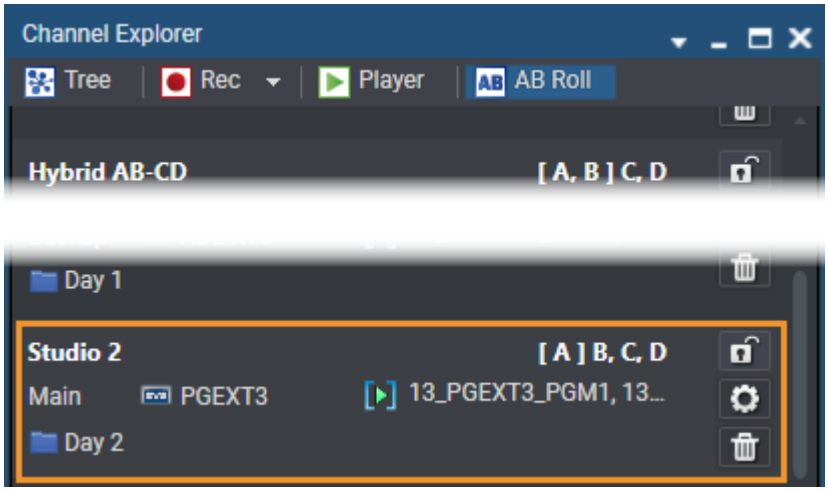
    By default, the Start mode is set to **Automatically** and no Still mode is selected. Playlist elements will be played back-to-back.

    If you choose a Still mode option, the Start mode will automatically be set to **Manually**. The playout will stop between playlist elements, based on the selected Still mode.

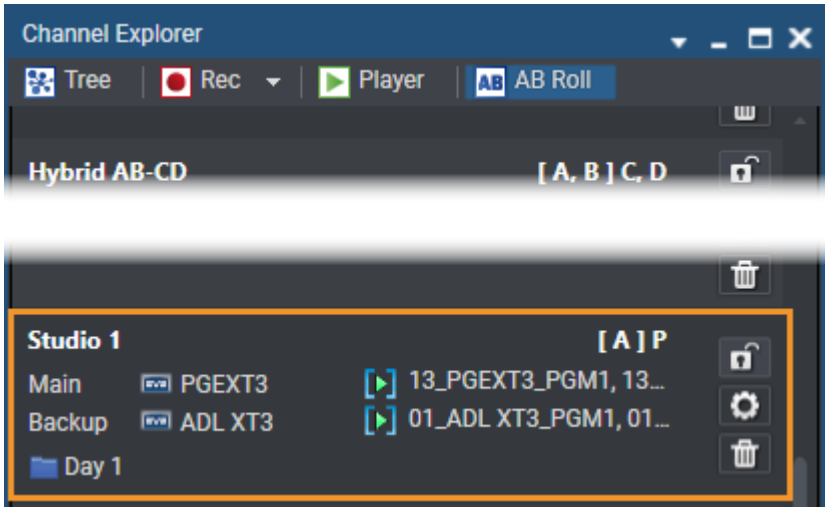
22. Click **Finish**.

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.

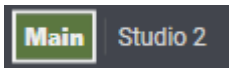
X represents the letters of the channels set to manual.

3.3. Associating an AB Roll Studio with the AB Roll Playlist Panel

Context of Use

You need to link a studio to the AB Roll window to be able to load a playlist or to create a new playlist from the AB Roll Playlist panel.

If no studio is associated with the interface yet, the system will display the following message in the AB Roll Playlist status bar:

If a studio is already associated, it is mentioned in the status bar: 

Prerequisites

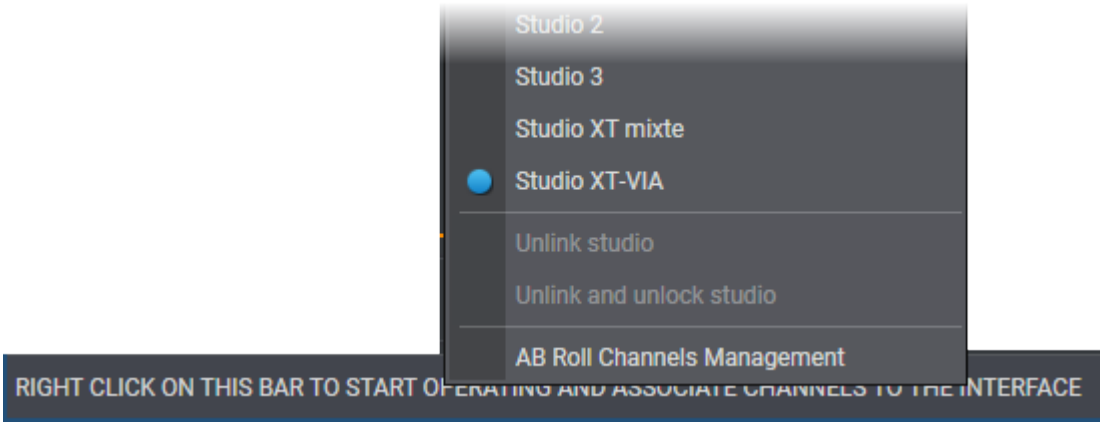
This action is possible provided that

- the AB Roll service is started
- you have the appropriate user rights:
  - Player channels control and visibility (if only a selection of player channels are controlled, the **Delete** action can only be done on studio with controlled channels)
  - AB Roll Playlist Configure Channels.

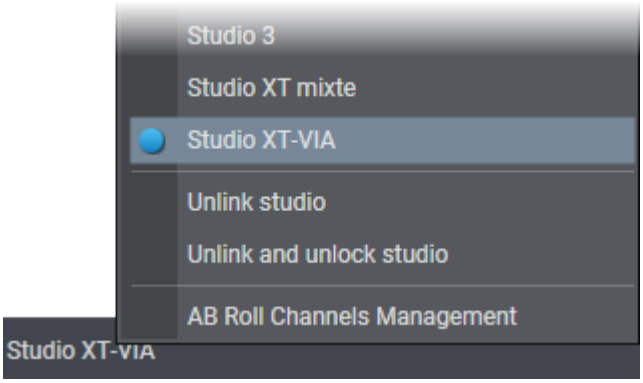
  If you do not have the rights, you will be able to select a studio, but you will not be allowed to do any action on it.
- no channel of the studio is set in another channel mode (Gang, PGM/PRV,...)
- no channel of the studio is already set in AB Roll mode from another studio on another AB Roll Playlist window
- no channel of the studio has been locked by another user.

List of Configured Studios

The list of configured studios is displayed by right-clicking the Status bar:



- indicates studios already set to AB Roll mode.
- If a studio is already associated with the current panel, it is highlighted in the contextual menu:

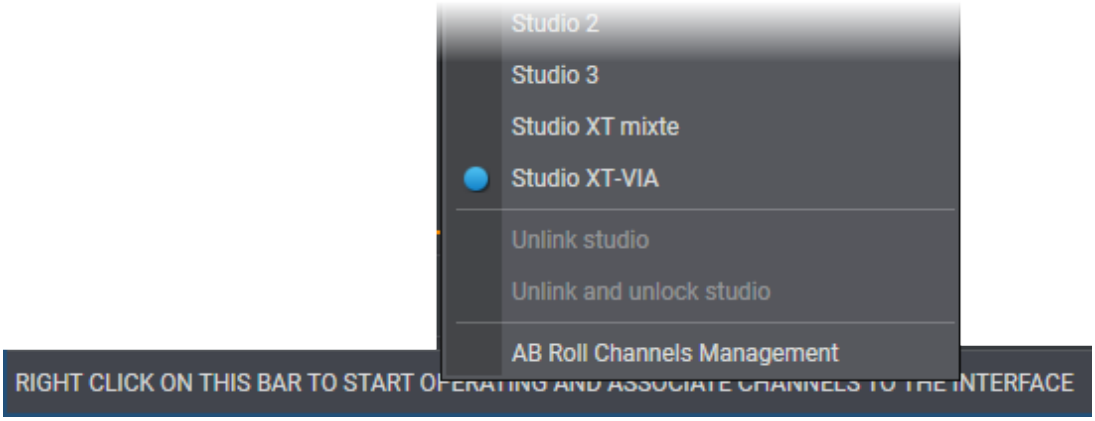


How to Associate a Studio with the AB Roll Playlist Window

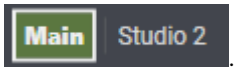
To associate a studio with the AB Roll Playlist,

1. Right-click the status bar at the bottom of the AB Roll Playlist window.

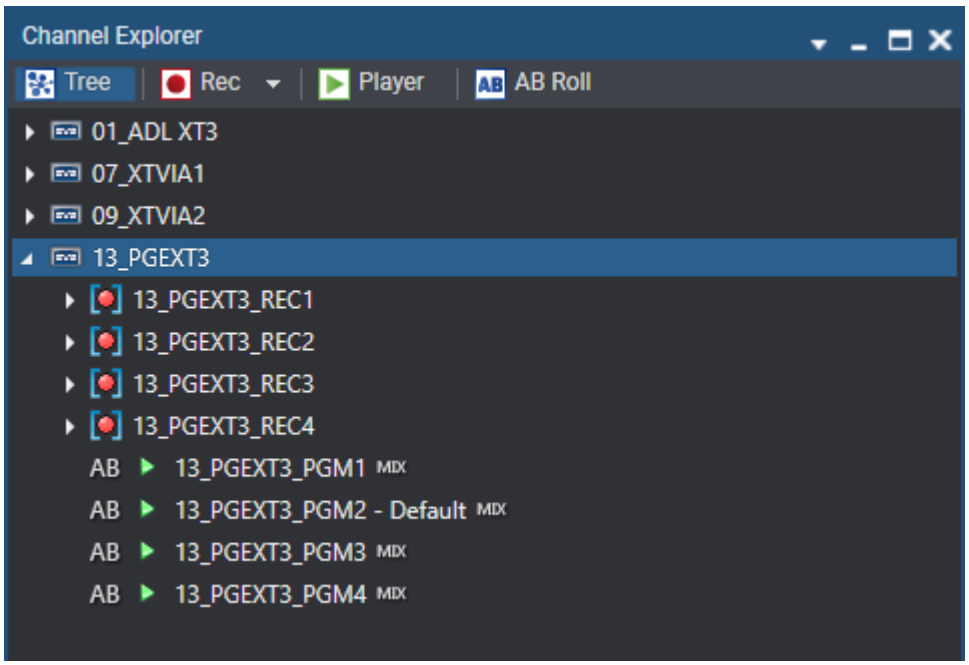
   A contextual menu displays all the configured studios.



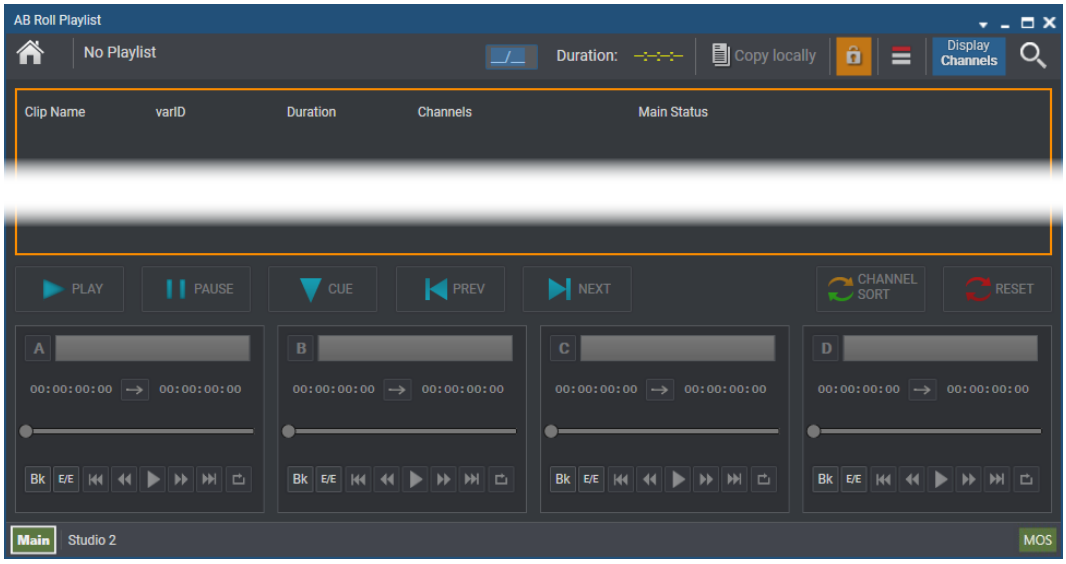
2. Select the desired studio from the contextual menu.
   - The studio name is displayed in the Associated Channel zone of the AB Roll Playlist window:

   - The studio player channels are set to AB Roll mode. This is shown in the Channel Explorer as follows:



- As many small Control panels as they are channels in the associated studio are displayed under the Playlist grid:



3.4. Other Possible Actions on Studios

Viewing a Studio Configuration

To view a studio configuration after its creation,

- Click the button next to a studio in the AB Roll tab of the Channel Explorer window.

The ABRoll Configuration window opens in read-only mode.

Deleting a Studio Configuration

This action is possible provided that

- you have the appropriate user right:
  - Player channels control and visibility (if only a selection of player channels are controlled, the **Delete** action can only be done on studio with controlled channels)
  - 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 in the AB Roll tab of the Channel Explorer 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 rights:
  - Player channels control and visibility (if only a selection of player channels are controlled, the **Delete** action can only be done on studio with controlled channels)
  - AB Roll Playlist Configure 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  .
- Right-click the Status bar at the bottom of the AB Roll Playlist window and select **Unlink and unlock studio**.

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

Unlinking studio

This action is possible provided that you have the appropriate user rights:

  - Player channels control and visibility (if only a selection of player channels are controlled, the **Delete** action can only be done on studio with controlled channels)
  - AB Roll Playlist Configure Channels.

- Right-click the Status bar at the bottom of the AB Roll Playlist window and select **Unlink studio**.

  This removes the association between the currently loaded studio and the AB Roll Playlist window.

  The studio remains locked and its player channels remain in AB Roll mode.

4. Managing Playlists

4.1. Overview of the Section

This section describes the basics actions which can be performed on playlists, i.e. information on the following topics:

4.2. Creating Playlists

Introduction

Playlists can be created on-line or off-line, depending on whether a channel is assigned to it or not.

- A playlist can be created on-line if a channel has been first assigned to the Playlist Panel. The system immediately puts the playlist on-line on that EVS server.
- An off-line playlist is a playlist created without associating it to a channel. You can browse and play an off-line playlist on the Software Player.

  The off-line playlist can also be made on-line afterwards. .

When creating a playlist, different types of playlists can be defined: Normal, Fill or Key. The following sections refer to Normal playlists for specificities of Fill and Key playlists.

How to Create a New Playlist

A studio must have been associated with the AB Roll Playlist panel to be able to create a new playlist.

To create a new playlist from the AB Roll Playlist panel,

1. Click the **Playlist Menu** button in the toolbar.
2. Select **New Playlist**.

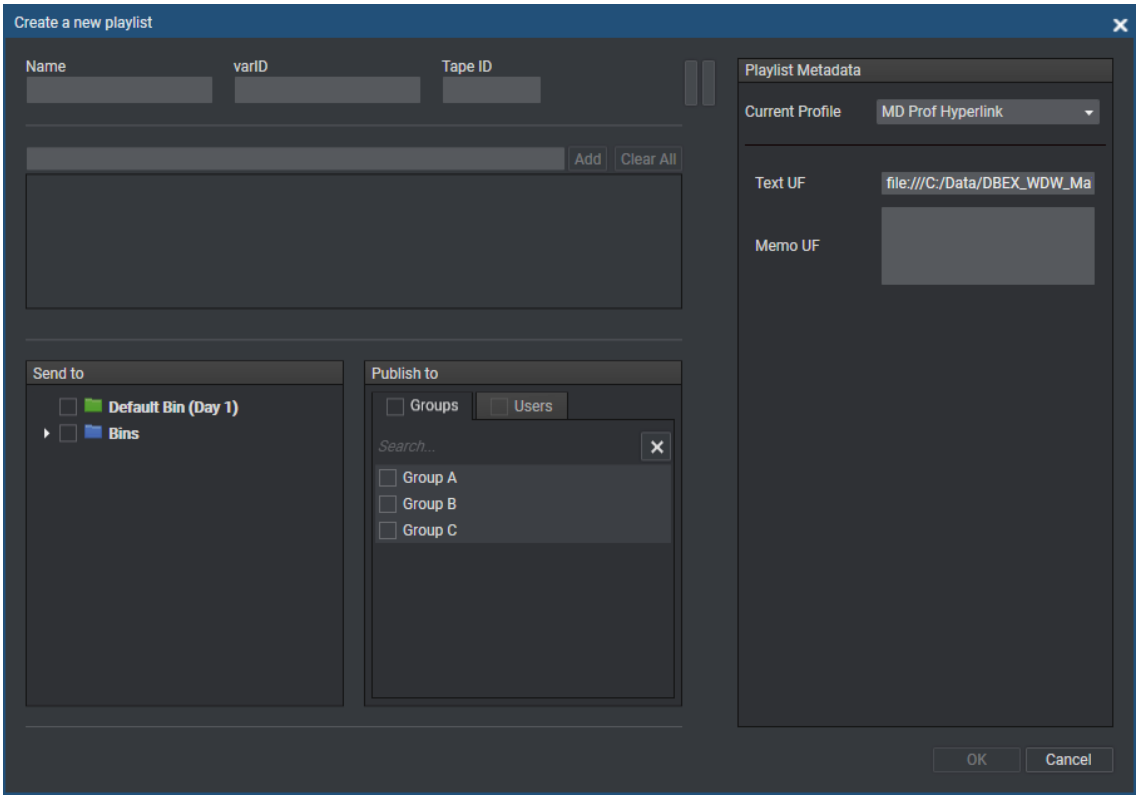
   The Create a new playlist window opens.
3. Enter a name for the new playlist in the **Name** field.
4. Complete the Create a new playlist window with the necessary information in the remaining fields.

The playlist is created but is empty. Elements can be inserted as described in "Editing Playlists" on page 73.

Create a New Playlist Window

Window Overview

While creating a new playlist, the Create a New Playlist window will open. This window makes it possible to enter general and customer-defined data (called "metadata") for the playlist.



The New Playlist window is divided into two panes:

- The left pane contains the playlist information, i.e. playlist data in general.

  It is always displayed.

- The right pane contains the playlist metadata, i.e. playlist data based on customer-defined user fields.

  It is displayed by clicking the right area in the **Pane Display** button  .

Fields in the Playlist Information Pane

The Playlist Information pane contains the following fields:

Name

User-defined name for the playlist. It can contain up to alphanumeric characters.

It is mandatory.

VarID

VarID is a 32-character ID with variable length and format. It is automatically assigned to a new playlist. It is mainly used to ensure redundancy on the system. It can be unique for a clip on the EVS server level or on the XNet network level, depending on EVS video server settings.

Tape ID

This identifies the tape on which the playlist is stored.

Keywords

This area allows you to assign up to five keywords to a playlist to qualify its content.

For more information on how to assign keywords to media, see the General Functions user manual.

Send To

Destinations where the playlist can be transferred to.

Select the check boxes corresponding to the requested destinations.

Publish To

User groups, or individual users, to which the playlist can be published, i.e. made available.

- Select / clear the **Groups** checkbox or the **Users** checkbox at the top of the lists to select / unselect all the groups or all the users at once.
- Use the **Search** field to search for a group or to search for a user from the corresponding lists.

Set as default playlist checkbox

When the checkbox is selected, the new playlist is defined as the default playlist.

Fields in the Playlist Metadata Pane

The Playlist Metadata pane contains the following fields:

Current Profile

Drop-down list from which the users with appropriate user rights can select the metadata profile to be associated with the playlist.

For users who do not have the right to choose a metadata profile, the profile set as default in the Metadata Profile Management window is automatically applied with its fields and default values.

For users who have the right to choose a metadata profile, the default profile will be displayed the first time each user create an item. Afterwards, each user who will have chosen another metadata profile at playlist creation will get this new current profile at creation of the next item.

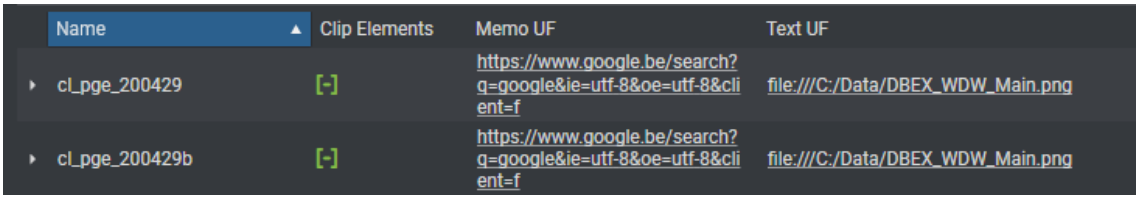
Metadata Profile fields

Fields belonging to the metadata profile selected in the **Current Profile** field.

The users can modify the values of the **Metadata Profile** fields, if they have appropriate user rights. The modifications will only apply to the given playlist and not impact the default values of the profile.

Hyperlinks in Text and Memo User Fields

In a **Text** user field, or in a **Memo** user field, you will be able to enter a link to a website or to a file. This link will appear as a hyperlink in the Elements grid.



Name	Clip Elements	Memo UF	Text UF
cl_pge_200429	[-]	https://www.google.be/search?q=google&ie=utf-8&oe=utf-8&client=f	file:///C:/Data/DBEX_WDW_Main.png
cl_pge_200429b	[-]	https://www.google.be/search?q=google&ie=utf-8&oe=utf-8&client=f	file:///C:/Data/DBEX_WDW_Main.png

Clicking a website hyperlink will open the page in a browser. Clicking a file hyperlink will open the file in the appropriate application.

The following conditions must be fulfilled regarding the hyperlink naming:

- websites must be preceded with **http://** or **https://**.

  Example: https://www.google.be/search?q=google&ie=utf-8&oe=utf-8&client=f
- files must be preceded with **file://**.

  Example: file://10.129.180.119/v740/Nearlines/PMU/Hi/EVS-pmu-20171024-0169-CamA.evs.xml
- local files must be preceded with **file:///**.

  Example: file:///C:/Data/DBEX_WDW_Main.png
- the only allowed characters in filenames or website names are:
  - letters (a-z)
  - numbers (0-9)
  - - . _ ~ # [ ] @ ! $ & ' ( ) + , ; = %

4.3. Loading a Playlist

Introduction

Prerequisite

A studio must have been associated with the AB Roll Playlist panel to be able to load a playlist. See section "Associating an AB Roll Studio with the AB Roll Playlist Panel" on page 32.

How to Open a Playlist in the AB Roll Playlist panel

A playlist can be opened in one of the following ways:

- entering the playlist LSM ID
- dragging the playlist from the Search pane of the AB Roll Playlist panel to the Playlist grid area.
- dragging the playlist from the Database Explorer to the Playlist grid area.

Depending on the assignment mode of the player channels from the selected studio, the playlist elements will, or will not, be automatically cued on the player channels. See section "Allocating Player Channels to Playlist Elements" on page 43.

Limitations

The following playlist effects and parameters are not managed by the AB Roll Playlist application:

- A/V effects
- Specific playout speed
- Still and Start modes (Jump-on-time / start-on-time)
- Tags
- Groups
- Black clips
- White clips
- Live trains without boundaries

If a playlist containing such parameters is loaded on the AB Roll Playlist panel, a warning message is displayed in the Message panel. The playlist is opened but none of those functions is taken into account.

When comments are displayed in the AB Roll playlist, they are not considered as normal elements and are not taken into account in the channel association.

How to Load a Playlist from the Search Pane

To load a playlist from the Search pane,

1. Click the **Search** button  .

   This opens the Search pane at the bottom half of the AB Roll Playlist window.
2. Select the Bins or the Playlists view on the left of the Search pane.
3. Select the requested playlist in the Elements grid.
4. Drag the playlist from the Search pane to the AB Roll Playlist grid.

5. If another playlist was already loaded, a warning message is displayed, asking you whether you want to replace the currently loaded playlist with a new one.

   Click **Yes** to confirm.

The playlist elements are listed in the Playlist grid.

If the playlist was an off-line playlist, it becomes on-line on the local server.

How to Load a Playlist from the Database Explorer

To load a playlist from the Database Explorer pane,

1. Open the Database Explorer.
2. Select the Bins or the Playlists view of the Database Explorer.
3. Select the requested playlist in the Elements grid.
4. Drag the playlist from the Database Explorer grid to the AB Roll Playlist grid.
5. If another playlist was already loaded, a warning message is displayed, asking you whether you want to replace the currently loaded playlist with a new one.

   Click **Yes** to confirm.

The playlist elements are listed in the Playlist grid.

If the playlist was an off-line playlist, it becomes on-line on the local server.

How to Load a Playlist via the Playlist LSM ID

To load a playlist by entering its playlist LSM ID,

1. Enter the playlist LSM ID in the **Playlist LSM ID** field  .
2. Press ENTER.
3. If another playlist was already loaded, a warning message is displayed, asking you whether you want to replace the currently loaded playlist with a new one.

   Click **Yes** to confirm.

The playlist elements are listed in the Playlist grid.

4.4. Allocating Player Channels to Playlist Elements

4.4.1. Assignment Modes

Introduction

Three assignment modes exist for a studio: **Automatic**, **Manual** or **Hybrid** (Automatic and Manual). The player channels will be either set to Automatic or to Manual during the creation and configuration of the studio. See section "Configuring a New AB Roll Studio" on page 23.

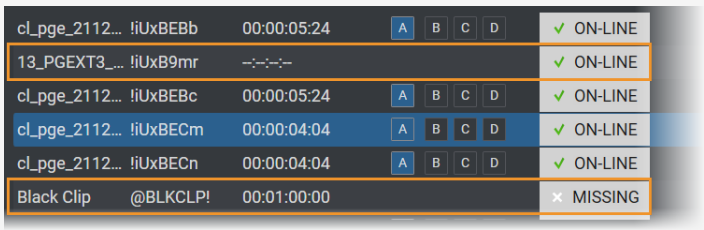
Depending on the assignment mode of the player channels from the selected studio, the player channels will, or will not, be automatically allocated to playlist elements when a playlist is loaded on the AB Roll Playlist window.

When the player channels of a studio have been set to Automatic (Full Automatic or Hybrid studio), they are automatically allocated to all playlist elements. The first X playlist elements are cued on the X automatic channels.

When player channels of a studio have been set to Manual (Full Manual or Hybrid studio), they are not allocated to any playlist element. Users can manually select a manual channel to assign it to a playlist element.

Trains in Playlist

No player channel will be allocated to live trains without boundaries, to black clips and white clips present as elements in the playlist. It will not be possible to assign a player channel later on neither. So, such elements will not be played out.



Full Automatic Mode

Principle for Channel Allocation

If the studio associated with the AB Roll Playlist window has been configured as **Automatic**, when a playlist is loaded, all the player channels are automatically allocated to the playlist elements according to the player channels order.

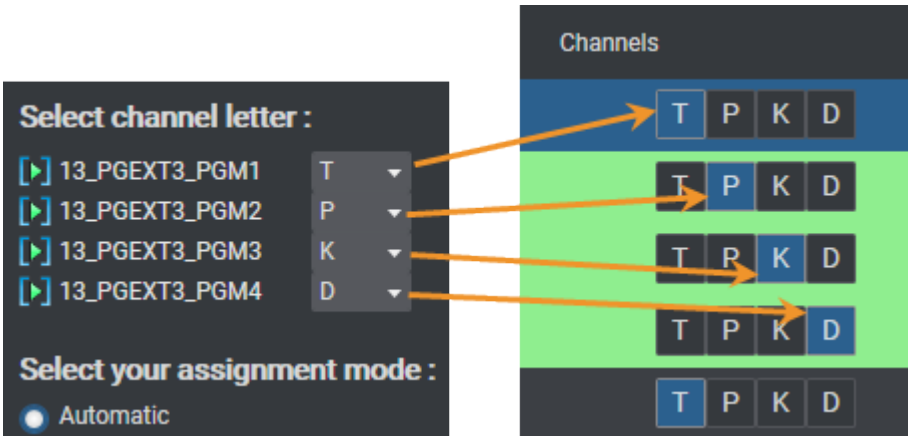
The first X playlist elements are cued on the X channels. X = number of Automatic player channels.

Display

Automatic player channels are represented by squares sticking together in the Playlist grid. The channel allocated to each playlist element is highlighted in blue.

The letters correspond to the letters selected for each channel during the AB Roll studio configuration. They are displayed according to the player channels order.

For example:



Case of a Missing Element

If a missing playlist element is among the first X elements, a player channel is allocated to it but the element is not cued. So the elements cued will be the first elements which can be played on each player channel.

Full Manual Mode

Principle for Channel Allocation

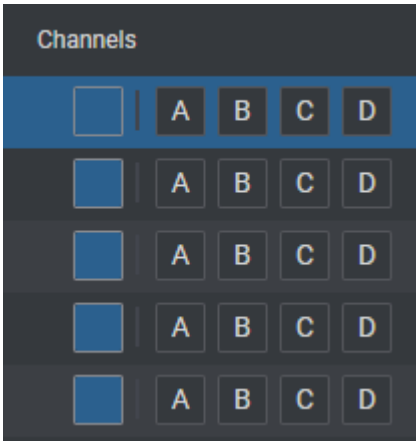
If the studio associated with the AB Roll Playlist window has been configured as **Manual**, when a playlist is loaded, its playlist elements are not loaded on any player channel. Users will have to manually select the channel to allocate to each playlist element. See section "Manually Allocating Player Channels" on page 47.

Display

Manual player channels are represented by spaced squares with a letter representing the channel.

The letters correspond to the letters selected for each channel during the AB Roll studio configuration. They are displayed according to the player channels order.

As no channel has been allocated yet, an empty square is highlighted in blue to the left of the player channels.



Hybrid Mode

Principle for Channel Allocation

If the studio associated with the AB Roll Playlist window has been configured as **Hybrid**, when a playlist is loaded, the automatic player channels of the studio are automatically allocated to all the playlist elements according to the player channels order.

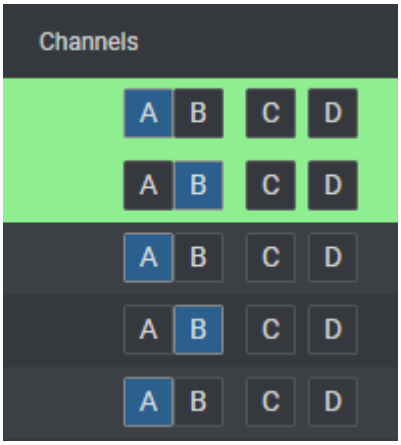
The first X playlist elements are cued on the X automatic channels.

No manual player channel is allocated to any playlist element. Users will have to manually select the manual channel to allocate to some playlist elements. See section "Manually Allocating Player Channels" on page 47. This will remove the association with the previously allocated automatic player channel.

Display

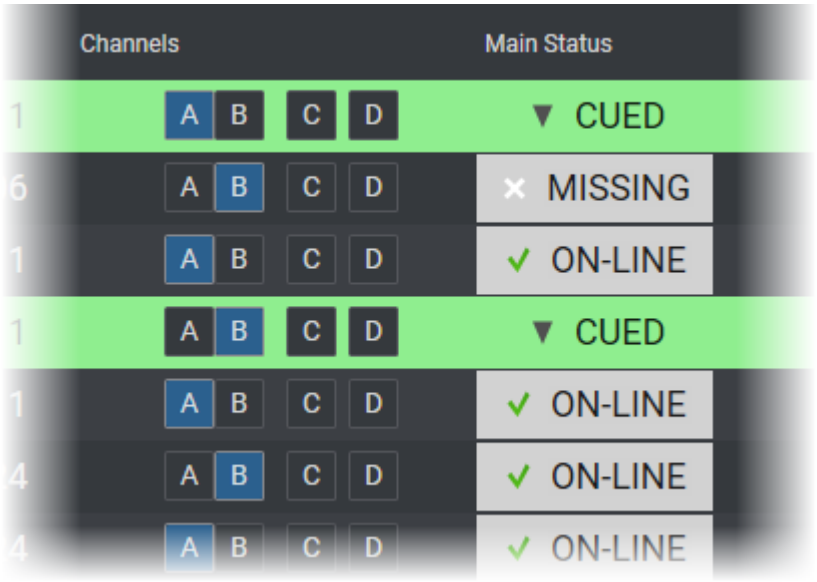
Automatic player channels are represented by squares sticking together in the Playlist grid. Manual player channels are represented by spaced squares.

The allocated channel is highlighted in blue for each playlist element.



Case of a Missing Element

If a missing playlist element is among the first X elements, an Automatic player channel is allocated to it but the element is not cued. So the elements cued will be the first elements which can be played on each player channel.

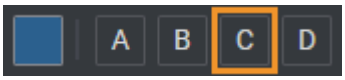
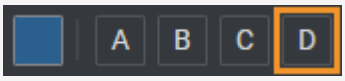


4.4.2. Manually Allocating Player Channels

How to Manually Allocate a Manual Player Channel to a Playlist Element

Manual Studio

Operation	User Interface Button	Keyboard Shortcut	Result
Allocate first player channel			allocates the first channel to the selected playlist element and, if no playlist element is currently cued on that channel, cues the playlist element.
Allocate second player channel			allocates the second channel to the selected playlist element and, if no playlist element is currently cued on that channel, cues the playlist element.

Operation	User Interface Button	Keyboard Shortcut	Result
Allocate third player channel			allocates the third channel to the selected playlist element and, if no playlist element is currently cued on that channel, cues the playlist element.
Allocate fourth player channel			allocates the fourth channel to the selected playlist element and, if no playlist element is currently cued on that channel, cues the playlist element.

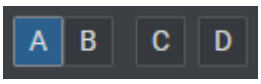
In the following example, different manual player channels have been assigned to the first four playlist elements and the elements have been cued.

Hybrid Studio

With an **Hybrid** studio, you can manually allocate a manual player channel to a playlist element in the same way as you do with a **Manual** studio:

- Click the button corresponding to the manual player channel.
- Press the keyboard shortcut corresponding to a player channel.

Example:

In this 4-channels **Hybrid** studio  , do one of the following actions:

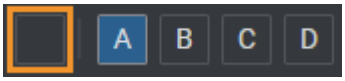
- click **C** or **D**
- press  or  .

On the following screenshot, the two manual player channels have been assigned to the third and fourth playlist elements and the elements have been cued.

In an **Hybrid** studio, this action impacts the allocation of the automatic player channels to the next elements.

How to Remove the Association between a Manual Player Channel and a Playlist Element

Manual Studio

Operation	User Interface Button	Keyboard Shortcut	Result
remove the association between a manual player channel and a playlist element			If the playlist element is cued, the operation unloads the selected playlist element from the player channel. The  button is then selected for the playlist element.

Hybrid Studio

With a **Hybrid** studio, the only way to remove the association between a manual player channel and a playlist element is to select an automatic player channel.

Do one of the following actions:

- Click the buttons group of automatic player channels:

- Press the keyboard shortcut corresponding to a player channel.

  In the current example, press  or  .

The selection of the automatic channel (A or B) will be done by the system, based on the allocation of the player channels to the previous playlist elements.

This action may impact the allocation of the automatic player channels to the next elements.

5. Playing Playlists

5.1. Overview of the Section

This section describes the basics actions to load and play playlists. It also provides procedures for more advanced operations.

Section
"Using Playlist Loading and Transport Functions" on page 51
"Looping Playlist Elements During Playout" on page 66
"Playing Consecutive Elements on the Same Manual Player Channel" on page 69
"Displaying a Black Screen on a Player Channel" on page 71

5.2. Using Playlist Loading and Transport Functions

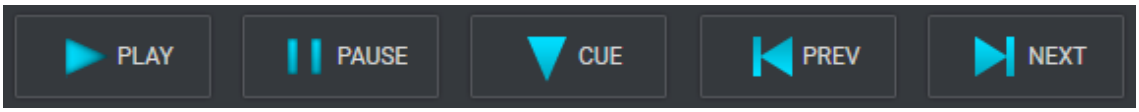
5.2.1. Ways to Perform Transport Functions

MPlay Commands

Loading and transport of the elements in the playlist is commonly controlled by means of the MPlay Remote controller. You will find detailed information on the use of the MPlay remote in the General Functions user manual.

Loading and Transport Buttons, Keyboard Shortcuts and ShuttlePRO Keys

Loading and Transport buttons, at the bottom of the AB Roll playlist grid



They act on the playlist element which is currently selected in the Playlist grid (blue background), provided that it has a player channel allocated.

See sections "Transport Functions" on page 53 and "Loading Functions" on page 60 for explanation.

Loading and Transport buttons, at the bottom of an AB Roll Playlist Control Panel

They act on the playlist element which is currently cued on the corresponding player channel.

Keyboard shortcuts

- If none of the AB Roll Playlist Control panels has the focus, keyboard shortcuts act in the same way as the transport buttons just below the Playlist grid.
- If an AB Roll Playlist Control panel has the focus (blue background of the player channel letter: A), keyboard shortcuts act on the playlist element currently cued on that player channel.

To select one of the AB Roll Playlist Control panel and give it the focus, do one of the following actions:

- Click within its area.
- Press the keyboard shortcut of the Control panel:

Keyboard Shortcut	Operation
% 5	Selects the first AB Roll Playlist Control panel.
^ 6	Selects the second AB Roll Playlist Control panel.
& 7	Selects the third AB Roll Playlist Control panel.
* 8	Selects the fourth AB Roll Playlist Control panel.

The element loaded on the player channel which has the focus is displayed on the top of the AB Roll Playlist grid.

ShuttlePRO keys

When a player channel is controlled by a ShuttlePRO, the device keys act on that channel. is shown next to the **Loaded Media Name** field of the controlled player channel.

See section "Quick Reference in AB Roll Mode" on page 125.

The player channel with the focus (shown by A) can be different than the player channel controlled by the ShuttlePro (shown by).

Drag-and-Drop Operations

Some functions can also be done by means of drag-and-drop operations from the Playlist grid to the AB Roll Playlist Control Panels area.

- Cue a playlist element on its assigned player channel by dragging it from the Playlist grid to the AB Roll Playlist Control panel of this player channel.

  See section "Cue the Selected Element" on page 60.

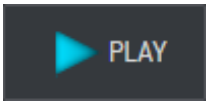
- Assign and cue a playlist element, to another player channel than the one it is assigned to, by dragging it from the Playlist grid to the AB Roll Playlist Control panel of another player channel.

  See section "Assign and Cue an Element to Another Channel" on page 64.

5.2.2. Transport Functions

Play an Element

How to Play an Element

User Interface Element / Keyboard Shortcut	Resulting Action (*)
	Plays the element selected in the grid.
 (when no Control Panel has the focus)	Plays the element selected in the grid.
	Play ASAP: Plays the element selected in the grid, as soon as possible. A Cue is needed before using the **Play ASAP** function if the selected element is • stopped, or • playing and the last element of the playlist.
	Plays the element currently cued on the corresponding player channel. The button switches to the **Pause** button.

User Interface Element / Keyboard Shortcut	Resulting Action (*)
P (when a Control Panel has the focus: A)	Plays the element currently cued on the player channel with the focus.
	Plays the element currently cued on the player channel controlled by the ShuttlePRO.

The playout speed is always 100%.

Once the playlist element has been played, it remains stopped on its last frame during the **Freeze on OUT duration** defined in the User Manager settings (Configure Settings > ABRoll).

The possible **Freeze on OUT duration** values are: [000s00fr - 599s24fr].

Then, the next element allocated to the same channel is cued on its TC IN.

Conditions

The element is played provided that

- the element has an allocated player channel
- the channel is not currently playing
- the element is not missing.

Pause the Playing Element

User Interface Element / Keyboard Shortcut	Resulting Action
PAUSE	Pauses the playing element in the grid. The element must be selected so that the **Pause** function is available.
(when no Control Panel has the focus)	Pauses the playing element in the grid. The element must be selected so that the **Pause** function is available.

User Interface Element / Keyboard Shortcut	Resulting Action
 (if speed = 100%)  (if speed differs from 100%)	Pauses the element currently playing on the corresponding player channel. The button switches to the **Play** button.
 (when a Control Panel has the focus: )	Pauses the element currently playing on the player channel with the focus.
	Pauses the element currently playing on the player channel controlled by the ShuttlePRO.

Play Fast Rewind and Play Fast Forward

Ways to Play Fast Rewind or Fast Forward

- Playing at a preset speed:

  Buttons and shortcuts are available to play a playlist fast rewind or fast forward at a preset speed.

- Playing forward or backwards at increasing or decreasing speeds:

  Keyboard shortcuts and the ShuttlePRO shuttle wheel can be used to play fast rewind or fast forward at different speeds.

Playing Fast Rewind or Fast Forward at a Preset Speed

The Preset Speed

A default rewind speed and a default forward speed are set in the **Tools > Settings > Control Panel** category.

Using the **Fast Rewind** or the **Fast Forward** buttons, shortcuts or Shuttle PRO keys will play the media at this default speed value. Another speed value than the default one can be chosen by means of contextual menus.

A different Fast Forward speed and Fast Rewind speed can be set for each AB Roll Playlist Control panel.

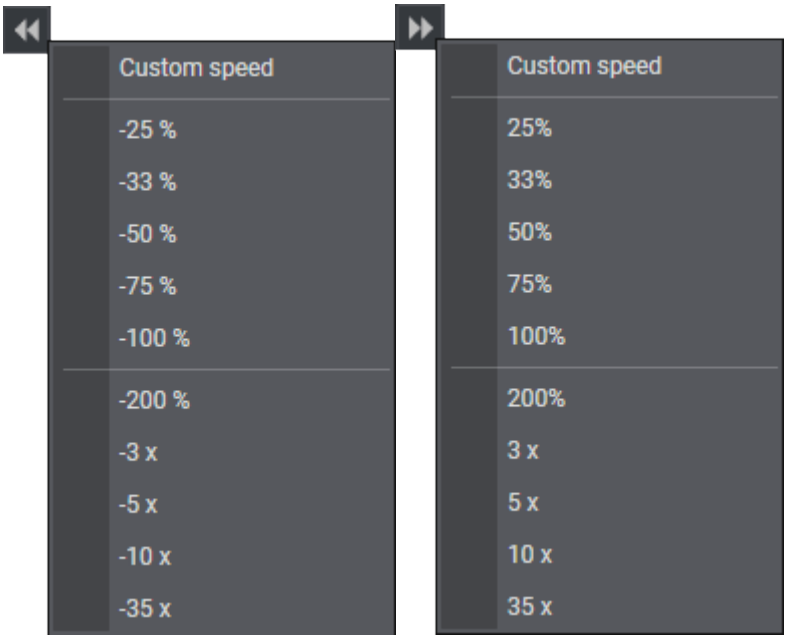
The speed is shown in a tooltip displayed when hovering the mouse over the **Fast Rewind** button or the **Fast Forward** button 

.

How to Use another Speed Value than the Default One

To use another speed value,

1. Right-click the **Fast Rewind** button or the **Fast Forward** button
2. Select one of the options from the contextual menu.



How to Play Fast Rewind or Fast Forward at Preset Speed

Play Fast Rewind

User Interface Element / Keyboard Shortcut	Resulting Action
W (when no Control Panel has the focus)	Starts moving backwards at preset or selected speed through the playlist element loaded on the same player channel as the element selected in the grid.
	Starts moving backwards at preset or selected speed through the playlist element loaded on the corresponding player channel. The button switches to .

User Interface Element / Keyboard Shortcut	Resulting Action
W (when a Control Panel has the focus: A)	Starts moving backwards at preset or selected speed through the playlist element loaded on the player channel with the focus. The button switches to .
	Starts moving backwards at preset or selected speed through the playlist element loaded on the player channel controlled by the ShuttlePRO.

Play Fast Forward

User Interface Element / Keyboard Shortcut	Resulting Action
F (when no Control Panel has the focus)	Starts moving forward at preset or selected speed through the playlist element loaded on the same player channel as the element selected in the grid.
	Starts moving forward at preset or selected speed through the playlist element loaded on the corresponding player channel. The button switches to .
F (when a Control Panel has the focus: A)	Starts moving forward at preset or selected speed through the playlist element loaded on the player channel with the focus. The button switches to .
	Starts moving forward at preset or selected speed through the playlist element loaded on the player channel controlled by the ShuttlePRO.

Playing Backwards or Forward at Different Speeds

Different shortcuts are available to play fast rewind at different speed values:

Fast Rewind Speed	Keyboard Shortcut
-35x	Shift + Ctrl + ~ `
-15x	Shift + Ctrl + ! 1
-5x	Shift + Ctrl + @ 2
-0.75x	Shift + Ctrl + # 3
-0.5x	Shift + Ctrl + $ 4

Different shortcuts are available to play fast forward at different speed values:

Fast Forward Speed	Keyboard Shortcut
0.5x	Shift + Ctrl + % 5
0.75x	Shift + Ctrl + ^ 6
5x	Shift + Ctrl + & 7
15x	Shift + Ctrl + * 8
35x	Shift + Ctrl + (9

The ShuttlePRO can also be used to play backwards or forward at increasing or decreasing speed.

- Rotate the Shuttle ring to play fast forward or fast rewind the loaded media.

Go to Previous or Next Frame/Field

User Interface Element / Keyboard Shortcut	Resulting Action (*)
← (when no Control Panel has the focus)	Goes to the previous frame in the element selected in the grid.
← (when a Control Panel has the focus: A)	Goes to the previous frame in the element currently cued on the player channel with the focus.
 (field by field)	Goes to the previous field in the element currently cued on the player channel controlled by the ShuttlePRO.
→ (when no Control Panel has the focus)	Goes to the next frame in the element selected in the grid.
→ (when a Control Panel has the focus: A)	Goes to the next frame in the element currently cued on the player channel with the focus.
 (field by field)	Goes to the next field in the element currently cued on the player channel controlled by the ShuttlePRO.

5.2.3. Loading Functions

Cue the Selected Element

Context of Use

A playlist element can be cued on its assigned player channel in different ways described hereafter.

A loop on the element to cue is kept.

The following restrictions apply:

- the element must have an allocated player channel
- the channel must not be currently playing
- the element must not be playing out
- the element must not be missing.
- the element must not be a virtual element.

Using Buttons and Shortcuts

User Interface Element / Keyboard Shortcut	Resulting Action (*)
	Cues the element selected in the grid.
 (when no Control Panel has the focus)	Cues the element selected in the grid.
	Cue ASAP: Cues the element selected in the grid, as soon as possible, even if it is playing.
	(re-)Cues the element currently loaded on the corresponding player channel.
 (when a Control Panel has the focus: )	(re-)Cues the element currently loaded on the player channel with the focus.

(*) The selected element is cued for playout, on its IN point, on its assigned player channel.

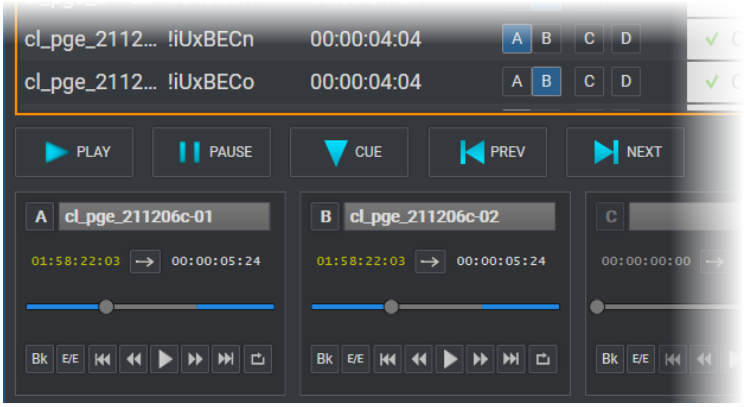
Dragging the Element on its AB Roll Playlist Control Panel

A playlist element can also be cued on its assigned player channel by a drag-and-drop operation.

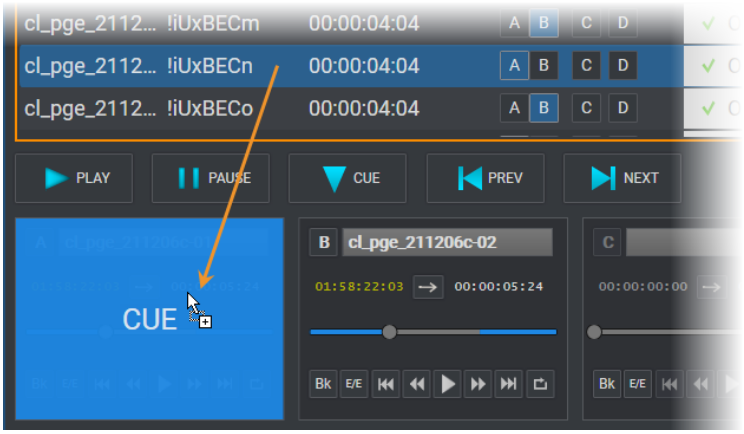
The channel may be manual or automatic.

1. Drag the element from the Playlist grid to the AB Roll Playlist Control panel of the player channel assigned to this element (e.g. A to A).

   Example - Original Situation:

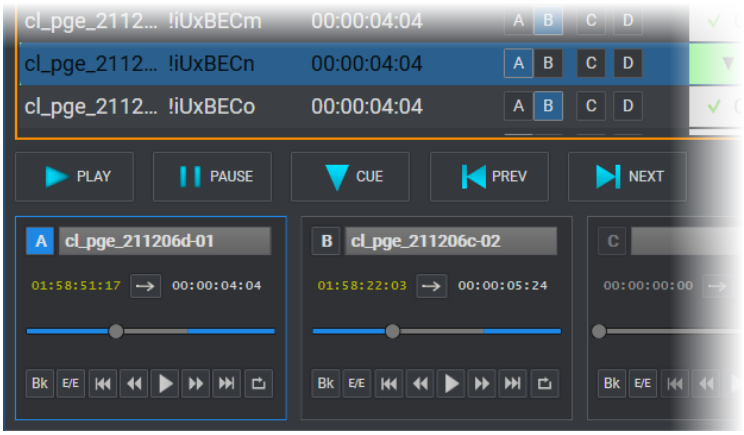


   Before dropping the element, the whole AB Roll Playlist Control panel is covered by a blue rectangle and **CUE** is displayed:



2. Drop the element on the blue area.

   The element is cued on its player channel (A)



Cue the Elements from the Selected Element Position

Do one of the following actions:

- Right-click a playlist element to display the contextual menu and select the **Cue elements from this position** option.
- Shift + C

This operation cues the selected element on its IN point, on its assigned channel, and cues the next elements assigned to all the other channels.

The action cannot be done if the playlist is playing.

Cue the Previous Element

User Interface Element / Keyboard Shortcut	Resulting Action (*)
PREV	Cues the previous element which is not cued before the element currently loaded on the same channel as the element selected in the grid.
B (when no Control Panel has the focus)	Cues the previous element which is not cued before the element currently loaded on the same channel as the element selected in the grid.
⏮	Cues the previous element which is not cued before the element currently loaded on the same channel as the corresponding Control panel.

User Interface Element / Keyboard Shortcut	Resulting Action (*)
B (when a Control Panel has the focus: A)	Cues the previous element which is not cued before the element currently loaded on the same channel as the player channel with the focus.
	

The element to cue must not be missing.

(*) When the **Prev** function is used:

- If the element currently loaded on the channel is cued but not playing ▼ CUED, the **Prev** function unloads this element and cues the previous element assigned to the same channel on its IN point.
- If the element currently loaded on the channel is playing ► PLAYING, the **Prev** function stops the playout of this element and cues the previous element assigned to the same channel on its IN point.

Cue the Next Element

User Interface Element / Keyboard Shortcut	Resulting Action (*)
NEXT	Cues the next element which is not cued after the element currently loaded on the same channel as the element selected in the grid.
N (when no Control Panel has the focus)	Cues the next element which is not cued after the element currently loaded on the same channel as the element selected in the grid.
⏭	Cues the next element which is not cued after the element currently loaded on the same channel as the corresponding Control panel.

User Interface Element / Keyboard Shortcut	Resulting Action (*)
N (when a Control Panel has the focus: A)	Cues the next element which is not cued after the element currently loaded on the same channel as the player channel with the focus.
	

The element to cue must not be missing.

(*) When the **Next** function is used:

- If the element currently loaded on the channel is cued but not playing ▼ CUED, the **Next** function unloads this element and cues the next element assigned to the same channel on its IN point.
- If the element currently loaded on the channel is playing ► PLAYING, the **Next** function stops the playout of this element and cues the next element assigned to the same channel on its IN point.

Assign and Cue an Element to Another Channel

Context of Use

A playlist element can be assigned to another player channel than the one it is currently assigned to and, concomitantly, cued on that channel (e.g. A to C). This is done by a drag-and-drop operation.

The destination channel must be manual. It may already have a playlist element cued on it or not.

In a **Full Manual** studio, a playlist element which is not assigned to any player channel can be assigned and cued to any of the studio channels by a drag-and-drop operation.

A loop on the element to cue is kept.

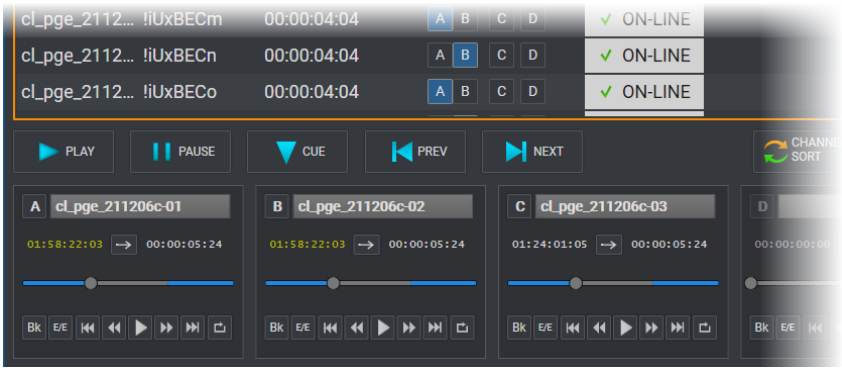
The following restrictions apply:

- the destination channel must be manual
- the destination channel is not currently playing
- the element is not being played out
- the element is not missing
- the element is not a virtual element.

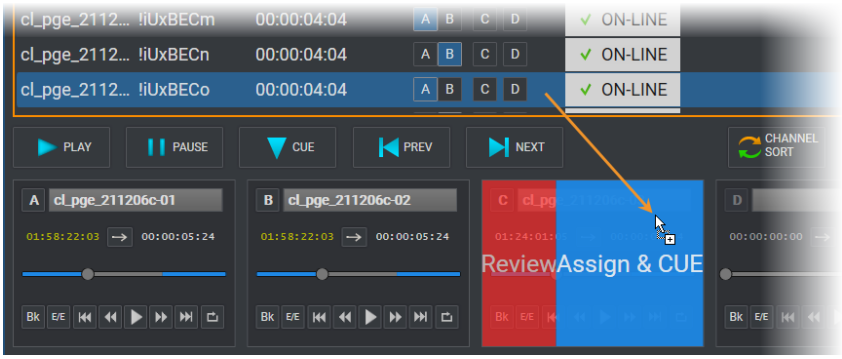
How to Assign and Cue an Element to Another Channel

1. Drag the playlist element from the Playlist grid to the AB Roll Playlist Control panel of another player channel (manual).

   Example - Original Situation:

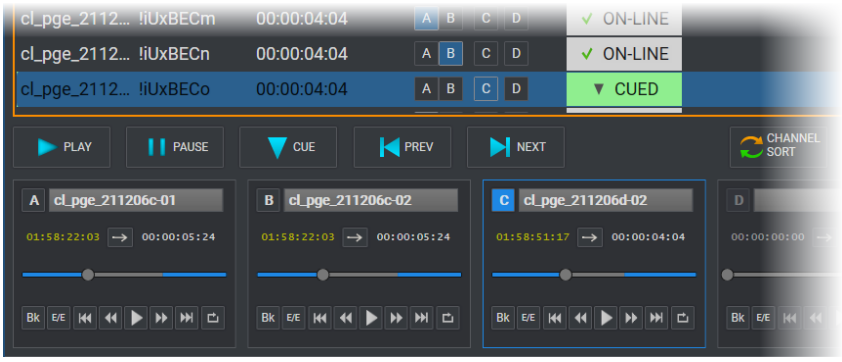


   Before dropping the element, the whole AB Roll Playlist Control panel is covered by a two-colored rectangle:



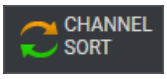
2. Drop the element on the blue area (Assign & CUE).

   The element is cued on the manual player channel (C)



This leads to an automatic ripple of the next channels in the Playlist grid.

Channel Sort - Ripple and Cue from the Selected Element

User Interface Element	Keyboard Shortcut
	-

The **Channel Sort** function only applies to automatic channels of the Automatic or Hybrid studios.

The function leads to a ripple and cue operation from the selected element.

See section "Sorting Channels" on page 90 for a description of the system behavior.

Reset - Ripple and Cue from the Beginning of the Playlist

User Interface Element	Keyboard Shortcut
	

This function cannot be applied when an element is playing.

The result of this function is equivalent to opening the playlist in the AB Roll Playlist window. See sections "Allocating Player Channels to Playlist Elements" on page 43 and "Resetting a Playlist" on page 95 for a description of the system behavior depending on the studio assignment mode.

5.3. Looping Playlist Elements During Playout

Introduction

It is possible to define an infinite loop on a playlist element. So, this element will be played indefinitely without any intervention.

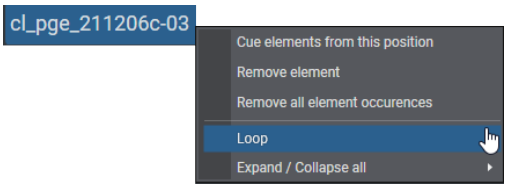
The loop can be set from the AB Roll interface, regardless of the element status.

If a loop has been defined from the Playlist Panel, the following conditions will be applied when the playlist is loaded on the AB Roll Playlist window:

- Only loops applied to a single element are allowed.
- A counter loop defined on a single element will be converted to an infinite loop on that element in the AB Roll Playlist module.

How to Create a Loop in the AB Roll Playlist Module

How to Create a Loop from the Playlist Grid

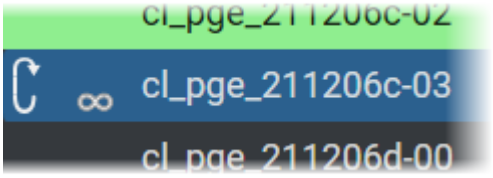
User Interface Element	Keyboard Shortcut
	 (when no Control panel has the focus)

A loop can be created on any element of the playlist in one of the following ways:

1. Right-click a playlist element.
2. Select **Loop** from the contextual menu.

An infinite loop is automatically applied on the selected element.

It is displayed in the Loop column of the Playlist grid:



If the element is currently loaded on a player channel, the loop is displayed as follows on the Control panel of the corresponding channel: 

If no Control panel has the focus, you can also press  to apply a loop on the element selected in the Playlist grid.

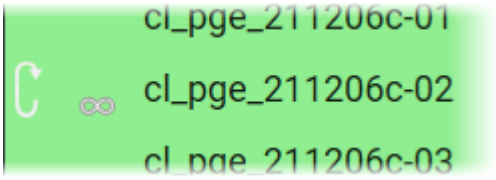
How to Create a Loop from a Control Panel

User Interface Element	Keyboard Shortcut
	 (when a Control panel has the focus: )

A loop can be created from a Control panel for the element currently loaded on the corresponding player channel.

- Click  .

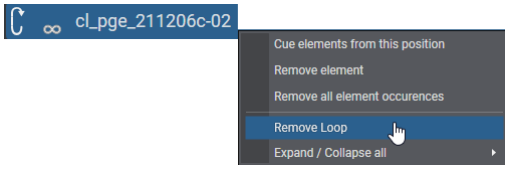
The button switches to  on the Control panel and is displayed in the Loop column of the Playlist grid:



If a Control panel has the focus, pressing  applies an infinite loop on the element currently loaded on the corresponding player channel.

How to Remove a Loop

How to Remove a Loop from the Playlist Grid

User Interface Element	Keyboard Shortcut
	 (when no Control panel has the focus)

How to Remove a Loop from a Control Panel

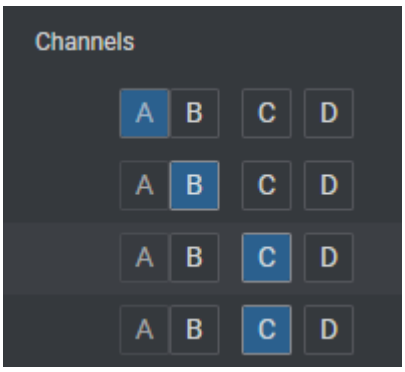
User Interface Element	Keyboard Shortcut
	 (when a Control panel has the focus: )

5.4. Playing Consecutive Elements on the Same Manual Player Channel

Context of Use

Two consecutive elements, allocated to the same player channel set to Manual, may either be automatically played back to back or the playout can stop between the elements.

This is set during the studio configuration by selecting a Still/Start mode. See section "Configuring a New AB Roll Studio" on page 23.



The Still/Start mode is only available with Multicam version 16.01 or higher.

Still and Start Mode

The Still and Start modes determine whether the playout will stop between two consecutive playlist elements.

They are set during the studio configuration and apply only to consecutive elements allocated to the same manual channel (Manual and Hybrid studios).

This does not apply to channels set to Automatic.

Still Mode

The Still mode is used to make the playlist stop .

Different options are available:

- Stop on the first frame of current clip (playlist element)
- Stop on the last frame of previous clip (playlist element)
- Stop on the last frame of the previous clip, wait, then jump on first frame of current clip (playlist element)

  The playlist will stop on the last frame of the previous clip, then jump on the first frame of the next element after a certain time which is set in the **Wait** field.

The user will then have to manually start the playout between the two consecutive elements.

Start Mode

- **Automatically** (default): the playout will not stop between clips (playlist elements). Elements will be played back to back.

  This option cannot be used with a Still mode. So, if a Still mode option has been selected, the Start mode will be automatically changed to the **Manually** option.
- **Manually**: the operator will have to manually initiate the playout. Elements will not be played back to back and the Still mode will be taken into account between the two consecutive elements.

Rules

- The Still/Start mode applies to all the elements of the playlist loaded on the studio (all the consecutive elements allocated to the same player channel). It is not possible to define different Still/Start modes.
- Information regarding the Still/Start mode selected for the studio is not visible from the playlist loaded on the studio.
- The Still/Start mode can be applied on EVS side, not on NRCS side.
- If Still/Start mode options have been set for some elements on the playlist from the Playlist Panel, the Still/Start mode set during the studio configuration is taken into account.

Conditions for Back-to-Back Playout

- This is only possible with channels set to Manual (Manual and Hybrid assignment modes).
- The elements must not be missing.
- The consecutive elements must be allocated to the same player channel.
- The Start mode must have been set to **Automatically** during the studio configuration.

5.5. Displaying a Black Screen on a Player Channel

Context of Use

An AB Roll Playlist player channel can be put to black if there is nothing relevant to play on it for the next minutes. This means that a black screen will be displayed for that channel, so everybody watching the screen wall knows that they do not have to pay attention to that channel at that moment.

Rules

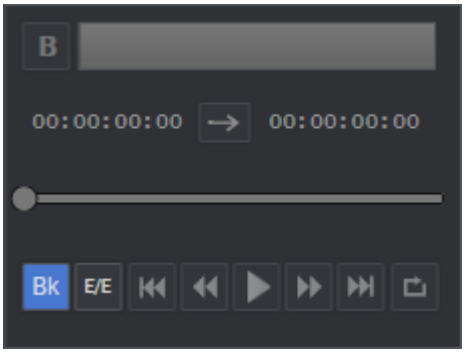
- All the studio channels can be put to black.
- The channel must not be currently playing.
- The player channel remains in AB mode.
- In the Playlist grid, no more element is cued on the player channel.
- The allocation of player channels to playlist elements is kept.
- In Main/Backup configuration, a black screen is displayed on player channels of both main and backup servers.

Hox to Display a Black Screen on a Player Channel

- Use the following button or keyboard shortcut:

User Interface Element / Keyboard Shortcut	Resulting Action
 (when no Control panel has the focus)	Sets to black the player channel of the element selected in the grid.
	Sets to black the corresponding player channel.
 (when a Control panel has the focus: )	Sets to black the player channel with the focus.

The AB Roll Playlist Control panel displays as follows:



Ctrl + Q may be used to put all the channels to black.

6. Editing Playlists

6.1. Introduction

Playlist Edition

The playlist content can be edited when it is displayed in the AB Roll Playlist window.

To have access to editing functions, the **Lock Playlist Edition** mode must be disabled by clicking the  button, so it becomes unlocked  .

The following editions are possible on a playlist:

- insert an element,
- remove an element,
- delete an element.

A playlist element can be trimmed. See section "Trimming a Playlist Element" on page 88.

Any modification done on the rundown from the NRCS is synchronized with AB Roll Playlist thanks to the MOS gateway.

If the playlist content is modified from the AB Roll Playlist window, the changes can automatically be reflected in linked third party NRCS applications.

Channel Reallocation

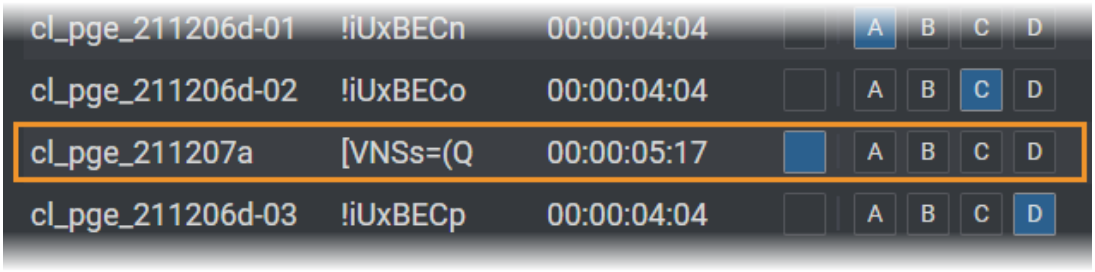
The order of the channels allocated to the playlist elements will, or will not, be reset when an editing operation happens. This depends on several parameters: studio assignation mode, auto ripple setting for automatic channels, location of the editing operation relating to the cued elements.

Full Manual Studio

The following rules apply when editing operations are done on a playlist loaded on a studio configured as (Full) Manual.

- Inserting an element:

  The channel allocation remains the same: the playlist elements remain associated with the same player channel which had been manually allocated. The inserted element has no channel allocated.



- Removing an element: the channel allocation remains the same.

  The channel allocation remains the same: the playlist elements remain associated with the same player channel which had been manually allocated.

  If the Remove operation is undone, the element has no channel assigned.

- Moving an element:

  The channel allocation remains the same: the playlist elements remain associated with the same player channel which had been manually allocated.

Full Automatic Studio

The following rules apply when editing operations are done on a playlist loaded on a studio configured as (Full) Automatic.

- The Auto ripple mode can be enabled, so for modifications between the cued elements in the rundown, the order of automatic channels is reset in the playlist on the AB Roll Playlist window. See section "ABRoll Playlist Ripple Modes" on page 75.
- The behavior of the AB Roll Playlist is detailed in sections "Inserting an Element in the Playlist" on page 75, "Removing an Element from the Playlist" on page 83 and "Moving an Element in the Playlist" on page 87.

Hybrid Studio

In the case of a playlist loaded on a hybrid studio,

- Manual player channels will behave like in Full Manual mode. The channel allocation of playlist elements loaded on manual channels will not be impacted by editing operations.
- Automatic player channels will behave like in Full Automatic mode. See sections "ABRoll Playlist Ripple Modes" on page 75, "Inserting an Element in the Playlist" on page 75, "Removing an Element from the Playlist" on page 83 and "Moving an Element in the Playlist" on page 87.

6.2. ABRoll Playlist Ripple Modes

The AB Roll Playlist application can be used according to two different modes:

- AB Roll auto ripple mode ON: when a modification is done in the rundown in between the cued elements, the system will automatically update the assignment of automatic channels to keep the player channels order from the modification and recue the elements. This is called the ripple-and-cue operation. This does not apply to manual channels.
- AB Roll auto ripple mode OFF: any modification in the rundown will have no impact on the cued elements.

The mode is set for each studio during its configuration from the Channel Explorer.

This only applies to automatic channels.

6.3. Inserting an Element in the Playlist

Introduction

You can insert an element in the playlist by a drag-and-drop operation on an element from:

- the AB Roll Playlist Search pane
- a Database Explorer window
- another AB Roll Playlist window
- a Playlist Panel
- a Control Panel

Up to 50 elements can be inserted at once.

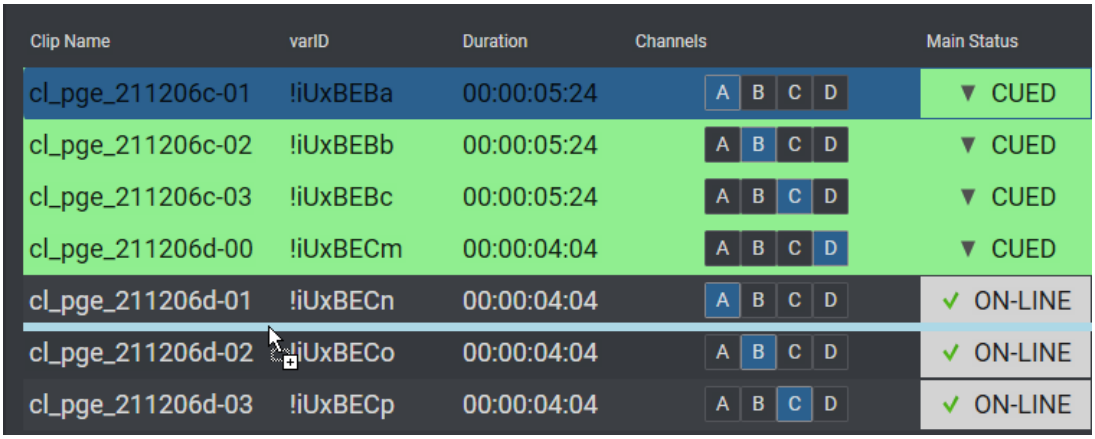
If any type of loop has been defined on the selected elements, the loop will be removed in the playlist receiving the elements.

How to Insert an Element in the AB Roll Playlist

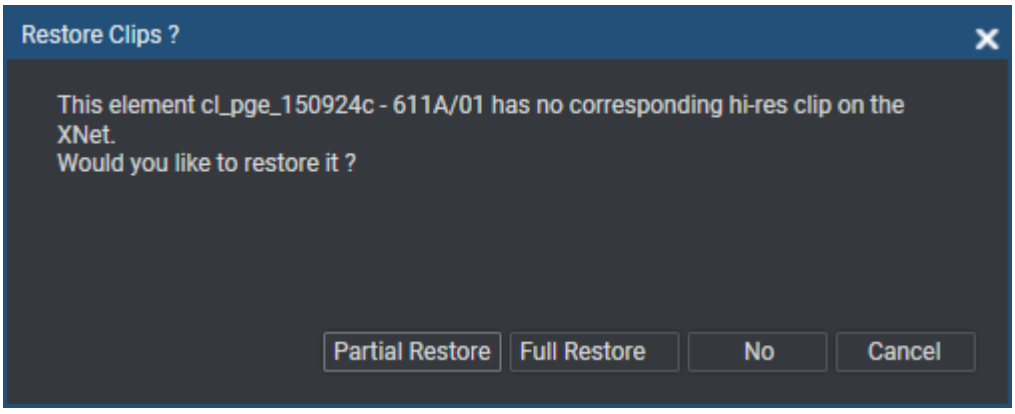
To insert an element in the AB Roll Playlist,

1. Select the element that you wish to insert.
2. Drag the element to the desired position in the AB Roll Playlist grid.

   The position where the element will be inserted is marked by a thick line:



3. Release the element at the desired position in the grid.
4. If the element is not on the XNet as a high resolution clip, the following dialog box appears:



5. Select an option in the dialog window:

   Short Restore: The element is restored from TC IN to TC OUT only

   Full Restore: The full element is restored, including guardbands

   No: The element is not restored and remains Missing

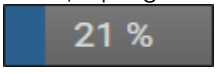
   Cancel: The element is not inserted

After selecting **Short Restore** or **Full Restore**, the element will appear in the playlist.

First it will appear as Missing: 

.

Then, a progress bar will be displayed in the Status column during the Restore operation:



When the restore is finished, it will show as 

or if it is one of the elements to be played out next, it will be set to 

.

Impact on the Automatic Channel Association with Recue Mode OFF

The Element is Inserted below the Cued Elements

The inserted element is assigned to the next channel in the ABCD order, based on the previous element. The channels assigned to the elements below the inserted element are resorted according to the ABCD sequence (automatic ripple from the inserted element).

Initial situation			RECUE Mode OFF		
Elem1	CUED	A	Elem1	CUED	A
Elem2	CUED	B	Elem2	CUED	B
Elem3	CUED	C	Elem3	CUED	C
Elem4	CUED	D	Elem4	CUED	D
Elem5	ON-LINE	C	Elem5	ON-LINE	C
Elem6	ON-LINE	B	Inserted Elem	ON-LINE	D
Elem7	ON-LINE	C	Elem6	ON-LINE	A
			Elem7	ON-LINE	B

The Element is Inserted above the Cued Elements

The inserted element is assigned to the next channel in the ABCD order, based on the previous element. The channel assignment of the cued elements is not modified, but it is resorted for the elements after the cued ones (automatic ripple for the elements below the cued ones).

Initial situation			RECUE Mode OFF		
Elem1	ON-LINE	A	Elem1	ON-LINE	A
Elem2	ON-LINE	B	Inserted Elem	ON-LINE	B
Elem3	CUED	C	Elem2	ON-LINE	B
Elem4	CUED	D	Elem3	CUED	C
Elem5	CUED	A	Elem4	CUED	D
Elem6	CUED	B	Elem5	CUED	A
Elem7	ON-LINE	D	Elem6	CUED	B
Elem8	ON-LINE	C	Elem7	ON-LINE	C
			Elem8	ON-LINE	D

The Element is Inserted within the Cued Elements

The inserted element is assigned to the next channel in the ABCD order, based on the previous element. Therefore, the channel order is affected. The channel assignment of the cued elements is not modified, but it is resorted for the elements after the cued ones (automatic ripple for the elements below the cued ones).

Initial situation			RECUE Mode OFF		
Elem1	ON-LINE	A	Elem1	ON-LINE	A
Elem2	CUED	B	Inserted Elem	ON-LINE	B
Elem3	CUED	C	Elem2	CUED	B
Elem4	CUED	D	Elem3	CUED	C
Elem5	CUED	A	Elem4	CUED	D
Elem6	ON-LINE	B	Elem5	CUED	A
Elem7	ON-LINE	C	Elem6	ON-LINE	B
			Elem7	ON-LINE	C

Initial situation			RECUE Mode OFF		
Elem1	ON-LINE	A	Elem1	ON-LINE	A
Elem2	CUED	B	Elem2	CUED	B
Elem3	CUED	C	Elem3	CUED	C
Elem4	CUED	D	Inserted Elem	ON-LINE	D
Elem5	CUED	A	Elem4	CUED	D
Elem6	ON-LINE	B	Elem5	CUED	A
Elem7	ON-LINE	C	Elem6	ON-LINE	B
			Elem7	ON-LINE	C

Impact on the Automatic Channel Association with Recue Mode ON

The Element is Inserted below the Cued Elements

The inserted element is assigned to the next channel in the ABCD order, based on the previous element. The channels assigned to the elements below the inserted element are resorted according to the ABCD sequence (ripple from the inserted element).

Initial situation			RECUE Mode ON		
Elem1	CUED	A	Elem1	CUED	A
Elem2	CUED	B	Elem2	CUED	B
Elem3	CUED	C	Elem3	CUED	C
Elem4	CUED	D	Elem4	CUED	D
Elem5	ON-LINE	C	Elem5	ON-LINE	C
Elem6	ON-LINE	B	Inserted Elem	ON-LINE	D
Elem7	ON-LINE	C	Elem6	ON-LINE	A
			Elem7	ON-LINE	B

The Element is Inserted above the Cued Elements

This case does not apply to the insertion of an element just before the first cued element.

The inserted element is assigned to the next channel in the ABCD order, based on the previous element. The channel assignment of the cued elements is not modified, but it is resorted for the elements after the cued ones (ripple for the elements below the cued ones).

Initial situation			RECUE Mode ON		
Elem1	ON-LINE	A	Elem1	ON-LINE	A
Elem2	ON-LINE	B	Inserted Elem	ON-LINE	B
Elem3	CUED	C	Elem2	ON-LINE	B
Elem4	CUED	D	Elem3	CUED	C
Elem5	CUED	A	Elem4	CUED	D
Elem6	CUED	B	Elem5	CUED	A
Elem7	ON-LINE	D	Elem6	CUED	B
Elem8	ON-LINE	C	Elem7	ON-LINE	C
			Elem8	ON-LINE	D

The Element is Inserted within the Cued Elements when No Element is Playing

This case applies to the insertion of an element just before the first cued element.

A "ripple-and-cue" operation is performed from the inserted element.

The inserted element is cued and assigned to the next channel in the ABCD order, based on the previous element. The channel assignment of the cued elements and the next ones is modified. The element which was cued on the channel taken by the inserted element is uncued.

Initial situation			RECUE Mode ON		
Elem1	ON-LINE	A	Elem1	ON-LINE	A
Elem2	CUED	B	Inserted Elem	CUED	B
Elem3	CUED	C	Elem2	CUED	C
Elem4	CUED	D	Elem3	CUED	D
Elem5	CUED	A	Elem4	CUED	A
Elem6	ON-LINE	B	Elem5	ON-LINE	B
Elem7	ON-LINE	C	Elem6	ON-LINE	C
			Elem7	ON-LINE	D

Initial situation			RECUE Mode ON		
Elem1	ON-LINE	A	Elem1	ON-LINE	A
Elem2	CUED	B	Elem2	CUED	B
Elem3	CUED	C	Elem3	CUED	C
Elem4	CUED	D	Inserted Elem	CUED	D
Elem5	CUED	A	Elem4	CUED	A
Elem6	ON-LINE	B	Elem5	ON-LINE	B
Elem7	ON-LINE	C	Elem6	ON-LINE	C
			Elem7	ON-LINE	D

The Element is Inserted between the Cued Elements and before the Playing Element

The inserted element is assigned to the next channel in the ABCD order, based on the previous element. The channel assignment of the cued elements and the next ones is not modified (no ripple operation).

- In case the channel assigned to the inserted element corresponds to the playing channel, the inserted element is not cued.

Initial situation			RECUE Mode ON		
Elem1	ON-LINE	A	Elem1	ON-LINE	A
Elem2	PLAYING	B	Inserted Elem	ON-LINE	B
Elem3	CUED	C	Elem2	PLAYING	B
Elem4	CUED	D	Elem3	CUED	C
Elem5	CUED	A	Elem4	CUED	D
Elem6	ON-LINE	B	Elem5	ON-LINE	A
Elem7	ON-LINE	C	Elem6	ON-LINE	B
			Elem7	ON-LINE	C

- In case the channel assigned to the inserted element does not correspond to the playing channel, the inserted element is cued. So, the element which was cued on the channel taken by the inserted element is uncued.

Initial situation			RECUE Mode ON		
Elem1	ON-LINE	A	Elem1	ON-LINE	A
Elem2	CUED	B	Inserted Elem	CUED	**B**
Elem3	PLAYING	C	Elem2	ON-LINE	**B**
Elem4	CUED	D	Elem3	PLAYING	C
Elem5	CUED	A	Elem4	CUED	D
Elem6	ON-LINE	B	Elem5	CUED	A
Elem7	ON-LINE	C	Elem6	ON-LINE	B
			Elem7	ON-LINE	C

The Element is Inserted between the Cued Elements and after the Playing Element

A "ripple-and-cue" operation is performed from the inserted element.

The inserted element is cued and assigned to the next channel in the ABCD order, based on the previous element. The channel assignment of the cued elements and the next ones is modified.

Initial situation			RECUE Mode ON		
Elem1	ON-LINE	A	Elem1	ON-LINE	A
Elem2	CUED	B	Elem2	CUED	B
Elem3	PLAYING	C	Elem3	PLAYING	C
Elem4	CUED	D	Inserted Elem	CUED	**D**
Elem5	CUED	A	Elem4	CUED	**A**
Elem6	ON-LINE	B	Elem5	ON-LINE	**B**
Elem7	ON-LINE	C	Elem6	ON-LINE	**C**
			Elem7	ON-LINE	**D**

6.4. Removing an Element from the Playlist

How to Remove an Element From the Playlist

To remove an element from the playlist,

1. Select the element you want to remove in the Playlist grid.
2. Done one of the following actions:
   - Right-click the element and select **Remove element** from the contextual menu.
   - Press 

.

How to Remove All the Occurrences of a Playlist Element

An option is available to remove all the occurrences of a playlist element at once from the open playlist.

1. Right-click the element you want to remove.
2. Select **Remove all element occurrences** from the contextual menu.

   A confirmation message will be displayed.
3. Click **Yes** to confirm the operation.

Impact on the Automatic Channel Association with Recue Mode OFF

The Element to Delete is Cued

The element is deleted from the playlist. Therefore, the channel order is affected.

The next element assigned to the same channel is cued.

The channels assigned to the elements below the cued element are resorted according to the ABCD sequence (ripple from the inserted element).

Initial situation			RECUE Mode OFF		
Elem1	ON-LINE	A	Elem1	ON-LINE	A
Elem2	CUED	B	Elem2	CUED	B
Elem3	CUED	C	Elem4	CUED	D
Elem4	CUED	D	Elem5	CUED	A
Elem5	CUED	A	Elem6	ON-LINE	B
Elem6	ON-LINE	B	Elem7	**CUED**	C
Elem7	ON-LINE	C	Elem8	ON-LINE	D
Elem8	ON-LINE	D			

The Element to Delete is Playing

The element cannot be deleted. An error message is displayed in the **Message** field.

The Element to Delete is below the Cued/Played Elements

The element is deleted from the playlist. The channels assigned to the elements below the deleted element are resorted according to the ABCD sequence (ripple operation).

Initial situation			RECUE Mode OFF		
Elem1	ON-LINE	A	Elem1	ON-LINE	A
Elem2	CUED	B	Elem2	CUED	B
Elem3	PLAYING	C	Elem3	PLAYING	C
Elem4	CUED	D	Elem4	CUED	D
Elem5	CUED	A	Elem5	CUED	A
Elem6	ON-LINE	B	Elem7	ON-LINE	**B**
Elem7	ON-LINE	C	Elem8	ON-LINE	**C**
Elem8	ON-LINE	D			

The Element to Delete is above the Cued/Played Elements

The element is deleted from the playlist. The channel assignment of the elements is not modified. Therefore, the channel order is affected.

Initial situation			RECUE Mode OFF		
Elem1	ON-LINE	A	Elem1	ON-LINE	A
Elem2	ON-LINE	B	Elem2	ON-LINE	B
Elem3	ON-LINE	C	Elem4	CUED	D
Elem4	CUED	D	Elem5	PLAYING	A
Elem5	PLAYING	A	Elem6	CUED	B
Elem6	CUED	B	Elem7	CUED	C
Elem7	CUED	C	Elem8	ON-LINE	D
Elem8	ON-LINE	D			

Impact on the Automatic Channel Association with Recue Mode ON

The Element to Delete is Cued

In case the element is above a playing element, no ripple operation is performed. The element is deleted and the next element to be played on that channel is cued.

Initial situation			RECUE Mode ON		
Elem1	ON-LINE	A	Elem1	ON-LINE	A
Elem2	CUED	B	Elem2	CUED	B
Elem3	CUED	C	Elem4	PLAYING	D
Elem4	PLAYING	D	Elem5	CUED	A
Elem5	CUED	A	Elem6	ON-LINE	B
Elem6	ON-LINE	B	Elem7	**CUED**	C
Elem7	ON-LINE	C	Elem8	ON-LINE	D
Elem8	ON-LINE	D			

In case the element is below a playing element, or if no element is playing, a ripple-and-cue operation is performed from the deleted position. The element is deleted and the next element to be played on that channel is cued.

Initial situation			RECUE Mode ON		
Elem1	ON-LINE	A	Elem1	ON-LINE	A
Elem2	CUED	B	Elem2	CUED	B
Elem3	PLAYING	C	Elem3	PLAYING	C
Elem4	CUED	D	Elem5	CUED	**D**
Elem5	CUED	A	Elem6	**CUED**	**A**
Elem6	ON-LINE	B	Elem7	**ON-LINE**	**B**
Elem7	ON-LINE	C	Elem8	ON-LINE	**C**
Elem8	ON-LINE	D			

The Element to Delete is Playing

The element cannot be deleted. An error message is displayed in the **Message** field.

The Element to Delete is below the Cued/Played Elements

The element is deleted from the playlist. The channels assigned to the elements below the deleted element are resorted according to the ABCD sequence (ripple operation).

Initial situation			RECUE Mode ON		
Elem1	ON-LINE	A	Elem1	ON-LINE	A
Elem2	CUED	B	Elem2	CUED	B
Elem3	PLAYING	C	Elem3	PLAYING	C
Elem4	CUED	D	Elem4	CUED	D
Elem5	CUED	A	Elem5	CUED	A
Elem6	ON-LINE	B	Elem7	ON-LINE	**B**
Elem7	ON-LINE	C	Elem8	ON-LINE	**C**
Elem8	ON-LINE	D			

The Element to Delete is above the Cued/Played Elements

The element is deleted from the playlist. The channel assignment of the elements is not modified. Therefore, the channel order is affected.

Initial situation			RECUE Mode ON		
Elem1	ON-LINE	A	Elem1	ON-LINE	A
Elem2	ON-LINE	B	Elem2	ON-LINE	B
Elem3	ON-LINE	C	Elem4	CUED	D
Elem4	CUED	D	Elem5	PLAYING	A
Elem5	PLAYING	A	Elem6	CUED	B
Elem6	CUED	B	Elem7	CUED	C
Elem7	CUED	C	Elem8	ON-LINE	D
Elem8	ON-LINE	D			

6.5. Moving an Element in the Playlist

How to Move an Element in the Playlist

To move an element in the playlist,

1. Select the element that you wish to move.
2. Drag the element to the desired position in the AB Roll Playlist grid.

   The position where the element will be moved is marked by a thick line:

3. Release the element at the desired position in the grid.

Impact on the Automatic Channel Association with Recue Mode OFF

The Element is Moved from above the Cued Elements

The channel assignment is not modified when the element is moved and inserted above or between the cued elements. Therefore, the channel order is affected.

When the element is moved and inserted below the cued elements, the channels assigned to the elements from the insertion point are resorted according to the "ABCD" sequence.

Cued elements always remain cued.

The Element to Move is Cued

The channel assignment is not modified when the cued element is moved. Therefore, the channel order is affected. Cued elements always remain cued.

When a cued element is moved from the NRCS, it remains cued at its new position. No ripple occurs.

This is valid only with NRCS which support the MOVE operation in their implementation of the MOS protocol. For others, the result of a MOVE operation is the one of a DELETE + INSERT.

The Element is Moved from below the Cued Elements

The channel assignment is modified below the removed element and resorted according to the "ABCD" sequence.

When the element is moved and inserted above or between the cued elements, its channel remains the same. When it is moved and inserted below the cued elements, its assigned channel is modified according to the "ABCD" sequence.

Impact on the Automatic Channel Association with Recue Mode ON

To know how the system will behave after move operations with the RECUE mode enabled, consider that it first performs a remove operation and then an insert operation.

6.6. Trimming a Playlist Element

It is possible to modify the IN or OUT point of a playlist element.

1. Open the Control Panel and assign a player channel to it.
2. Load a playlist on the AB Roll Playlist window.

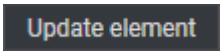
3. Drag an element from the playlist onto the **Loaded Media** field of the Control Panel.

   The element will then be loaded on the Control Panel.

   The association is indicated by the **Player** field which turns blue in both Control Panel and AB Roll Playlist windows.

4. Do one or both of the following possibilities:
   - Define a new TC IN and click the **IN** button.
   - Define a new TC OUT and click the **OUT** button.
5. Click the **Update Element** button.

The element is modified in the playlist.

If the original record train is still available, clicking the **Ret** button in the Control Panel will load the media on the same frame than the loaded clip. This will allow retrieving media outside the original clip boundaries.

In case of Main/Backup configuration, the playlist element in both playlists on the main and on the backup servers are trimmed.

This will not be the case if the playlist element is trimmed while the playlist is loaded on the Playlist Panel.

The update is sent to the NRCS.

7. Sorting Channels or Resetting the Playlist

7.1. Introduction

The re-allocation of channels to playlist elements can be done manually or automatically.

An automatic ripple is triggered by one of the following action

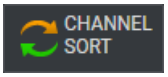
- When a playlist is edited (insert / move / delete), the order of player channels allocated to elements can be modified. = automatic ripple
- In Hybrid mode, when the player channel allocated to an element is changed from manual to auto or vice versa.

The **Channel Sort** button can be used to do a manual ripple from the selected element. This has no impact on Manual channels. Only Automatic channels will be reassigned (Full Automatic or Hybrid studios).

The **Reset** button can be used to do a ripple and cue operation from the beginning of the playlist on the Automatic channels. On Manual channels, the channel association with playlist elements will be removed.

7.2. Sorting Channels

Purpose

The **Channel Sort** function 

only applies to automatic channels of the Automatic or Hybrid studios.

The function leads to a ripple and cue operation from the selected element.

This function cannot be applied when an element is playing on an automatic channel below the element selected.

The system behavior is illustrated in the next sections for a (Full) Automatic studio. Automatic channels from a hybrid studio will behave in the same way.

The general principles may be formulated as follows.

1. Ripple operation on the player channels:
   - If the selected element is playing, the ripple operation reorders the allocated channels based on the channel of the selected line.
   - If the selected element is not playing, the ripple operation reorders the allocated channels based on the channel of the line above the selected line.
2. Cue operation on the playlist elements:
   - The Cue operation will never concern elements above the selected line.
   - The elements located above the selected element will keep their status (Playing, Cue,...).
   - Some elements located on the selected line or below can be cued or uncued based on the channel reallocation to ensure the following rule is followed:

     The first element assigned to a player channel where no element is cued yet will then be cued.

The Selected Element is being Played

The channels assigned to the elements below the selected element are resorted according to the ABCD sequence.

Then, a cue operation may be performed on elements below the selected line to have an element loaded on each channel. Elements cued above the selected line will not be un-cued.

Initial situation			Channel Sort on Element 5		
Elem1	ON-LINE	A	Elem1	ON-LINE	A
Elem2	ON-LINE	B	Elem2	ON-LINE	B
Elem3	CUED	C	Elem3	CUED	C
Elem4	CUED	D	Elem4	CUED	D
Elem5	PLAYING	B	Elem5	PLAYING	B
Elem6	ON-LINE	C	Elem6	ON-LINE	C
Elem7	CUED	A	Elem7	ON-LINE	D
Elem8	ON-LINE	D	Elem8	CUED	A
Elem9	ON-LINE	A	Elem9	ON-LINE	B

Initial situation			Channel Sort on Element 3		
Elem1	ON-LINE	A	Elem1	ON-LINE	A
Elem2	ON-LINE	B	Elem2	ON-LINE	B
Elem3	PLAYING	C	Elem3	PLAYING	C

Initial situation			Channel Sort on Element 3		
Elem4	CUED	D	Elem4	CUED	D
Elem5	CUED	B	Elem5	CUED	A
Elem6	ON-LINE	C	Elem6	CUED	B
Elem7	CUED	A	Elem7	ON-LINE	C
Elem8	ON-LINE	D	Elem8	ON-LINE	D
Elem9	ON-LINE	A	Elem9	ON-LINE	A

The Selected Element is not Playing and is above a Playing Element

The Channel Sort operation has no effect.

Initial situation			Channel Sort on Element 6		
Elem1	ON-LINE	A	Elem1	ON-LINE	A
Elem2	ON-LINE	B	Elem2	ON-LINE	B
Elem3	CUED	C	Elem3	CUED	C
Elem4	CUED	D	Elem4	CUED	D
Elem5	CUED	B	Elem5	CUED	B
Elem6	ON-LINE	C	Elem6	ON-LINE	C
Elem7	PLAYING	A	Elem7	PLAYING	A
Elem8	ON-LINE	D	Elem8	ON-LINE	D
Elem9	ON-LINE	A	Elem9	ON-LINE	A

The Selected Element is not Playing and is above the Cued Elements

The channels assigned to the selected element and to all elements below are resorted.

Then, the cue operation is performed from the selected element to have an element loaded on each channel.

Initial situation			Channel Sort on Element 2		
Elem1	ON-LINE	C	Elem1	ON-LINE	C
Elem2	ON-LINE	B	Elem2	CUED	D
Elem3	ON-LINE	B	Elem3	CUED	A
Elem4	CUED	C	Elem4	CUED	B
Elem5	CUED	D	Elem5	CUED	C
Elem6	CUED	A	Elem6	ON-LINE	D
Elem7	CUED	B	Elem7	ON-LINE	A
Elem8	ON-LINE	C	Elem8	ON-LINE	B
Elem9	ON-LINE	D	Elem9	ON-LINE	C

Initial situation			Channel Sort on Element 3		
Elem1	ON-LINE	A	Elem1	ON-LINE	A
Elem2	ON-LINE	B	Elem2	ON-LINE	B
Elem3	ON-LINE	B	Elem3	CUED	C
Elem4	CUED	C	Elem4	CUED	D
Elem5	CUED	D	Elem5	CUED	A
Elem6	CUED	A	Elem6	CUED	B
Elem7	CUED	B	Elem7	ON-LINE	C
Elem8	ON-LINE	C	Elem8	ON-LINE	D
Elem9	ON-LINE	D	Elem9	ON-LINE	A

The Selected Element is not Playing and is between the Cued Elements

The channels assigned to the selected element and to all elements below are resorted.

Then, the cue operation is performed from the selected element to have an element loaded on each channel. Elements cued above or on the selected line will not be un-cued.

Initial situation			Channel Sort on Element 5		
Elem1	ON-LINE	A	Elem1	ON-LINE	A
Elem2	ON-LINE	B	Elem2	ON-LINE	B
Elem3	CUED	C	Elem3	CUED	C
Elem4	CUED	D	Elem4	CUED	D
Elem5	CUED	B	Elem5	CUED	A
Elem6	ON-LINE	C	Elem6	CUED	B
Elem7	CUED	A	Elem7	ON-LINE	C
Elem8	ON-LINE	D	Elem8	ON-LINE	D
Elem9	ON-LINE	A	Elem9	ON-LINE	A

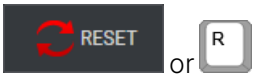
Initial situation			Channel Sort on Element 6		
Elem1	ON-LINE	A	Elem1	ON-LINE	A
Elem2	ON-LINE	B	Elem2	ON-LINE	B
Elem3	CUED	C	Elem3	CUED	C
Elem4	CUED	D	Elem4	CUED	D
Elem5	CUED	A	Elem5	CUED	A
Elem6	ON-LINE	C	Elem6	CUED	B
Elem7	CUED	B	Elem7	ON-LINE	C
Elem8	ON-LINE	D	Elem8	ON-LINE	D
Elem9	ON-LINE	A	Elem9	ON-LINE	A

The Selected Element is not Playing and is below the Cued Elements

The Channel Sort operation has no effect.

Initial situation			Channel Sort on Element 8		
Elem1	ON-LINE	A	Elem1	ON-LINE	A
Elem2	ON-LINE	B	Elem2	ON-LINE	B
Elem3	CUED	C	Elem3	CUED	C
Elem4	CUED	D	Elem4	CUED	D
Elem5	CUED	B	Elem5	CUED	B
Elem6	ON-LINE	C	Elem6	ON-LINE	C
Elem7	CUED	A	Elem7	CUED	A
Elem8	ON-LINE	D	Elem8	ON-LINE	D
Elem9	ON-LINE	A	Elem9	ON-LINE	A
Elem10	ON-LINE	B	Elem10	ON-LINE	B
Elem11	ON-LINE	C	Elem11	ON-LINE	C
Elem12	ON-LINE	D	Elem12	ON-LINE	D
Elem13	ON-LINE	A	Elem13	ON-LINE	A

7.3. Resetting a Playlist



The **Reset** function cannot be applied when an element is playing.

The result of this function is equivalent to opening the playlist in the AB Roll Playlist window. See section "Allocating Player Channels to Playlist Elements" on page 43 for a description of the system behavior depending on the studio assignment mode.

Automatic Mode

The **Reset** function leads to a ripple and cue operation from the beginning of the playlist.

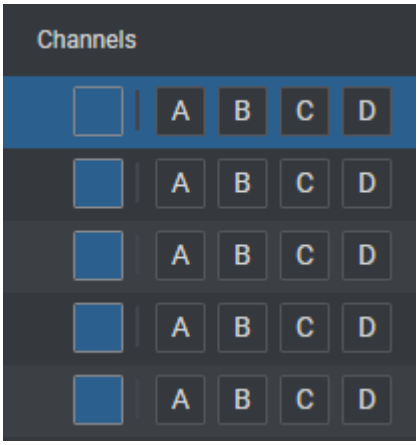
- All the player channels are automatically reallocated to the playlist elements from the beginning of the playlist according to the player channels order (ripple).
- The first elements on each channel are cued.

This can be used to reassign elements according to the player channels sequence.

Manual Mode

The **Reset** function removes the association between all the player channel and the playlist elements.

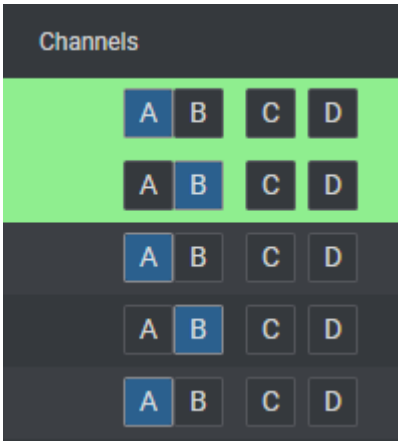
The  button is selected for each playlist element.



Hybrid Mode

The function resets the playlist from the beginning.

- All the automatic player channels are automatically allocated to the playlist elements according to the player channels order.
- No manual player channel is allocated to any playlist element.



8. Stealing a Player Channel

8.1. Introduction

There are several possibilities to "steal" one of the player channels of the studio which is assigned to the AB Roll Playlist panel.

This is particularly useful for Breaking News. A live train, a recording feed, or a clip can be quickly loaded and played.

Stealing a player channel can also be used to review an element from the playlist on another player channel.

It is not possible to steal all the channels of a studio at the same time. One channel cannot be stolen.

Transport functions are available from the AB Roll Playlist Control panels, the Shuttle PRO or the MPlay device.

The channel can then be manually put back in the AB Roll Playlist studio after the element playout, or this will be automatically done by cuing a playlist element on the stole channel.

8.2. Stealing a Player Channel to Play a Live Train or Recording Ingest

Context of Use

A live train, or a recording ingest, can be loaded on an AB Roll Playlist player channel, so you can immediately play it.

Rules

- The channel must not be currently playing.
- The player channel is stolen and is no more in AB mode. It cannot be used to play any playlist element.
- No more playlist element is cued on the player channel.
- The allocation of player channels to playlist elements is kept.
- In **Main/Backup configuration**, a black screen is displayed on the player channel of the non active server.

How to Load a Train or Recording Ingest

To load and play the last media (record train or recording ingest) which had been loaded on a player channel,

- Use the following button or keyboard shortcut:

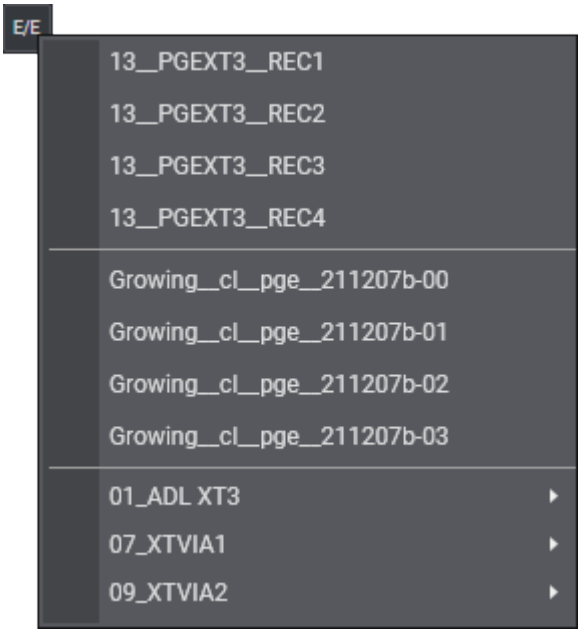
User Interface Element / Keyboard Shortcut	Resulting Action
E (when no Control Panel has the focus)	Loads and plays the record train or recording ingest at its current recording position, on the player channel of the element selected in the grid.
E/E	Loads and plays the record train or recording ingest at its current recording position, on the corresponding player channel.
E (when a Control Panel has the focus: A)	Loads and plays the record train or recording ingest at its current recording position, on the player channel with the focus.
	Loads and plays the record train or recording ingest at its current recording position, on the player channel controlled by the ShuttlePRO.

A tooltip is displayed when you hover the mouse over the **E/E** button and indicates the media (train or recording ingest) which will be loaded on the player channel when the **E/E** button is clicked.

How to Select a Train or Recording Ingest

1. Right-click the **E/E** button.

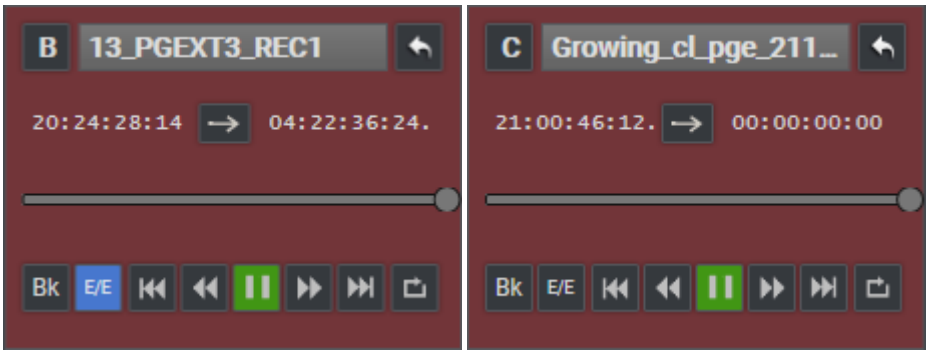
   A contextual menu shows the available EVS video servers with their recorder channels and the list of clips being currently ingested identified by their name.



2. Select a recorder channel to load the corresponding train at its current recording position and play it on the player channel of the AB Roll Playlist Control panel. The **E/E** button turns blue only when a train is loaded and playing live.
3. Select a recording ingest to directly load it at its currently recording position (OUT point) and play it on the player channel of the AB Roll Playlist Control panel.

Result

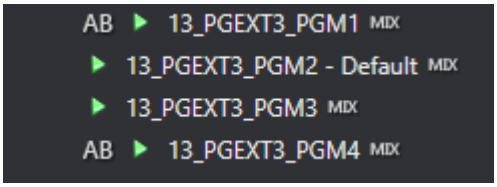
The player channel displays as follows in the AB Roll Playlist Control panel, for a live train (right) and for a growing clip (left):



In the Playlist grid, the stolen channel is grayed out and no more element is cued on it.

Clip Name	varID	Duration	Channels
cl_pge_211206c-01	!iUxBEBa	00:00:05:24	A B C D
cl_pge_211206c-02	!iUxBEBb	00:00:05:24	A B C D
cl_pge_211206c-03	!iUxBEBc	00:00:05:24	A B C D
cl_pge_211206d-00	!iUxBECm	00:00:04:04	A B C D
cl_pge_211206d-01	!iUxBECn	00:00:04:04	A B C D
cl_pge_211206d-02	!iUxBECo	00:00:04:04	A B C D
cl_pge_211206d-03	!iUxBECp	00:00:04:04	A B C D
cl_pge_211207a	[VNSs=(Q	00:00:05:17	A B C D

In the Channel Explorer, the AB icon is no more next to the channel.



Only the following functions are available: E/E, Play, Pause, Fast Forward, Fast Rewind and  to put the stolen channel back to the AB mode.

8.3. Stealing a Player Channel to Load a Clip

Context of Use

A clip can be loaded on a player channel, initially in AB Roll Playlist mode, so you can play a breaking news without waiting to create the story on the NRCS side.

This is the "**Steal & Cue**" workflow.

This is done by a drag-and-drop operation from the Database Explorer to a Control panel.

The destination channel can be manual or automatic. It may already have a playlist element cued on it or not.

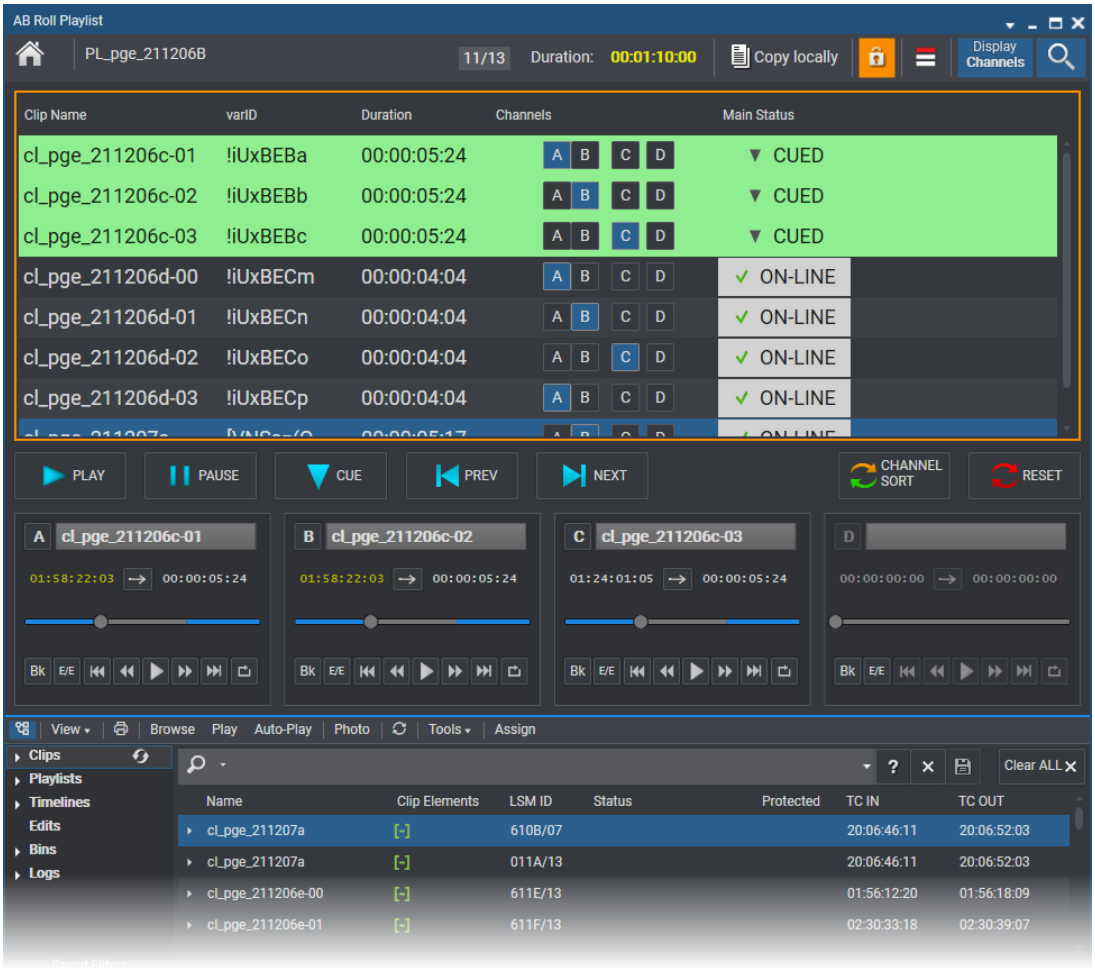
Rules

- The destination channel must not be currently playing.
- The player channel is stolen and is no more in AB mode.
- No more playlist element is cued on the player channel.
- The allocation of player channels to playlist elements is kept.
- In Main/Backup configuration, a black screen is displayed on the player channel of the non active server.

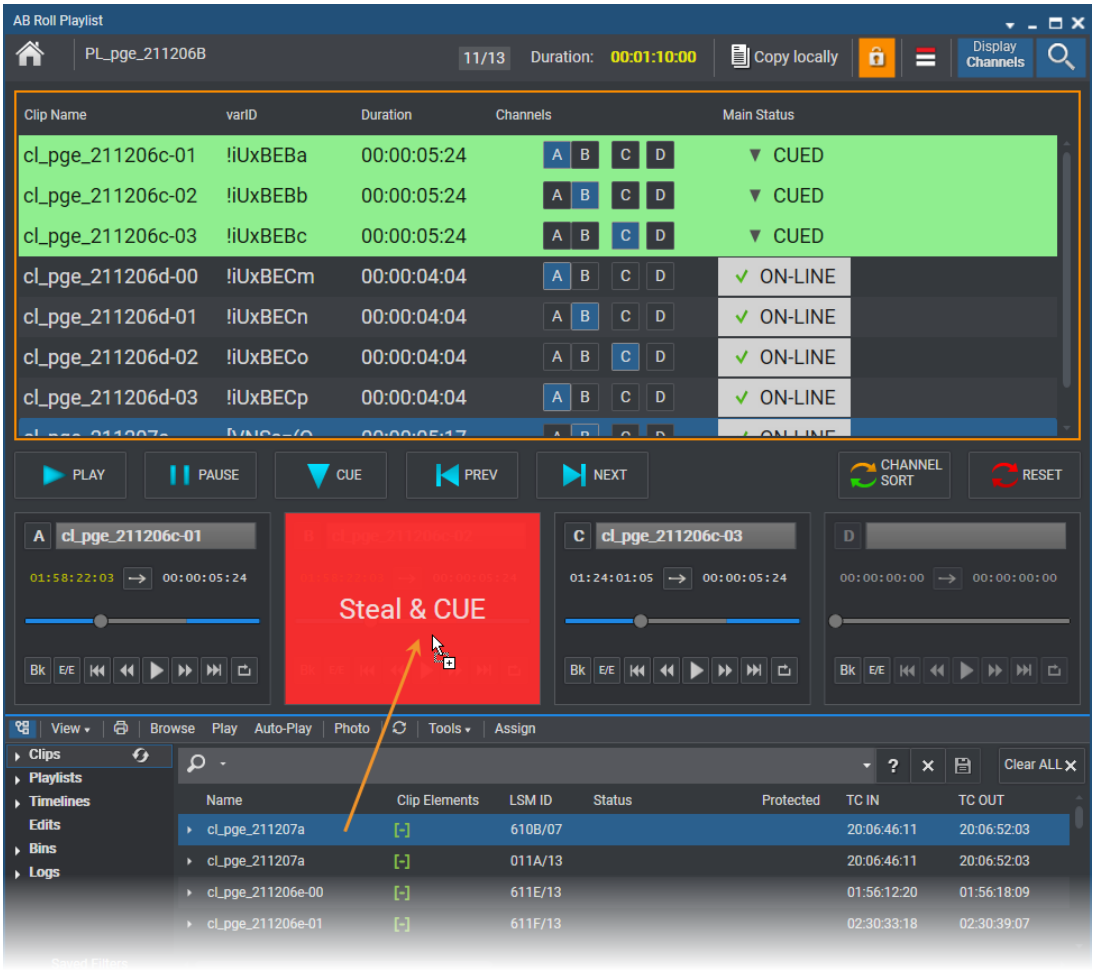
How to Steal a Player Channel to Load a Clip

1. Drag a clip from the Database Explorer to the AB Roll Playlist Control panel of a player channel.

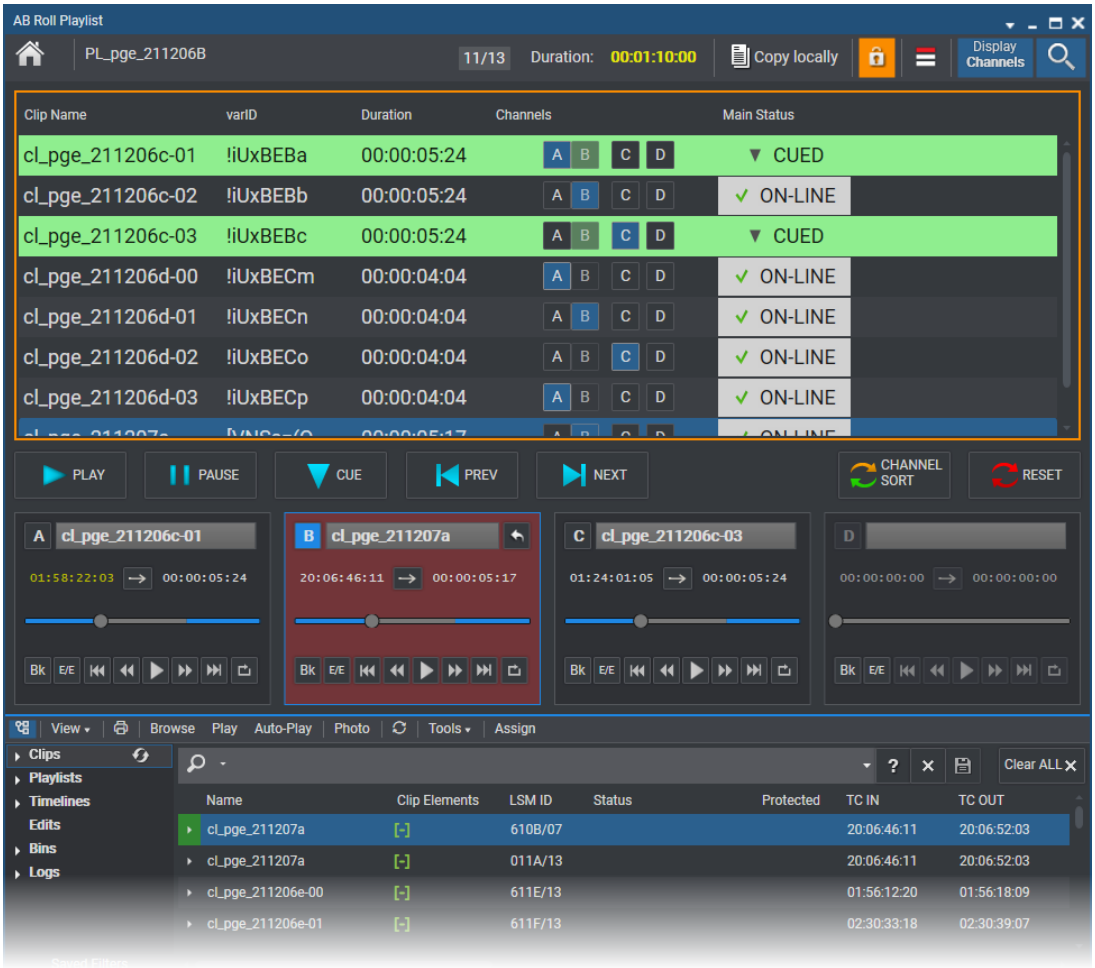
   Example - Original Situation:



Before dropping the element, the whole AB Roll Playlist Control panel is covered by a red rectangle (STEAL & CUE).



2. Drop the element on the red area.



Result

- The AB Roll Playlist Control panel displays with a burgundy background.
- The clip is loaded on its TC INon the corresponding player channel and the AB Roll Playlist Control panel transport functions are available to play the clip.
- In the Playlist grid, the stolen channel is grayed out and no more element is cued on it.
- In the Channel Explorer, the AB icon is no more next to the channel.
- The  is available to put the stolen channel back to the AB mode.

8.4. Stealing a Player Channel to Review a Playlist Element

Context of Use

A playlist element can be loaded on another player channel than the one it is currently assigned to for review purpose, without changing the player channel allocated to it. This is done by a drag-and-drop operation from the Playlist grid to a Control panel.

This is the "**Review**" workflow.

The destination channel can be manual or automatic. It may already have a playlist element cued on it or not.

In a **Full Manual** studio, a playlist element which is not assigned to any player channel can be loaded for review on any of the studio channels by a drag-and-drop operation.

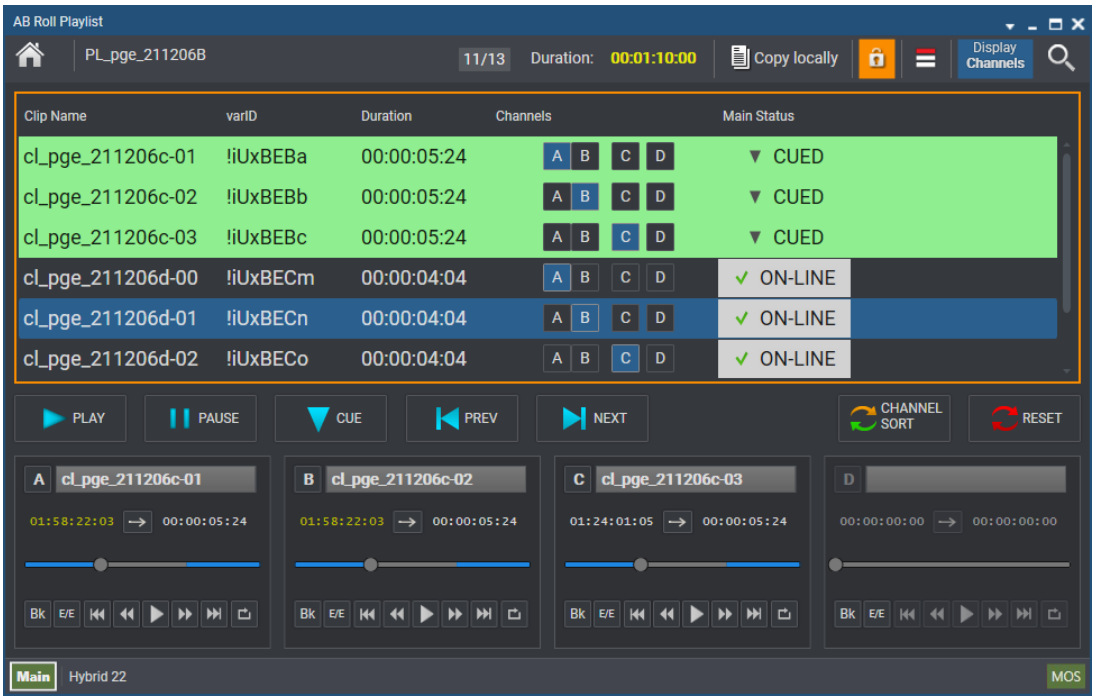
Rules

- The destination channel must not be currently playing.
- The element must not be missing.
- The element must not be a virtual element.
- A loop on the element to review is not kept.
- The player channel is stolen and is no more in AB mode.
- No more playlist element is cued on the player channel.
- The playlist element remains assigned to its player channel in the playlist and, if it was cued, it remains cued.
- The allocation of player channels to playlist elements is kept.
- In **Main/Backup configuration**, a black screen is displayed on the player channel of the non active server.

How to Steal a Manual Player Channel to Review a Playlist Element in Hybrid or Full Manual Mode

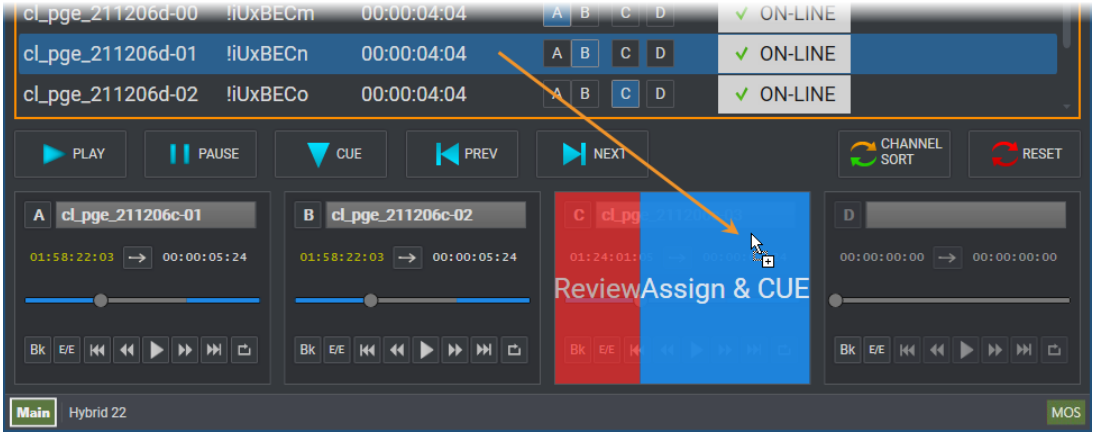
1. Drag the playlist element from the Playlist grid to the AB Roll Playlist Control panel of another player channel set to manual (e.g. B to C).

   Example - Original Situation:

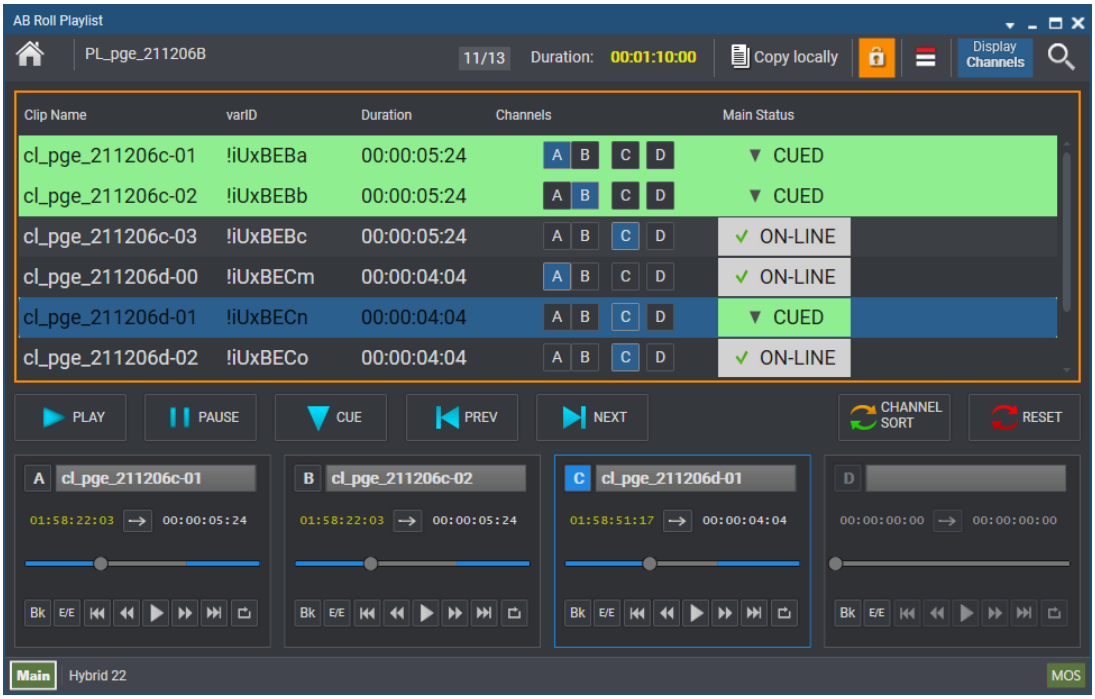


   In a **Full Manual** studio, a playlist element which is not assigned to any player channel can be loaded on any of the studio channels by a drag-and-drop operation for review.

   Before dropping the element, the whole AB Roll Playlist Control panel is covered by a two-colored rectangle:



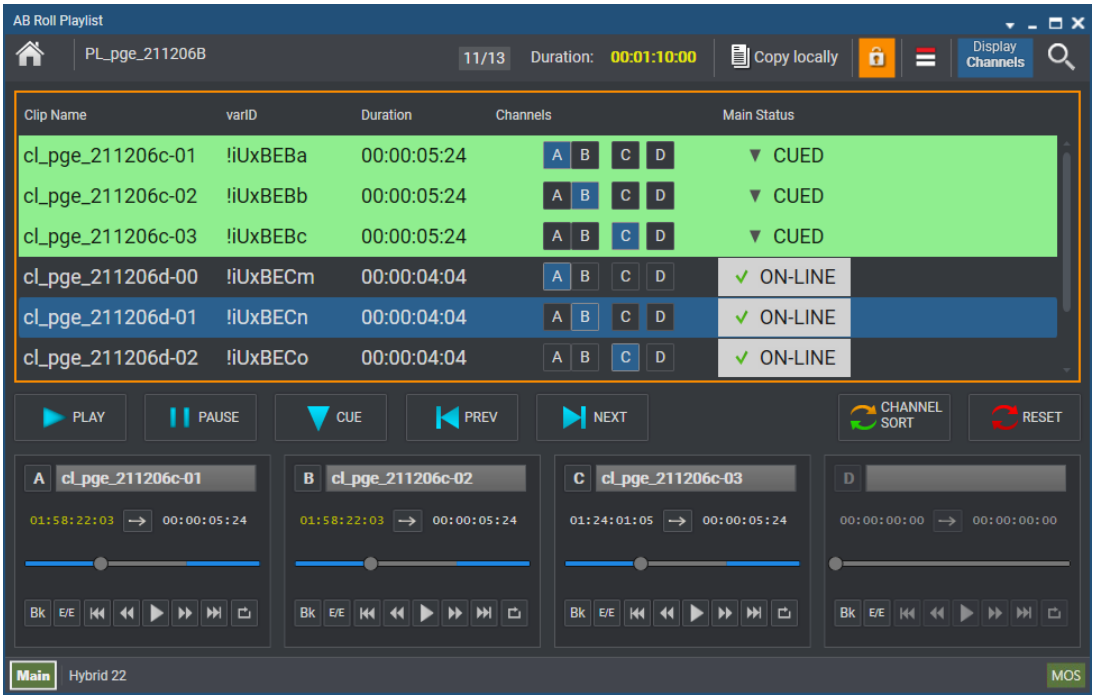
2. Drop the element on the red area (Review).



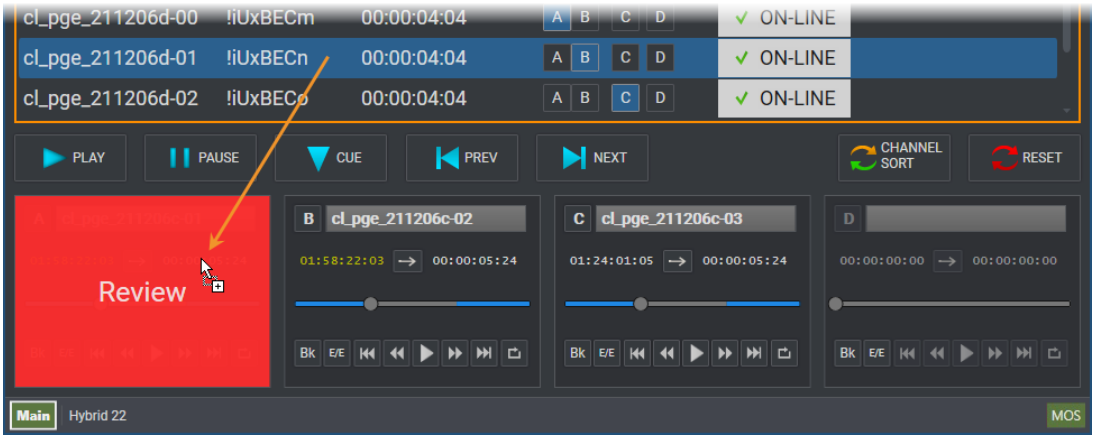
How to Steal an Automatic Player Channel to Review a Playlist Element in Hybrid or Full Auto Mode

1. Drag the playlist element from the Playlist grid to the AB Roll Playlist Control panel of another player channel set to automatic (e.g. B to A).

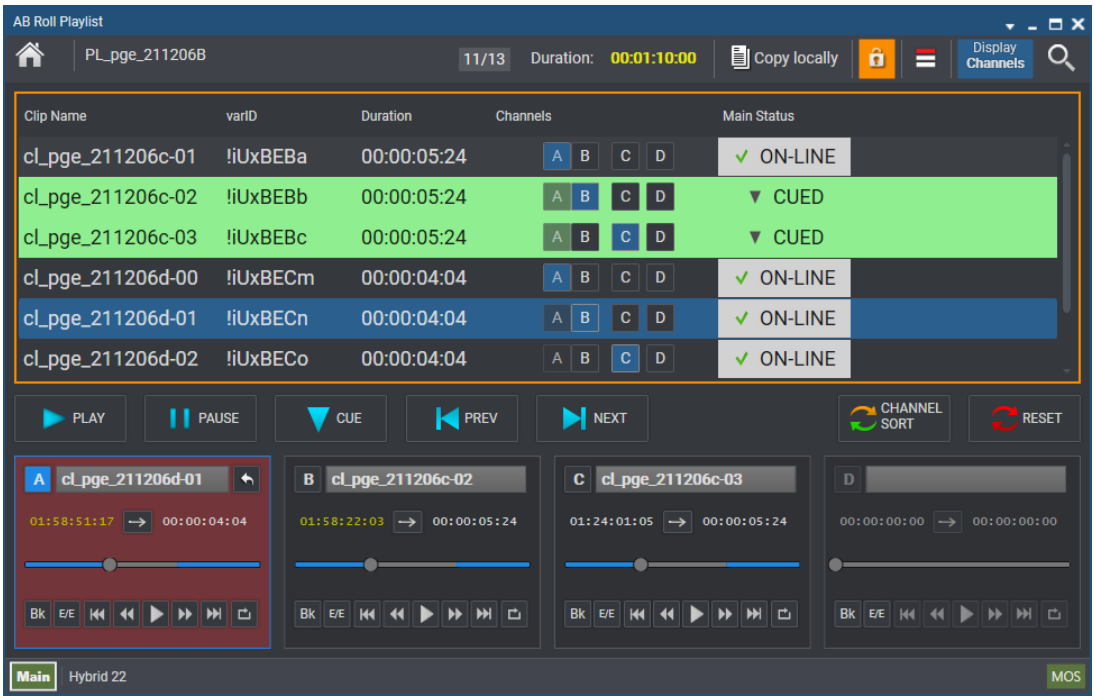
   Example - Original Situation:



Before dropping the element, the whole AB Roll Playlist Control panel is covered by a red rectangle and **REVIEW** is displayed:



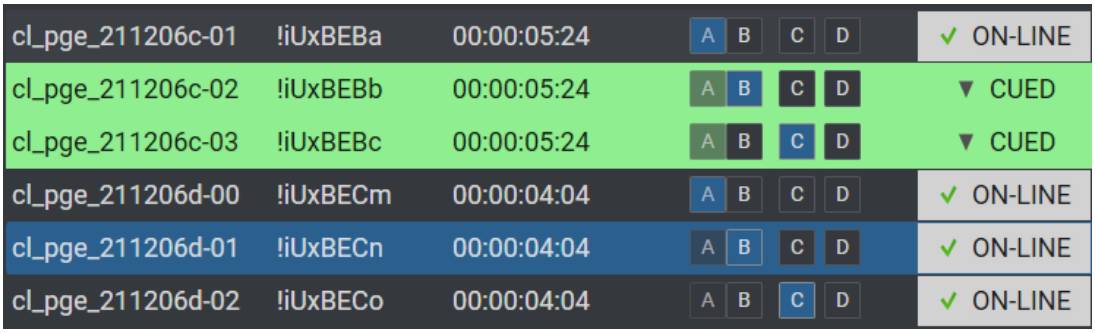
2. Drop the element on the red area.



Result

- The AB Roll Playlist Control panel displays with a burgundy background and its transport functions are available to review the playlist element.

- In the Playlist grid, the stolen channel is grayed out and no more element is cued on it.
- The playlist element remains assigned to its player channel in the playlist and, if it was cued, it remains cued.

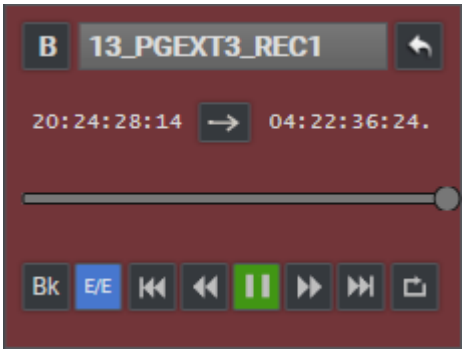


- In the Channel Explorer, the AB icon is no more next to the channel.
- The  is available to put the stolen channel back to the AB mode.

8.5. How Does a Stolen Channel Appear?

AB Roll Playlist Control Panel

When a player channel is stolen, its corresponding AB Roll Playlist Control panel displays with a burgundy background. For example:



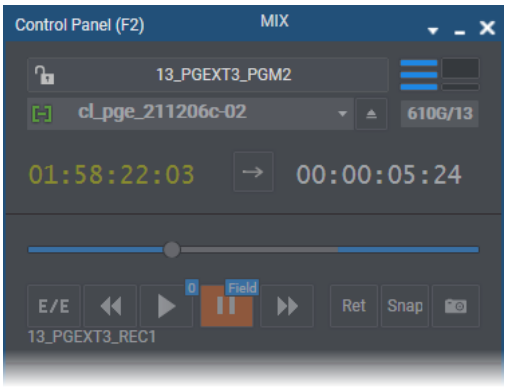
Channel Explorer

When a studio is associated with the AB Roll Playlist panel, its channels are set to AB Roll Playlist mode. The AB icon displays next to the channel names in the Channel Explorer.

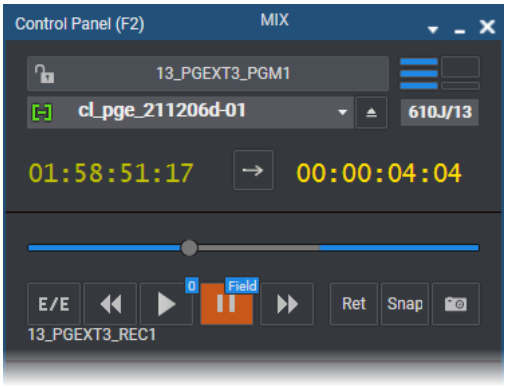
When a player channel is stolen, it is no more set to AB Roll Playlist mode. AB no more displays next to the channel name in the Channel Explorer.

Control Panel Application

When a player channel is set to AB Roll Playlist mode, it cannot be controlled from the main Control Panel application: most of the areas of the Control Panel are grayed out and not available.



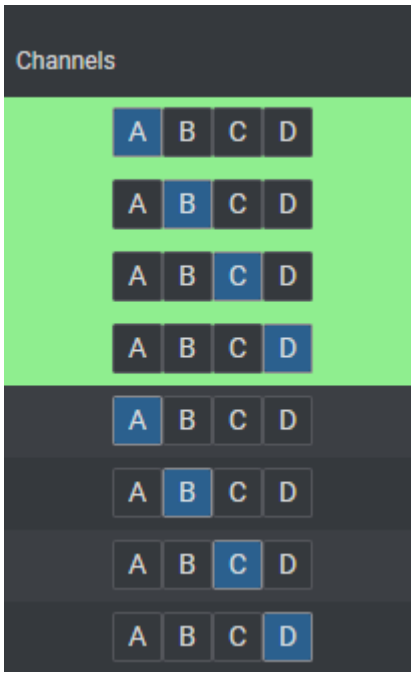
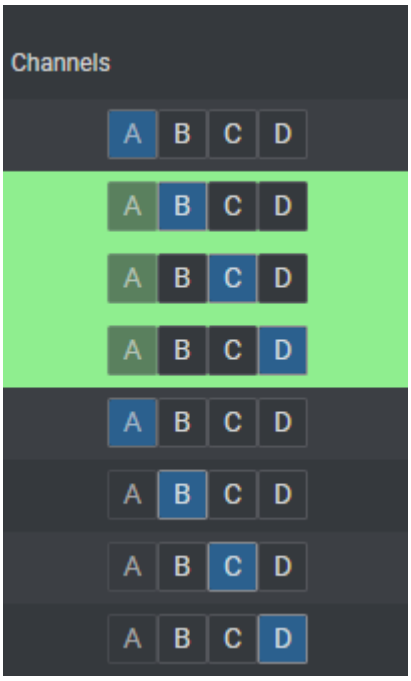
A stolen channel can be controlled from the Control Panel. The Transport Functions buttons are available:



Playlist Grid

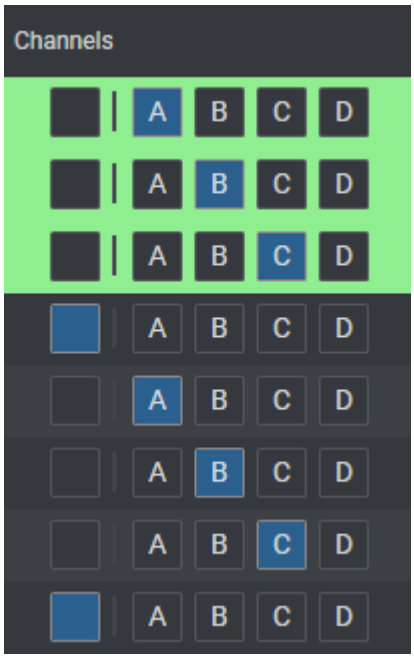
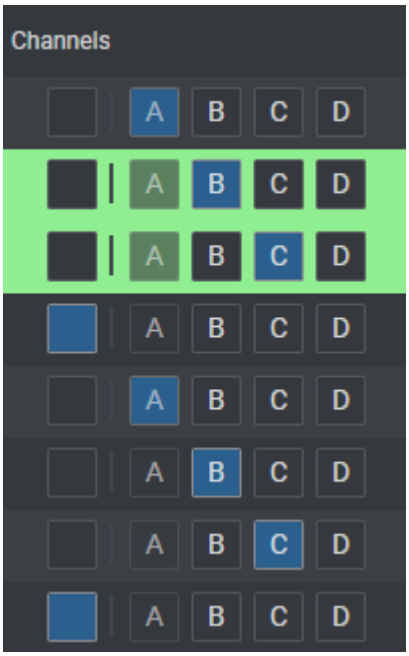
Full Auto Studio

- The stolen channel is grayed out and cannot be allocated to any playlist element.
- The allocation of player channels to playlist elements is kept. The element will be skipped at playout, or another channel can be allocated to it.

Before stealing a channel	After stealing a channel
	

Full Manual Studio

- The stolen channel is grayed out and cannot be allocated to any playlist element.
- Where the channel had already been allocated to a playlist element, the allocation remains, but no element is no more cued on that channel. The elements will be skipped at playout, or another channel can be allocated to them.

Before stealing a channel	After stealing a channel
	

Hybrid Studio

Automatic channels behave like described for the Full Auto studio.

Manual channels behave like described for the Full Manual studio.

8.6. Returning the Stolen Channel to the AB Roll Studio

Manual Retrieve

To manually give a stolen channel back to the AB Roll Playlist studio,

- Click the  button in the corresponding AB Roll Playlist Control panel.

The channel is set back to AB Roll Playlist mode.

Automatic Retrieve

Any operation which cues a playlist element on a stolen channel leads to automatically give the channel back to the AB Roll Playlist studio.

This is the case with the following operations:

- Select and Play: select a playlist element associated with the stolen in the Playlist grid + use the Play function.

  See section "Play an Element" on page 53.

- Select and Cue: select a playlist element associated with the stolen in the Playlist grid + use the Cue function.

  See section "Cue the Selected Element" on page 60.

- Drag&Drop from same channel (Cue workflow) : Drag & drop a playlist element associated with the stolen channel from the Playlist grid to the AB Roll Playlist Control panel of the stolen player channel.

  See section "Cue the Selected Element" on page 60.

- Drag&Drop from a different channel (Assign and Cue workflow): Drag a playlist element not associated with the stolen channel from the Playlist grid and drop it on the Assign & Cue area of the AB Roll Playlist Control panel of the stolen player channel.

  See section "Assign and Cue an Element to Another Channel" on page 64.

Element Assignment on a Stolen Channel on NRCS Side

When a channel is stolen, elements can still be assigned to it on NRCS side. The playlist is automatically updated on IPDirector side as soon as the channel goes back to the AB Roll Playlist studio.

9. Redundancy

9.1. Principle

Two EVS servers are assigned to a single studio of player channels. One server is used as the main server and the other one is used as backup to ensure uninterrupted operation. Two separate playlists are loaded on the servers. They must be identical and be played together. The system must ensure the continuous and automatic synchronization of playlists content and playout.

The system ensures redundancy for the following operations:

- playlist creation.
  - If a playlist is created from the NRCS or from the AB Roll Playlist interface on the active server of a studio associated with the AB Roll Playlist, an identical playlist is created and loaded on the inactive server.
  - If a playlist, created from the Playlist Panel or the Control Panel, is loaded for the first time in the AB Roll Playlist interface, on the active server of a studio associated with the AB Roll Playlist, an identical playlist is created and loaded on the inactive server.
- channel assignation. If a playlist is unloaded from the active server of a studio because a new one is loaded on it, the redundant playlist corresponding to the second one is loaded on the inactive server.
- playout operations. If an operator uses one of the transport functions on a playlist, the action is applied on both playlists at the same time. This applies to **Play**, **Pause**, **Cue**, **Next**, **Prev**, **Fast Rewind**, **Fast Forward**, **Black screen (Bk)**, **Channel Sort**, **Reset**.
- editing operations. If an operator uses one of the editing functions on a playlist, the action is applied on both playlists at the same time. This applies to Delete, Insert, Move, Retrim or Loop an element.

In case of malfunction or interruption of the main server, the system can perform a failover operation to switch to the backup playlist. The backup server becomes the active one. A failover operation can also be done from the backup server to the main server. See section "Failover Management" on page 116.

Redundancy is not ensured in case of stolen channel. Then, a black screen is displayed on the player channel of the non active server.

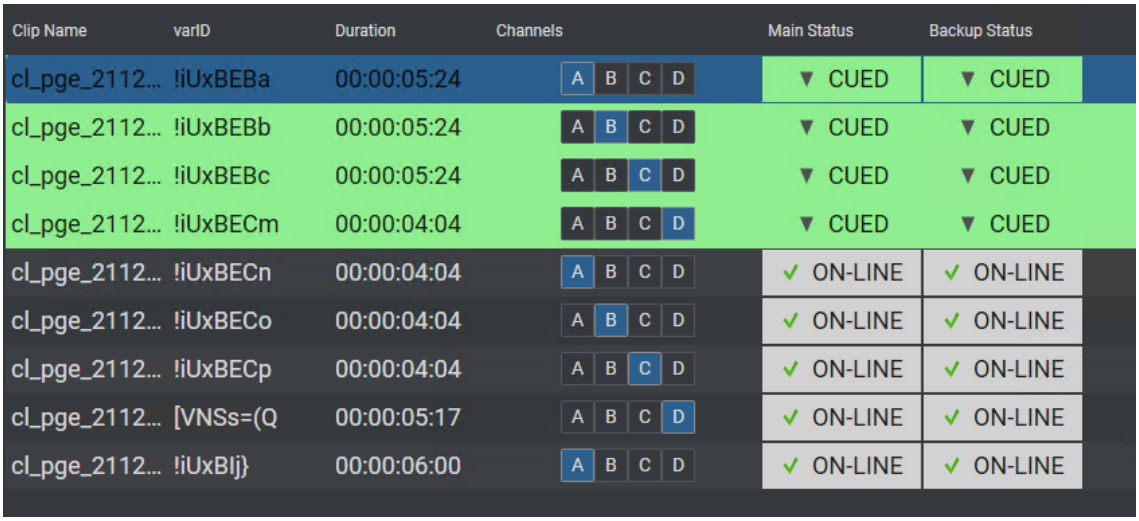
When the playlists stored on the main and on the backup servers are no more synchronized, or when the playout of the main and playlists backup is no more synchronized, a warning message is displayed in the Status bar. The user will be able to perform a manual synchronization of playlists between the two servers. See section "Solving Conflict between Redundant Playlists" on page 117.

9.2. Redundancy Information

Playlist Grid

In Main / Backup Configuration, the Playlist grid displays the elements of the active playlist.

The **Main Status** column shows the status of the elements on the main server. The **Backup Status** column shows the status of the elements on the backup server.



In case of failover Main -> Backup, the playlist elements listed in the Playlist grid will switch to those of the backup playlist (active), but the Main Status column and the Backup Status column will still show the status of the main playlist (inactive) and the backup playlist (active).

Status Bar

In Main / Backup Configuration, the Status bar contains the areas highlighted on the screenshot below:

Main Server Status (1)

The color of this area indicates whether the main server is working properly.

- green: the server is running and its player channels are in AB Roll mode.
- orange: the server is running but its player channels are not in AB Roll mode.
- red: the server cannot be reached

The bold white border around a server (main or backup) indicates the server hosting the active playlist.

Failover Button (2)

This button is only displayed in case of Main / Backup configuration.

It can be used to perform a manual failover between the main and the backup servers. See section "Failover Management" on page 116.

It is blue when the backup server is active.

Backup Server Status (3)

This area is only displayed in case of Main / Backup configuration.

The color of this area indicates whether the backup server is working properly.

- green: the server is running and its player channels are in AB Roll mode.
- orange: the server is running but its player channels are not in AB Roll mode.
- red: the server cannot be reached

Studio Name (4)

This area displays the name of the studio associated with the ABRoll interface.

See section "Associating an AB Roll Studio with the AB Roll Playlist Panel" on page 32.

Warning Message (5)

This area is only present in case of conflict between redundant playlists.

It warns users in case of problem of synchronization regarding the playout or the content between the main and the backup playlists.

See section "Solving Conflict between Redundant Playlists" on page 117.

Resync Button (6)

This button is only displayed in case of Main / Backup configuration.

It can be used to synchronize the main and the backup playlists in case of conflict.

See section "Solving Conflict between Redundant Playlists" on page 117.

Communication Status with MOS Gateway and NRCS (7)

The color of this area gives indication on the status of the communication with the MOS gateway and the NRCS. A tooltip, displayed when the mouse is over the **MOS** icon, gives more precise information on the status.

MOS Icon	Possible Meanings
MOS	• The communication between IPDirector and the MOS gateway and the communication between the MOS gateway and the NRCS works properly. The IPDirector playlist has been synchronized according to the NRCS rundown: editions (insert/move/delete) of the rundown have been applied to the IPDirectorplaylist. If editions of the IPDirector playlist have not applied to the NRCS rundown, the system is not able to detect the de-synchronization and this is not reflected in the Status.
MOS	• The communication with the MOS gateway works properly but the communication with the NRCS server does not. • The communication with the MOS gateway does not work. • The IPDirector playlist has not been synchronized according to the NRCS rundown: editions (insert/move/delete) of the rundown have not been applied to the IPDirectorplaylist.
MOS	• The communication between IPDirector and the MOS gateway and the communication between the MOS gateway and the NRCS works properly. The IPDirector playlist has not been synchronized according to the NRCS rundown: editions (insert/move/delete) of the rundown have not been applied to the IPDirector playlist. In addition to the blinking orange **MOS** icon, a blinking orange border is displayed around the playlist elements to warn the users.

9.3. Failover Management

Introduction

A failover operation is done from the active server to the non active server. This can be from the main server to the backup server but also from the backup server to the main server. This operation may be automatic or manual.

In case of failover operation, the MOS gateway is warned of this change and then sends the playout status of the newly active playlist to the NRCS.

Automatic Failover

The automatic failover to switch to the backup playlist is triggered:

- when the Main server is down

- when the Main server is not reachable
- when Synchro DB managing this server is down
- in any situation which can cause a playout problem on the main server.

Then, the backup server becomes the active one.

Manual Failover

A **Failover** button  is available to perform a manual failover between the main and the backup servers.

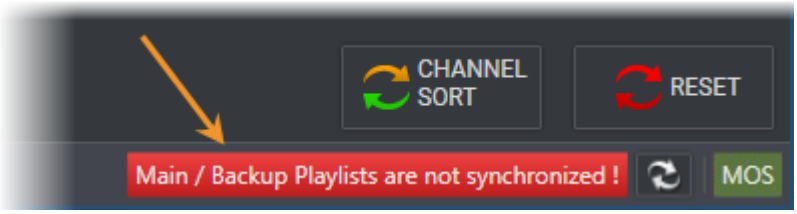
The button becomes blue when the backup server is the active one.

The button cannot be used when the non active server has a red status, or if you do not have the appropriate user right (AB Roll Playlist Control Channels).

9.4. Solving Conflict between Redundant Playlists

Redundant Playlists Content Status

In Main / Backup configuration, a warning message is displayed in the Status bar when the content of the playlists stored on the main and on the backup servers are no more synchronized.



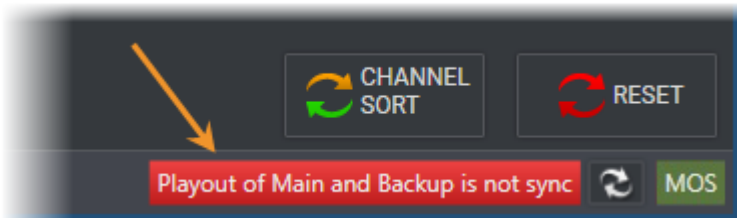
The message is displayed in case one of the following differences exists between the main and the backup playlists:

- the number of elements differ
- the order of elements
- the VarID of the corresponding elements
- the TC IN, the TC OUT or the duration of the corresponding elements.

Differences related to tags, start mode or transition effects will not be detected.

Redundant Playlists Playout Status

In Main / Backup configuration, a warning message is displayed in the Status bar when the playout of the main and playlists backup is no more synchronized.



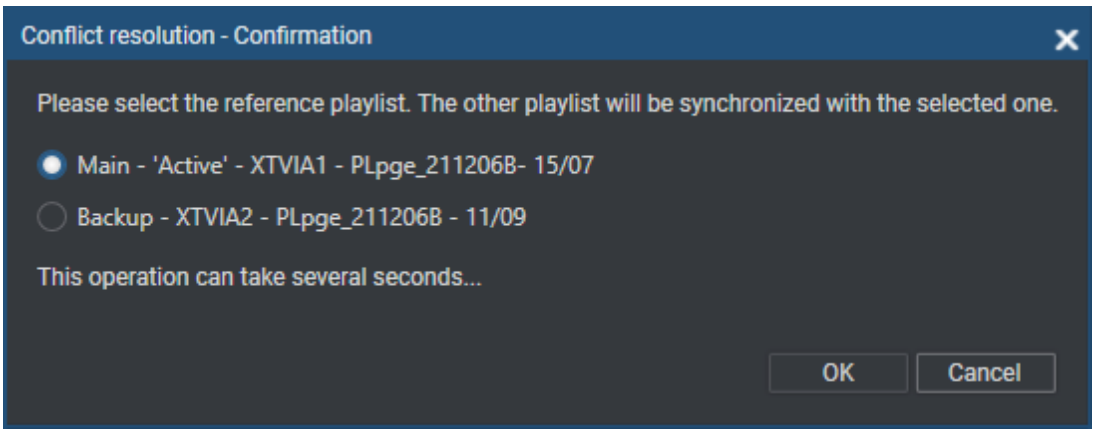
The message is displayed in case the playout status is not the same between corresponding elements of both playlists: playing, cued, paused.

How to Solve a Conflict

When a conflict exist between redundant playlists, either linked to playout or to content, the following procedure may be followed to synchronize the playlists again.

1. Ensure that no element is playing, paused or stopped.
2. Click the **Resync** button .

   The Conflict Resolution window opens.



3. Select the reference playlist which will be used to synchronize the other playlist.
4. Click **OK**.

   The playlist to synchronize is recreated according to the reference playlist. New VarID are provided to its playlist elements.

10. AB Roll Playlist Settings

Some settings apply to the AB Roll Playlist even if defined in other category (for example, Settings > Playlist > Colors), or in the User Manager.

Some settings are specific to the AB Roll Playlist.

1. Click **Tools > Settings** to open the IPDirector Settings window.
2. Select **Playlist > AB Roll**.

Freeze on OUT Duration

This setting defines the duration during which an element remains stopped on its last frame as soon as it has been played, before the next element allocated to the same channel is cued on its TC IN.

It can be changed by the user if the parameter has been set to **User** in the IPDirector User Manager.

Possible values: [000s00fr - 599s24fr]

First Threshold

When a playlist element is playing, the line will become red when the remaining time corresponds to the value set in this field.

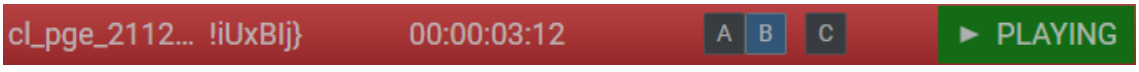
Possible values: [**00s** - **60s**]

Default value: **10s**

The user will be allowed to change the value only if the setting has been set to **User** in the User Manager.

Second Threshold

When a playlist element is playing, the line will blink red when the remaining time corresponds to the value set in this field.



Possible values: [**00s** - **60s**]

Default value: **5s**

The user will be allowed to change the value only if the setting has been set to **User** in the User Manager.

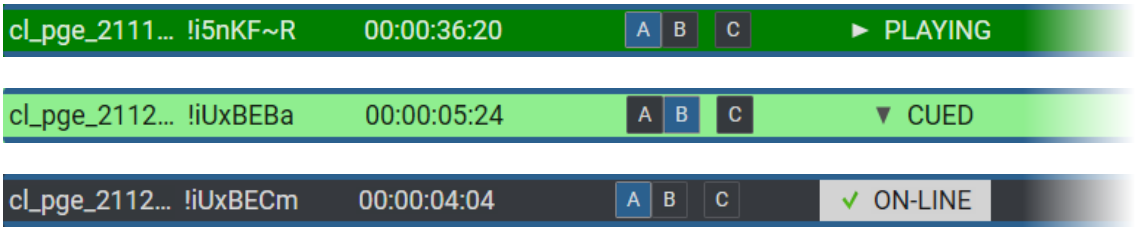
Indicator for Selected Element

When an element is selected in the grid, its line is highlighted in blue. Two different display options are available.

The user will be allowed to change the value only if the setting has been set to **User** in the User Manager.

Outline blue applied for all elements

Any selected line will be surrounded by a blue line regardless of the playback status of the element.



Outline blue applied only for Playing element

If the selected element is playing, the line will be surrounded by a blue line.

If the selected element is not playing, the line will be displayed as a solid blue line, as follows:

11. AB Roll Playlist 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 AB Roll Playlist button on the left.

See section "Shortcut Definition" in the General Functions user manual for more information.

Shortcut	Description	See section
Ctrl + F	Searches in Database Explorer.	"Touring the ABRoll Playlist User Interface" on page 4
P	Plays selected element. Also pauses the playing element.	"Play an Element" on page 53
Space	Pauses selected element. Also plays a paused element.	"Pause the Playing Element" on page 54
W	Fast Rewind.	"Play Fast Rewind and Play Fast Forward" on page 55
F	Fast Forward.	"Play Fast Rewind and Play Fast Forward" on page 55
N	Jumps to the next element assigned to the same channel.	"Cue the Next Element" on page 63
B	Jumps to the previous element assigned to the same channel.	"Cue the Previous Element" on page 62
C	Cues selected element.	"Cue the Selected Element" on page 60
Shift + C	Cues elements from this position (on a selected playlist element).	"Cue the Elements from the Selected Element Position" on page 62
Q	Puts channel to black.	"Displaying a Black Screen on a Player Channel" on page 71
Ctrl + Q	Puts all channels to black.	
E	E/E	"Stealing a Player Channel to Play a Live Train or Recording Ingest" on page 98
R	Resets playlist	"Resetting a Playlist" on page 95

Shortcut	Description	See section
L	Adds / removes infinite loop on selected element	"Looping Playlist Elements During Playout" on page 66
Delete (on a selected playlist element)	Removes element. The result is the same as for the **Remove Element** command from the Playlist Element contextual menu.	/
! 1	Allocates the first channel to the selected playlist element.	"Manually Allocating Player Channels" on page 47
@ 2	Allocates the second channel to the selected playlist element.	"Manually Allocating Player Channels" on page 47
# 3	Allocates the third channel to the selected playlist element.	"Manually Allocating Player Channels" on page 47
$ 4	Allocates the fourth channel to the selected playlist element.	"Manually Allocating Player Channels" on page 47
) 0	Removes the association between a manual player channel and a playlist element.	"Manually Allocating Player Channels" on page 47
% 5	Selects the first AB Roll Playlist Control panel.	"Using Playlist Loading and Transport Functions" on page 51
^ 6	Selects the second AB Roll Playlist Control panel.	"Using Playlist Loading and Transport Functions" on page 51
& 7	Selects the third AB Roll Playlist Control panel.	"Using Playlist Loading and Transport Functions" on page 51
* 8	Selects the fourth AB Roll Playlist Control panel.	"Using Playlist Loading and Transport Functions" on page 51
I	Mark IN.	
Ctrl + Z	Undoes the most recently executed operation (insert / move / delete).	/
Ctrl + Y	Redoes a previously undone operation (insert / move / delete).	/
Shift + Ctrl + ~ `	Plays at -35x.	"Play Fast Rewind and Play Fast Forward" on page 55
Shift + Ctrl + ! 1	Plays at --15x.	"Play Fast Rewind and Play Fast Forward" on page 55
Shift + Ctrl + @ 2	Plays at -5x.	"Play Fast Rewind and Play Fast Forward" on page 55
Shift + Ctrl + # 3	Plays at -0.75x.	"Play Fast Rewind and Play Fast Forward" on page 55

Shortcut	Description	See section
Shift + Ctrl + $ 4	Plays at -0.5x.	"Play Fast Rewind and Play Fast Forward" on page 55
Shift + Ctrl + % 5	Plays at 0.5x.	"Play Fast Rewind and Play Fast Forward" on page 55
Shift + Ctrl + ^ 6	Plays at 0.75x.	"Play Fast Rewind and Play Fast Forward" on page 55
Shift + Ctrl + & 7	Plays at 5x.	"Play Fast Rewind and Play Fast Forward" on page 55
Shift + Ctrl + * 8	Plays at 15x.	"Play Fast Rewind and Play Fast Forward" on page 55
Shift + Ctrl + (9	Plays at 35x.	"Play Fast Rewind and Play Fast Forward" on page 55
←	Moves from the current position to the previous frame.	"Go to Previous or Next Frame/Field" on page 59
→	Moves from the current position to the next frame.	"Go to Previous or Next Frame/Field" on page 59
Shift + Ctrl + G	Opens the Go to line dialog box to select an element position to make visible in the grid.	"Managing the Playlist Grid View" on page 13
Shift + Ctrl + C	Cues the selected element ASAP	"Cue the Selected Element" on page 60
Shift + Ctrl + P	Plays the selected element ASAP	"Play an Element" on page 53

12. ShuttlePRO Keys

12.1. Introduction

The ShuttlePRO device has a Jog wheel, a Shuttle ring, and fifteen buttons. The two top rows of buttons on the ShuttlePRO have labels for quick reference as to which function each button is designed to perform.

However, the controller has different functions depending on which mode IPDirector is being operated in.

No ShuttlePRO driver is needed. The button configuration is hard coded. IPDirector accesses directly this device.

Details on the button functions are included in the respective sections of the current manual.

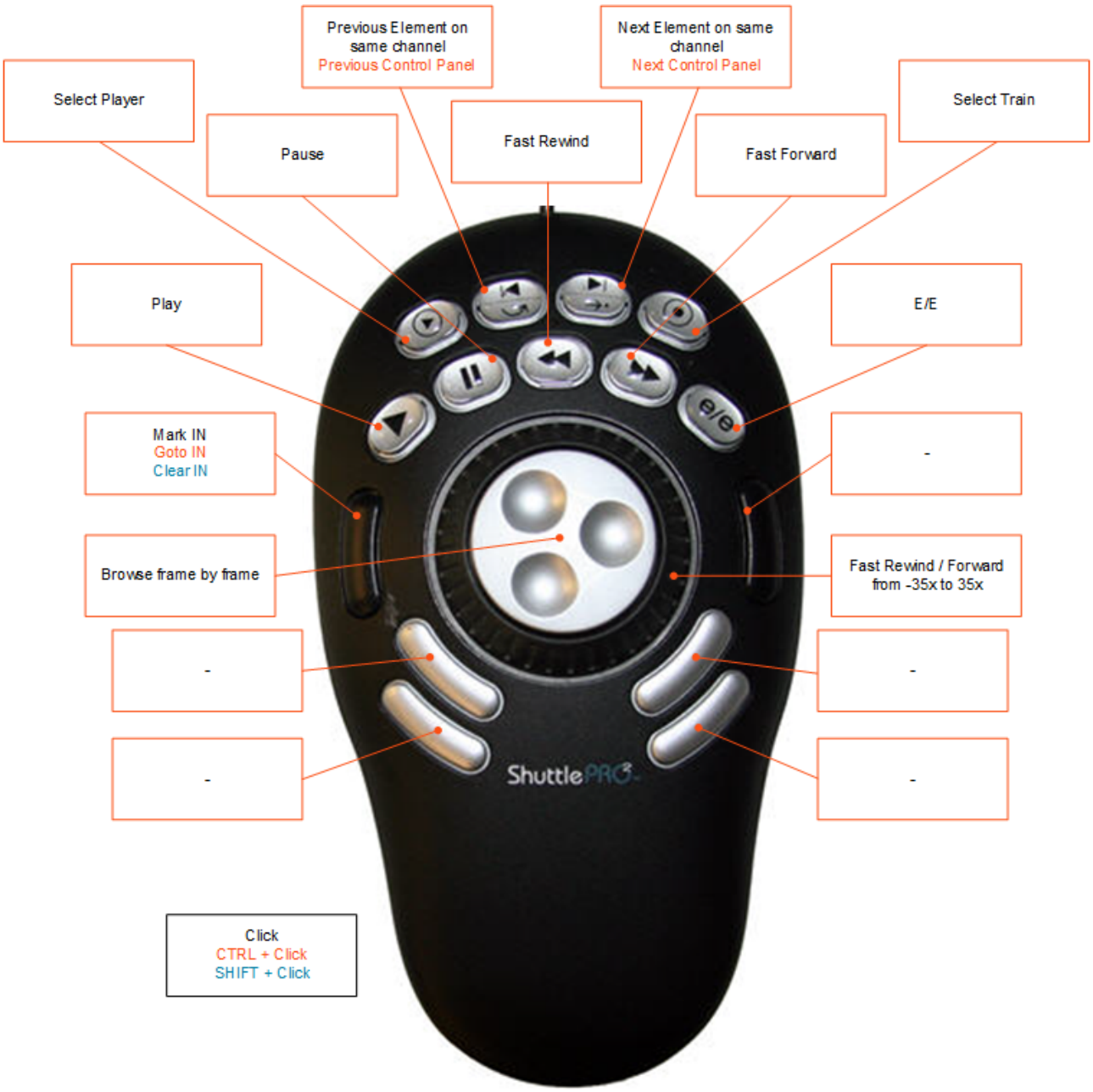
The diagram in section "Quick Reference in AB Roll Mode" on page 125 is a quick reference guide to the location of the functions.

Some buttons may be used with **CTRL** or **SHIFT** from the keyboard as a modifier to change the button function. These functions are shown in red for CTRL and blue for SHIFT in the diagrams.

12.2. Quick Reference in AB Roll Mode

AB Roll Playlist Control panels can be controlled by a ShuttlePRO device.

The ShuttlePRO buttons can be used for the following operations. Some buttons may be used with **CTRL** or **SHIFT** from the keyboard as a modifier to change the button function. These functions are shown in red for **CTRL** and blue for **SHIFT**.



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