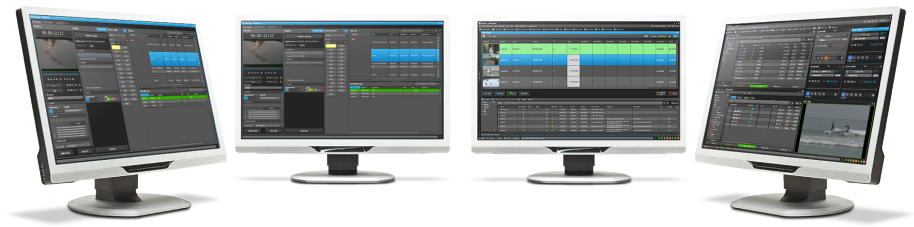
USER MANUAL
General Functions

Version 6.57 - December 2014



IP.Director

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Improvement Requests

Your comments will help us improve the quality of the user documentation. Do not hesitate to send improvement requests, or report any error or inaccuracy on this user manual by e-mail to doc@evs.com.

Regional Contacts

The address and phone number of the EVS headquarters are usually mentioned in the Help > About menu in the user interface.

You will find the full list of addresses and phone numbers of local offices either at the end of this user manual (for manuals on hardware products) or at the following page on the EVS website: http://www.evs.com/contacts.

User Manuals on EVS Website

The latest version of the user manual, if any, and other user manuals on EVS products can be found on the EVS download center, on the following webpage: http://www.evs.com/downloadcenter.

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What's New?

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

The sections updated to reflect the new and modified features in the General Functions manual of IPDirector 6.57 (compared to version 6.56) are listed below.

Use of licenses

The DB Connect license has been renamed IPDirector Live PAM Core license.

See section "Licenses" on page 4.

1. Introduction

1.1. IPDirector Overview

IPDirector is an integrated suite of software applications designed to enhance the workflow of a television production.

IPDirector uses its applications to control multiple channels from several EVS video servers connected to the XNet SDTI network. The IPDirector system sees the XNet network as one large server whose storage is divided into various sections accessible by any channel from any EVS server within the XNet network.

The IPDirector suite allows:

- ingest control,
- metadata management,
- on the fly editing,
- playout scheduling,

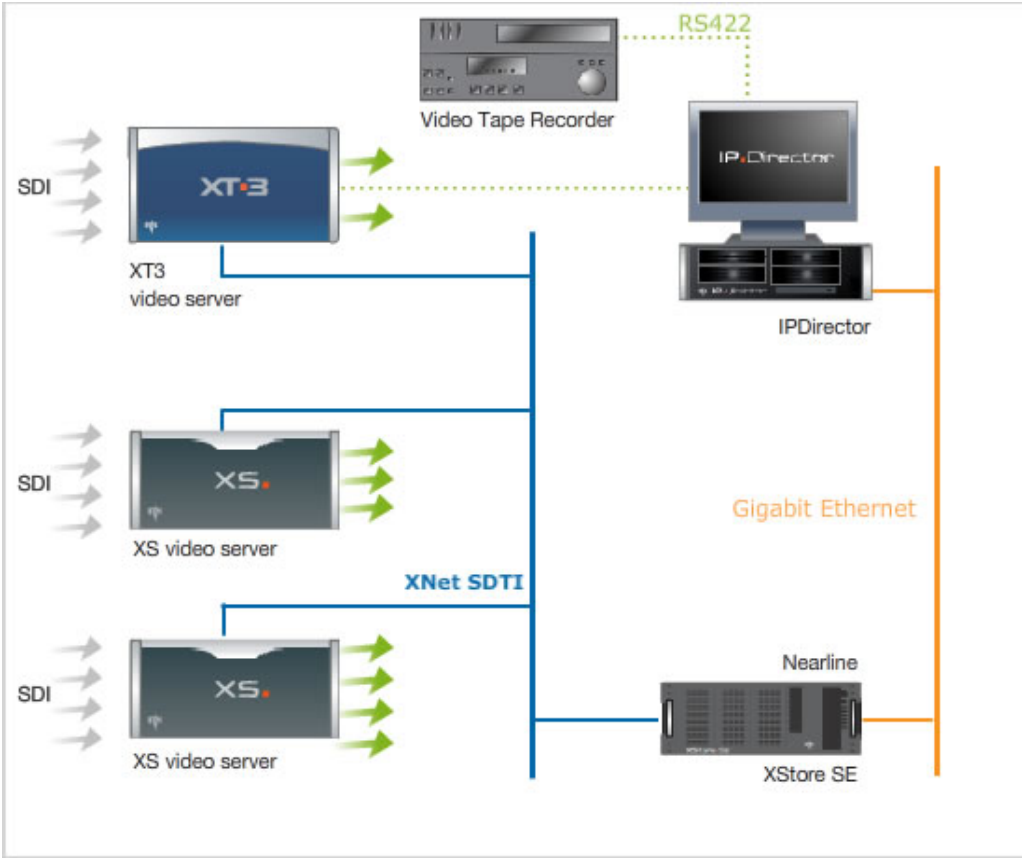
All are managed from a single interface.

Together with XTAccess, EVS gateway software, media interchange is facilitated between EVS video servers and third-party tools such as post-production, file-based camcorders, storage, etc.

1.2. IPDirector Uses

Standalone Mode

Each IPDirector workstation can function as a standalone system while providing all applications for the production, from ingest to playout.

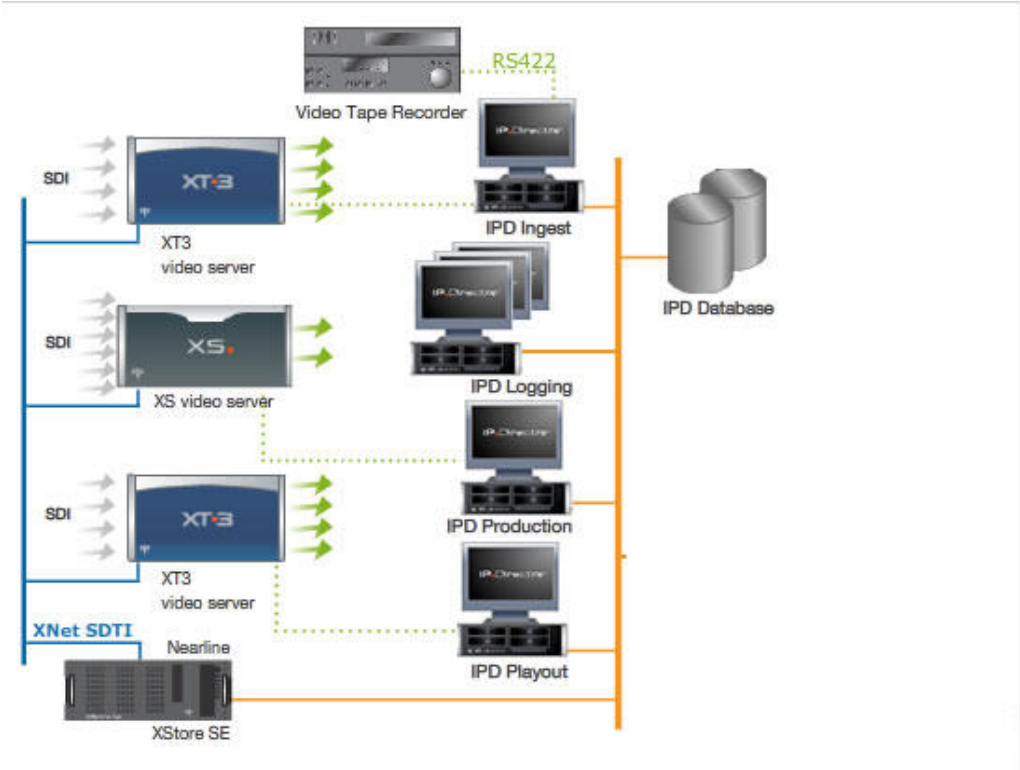


Modular Mode

Several workstations can be used, running only the applications required for a specific task.

Each workstation is connected through Ethernet with a central Database.

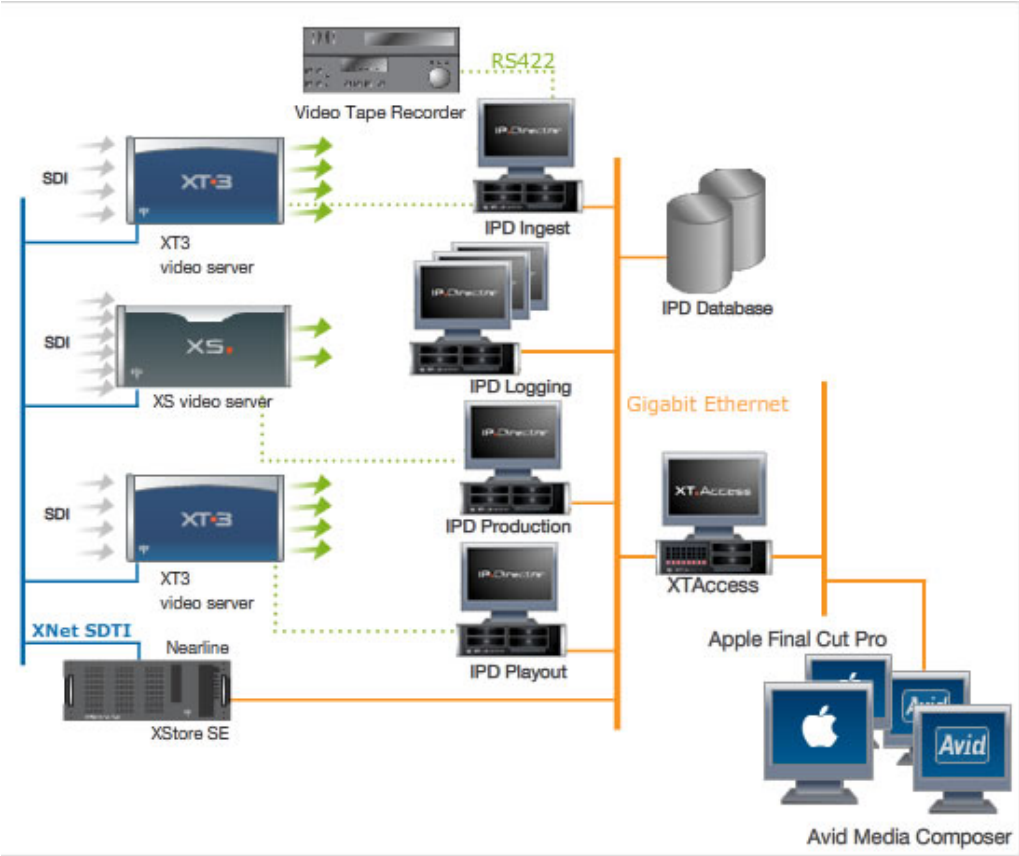
When networked together, IPDirector Database information is available to all other workstations used in different production areas while enhancing the overall production workflow.



In this modular mode, the first IPDirector station commands the ingest and is able to control multiple recordings and the digitization process of tapes into EVS servers.

This can be complemented with a logging module inside IPDirector which can associate data with each recording. The logs created will be accessible by all other users on the different workstations.

Other IPDirector workstations dedicated to the production phase allow a control of media while making clips, playlists, timelines, bins and logs. They also allow the transfer of media to third-party editing systems for finalizing edits, for instance.



Once the edit has been finalized, it can be sent back for playback to an EVS server. At the end of the production process, another workstation can allow the playback of any clips or playlists.

It also allows Fill & Key playback with perfect timecode accuracy.

1.3. Licenses

IPDirector can work with static licenses imported to XSecure on the workstation or with floating licenses imported to XSecure in the database.

Some users, like editors, need a guaranteed connection to IPDirector. So, a static license will be installed on their workstation.

For users who do not need to have a guaranteed connection, such as journalists, no static license will be installed and a pool of floating licenses can be used on a first come/first served basis. So a larger number of stations can be equipped with IPDirector.

NEW !

Actually, when IPDirector is started, the system first checks whether a license for IPDirector Live PAM Core exists on the workstation. This license is always a floating license (**key 05**). It controls the number of workstations which connect to the database. If there is no valid license, the user gets an error message. If a valid IPDirector Live PAM Core license exists, it is used.

The system then checks whether a static license for IPAccess exists on the workstation (**key 15**). If there is one valid static license, it is used. If there is no static license, the

system requests a floating IPAccess license (**key 115**). If such a license is available, it is used for that user. If there is no floating license left at that time, the user gets an error message.

Note
Several applications, such as IPDirector, IPBrowse and IPClipLogger, can be started with the same IPAccess static license on a workstation. However, if the workstation works with IPAccess floating licenses, several licenses will be used to start all applications.

1.4. Opening IPDirector

To open IPDirector, select the application from **Start > Programs > EVS Broadcast Equipment** or click the corresponding icon on the desktop.

The IPDirector workstation may be integrated into an Active Directory domain. In this case, IPDirector will automatically open without requesting additional access codes when the user starts it.

The user group the user belongs to in the Windows domain is linked to a profile in the User Manager. This determines the set of user rights and user settings the user will have in the application. See the IPDirector Technical Reference user manual for more information.

If the IPDirector workstation is not integrated into an Active Directory domain, a login screen will display, where users have to enter their own IPDirector username and password.

1.5. IPDirector Applications

1.5.1. Production Workflow

There are several applications designed for use on a production. Each is integrated into the overall package and is accessible via installed software licenses.

Each application can be used to perform different tasks.

The following diagram represents the production process and the role of every application.

1.5.2. Channel Explorer

The Channel Explorer provides a comprehensive overview of any device available on the media sharing network, XNet2, including:

- EVS video servers, with their recorder channels and player channels,
- XF2 removable storage,
- XStoreSE media storage,
- high resolution and low resolution streams,
- VTR devices,

From within the Channel Explorer window, any IPDirector workstation can take control of one or several channels from different EVS servers connected to the XNet. When control has been taken, the selected channels can be locked.

The flexibility of IPDirector allows multiple channels to be managed together in a variety of methods:

- Ganged channels: allowing simultaneous control of several channels from one control panel (recorders or players)
- Fill and Key: allowing 2 clips to be linked in a Fill/Key pairing for playback to a vision mixer (switcher) or keyable device.
- Program/preview: allowing the playout of audio and video transition effects between clips, playlist elements or timeline elements.
- Lock Timeline: allowing two channels to be function as Timeline Engine for use with IPEdit.
- AB Roll Playlist: to control and play material on up to 4 channels at the same time.

1.5.3. Recorder Panel

The Recorder Panel is the graphic user interface required to control recorder channels of EVS servers. It displays the channel record status and allows to start or stop the recording by a recorder channel. It provides the basic functions to create a clip.

1.5.4. Ingest Scheduler

The Ingest Scheduler is a visual tool that allows the creation, editing and view of scheduled ingests on EVS video servers, or from the servers to files on storage via XTAccess. It provides a timeline view of each recorder and stream configured through the Remote Installer and controlled by IPDirector.

The Ingest Scheduler is designed to control:

- ingests as a growing clip on any recorder channel of an EVS video server (high resolution or low resolution) controlled by IPDirector.

  The scheduled ingests are automatically saved as clip elements of XT Clip type.

- streams of the material ingested onto the recorders. The streams shown are virtual channels that are automatically associated with each recorder if at least one XTAccess in the GigE network.

  The streams are automatically saved to files and appear in IPDirector as clip elements of File type.

This module is used to schedule ingests in the future, but can also be used to immediately start a recording. It is designed to schedule one-shot ingests or to schedule ingests repeated at regular intervals (Repeat Every ingests) or repeated at a defined start time on selected days (Repeat ingests).

Ingests can be associated to a logsheet and automatically protected.

1.5.5. IPLogger

IPLogger is used to create logs on a given event. A log is a reference point to a given timecode in a record train, to which descriptive information can be associated. This is used to easily identify important moments in an event and create clips later on based on the logs.

Logs are related to a logsheet which is created for the event and contains its own metadata, previously defined in a logsheet profile. Users have the possibility to create log entries directly during the event, or later on.

Users can associate metadata to the log, such as keywords, interest level, highlight color or a description.

1.5.6. Keyword Management

A set of applications is used to manage the keywords database, prepare grids and dictionaries for logging, searching and browsing.

Using the Keyword Management tools, a keyword grid or dictionary content can easily be changed and organized by the operator and production team to make it perfectly suited for any sport or live production. An unlimited number of keyword grids, consisting of up to 300 words each can be managed by IPDirector.

Keyword Management tools allows the addition of single keywords to the database and therefore to any grid. It also allows the import of keyword grids generated by an EVS sever, keyword grids from other IPDirector installations and even the integration of keywords and keyword grids from 3rd party databases which may already exist such as competitor lists and team or event statistical databases.

Simple text files can also be easily imported into the Keyword Database making it easy to import data from a web page or other document where words exist for your event.

1.5.7. Database Explorer

The Database Explorer is a central point in the IPDirector application to perform search on all the media available on the network and to load media. It provides access to any high or low resolution media available on the online production network, as well as nearline storage platforms. This includes clips (XT clips and files), playlists, edits, timelines, and logs. It can also display the list of off-line nearline media.

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

1.5.8. VTR Control Panel

The purpose of the VTR Control Panel is to control a VTR (Video Tape Recorder) from IPDirector. It is an advanced remote control, from within the IPDirector application.

Apart from playback and record control, it also allows the extraction of clips from a tape to the EVS video servers. This process can be done for a single clip or multiple clips can be "batch digitized".

The VTR Control Panel can be used according 3 modes:

- Transport mode: the VTR Control Panel works as a remote control for the VTR, from within IPDirector.
- Clip Digitize mode: one or several clips can be digitized from a single tape to a recorder channel on an EVS video server.
- Batch Digitize mode: several clips can be queued in a Batch list, so that they can all be digitized in one process run.

1.5.9. Control Panel

The Control Panel is the graphical user interface used to preview and manipulate:

- clips, record trains, playlists and timelines stored on an EVS video server when the Control Panel is associated to a player channel,
- files stored on a nearline folder of the GigE network when the Control Panel is associated to the OCX Software Player (if the workstation has a valid license for it).

It provides transport functions to play the media and clip creation functions to clip media or trim existing clips.

Clips, playlists or timelines can be played out with transition effects between elements. To do so, special channel modes must be enabled. Depending on several parameters on the EVS video server, a single player channel could be used or two player channels must be dedicated to the playout of the loaded item.

It also allows to:

- build and play clip-lists (simple playlists),
- play back media in loop or bounce-modes,
- synchronize playback on ganged channels.

1.5.10. Playlist Panel

The Playlist Panel allows the creation, modification and playout of multiple playlists on air using an efficient and extremely flexible workflow.

A variety of playout effects can be defined, different stop or start options can be programmed, and tags can be set to carry out specific audio or video actions during playout.

1.5.11. IPEdit

IPEdit allows complete timeline editing while maintaining the speed and power of the EVS servers recorder and player channels. Drag-and-drop operations and keyboard shortcuts make it easy to perform video and audio transition effects.

Video graphics and voiceovers can be added to the timelines. Up to two simultaneous timelines can be created per EVS server. GPI Out allows for external device automation, and the ability to play out while editing ensures a speed to air workflow.

1.5.12. AB Roll Playlist

The AB Roll Playlist application is used to control and play material on a series of channels from a staged playlist in the database. These channels load in a sequential manner as per a shows rundown or planned sequence. These channels may be directly managed using the companion MPlay remote to manage up to 4 player channels.

Playlists from any EVS interface or third party applications, or rundowns from NRCS (Newsroom Computer Systems) can be used as input for the AB Roll Playlist application.

1.5.13. Director's Cut

The Director's Cut application is used in live or near-live post-productions.

Takes recorded from several camera angles at a time, as well as the director's cut created with a switcher, are kept on the EVS video servers and streamed or written to a NLE. An EDL, using all the switcher input change notifications that appears on the switcher when the director produces the show, is exported to the NLE in native format and linked to the takes.

2. IPDirector Main Window

2.1. Introduction

The IPDirector main window is the window which opens when IPDirector is started. By default the IPDirector main window opens without no application window opened. However, specific layout of windows display may have been assigned to a user or created and saved by the user, so this layout will automatically be launched when the user opens IPDirector.

From this main window, the user can open one or several instances of the various IPDirector applications.

2.2. Overview of the IPDirector Main Window

Illustration

The IPDirector main window contains the areas highlighted on the screenshot below:

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

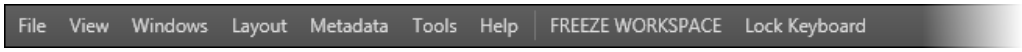
Area Description

The table below describes the various parts of the IPDirector main window:

Part	Name	Description
1.	Menu bar	The Menu bar gives access to several menu commands. • The **File**, **View**, **Windows** and **Layout** menu commands allow the users to modify and customize the IPDirector user interface in which they are working. • The **Metadata** menu gives access to the options for managing the customer-defined data that can be associated with clips, logsheets, playlists and timelines. • The **Tools** menu gives access, among others, to the settings and shortcuts defined for the various IPDirector applications as well as some additional options. • The **Help** menu gives access to the application version, user manual, license information, etc. See section "Menu Bar" on page 12 for more information on the menu commands.
2.	Application bar	The application bar provides direct access to the various IPDirector applications. When the user clicks the icon corresponding to a given application, the application opens in the workspace. The **Keyword** icon gives access to a menu for the selection of the keyword tool to open. Each application is widely described in separate chapters of the current user manual.
3.	Date and Time fields	These fields are read-only and give information on the date and time of the SDTI network, if any, or of the EVS video server in case of a standalone server.
4.	Workspace	The workspace is the central area used to display the IPDirector applications that the current user opens. Application windows can be freely resized and organized in the workspace.
5.	Status bar	The Status bar contains icons and fields that provide information on the following elements: default player channel, default bin, default playlist, loaded layout, minimized application windows, messages, connection status of IPDirector processes and external components, license validity. See section "Status Bar" on page 22 for more information on the elements available from the Status bar.
6.	Channel Status panel	The Channel Status panel contains the Recorder Status and the Player Status tabs. They make it possible to view the recorder and player channels connected to the XNet network, as well as status information. See section "Channel Status Panel" on page 18 for more information on the Channel Status panel.
7.	Layout panel	The Layout panel allows single-click access to your saved layouts. The Layout tab is described in details in "Layout Management" on page 30.

2.3. Menu Bar

2.3.1. Introduction



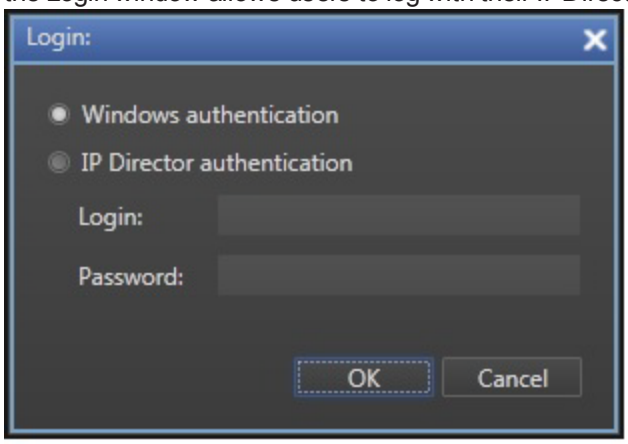
The Menu bar gives access to a series of menus and buttons which provides various commands described hereafter.

2.3.2. File Menu

Clicking the **File** option on the Menu bar displays the File menu with the following options:

Log Off User

Logs off the current user and displays the Login window.
In case the user had been logged in automatically through the Active Directory integration, the Login window allows users to log with their IPDirector access codes:



Exit

Exits IPDirector.

Note
Prior to log off or exit, it is best practice to save the current layout. The saved layout will automatically be displayed the next time the user logs on to IPDirector.

2.3.3. View Menu

Clicking the **View** option on the Menu bar displays the View menu.

Menu Item	Description
Application Toolbar	Displays or hides the Application bar
Status Panel	Displays or hides the Status bar at the bottom of the main window.
Layout Panel	Displays or hides the Layout tab on the left of the main window.
Green Information on VGA	Enables or disables the display of the green messages on the IPDirector main window when a specific action has been performed, e.g. CLIP CREATED, CLIP DELETED…etc.
Message Box	Displays or hides the message boxes. If the option is not selected, no message box will be displayed on the workspace. They will only be added in the **Message** field. See section "Message Pane" on page 24 for information on the **Message** field.

2.3.4. Windows Menu

Clicking the **Windows** option on the Menu bar displays the Windows menu.

Menu Item	Description
Close All Windows	Closes all the IPDirector applications opened in the current session.
<Name of open IPDirector Application(s)>	Gives the focus on the application corresponding to the selected item and brings it to the front.

2.3.5. Layout Menu

Clicking the **Layout** option on the Menu bar displays the Layout menu.

Menu Item	Description
New	Opens the New Layout window to create a new layout.
Open	Opens the Load Layout window to select and load an existing layout.
Save Layout	Saves the current layout into the database.
Save Current Layout as	Saves the current layout with a new name into the database.
Delete	Deletes an existing layout.

Menu Item	Description
Publish	Publishes a layout to a user group.
Properties	Displays and allows users to change the layout properties: name, icon, description, owner, publish options.
Import	Imports a layout.
Export	Exports one of the existing layouts.

The layout management is described in details in "Layout Management" on page 30.

2.3.6. Metadata Menu

The Metadata menu gives access to the single option **Manage Profiles...** which opens the window for defining, importing, exporting and updating the metadata on clips, logsheets, playlists, timelines and edits.

The management of metadata profiles is described in details in section "Metadata Profiles Management" on page 37.

2.3.7. Tools Menu

Tools Menu Options

Clicking the **Tools** option on the Menu bar displays the Tools menu.

The following commands are listed in the Tools menu:

Settings
Opens the Settings window which gives access to all the categories of IPDirector settings.
Some categories relate to a dedicated application and are detailed in the chapter dealing with that application. Other categories are general or common to several applications and are detailed in section "Settings" on page 91.

Logging Manager
Opens the Logging Manager window from which users can refresh associations between logs and clips.
See the IPLogger user manual for more information on that function.

Remote Control Manager
Opens the Remote Control Manager window.
When a MPlay Remote device or a BEPlay Remote device is connected to the IPDirector workstation, you can configure it by selecting the **Remote Control Manager** option from the Tools menu. The MPlay Remote and BEPlay Remote configuration is explained in details in section "Remote Control Management" on page 110.

Recreate all Thumbnails
Allows the creation of thumbnails from a particular EVS video server.
See section "Recreating all Thumbnails" on page 15.

Define Shortcuts
Opens the Define Shortcuts window which gives access to the different lists of keyboard shortcuts defined for most of the actions possible in IPDirector.
Some lists relate to a dedicated IPDirector application and are detailed in the chapter dealing with that application. Other lists are general or common to several applications and are detailed in section "Shortcut Definition" on page 105.

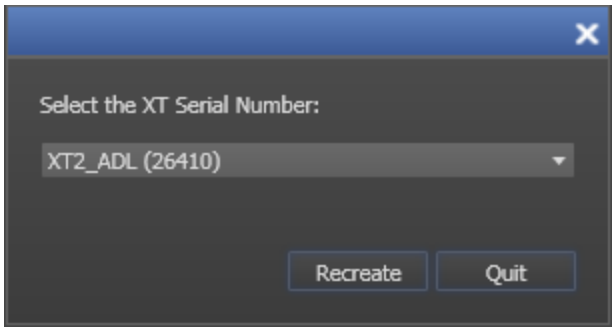
Transfer Monitoring
Opens the Transfer Monitoring window that provides detailed information on the clip, playlist or timelines transfers. Transfer monitoring is explained in section "Monitoring the Transfer Status" on page 15 .

Change Password
Allows the currently logged on users to change their own password.

Recreating all Thumbnails

Note
Please note that this function is only available for administrators and should be used cautiously.

This setting allows the creation of thumbnails from a particular EVS video server when there is an XML unit set to create thumbnails. Normally this process will function as a background process. If a system needs to have its clips thumbnails recreated, this window allows a manual initiation of that process.



The **Recreate** button will send XML files to the XFile or XTAccess on the network that will create thumbnails for the IPDirector system.

Monitoring the Transfer Status

Purpose

The Transfer Monitoring window provides detailed information on the clips, playlists, edits or timelines transfers, would they be scheduled, on-going, finished or failed.

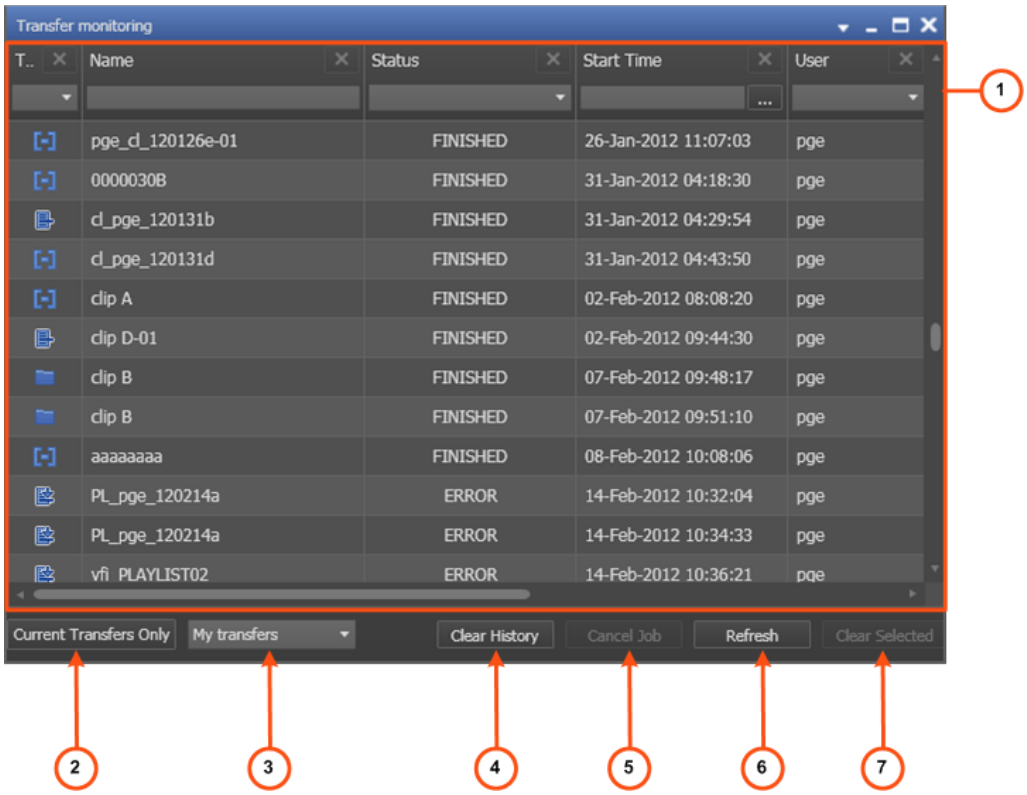
Accessing the Transfer Status Information

Information on the transfer status is available from different areas:

- In the Transfer Monitoring pane of the Database Explorer by clicking **Tools > Transfer Monitoring** from the Database Explorer toolbar. In this pane, you can only see transfer information about the item selected in the Elements grid.
- in the Transfer Monitoring window by clicking **Tools > Transfer Monitoring** from the Menu bar of the main IPDirector window.

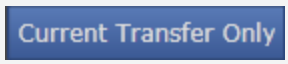
Illustration

The Transfer Monitoring window contains the areas highlighted on the following screenshot:



Area Description

The table below describes the various parts of the Transfer Monitoring window:

Part	Name	Description
1.	Transfer Jobs grid	Transfer jobs are presented in rows and all their associated parameters and metadata are in columns. Filters are available from fields displayed above each column and allow searches on a specific column of the grid.
2.	Current Transfer Only	This button gives access to the list of transfers currently in progress and scheduled. Its background is colored when it is enabled:  To go back to the list of all the transfers, click the **Current Transfers Only** button again.
3.	My Transfers / All Transfers option list	**My Transfers**: this option only shows the transfers initiated by the logged user. **All Transfers**: this option shows all the transfers initiated by all the users. It is only available for administrators / media managers or users with appropriate user rights.
4.	Clear History	This button removes all the transfers jobs from the list.
5.	Cancel Job	This button cancels the selected transfer job. It is available for transfers currently in progress.
6.	Refresh	This button allows users to manually refresh the view at a point in time. Otherwise, the system automatically refreshes the view.
7.	Clear Selected	This button removes the selected transfer job from the list.

2.3.8. Help Menu

Clicking the **Help** option on the Menu bar displays the Help menu.

The Help menu gives access to version and license checking features, together with Monitoring applications for the use of EVS Staff.

2.3.9. Freeze Workspace

Clicking the **Freeze Workspace** button on the Menu bar locks the IPDirector workspace to prevent from moving windows, resizing windows or opening a new IPDirector window.

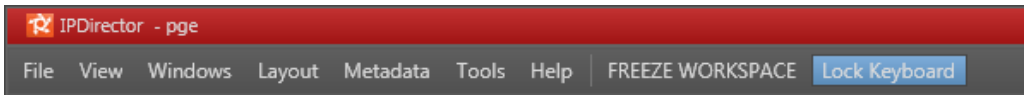
The button background color turns to blue. The operator can still open the layout shortcut panel and click a shortcut to change the layout.

The option is selected again to unfreeze the workspace.

2.3.10. Lock Keyboard

Clicking the **Lock Keyboard** button on the Menu bar locks the keyboard from use on the workstation.

The button background color changes to blue as a warning of this action and the background color of the window title bar turns to red. The control of the workstation is still possible with a mouse or touch screen.



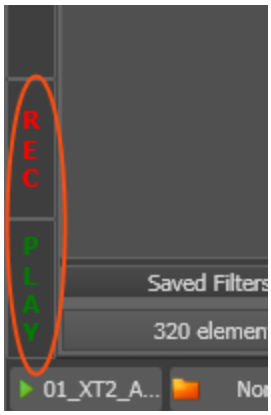
The keyboard can be unlocked by selecting the option again.

2.4. Channel Status Panel

2.4.1. Purpose

The Channel Status panel is made up of the Recorder Status panel and the Player Status panel. These panels allow the user to monitor the status of requested recorder or player channels.

By default, the panels are minimized to small REC and PLAY tabs on the bottom left side of the workspace as shown in the screenshot below.



2.4.2. Opening and Closing the Channel Status Panels

To open the Recorder Status panel or Player Status panel for the first time in a session, proceed as follows:

1. right-click the tab
2. Select the **View All Recorders** or the **View All Players** option respectively.

   The Recorder tab or the Player tab expands to the right:

To open the Recorder Status panel or the Player Status panel again during the same session, simply click the REC or PLAY tab.

To close the Recorder Status panel or Player Status panel, click again on the REC or PLAY tab.

2.4.3. Recorder Status Panel

Overview of the Recorder Status Panel

Depending on the EVS server configurations, up to 6 recorder channels can be displayed per server.

The Recorder Status panel provides the following information for each recorder channel displayed on the panel:

- recorder channel name
- remaining capacity on the recorder
- recording status
  - capacity information on a red background if the channel is recording
  - capacity information on a gray background if the channel is not recording
- **Lock** icon 

next to the remaining capacity information, if the channel is locked
- **Gang Group** icon  next to the remaining capacity information, if the channel is part of a gang group.

Recorder Status Tab Contextual Menu

A contextual menu appears when you right-click the Recorder Status tab.

The following table describes the commands available from the contextual menu.

Menu Item	Description
View Recorders	Expands the Recorder Status panel and displays the list of recorder channels as selected from the Define the Recorder Channels window.
Add/Remove Recorders	Allows the user to add recorders to or remove recorders from the Recorder panel. Selecting this item opens the Define the Recorder Channels window from which you can select the recorders to be added to or removed from the Recorder Status panel.
View All Recorders	Expands the Recorder Status panel and displays all recorder channels available on the XNet network.

Recorder Channel Contextual Menu

A contextual menu appears when you right-click a recorder area.

The following table describes the commands available from the contextual menu.

Menu Item	Description
Open Recorder Panel	Opens the Recorder Panel window for the selected channel. See the Recorder Panel user manual for more information on that window.
Remove	Removes a given recorder from the Recorder Status panel.

2.4.4. Player Status Panel

Overview of the Player Status Panel

Depending on the EVS server configurations, up to 6 player channels can be displayed per server.

The Player Status panel provides the following information for each player channel displayed on the panel:

- player channel name
- player status
  - **on air** red icon if the player channel is on air
  - **off air** gray icon if the player channel is off air

- **Lock** icon 

if the channel is locked
- **Gang Group** icon  if the channel is part of a gang group or a Fill & Key association.

Player Status Tab Contextual Menus

A contextual menu appears when you right-click the Player Status panel.

The following table describes the commands available from the contextual menu.

Menu Item	Description
View Players	Expands the Player Status panel and displays the list of player channels as selected from the Define the Player Channels window.
Add/Remove Players	Allows the user to add players to or remove players from the Player Status panel. Selecting this item opens the Define the Player Channels window from which you can select the players to be added to or removed from the Player Status panel.
View All Players	Expands the Player Status panel and displays all player channels available on the XNet network.

Player Channel Contextual Menus

A contextual menu appears when you right-click a player area.

The following table describes the commands available from the contextual menu.

Menu Item	Description
Open Control Panel	Opens a Control Panel window with the selected player channel assigned to it. See the Control Panel user manual for more information on that window.
Remove	Removes a given player from the Player Status panel.

2.5. Status Bar

2.5.1. Introduction

The Status bar contains icons that provide information on the following elements:

- default channel
- default bin
- default playlist
- loaded layout
- minimized application windows
- messages
- connection status of IPDirector processes and external components
- license

The Status bar can be hidden from the View menu of the Menu bar.

2.5.2. Default Item Icons

Purpose

The default item icons inform whether a default player channel, bin, or playlist has been defined. If this is the case, the name of the default channel, bin, or playlist will be displayed.

Default Player Channel

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

If a default player channel has been defined, the **Default Player Channel** icon is green and is followed by the name of the default player channel. A tooltip can be displayed by moving the mouse over the area.

If no default player channel is defined, the **Default Player Channel** icon is orange and followed by **None**.

See the Channel Explorer user manual for more information on how to set and how to clear a default player channel.

Default Bin

If a default bin has been defined, the **Default Bin** icon is green and is followed by the name of the default bin.

If no default bin is defined, the **Default Bin** icon is orange and followed by **None**.

You can define a default bin in the Database Explorer, via the **Set as Default Bin** option available from the Bin contextual menu. See the Database Explorer user manual.

You can clear the default bin by double-clicking the **Default Bin** field.

Default Playlist

If a default playlist has been defined, the **Default Playlist** icon is green and is followed by the name of the default playlist. A tooltip can be displayed by moving the mouse over the area.

If no default playlist is defined, the **Default Playlist** icon is orange and followed by **None**.

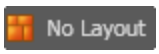
You can define a default playlist in the Database Explorer, via the **Set as Default Playlist** option available from the Playlist contextual menu. See the Playlist Panel user manual.

You can clear the default playlist by double-clicking the **Default Playlist** field in the Status bar.

2.5.3. Loaded Layout Icon

If a layout is currently loaded in IPDirector, the **Loaded Layout** icon is green and is followed by the name of the loaded layout.

If no layout is loaded, the **Loaded Layout** icon is orange and followed by **No Layout**.



See section "Layout Management" on page 30 for information on how to load a layout.

You can clear the layout by double-clicking the **Loaded Layout** field.

Warning
Clearing the current layout will clear the entire user interface of all open windows! Use this with caution.

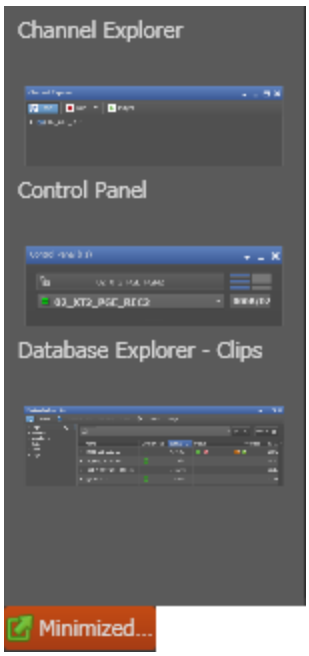
2.5.4. Minimized Windows

The **Minimized** field indicates whether windows have been minimized and allows the users to restore the minimized windows.

When no window is minimized, the **Minimized** field has a gray background.

When one or more windows have been minimized, the **Minimized** field has an orange background.

To restore a minimized window, click the **Minimized** field and select the minimized display of the window you want to restore.

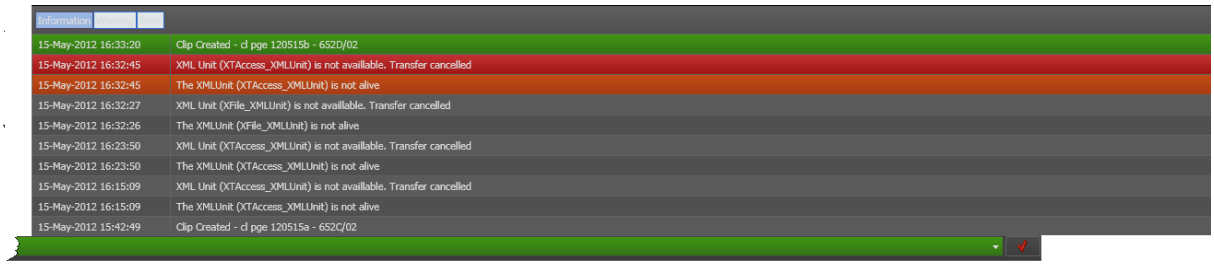


2.5.5. Message Pane

Purpose

The **Message** field displays the most recent message in the Status bar.

The Message panel expands by clicking the **arrow** on the right of the **Message** field. It provides a quick display of the information, warning and error messages generated during the current session.



Messages Display

The messages include the following information:

- the date and time when the message was generated
- the message itself

The messages are highlighted on a different background color depending on the type of message.

- An information message is highlighted in green.
- A warning message is highlighted in orange.
- An error message is highlighted in red.

Message Acknowledgment

As soon as a message appears, the **Acknowledge** button turns red.

Users can acknowledge the message by clicking the button. This changes the background of the message to gray.

This helps the users to distinguish the messages that have been dealt with from the ones that have not.

Messages Filter

Messages can be filtered according to their type thanks to the **Message Type** buttons displayed on the top left corner of the expanded **Message** field: **Information**, **Warning**, **Error**.

By default, all the filters are enabled and all the buttons have a blue background.

To disable a filter and remove the corresponding messages from the list, users must click the **Message Type** button for that filter. The button is then displayed on a gray background.

2.5.6. Process Status Icons

The background color of the **Status** icons provides information on the status of the processes that run in the background:

- When the background color is green, the process is running or the connection is established.
- When the background color is orange, the process is not running or the connection is not established.

For more information on these processes, refer to the Technical Reference manual.

Icon	Description
	Status icon for the IPDirector Routing process
	Status icon for the database connection
	Status icon for the SynchroDB process
	Status icon for the IPScheduler process
	Status icon for the VTR Engine process
	Status icon for the EVS video server connection. • green icon: the Routing process works (the IPDirector Routing process icon is green) and there is at least one EVS server visible by IPDirector on the setup. • orange icon: the Routing process works (the IPDirector Routing process icon is green) and IPDirector does not detect any EVS server (possible causes: no SynchroDB process managing the server, no EVS server physically connected to the setup,...). • red icon: the Routing process does not work properly (the IPDirector Routing process icon is red).
	Status icon for the Router Control.

2.5.7. License Icon

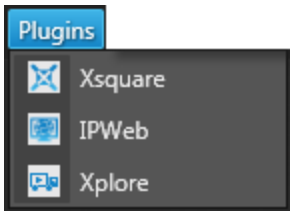
The background color of the **License** icon turns orange when one of the IPDirector licenses is expiring within two weeks.

3. Plugins Management

Introduction

Predefined external web pages or ActiveX can be called from the IPDirector main window. This is done from the **Plugins** button which is added to the IPDirector Application bar, provided that the function has been configured and that appropriate user rights have been granted.

Here is an example of the plugins which can be available from the **Plugins** button:



The pages called display in windows like other IPDirector modules and the windows can be saved in layout.

Warning
The plugin works with IPDirector process, so it uses graphical resources. To use Xplore and IPDirector, it is highly recommended to start Xplore from outside IPDirector rather than from the plugin interface.

Plugins Configuration

Plugin Definition

The plugin definition is described in an XML file stored locally on the IPDirector workstation in one of the following directories:

- %appdata%\EVS Broadcast Equipment\IP-Director\PluginsConfiguration
- %programfiles%\EVS Broadcast Equipment\IP-Director\PluginsConfiguration (for 32bits platforms)
- %programfiles(x86)%\EVS Broadcast Equipment\IP-Director\PluginsConfiguration (for 64bits platforms)

The XML file must contain:

- the plugin name (as it will be diplayed in the Plugins menu)
- the web page URL of the plugin (if webpage)
- the ProgID or ClassID of the ActiveX (if ActiveX)
- the maximum and minimum size of the plugin window
- the default size of the plugin window

- the reference to the **Plugin** icon file which will be displayed in the **Plugins** menu. Icons files are located in EVS Broadcast Equipment\IP-Director\PluginsConfiguration\IconSet.

Note
A plugin can be available from a dedicated labeled button from the Application bar rather than from the **Plugins** menu. To do so, the plugin name, such as Xplore, must be written as the label tag for button in the XML file.

The structure of the XML file is described in the plugin.xsd file that can be found in the same directory as the XML file (%programfiles%\EVS Broadcast Equipment\IP-Director\PluginsConfiguration).

Example of a Plugins XML File

```
<?xml version="1.0" encoding="UTF-8"?>
- <plugins>
  - <plugin id="c9a87661-8b52-4ac7-8614-25e78655f855">
      <name>Xsquare</name>
      <url>http://127.0.0.1:9004/</url>
      <minsize height="380" width="655"/>
      <maxsize height="768" width="1024"/>
      <defaultsize height="380" width="655"/>
    - <button>
        <label>Plugins</label>
        <icon>C:\Program Files (x86)\EVS Broadcast Equipment\IP-
          Director\PluginsConfiguration\IconSet\Xsquare.png</icon>
      </button>
    </plugin>
  - <plugin id="c9a87661-8b52-4ac7-8614-25e78655f857">
      <name>IPWeb</name>
      <url>http://90.193.88.251/IPWebBrowser/Default.aspx</url>
      <minsize height="380" width="655"/>
      <maxsize height="768" width="1024"/>
      <defaultsize height="380" width="655"/>
    - <button>
        <label>Plugins</label>
        <icon>C:\Program Files (x86)\EVS Broadcast Equipment\IP-
          Director\PluginsConfiguration\IconSet\IPWeb.png</icon>
      </button>
    </plugin>
  - <plugin id="c9a87661-8b52-4ac7-8614-25e78655f8458">
      <name>Xplore</name>
      <url>http://127.0.0.2:9004/</url>
      <minsize height="380" width="655"/>
      <maxsize height="768" width="1024"/>
      <defaultsize height="380" width="655"/>
    - <button>
        <label>Plugins</label>
        <icon>C:\Program Files (x86)\EVS Broadcast Equipment\IP-
          Director\PluginsConfiguration\IconSet\Xplore.png</icon>
      </button>
    </plugin>
</plugins>
```

Example of a Plugins XSD File

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" version="1.0" >
 <xs:simpleType name="guid">
  <xs:restriction base="xs:string">
   <xs:pattern value="[a-fA-F0-9]{8}-[a-fA-F0-9]{4}-[a-fA-F0-9]{4}-[a-fA-F0-9]{4}-[a-fA-F0-9]{12}"/>
  </xs:restriction>
 </xs:simpleType>
 <xs:simpleType name="progid">
  <xs:restriction base="xs:string">
   <xs:maxLength value="39"/>
   <xs:pattern value="[a-zA-Z][a-zA-Z0-9.]+"/>
  </xs:restriction>
 </xs:simpleType>
 <xs:complexType name="size">
  <xs:attribute name="width" type="xs:nonNegativeInteger" use="required"/>
  <xs:attribute name="height" type="xs:nonNegativeInteger" use="required"/>
 </xs:complexType>
 <xs:element name="plugins">
  <xs:complexType>
   <xs:sequence>
    <xs:element name="plugin" minOccurs="0" maxOccurs="unbounded">
     <xs:complexType>
      <xs:sequence>
       <xs:element name="name" type="xs:string"/>
       <xs:choice>
        <xs:element name="url" type="xs:anyURI"/>
        <xs:element name="clsid" type="guid"/>
        <xs:element name="progid" type="progid"/>
       </xs:choice>
       <xs:element name="minsize" type="size" minOccurs="0"/>
       <xs:element name="maxsize" type="size" minOccurs="0"/>
       <xs:element name="defaultsize" type="size" minOccurs="0"/>
       <xs:element name="button" minOccurs="0" maxOccurs="1">
        <xs:complexType>
         <xs:sequence>
          <xs:element name="label" type="xs:string"/>
          <xs:element name="icon" type="xs:string" minOccurs="0"/>
          <xs:element name="groupVisibility" minOccurs="0" maxOccurs="1">
           <xs:complexType>
            <xs:sequence>
             <xs:element name="groupName" type="xs:string" minOccurs="0" maxOccurs="unbounded"/>
            </xs:sequence>
           </xs:complexType>
          </xs:element>
         </xs:sequence>
        </xs:complexType>
       </xs:element>
      </xs:sequence>
      <xs:attribute name="id" type="xs:ID" use="required"/>
     </xs:complexType>
    </xs:element>
   </xs:sequence>
  </xs:complexType>
 </xs:element>
</xs:schema>
```

User Rights

The **Allow Using Plugins** user right must have been selected for the user to have the Plugins button displayed in the Application bar of the IPDirector main window.

4. Layout Management

4.1. Context of Use

Depending on the job content and personal preferences, most users have a preferred screen layout (open windows and window positions).

The purpose of the Layout features in IPDirector is to present users their personalized screen layout every time they log on to IPDirector.

Pre-defined layouts, specifically dedicated to a category of users, are managed in the User Manager. They can be assigned to a user by the system administrators. So, this layout becomes the default layout for the user.

Depending on the user rights, a default layout will be assigned to the users or they will be able to create their own layouts by themselves or to import a layout.

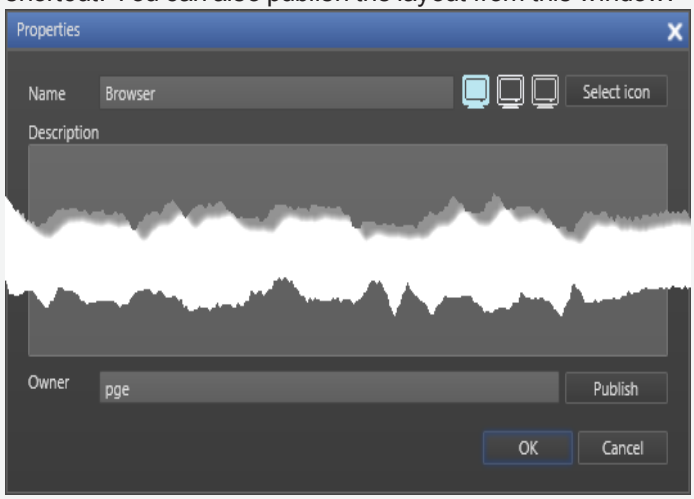
Shortcuts can be created for the existing layouts, so, a layout can be opened in one-click.

The layout shortcuts are defined and selected from the Layout panel. The Layout panel opens when you click the Layout tab on the left screen border.

4.2. Possible Operations on Layouts and Shortcuts

Layout Menu

The following table describes the options available from the Layout menu on the main Menu bar.

Menu Item	Description
New	Opens the New Layout window to create a layout. See section "How to Define a Layout" on page 32.
Open	Opens the Load Layout window from which you can select an existing layout. This includes layouts created by the user and imported layouts. The IPDirector windows associated to the selected layout will then open on screen.
Save Layout	Saves the layout of the open windows with the name of the currently loaded layout, which is displayed in the Status bar of the Main window. See section "How to Define a Layout" on page 32.
Save Current Layout as	Opens the Save Current Layout As window to allow you to give a name to the current layout. See section "How to Save a Layout with a New Name" on page 34.
Delete	Opens the Delete Layout window from which you can select the layout(s) to delete.
Publish	Opens the Publish window from which you can publish a layout to selected users.
Properties	Opens the Properties window from which you can change the name and/or the icon of the layout and the layout shortcut. You can also publish the layout from this window. 

Menu Item	Description
Import	Allows to import a layout. The imported layout will therefore be available from the Layout menu.
Export	Allows to export a layout as xml file.

Layout Shortcut Contextual Menu

A contextual menu is displayed when you right-click a **Layout** shortcut button in the Layout panel.

The following table describes the commands available from the contextual menu.

Menu Item	Description
Rename	Renames the layout shortcut in the Layout panel but does not rename the corresponding layout.
Delete	Deletes the layout shortcut but does not delete the corresponding layout.
Properties	Opens the Properties window from which you can change the name and/or the icon of both the layout and the layout shortcut. You can also publish the layout.

4.3. How to Define a Layout

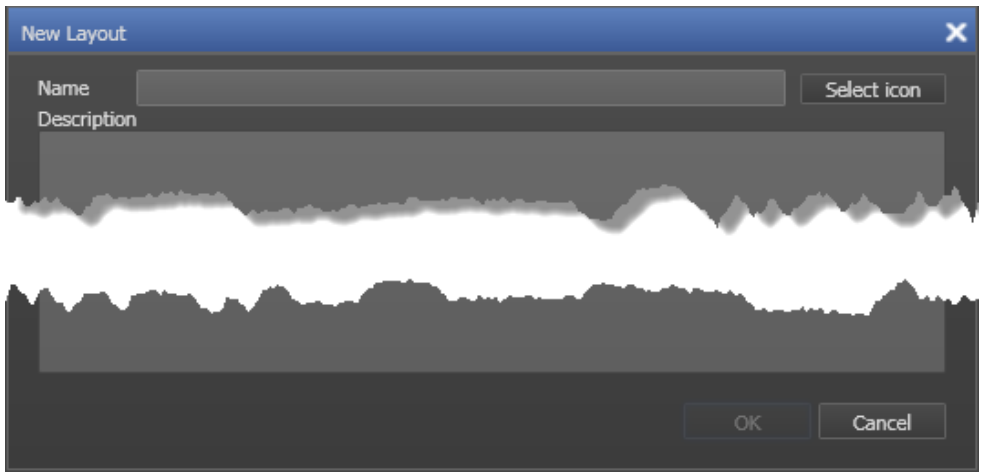
This section describes the way to define a new layout, for users who have the appropriate user rights.

You can open and arrange the selected windows before creating the layout or you can first create the layout and arrange the windows later on and save them with the layout name.

To define a layout, proceed as follows:

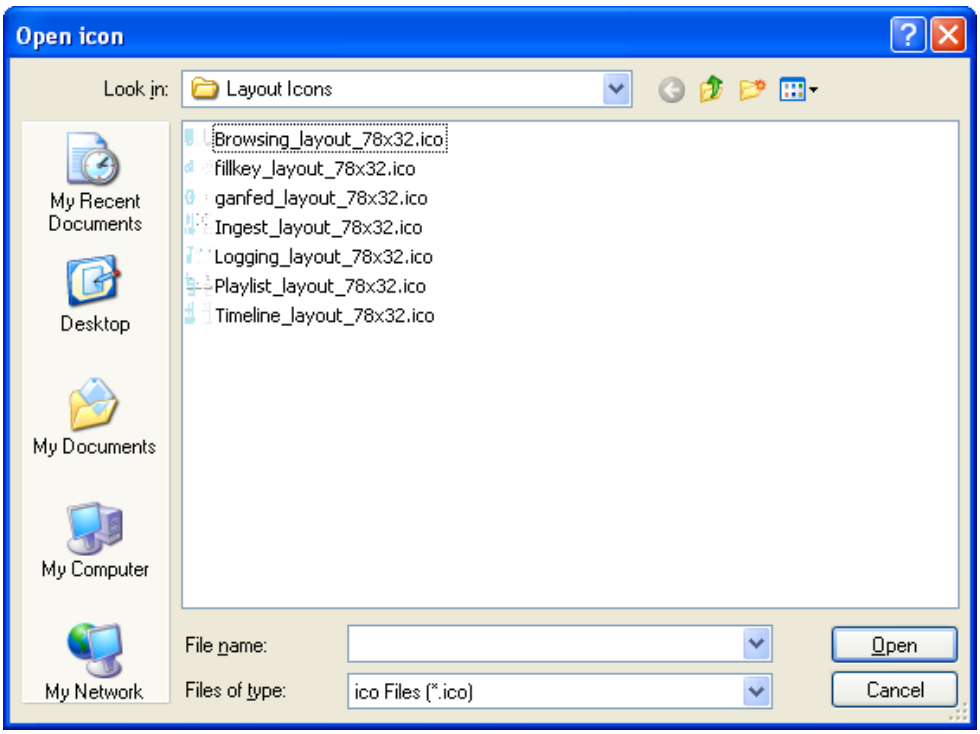
1. Select **New** in the Layout menu of the IPDirector Menu bar.

   The New Layout window opens.



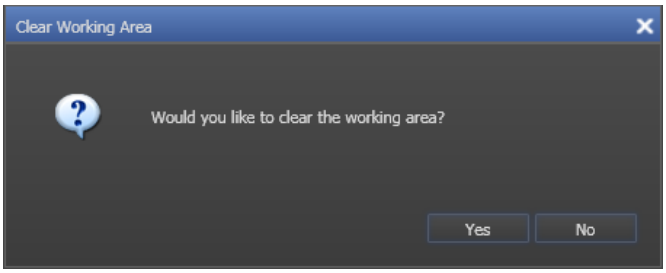
2. Enter a name for the layout.

3. If you want to associate an icon to the layout:
   a. Click the **Select Icon** button
   b. Select an icon file from the Open Icon window



   c. Click **Open**.
4. Click **OK**.

   The following message is displayed:



5. Click
   - **Yes** if you want to start from a clean working area

   or
   - **No** if you want to create a new layout based on your current working area.

   The layout name is displayed in the Status bar of the main window 

.
6. In case you have clicked **Yes**,
   a. open and arrange the selected windows.
   b. Select **Save Layout** from the Layout menu.

The current work area is saved with the name of the current layout.

Steps 5 and 6 may be done later on, provided that you first open the layout with the **Layout > Open** option.

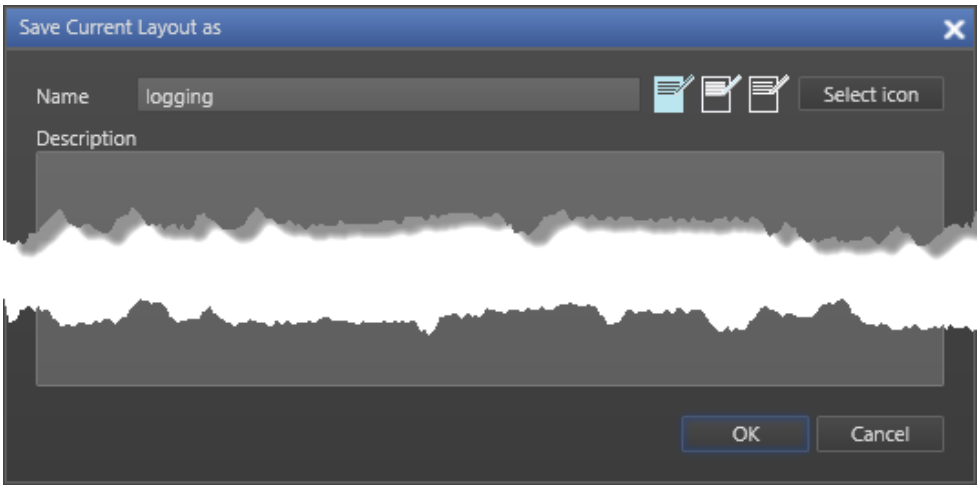
4.4. How to Save a Layout with a New Name

Once you have arranged some windows in the way you want them to appear, you can save the current layout with a new name. To do so, proceed as follows:

1. Select **Save current layout as** in the Layout menu.

   The Save Current Layout As window appears.

2. Enter a name for the layout.



3. If you want to associate an icon to the layout:
   a. Click the **Select Icon** button
   b. Select an icon file from the Open Icon window
   c. Click Open
4. Click **OK**.

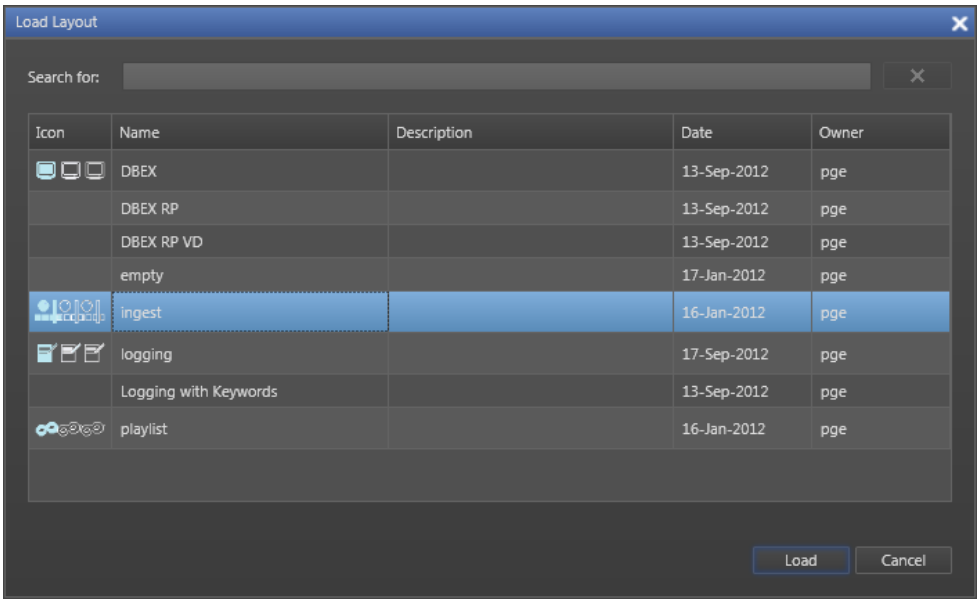
   The name of the new layout is displayed in the Status bar of the main window.

4.5. How to Create a Layout Shortcut

To create a layout shortcut, proceed as follows:

1. Click the Layout tab on the left screen border to open the Layout panel.
2. Click the **Add Shortcut** button from the Layout panel.

   The Load Layout window opens:



3. Select a layout from the list.
4. Click **Load**.

   The layout is available from the Layout panel:

4.6. How to Open an Existing Layout

From the Layout Menu

To open an existing layout from the Layout Menu, proceed as followins:

1. Click the **Layout** option from the main Menu bar
2. Select the **Open** option from the Layout menu.
3. Select a layout from the Load Layout window.
4. Click **Load**.

The different windows corresponding to the selected layout open.

From the Layout Panel

To open an existing layout by using the layout shortcut, proceed as follows:

1. Click the Layout tab on the left screen border to open the Layout panel.

2. Click the **Layout** shortcut button corresponding to the layout you want to load.

The different windows corresponding to the selected layout open.

5. Metadata Profiles Management

5.1. Introduction

5.1.1. Metadata, Profiles, User Fields

Metadata is customer-defined data used to describe or classify A/V material.

A metadata profile is made of a set of user fields which are managed together.

Metadata user fields are created and associated into metadata profiles from the Metadata Profiles Management window in IPDirector, or they can be imported into the system in the form of an .XML file.

A metadata profile can be associated with various items such as clips, playlists, timelines and edits and, then, metadata values can be attributed to the item by entering specific values in the user fields.

The metadata from the metadata profile can be displayed as columns in the Elements grid of the Database Explorer, so searches can be performed on the user fields values.

The profiles defined for logsheets slightly differ from profiles defined for other media items as two profiles can be associated with a logsheet:

- a profile for the logsheet metadata
- a profile for the log metadata.

These two profiles are selected from the list of metadata profiles.

Depending on the user rights defined, the users will be allowed to manage profiles, or to choose a profile at creation or edit of an item, or they will be forced to use the default profile imposed by the administrator.

For more information on how to use the metadata in the IPDirector applications, refer to:

- the Control Panel user manual ("Metadata Tab")
- the Control Panel user manual ("Save Clip Window")
- the Database Explorer user manual
- the Playlist Panel user manual
- the Ingest Scheduler user manual
- the IPLogger user manual ("Step 1: Defining the Logsheet Characteristics")
- the IPLogger user manual ("Create a New Log Window")

5.1.2. Metadata Profiles Management Window

Accessing the Metadata Profiles Management Window

To access the Metadata Profiles Management window, select **Manage Profiles** from the Metadata menu of the IPDirector Menu bar.

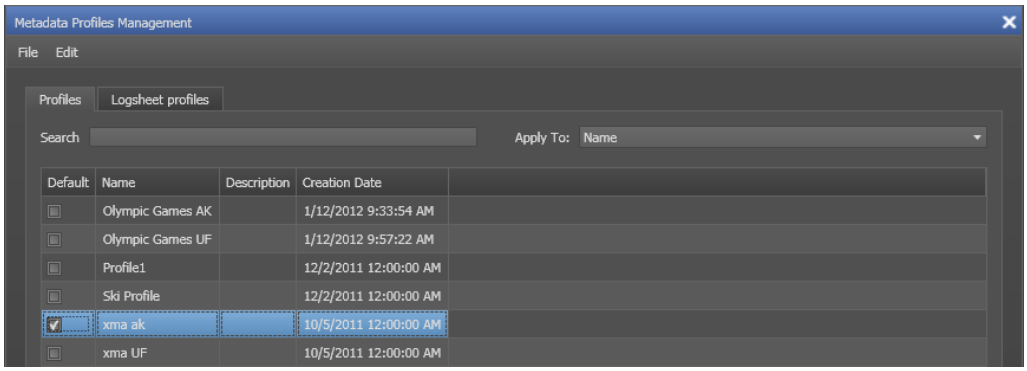
This window can only be accessed if you have the appropriate user right.

The window contains two tabs:

- The Profiles tab that lists all the metadata profiles.
- The Logsheet Profiles tab that lists the profiles specifically dedicated to logsheets.

A File menu and an Edit menu are available and allow actions such as creation, edit, deletion, import, and export of profiles.

Profiles Tab



The Profiles tab gives the list of available profiles.

Creation of profiles and definition of the user fields to be present in each profile will be done from the Profiles tab.

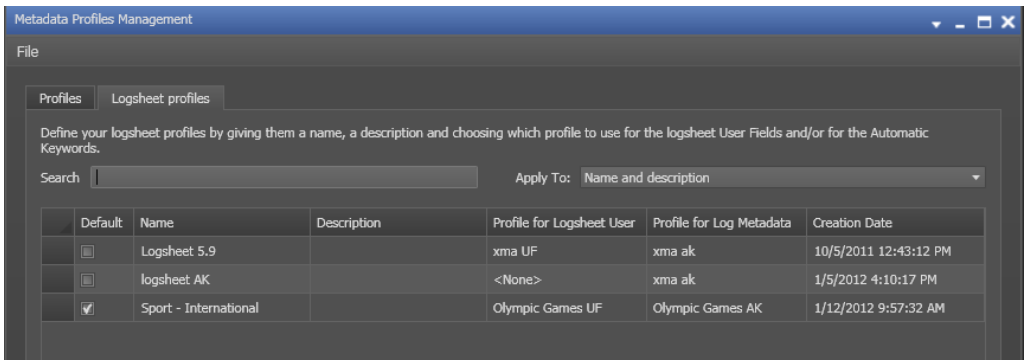
These profiles are intended to be attributed to clips, playlists, timelines or edits.

A search operation can be performed either on the profile name, on the profile description or on both by entering a few letters in the **Search** field.

A profile can be set as the default profile from the **Default** column:

- This profile will be the default profile displayed at item creation for users who do not have the right to choose a metadata profile.
- For users who have the right to choose a metadata profile, this profile will be displayed the first time each user create an item. Afterwards, each user who will have chosen another metadata profile at item creation will get this new current profile at creation of the next item.

Logsheet Profiles Tab



This area manages the list of available logsheet profiles which can be associated with a logsheet.

A logsheet profile consists of the selection of two profiles available from the Profiles tab:

- a profile for logsheet user fields
- a profile for log metadata.

A search operation can be performed either on the logsheet profile name, on the logsheet profile description or on both by entering a few letters in the **Search** field.

A logsheet profile can be set as the default logsheet profile from the **Default** column:

- The selected logsheet profile and its user fields will be applied by default to the new logsheets for users who do not have the right to choose a metadata profile.
- For users who have the right to choose a metadata profile, this logsheet profile and its user fields will be displayed the first time each user create a logsheet. Afterwards, each user who will have choosen another metadata profile at logsheet creation will get this new current ptofile at creation of the next logsheet.

5.2. Creating Profiles

5.2.1. Introduction

Creation of metadata profiles and definition of the user fields to be present in each profile will be done from the Profiles tab.

A profile is a flat structure: there is no possibility to build trees with user fields under other user fields.

When you create a new metadata profile, you will be able to choose existing user fields and/or to define new user fields.

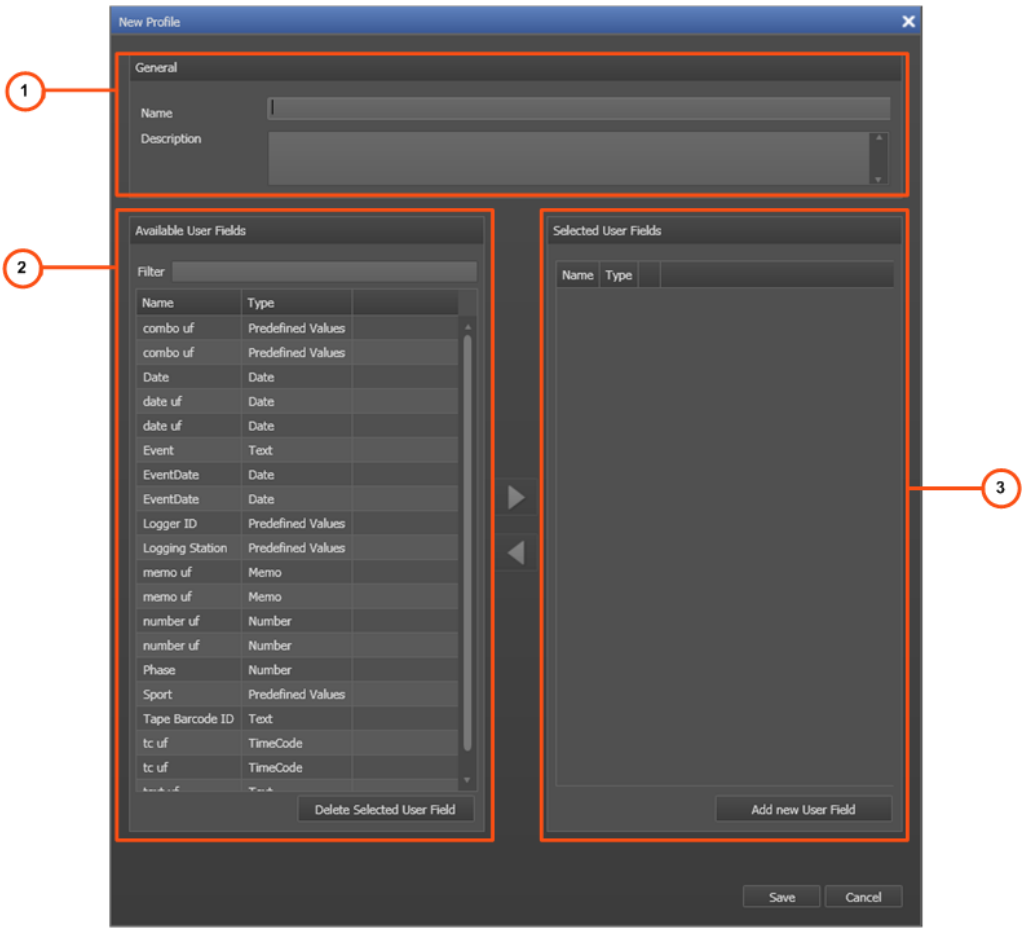
The user fields of each profile will then be listed in the available columns of the Database Explorer. The column corresponding to a user field could thus be made visible and searches could be performed on the user field values. The name of the user field appears as heading of the column in the Database Explorer.

A logsheet profile is cretaed from the Logsheet Profiles tab. A profile is selected for logsheet user fields and/or a profile is selected for log metadata. A name is given to the logsheet profile.

5.2.2. New Profile Window

Illustration

The Metadata Profiles Management window contains the areas highlighted on the screenshot below:



Area Description

The table below describes the various parts of the New Profile window:

Part	Name	Description
1.	General area	It is used to enter the **Name** and a **Description** for the profile.
2.	Available User Fields area	It gives the list of the available user fields, and their corresponding type, which can be selected and associated to a profile. It allows users to filter the list through the **Filter** field or to delete one or several user field(s) by clicking the **Delete Selected User Field** button.
3.	Selected User Fields area	It gives the list of the user fields selected for the new profile and their corresponding type. This list is empty when creating a new profile. It allows users to create a new user field and add it to the profile by clicking the **Add New User Field** button.

5.2.3. User Field Types and Display

All the types of user fields are listed hereafter with the way they appear in the element metadata area.

Text (64 characters)

The **Text** user field type will appear on screen as a free-text field:

Memo (text, unlimited number of characters)

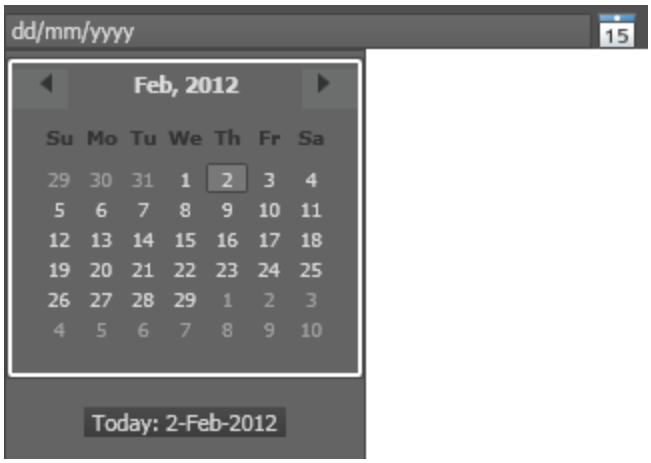
The **Memo** user field type will appear on screen as a free-text field:

TC (for Timecode)

The **TC** user field type will appear on screen as a timecode field:

Date

The **Date** user field type will appear on screen as a Date field with a **Calendar** button giving access to a calendar:

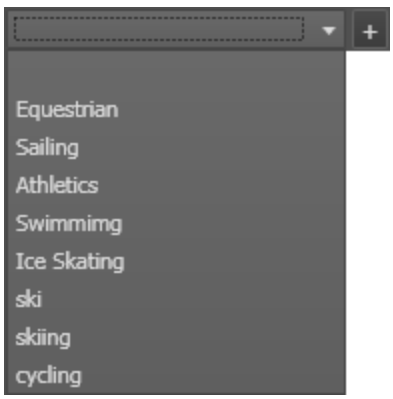


Number

The **Number** user field type will appear on screen as a field with up and down arrows to increase or decrease the value.

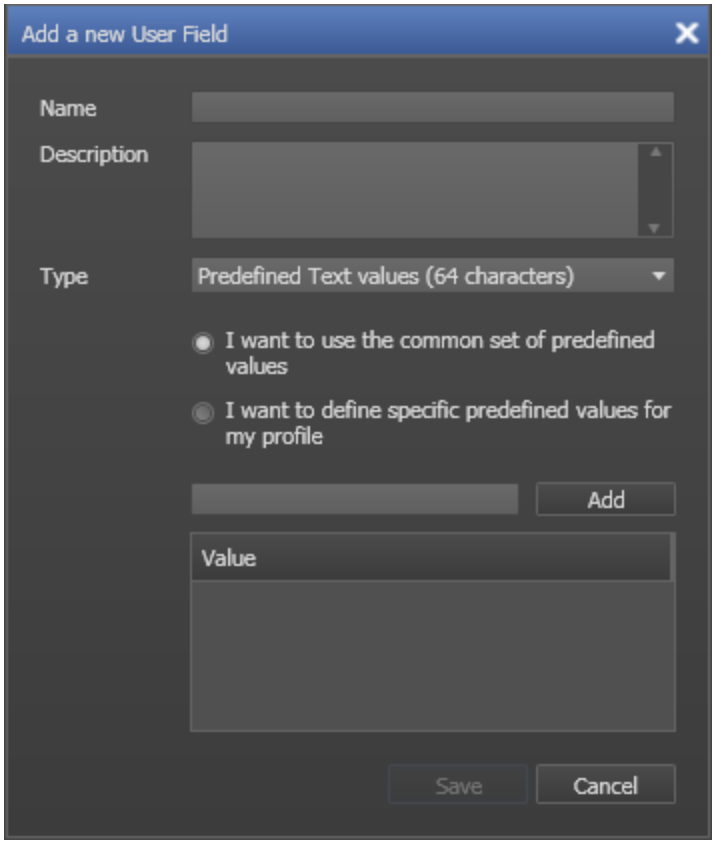
Predefined Text Values (64 characters)

The **Predefined Text values** user field type will appear on screen as a drop-down list displaying all the values which have been created for the user field:



A **+** button displayed on the right of the combo box allows you to add additional values in the list of predefined values.

When this user field type is selected, the expanded Add New User Field window is displayed and gives the users the choice between two options.



- It is recommended to use the common set of predefined values when
  - The metadata will be used in only one profile, or
  - The metadata will be used in several profiles but the predefined values will always be the same.
- It is recommended to define specific predefined values when
  - The metadata will be used in several profiles and the predefined values will differ depending on the profile.

The users will then have to enter the values they want to be available in the new profile.

5.2.4. How to Create a New Profile

To create a new profile, proceed as follows:

1. In the Profiles tab, do one of the following:
   - from the File Menu, select **New**
   - right-click in the Profiles list and select **New** from the contextual menu.

   The New Profile window opens. See section "New Profile Window" on page 40.
2. Enter a profile name.
3. (optional) Enter a description for the profile.

4. If the required user fields already exist, associate them to your profile by selecting them in the Available User Fields area in one of the following ways:
   - select the user field and then click the right arrow
   - double-click the user field
   - drag it onto the Selected User Fields area at the position where you want to drop it.
5. If the required user fields do not already exist, you need to add new user field as described in section "How to Create a User Field" on page 44.

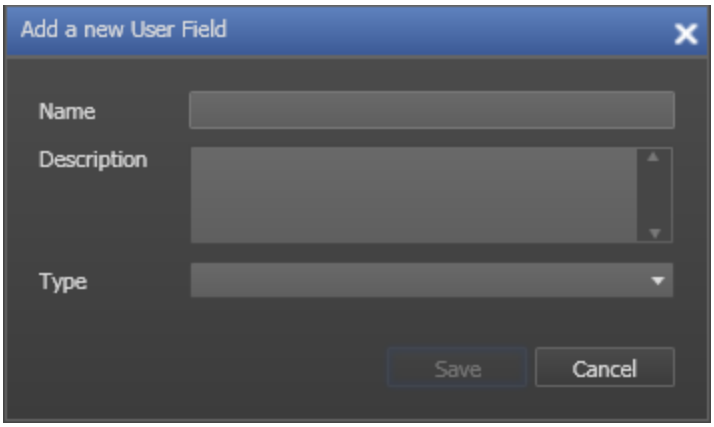
   All the added user fields are listed in the Selected User Fields area.
6. Re-order the user fields by drag-and drop operation in the way you want them to appear in the metadata area related to the element.
7. Click **Save**.

The new profile is created and appears in the Profiles tab of the Metadata Profiles Management window.

5.2.5. How to Create a User Field

To create a new user field from the New Profile window, proceed as follows:

1. Click the **Add New User Field** button. The Add New User Field window opens.



2. Fill in the **Name** field.
3. (optional) Enter a description in the **Description** field
4. Choose a type for the new user field from the drop-down list. See section "New Profile Window" on page 40.
5. Click the **Save** button.

All the selected and/or added user fields are listed in the Selected User Fields area.

5.2.6. How to Define Values for a User Field with Predefined Text Values

It is possible to define values for a user field which type is predefined text value.

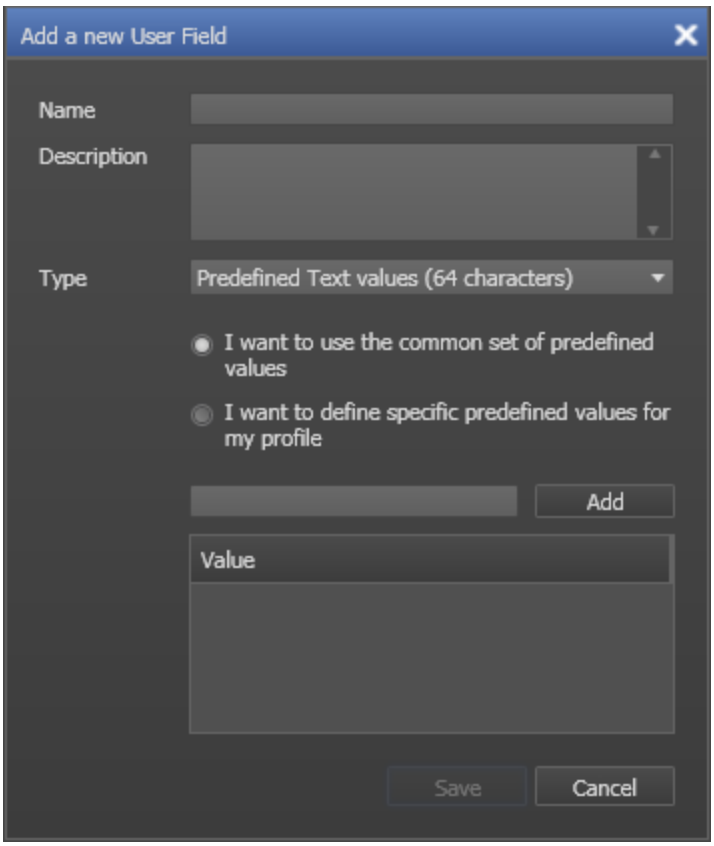
To do so, proceed as follows:

1. in the New Profile window, click the **Add New User Field** button and select **Predefined Text Values** in the **Type** field

   OR

   in the New Profile window or in the Edit Profile window, click the **Edit** button next to the user field which type is predefined text value

   The expanded Add New User Field window is displayed.



2. Enter a value in the field above the list of values.
3. Click **Add**.

The value is listed in the Value list.

If it is a common set of predefined values:

- the new value will be added to the edited profile and
- all profiles containing this user field are updated

If it is a specific set of predefined values:

- the new value will only be added to the edited profile.

5.2.7. How to Create a Logsheet Profile

To create a logsheet profile, proceed as follows:

1. In the Logsheet Profiles tab, do one of the following:
   - in the File Menu, select **New**, or
   - right-click the logsheet profile list and select **New** from the contextual menu.

   A new line appears in the list. It is highlighted and the cursor is placed in the **Name** field to allow the user to enter a name for the logsheet profile.
2. Enter a profile name.
3. (optional) Enter a description for the profile.
4. Click at the right of the cell in the **Profile for Logsheet User Fields** column.

   An arrow appears.
5. Click the arrow to display the list of available profiles.
6. Select a profile to be used as Logsheet User Fields profile.
7. Click at the right of the cell in the **Profile for Log Metadata** column.

   An arrow appears.
8. Click the arrow to display the list of available profiles.
9. Select a profile to be used for the Log Metadata.

5.3. Editing Profile and User Fields

Possible Actions

Once a profile has been created, it is still possible to edit it. The profile name or the profile description can be modified. User fields can be added, removed, updated or re-ordered by a drag-and drop operation.

Limitations

Adding a User Field to an Existing Profile

If a user field is added to an existing profile, it is added to the corresponding metadata profile associated to existing elements and the user field will have an empty value.

Removing a User Field from an Existing Profile

If some A/V elements already reference the profile, a warning message is displayed.

Answering **Yes** will remove the fields from the profile and all the previously entered data for that profile will be cleared from the user fields table.

How to Edit a Profile

To edit a profile, proceed as follows:

1. In the Profiles tab, select the profile you want to edit.
2. Do one of the following:
   - Select **Edit** from the File menu.
   - Right-click the profile line and select **Edit** from the contextual menu.

   The Edit Profile window, similar to the Add New Profile window, opens.
3. Make the desired changes: add, remove, move user fields or rename the profile.

How to Edit a User Field

To edit a user field (name, description or type):

1. In the Selected User Fields area of the New Profile window, click the **Edit** button at the right of the user field you want to edit.

   The Edit a User Field window, similar to the Add New User Field window, opens.
2. Make the desired change (name, description or type).
3. Click **Save**.

5.4. Deleting an Available User Field

Rules and Constraints for the Deletion of a User Field

- If the user field is not present in another profile and if no element references the user field, the user field is deleted.
- If the user field is present in a bin rule, a warning message is displayed.
- If some A/V elements already reference the user field, or

  if the user field is present in the Selected User Fields list of another profile, even if it is not referenced,

  then, a warning message is displayed.

  Answering **Yes** will remove the fields from the profile and all the previously entered data for that profile will be cleared from the user fields table.

How to Delete an Available User Field

The user can delete a user field from the list of available user fields either from the New Profile window or from the Edit Profile window. To do so, proceed as follows:

1. In the Available User Fields list, select the user field to be deleted.
2. Click the **Delete selected User Field** button.

The user field is deleted from the Available User Fields list and will no longer be available.

5.5. Other Possible Actions on Metadata Profiles and User Fields

How to Copy a Profile

1. Select the profile to be copied.
2. Do one of the following:
   - Select **Copy** from the Edit menu
   - Right-click the profile and select **Copy** from the contextual menu.
3. Enter a name for the new profile in the Enter New Profile Name window.
4. Click **OK**.

The new profile is created with the same description and user fields as the original one.

How to Import a Profile

1. Select the profile or the logsheet profile to import.
2. Select **Import Profiles** from the File menu.
3. Select the .XML file that contains the metadata profile to import from the Import Profiles window.
4. Click **Open**.

How to Export a Profile

1. Select the profile or the logsheet profile to export.
2. Select **Export Selected Profiles** from the File menu.
3. Select the folder where you will export the file in the **Save in** field of the Export Profile window and type a file name for the profile to export in the **File Name** field.
4. Click **Save**.

How to Export the Default Profile

1. Select the profile to export.
2. Select **Export Current Profiles** from the File menu.
3. Select the folder where you will export the file in the **Save in** field of the Export Profile window and type a file name for the profile to export in the **File Name** field.
4. Click **Save**.

How to Delete a Profile

Note
A profile can be deleted only if it is not associated to A/V items, nor to a logsheet profile.

1. Select the profile to be deleted.
2. Do one of the following:
   - Select **Delete** from the Edit menu
   - Right-click the profile and select **Delete** from the contextual menu.

A profile deleted permanently disappears from the list.

A profile marked as deleted appears in an italic format; it is no more accessible but it could nevertheless be recovered later.

Tip
A profile marked as deleted can be recovered in one of the following ways:
- select the profile and then select **Undelete** from the Edit menu,
- right-click the profile and select **Undelete** from the contextual menu.

How to Delete a Logsheet Profile

Note
A logsheet profile used in a logsheet that has at least one log cannot be deleted.

1. In the Logsheet Profiles tab, select the logsheet profile to be deleted.
2. Right-click the logsheet profile.
3. Select **Delete** from the contextual menu.

The logsheet profile is deleted from the list.

6. Keyword Management

6.1. Introduction

6.1.1. Product Overview

Keywords are an essential element to the IPDirector system, bridging the gap between the EVS video servers and a conventional database by allowing the user to search for material using keywords which relate to the media rather than searching by storage locations.

Keywords allow you to perform searches in any type of media items (logs, clip elements,...) in a unified manner. Every user can thus be certain that the media and logs are indexed in a structured manner so as to provide accurate search results.

IPDirector provides tools to add data to the database. It allows the addition of individual words, importation of existing keyword grids of up to 300 keywords, or the importation of 3rd party text data into the IPDirector database. Using keyword management tools it is possible to create and edit keyword grids, keyword dictionaries and also to import and export keyword files between different IPDirector installations. Keyword files made on an EVS video server are also importable.

Dictionaries allow you to manage all your keywords in a structured hierarchy. This hierarchy allows for similar items to be grouped under headings that are collapsible and expandable.

The Cascading Grid is a tool designed to guide the users, especially the loggers and ingest operators, among the amount of keywords and to ensure that they easily and quickly find the information. Cascading grids are build in such a way that a main set of keywords is displayed and, based on the selected keyword, another set is proposed to the users at a second level.

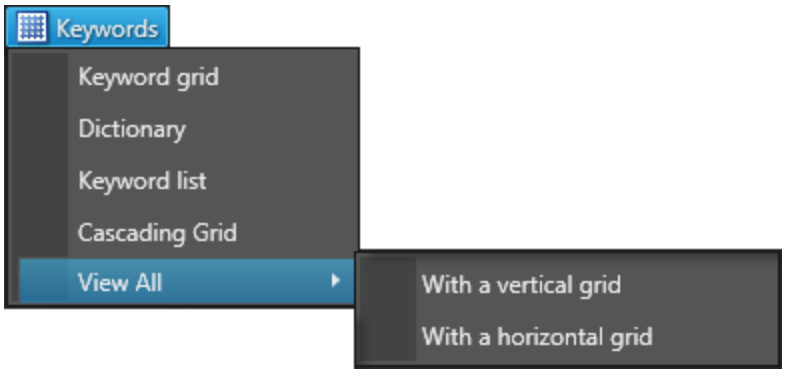
The management of the different keyword tools is described in sections "Keyword List Tool" on page 52, "Keyword Grid Tool" on page 59 and "Dictionary Tool" on page 69.

The assignment of keywords to the various media types is described in the corresponding chapters of the IPDirector manual.

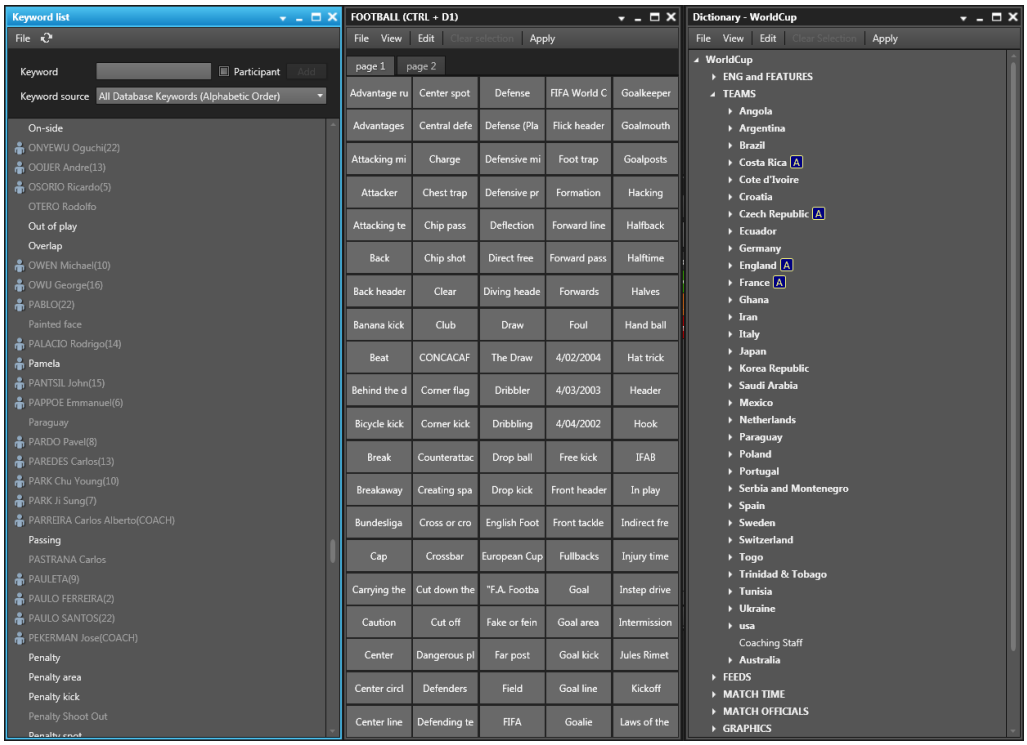
6.1.2. Opening the Keyword Tools

The four keyword tools can be accessed from the Keywords menu of the main Application bar.

You may choose to open each of them individually or to display several tools (Keyword List, Keyword Grid and Dictionary) next to each other.



The **View All** option will show three windows at once, either vertically or horizontally.

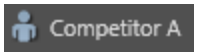


6.1.3. Keyword Types

A distinction can be made between standard keywords and participant keywords. The participant keywords can be used for the competitor or player names. The standard keywords can be used for actions.

By default, the keywords are defined as standard keywords.

The participant keywords are differentiated by a little blue icon next to the keyword in the keyword tools.



6.2. Keyword List Tool

6.2.1. User Interface

Overview of the Keyword List Window

Description

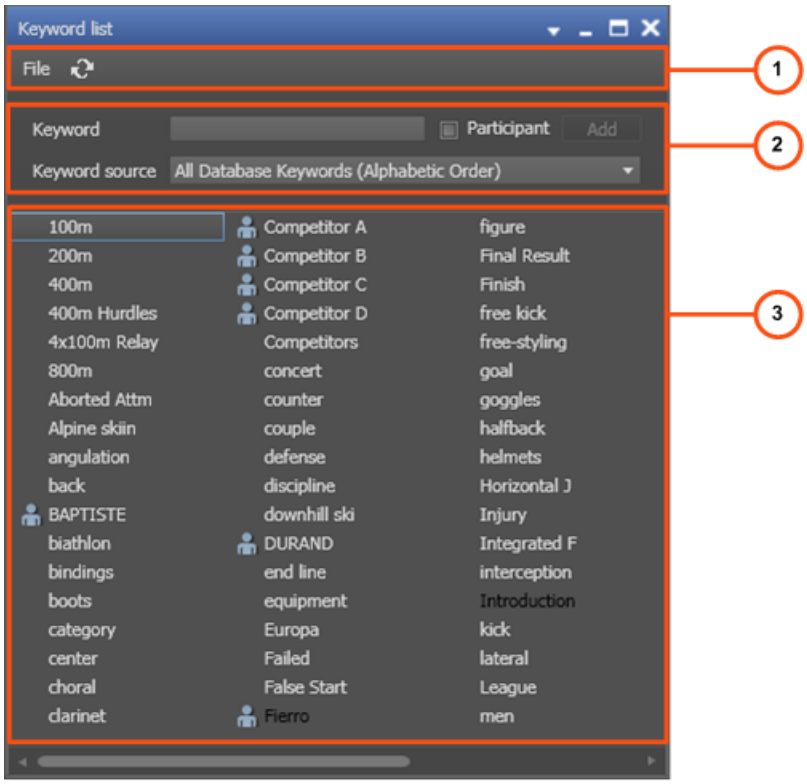
The Keyword List tool provides the list of all the keywords stored in the IPDirector database. It also shows a flat view of the keywords present in each keyword grid or dictionary. This tool allows to create, delete or rename keywords. It can be used as a source for the selection of keywords to be inserted into a keyword grid or a dictionary.

The Keyword List tool can be accessed from the Keywords menu of the Application bar.

The keywords list is kept in the IPDirector database which means that you work with shared data. All actions undertaken on keywords will have repercussions on each IPDirector of the same XNet network.

Illustration

The Keyword List window contains the areas highlighted on the screenshot below:



Area Description

The table below describes the various parts of the Keyword List window:

Part	Name	Description
1.	Toolbar	The Toolbar mainly provides a File menu with import and export functions. See section "Toolbar" on page 54.
2.	Keyword Creation Area	This area is used to enter new keywords in the keyword list. See section "Creating and Renaming Keywords" on page 55. Two types of keywords can be defined: standard or participants. See section "Keyword Types" on page 51.
3.	Keywords List	This area shows all the keywords from the database, a selected keyword grid or a selected dictionary. See section "Keywords List" on page 54.

Toolbar

Keyword List File Menu

The following options are available from the File menu:

Menu Item	Description
Import	Allows the import of a keyword list from a file (.txt format).
Undo last import	Cancels the last import of keywords.
Export	Allows exporting keywords into a file (.txt format).
Delete all unused keywords	Allows deleting all keywords that are not associated with any clip element or log. See section "Deleting Keywords" on page 56.

Keyword List Refresh Button

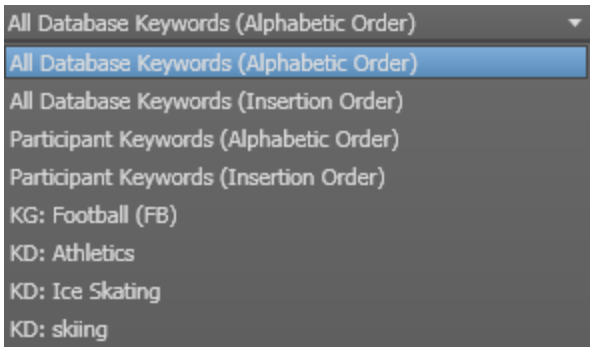
Several users can add keywords from different IPDirector workstations at the same time. In some cases, the list is not refreshed automatically.

You can force the refresh by selecting the **Refresh** button on the menu bar of the Keyword List tool.

Keywords List

You can change the way the keywords are displayed in the list by selecting one of the following options in the **Keyword Source** field:

- All Database Keywords (Alphabetic Order)
- All Database Keywords (Insertion Order)
- Participant Keywords (Alphabetic Order)
- Participant Keywords (Insertion Order)
- KG: Keyword Grid Name: this option only displays keywords and participant keywords from a specific keyword grid.
- KD: Dictionary Name: this option only displays keywords and participant keywords from a specific dictionary.



6.2.2. Possible Actions

Keyword Contextual Menu

The Keyword contextual menu is available when right-clicking a keyword in the Keywords List. The table below describes the available options:

Field	Description
Rename Keyword	Used to rename a keyword. See section "Creating and Renaming Keywords" on page 55.
Delete Keyword	Used to delete a keyword. See section "Deleting Keywords" on page 56.
Define as Participant Keyword	Used to change a standard keyword to a participant keyword. The option is only available from standard keywords.
Reset Participant Keyword	Used to change a participant keyword to a standard keyword. The option is only available from participant keywords. In this case, a warning message will be displayed asking you to confirm the action.

Creating and Renaming Keywords

How to Create Keywords

To create a keyword in the database, proceed as follows:

1. Open the Keyword List tool.
2. Type the keyword in the **Keyword** field:

3. If you want to define the keyword as a participant keyword, select the **Participant** box.

4. Click the **Add** button.

The keyword is added to the Keyword list and could later be used in a Keyword Grid or a Dictionary.

How to Rename Keywords

To rename a keyword, proceed as follows:

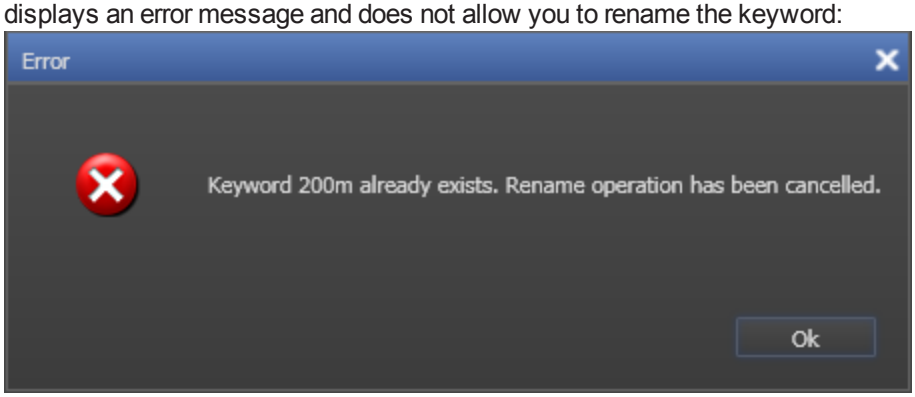
5. In the selected keyword list, right-click the keyword to be renamed.
6. Select **Rename Keyword** from the contextual menu.

   The keyword name is highlighted:

7. Enter the new name in the **Keyword** field.
8. Press **ENTER** to validate your modification.

Note
The system does not accept several keywords having the same spelling (case non sensitive).
If a keyword with the same spelling is already present in the list, a pop-up displays an error message and does not allow you to rename the keyword:



Deleting Keywords

Possible Actions

You have two options to delete keywords

- Delete selected keywords from the keyword list
- Delete all the unused keywords

How to Delete Selected Keywords

To delete one or more selected keywords, proceed as follows:

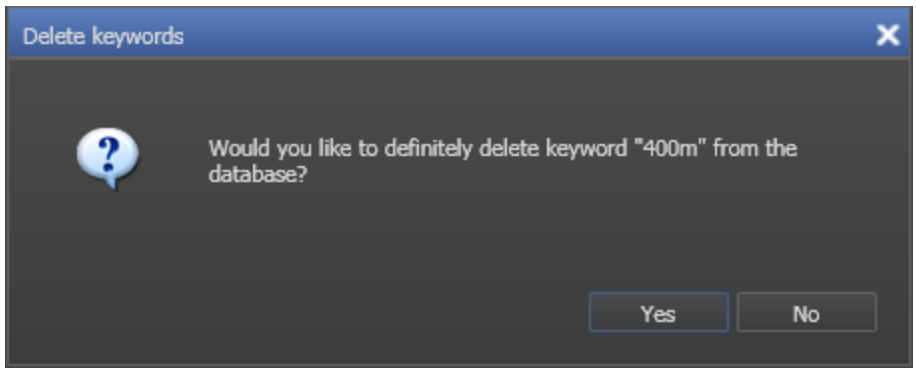
1. In the Keyword List tool, select the keyword(s) to delete from the list.

   Use **CTRL** + **CLICK** or **SHIFT** + **CLICK** for a multiple selection.

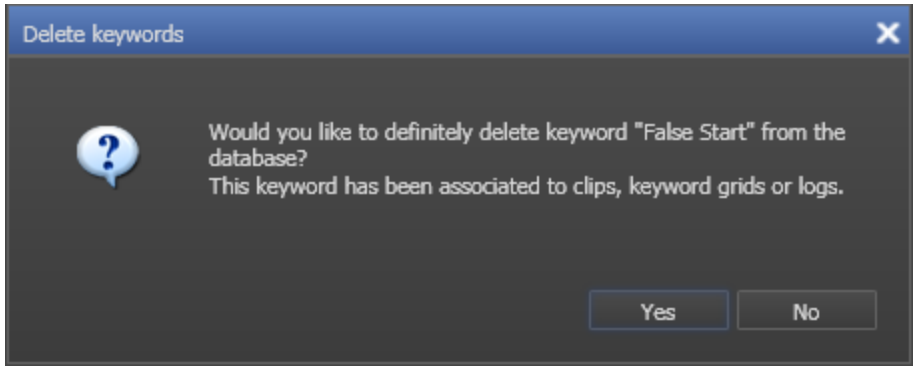
2. Right-click and select **Delete Keyword** from the contextual menu.

   A popup is displayed:

   - If the keyword is not already used:



   - If the keyword is already used:



3. Click **YES** to delete the keyword.

The keyword is deleted.

How to Delete All Unused Keywords

To delete all unused keywords in the database, proceed as follows:

1. Click the **File** button to display the File menu.
2. Select **Delete All Unused Keywords**

Importing and Exporting Keyword Lists

Rules for Keyword File Import

Before importing the keyword file, check the file structure and the settings to ensure that the following conditions are met:

- Each keyword in the keyword file must be on its own line within the file.
- The general IPDirector settings in the Remote Installer must be set to manage 64 character keywords. Otherwise, the keywords will be truncated to 12 characters if they are longer.

- The text file does not contain extra characters, such as #, %, @, TABS, etc.

How to Import Keywords

Once you have checked that all the conditions are met to perform a proper keyword file import (see previous section), you can import a keyword file with multiple keywords in it, for instance a team line-up or squad.

To import keywords, proceed as follows:

1. In the Keyword List, click the **File** button to display the File menu.
2. Select **Import**

   The Keyword Import window opens.
3. In this window, select the .txt file that contains the keywords to import.

The keywords are imported in the general keyword list. Once the keywords have been imported in the general keyword list, you can add them to a keyword grid or a dictionary.

How to Cancel the Last Keyword Import

To cancel the last import of keywords, proceed as follows:

4. Click the **File** button to display the File menu.
5. Select **Undo Last Import**.

How to Export Keywords

To export the currently listed keywords (from the selected keyword source) into an external file, proceed as follows:

6. In the Keyword List, click the **File** button to display the File menu.
7. Select **Export** from the File menu

   The Keyword Export window opens.
8. In the window, select the folder in which to export the .txt file.
9. Type a name for the .txt file.
10. Click the **Save** button.

The keywords are saved in the given .txt file stored in the specified folder.

This file can be used to transport a set of keywords between two IPDirector workstations in different locations and not on the same IPDirector network.

6.3. Keyword Grid Tool

6.3.1. User Interface

Overview of the Keyword Grid Window

Description

The Keyword Grid tool allows the users to build groups of up to 300 keywords. These keyword grids will be a source to associate keywords with the various types of media. Subsequently, keywords can be used to search the metadata and retrieve the required media.

The Keyword Grid tool can be accessed from the Keywords menu of the Application bar. Then, a specific keyword grid is opened from the **File > Open** option.

Illustration

The Keyword Grid window contains the areas highlighted on the screenshot below:

Area Description

The table below describes the various parts of the Keyword Grid window:

Part	Name	Description
1.	Keyword Grid name	The title bar gives the name of the open keyword grid.
2.	Toolbar	The Toolbar provides functions for performing operations on keyword grids.
3.	Keyword Grid area	This area shows all the keywords from the selected keyword grid.

Toolbar

Toolbar Options

The toolbar is located on the top of the window.

The following table gives a description of the buttons available from the toolbar.

Button	Description
File	**File** button: displays a menu with various options for the management of keyword grids.
View	**View** button: displays a menu with various options regarding display.
Edit	**Edit** button: displays the Editing area and enables the Edit mode for the management of keywords in the keyword grid.
Clear Selection	This option is only available in Edit mode when a keyword is selected. It is used to clear a selection of keywords.
Apply	This button is used when keywords are assigned to a media item from the Database Explorer. See section "Assigning a Keyword from a Keyword Tool" on page 82.

Keyword Grid File Menu

The following options are available from the File menu:

Menu Item	Description
New	Opens the Create Keyword Grid window to define a new keyword grid and optional description.
Rename	Allows the users to rename an open keyword grid.
Open	Allows the users to select an existing keyword grid.

Menu Item	Description
Publish	Allows the users to publish the open keyword grid to predefined user groups.
Delete	Allows the deletion of the keyword grid from the database.
Import	Allows the import of a keyword grid from a file in one of two ways depending on the selection: • Import in a new keyword grid • Import into the current keyword grid Choosing **Import into the current keyword grid** will replace all the keywords in the current keyword grid. The file used to import a keyword grid must be a text file with a .xml or .kwd extension. A line of text must have the following format: **Position = keyword** where the position is the location of the keyword on the grid. Only one keyword per line of text should be used **Example:** 1 = Jones 2 = Touchdown 3 = Pass
Export	Opens a window to allow a file to be created with the currently selected keyword grid and to be stored or exported to another database. This format is the same as for an EVS video server allowing the direct import of the file to an EVS video server.

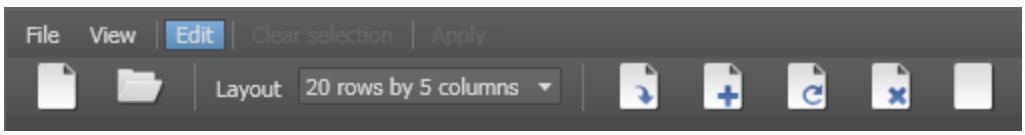
Keyword Grid View Menu

The following options are available from the View menu:

Menu Item	Description
Empty Position	Shows or hides the empty keywords cells.
Description	Shows the keyword grid description.
Keyword Numbers	Shows the index number of each keyword in a grid.

Keyword Grid Editing Toolbar

Clicking the **Edit** button displays the Editing toolbar.



The Editing toolbar gives access to some of the editing functions from the File menu.

Editing Buttons

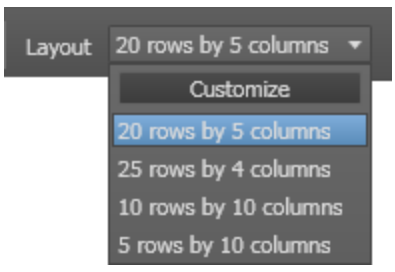
The table below describes the editing buttons.

Menu Item	Description
	Opens the New Keyword Grid window to create a new keyword grid.
	Opens a keyword grid.
	Inserts a page in the open grid.
	Appends a page at the end of the open grid.
	Opens the Rename Page window to rename the selected page of the open keyword grid.
	Deletes the selected page of the open keyword grid.
	Clears a page, i.e. removes keywords from the selected page of the open keyword grid.

Note
If the width of the keyword grid window has been changed, the above mentioned buttons may not appear as visible. At this time, the user must select the arrow on the right of the Editing Toolbar to display all the hidden icons.

Keyword Grid Layout Field

At any moment, you can change the layout of your keyword grid by selecting a predefined layout or a custom one using the **Customize** option. This can be done from the **Layout** field in the Edit toolbar.



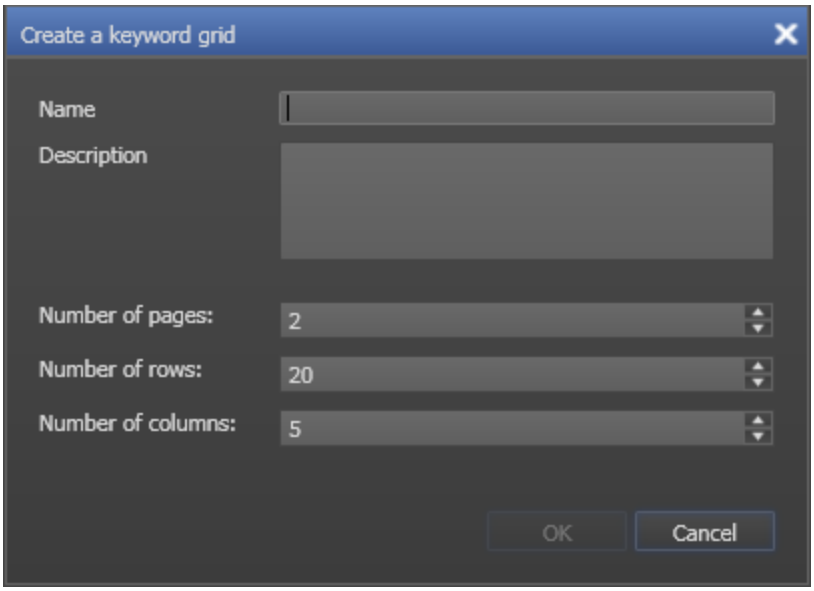
6.3.2. Possible Actions

How to Create a New Keyword Grid

To create a new keyword grid, proceed as follows:

1. Open the Keyword Grid tool.
2. Select **New** from the File menu.

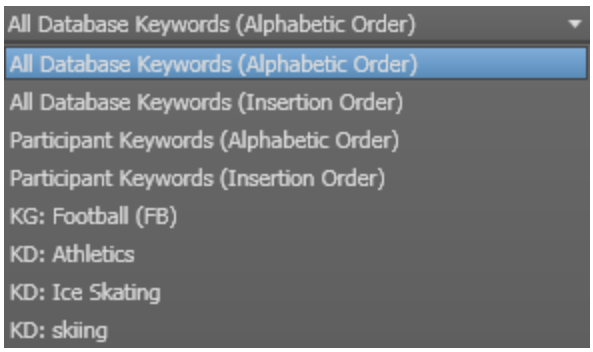
   The New Keyword Grid window opens:



3. Type a name for the keyword grid in the **Name** field, and a description in the **Description** field, if required.
4. In the three following fields, specify the number of pages, rows in a page and columns in a page that the keyword grid should contain.
5. Click **OK**.

   The empty keyword grid is created with the parameters specified. It opens automatically in Edit mode.

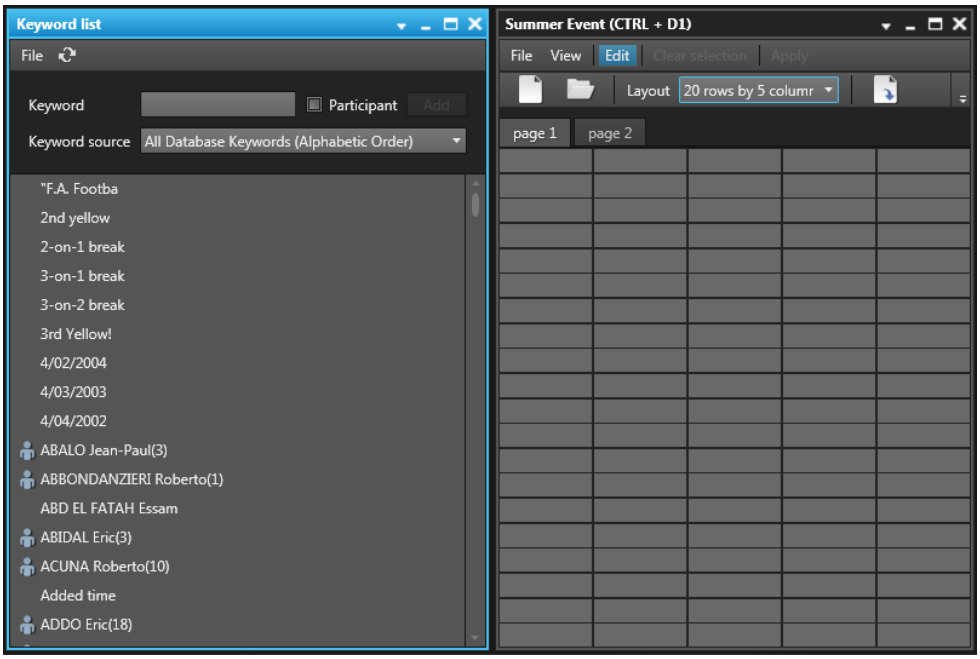
Once the keyword grid is created, it becomes available in the Keyword List tool, from the **Keyword Source** field, with "KG" in front of the keyword grid name.



How to Add Keywords to a Keyword Grid from a Keyword List

To add keywords from a keyword list to a keyword grid, proceed as follows:

1. Open the Keyword List and the Keyword Grid tools next to each other on your workspace:

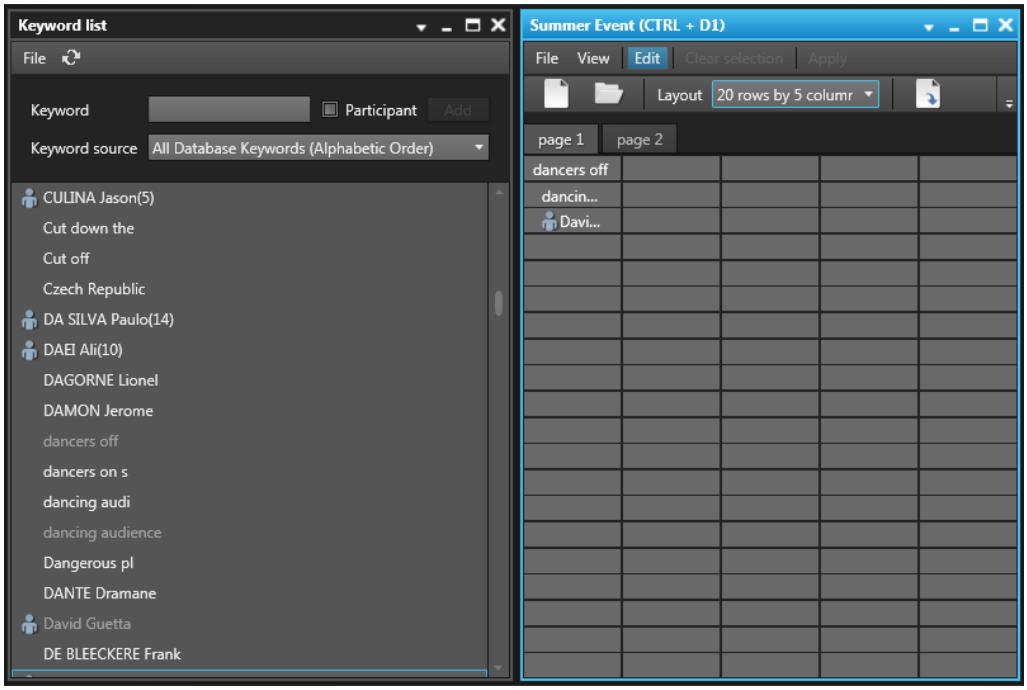


   The Keyword List displays the keywords that have been entered in the database.

2. Select the **Edit** command in the toolbar of the Keyword Grid.
3. In the Keywords list, select the keywords to be added to the keyword grid. Click **CTRL+CLICK** or **SHIFT+CLICK** for a multiple selection.
4. Drag the selected keywords in the first cell of the keyword grid where you want to copy the keywords.

The keywords are added to the keyword grid.

The keywords added to the keyword grid have then a lighter foreground in the Keyword List.



How to Add Keywords to a Keyword Grid from a Dictionary Branch

A part of a Dictionary tree can be used to populate a keyword grid. Proceed as follows:

1. Open the keyword grid you want to edit.
2. Open the dictionary containing the keywords. See section "Dictionary Tool" on page 69 for more information.
3. Select the **Edit** command in the menu bar of both windows, so the buttons are highlighted.
4. In the dictionary, select the keywords you want to copy.
5. Drag these elements to the keyword grid.

All the elements of this branch are added to the keyword grid.

Keyword Contextual Menu

The Keyword contextual menu is available when right-clicking a keyword in the Keywords Grid.

The following commands are listed in the Keyword contextual menu:

Cut
Cuts the selected keyword.

Copy
Copies the selected keyword.

Paste
Pastes the keyword which has just been cut or copied.

Clear Selected Position
Clears the selected keyword from the keyword grid.

Define as Participant Keyword
Used to change a standard keyword to a participant keyword. The option is only available from standard keywords.

Reset Participant Keyword
Used to change a participant keyword to a standard keyword. The option is only available from participant keywords.
In this case, a warning message will be displayed asking you to confirm the action.

Change Color
Used to change to foreground and/or background color of a keyword grid cell or of a keyword from a dictionary. See section "Setting the Keyword Colors" on page 67.

Reset Color
Used to reset the foreground and/or background color of a keyword grid cell or of a keyword from a dictionary. See section "Setting the Keyword Colors" on page 67.

Setting the Keyword Colors

Context of Use

If you want to highlight some frequently used keywords or organize them visually in groups in a grid, you can assign a background and/or foreground color to keyword cells of a keyword grid.

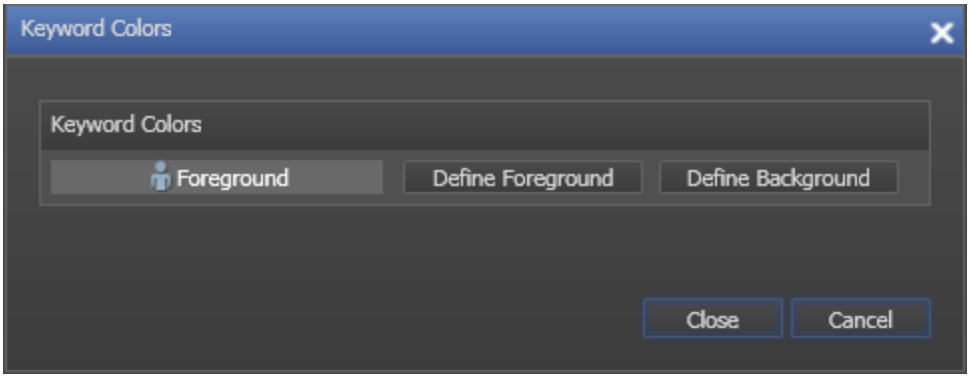
A background and/or foreground color can also be set for keywords from a dictionary. This will be reflected in the related cascading grid.

How to Set the Keyword Colors

To set or modify the foreground and/or the background color of a keyword, proceed as follows:

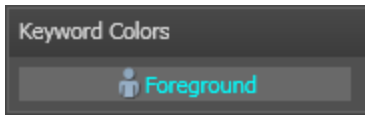
1. Open the keyword grid or the dictionary.
2. Select the **Edit** command in the menu bar, so the button is highlighted.
3. Right-click the keyword you want to edit.
4. Select **Change Color** from the contextual menu.

The Keyword Colors window opens:



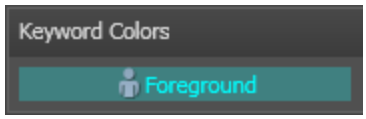
5. To apply a foreground color,
   a. Click the **Define Foreground** button.
   b. Select the color you want to apply from the palette.
   c. Click **OK**.

      The **sample** field in the Keyword Colors window shows you an example of your selection:



6. To apply a background color,
   a. Click **Define Background** button.
   b. Select the color you want to apply from the palette.
   c. Click **OK**.

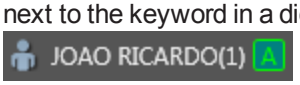
      The **sample** field in the Keyword Colors window shows you an example of your selection:



7. Click the **Close** button.

The selected keyword displays your color selection:

- in the cell of a keyword grid, when set from a keyword grid: 

- next to the keyword in a dictionary, when set from a dictionary:
  

- in the cell of a cascading grid, when set from the related dictionary:
  

Note
To reset the Foreground or Background color, select **Reset Color** from the contextual menu.

6.4. Dictionary Tool

6.4.1. User Interface

Overview of the Dictionary Window

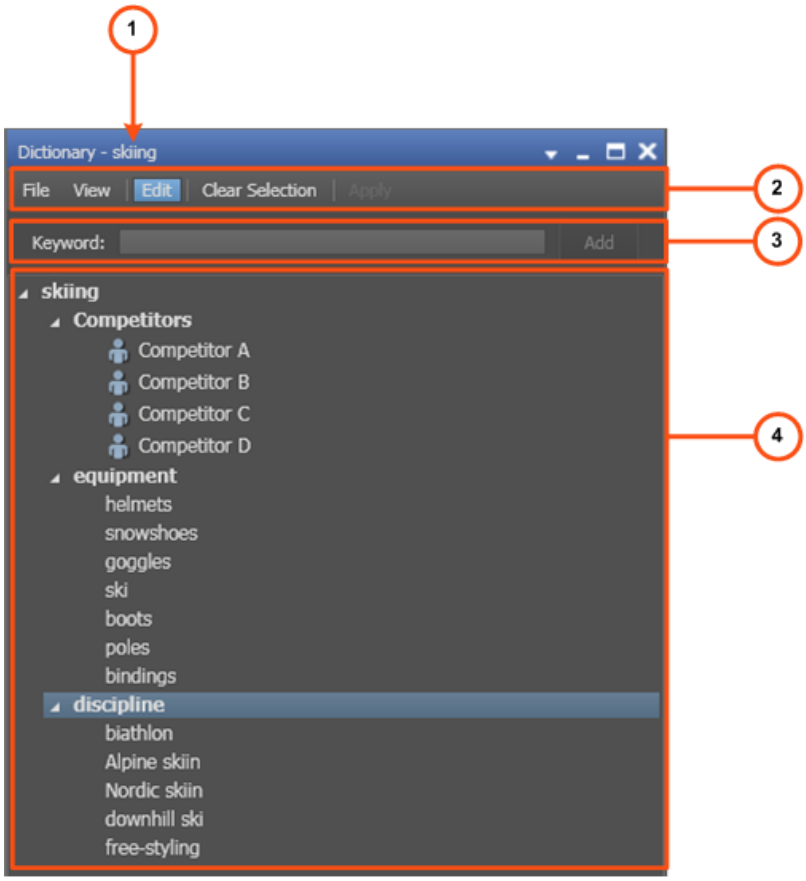
Description

The Dictionary tool allows the users to organize groups of keywords according to a tree structure. These dictionaries will be a source to associate keywords with the various types of media. Subsequently keywords can be used to search the metadata and retrieve required media.

The Dictionary tool can be accessed from the Keywords menu of the Application bar. Then, a specific dictionary is opened from the **File > Open** option.

Illustration

The Dictionary window contains the areas highlighted on the screenshot below:



Area Description

The table below describes the various parts of the Keyword List window:

Part	Name	Description
1.	Dictionary name	The title bar gives the name of the open dictionary.
2.	Toolbar	The Toolbar provides functions for performing operations on dictionaries.
3.	Keyword Creation area	This area is used to enter new or existing keywords in the dictionary.
4.	Keywords tree	This area shows all the keywords from the selected dictionary.

Toolbar

Toolbar Options

The toolbar is located on the top of the window.

The following table gives a description of the buttons available from the toolbar.

Button	Description
File	**File** button: displays a menu with various options for the management of keyword dictionaries.
View	**View** button: displays a menu with an option to manage the description of the keyword dictionary.
Edit	**Edit** button: displays the Editing area and enables the Edit mode for the management of keywords in the dictionary.
Clear Selection	This option is only available in Edit mode. It is used to clear a selection of keywords.
Apply	This button is used when keywords are assigned to a media item from the Database Explorer. See section "Assigning a Keyword from a Keyword Tool" on page 82.

Keyword Dictionary File Menu

The following options are available from the File menu:

Menu Item	Description
New	Opens the Create a New Dictionary window to define a new dictionary.
Rename	Allows the users to rename an open dictionary.

Menu Item	Description
Open	Allows the users to select an existing dictionary.
Publish	Allows the users to publish the open dictionary to predefined user groups.
Delete	Allows the deletion of the dictionary from the database.
Import	Allows the import of a dictionary from a file (.xml format).
Export	Allows the export of a dictionary to a file (.xml format).

Keyword Dictionary View Menu

The following option is available from the View menu:

Menu Item	Description
Show Description	Shows the dictionary description which has been entered at the dictionary creation. It can be edited when the Edit mode is enabled from the **Edit** button.

Dictionary Editing Area

Clicking the **Edit** button displays the Editing area.

The Edit button is highlighted when the Edit mode is enabled.

This mode allows the user to add keywords via the **Keyword** field or to perform other actions on keywords.

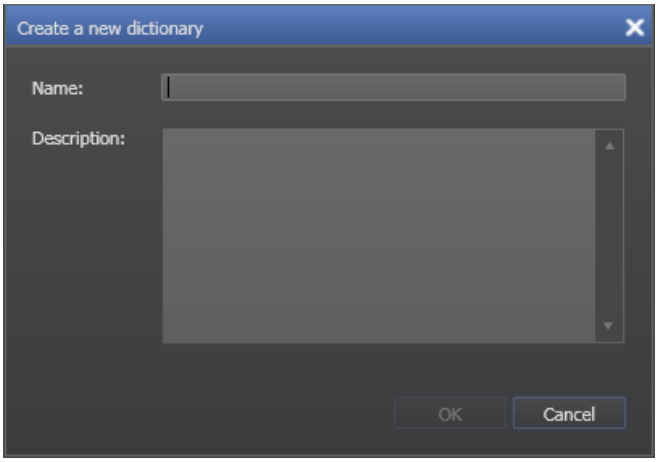
6.4.2. Possible Actions

How to Create a New Dictionary

To create a new dictionary, proceed as follows:

1. In the Dictionary tool, select **New** from the File menu.

   The Create a New Dictionary window opens:



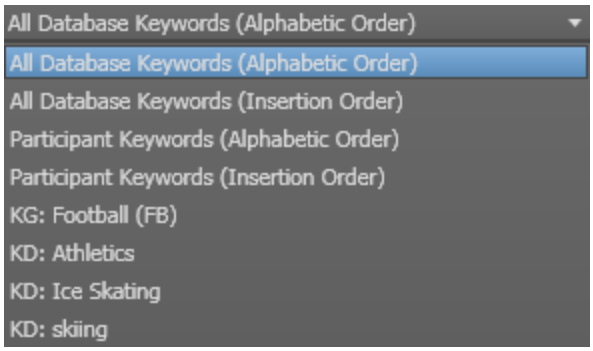
2. Type a name for the dictionary in the **Name** field, and a description in the **Description** field, if required.

   The name you give to your new dictionary will take place as the root of your keywords tree.

3. Click **OK**.

   The empty dictionary is created.

Once the dictionary is created, it becomes available in the keyword list, from the **Keyword Source** field, with "KD" in front of the dictionary name.



Adding Keywords to a Dictionary

How to Add Keywords by Direct Entry in the Dictionary

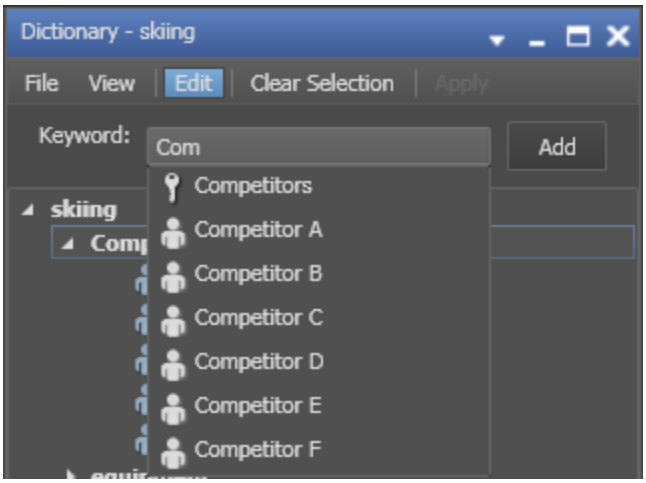
To add keywords by direct entry into a dictionary, proceed as follows:

1. Open a dictionary via the **File > Open** menu of the Dictionary window.
2. Click the **Edit** button to enable the Edit mode 

.

   The **Keyword** field and **Add** button are displayed at the top of the Dictionary window.
3. Select the position of the new keyword in the dictionary:
   - To insert a child keyword, first select the parent keyword in the dictionary before typing the keyword name
   - To insert a keyword at the root of the dictionary, no previous selection is required
4. Start typing the keyword into the **Keyword** field.

   A list of proposals is displayed as soon as you start to type and it is refined as you go on typing.



5. If the required keyword already exists, select the line by using the mouse or the  key.

   The keyword is automatically added to the dictionary.
6. If the required keyword does not exist yet, type the entire word into the **Keyword** field and click **Add**.

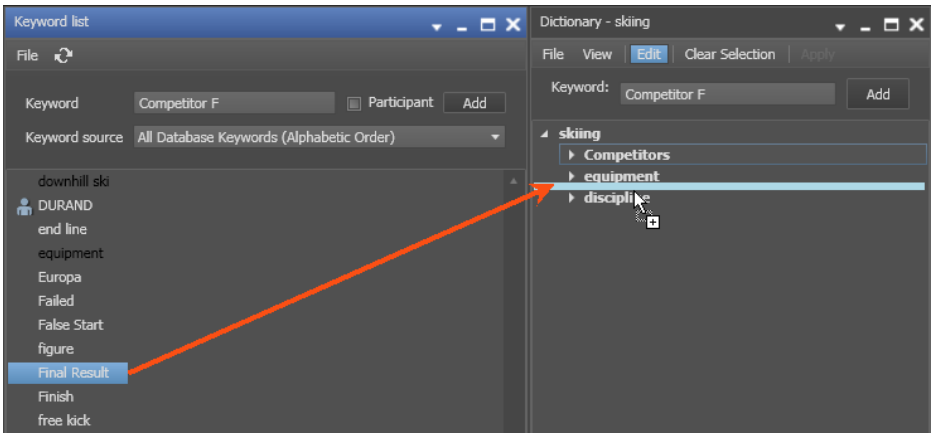
You can add as many keywords as you want in any of the tree branches.

Note
All new keywords added in a dictionary are automatically inserted in the database. They immediately appear in the Keyword list and can be used in keywords grids or other dictionaries.

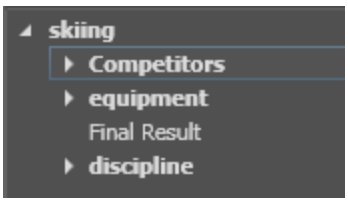
How to Add Keywords in a Dictionary from a Keyword List

To add existing keywords from the keyword list into a dictionary, proceed as follows:

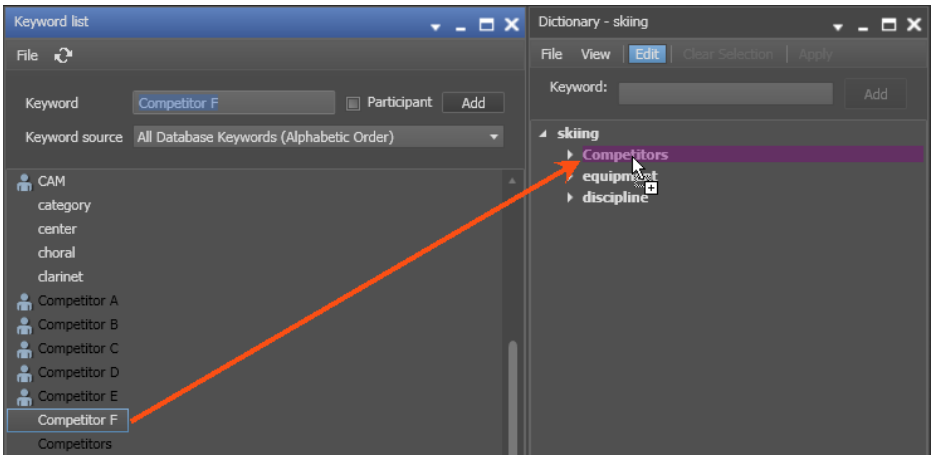
1. Open the Keyword List and Dictionary tools next to each other on your workspace.
2. If you select **All Database Keywords** in the Keyword List, you will see all the keywords that have been entered in the database.
3. Open the dictionary you want to edit.
4. Click the **Edit** button of the dictionary to enable the Edit mode.
5. In the keyword list, select the keywords to be added to the dictionary. Click **CTRL**+**CLICK** or **SHIFT**+**CLICK** for a multiple selection.
6. Drag the selected keywords to the dictionary, at the required position.
   a. To move it/them between two keywords or parent keywords, the drop location is indicated by a light blue line:



The keyword is added to the dictionary:



b. To move it/them under a parent keyword or to move it/them under a keyword which will become a parent keyword, the parent keyword must be highlighted purple:



The keyword is added to the dictionary:

How to Add Keywords to a Dictionary from a Keyword Grid

It is possible to copy keywords from a keyword grid to a dictionary and vice-versa. To do so, proceed as follows:

1. Open both Keyword Grid and Dictionary tools.
2. In both windows, click the **Edit** button to active the Edit mode.
3. Select the keyword(s) in the keyword grid. Click **CTRL+CLICK** or **SHIFT+CLICK** for a multiple selection.
4. Drag them to the dictionary, at the required position.
   a. To move it/them between two keywords or parent keywords, the drop location is indicated by a light blue line.
   b. To move it/them under a parent keyword or to move it/them under a keyword which will become a parent keyword, the parent keyword must be highlighted purple.

How to Move Keywords within a Dictionary

To move keywords from one place to another in a dictionary, proceed as follows:

1. Open the dictionary.
2. Click on the **Edit** button to enable the Edit mode  .
3. Select the keywords you want to move.
4. Drag them to the new location.
   - To move it under a parent keyword, this latter must be highlighted purple.
   - To move it between two keywords or parent keywords, the drop location must be indicated by a light blue line

Keyword Contextual Menu

The Keyword contextual menu is available when right-clicking a keyword in the Dictionary.

The following commands are listed in the Keyword contextual menu:

Rename keyword
Used to rename a keyword.

Define as Participant Keyword
Used to change a standard keyword to a participant keyword. The option is only available from standard keywords.

Reset Participant Keyword
Used to change a participant keyword to a standard keyword. The option is only available from participant keywords.
In this case, a warning message will be displayed asking you to confirm the action.

Remove a Keyword from a Dictionary
Removes the selected keyword from the open dictionary.

Change Color
Used to change to foreground and/or background color of a keyword grid cell or of a keyword from a dictionary. See section "Setting the Keyword Colors" on page 67.

Reset Color
Used to reset the foreground and/or background color of a keyword grid cell or of a keyword from a dictionary. See section "Setting the Keyword Colors" on page 67.

6.5. Cascading Grid

6.5.1. User Interface

Overview of the Cascading Grid Window

Description

A cascading grid is built upon a dictionary. The difference lies in the fact that the tree structure of the dictionary is converted into several levels of keywords sets in the cascading grid. The keywords content cannot be edited from a cascading grid. This must be done from the related dictionary.

A cascading grid displays sets of keywords according to a waterfall effect. Clicking a keyword button from the first set displays a second set of keywords related to the parent keyword. Then, clicking a keyword button from the second set displays a third set of keywords related to the second keyword, and so on.

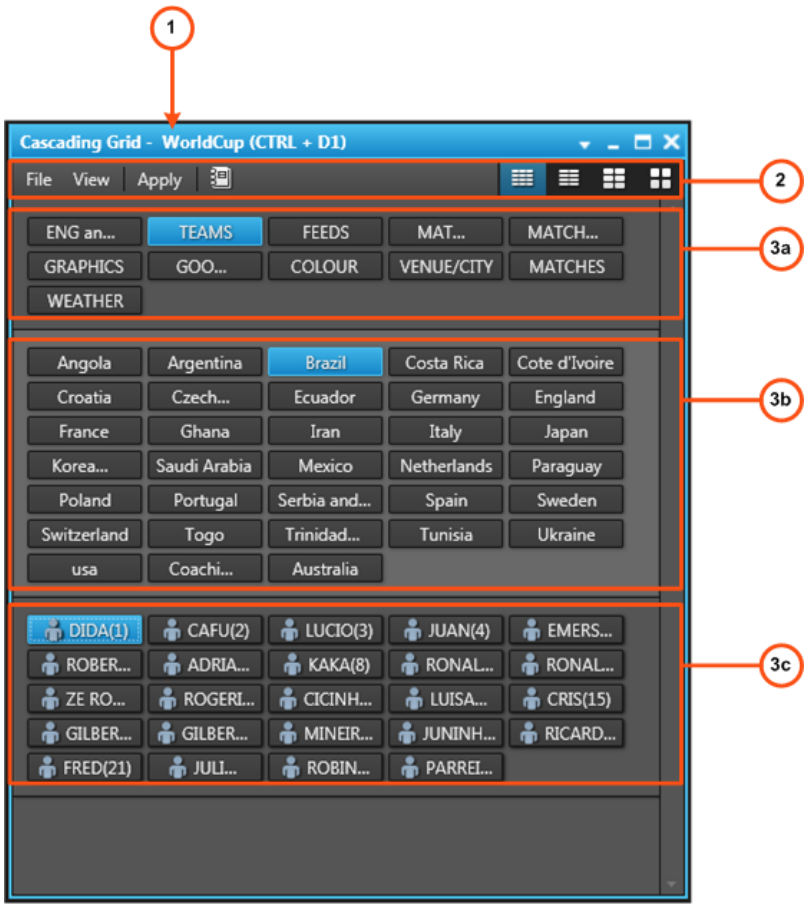
These cascading grids will be a source to associate keywords with the various types of media.

Warning
The cascading grid is not automatically refreshed when the dictionary is edited.

The Cascading Grid tool can be accessed from the Keywords menu of the Application bar. Then, a specific cascading grid is opened from the **File > Open** option.

Illustration

The Cascading Grid window contains the areas highlighted on the screenshot below:



Area Description

The table below describes the various parts of the Cascading Grid window:

Part	Name	Description
1.	Cascading Grid name	The title bar gives the name of the opened cascading grid.
2.	Toolbar	The toolbar provides functions for performing operations on cascading grids. See section "Toolbar" on page 79.

Part	Name	Description
3.	Cascading Grid area	This area shows the keywords from the selected cascading grid. 3a: 1st set of keywords. The keywords from the first set are always displayed. They correspond to the 1st level of keywords in the related dictionary. 3b: 2nd set of keywords. They are only displayed when a keyword is selected in the 1st set. They correspond to child keywords of the keyword selected in the first set. 3c: 3rd set of keywords. They are only displayed when a keyword is selected in the 2nd set. They correspond to child keywords of the keyword selected in the third set. Keywords assigned to a media item are highlighted (light blue). A background and/or foreground color can have been set for keywords from the related dictionary, which will be reflected in the cascading grid. See section "Setting the Keyword Colors" on page 67.

Toolbar

The toolbar is located on the top of the window.

The following table gives a description of the buttons available from the toolbar.

Button	Description
File	**File** button: displays a menu with a single option (**Open**) to open an existing cascading grid, based on a dictionary.
View	**View** button: displays a menu with a single option (**Keyword numbers**) to show the index number of each keyword in a grid.
Apply	This button is used when keywords are assigned to a media item from the Database Explorer. See section "Assigning a Keyword from a Keyword Tool" on page 82.
	**Open Dictionary** button: opens the dictionary associated to the current cascading grid.
	**Cascading Grid Display** buttons: Four buttons are available to choose the size of the keyword buttons displayed in the cascading grid.

6.6. Assigning Keywords to Media

6.6.1. Introduction

Keywords can be assigned to media (clip, ingest, playlist, timeline, edit, log, clip digitized from VTR) when the item is created or they can be assigned or removed later on by editing the media item.

This can be done in various ways.

- You can start typing the keyword directly in the **Keyword** field of the Create [Media] windowor Edit windowor the Clip Information tab of the Control Panel or VTR Panel and select a keyword proposed in the Autocomplete list.
- You can select keywords in a keyword grid, a dictionary or a cascading grid .
- You can type the number associated to a keyword in an open keyword grid or an open cascading grid.

When a Keyword tool is used, the Edit mode must be inactive (**Edit** button of the Keyword tool not highlighted).

Warning
It is highly recommended not to use different Keywords tools to add or remove keywords to a media item.

6.6.2. Conditions for the Use of a Keyword

The assignment of a keyword to a media item will only be possible if the following conditions are met.

- The maximum number of keywords which can be assigned to the item has not already been reached.
- The keyword typed in the **Keyword** field exists in the IPDirector database.
- An additional limitation exists for the use of cascading grids: It is not possible to select more than one keyword per keywords level/set.

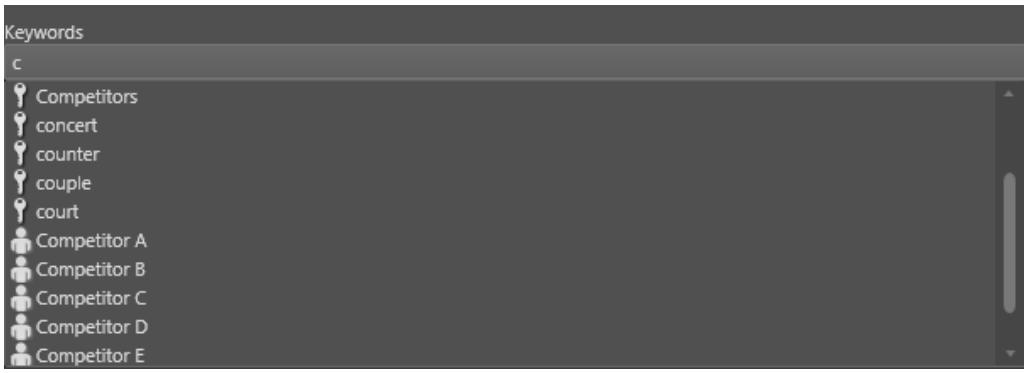
6.6.3. Assigning a Keyword by Direct Entry

Autocomplete List

The Autocomplete function is a help service for the capture of a keyword.

This is available from the Keywords area of the Create [Media] window,the Edit windowor the Clip Information tab of the Control Panel or VTR Panel.

As soon as the users start typing in the **Keyword** field, the Autocomplete function provides a list of matching keywords, standard and participant, beginning with the typed letters and existing in the Keyword List of the IPDirector database.



How to Assign a Keyword to Media by Direct Entry

To assign a keyword to a media item by direct entry in the **Keyword** field, proceed as follows.

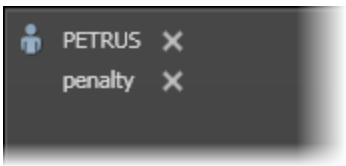
1. Start typing a keyword in the **Keyword** field.

   A list of proposals is displayed as soon as you start to type and it is refined as you go on typing.

Tip
The **Add** button next to a **Keyword** field becomes available when all the letters of a keyword existing in the Keyword List of the IPDirector database have been typed in the **Keyword** field.

2. Select a line by using the mouse or the ↓ key.
3. Click **Add** or press **ENTER**.

   The keyword is displayed in the list of keywords assigned to the item.



To remove a keyword assigned to the media item:

- click the **X** button next to the corresponding keyword.

To remove all the keywords assigned to the media item:

- click the **Clear All** button.

6.6.4. Assigning a Keyword from a Keyword Tool

Displaying the Keywords Sources

To display one or several list(s) of keywords, proceed as follows:

1. Select the keyword tool you want to work with from the Keywords menu of the main Application bar.
2. To open a specific dictionary, keyword grid or cascading grid,
   a. select the **File > Open** option

      The Open [Dictionary /Keyword Grid / Cascading Grid] from Database window opened.

   b. select the required dictionary, keyword grid or cascading grid from the list.

Note
You can open several windows with different dictionaries, keyword grids or cascading grids, if needed.

3. When several keyword grids or cascading grids have been opened, make one of them active for keyword selection in one of the following ways:
   - Simply click the window
   - Use the keyboard shortcut assigned to the window:

     for the keyword grid or cascading grid open first

     for the second one, and so on.

Assigning Keywords to Media from a Keyword Grid or Dictionary

Introduction

The Keyword Grid and the Dictionary tools can be accessed from the Keywords menu of the Application bar. Then, a specific keyword grid or dictionary is opened from the **File > Open** option of the tool.

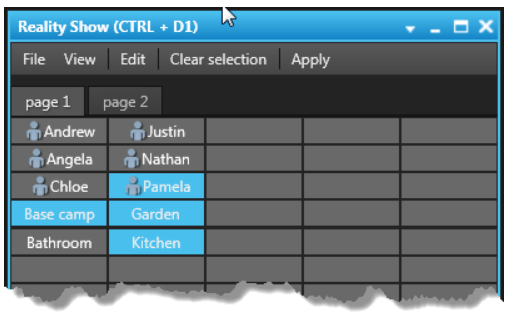
A keyword grid can be used with or without numbers associated to each keyword.

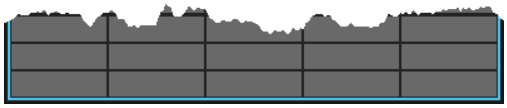
A dictionary can be organized according to a tree structure, with parent and child keywords.

When a media item is being edited, its associated keywords are highlighted in the keyword grid or dictionary, provided that it is open.

Display in the Dictionary

Display in the Keyword Grid:





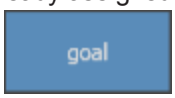
See the Keywords Management chapter in the General Functions user manual for a description of the different tools.

Warning
It is highly recommended not to use different Keywords tools to add or remove keywords to a media item.

How to Assign a Keyword

To add a keyword from a keyword grid or a dictionary when a media item is being created or when it is being edited, proceed as follows:

1. Open the relevant keyword grid or the relevant dictionary.

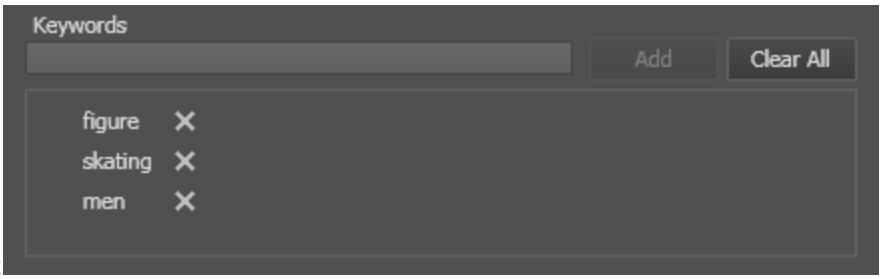
   The keywords already assigned to the media item, if any, are highlighted as follows in the keyword grid 

   or in the dictionary 

   .
2. If you want to work with keyword numbers from the keyword grid, select **View > Keyword Numbers** or click 

   to view the numbers associated to each keyword.
3. Select the keywords you want to assign to the media in one of the following ways:
   - click it in the keyword grid or in the dictionary.
   - if the keyword numbers are displayed in the keyword grid, press the key number corresponding to the requested keyword on the keypad and then press 
     .

   It is added to the Keywords area:

   :

   It is also highlighted in the keyword grid or dictionary.

How to Remove a Keyword

To remove a keyword, do one of the following actions:

- click the keyword in the keyword grid or dictionary
- click the **X** button next to the corresponding keyword in the Keywords areaof the Create [Media] window, the Edit windowor the Clip Information tab.
- if the keyword numbers are displayed in the keyword grid, press the key number corresponding to the requested keyword on the keypad and then press 
  .

It is removed from the Keywords area and it is no more highlighted in the Keyword tool.

To remove all the keywords:

- Click the **Clear All** button in the Keywords area.

Assigning Keywords to Media from a Cascading Grid

Introduction

The Cascading Grid tool can be accessed from the Keywords menu of the main Application bar. Then, a specific cascading grid is opened from the **File > Open** option of the tool.

A cascading grid can be used with or without numbers associated to each keyword.

A cascading grid displays sets of keywords according to a waterfall effect. The sub-sets of keywords displayed will depend upon the keyword selected from the first set, the second set, and so on. It is not possible to select more than one keyword per keywords level/set.

See section "Cascading Grid" on page 77 for a description of the tool.

How to Assign a Keyword

To add a keyword from a cascading grid when a media item is being created or when it is being edited and no keyword has been assigned yet, proceed as follows:

1. Open the relevant cascading grid.

   The cascading grid displays the first set of keywords.

2. If you want to work with keyword numbers from the cascading grid, select **View > Keyword Numbers** or click 

to view the numbers associated to each keyword.

3. Select the parent keyword you want to assign to the media item in one of the following ways:

   - click it in the cascading grid.

   - if the keyword numbers are displayed in the cascading grid, press the key number corresponding to the requested keyword on the keypad and then press 

.

The parent keyword is added in the Keywords area and it is highlighted in the cascading grid.

The child keywords from the second set, if any, is displayed below the first set:

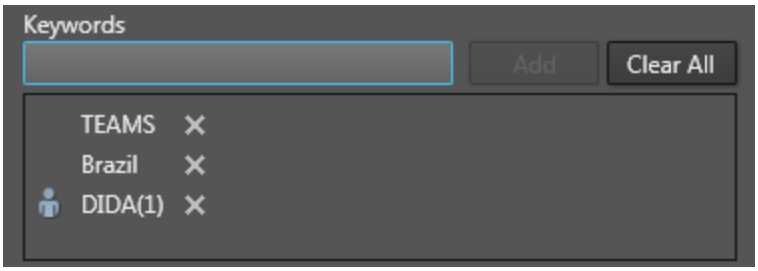
4. Select a keyword from the second set (click or keypad number).

   The child keyword is displayed in the Keywords area and it is highlighted in the cascading grid.

   The child keywords from the third set, if any, is displayed below the second set:

5. Select a keyword from the third set (click or keypad number).

   The child keyword is displayed in the Keywords area and it is highlighted in the cascading grid.



   The set of child keywords from the fourth set, if any, is displayed below the third set.

   All the selected keywords are highlighted in the cascading grid.

> **Note**
> It is not possible to select more than one keyword per keywords level/set.

6. To remove a keyword, see the section below and the warning message.
7. Click **OK** from the the Create [Media] window or the Edit windowor click **Update Clip** in the Control Panel to save the item.

How to Remove Selected Keywords

To remove a keyword and its child keywords, do one of the following actions:

- click the keyword in the cascading grid
- if the keyword numbers are displayed in the cascading grid, press the key number corresponding to the requested keyword on the keypad and then press 

.

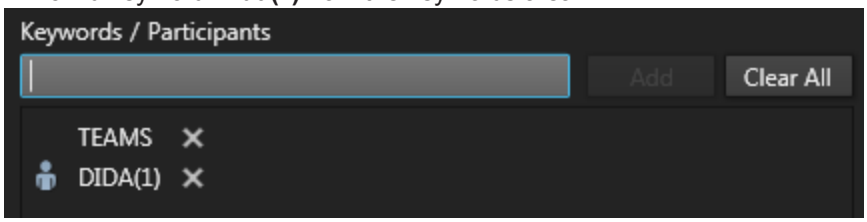
This automatically un-selects the keyword and its selected child keyword and collapses the cascading grid to the level under the remaining selected keyword.

The same keywords are removed from the Keywords area of the as well.

Example: Clicking **Brazil** removes **Brazil** and **Dida(1)**, and displays the sub-set of keywords related to **Teams**.

Warning
Clicking the **X** button next to a selected keyword in the Keywords area of the media item leads to a different result:

- the keyword is removed from the cascading grid, the cascading grid is collapsed and, therefore, does not display its child keywords anymore.
- the keyword is removed from the Keywords area **BUT** its child keyword is not removed. In the follwing example, clicking **Brazil** does not remove its child keyword **Dida(1)** from the keywords area:



To remove all the keywords, do one of the following actions:

- Click the **Clear All** button in the Keywords area.
- Click the highlighted parent keyword in the cascading grid.

Rules for the Display of Keywords in Cascading Grids

Warning
It is highly recommended not to use different Keywords tools to add/remove keywords to/from a media item.

Display of Keywords in an Cascading Grid

In the case when a media item has been assigned keywords only from a cascading grid and, later on, is being editedor is loaded on the Control Panel, its associated keywords are highlighted in the cascading grid:

Rules for the Display of Keywords of a Media Item

Specific rules exist for the display of keywords in the Cascading Grid tool.

In case a media item has been assigned several keywords from different keywords assignment processes (Keywords tools, direct entry), some of them could not be displayed in a cascading grid when the media item is selected in the Database Explorer or when it is being edited.

The order according to which keywords have been assigned is taken into account.

The media item ...	**...the keyword(s) highlighted in the cascading grid...**
has several keywords from level 1	is the first one encountered in the list, and its child keywords if any
has one keyword from level 1 (KW1) and level 2 (KW2) but the KW2 had been selected before KW1 and appears before KW1 in the Keywords area	...the keyword from level 1 is the only one displayed

Rules for the Display of Keywords when Edited

The media item ...	...the edition of keywords consists of...	...the keyword(s) highlighted in the cascading grid...
has one keyword from level 1, level 2 and level 3	selecting another keyword from level 2 from the cascading grid	the new keyword from level 2 is added to media and the previous keywords from levels 2 and 3 are removed. The keyword from level 1 is still selected.
has one keyword from level 1 (KW1) and level 2 (KW2) but the KW2 had been selected before KW1, so KW2 appears before KW1 in the Keywords area and only KW1 is highlighted in the cascading grid	selecting the KW2 from the cascading grid	both KW1 and KW2 are highlighted in the cascading grid and KW2 appears after KW1 in the Keywords area
has one keyword from level 1 (KW1), level 2 (KW2) and level 3 (KW3.1) but the KW3.1 had been selected before KW2, so KW3.1 appears before KW2 in the Keywords area and only KW1 and KW2 are displayed in the cascading grid	clicking another keyword from level 3 from the cascading grid (KW 3.2)	The cascading grid highlights KW1 and KW2 and the newly selected KW3.2. The Keywords area displays KW1, KW 3.1, KW2 and at the end of the list KW 3.2.
has several keywords from level 1, so both are displayed in the Keywords area but only the first one assigned to the media item is highlighted in the cascading grid	clicking the keyword not highlighted	the "first assigned" keyword is removed from the Keywords area and the cascading grid and the second one is appears on both sides.

7. Settings

7.1. Introduction

This section only describes the general and global settings applicable to several modules. For more information on specific settings, refer to dedicated chapters:

- Playlists settings: detailed in the Playlist Panel user manual.
- Control Panel settings: detailed in the Control Panel user manual.
- Ingest Scheduler settings: detailed in the Ingest Scheduler user manual.
- IPEdit settings: detailed in the IPEdit user manual.
- IPLogger settings: detailed in the IPLogger user manual.

Settings are available from the Tools menu of the IPDirector Menu bar.

7.2. General Settings

Display XT Structure

The Display XT Structure setting makes it possible to display the server structure in different ways in the various applications where it is available, e.g. in the Database Explorer, in the contextual menu of the Control Panel.

Three possible displays are available:

Display Option	Description
Do not display	All elements are listed without displaying the server structure or the page and bank organization.
Display XTs but not Page/Bank	All elements are listed on the level down the server they belong to.
Display XTs, Page and Bank	All elements are listed on the level down of the page/bank they belong to.

Display File Directory Structure

The Display File Directory Structure setting makes it possible to display the file structure in different ways in the various applications where it is available.

Three possible displays are available:

Display Option	Description
Do not display Directory Structure	All elements are listed without displaying the file directory organization.
Display Root Directory Only	All elements are listed on the level down the first level of the file directory structure (e.g. on-line nearline or media files, in the Database Explorer).
Display Full Directory Structure	All elements are listed on the level down of the file directory they belong to.

Date Format Recognized in Text Searches

Two formats are available:

- dd/mm/yyyy
- mm/dd/yyyy

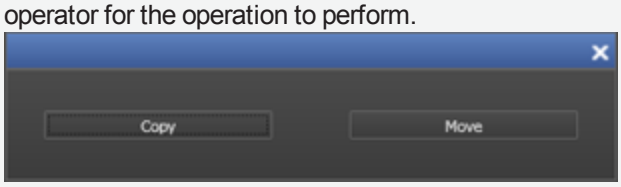
Free Text Search Behavior

When the users perform a search based on free text, the system may behave in two different manners.

Selected Option	Operation Performed
Classic Full Text	A search performed with a search string will return the list of results corresponding to this string. See also the Database Explorer user manual.
With Thesaurus	A search performed with a search string will return the corresponding synonyms, provided that they have been defined in the SQL thesaurus file.

Select a Way to Copy/Move Elements

Depending on the selected option, the copy and move operations could be performed in different ways:

Selected Option	Operations performed
Windows Style	Drag = move CTRL + drag = copy
Google Style	Drag = copy CTRL + drag = move
Confirmation Style	When dragging a clip, displays a popup window and asks the operator for the operation to perform. 

Action Taken when the Channel is Set to IDLE

Determines what the EVS video server does when the channel is set to idle:

- the video output is left as it is (= no action)
- the video output is reset to black

Key Default Output Color

This setting defines the output color on the Key channel when the user loads a Fill clip that is not associated with a Key clip. The available options are **Black** and **White**.

Language

The language setting makes it possible to change the interface language to the selected language.

7.3. Auto-Name Settings

7.3.1. Auto-Name Settings for Clips

Clip Name – Format String

Description

This setting allows the users to define auto-naming rules for new clips.

If the Save Clip window or the New Ingest window are not displayed at clip or ingest creation, the format string defined in the **Clip Name - Format String** field will be used to create the clip name or ingest name.

The various possible format string options are listed with a brief explanation under the field.

Double-clicking an item appends it to the format string.

User Fields

Up to 10 user fields can be used in the clip name, provided that a metadata profile has been assigned to the clip and that the selected user field number exist in the profile and has got a value.

For example, if %UF3 is used in the clip format string, the value entered in the third user field from the profile will be used in the clip name. This could be text, timecode or date.

Keywords

Up to 5 keywords can be used in the clip name, provided that the corresponding keyword number has been assigned to the clip.

For example, if %K2 is used in the clip format string, the second keyword assigned to the clip will be used in the clip name.

Ganged Recorders

When clips are created from ganged recorders, the value used for some of the format string options in the clip names may be different between linked clips.

These format string options are:

%COUNTER, %XTNAME, %XTNB and %CAMLBL.

For example, clips saved from 3 ganged recorders of a server can be distinguished one from each other by using the recorder name specific to each linked clip (%CAMLBL) in their name: CamA, CamB, CamC.

Feed Name

The feed name usually corresponds to the name of the recorder channel rrecording the train.

When a recorder channel is connected to an OUT port of a video router, itself associated to an IN port, the name of the router IN port is used as feed name.

Clip Name Prefix – Format String

If the Save Clip window or the New Ingest window are displayed at clip or ingest creation, the format string defined in the **Clip Name Prefix - Format String** field is automatically added as a prefix to the clip / ingest name.

If this field is left empty, the users will have the possibility to enter a name of their choice at clip creation.

The possible format string options are the same as for the clip name.

Double-clicking an item appends it to the format string.

The use of format string options related to user fields or keywords or specific to ganged recorders is the same for prefix as for auto-names.

Clip Name Counter Value

In the Clip Name and Clip Name Prefix format strings, the user has the possibility to insert an integer counter (%COUNTER). This setting allows the user to view or edit the next value of the counter, e.g. if 001 is entered in the field, the next counter value will be 001.

The number of digits entered in the **Clip Name Counter Value** field defines the format of the number. For example, if 0001 is entered in the field, the counter will have 4 digits and the counter will loop from 0001 to 9999.

7.3.2. Auto-Name Settings for Files

Clip File Name – Format String

This setting will be used to name the files created when backing up clips using XFile or XTAccess. If left empty, the default XTAccess or XFile settings will be used.

The various possible format string options are listed and explained under the field.

Up to 10 user fields can be used in the clip file name. See section "Auto-Name Settings for Clips" on page 93.

Double-clicking an item appends it to the format string.

Stream File Name – Format String

This setting will be used to automatically name files when streaming using XStream or XTAccess.

The various possible format string options are listed and explained in the field.

Up to 10 user fields can be used in the stream file name. See section "Auto-Name Settings for Clips" on page 93.

Double-clicking an item appends it to the format string.

Playlist File Name – Format String

This setting will be used to automatically name files created from consolidated playlists using XFile or XTAccess.

The various possible format string options are listed and explained in the field.

Up to 10 user fields can be used in the playlist file name. See section "Auto-Name Settings for Clips" on page 93.

Double-clicking an item appends it to the format string.

Image File Name – Format String

This setting will be used to name the files created when capturing an image in Control Panel.

The various possible format string options are listed and explained in the field.

Up to 10 user fields can be used in the image file name. See section "Auto-Name Settings for Clips" on page 93.

Double-clicking an item appends it to the format string.

7.4. Clips Settings

7.4.1. General Settings for Clips

Open Save Clip Window

If this checkbox is NOT selected, the clip will be made instantly when a new clip is created in the Control Panel. The clip is stored in the next available location on the page designated for IPDirector clips in the EVS server setup (default setting is page 6).

If this checkbox is selected, the Save Clip window will open when a new clip is created in the Control Panel. The user can enter data on the clip in this window. See the Control Panel user manual.

Guardbands

The guardbands correspond to A/V material which is added on both sides of the clip boundaries when the clip is created. They are defined in seconds in this setting field.

When a new clip is saved, the guardbands will automatically be added before the IN point of the clip and after the OUT point of the clip.

Default Clip Duration

The **Default Clip Duration** setting makes it possible to create a new clip with the default duration specified in this setting when only the IN point or the OUT point has been defined and the **NEW CLIP** button is clicked.

Create Clips on all Synchronized Recorders

When this setting is selected, clips will automatically be created on all recorders ganged to the recorder on which the user creates a clip.

Create Sub Clips on all Ganged Clips

If this setting is selected, when a user creates a sub-clip from one linked clip, sub-clips will automatically be created from all the clips linked to that clip.

If this setting is not checked, a sub-clip will only be created on the selected clip.

Trim all Ganged Clips

If this setting is selected, when a user trims a linked clip, all the clips linked to that clip will automatically be trimmed.

If this setting is not checked, only the selected clip will be trimmed.

Automatic Clip Creation based on Logs

A clip can be created when a log is dragged into a bin. The current setting is used to define the duration between the clip IN point and the log timecode (Pre Mark) and the duration between the log timecode and the clip OUT point (Post Mark).

Default values for the Pre Mark and Post Mark are 10 sec.

For more information on the creation of automatic clips, refer to the Database Explorer user manual.

Default Clip ID Display Mode

The clip ID mode determines which ID will be used by default in the display: Name, UmID or VarID.

Default XT for Partial Clip Restore

Clips published from XFile are displayed in the Database Explorer, and can be loaded to a Control Panel. When the user creates a sub-clip from a file stored in XFile and published, IPDirector will save the sub-clip on the EVS server specified in the option.

7.4.2. Take Settings

Default Effect Type

The **Default Effect Type** setting allows you to define the default transition effect to be applied when you use the Take function to shift from the PGM to the PRV channel. You can specify different transition effects for the audio track and the video track.

Default Effect Duration

The **Default Effect Duration** setting allows you to define the duration of the transition effect to be applied on the audio track and the video track when you use the Take function.

7.5. GPI Settings

7.5.1. Introduction

Context of Use

The GPI is the General Purpose Interface device that can be connected to the EVS video server. It allows the operator to send commands directly to the EVS server. These commands need to be reflected in the IPDirector applications.

The GPI keys first need to be configured in the Setup Configuration on the EVS server. The configuration on the EVS server includes the following settings:

- The definition of the application that will manage the GPI keys. In this case, it would be IPDirector.
- The port on which the serial connection between the EVS server and IPDirector is defined.
- The actions assigned to the GPI keys.

The settings which are defined in IPDirector specify the following:

- Which signal will trigger which action on which player channel of the EVS server when a given key is pressed on a GPI device connected to this EVS server. These are the INPUT GPIs. The actions triggered by the GPI need to be reflected in the IPDirector user interface. The INPUT GPIs actions are set up in parallel on the EVS server.
- Which signal will be transferred by IPDirector via a given GPI key to a third device. These are the OUTPUT GPIs.

These settings are defined in the Input GPIs and Output GPIs categories available from the **Tools > Settings** menu.

XT Server Selection

In both the Input GPIs and Output GPIs Settings window, the **Select an XT Server** field displays all the high resolution EVS servers available on all the network groups.

When an EVS server is selected in the field, the GPI parameters of that server are displayed. This will allow the user to modify these settings for the selected server.

Use of TTL GPIs

Each EVS video server has 4 Input GPIs, 4 Output GPIs and 4 TTL GPIs which can be configured either as Input GPIs or as Output GPIs. Depending on the option selected in the **How to Use the TTL GPIs** field, 4 or 8 GPIs will be displayed.

In the Input GPIs Settings window, changing the TTL configuration will result in the following behaviors:

- from Input GPIs to Output GPIs: the configuration of the last 4 Input GPIs is cleared.
- from Output GPIs to Input GPIs: a message will warn the user that the TTL GPIs may be used as Output GPIs in playlist, playlist macro command or timeline macro command.

In the Output GPIs Settings window, changing the TTL configuration will result in the following behaviors:

- from Output GPIs to Input GPIs: the configuration of the last 4 Output GPIs is cleared.
- from Input GPIs to Output GPIs: a message will warn the user that the TTL GPIs may be used as Input GPIs in playlist, playlist macro command or timeline macro command.

7.5.2. Input GPIs Settings

Purpose

The Input GPIs settings make it possible to configure the action to be triggered on a given player channel of the EVS server when a given key is pressed on a GPI device connected to this EVS server.

Up to eight GPI inputs can be used on an EVS server.

For each Input GPI, the following information needs to be defined:

- the action triggered by the GPI key on the EVS server.
- the player channel on which the action needs to be executed.
- the type of trigger signal sent by the GPI to EVS server.

In the IPDirector workspace, the triggered action will be reflected in the open applications to which the player channel has been assigned.

Only the GPI keys set up to be managed by IPDirector on the EVS server can be configured in the Input GPIs Settings window. The other ones will be dimmed.

Warning
The GPIs IN to be used in IPDirector need to be assigned to the IPDP protocol Setup Configuration module of Multicam (SHIFT-F2, Page 4). Otherwise, they cannot be defined in IPDirector.

Example

In the above example, when the GPI key 1 is pressed on the EVS server 03_XT3, this triggers a playback action on the PGM1 player channel of the XT3 server. The trigger signal is a rising edge pulse. With the configuration defined above, the IPDirector will show the triggered action in any application that displays the given player channel.

The following sections describe in details the various fields in the Input GPI Settings window.

Action

The **Action** field allows the user to define the action that will be triggered by the GPI key. The value defined in the **Action** field for a GPI key is also defined in the Setup Configuration of the EVS server. Modifying the action type on IPDirector will update the corresponding value in the EVS server Setup Configuration and vice versa.

The following actions can be defined on a GPI key:

Action	Description
PLAY	Initiates a play command at 100% on the selected channel.
PAUSE	Initiates a pause command on the selected channel.
RECUE	Initiates a jump to the IN point of the on air element on the selected channel. If this is a playlist, the jump is performed to the IN point of the first clip of the playlist.
PREVIOUS	Initiates a command to go to the previous clip of a playlist on the selected channel.
NEXT	Initiates a command to go to the next clip of a playlist on the selected channel.
SKIP	Initiates a command to skip the clip being played on the selected channel.
TALLY	Activates or deactivates the on-air flag on the selected channel.
EXITASAP	Initiates a command to exit the loop as soon as possible without playing the current element until its end and jump to the selected element.
EXITOUT	Initiates a command to exit the loop as soon as the OUT point of the current element is reached and jump to the selected element.
NONE	No value is defined.

Channel

The **Channel** field allows the user to define the channel on which the GPI key action will be executed. The possible values are:

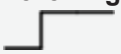
- a channel of the EVS server to which the GPI is physically linked
- the **None** value.

Trigger Mode

The **Trigger Mode** field allows the user to define the type of trigger signal that will be sent by the GPI to the EVS server. The following trigger modes can be defined:

Trigger Mode	Description
Pulse Rising Edge 	The trigger is done on a rising edge pulse.
Pulse Falling Edge 	The trigger is done on a falling edge pulse.
Level High 	The trigger is done when the level changes to high level.

Trigger Mode	Description
Level Low 	The trigger is done when the level changes to low level.
None	No trigger mode is defined.

Trigger Mode	Description
Pulse Rising Edge 	The trigger is done on a rising edge pulse.
Pulse Falling Edge 	The trigger is done on a falling edge pulse.
Level High 	The trigger is done when the level changes to high level.
Level Low 	The trigger is done when the level changes to low level.
None	No trigger mode is defined.

Note
If the operator selects **None** for one of the fields, all three fields are reset to **None**. It is considered that the GPI is not used.

Delay

It is possible to specify a delay between the time the GPI key is pressed and the time the action will be carried out on the EVS server.

7.5.3. Output GPIs Settings

Purpose

The Output GPIs are signals that are sent from an EVS server under the control of the IPDirector.

The Output GPIs are used to send a signal from the IPDirector to a GPI key at a given timecode of a playlist played on a given player channel. This signal can then be used to trigger a record action of the playlist from the given timecode by a third device, for example a VTR. Up to eight Output GPI commands can be defined.

The Output GPI keys will be unavailable in IPDirector if they have been assigned to the Remote panel via the Replace function defined on the Remote panel itself.

For each Output GPI, the output mode, the pulse duration and the offset value can be set when defining the Output GPI. For more detailed information, refer to the Playlist Panel user manual.

The Output GPIs Settings window is used to determine how to use the TTL GPIs and to specify the Advance value.

Advance

In the **Advance** field, you can specify how many seconds ahead of the timecode (on which the GPI tag is defined) the Output GPI signal should be sent by the IPDirector.

7.6. OSD Settings

Purpose

The On-Screen Display settings allow the users to select the category of information to be displayed for each playout channel. This does not apply to recorder channels or software player.

Select an XT Server

In the **Select an XT server** drop-down list, first select the EVS server for which you want to specify OSD settings.

OSD Mode

Global OSD Mode

This mode applies to clips, growing clips, trains, playlist elements and timelines loaded on the channel. Two options are available.

- **Basic**

  With this option selected, only the following information is displayed on screen:

  - the current on-air timecode of the clip, growing clip or train loaded on the channel
  - the on-air timecode of the playlist element loaded on the channel
  - the on-air timeline track position of the loaded timeline.

- **Detailed**

  This is the default value.

  It gives detailed information about the loaded media.

OSD Info in Playlist Mode

This mode applies to playlists loaded on the player channel. Two options are available.

- **Display Transition Information**

  When this mode is chosen, select which type of information to display on screen as Remaining Time: time until next break or time until next available element.

- **Display Playlist Elements**

  The OSD mentions the following information:

  - Channel Name
  - Previous Clip Name
  - Current Clip Name
  - Current Clip Name + 1
  - Current Clip Name + 2

  When this mode is chosen, select which type of information to display on screen as Clip Information, Current On-Air Timecode and Remaining Time.

Clip Information

This setting defines which clip information will be displayed on screen: the Clip Name/VarID or the LSM ID.

Display Current On-Air Timecode

This setting defines whether the current on-air timecode will be displayed or not.

Display Remaining Time

This setting defines how the remaining time information will be displayed on screen with playlists:

- remaining time until next break
- remaining time until next transition (only with the Display Playlist Elements mode)
- remaining time until next unavailable element

7.7. Image Capture Settings

Default Path for Captured Images

This setting allows the operators to specify a destination folder where the captured images will be stored. This path is used for the Grab to File actions.

- If the administrator has specified a path applicable to all users in the User Manager, you will see the path in this setting but you will not be able to modify it.
- If the administrator has defined a default path in the User Manager, you can modify the path if requested.
- If the administrator has not defined a default path, you can specify a path for captures images in this setting. The path needs to point to a shared folder on the Gigabit Ethernet network and should have the following pattern: `\\<MachineName>\<SharedFolder>\`.

Capture Images on all Ganged Recorders or Linked Clips

When this option is selected, the image grabbed on a clip will also be grabbed:

- on all the recorder channels ganged to the recorder channel from which the image is grabbed.
- on all the clips linked to the clip on which the image is grabbed.

8. Shortcut Definition

8.1. Introduction

For each application in the IPDirector, keyboard shortcuts are available to make operation faster to the operator.

The list of shortcuts can be accessed by clicking the **Tools > Define Shortcuts** option from the menu bar of the IPDirector main window.

Some shortcuts can be redefined to suit individual preferences. They are displayed in regular text. See section "How to Change a Shortcut" on page 106. Other ones cannot be modified. They appear as dimmed text.

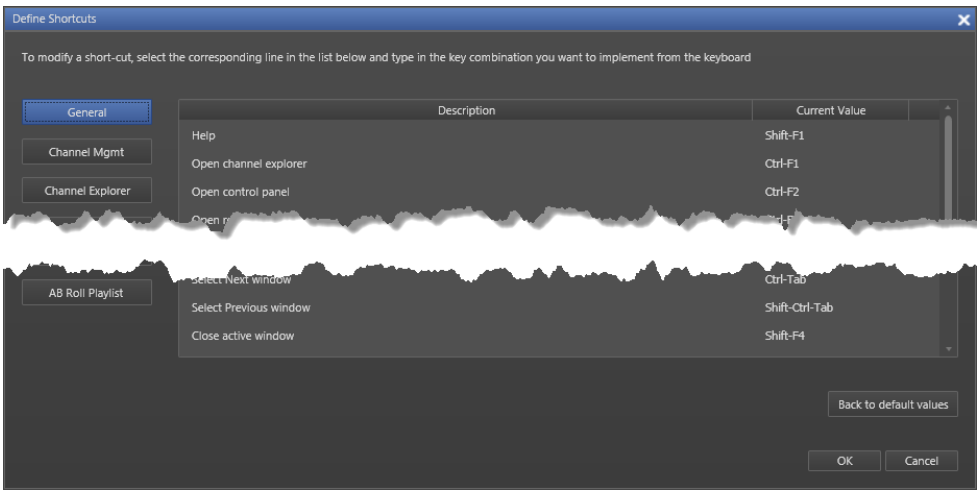
This section only describes the General and Channel Management Shortcuts, which are valid for several applications. For more information on shortcuts specific to an application, refer to:

- the Channel Explorer user manual
- the Control Panel user manual
- the Database Explorer user manual
- the IPLogger user manual
- the Playlist Panel user manual
- the Recorder Panel user manual
- the VTR Control Panel user manual
- the Ingest Scheduler user manual
- the AB Roll Playlist user manual

8.2. How to Change a Shortcut

To change a shortcut setting, proceed as follows:

1. Select the menu **Tools > Define Shortcut** from the IPDirector Menu bar to open the Define Shortcuts window:



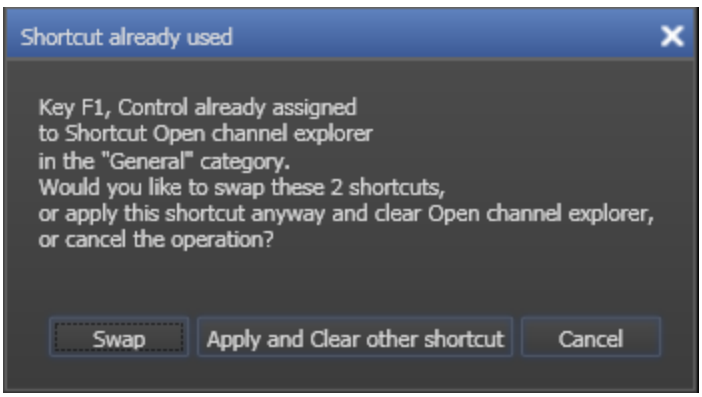
2. Select the application in which you want to modify a shortcut by clicking the corresponding button on the left. The **General** and **Channel Management** buttons include general shortcuts or shortcuts valid for several applications.

   The shortcuts usable in the corresponding application are displayed on the right pane.

3. Select the relevant shortcut action from the shortcut list. Only the shortcuts displayed in regular text can be modified.

4. Strike the key or key combination to be used as the new shortcut.

   - If the new shortcut key is still available, it is automatically modified in the **Current Value** column.
   - If the new shortcut key is not available, the following type of error message is displayed:



5. Select **OK** to confirm the change in the Define Shortcut window.

The change in the shortcut definition are saved and available in the application.

To restore the default values for an application, use the **Back to Default Values** button in the bottom right part of the window.

8.3. General Shortcuts

All the general shortcuts items that are available are shown in the screenshots below with their default values. These shortcuts are global to the system and not specific to one application. These can be modified and saved by the user if desired.

Description	Current Value
Help	Shift-F1
Open channel explorer	Ctrl-F1
Open control panel	Ctrl-F2
Open recorder panel	Ctrl-F3
Open database explorer	Ctrl-F4
Open IPLogger	Ctrl-F5
Open keyword grid	Ctrl-F6
Open keyword List	Ctrl-F7
Open dictionary	Ctrl-F8
Open Ingest scheduler	Ctrl-F9
Open Video display	Ctrl-F10
Open Playlist Panel	Ctrl-F12
Open Timeline display	Shift-Ctrl-F12
Open VTR control panel	Shift-Ctrl-F2
Select Next window	Ctrl-Tab
Select Previous window	Shift-Ctrl-Tab
Close active window	Shift-F4

Description	Current Value
Select control panel #1	F1
Select control panel #2	F2
Select control panel #3	F3
Select control panel #4	F4
Select control panel #5	F5
Select control panel #6	F6
Select control panel #7	F7
Select control panel #8	F8
Select control panel #9	F9
Select control panel #10	F10
Select keyword grid #1	Ctrl-1
Select keyword grid #2	Ctrl-2
Select keyword grid #3	Ctrl-3
Select keyword grid #4	Ctrl-4
Select keyword grid #5	Ctrl-5
Select keyword grid #6	Ctrl-6
Select keyword grid #7	Ctrl-7

Description	Current Value
Select keyword grid #8	Ctrl-8
Select keyword grid #9	Ctrl-9
Select keyword grid #10	Ctrl-0

8.4. Channel Management Shortcuts

All the Channel Management shortcuts are shown in the screenshots below with their default values. These can be modified and saved by the user if desired.

Description	Current Value
PLAY	P
Var play	Ctrl-P
Change the speed of the on-air element	,
PAUSE	Space
Fast Forward (FF)	F
Fast Reverse (FR)	W
E/E	L
Return	X
Snap to LIVE	Q
TAKE	Ctrl-T
Activate/Deactivate 2nd controller	D
Mark IN	I
Clear IN	Ctrl-I
Goto IN	A
Mark OUT	O
Clear OUT	Ctrl-O
Goto OUT	E
Turn OSD ON or OFF	Shift-F5
Lock/Unlock channel	Ctrl-L
Change LOOP mode	B
Send clip to default bin	Shift-B
Append clip to default playlist	Shift-A
Send to Archive (default Xfile)	Shift-X
Save clip	S

9. Remote Control Management

9.1. Introduction

Remote Devices

Remote devices can be connected to IPDirector to perform specific actions.

The MPlay Remote is a Multi-Playout controller used to control the playout of subjects on up to 4 channels.

The BEPlay Remote is used for media browsing, editing and playout.

Opening the Control Manager Window

The configuration of the remote devices is performed through the Remote Control Manager window. It can be accessed from the IPDirector main window, via **Tools > Remote Control Manager**.

The window displayed several tabs, one for each remote device assigned to a serial communication port in the Remote Installer.

9.2. MPlay Remote

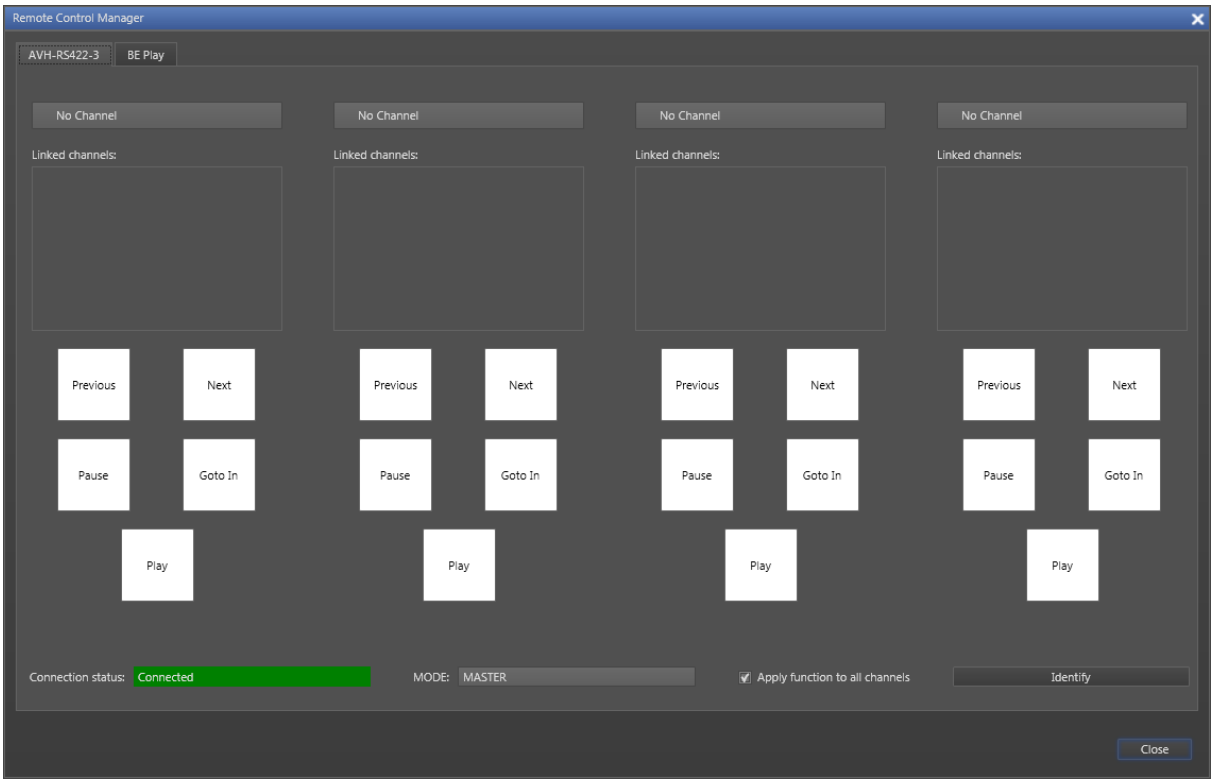
9.2.1. Introduction

The MPlay Remote is a simple interface dedicated to control the playout of clips, playlists or graphics. It is designed to simultaneously control up to 4 player channels. Its buttons can be configured to perform classic transport functions.

9.2.2. MPlay Remote Configuration

Overview of the Remote Control Manager Window

You can access the Remote Control Manager window from the IPDirector main window, via **Tools > Remote Control Manager**.



Then, select the tab corresponding to the MPlay Remote device.

Several MPlay remote devices can be connected. In this case, as many tabs are displayed as they are devices. One of the devices is defined as Master, the other ones as slaves. This is done in the Remote Installer. Refer to the Technical Reference manual.

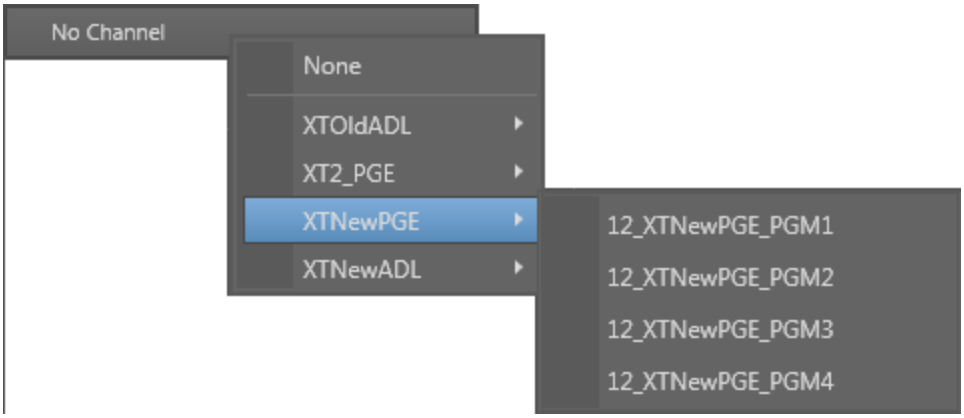
You will be able to control up to four player channels with one device.

Assigning Player Channels

How to Assign Player Channels from the Channel Name Contextual Menu

To assign a player channel to the MPlay Remote from the **Channel Name** field of the Remote Control Manager window, proceed as follows:

1. In the Remote Control Manager window, right-click one of the **Channel Name** field. A contextual menu is displayed:



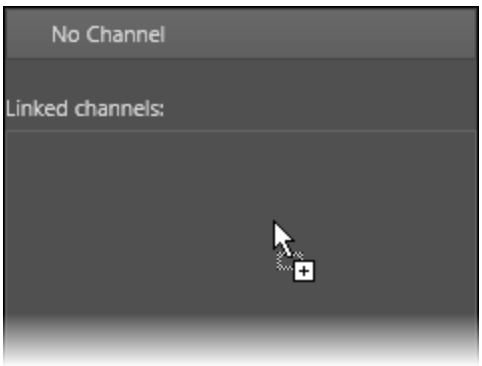
2. Select a player channel.
3. Repeat steps 1 and 2 for all the channels you want to associate to the buttons.

The channel name is displayed in the **Channel Name** field.

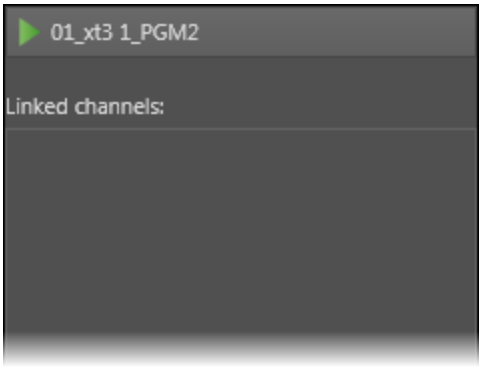
How to Assign Player or Recorder Channels to Function Buttons from the Channel Explorer

To assign player channels to the MPlay Remote by a drag-and-drop operation from the Channel Explorer, proceed as follows:

1. Open the Channel Explorer.
2. Select the player channel and drag it to one of the four**Channel Name** field areas in the Remote Control Manager window.



The player channel name is displayed in the **Channel Name** field:

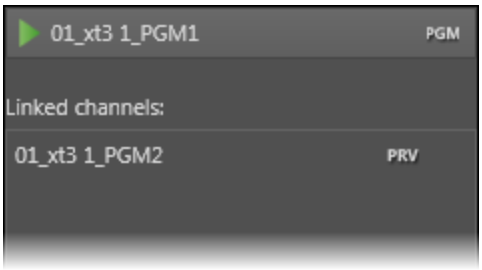


3. If needed, repeat these two steps for the three other **Channel Name** field areas.

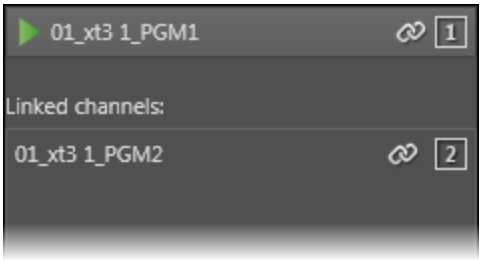
Linked Channels

In case the player channel is linked to another one in a PGM/PRV mode, gang mode or Fill and Key mode, the linked channels are listed in the Linked Channels box.

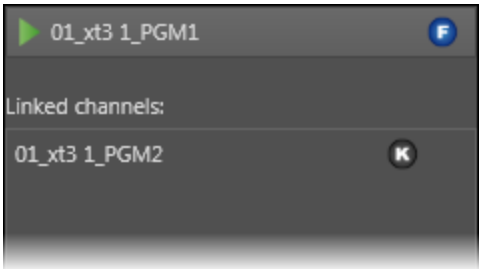
- PGM/PRV Mode:



- Gang Mode:



- Fill and Key Mode:



How to Customize Transport Buttons

To associate a transport function to one of the button, proceed as follows:

1. In the Remote Control Manager window, right-click one of the buttons in the box you have assigned a player channel to.

   The contextual menu with all the transport functions available is displayed:

2. Select the function you want to assign to the button.

The action name is displayed in the button for the selected channel:

Note
If the **Apply function to all channels** checkbox had previously been selected, when the operator assigns a function to a button, it is assigned to all the corresponding buttons for the player channels controlled by the remote. This modification is done on the selected tab only, not on all the connected MPlay devices.

9.2.3. How to Use the MPlay Remote

When you have assigned a player channel to the MPlay Remote and configured its buttons, you can use the device to perform actions on that channel.

1. Associate the same player channel to an IPDirector module such as Control Panel, Playlist Panel, Database Explorer or AB Roll Playlist interface. You can assign it to several windows at the same time.
2. On the MPlay Remote, press the button corresponding to the action you want to apply.

The action is performed on the panel or window which is active at the moment you press the button.

9.3. BEPlay Remote Device

9.3.1. Introduction

The BEPlay is a remote controller for browsing, editing and playing content.

It can be configured to control selected channels and to send media to predefined destinations.

The first sections of the current chapter are dedicated to the configuration and the description of the various buttons.

The next sections provide procedures on the main functionalities which can be performed with the remote.

9.3.2. BEPlay Remote Configuration

Overview of the Remote Control Manager Window

General Description

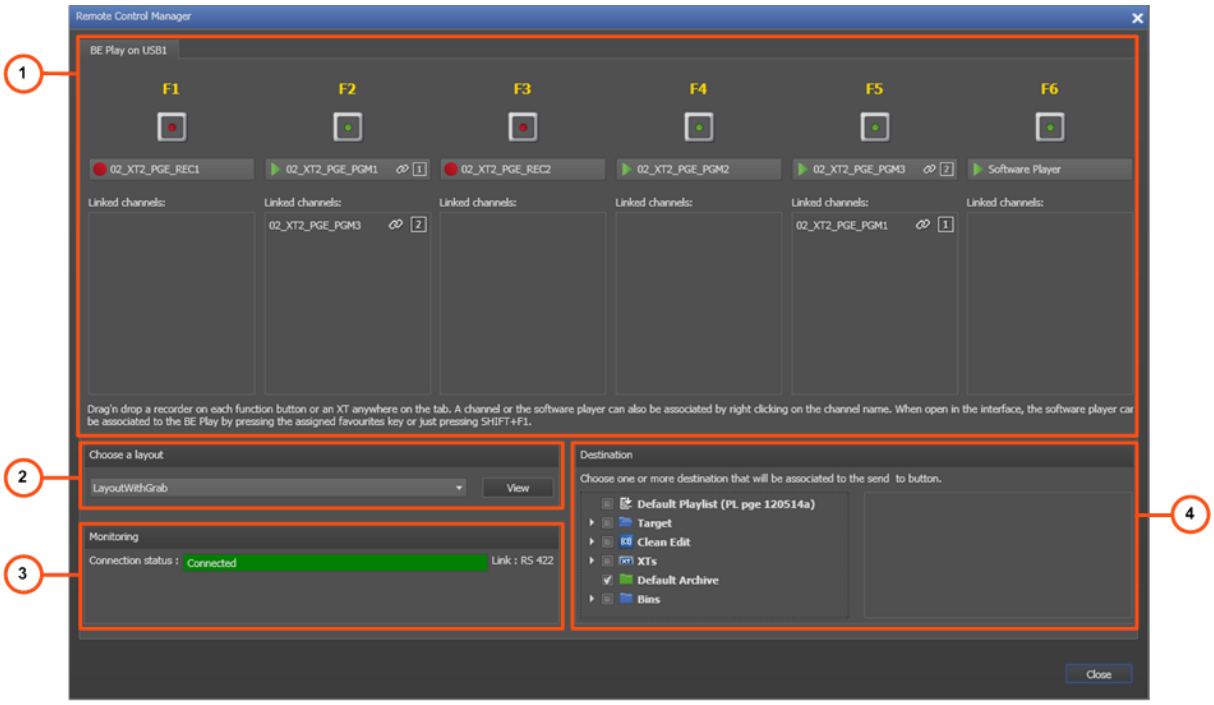
The configuration of the BEPlay remote device is performed from the Remote Control Manager window.

You can access this window from the IPDirector main window, via **Tools > Remote Control Manager**. Then, select the tab corresponding to the BEPlay Remote device. There can only be one BEPlay remote per IPDirector workstation.

The remote configuration is linked to the workstation, not to the user.

Illustration

The BEPlay tab of the Remote Control Manager window contains the areas highlighted on the screenshot below:



Area Description

The table below describes the various parts of the BEPlay tab:

Part	Name	Description
1.	Channels Assignment area	This area is used to assign channels to the remote **Function** buttons See section "Assigning Channels to Function Buttons" on page 129.
2.	Choose a Layout area	This area is used to select a remote layout. See section "Selecting a Remote Layout" on page 118.
3.	Monitoring area	This area is used to monitor the connection status. See section "Monitoring the Connection Status" on page 117.
4.	Destinations area	This area is used to define target destinations where the media will be sent to when using the **Send to** button. The available destination targets are the following: • the user's default bin, if any • the default playlist, if any • a default archive target • any target destination visible on the GigE network that has been defined in the Remote Installer (CleanEdit targets, Avid targets, Final Cut Pro targets, File targets, XT targets). • the EVS servers for which the user has visibility right • the bins configured in IPDirector and for which the user has write access right.

Monitoring the Connection Status

The BEPlay remote device can be connected to the IPDirector workstation through a RS422 port or a USB port. The RS422 port must be configured in the Remote Installer.

The monitoring of the connection status between the BEPlay remote device and the IPDirector workstation is performed from the Monitoring area of the Remote Control Manager window.

You can access this window from the IPDirector main window, via **Tools > Remote Control Manager**.

When a serial port has been configured, the **Link: RS422** information is displayed in the Monitoring area and the system looks for a BEPlay remote on the serial port.

If no serial port has been configured, the system tries to detect a BEPlay remote on a USB port. If one is found, **Connected – Link: USB** is displayed in the Monitoring area.

Selecting a Remote Layout

Only clips, playlists and timelines can be controlled by the device.

Two modes are defined for using the BEPlay. So, two layouts are available from the **Choose a Layout** field. The two layouts differ in two action buttons.

- The Layout with Split : will be preferably used with playlist elements
- The Layout with Grab

Clicking on the **View** button opens the Layout Form window which corresponds to the selected layout and shows the name of the functions assigned to each button. No action can be performed from this window.

All the functions linked to each button are described in "BEPlay Remote Buttons" on page 118.

9.3.3. BEPlay Remote Buttons

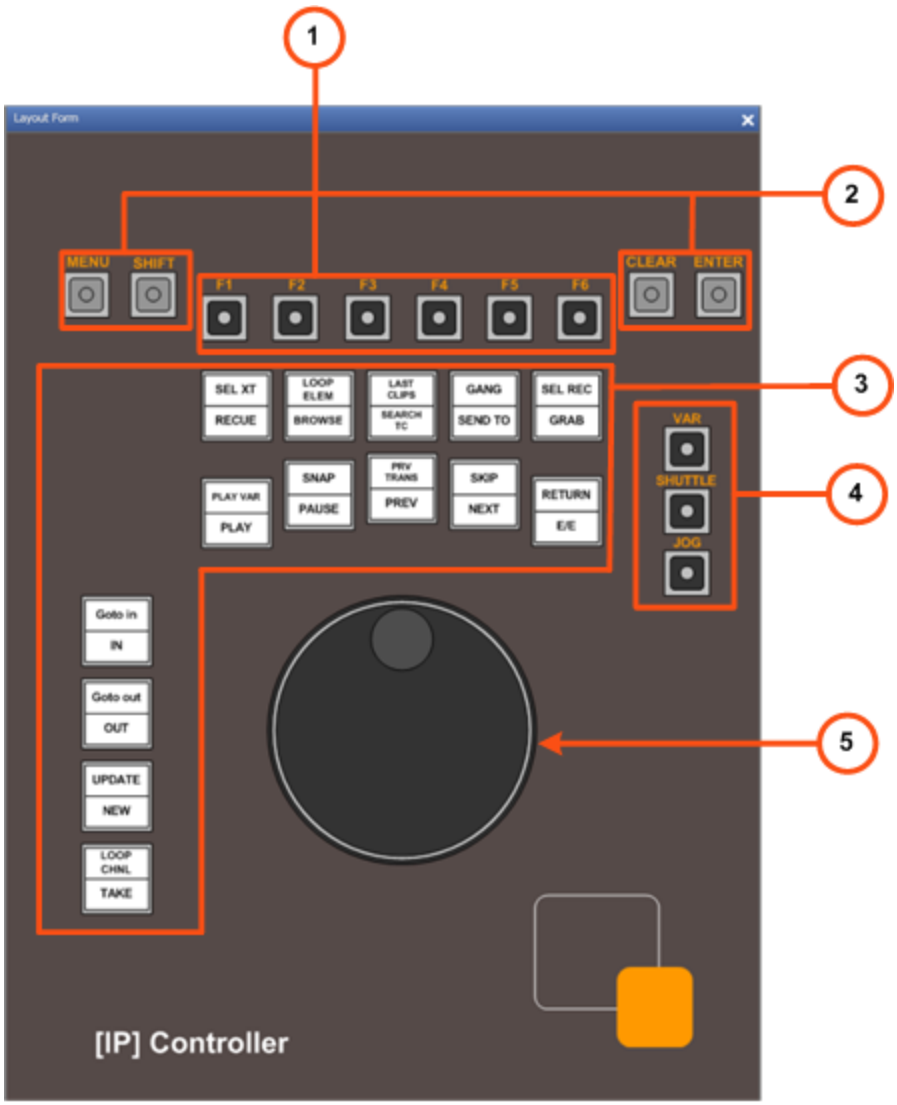
Overview of the BEPlay Remote Buttons

General Description

The BEPlay remote device has different kinds of buttons. The device has labels on some of them for the usual use with IPDirector.

Illustration

The different kinds of buttons are represented on the following image.



Area Description

The table below describes the different kinds of buttons of the BEPlay device:

Area		Description
1.	Function buttons	Function buttons are used to control a recorder or a player channel, or the Software Player. See section "Function Buttons" on page 120.
2.	Special buttons	4 buttons can be used alone or together with other buttons to perform specific actions. See section "Special Buttons" on page 126.
3.	Action buttons	14 buttons can all be used to perform two different actions, depending on whether the **SHIFT** button is pressed prior to the button. The actions vary according to the selected layout. See section "Action Buttons" on page 121.
4.	Wheel Mode buttons	Three buttons can be combined to provide 5 modes according to which the wheel will be used. See section "Wheel Mode Buttons" on page 128.
5.	Wheel	The wheel is used to navigate through the loaded media. It can be used according to 5 different modes. See section "Wheel Mode Buttons" on page 128.

Function Buttons

Function buttons are used to control a recorder or a player channel, or the Software Player. The section "Assigning Channels to Function Buttons" on page 129 describes the possible ways to assign channels to function buttons.

The LED of a function button gives indication on the channel assignment.

The LED of a Function button…	…when
is green	a player channel or the Software Player is assigned to the button
flashes green	the player channel or the Software Player assigned to the button is being controlled by the Remote
is red	a recorder channel is assigned to the button
flashes red	the record train from the recorder channel assigned to the button is loaded on the player controlled by the Remote
is not turned on	• no channel is assigned to the button, or • the user cannot see the recorder channel or control the player channel, or • the Software Player is not opened.

Action Buttons

Use of Action Buttons

The BEPlay Remote has 14 buttons which can all be used to perform specific actions. Their action will depend upon several conditions:

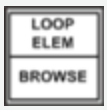
- the 

button is pressed before the **Action** button or not
- the Layout selected from the Remote Control Manager window
- the media type (clip, playlist, train, playlist element or timeline) loaded on the channel controlled by the remote.

The following tables gives a brief description of the action of each **Action** button. The media types on which the **Action** button has an effect are mentioned in bold in the **Description** column.

Channel Management / Mode Selection

Action	Button	Description
SEL(ect) XT		Displays a list and allows • to select the EVS server from which the channels will be assigned to the **Function** buttons in Normal mode. See section "Assigning Channels to Function Buttons" on page 129. OR • to associate the Software Player to the remote. The **Software Player** option is displayed in the list only when the Software Player is associated to a Control Panel or a Playlist Panel. **MENU**: gets out of the list.
SEL(ect) REC(order)		Displays a menu with the list of available recorder channels. **MENU**: gets out of the list. See section "Loading Media" on page 134.
GANG		When channels have previously been ganged, this function ungangs, or re-gangs channels. (available in layout with grab)

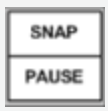
Action	Button	Description
TAKE		**Playlists / clips / trains:** If the controlled channel is in PGM/PRV mode, the Take function shifts from the current media on the PGM channel to the media on the associated PRV channel using the Take Effect settings as defined in **Tools > Settings > Clips > Clips/Take**. If the controlled channel is in Lock Timeline mode, the Take function acts as a toggle between the media on the Player pane and the media on the Timeline pane using the Take Effect settings as defined in **Tools > Settings > Clips > Clips/Take**.
BROWSE		Enables or disables the Browse mode. The button is red in Browse mode. See section "Browsing Media with the BEPlay Remote" on page 136.

Clip Selection and Transfer

Action	Button	Description
SEARCH TC		**Clips / trains:** Displays the list of clips and trains containing the same TC as the loaded clip and allows the selection of an element by using the wheel. The selected element is automatically loaded on the same frame as the initial element. **MENU**: gets out of the list. **ENTER**: appends the loaded clip to the default playlist. **SHIFT - ENTER**: inserts the loaded clip to the default playlist before or after the on-air element.
LAST CLIPS	 , 	Displays the list of last created clips and allows the selection of a clip by using the wheel, Automatically loads the last created clip on the controlled channel. Then, by moving the wheel through the list, the clip highlighted in the list is automatically loaded on the controlled player. **MENU**: gets out of the Last Created Clips list. **ENTER**: appends the selected clip to the default playlist. **SHIFT - ENTER**: inserts the selected clip to the default playlist before or after the on-air element.

Action	Button	Description
SEND TO		Sends the media to the destinations predefined in the Remote Control Manager window. **Playlists:** sends the loaded playlist. **Clips:** sends the loaded clip or the marked portion of the loaded clip. **Trains:** sends the marked portion of the loaded train. See section "BEPlay Remote Configuration" on page 116.
GRAB		**Playlists / clips / trains:** (available in layout with grab) Saves a small image of the loaded media for use as a thumbnail. The image will be that of the current position when you click the **Grab** button. The image is stored as a file in a directory specified in the Settings (**Tools > Settings > Image Capture > Default Path for Captured Images**). See section "Image Capture Settings" to know how this path can be set.

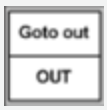
Transport Functions

Action	Button	Description
PLAY		**Playlists / clips / trains / timelines:** Plays the media loaded on the controlled channel.
PLAY VAR	 , 	**Playlists / clips / trains:** Plays the media loaded on the controlled channel at speed defined in the Control Panel settings.
PAUSE		**Playlists / clips / trains / timelines:** Stops the playout of the media loaded on the controlled channel.
E/E		**Playlists / clips / trains:** Unloads the loaded media and loads the last loaded record train or recording ingest at its current recording position. This function can be used with clips loaded on the IPEdit Player.

Action	Button	Description
RETURN (Ret)		**Clips:** When a clip has been loaded on a player channel, pressing **RETURN** loads the same frame of media from the original record train, if it is still available (not overwritten in the recorder yet). This function can be used with clips loaded on the IPEdit Player.
SNAP		**Playlists / clips / trains:** Goes back to the last loaded record train or recording ingest at the timecode where the E/E mode was exited, effectively "snapping" back to where the user left off in the record train or recording ingest. This function can be used with clips loaded on the IPEdit Player.
PREV(ious)		**Playlists / clips / trains:** Loads the previous playlist element, linked clip or train on the controlled channel.
PREV(iew) TRANS (ition)		**Playlists:** Allows the user to preview a transition effect between playlist elements. Starts the playout before the element transition, for the duration of the pre-roll.
NEXT		**Playlists / clips / trains:** Loads the next playlist element, linked clip or train on the controlled channel.
SKIP (Element)		**Playlists:** Skips the next playlist element during the playout of the playlist so it will not play. If the button is pressed twice, the next 2 elements will be skipped, and so on.
GO TO ELEM(ent)		(available in layout with split) **Playlists:** Exits a partial loop and jumps on the selected element, according to the selected Exit Loop mode, i.e. as soon as possible or when the OUT point of the current element is reached.
RECUE		**Playlists**: Preloads the first frame of the first playlist element from the playlist associated to the controlled channel. **Timelines:** Acts as Goto Mark IN in the IPEdit Player. Acts as Recue timeline in the IPEdit Timeline.

Action	Button	Description
LOOP ELEM (ent)		**Playlists:** • If the loaded playlist element is not in a partial loop, the **Loop Elem** button puts it in an infinite loop. • If the loaded playlist element is the single element in a partial loop, the **Loop Elem** button removes the loop. • If the on-air playlist element is in a partial loop containing other clips, the **Loop Elem** button has no effect.
LOOP CHNL (channel)		Changes the loop mode of the controlled channel. **Playlists:** no loop  ↔ loop  (the action button is green). **Clips:** no loop  ↔ loop  (the action button is green) ↔ loop bounce  (the action button is red).

Clip Creation Functions

Action	Button	Description
IN		**Playlist elements / clips / trains:** Sets a Mark IN point at the current position of the loaded media.
OUT		**Playlist elements / clips / trains:** Sets a Mark OUT point at the current position of the loaded media.
CLEAR IN		**Playlist elements / clips / trains:** Clears the Mark IN point which has been set but not yet saved.
CLEAR OUT		**Playlist elements / clips / trains:** Clears the Mark OUT point which has been set but not yet saved.
GOTO IN		**Playlist elements / clips / timelines:** Goes to the IN point of the loaded media. This function can be used with clips loaded on the IPEdit Player or with timelines from the IPEdit timeline pane.

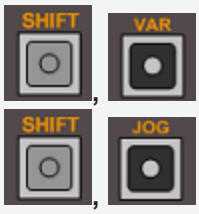
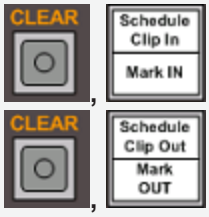
Action	Button	Description
GOTO OUT		**Playlist elements / clips / timelines:** Goes to the OUT point of the loaded media. This function can be used with clips loaded on the IPEdit Player or with timelines from the IPEdit timeline pane.
NEW		**Playlist elements / clips / trains:** Saves the new clip after having marked an IN point and an OUT point. This function can be used with clips loaded on the IPEdit Player.
UPDATE		**Playlist elements / clips:** Allows the user to save the changes made to a playlist element or to a clip.
SPLIT		(available in layout with split) **Playlists Elements:** Splits the loaded playlist element in two elements at the current timecode.

Special Buttons

The BEPlay Remote has 4 buttons which can be used alone or together with other buttons to perform various types of actions.

The following table gives a brief description of the action of each button.

Button	Description
	Acts as Escape to exit a screen. When using the **Sel XT**, **Last clips**, **Search TC** or **Sel Rec** options, a list is displayed on the IPDirector screen. Pressing the **MENU** button gets out of the list.
	Locks / unlocks the remote. When the remote device is locked, no button is available, except to unlock the BEPlay. The Function LED flash red one after each other. The time to press the two buttons must not exceed 3 seconds.
	The **SHIFT** button is used prior to another button to modify the behavior of this button. When it is activated, its LED is green.
 **, action**	Allows to apply the action associated with the upper part of the button. See section "Action Buttons" on page 121.
	From a list (**Last clips**, **Search TC** or **Browse** options), inserts the loaded clip to the default playlist, before or after the loaded element, depending on the setting.

Button	Description
	Switches the function buttons assignment between the normal mode (all channels of an EVS video server) and the favorite mode (channels defined in the Remote Control Manager window). The **MENU** LED flashes red in favorite mode.
	See section "Wheel Mode Buttons" on page 128.
	Used to associate the Software Player to the remote.
	The **CLEAR** button is used prior to another button to modify the behavior of this button. When it is activated, its LED is red. • **CLEAR, IN**: works as **CLEAR IN** • **CLEAR, OUT**: works as **CLEAR OUT**
	Cancels the applied saved filter in the Database Explorer.
	The **ENTER** button can be used alone (see below) • In Browse mode, in the Last Created Clips list and in the Search on TC list, when a clip is loaded on the controlled channel, pressing the **ENTER** button appends it to the default playlist. • In the SEL XT and the SEL REC lists: pressing the **ENTER** button confirms the selection. • In the Database Explorer tree view: opens or closes a tree node. • In the saved filter pane of the Database Explorer: applies the selected saved filter. or it can be used together with another button (refer to the description of the other buttons): • see **MENU**, **ENTER**. • see **SHIFT**, **ENTER**. • see **CLEAR**, **ENTER**.

Wheel Mode Buttons

Purpose

Three buttons are available to select the mode according to which the wheel will be used. As some of these buttons can be used in association with other buttons, all things considered, 5 wheel modes are available to the users.

Pressing a **Wheel Mode** button activates a wheel mode but does not change the playout speed.

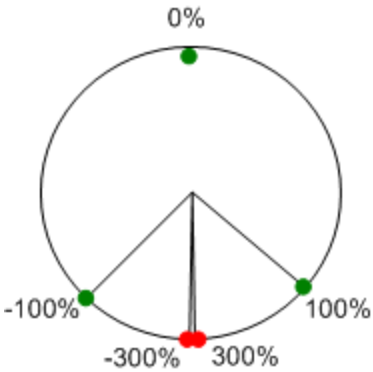
VAR Mode

The Var wheel mode enables to move in the loaded media at a selected constant review speed.

It is activated by pressing 

. The **VAR** button LED is red.

On the wheel, the zero position is calculated from the current playout speed to correspond to the point where the speed is null. The following picture represents the positions of different speed values:



Shift Var Mode

The Shift Var wheel mode is used to fine tune a speed by applying +1% or -1% to the speed.

It is activated by pressing 

then 

. The **VAR** button LED flashes red.

The current speed corresponds to the zero position. The speed can be increased (clockwise), or decreased (counter-clockwise). The positions of the different speed values will differ according to the initial playout speed.

Shuttle Mode

The Shuttle wheel mode enables to play fast forward or fast rewind the loaded media.

It is activated by pressing 

. The **SHUTTLE** button LED is red.

The zero position is calculated from the current playout speed to correspond to the point where the speed is null. The speed range is: -35x to +35x.

Jog Mode

The Jog wheel mode is used to navigate through the loaded media field by field.

It is activated by pressing 

. The **JOG** button LED is red.

One impulsion of the wheel corresponds to a jump of one field and is equivalent to pressing the left arrow or the right arrow keys on the keyboard.

Fast Jog Mode

The Fast Jog wheel mode is used to navigate through content second by second.

It is activated by pressing 

then 

. The **JOG** button LED flashes red.

One impulsion of the wheel corresponds to a jump of 1 second.

9.3.4. Assigning Channels to Function Buttons

Assignment Modes

Each of the 6 **Function** buttons can be assigned to a recorder channel, to a player channel or to the Software Player.

The assignment of channels to **Function** buttons can be done in two ways:

- Favorite Mode: selected channels are defined in the Remote Control Manager window. This is done during the configuration of the remote.
- Normal mode: this mode uses all channels of an EVS video server. The server can be selected from the remote, during its use.

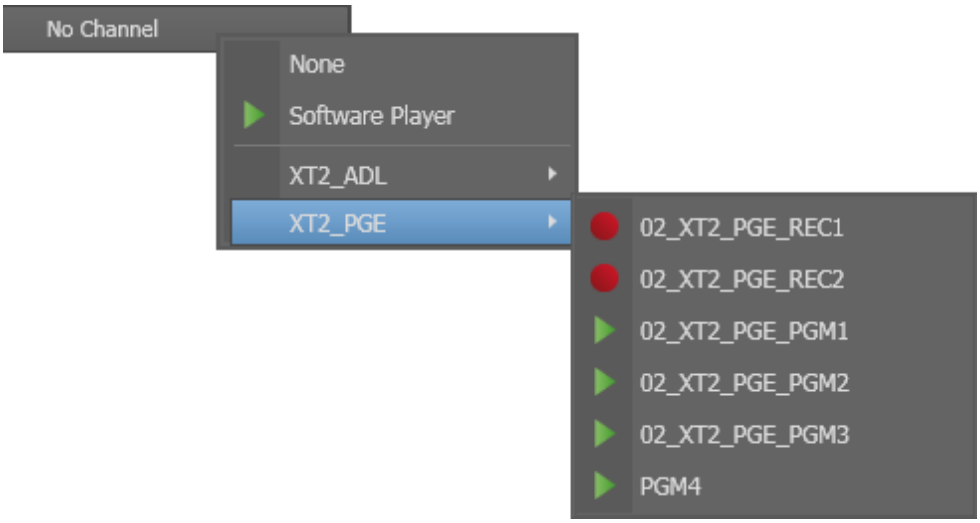
To switch the function buttons assignment between the normal mode and the favorite mode, press the **SHIFT** key and then the **MENU** button.

Assigning Player or Recorder Channels to Function Buttons in Favorite Mode

How to Assign Player or Recorder Channels to Function Buttons from the Channel Name Contextual Menu

To assign a recorder channel, a player channel or the Software Player to a **Function** button of the BEPlay Remote from the **Channel Name** field of the Remote Control Manager window, proceed as follows:

1. In the Remote Control Manager window, right-click one of the **Channel Name** field. A contextual menu is displayed:



2. Select a channel or the Software Player.
3. Repeat steps 1 and 2 for all the channels you want to associate to the buttons.

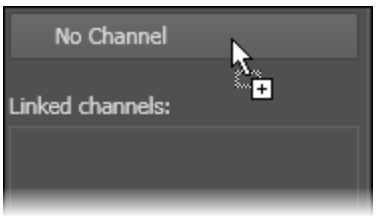
The channel name is displayed in the **Channel Name** field:

and the **Function** button LED turns red (recorder) or green (player) in the Remote Control Manager and on the remote:

How to Assign Player or Recorder Channels to Function Buttons from the Channel Explorer

To assign a recorder channel or a player channel to a **Function** button of the BEPlay Remote by a drag-and-drop operation from the Channel Explorer, proceed as follows:

1. Open the Channel Explorer.
2. Select the channel and drag it to one of the six **Function** button / **Channel Name** field areas in the Remote Control Manager window.



The channel name is displayed in the **Channel Name** field:

and the **Function** button LED turns red (recorder) or green (player) in the Remote Control Manager and on the remote:

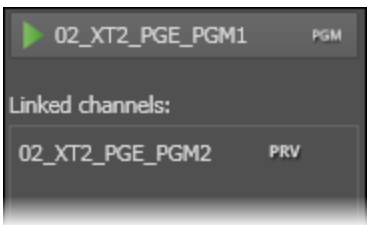
Note
If you do not have the user right to control the channel, the channel name is displayed but the **Function** button LED is dimmed.

3. If needed, repeat step 2 for the other **Function** buttons.

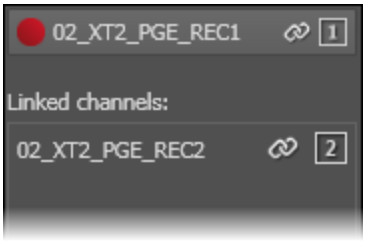
Linked Channels

In case the channel is linked to another one in a PGM/PRV mode, gang mode or Fill and Key mode, the linked channels are listed in the Linked Channels box.

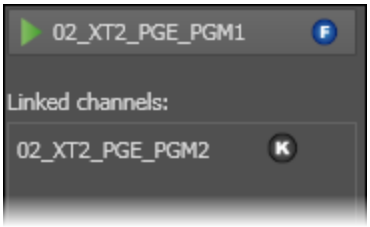
- PGM/PRV Mode



- Gang Mode



- Fill and Key Mode



How to Un-Assign Player or Recorder Channels to Function Buttons

To un-assign a player or recorder channel from a **Function** button, proceed in one of the following ways:

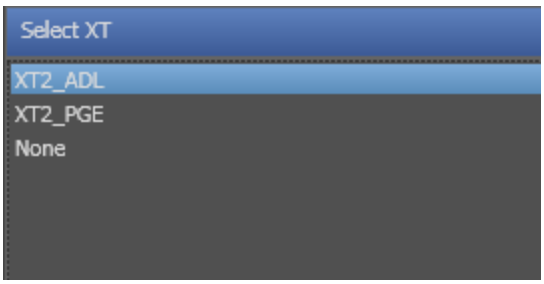
- Right-click the **Channel Name** field and select **None**
- Double-click the **Channel Name** field.

Assigning EVS Server Channels to Function Buttons in Normal Mode

To assign all the channels from an EVS video server to the Function buttons of the BEPlay Remote, proceed as follows:

1. On the remote, press the **SHIFT** key and then the **Sel XT** button.

   The list with the available EVS video servers is displayed on screen.



2. Use the remote wheel to move through the list of EVS servers.
3. Press the **ENTER** button of the remote to select one of the EVS servers.

   Note: To cancel the operation: press **MENU**.

The server recorder channels are assigned to the first **Function** buttons and the corresponding LED are red. The server player channels are assigned to the next buttons and the corresponding LED are green.

In case the EVS server has less than 6 channels, the exceeding buttons are not assigned.

When it has more than 6 channels, recorder channels are assigned first and the player channels are assigned until no more **Function** button is available.

9.3.5. Selecting a Player to Control

Selecting a Player Channel to Control

To select one of the player channels, press the **Function** button which has been associated to it in Favorite mode or in Normal mode, as described in section "Assigning Channels to Function Buttons" on page 129.

The LED of the **Function** button flashes green.

If the player channel is already associated to a Control Panel or a Playlist Panel, the BEPlay remote icon appears in the **Player** field of this panel:

It is also displayed in the Channel Explorer, next to the controlled player.

In Timeline mode, two players are associated to form the Timeline Engine. They can be PGM1/PGM2 or PGM3/PGM4. Pressing the **Function** button assigned to the odd player gives access to the IPEdit Timeline pane. Pressing the **Function** button assigned to the even player gives access to the IPEdit Player pane.

Controlling the Software Player

Favorite Mode

If you work with the player and recorders which have been selected in the Remote Control Manager window, you can take the control of the Software Player with the BEPlay remote in one of the following ways:

- Press the **Function** button which has been assigned the Software Player in the Remote Control Manager window.
- Press **SHIFT**, **F1** on the Remote, would the Software Player be associated to a **Function** button or not.

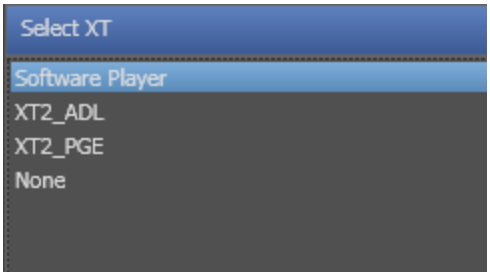
Normal Mode

If you have assigned all the channels of an EVS server to **Function** buttons from the **Sel XT** function, you can take the control of the Software Player with the BEPlay remote in one of the following ways. In both cases, the Software Player must have previously been associated to an open Control Panel or Playlist Panel.

- Press **SHIFT**, **F1** on the Remote.

- Press **SHIFT**, **SEL XT** on the Remote, as explained below.
  a. On the remote, press the **SHIFT** key and then the **SEL XT** button.

     The list with the available EVS video servers and the Software Player is displayed on screen.



  b. Use the remote wheel to select the Software Player.
  c. Press the **ENTER** button of the remote.

     Note: To cancel the operation: press **MENU**.

The **Remote** icon appears on the left of the **Player** field in the Control Panel or Playlist Panel:

9.3.6. Loading Media

Loading a Train

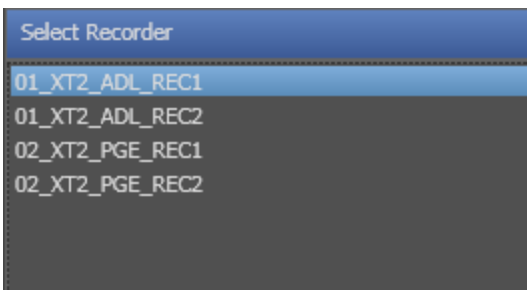
Possible Actions

Users can load a train on the controlled player channel in one of the following ways:

- If the required recorder is assigned to a **Function** button, press this **Function** button. The LED flashes red.
- In case a train is already loaded on the controlled player, you can press the **NEXT** or the **PREV** button to load the train from the next or the previous recorder.
- To select a recorder channel not assigned to a **Function** button, proceed as follows:

1. Press the **SHIFT** key and then the **SEL REC** button.

   The list with the available recorder channels is displayed on screen.



2. Use the remote wheel to move through the recorder channels list.

3. Press the **ENTER** button of the remote to select a recorder.

   Note: To cancel the operation: press **MENU**.

The train is loaded on the player channel or on the Software Player controlled by the remote.

Rules for Loading a Train

Depending on the element previously loaded on the controlled player channel, the behavior will vary as follows:

Element Previously Loaded	Pressing the F button of a recorder…
Playlist	loads the corresponding train in E/E.
Clip	loads the corresponding train in E/E.
Train in Pause	loads the corresponding train in pause at the same timecode.
Train in Play	loads the corresponding train in play at the same timecode.
Train in E/E	loads the corresponding train in E/E.

Loading a Clip

Possible Sources of Clips

Clips can be selected from different sources to load them on the controlled player channel:

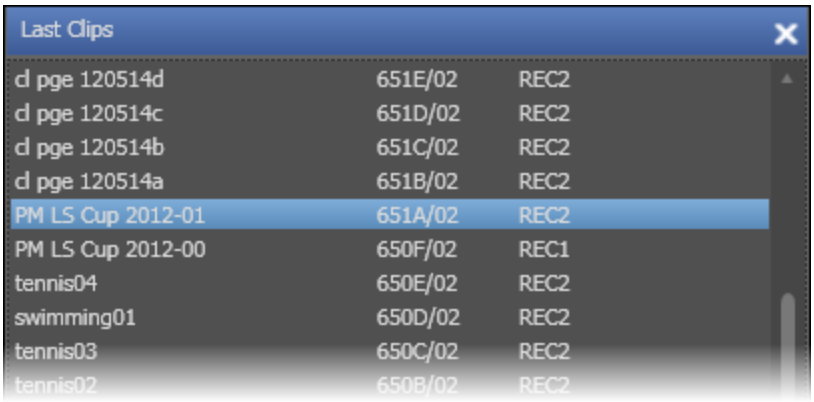
- From the Search TC list: see section "BEPlay Remote Buttons" on page 118.
- From the Last Created Clips list: see section "BEPlay Remote Buttons" on page 118.
- From the Database Explorer grid: see section "Browsing Media with the BEPlay Remote" on page 136.

How to Load a Linked Clip

1. Select the player to be controlled by the BEPlay remote, as described in "Selecting a Player to Control" on page 133.
2. Press **SHIFT**, **Last Clips** on the BEPlay.

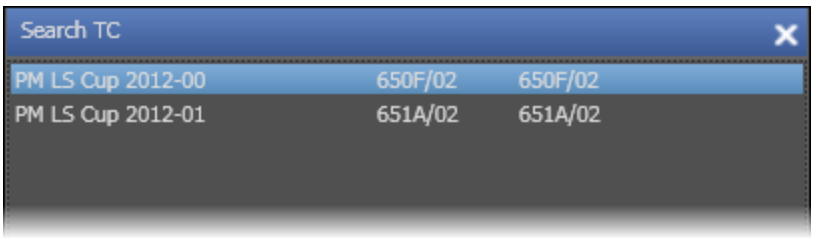
   The Last Clips window is displayed on screen and the last created clip is loaded on the controlled player.
3. Use the wheel to move through the list until the requested clip is highlighted.

   The highlighted clip is automatically loaded on the controlled player.



4. Press **MENU** to get out of the list.
5. Press **Search TC** on the BEPlay.

   The Search TC window opens on screen and displays the list of clips linked to the loaded clip.



6. Use the wheel to move through the list until the requested clip is highlighted.

   The highlighted clip is automatically loaded on the controlled player.

9.3.7. Browsing Media with the BEPlay Remote

Browsing a Playlist

Introduction

The BEPlay remote allows the users to browse elements within a playlist.

Prerequisites

To be able to browse a playlist with the remote, some conditions must be met:

- a player channel or the Software player must be controlled by the remote
- the playlist must be opened in a playlist panel or in a control panel
- the player channel controlled by the remote must be assigned to the playlist panel or the control panel where the playlist is opened.

How to Browse a Playlist

To browse a playlist when the prerequisites are met, proceed as follows:

1. Press the **BROWSE** button on the remote.

   The panel on which the playlist is opened becomes active on screen.

2. Use the wheel to select a playlist element:
   - in clockwise to select the next element
   - in a counter-clockwise to select the previous element.

   The selected element is cued on its IN point.

Browsing Clips

Introduction

The BEPlay remote allows the users to browse clips from the Database Explorer, would they be in the Clips plug-in or in the Bins/Clips plug-in.

Prerequisites

To be able to browse a clip with the remote, some conditions must be met:

- a player channel or the Software player must be controlled by the remote
- the player channel or Software player controlled by the remote must be assigned to the Database Explorer
- the remote must be linked to the Database Explorer by double-clicking the BEPlay Remote area on the status bar of the Database Explorer.

Moving through the Database Explorer

The users can navigate in the grid, in the tree view or in the saved filters pane if it is displayed. To move from one pane of the Database Explorer to another, use the following remote buttons:

- **NEXT**: move from grid → saved filters, if the pane is displayed → tree view
- **PREV**: move from grid → tree view → saved filters, if the pane is displayed.

Note
The active pane is not highlighted. When you turn the remote wheel, you will see in which pane the selection is moving.

How to Browse a Clip in the Grid

To browse clips when the prerequisites are met, proceed as follows:

1. Press the **BROWSE** button on the remote.

   The Database Explorer linked to the remote becomes active on screen.

   The Browse mode of the Database Explorer is enabled 

   The focus is on the grid.
2. Use the wheel to select a clip:
   - in clockwise to select the next clip
   - in a counter-clockwise to select the previous clip.

   The selected clip is cued on its IN point on the controlled player.
3. To send the loaded clip the default playlist, do one of the following:
   - Press the **ENTER** button to append the current clip to the default playlist.
   - Press **SHIFT then ENTER** to insert the current clip to the default playlist before or after the on-air element, according to the settings.

   To send the clip to the predefined destination:
   - Press the **SEND TO** button.

How to Browse a Clip in the Tree View

To browse clips when the prerequisites are met, proceed as follows:

1. Press the **BROWSE** button on the remote.

   The Database Explorer linked to the remote becomes active on screen.

   The Browse mode of the Database Explorer is activated 

   The focus is on the grid.
2. Use the **PREV** button to move to the tree view.
3. In the tree view, only the Clips plug-in and the Bins/Clips plug-in can be browsed. Use the wheel to move from one plug-in to the other.
4. Press the **ENTER** button to open or close a tree node.

   The corresponding list of clips is displayed in the grid.
5. Press the **NEXT** button to be able to browse the list.

How to Browse a Clip in the Saved Filters

To browse clips when the prerequisites are met, proceed as follows:

1. Press the **BROWSE** button on the remote.

   The Database Explorer linked to the remote becomes active on screen.

   The Browse mode of the Database Explorer is activated 

   The focus is in the grid
2. Press the **NEXT** button to move to the saved filters, if the pane is displayed.
3. Use the wheel to select a filter.
4. Press the **ENTER** button to apply a filter.
5. Press the **PREV** button to move to the grid and browse clips.
6. To cancel the filter, press the **CLEAR** button then the **ENTER** button.

10. ShuttlePRO Keys

10.1. 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 the IPDirector is being operated in.

The diagrams in sections "Quick Reference in Clip Mode" on page 141 and "Quick Reference in Playlist Mode" on page 142 are quick reference guides to the location of the functions on the ShuttlePRO. 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. Diagrams specific to the use of the ShuttlePRO with IPEdit are provided in the IPEdit user manual.

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

Details on the button functions are included in the different chapters of the IPDirector manual.

10.2. Quick Reference in Clip Mode

In clip mode, the ShuttlePRO buttons can be used for the following operations:

10.3. Quick Reference in Playlist Mode

In playlist mode, the ShuttlePRO buttons can be used for the following operations:

11. Display Tools

11.1. Software Player

11.1.1. Introduction

Context of Use

The Software Player acts as media viewer and allows the users to browse media through the GigE network.

The Software Player can be chosen as a source for the Control Panel or the Playlist Panel, in the same way as a normal player channel. Browsed media can also be viewed in the Video Display. The Software Player can be used with the ShuttlePRO or with the BEPlay remote.

You can only open one instance of the Software Player at a time in IPDirector.

As the Software Player works by decoding files on the IPDirector, its performance will depend on the workstation capacity.

Browsable Media

Using the Software Player, you will be able to browse any of the hi-res or lo-res following media elements as long as they are available on an EVS server or on an online nearline via the GigE network:

- trains
- XT clips or growing clips defined on an EVS server
- files stored on a nearline storage.
- playlist elements
- playlists

Note
The Software Player will not play transition effects between the playlist elements. All transitions will be viewed as "Cut".

Once a near line clip is loaded on the player, the user can make sub clips in the same way as in a normal control panel.

Supported Codecs

The following codecs are supported by the Software Player:

- SD: MJPEG SD, MJPEG Proxy, IMX 30, IMX 40, IMX 50, DVCPRO 25, DVCPRO 50, MPEG-1, MPEG-2, MPEG-2 (I-Field), DV25, H264.
- HD: MJPEG EVS HD, MJPEG Standard HD, MPEG-2, MPEG-2 (I-Field), MPEG-2 HD (I-frame), Avid DNxHD® Lo 8 bits, DNxHD® Hi 8 bits, DNxHD® Hi 10 bits, DVCPRO HD 100 mbps, XDCAM HD, ProRes 422 SQ, ProRes 422 HQ, ProRes 422 LT, AVC Intra 50, AVC Intra 100, H-264.
- Proxy: lo-res MPEG-1 and H264.

11.1.2. References

The use of the Software Player is described in various sections.

Use in the Control Panel

- section "Assigning a Player", in the Control Panel user manual.
- section "Loading Rules for the Software Player, in the Control Panel user manual.

Use in the Playlist Panel

- section "Assigning a Player", in the Playlist Panel user manual.

Use in the Video Display

- "Using the Software Player and the Video Display" on page 147.
- "Video Display Linked to the Software Player" on page 149.

11.2. Video Display

11.2.1. Introduction

There are two ways to view video on the IPDirector workstation:

- through the Software Player
- by connecting the SDI output of an EVS server into the IPDirector

In both cases, the video associated to the channel can be displayed within the Control Panel or the Playlist Panel, or externally in the Video Display.

The advantage of displaying the video in the Video Display is that the window can be resized and placed anywhere on the IPDirector desktop.

11.2.2. Using a Player Channel on a Video Display

Preliminary Steps

Before you can actually display a channel in the Video Display, you need to perform the following tasks:

1. Make a physical connection from the required video source to the input of the A/V board on the IPDirector workstation.

   See section "Connecting the Video Source" on page 145.

2. Assign a player channel to the Video Display in the Remote Installer application.

   See section "Assigning a Channel to a Video Display" on page 146.

3. Select the A/V board in the Video Display to open the related channel.

   See section "Selecting the A/V Board in the Video Display" on page 147.

Connecting the Video Source

To be able to display a channel in the Video Display window, a physical connection must be made from the required video source to the input of the IPDirector workstation A/V board.

Note
To display video on the VGA uses around 25% of the CPU power of the workstation for a display size of 384 x 288, more if a larger display is required. The reactivity of the IPDirector interface could be significantly slower if larger window sizes are used.

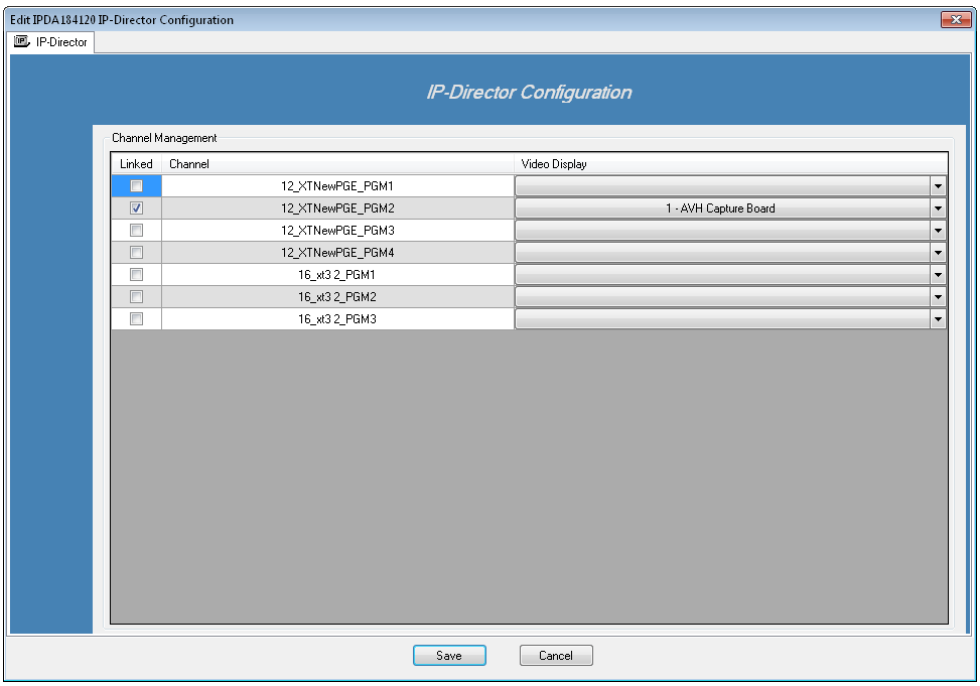
Assigning a Channel to a Video Display

Once the physical connection is made, the Video Display panel needs to be linked to the corresponding PGM video channel connected to the input of the IPDirector Workstation video card.

To do so, proceed as follows:

1. In the Remote Installer, right click the selected **IPDirector Service** button. For more information about the Remote Installer, see the IPDirector Technical Reference.
2. Select **Edit Config** from the contextual menu.

   The IPDirector Configuration window opens:



   This window allows you to link a player channel of one specific EVS video server to one Video Display (Video Board).

3. Check the box in the **Linked** column corresponding to the player channel you want to link to the video display.
4. Select which video display device it must be linked to from the drop down list in the **Video Display** column.

> **Note**
> The linked box can be checked without being linked to a Video Display. For example, this is used when an external monitor is connected to your workstation.

5. Click **Save**.

> **Note**
> All these parameters are local to the IPDirector workstation and must be set independently on all IPDirector Workstations using the Remote Installer tool.

Opening the Video Display

To open the Video Display panel, select the corresponding icon 

on the IPDirector Application bar.

To open the Video Display within a Control Panel or a Playlist Panel, you need to assign the player channel linked to the A/V board to the corresponding panel. Then, you can hide or unhide the Video Display by right-clicking the panel and selecting **Show/Hide Video Display**.

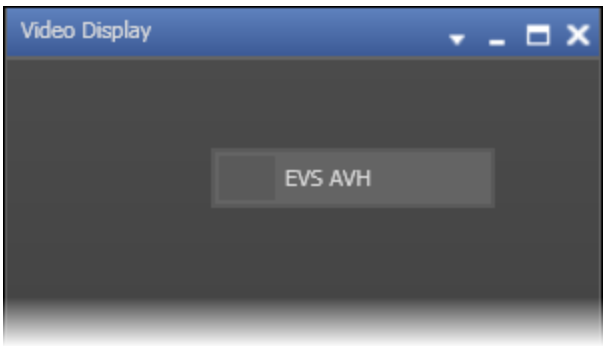
Selecting the A/V Board in the Video Display

When you open the Video Display module, you need to select the A/V board to be able to view the channel associated to the board.

To do so, proceed as follows:

1. Right-click the Video Display window.

   A contextual menu is displayed with the names of the A/V board(s) connected to the IPDirector workstation.



2. Select **EVS AVH.**

The media loaded on the player channel linked to the A/V board will be displayed in the Video Display window.

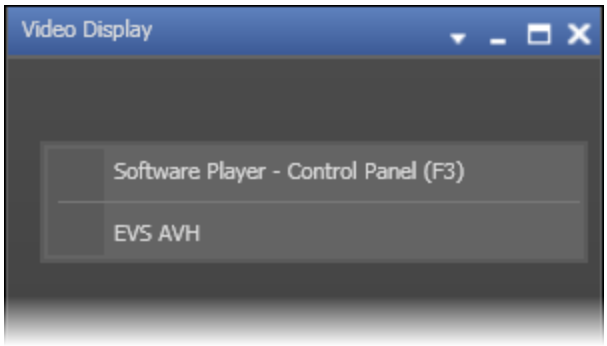
11.2.3. Using the Software Player and the Video Display

Introduction

The Software Player acts as media viewer and allows the users to browse media through the GigE network. See section "Software Player" on page 143 for more details.

Opening the Video Display

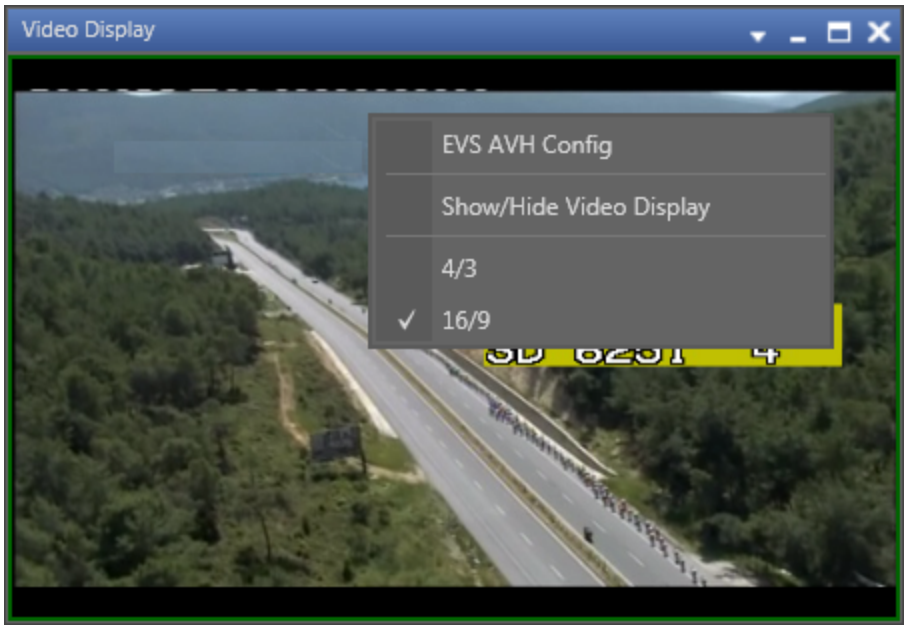
Media browsed through the Software Player can be viewed in the Video Display module, provided that the Software Player has previously been assigned to a Control Panel or a Playlist Panel. See the Control Panel user manual and the Playlist Panel user manual. The **Software Player** option will then be available when right-clicking the Video Display window:



11.2.4. Video Display Options

Video Display Linked to the Player Channel

The options available if you right-click the Video Display window when a media is loaded on the linked player channel are described below.



EVS AVH Config
Opens the Audio Output Channels window allowing the selection of audio channels to be listened to. See section "Audio Configuration and Monitoring" on page 150.

Show/hide Video Display
Displays, or not, the media in the Video Display.

4/3
Sets the video ratio to 4/3 format.

16/9
Sets the video ratio to 16/9 format.

Video Display Linked to the Software Player

The options available if you right-click the Video Display window when a media is loaded on the Software Player are described below.

OCX Audio Configuration
Opens the Audio Output Channels window allowing the selection of audio channels to be listened to and the selection of the number of audio channels for the audiometers display. See sections "Audio Configuration" on page 150 and "Audio Level Monitoring" on page 151.

Show/hide Video Display
Displays, or not, the media in the Video Display.

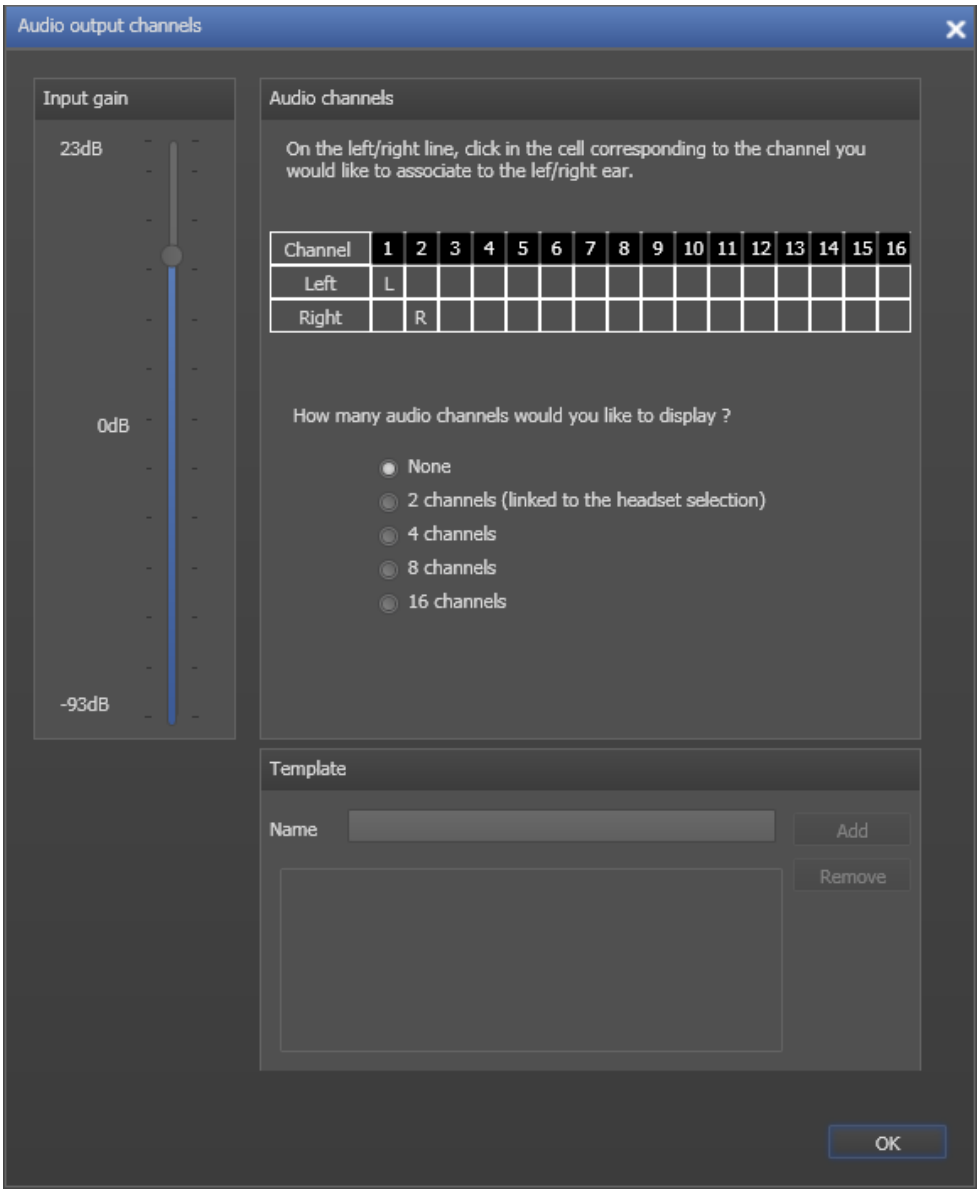
11.2.5. Audio Configuration and Monitoring

Audio Configuration

To select the audio channels you want to listen to, proceed as follows:

1. Right-click the Video Display.
2. Select **OCX Audio Configuration** from the contextual menu.

   The Audio Output Channels window opens.



3. On the **Left** line, click the cell corresponding to the channel you want to associate to the left ear.
4. On the **Right** line, click the cell corresponding to the channel you want to associate to the right ear.

5. If required, adjust the input gain.
6. For an easy retrieval of the configuration, you can save it:
   - Enter a name in the **Template Name** field
   - Click the **Add** button.
7. Click **OK**.

The audio configuration is automatically applied.

Audio Level Monitoring

The audio level can be monitored with audiometers on the sides of the Video Display window when you use the Software Player.

To select the number of audio channels to be displayed, proceed as follows:

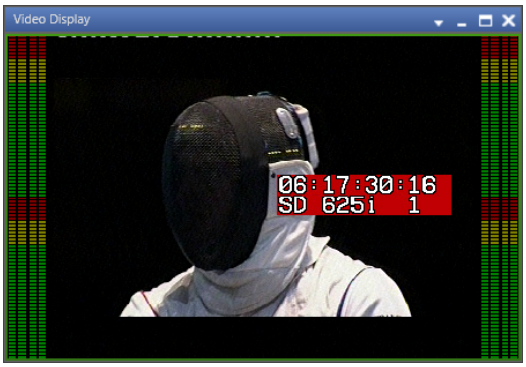
1. Right-click the Video Display.
2. Select **OCX Audio Configuration** from the contextual menu.

   The Audio Output Channels window opens.
3. Click the radio button corresponding to the number of audio channels to display.

The audiometers are shown on the Video Display sides.

- Example for a selection of 2 channels:

- Example for a selection of 16 channels:



11.3. On-Screen Display

11.3.1. Configuration and Activation

The information to display on a monitor is set in the OSD Settings window. It is defined for each playout channel. This does not apply to recorder channels or software player. See section "OSD Settings" on page 102.

The OSD can be turned ON or OFF in several ways:

- By using a shortcut in the various IPDirector applications: Control Panel Playlist Panel, AB Roll Playlist Panel, IPEdit, IPLogger, Database Explorer. See sections "Channel Management Shortcuts" on page 109 and "Channel Management Shortcuts" on page 109.
- By using a shortcut on the ShuttlePRO. See section "ShuttlePRO Keys" on page 140.
- By selecting an option in the Channel Explorer.

11.3.2. Impacted Channels

Depending on the channel mode the player channel is involved into, the effect of the **Turn OSD ON or OFF** shortcut will differ as detailed in the table below.

If the channel mode is…	**…the OSD appears / disappears for…**
PGM	the player channel linked to the device or active panel from which the shortcut has been applied
PGM/PRV	• In Clip mode (clip, growing clip, train loaded): the player channel linked to the device or active panel from which the shortcut has been applied • In Playlist mode (playlist loaded): both player channels engaged in PGM/PRV mode
Fill & Key	the player channel linked to the device or active panel from which the shortcut has been applied
Ganged	the player channel linked to the device or active panel from which the shortcut has been applied
IPEdit (Timeline mode)	the player channel associated to the panel which is active in IPEdit: Player or Timeline
AB Roll	all the player channels associated to the AB Roll Panel

12. Fill and Key

12.1. Associating Channels in Fill and Key Mode

Purpose

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

Constraint

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

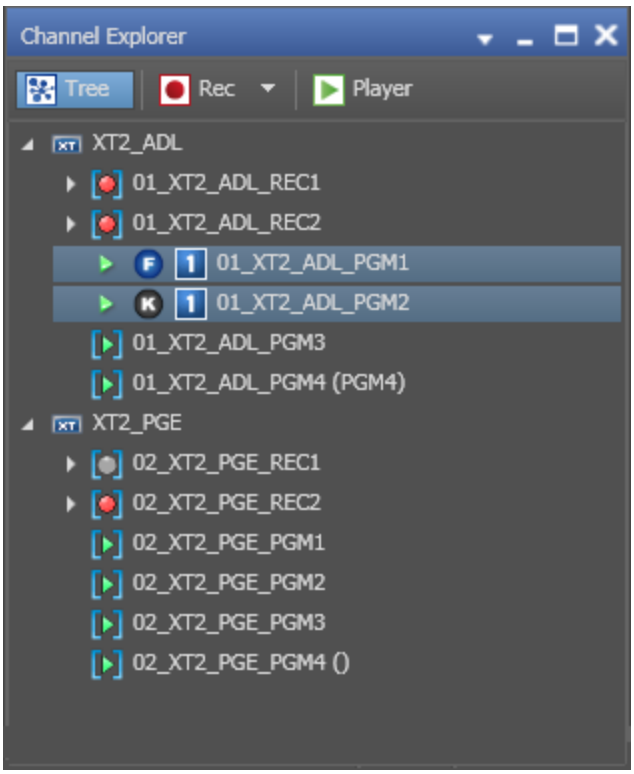
How to Associate Channels in Fill and Key Mode

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

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

Display of Channels in Fill and Key Mode

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



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

12.2. Fill and Key Clips

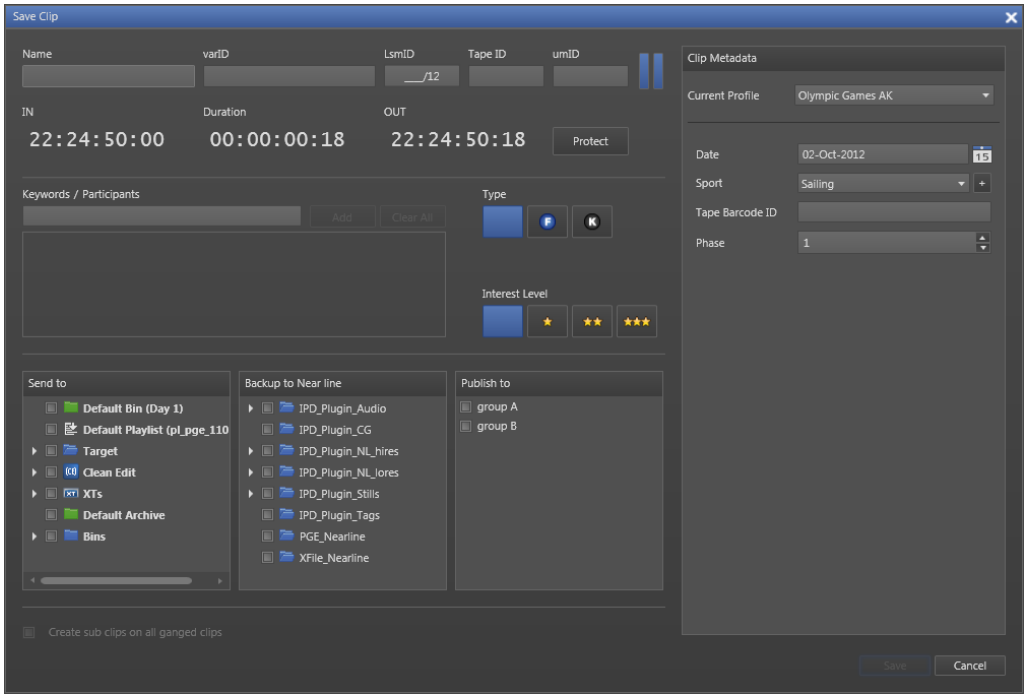
12.2.1. Introduction

This chapter is intended to highlight specificities of Fill and Key clips.

Most of the operations performed on a Fill or a Key clip are done in the same way as for Normal clips. References are therefore made to the chapters "Control Panel" and "Database Explorer", describing in details all the procedures about clip management. Refer to part 5 of the manual for the description of the Control Panel chapter and to part 3 for the Database Explorer chapter.

12.2.2. Define Clips as Fill and Key

At Clip Creation



Clip can be defined as Normal, Fill or Key clip when metadata is assigned to it.

By default the clip type is set to Normal.

- Select the **Fill** button  to define the clip as Fill clip.
- Select the **Key** button  to define the clip as Key clip.

After Clip Creation

How to Edit the Clip Type from the Database Explorer

The clip type can be modified after the clip creation.

To edit the metadata of an existing clip from the Database Explorer, proceed as follows:

1. Select the clip in the Database Explorer.
2. Right-click the selected clip in the grid.

   The Clip contextual menu is displayed.

3. Select **Edit**.

   The Edit Clip window appears and allows you to modify the clip type.

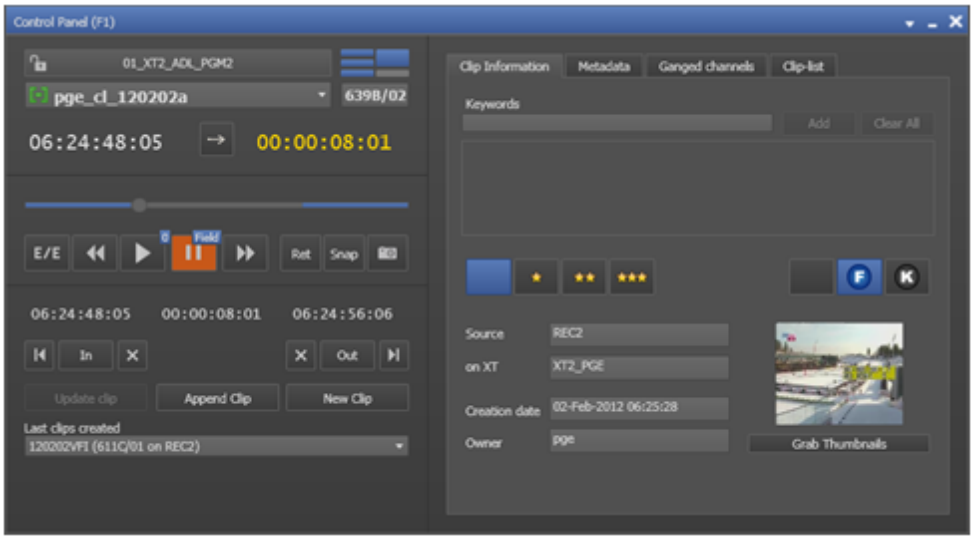
4. Select the **Fill** button  to define the clip as Fill clip.

   Select the **Key** button  to define the clip as Key clip.

How to Edit the Clip Type from the Control Panel

To edit the metadata of an existing clip from the Control Panel, proceed as follows:

1. Load the clip on the Control Panel.



2. In the Clip Information tab,

   - select the **Fill** button  to define the clip as Fill clip.
   - select the **Key** button  to define the clip as Key clip.

12.2.3. Fill and Key Clips Association

How to Manually Associate Two Clips as Fill and Key

To manually associate two clips in a Fill and Key association, proceed as follows:

1. In the Database Explorer, select a clip 1 (Normal, Fill, or Key).
2. Drag it onto a clip 2 (Normal, Fill, or Key), keeping the **CTRL** and **SHIFT** keys pressed.

The clips are automatically linked in a Fill and Key association according to the rules described in section "Rules in Key and Fill Clip Associations" on page 157.

The **Fill** icon is now displayed in the **Type** column for the Fill clip.

The **Key** icon is now displayed in the **Type** column for the Key clip.

Rules in Key and Fill Clip Associations

The result will depend on the original type of the two clips: some associations are not allowed, some clip type will be converted to another one. The table below describes the different cases which can occur when dragging a clip 1 onto a clip 2:

Clip 1	Clip 2		
	Normal	**Fill**	**Key**
Normal	Normal clip1 → Fill Normal clip2 → Key Link the two clips	If Fill not yet linked: Normal clip1 → Key Link the two clips	Normal clip1 → Fill Link the two clips
		If Fill already linked: Error message in popup window	
Fill	If Fill not yet linked: Normal clip2 → Key Link the two clips	Invalid operation Error message in the error list	If Fill not yet linked: Link the two clips
	If Fill already linked: Error message in popup window		If Fill already linked: Error message in popup window
Key	Normal clip2 → Fill Link the two clips	If Fill not yet linked: Link the two clips	Invalid operation Error message in the error list
		If Fill already linked: Error message in popup window	

How to Disassociate Fill and Key Links

To delete a link between fill and key clips, proceed in one of the following ways:

1. Select the Fill or Key clip in the Database Explorer.
2. Right-click on the selected clip to display the contextual menu.
3. Select **Unlink** from the contextual menu.

The link is deleted.

1. Load the Fill or Key clip in the Control Panel.
2. Right-click on the control panel to display the contextual menu.
3. Select **Unlink** from the contextual menu.

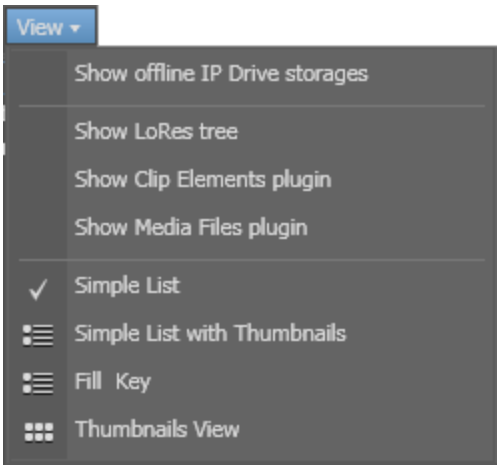
The link is deleted.

How to View Fill and Key Associations

To view Fill and Key associations, proceed as follows:

1. Click the View **List View** button in the Database Explorer toolbar.

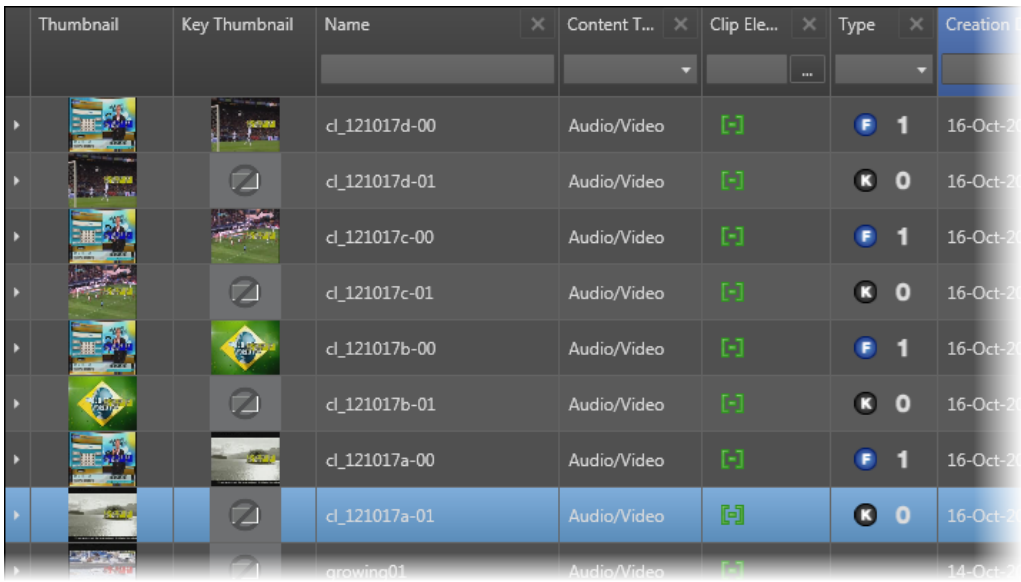
   The contextual menu is displayed:



2. Select **Fill Key.**

Once selected, the **Thumbnail** and **Key Thumbnail** columns are added in the Database Explorer.

If a Fill clip is associated with a Key clip, the corresponding key thumbnail is displayed in the **Key Thumbnail** column. If no key clip is associated, no key thumbnail is displayed.



To narrow your search, click the **Show / Hide Grid Filter Bar** button on the top of the grid and perform a search on the **Type** column by selecting Fill and/or Key. Refer to sections "Search Options" and "Searching the Database > Grid Filters" in Database Explorer chapter in part 3 of the user manual.

How to View Key Clip Information

To view more information on the Key clip associated to a Fill clip, proceed as follows.

In the Database Explorer:

1. Right-click the selected Fill clip in the Database Explorer.

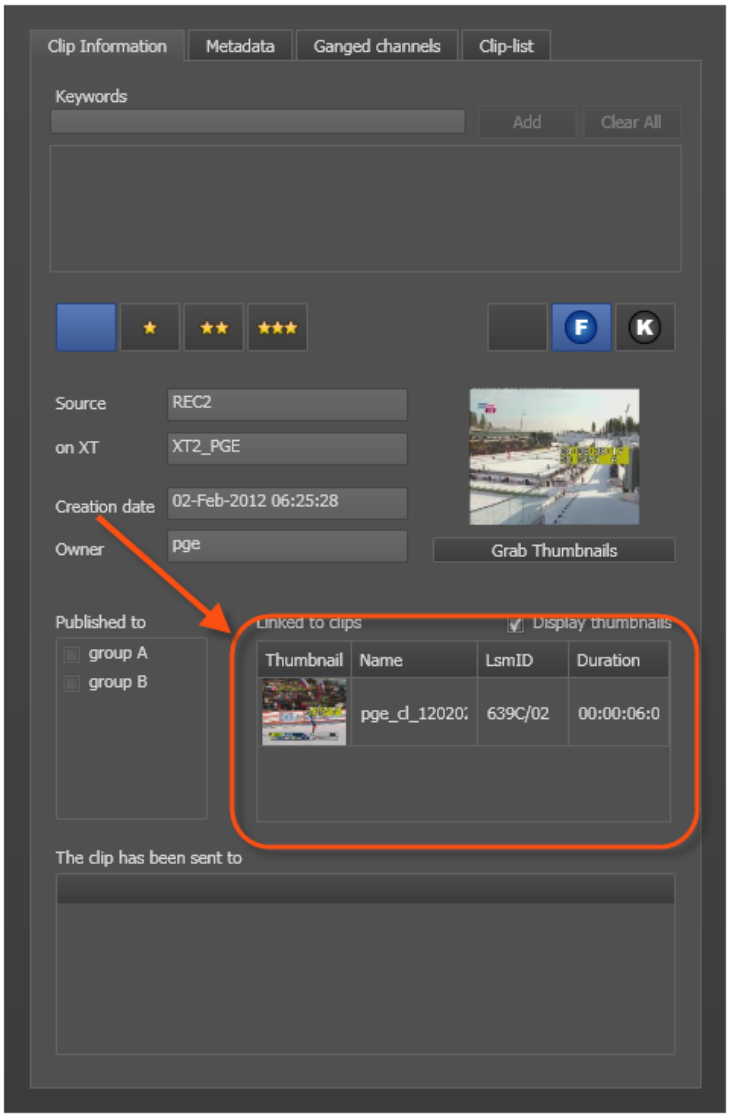
   The clip contextual menu is displayed.

2. Select **View Key Clip** in the contextual menu.

   The corresponding key thumbnail is displayed with specific information (clip name, clip ID, IN, duration).

Note
A thumbnail for the Key clip will only appear if the user has manually defined a thumbnail photo for the original Key clip or thumbnails can be created automatically when there is an XFile or XTAccess designated within the thumbnails configuration in the IPDirector Remote Installer. Please see the Technical Reference manual for further details.

In the Control Panel, the associated Key or Fill clip is displayed in the Linked to Clips area of the Clip Information tab:



12.3. Fill and Key Playlists

12.3.1. Purpose

This chapter is intended to highlight specificities of Fill and Key playlists.

Most of the operations performed on a Fill or a Key playlist are done in the same way as for Normal playlists. References are therefore made to the Playlist Panel user manual, describing in details the Playlist Panel interface and all the procedures about playlist management, playlist editing and playout effects and parameters.

The differences will mainly reside in the behavior of the system when an action is applied on a Fill or a Key playlist or playlist element and on the resulting action, or absence of action, on the corresponding Key or Fill playlist.

Note
Virtual elements cannot be used in fill and key playlists.

12.3.2. Fill and Key Playlists Management

Creating Fill and Key Playlists

Introduction

Fill and Key playlists can be created on-line or off-line exactly like Normal playlists.

In the New Playlist window, the user can define the type of the playlist between Normal, Fill or Key.

When the playlist type is defined as Fill (or Key), the system creates both a Fill playlist and a Key playlist.

How to Create a Fill or Key Playlist

You can create a new on-line or off-line playlist

- from the Playlist Panel,

OR

- from the Database Explorer.

To create a new Fill (or Key) playlist, proceed as follows:

1. From the Playlist Panel:

   If required, associate a channel.

   Right-click the **Playlist Name** field.

   From the Database Explorer:

   In the Playlists tree view of the Database Explorer, right-click in the element list.

   The Playlist contextual menu is displayed.
2. Select **New Playlist** from the contextual menu.

   The Create a New Playlist window is displayed.
3. Fill in a playlist name and any desired information.

   In the Type area, click the **Fill** (or the **Key**) button.
4. Click the **OK** button or press the **ENTER** key.

The system creates both a Fill playlist and a Key playlist.

They are both created with the same information (name, keywords,…).

When the new playlist is created from a server tree view in the Database Explorer, it is made on-line on the selected EVS video server, as well as its corresponding Fill or Key playlist.

When the new Fill (or Key) playlist is created from a clip-list Panel or a Playlist Panel associated to a channel, the playlist is made on-line on the EVS video server of the channel. If this channel is linked to another channel in a Fill & Key mode, the corresponding Key (or Fill) playlist is made on-line on the EVS server of the corresponding channel.

Manually Linking or Unlinking Two Playlists as Fill and Key

Purpose

When creating a Fill (or Key) playlist, the corresponding Key (or Fill) playlist is automatically created. However, with a drag-and-drop operation, it is possible either to change the existing association afterwards, to associate two playlists for which the respective links have been broken or to change the type of a Normal playlist to associate it to a Fill or Key playlist.

How to Manually Associate Two Playlists as Fill and Key

To manually associate two playlists, proceed as follows:

1. In the Database Explorer, select a playlist 1 (Normal, Fill, or Key).
2. Drag it onto a playlist 2 (Normal, Fill, or Key), pressing the **SHIFT** and **CTRL** keys at the same time.

The result will depend on the original type of the two playlists: some associations are not allowed, some playlist type will be converted to another one.

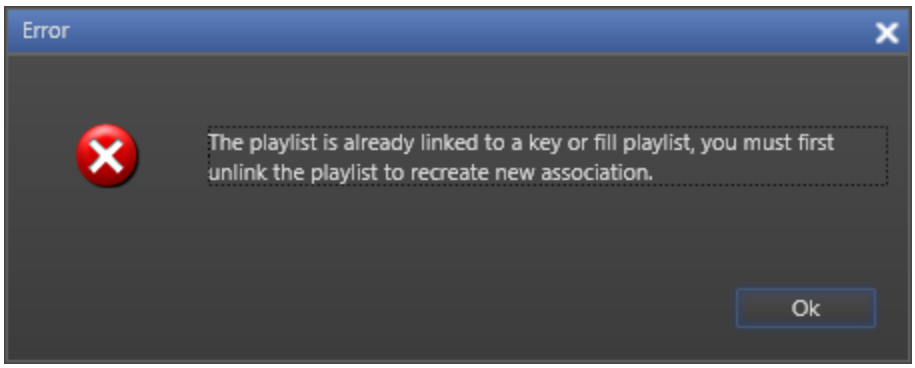
Rules in Key and Fill Playlist Associations

The table below describes the different cases which can occur when associating two playlists:

Playlist 1 (PL1)	**Playlist 2 (PL2)**		
	Normal	**Fill**	**Key**
Normal	Normal PL1 → Fill Normal PL2 → Key Link the two PL	If Fill not yet linked: Normal PL1 → Key Link the two PL	Normal PL1 → Fill Link the two PL
		If Fill already linked: Error message in popup window	

Playlist 1 (PL1)	Playlist 2 (PL2)		
	Normal	**Fill**	**Key**
Fill	If Fill not yet linked: Normal PL2 → Key Link the two PL	Invalid operation Error message in the error list	If Fill not yet linked: Link the two PL
	If Fill already linked: Error message in popup window		If Fill already linked: Error message in popup window
Key	Normal PL2 → Fill Link the two PL	If Fill not yet linked: Link the two PL	Invalid operation Error message in the error list
		If Fill already linked: Error message in popup window	

When a Fill and Key association already exists, a warning message will be displayed informing you that the playlist must first be unlinked to be able to create a new association. For example:



How to Manually Unlink Two Fill and Key Playlists

To manually remove the link between one or several Fill playlists and one or several Key playlists, proceed as follows:

1. In the Database Explorer, select either one playlist of the Fill and Key association or both.

   You can also select playlists from multiple associations.

2. Right-click one of the selected playlist.

   The Playlist contextual menu opens.

3. Select **Unlink** from the menu.

All Fill and Key associations of all elements from the selection are cleared, but the type of each playlist is kept.

Opening and Loading a Fill or Key Playlist

General procedures for the opening of a Normal playlist and for the loading of a Normal playlist on a player channel are detailed in the Playlist Panel user manual.

However, the behavior of the system could be slightly different when you work with Fill or Key playlists as well as when you try to load a Normal playlist on a Fill or Key channel.

The table below describes the different actions which result when

- you want to open a Normal, Fill or Key playlist in a Playlist Panel or the clip-list tab of a Control Panel (no channel associated)
- you want to load a Normal, Fill or Key playlist on a Normal, Fill or Key channel associated to a Playlist Panel or the clip-list tab of a Control Panel. See section "Associating Channels in Fill and Key Mode" on page 153 for more information on Fill and Key player channels.

Playlist Type	**Channel Type**			
	No channel	**Normal**	**Fill**	**Key**
Normal	Open	**Load**	Warning + black on Key channel	Warning
Fill	Open the Fill PL	**Load** the Fill PL on the channel	If Fill PL not linked to Key PL: **Load** the Fill PL on the Fill channel	Warning
			If Fill PL linked to Key PL: 1. Load the Fill PL on the Fill channel, AND 2. Load the Key PL on the Key channel	
Key	Open the Key PL	**Load** the Key PL on the channel	Warning	If Key PL not linked to Fill PL: **Load** the Key PL on the Key channel
				If Key PL linked to Fill PL: 1. Load the Key PL on the Key channel, AND 2. Load the Fill PL on the Fill channel

Renaming or Modifying Information of a Fill or Key Playlist

Introduction

Renaming a Fill or Key playlist or modifying information of a Fill or Key playlist can be done in the same way as for a Normal playlist through the Edit a Playlist window.

When a Fill (or Key) playlist is renamed, the corresponding Key (or Fill) playlist is automatically renamed as well.

Modifying the Playlist Type

Modifying the type of a Fill (or Key) playlist which is linked to a Key (or Fill) playlist is not allowed and the **Type** buttons cannot be selected in the Edit a Playlist window.

If the playlist is not linked to another one, it is allowed to modify its type as follows:

- A Normal playlist can be produced from the modification of a Key playlist or a Fill playlist.
- A Key playlist can be produced from the modification of a Normal playlist or a Fill playlist.
- A Fill playlist can be produced from the modification of a Normal playlist or a Key playlist. In this case, the corresponding Key playlist will be created and the Fill and Key playlists will be linked together.

This is summarized in the table below:

To / From	Normal	Fill	Key
Normal	NA	1. Normal → Fill 2. Create corresponding Key PL 3. Link the 2 PL	→ Key
Fill	→ Normal	NA	→ Key
Key	→ Normal	1. Key → Fill 2. Create corresponding Key PL 3. Link the 2 PL	NA

Deleting a Fill or Key Playlist

Deleting a Fill (or Key) playlist can be done in the same way as for a Normal playlist.

The Fill playlist and the corresponding Key playlist are deleted from the IPD database and from all bins in which they were included.

12.3.3. Fill and Key Playlists Editing

Adding Elements in a Fill or Key Playlist

How to Insert a Playlist in a Fill or Key Playlist

Inserting a playlist into a Fill (or Key) playlist can be done in the same way as for inserting a playlist into a Normal playlist.

However, the system will behave differently depending on the type of the two playlists. The table below summarizes the actions resulting from the insertion of a playlist (PL1) into another playlist (PL2):

Playlist 1 (PL1)	Playlist 2 (PL2)	
	Fill	**Key**
Normal	1. Normal PL1 inserted in Fill PL2 as a group. 2. Black or white elements of exact same duration inserted in corresponding Key PL.	Error message: you can only insert a Key PL into another Key PL.
Fill	1. Fill PL1 inserted in Fill PL2 as a group. 2. Key PL corresponding to PL1 inserted as a group in Key PL corresponding to PL2.	Error message: you cannot insert a Fill PL into a Key PL and vice-versa.
Key	Error message: you cannot insert a Fill PL into a Key PL and vice-versa.	1. Key PL1 inserted in Key PL2 as a group. 2. Fill PL corresponding to PL1 inserted as a group in Fill PL corresponding to PL2.

Adding Elements in a Fill or a Key Playlist

Adding an element by drag-and-drop operation into a Fill (or Key) playlist can be done in the same way as for adding a Normal element into a Normal playlist.

However, the system will behave differently depending on the type of the element added and the type of the playlist. The table below summarizes the actions resulting from the insertion of an element into a playlist:

Element Type	Playlist Type	
	Fill	**Key**
Normal	1. Element inserted in Fill PL. 2. Black or white element of exact same duration inserted in corresponding Key PL: warning message displayed.	Error message: you can only insert a Key element into a Key PL.
Fill	If Fill element is not linked to a Key element: 1. Element inserted in Fill PL. 2. Black or white element of exact same duration inserted in corresponding Key PL: warning message displayed.	Error message: you can only insert a Key element into a Key PL.
	If Fill element is linked to a Key element: 1. Fill element inserted in Fill PL. 2. Corresponding Key element inserted in corresponding Key PL.	
Key	Error message: you cannot insert a Key element into a Fill PL	If Key element is not linked to a Fill element: Key Element inserted in Key PL.
		If Key element is linked to a Fill element: 1. Key element inserted in Key PL. 2. Corresponding Fill element inserted in corresponding Fill PL.

Note
When a Key clip is linked to several Fill clips, it cannot be inserted into a Key playlist. You should insert the Fill clip into the fill playlist to avoid any confusion.

Warning
When the element is appended to the playlist, by using the **APPEND CLIP** button or the **Send to Default Playlist** option, both Fill and Key elements will be added at the last position in their respective playlist, even if the playlists do not have the same number of elements.

Modifying an Element in a Fill or Key Playlist

When the user modifies one of the parameters listed below to a Fill (or Key) playlist element, the modification is automatically applied to the corresponding Key (or Fill) playlist element:

- Playlist element duration
- Playlist element name

Moving Fill and Key Playlist Elements

Moving a Fill (or Key) playlist can be done in the same way as for a Normal playlist.

The elements are moved inside the Fill (or Key) playlist as well as the corresponding elements in the Key (or Fill) playlist which are moved at the same position.

Removing Playlist Elements from a Fill or Key Playlist

Removing elements in a Fill (or Key) playlist can be done in the same way as for a Normal playlist.

All selected elements in the Fill (or Key) playlist are removed as well as the corresponding elements in the Key (or Fill) playlist.

Modifying Tags of a Fill or Key Playlist Element

When the user inserts, modifies or deletes tags on a Fill (or Key) playlist element (see parameters listed below), the modification is not applied to the corresponding Key (or Fill) playlist element:

- GPI tags
- Swap audio tags
- Hide
- Mute

Grouping Elements in a Fill or Key Playlist

When the user creates or deletes a group of elements in a Fill (or Key) playlist, the same operation is performed on the corresponding Key (or Fill) playlist.

12.3.4. Fill and Key Playlists Playout Effects and Parameters

Applying Transport Commands on a Fill or Key Playlist

When both Fill and corresponding Key playlists are loaded on Fill and Key channels, if the operator performs one of the actions listed below on the Fill (or Key) playlist, the same operation is performed at the same time on the corresponding Key (or Fill) playlist:

- Play, Pause, Fast Forward,
- Fast rewind
- Jog
- Next

- Skip
- Go to Element
- E/E
- Preload a playlist element
- Recue

Modifying Playout Effects and Parameters

When the user modifies one of the parameters listed below to a Fill (or Key) playlist element, the modification is automatically applied to the corresponding Key (or Fill) playlist element:

- Video effect
- Audit effect
- Playlist element speed
- Reset transition to default
- Still/Start mode

Looping Playlist Elements

When the user creates or deletes a loop in a Fill (or Key) playlist, the same operation is performed on the corresponding Key (or Fill) playlist.

Associating an Auxiliary Clip to a Fill or Key Playlist

Associating an auxiliary clip to a Fill (or Key) playlist can be done in the same way as for a Normal playlist.

The system associates the auxiliary clip to the Fill (or Key) playlist but does not perform any operation on the corresponding Key (or Fill) playlist.

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