# USER MANUAL
## Ingest Scheduler

Version 7.90 - June 2020

iPDirector

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# Table of Contents

# What's New?

No section has been updated in the Ingest Scheduler manual of IPDirector version 7.90.

# 1. Introduction

## 1.1. Product Overview

### 1.1.1. General Description

The Ingest Scheduler is a visual tool that allows the creation, editing and view of scheduled ingests on EVS video servers, XStream or 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 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 XStream is present in the XNet or 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.

Only clips scheduled in the Ingest Scheduler are displayed in the Ingest Scheduler interface.

### 1.1.2. Recorder Channels and Ingest Scheduler

The Ingest Scheduler does not start or stop the EVS server recorder channels. The recording process must be started on the EVS video servers before the scheduled events:

- In LSM mode, the recorder channels are automatically started at boot up.
- In IPDP Spotbox mode, the **Rec Auto Start** parameter is normally set to "ON" in the Channels Configuration window (AVCFG) of the EVS video server to start the recorders when the system boots up.

In both modes, it is possible to manually start or stop the recorder channels independently of the Ingest Scheduler.

# 1.2. Opening Ingest Scheduler

To open Ingest Scheduler, select the corresponding icon 

on the IPDirector Application bar. The Ingest Scheduler window will populate with all visible recorder channels from the managed XNet network. Only recorders selected to be visible to the user will be displayed.

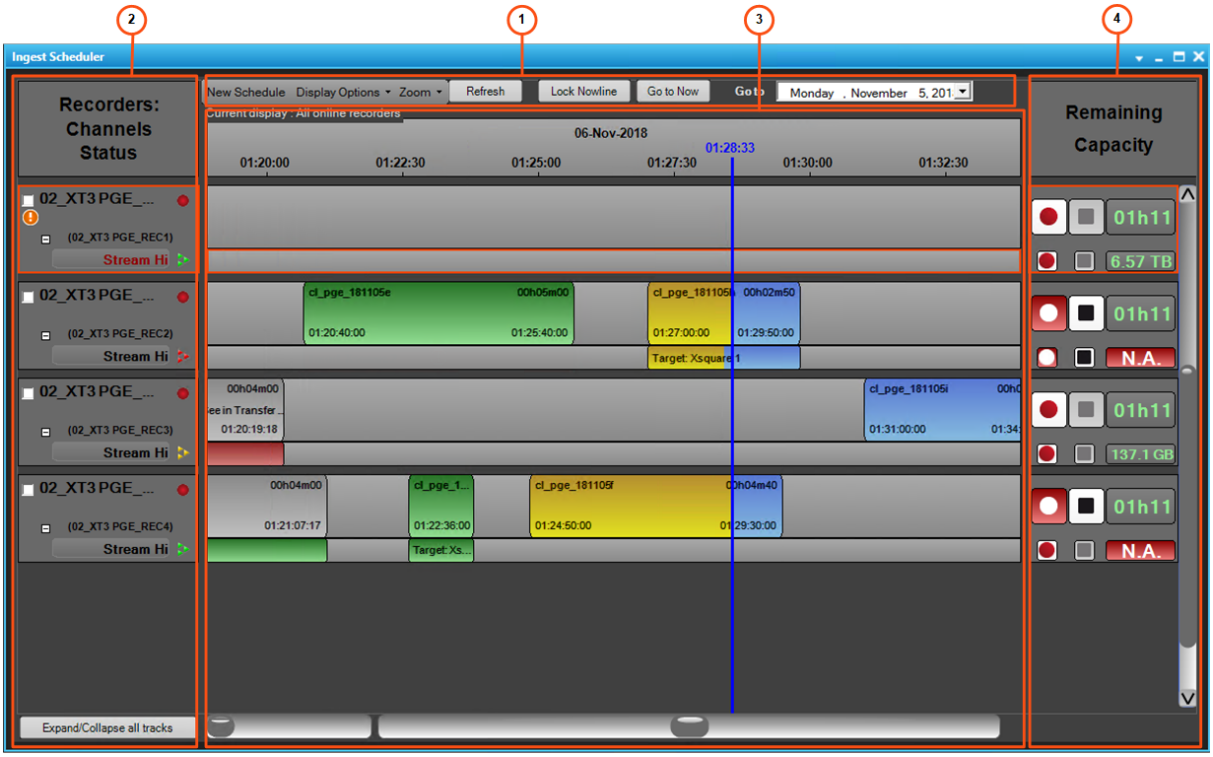
See section "Possible Ways to Start to Record a Growing Clip" on page 38 for alternative ways to open the Ingest Scheduler.

# 2. User Interface

## 2.1. Overview of the Ingest Scheduler Window

### Illustration

The Ingest Scheduler window contains the areas highlighted on the screenshot below:



### Area Description

The table below describes the various parts of the Ingest Scheduler window:

| Area | | Description |
|---|---|---|
| 1. | Toolbar | This area provides the basics functions to schedule an ingest, to select the recorder channels to display and to configure the timeline display.<br>See section "Toolbar" on page 4. |
| 2. | Recorder Channels Status pane | This area displays all the recorder channels and streams from which ingests can be started.<br>See section "Recorder Channels Status Area" on page 7. |
| 3. | Timeline and Ingest Overview area | This area displays a timeline and blocks corresponding to the ingests (already recorded, being recorded or scheduled). The current time is shown by a blue line, called the Nowline.<br>At the bottom left of the area, a zoom bar is available to zoom in and out within the Timeline and Ingest Overview area and to display a period of time from 15 minutes to 1 month.<br>At the bottom right of the area, a scroll bar is available to move along the timeline.<br>See section "Timeline and Ingest Overview Area" on page 10. |
| 4. | Remaining Capacity area | This area displays the remaining recording capacity on each recorder channel or stream. It also provides **Start** and **Stop** buttons to start or stop recording an ingest.<br>See section "Remaining Capacity Area" on page 15. |

# 2.2. Toolbar

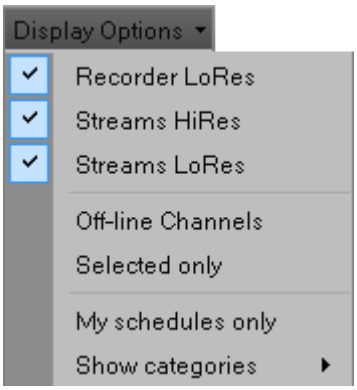
## 2.2.1. New Schedule Button

The **New Schedule** button is used to schedule a one-shot ingest or a series of repeated ingests. See section "Scheduling Ingests" on page 40 for detailed information on ingest creation.

# 2.2.2. Channels Selection Options

## Display Options

Clicking the arrow next to **Display Options** displays the following menu:




Through the Display Options menu, you can configure which types of recorder channels and/or streams to display. The various menu items of the Display Options menu are detailed in the tables below:

| Menu Item | Recorders / streams displayed | | | |
|---|---|---|---|---|
| | hi-res recorders | hi-res streams | lo-res recorders | lo-res streams |
| **No selection** | X | | | |
| **Recorder LoRes** | X | | X | |
| **Streams HiRes** | X | X | | |
| **Streams LoRes** | X | | X | X |

| Menu Item | Description |
|---|---|
| **Off-line Channels** | Displays or hides off-line recorder channels, i.e. recorder channels not used by the Multicam application selected to run on the EVS video server. |
| **Selected only** | Displays the recorder channels for which the checkbox on the left of the recorder name has been selected.<br>  |

| Menu Item | Description |
|---|---|
| **My Schedules only** | Displays only the blocks created by the logged user in the Timeline and Ingest Overview area. |
| **Show categories** | Displays only the blocks corresponding to the selected categories. A sub-menu allows the user to select a single option among the following: **All categories**, **No category**, or the different categories defined.<br>Categories of ingests can be created or selected from the New Schedule window. |

### Current Display Information

The selection made in the Display Options menu is reflected by a text line under the **Display Options** button.

This information is the concatenation of three pieces of information:

1. selection of off-line and/or on-line recorders
2. selection of high resolution recorders, high resolution streams, low resolution recorders and/or low resolution streams
3. selection of **My Schedules** option and/or **Selected Category** option.

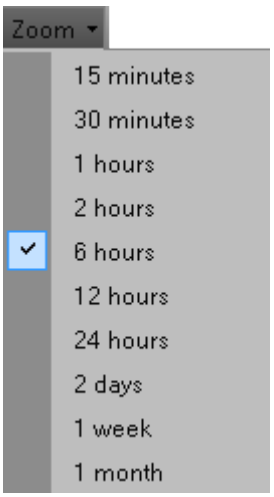
## 2.2.3. Timeline Display Options

### Zoom Options

With the Zoom function, users can configure the period of time displayed in the Timeline and Ingest Overview area. The period ranges from 15 minutes to 1 month.

Users can zoom in and out in three different ways:

- use the **Zoom** command in the Toolbar




- use the Zoom bar at the bottom left of the Ingest Scheduler window

- press 

and rotate the mouse wheel over any area of the Ingest Scheduler window.

Depending on the chosen time period, all the ingest blocks are redrawn to respect a new time scale.

### Lock Nowline Button

In the Timeline and Ingest Overview area, the current date/time is represented by a blue line, called the Nowline. The timeline can be displayed in two different ways depending on whether the nowline has been locked or not.

| Nowline Mode | Nowline Behavior |
|---|---|
| Locked   | By clicking the **Lock Nowline** button (colored background) the nowline stays locked in the middle of the Timeline and Ingest Overview area. The ingest blocks move from right to left across the line to keep the current date/time in the middle. |
| Unlocked   | When the **Lock Nowline** button appears with a white background, the nowline moves from left to right across the screen. Ingest blocks keep their places on the screen. |

### Go to Now

When the nowline is not locked, it is possible to jump to the current time with the nowline in the middle of the screen by clicking the **Go to Now** button.

### Go to [Date]

By entering a date in the **Go to [Date]** field, it is possible to display the Ingest Overview at this specific date.

# 2.3. Recorder Channels Status Area

## 2.3.1. Channel Track

### Definition

The recorders and streams are grouped by logical entity, which is hereafter referred to as a track: the channels recording the same video content are grouped together. For each channel, an expanded view displays the items selected in the Display Options menu.

All the tracks can be expanded, or collapsed, at once by clicking the **Expand/Collapse all Tracks** button at the bottom left of the window.

When the list of recorders is longer than the Ingest Scheduler window height, you can scroll within the list in one of the following ways:

- use the vertical scroll bar on the right of the window
- rotate the mouse wheel over any area of the Ingest Scheduler window.

## Display in High Resolution / Low Resolution Mode

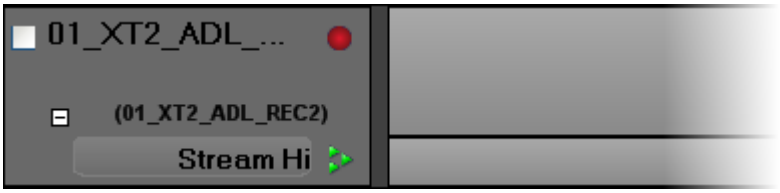
Recorders and streams are displayed in the following order:

- high resolution server recorder channel
- high resolution stream
- low resolution server recorder channel
- low resolution stream


## Display in High Resolution Only Mode

Recorders and streams are displayed in the following order:

- high resolution server recorder channel
- high resolution stream



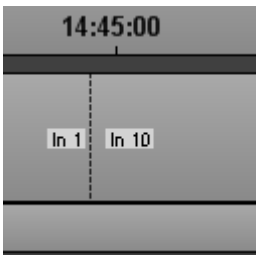

## Display in Case of Use with a Video Router

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 displayed next to the recorder channel name.

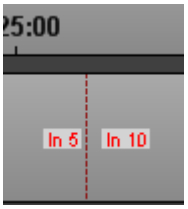
The **Change Recorder Input** button  is displayed in the area when the recorder channel is physically linked to a video router. It allows users to change the assigned router IN port.

See section "Managing the Links with a Video Router" on page 24.

The switch of the router IN port associated to a recorder channel is represented by a vertical dotted line in the channel track, at the timecode when it occurred:




If the switch operation failed, a warning is displayed as follows:




## 2.3.2. Stream Icons

The icon linked to a stream can be displayed with different colors. Their meaning is explained in the following table:

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

### 2.3.3. Channel Selection

To apply an action to several tracks or sub-tracks at once, they must be selected by clicking them from the Recorder Channels Status area.

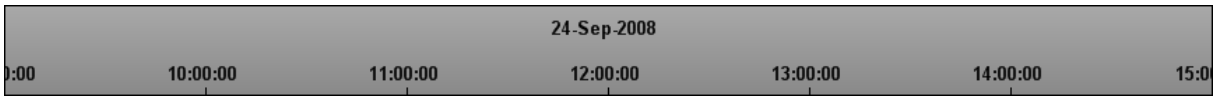
Multiselection is easy using shortcuts mentioned in the table below.

| Operation | Action |
|---|---|
| **CLICK** | Selects a sub-track. |
| **SHIFT + CLICK** | Adds all the contiguous sub-tracks to the selection. |
| **CTRL + CLICK** | Adds the sub-track to the selection. |
| **CTRL + SHIFT + CLICK** | Adds the whole channel track to the selection. |

Selected channels are displayed with a blue background.


## 2.4. Timeline and Ingest Overview Area

### 2.4.1. Time Bar




The period of time displayed in the Timeline and Ingest Overview area depends on the time scale chosen with the Zoom function.

There are different ways to move across the time bar of Ingest Scheduler:

- A double-click on a specific date and time automatically moves this date and time to the middle of the screen.
- A drag-and-drop action on the time bar moves the time bar accordingly.
- A drag-and-drop action on the scroll bar moves through the Ingest Scheduler Timeline.

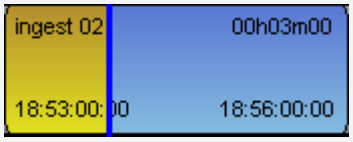
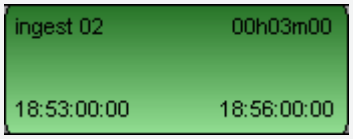
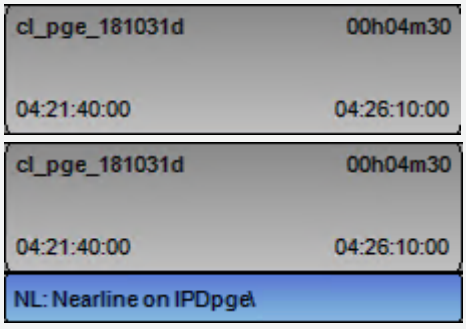
# 2.4.2. Ingest Block

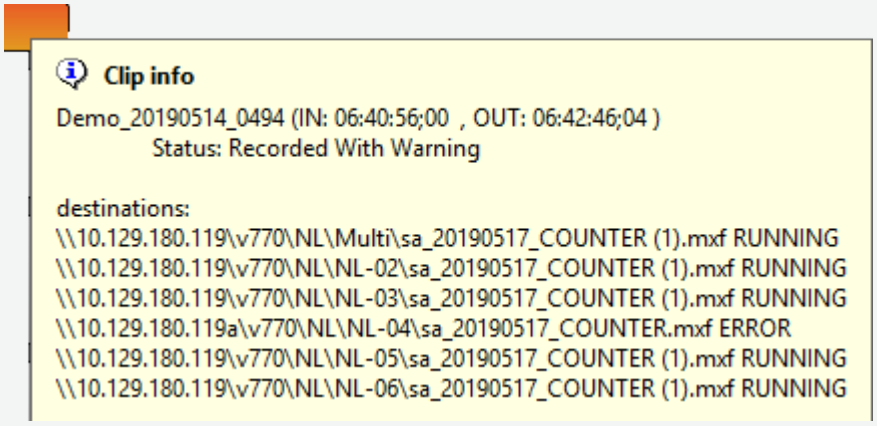
## About Ingest Blocks

In the Ingest Overview area, a block represents a clip element. It could be an XT clip element if it is recorded from a recorder channel sub-track, or a file element if it is recorded from a stream sub-track.

## Ingest Status Colors

The ingest status is shown by means of different colors as follows:

| Block Color | Status |
|---|---|
|  | A blue block to the right of the nowline is a **scheduled** ingest. |
|  | A currently **recording** ingest has two colors:<br>• The recorded media part, to the left of the nowline, is yellow<br>• The scheduled media part, to the right of the nowline, is blue. |
|  | A green block to the left of the nowline is a successfully **recorded** ingest. |
|  | A red block marks a recording that has **failed**. |
|  | A **growing clip** is a recording element without OUT point and launched by clicking on **Start** button in the Channel Explorer or the Ingest Scheduler. It is displayed in yellow. The right-end of the block is on the nowline. |
|  | A **stream only** ingest is represented by a colored block on the stream sub-track.<br>A transparent (gray) block is displayed on the recorder channel sub-track to draw attention. |

| Block Color | Status |
|---|---|
|  | A currently **recording** ingest is being sent to a multi-destinations target, nearline or Avid catalog, but one of the transfers failed.<br>The block has the two following colors:<br>• The recorded media part, to the left, is yellow.<br>• The scheduled media part, to the right, is orange to warn the users.<br>Hovering the mouse over the block displays a tooltip where you can identify the destination in error: |
|  | |

# Information Displayed on Blocks

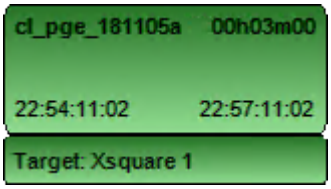
## Block for an EVS Server Clip

The parameters displayed and their location on the block are set in **Tools > Settings > Ingest Scheduler > General**. See section "Ingest Scheduler Settings" on page 19 for more information.

This can be: clip name, clip duration, Error, TC IN, TC OUT, Category, Owner, LSMID, VarID, None.

## Block for a Stream

The target name is displayed on the stream block.



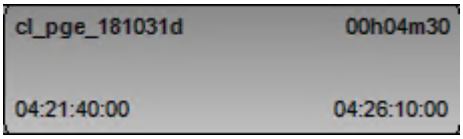
## Partial Block Display

A transparent block is displayed in the sub-track of the high resolution XT recorder, would the channel view be collapsed or expanded, in the following cases:

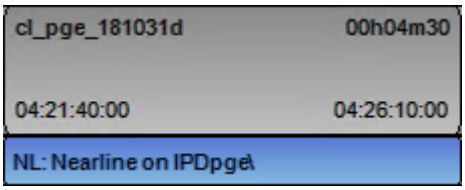
- A high resolution clip has been removed from the system, before or after recording, but some other clip elements are still present in the same track (low resolution XT clip, streams).
- A high resolution clip has not been scheduled, only other clip element, such as the high resolution stream, has been scheduled and/or recorded.

The metadata is displayed within the transparent block in the high resolution XT recorder sub-track.

**Collapsed view**




**Expanded view**




## Ingest Block Contextual Menu

A contextual menu appears when you right-click a block differnt than a transparent block.

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

| Menu Item | Description |
|---|---|
| **New Schedule** | Opens the New Schedule window to schedule an ingest.<br>See section "Creating Ingests" on page 28. |
| **Edit** | Opens the Edit Clip window with all the block properties and allows you to edit them.<br>See section "Editing a Scheduled Ingest" on page 45. |
| **Delete** | Deletes the selected block. See section "Deleting a Scheduled Ingest" on page 48. |
| **Start Ingest Now** | Changes the start time of the selected scheduled ingest to now and immediately starts the recording.<br>See section "How to Start a Scheduled Ingest Immediately" on page 44. |
| **Stop Ingest** | Stops the recording of the clip or stream.<br>See section "Stopping an Ingest" on page 44. |

| Menu Item | Description |
|---|---|
| **Convert to One Shot** | If the selected block is an occurrence of a series of recurrent ingests, this option removes the block from the series and convert it to a one shot ingest. |
| **Restart** | If a recording has failed, this option restarts the clip recording. If it is a stream, it sends the XML file to XStream or XTAccess. |
| **Kill stream** | Stops the recording of the selected stream and cancels the transfer job. The block color turns red.<br><br>**WARNING**<br>Even if the block is deleted after a **Kill Stream** operation, the file is already present in the Databse Explorer and in the SAN. |
| **Publish** | Opens the Publish window in which the operators can specify the user groups the clip should be published to.<br>The clip will be published to the selected groups provided that they have the adequate visibility rights.<br>When the high resolution XT clip is selected, all the elements of the track are published. When the stream is selected, only the file is published. |
| **Send To** | Provides a list of possible destinations to which the selected clip can be sent.<br>Possible destinations, depending on the XNet network, are:<br>• the user's default bin<br>• the user's default playlist<br>• a default archive target<br>• any target destination visible on the GigE network that has been defined, such as CleanEdit targets, Avid, targets, Final Cut Pro targets, File targets. |
| **Backup to Nearline** | Backs the clip up as file to the default nearline or to a nearline directory. Lists the on-line nearline directories destinations to which the loaded clip can be sent. |
| **Import Ingest List** | Allows users to import an ingest list from an XML file into IPDirector.<br>See section "How to Import an Ingest List" on page 58. |
| **Export Ingest List** | Allows users to generate a file that contains the list of the ingests scheduled in the Ingest Scheduler within a given range of dates and times.<br>See section "How to Export an Ingest List" on page 58. |
| **Create Logsheet from asset** | Opens the Create a Logsheet wizard to create a new logsheet and associate it to the ingest block.<br>See section "Linking Ingests with Logsheets" on page 57. |
| **Link Logsheet to Asset** | Opens the Open a Logsheet window to associate an existing logsheet to the selected ingest block.<br>See section "Linking Ingests with Logsheets" on page 57. |
| **Show Properties Window** | Opens the Properties window for the block. |

### Ingest Block Properties Window

A block properties window can be shown

- by pressing **SHIFT** + **CTRL** + click on a block or
- by pressing **SHIFT** + **CTRL** + **Enter** on a block or
- by right-clicking a block and selecting **Show Properties Window**from the contextual menu.

This window shows error messages, if any.

## 2.5. Remaining Capacity Area

On the right of each channel sub-track, a **Start** button, a **Stop** button and a box indicating the remaining capacity are present.

### Start and Stop Buttons

| Button Display | Meaning |
|---|---|
|  | The **Start** button has a white background when no ingest or growing clip is being recorded on the corresponding sub-track. |
|  | The **Start** button background is red when a recording is on-going. |
|  | The **Stop** button is dimmed when no ingest or growing clip is being recorded on the corresponding sub-track. It is thus unavailable. |
|  | The **Stop** button is available when a recording is on-going. |

### Remaining Capacity

The information about remaining capacity is displayed for each sub-track of a channel track.


The remaining capacity on the EVS video servers is displayed in time.

The remaining capacity is displayed as time, storage space or percentage according to the setting defined in **Tools > Settings > Ingest Scheduler > Remaining Capacity**. See section "Ingest Scheduler Settings" on page 19 for more information.

**NOTE**

When several targets have been selected, the remaining capacity displayed represents the value for the first target.

If the remaining capacity falls below the Capacity Warning threshold defined in the settings, the **Remaining Capacity** field is shown with a red background.

- EVS server:


- Selected stream target:


When no stream target has been selected, 

is displayed as no remaining capacity can be calculated.

# 2.6. Track Contextual menu

A contextual menu is available when right-clicking the Recorder Channels Status area, the Timeline and Overview area or the Remaining Capacity area outside any block.

This menu makes it possible to perform the following actions:

**New Schedule**
Opens the New Schedule window to schedule an ingest.
See section "Creating Ingests" on page 28.

**Start Ingest Now**
Starts a growing clip from the nowline.
See section "Creating Growing Clips" on page 37.

**Gang**
Gangs the selected channels.
See section "Managing Ganged Recorder Channels" on page 21.

**Ungang**
Removes the selected channels from the gang group.
See section "Managing Ganged Recorder Channels" on page 21.

**Import Ingest List**
Allows users to import an ingest list from an XML file into IPDirector.
See section "How to Import an Ingest List" on page 58.

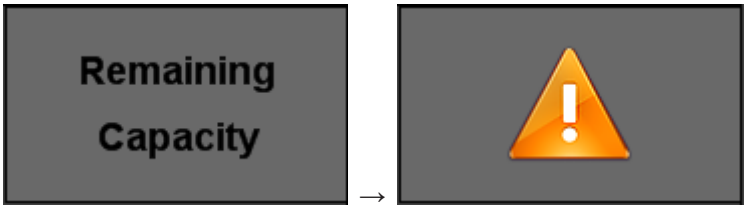
**Export Ingest List**
Allows users to generate a file that contains the list of the ingests scheduled in the Ingest Scheduler within a given range of dates and times.
See section "How to Export an Ingest List" on page 58.

**Set Stream Target**
Opens the Select Stream Target window to define a default target for the selected stream.
See section "Defining a Default Stream Target" on page 22.

# 2.7. Warnings

## Warning Display

The Remaining Capacity title area can be used to display a **Warning** icon, if a warning is issued on one of the recorders or streams.




## Potential Warning Sources

### Low Remaining Capacity

If the remaining space/time falls below the Capacity Warning threshold defined in the settings, the **Remaining Capacity** field is shown with a red background.

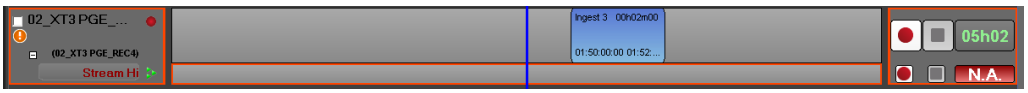

### No Stream Target Defined

When no stream target had been selected,

- the storage remaining capacity displays 

.
- **Stream** is displayed in red 

- the corresponding sub-track is highlighted with an orange border:




A tooltip is displayed when the mouse is over the **Warning** icon.

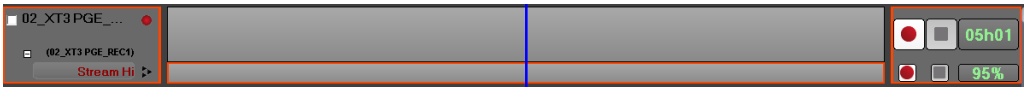
See section "Defining a Default Stream Target" on page 22.

## Stream Target Off-line

If the selected stream target is off-line,

- **Stream** is displayed in red with a black stream icon 

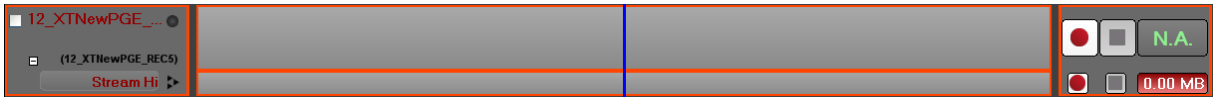
- the corresponding sub-track is highlighted with an orange border:




## Off-Line Channel

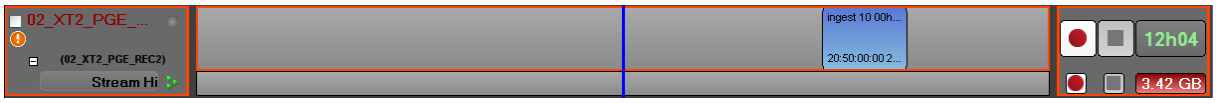
If the recorder is off-line and IPDirector has no control to start it,

- the server recorder channel displays in red
- the corresponding sub-track is highlighted with an orange border:




## Recorder Not Started

If the recorder is not started and a ingest is scheduled in less than an hour, the warning is displayed as follows:



# 3. Ingest Scheduler Settings

## 3.1. Introduction

Auto-Name settings are described in the General Functions user manual.

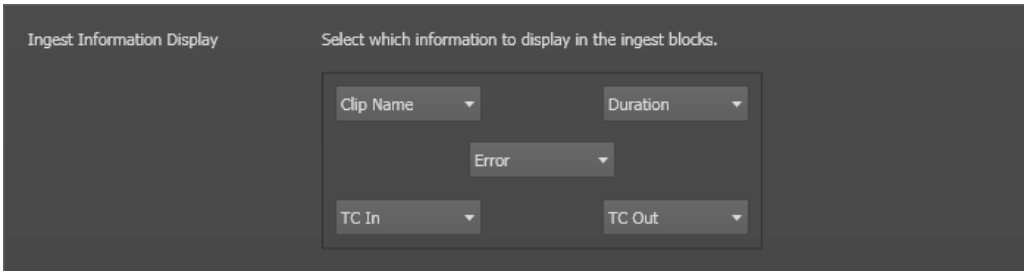
Settings specific to the Ingest Scheduler are defined in the Ingest Scheduler category of the IPDirector Settings window.

Click **Tools > Settings > Ingest Scheduler**.

## 3.2. General Settings

### Ingest Information Display

Information to be displayed on the ingest blocks, visible in the timeline, is set with this option.




### Auto-Name Clips

If this option is selected, the New Schedule window will not be displayed when an ingest is created and the ingest will start instantly. The default name defined in **Tools > Settings > Autoname** will be used. See the section "Auto-Name Settings" in the General Functions user manual for more information.

If this option is not selected, the New Schedule window will open an ingest is created. The user can enter data for the ingest in this window.

## 3.3. Remaining Capacity Settings

### Display Remaining Capacity As

Unit in which the remaining capacity on the selected stream target is displayed:

- Time
- Storage Space (GB, MB)
- Percentage of total storage space

### Remaining Capacity Calculation

The setting defines whether the remaining capacity takes scheduled ingests into account.

#### Live Channel Capacity

Estimated capacity of the current server calculated without taking into account anything planned in the future.

#### Channel Capacity with Scheduled Ingests

Estimated capacity of the current server calculated taking into account all scheduled blocks, thus giving the user a realistic capacity based on ongoing plans.

### Capacity Warning Threshold

Remaining capacity threshold below which an alert is displayed.

## 3.4. Advanced Settings

### Track Size

Defines what should be the height, in pixels, of the tracks displayed in the interface. This allows reducing the size of the tracks and displaying more tracks on screen.

### Minimum Mouse Move

Defines the minimum mouse move threshold below which the drag-and-drop operation is not considered.

# 4. Managing Channels

## 4.1. Managing Ganged Recorder Channels

### Introduction

Recorder channels can be ganged and unganged from the Ingest Scheduler.

When a block is created on a ganged channel, linked clips are automatically created with the same properties on all the ganged channels.

When a block is created on the stream sub-track of a ganged recorder, linked files are automatically created with the same properties on the stream sub-tracks of all the ganged channels.

When linked clips are created from ganged recorder channels belonging to different servers, the same VarID will be allocated to all the linked clips provided that the **Force Same VarID on Ganged Channels** setting has been selected under **Tools > Settings > Clips > General**. This occurs would the VarID be automatically attributed by the system, or would it be written in the **VarID** field of the New Schedule window by the user.

### How to Gang Recorder Channels

To gang two or more channels from Ingest Scheduler, proceed as follows:

1. Select two or more channels using **CTRL**+click or **SHIFT**+click.

   The selected channels are shown in blue.
2. Right-click one of the channels and select **Gang**.
3. The ganged channels are displayed with a chain symbol:


### How to Un-Gang Recorder Channels

To ungang two or more ganged channels from Ingest Scheduler, proceed as follows:

1. Select the channel to be unganged.
2. Right-click the channel.
3. Select **Ungang**.

# 4.2. Defining a Default Stream Target

## Introduction

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

If a stream does not have a default target defined, or if the corresponding target is off-line, a warning will be displayed. See section "Warnings" on page 17. This does not prevent streams from being scheduled, but alerts the users that a default target does not exist.

## How to Define a Stream Target

To define a target for a stream,

1. Right-click a stream name or track.

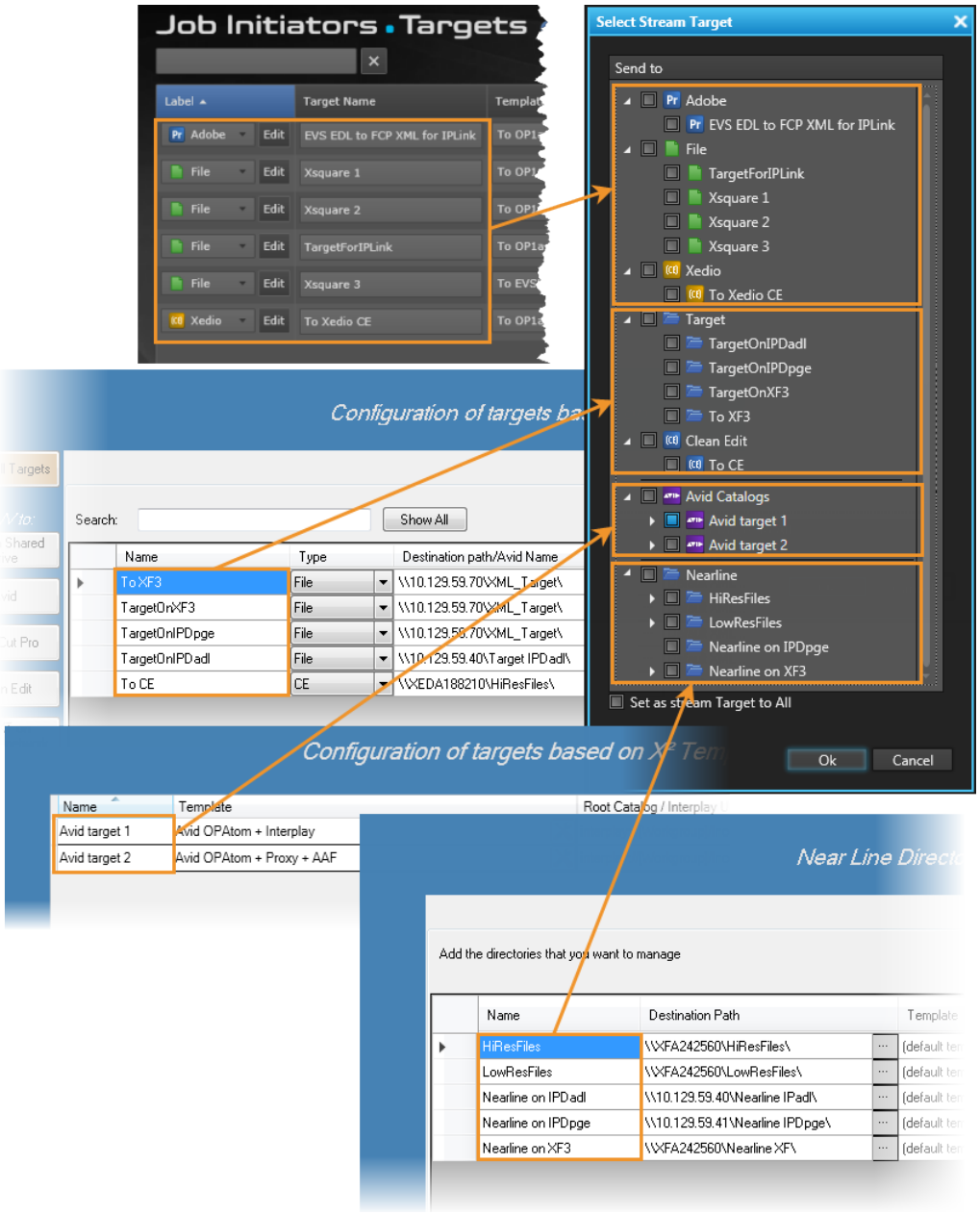
   A contextual menu is displayed.

2. Select **Set Stream Target**.

   The Select Stream Target window opens.

   It displays the following existing targets:

   - the Xsquare targets set from the Xsquare declared in the Remote Installer,
   - the targets set from the Remote Installer and using XML units,
   - the Avid catalogs set from the Remote Installer and using Xsquare templates,
   - the nearline storages set from the Remote Installer.




### NOTE - VISIBILITY OF XSQUARE TARGETS

Xsquare targets are visible provided that

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

3. Select the stream target.

4. (optional) To define this stream target for all the streams, select the **Set as Stream Target to All** option.
5. Click **OK**.

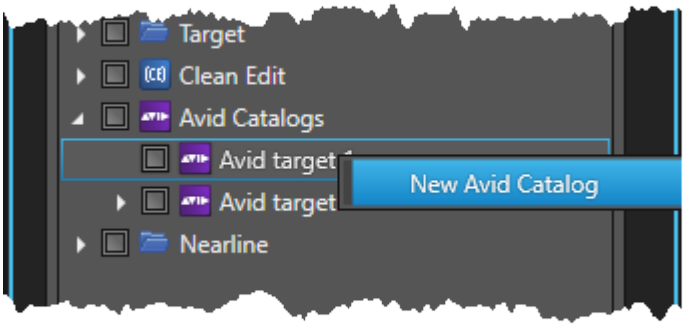
### How to Create an Avid Catalog

To create an Avid catalog as a target from the Ingest Scheduler interface,

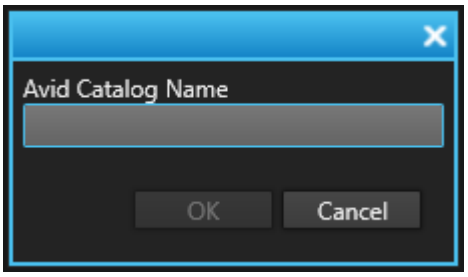
1. Right-click a stream name or track.

   A contextual menu is displayed.
2. Select **Set Stream Target**.

   The Select Stream Target window opens.
3. Right-click the Avid catalog under which you want to create a new catalog in Avid.
4. Select **New Avid catalog**.




5. Enter a name for the Avid catalog:




6. Click **OK**.

The catalog is created in Avid. You are not able to edit it or delete it from IPDirector.

# 4.3. Managing the Links with a Video Router

## 4.3.1. Introduction

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

installation.

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

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

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

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

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

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

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

# 4.3.2. Assigning a Recorder Source

## Introduction

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

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

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

From Ingest Scheduler, the switch can also be done automatically when the recording of a scheduled ingest starts. This is described in section "Creating Ingests from a Video Router" on page 60.

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

## Prerequisites

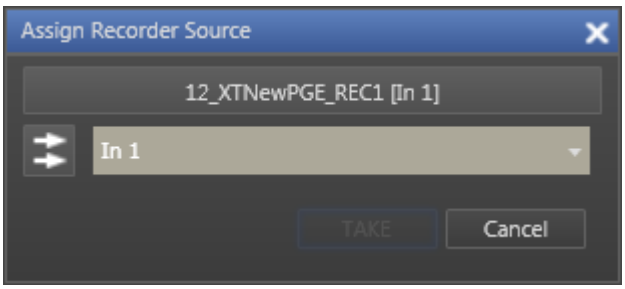
- The appropriate configuration must have been done from the Remote Installer regarding the communication parameters and the association of router OUT ports physically linked to recorder channels.
- The Router Control service is started.

## How to Assign a Router IN Port to a Recorder Channel

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

1. Click the **Change Recorder Input** button  next to the **Recorder Channel** field.

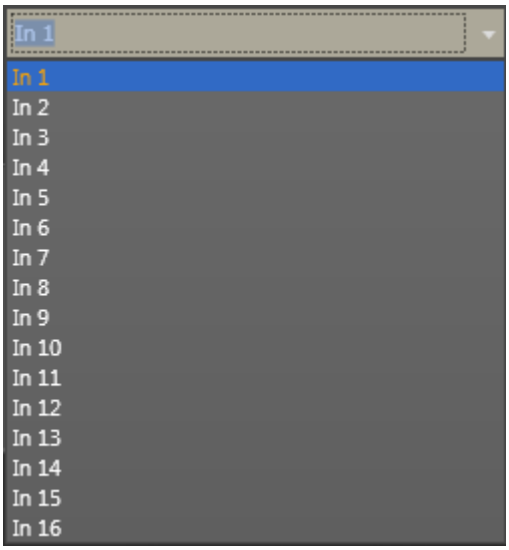
   The Assign Recorder Source window opens:

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

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

   The list of all the router IN ports is displayed:

3. Select an IN port.

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

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

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


The switch of the router IN port associated with a recorder channel is represented by a vertical dotted line in the channel track, at the timecode when it occurred.

# 5. Creating Ingests

## 5.1. Ingests Types

Several types of ingests can be recorded from the Ingest Scheduler.

- Growing clip: A growing clip is an ingest without any OUT point. This type of block has no stop time. It will continue recording until a user stops it manually.
- One-shot ingest: ingest which will be recorded only once.
- "Repeat" ingest: ingest which is part of a series where all the ingests are scheduled to occur at a defined start time every selected day of the week during a certain period of time.
- "Repeat every" ingest: ingest which is part of a series where all the ingests are scheduled to occur at predefined time intervals every selected day of the week during a certain period of time.

## 5.2. New Schedule Window

### 5.2.1. Context of Use

The New Schedule window opens in the following cases.

- The **New Schedule** button is clicked or the **New Schedule** option is selected from the Track contextual menu.

  The window allows users to schedule one-shot ingests, "repeat" ingests or "repeat every" ingests. See section "Window Overview" on page 28.
- A growing clip is started and the Autoname Clip setting has not been selected from the Ingest Scheduler Settings window.

  The window allows users to enter clip metadata but does not allow them to change the ingest time. See section "Variants of the New Schedule Window" on page 32.
- A growing clip is started from the Channel Explorer. See section "Variants of the New Schedule Window" on page 32

### 5.2.2. Window Overview

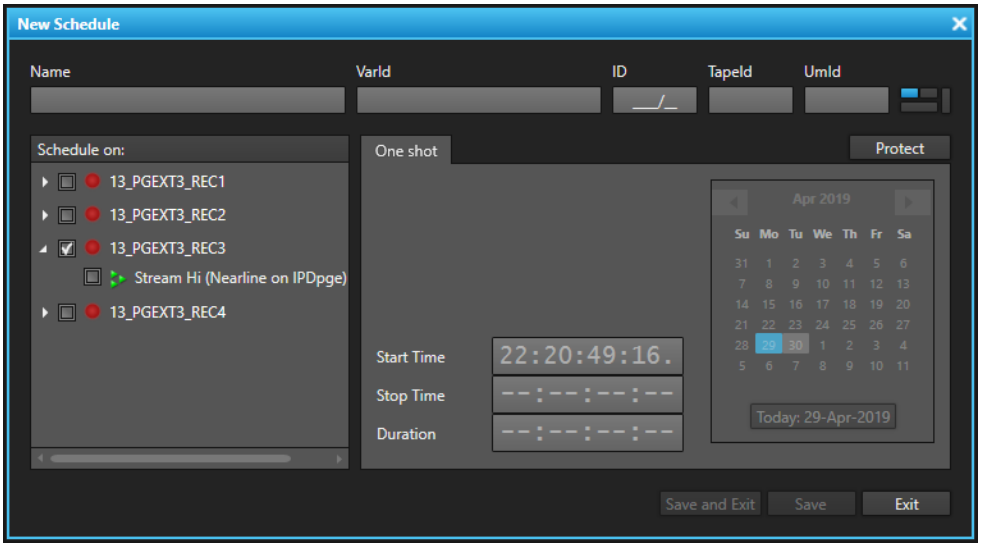
#### Possible Views of the New Schedule Window

The New Schedule window features several panes which can be shown or hidden thanks to the use of the **Pane Display** buttons  .

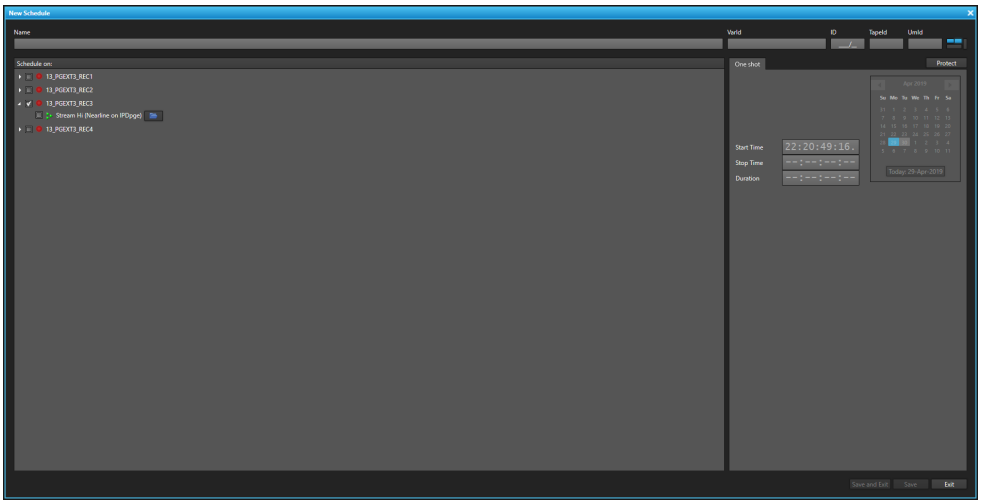
## Clip Schedule View

The Clip Schedule pane is the minimal view of the New Schedule window. It can appear in two different sizes:

- Regular size: window displayed by default. It can also be displayed by clicking the  button.



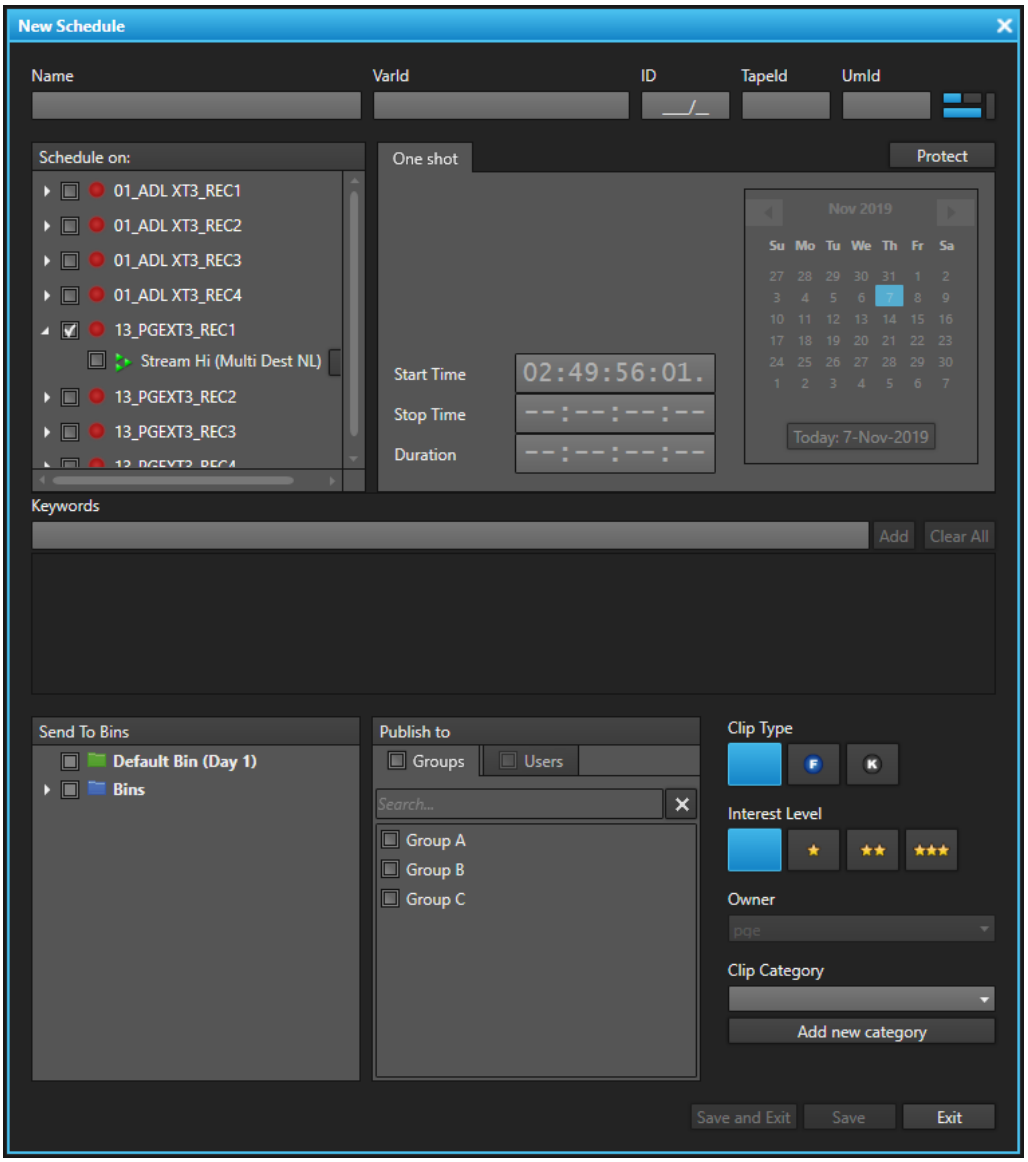

- Large size: the channel selection pane is enlarged. The window is displayed by clicking the  button.



## Clip Schedule and Clip Options View

The Clip Options pane can be displayed by clicking the  button.

Then, both the Clip Schedule pane (regular size) and the Clip Options pane are visible:

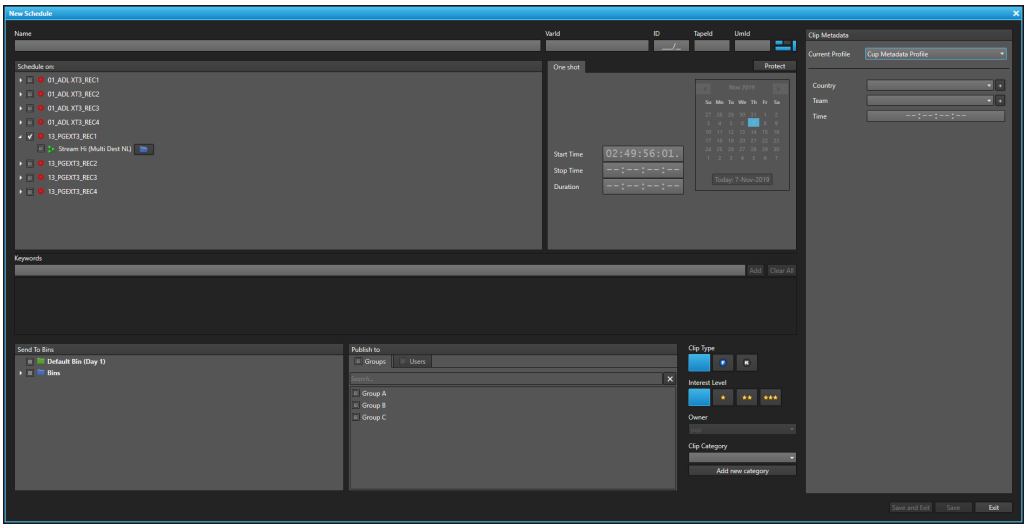



The Clip Options pane cannot be shown with the large size of the Clip Schedule pane.

## Clip Schedule, Clip Options and Clip Metadata View

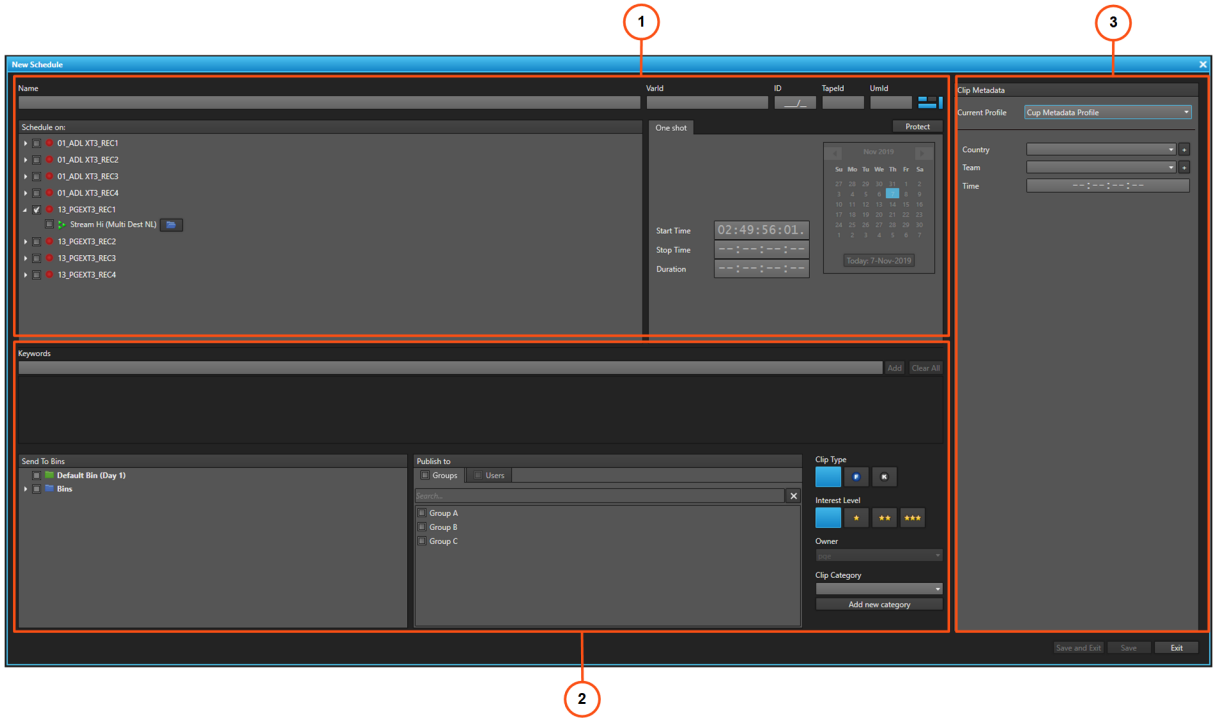
The Clip Metadata pane can be displayed by clicking the  button.

Then, all the panes are visible:




## The New Schedule Window Outline

When fully expanded, the New Schedule window contains the areas highlighted on the screenshot below:



### Clip Schedule pane (1)

It features the minimal information to schedule an ingest: clip name, channel selection and schedule configuration.

### Clip Options pane (2)

It allows to provide additional information on the clip, such as keywords, interest level,..., to select a bin to send the clip to, and to select group(s) or user(s) to publish the clip to.

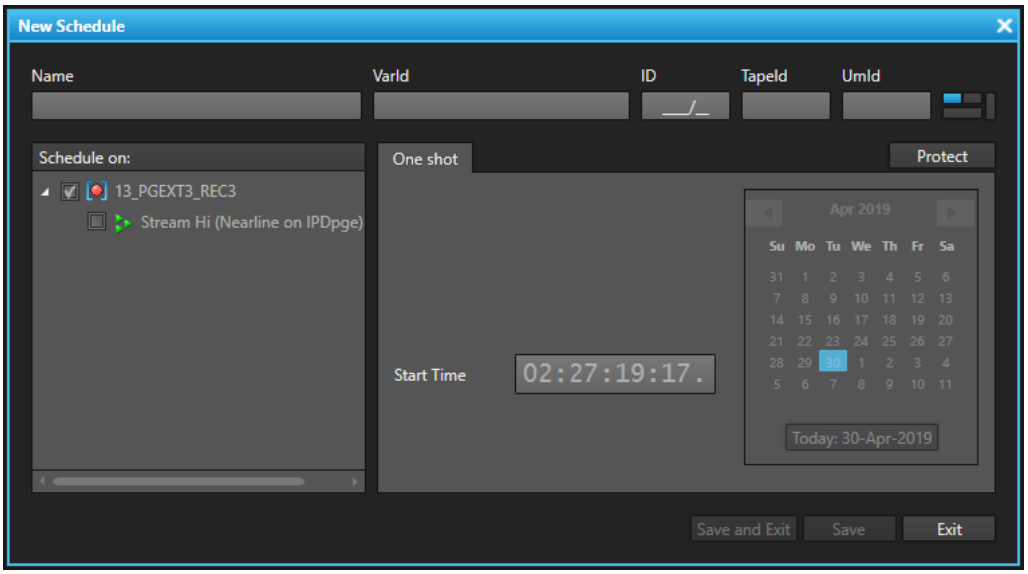
### Clip Metadata pane (3)

It can be used to assign a metadata profile and its metadata to the clip.

## 5.2.3. Variants of the New Schedule Window

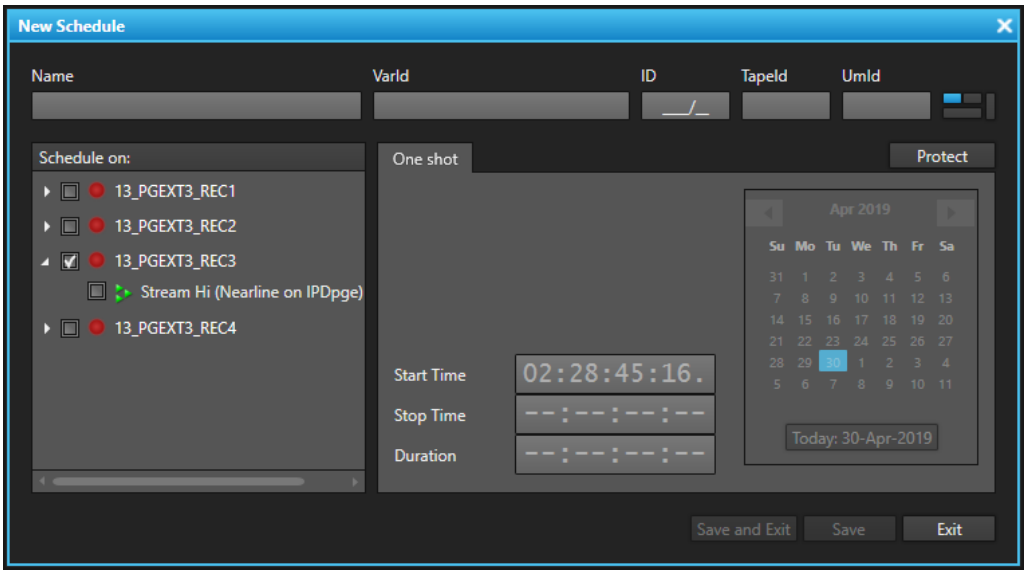
### Growing Clip Started from the Channel Explorer

When a growing clip is started from the Channel Explorer, the following variant of the window opens:




### Growing Clip Started from the Ingest Scheduler

When a growing clip is started by means of the **Start** button in the Ingest Scheduler, the following variant of the window opens:




# 5.2.4. Fields in the New Schedule Window

## Clip Schedule Pane

The Clip Schedule pane contains the following user interface elements.

**Name**
User-defined name for the scheduled ingest. It can contain up to 24 alphanumeric characters.
It is mandatory.
A prefix name can be defined from **Tools > Settings > Autoname/Clip**.

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

**ID**
ID identifying the scheduled ingest position in the XNet network. This numbering is based on the numbering of the LSM operational mode.
If you enter a requested position that is already used, the application will display an error message. You will have to enter a new position.
If you do not enter an ID, an ID is automatically assigned by the system.

**Tape ID**
This identifies the tape on which the clip is stored.

**UmID**
Unique Material Identification. UmID is a fixed length 8–character ID. The EVS server automatically assigns a UmID to each new scheduled ingest. It is used for the unique identification of a clip on an XNet network.

**Protect / Unprotect**
Button that allows the users to protect or unprotect the clip.
A message will warn the users in IPDirector or in Multicam not to delete the protected clip.

When the Protect status is selected, the button is highlighted.

**Scheduled On**
List of all the ingest channels where ingests can be recorded: server recorder channels for XT clips and targets/nearlines for streams.

- In case of recorder channels connected to a video router, the name of the currently connected IN port is displayed next to the recorder channel. See section "Creating Ingests from a Video Router" on page 60 for more information.
- The target used to send a stream to can be set by clicking the  button and selecting a target from the Select Stream Target window.
  This window displays the targets set from the Remote Installer and using XML units, and the Xsquare targets set from the Xsquare declared in the Remote Installer, the Avid catalogs set from the Remote Installer and using Xsquare templates, the nearline storages set from the Remote Installer.

Stream transfer could be monitored through the Transfer Monitoring window, from **Tools > Transfer Monitoring**.

**One-Shot tab**
Time information to define a "one-shot" ingest.

**Repeat tab**
Time information to define a "repeat" series of ingests.

**Repeat Every tab**
Time information to define a "repeat every" series of ingests.

## Clip Options Pane

The Clip Options pane contains the following user interface elements:

**Keywords**
This area allows you to assign up to five keywords to a scheduled ingest to qualify its content.
For more information on how to assign keywords to media, see the General Functions user manual.

**Send To**
Destinations where the clip can be transferred to.
Select the check boxes corresponding to the requested destinations.

**Publish To**
User groups, or individual users, to which the scheduled ingest can be published, i.e. made available.

**TIP**

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

**Type buttons**
The **Type** buttons allow you to assign a type to a scheduled ingest for use with Key and Fill operations.
The background of the button corresponding to the selected type is blue.

- The left button is used for normal items. This is the default value.
- The middle button is used for fill items.
- The right button is used for key items.

**Interest Level buttons**

The **Interest Level** buttons allow users to assign an interest rating to a scheduled ingest. Four interest levels can be defined, from no star to 3 stars. The background of the button corresponding to the selected interest level is blue. The default value is the no star level.

## Clip Metadata Pane

The Clip Metadata pane contains the following fields:

**Current Profile**

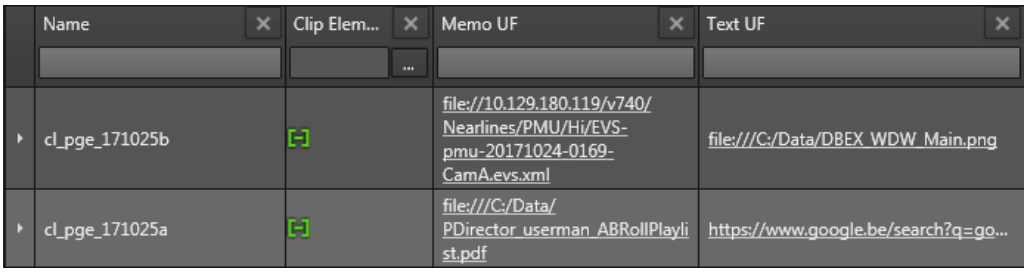
Drop-down list from which the users with appropriate user rights can select the metadata profile to be associated with the clip.
For users who do not have the right to choose a metadata profile, the profile set as default in the Metadata Profile Management window is automatically applied with its fields and default values.
For users who have the right to choose a metadata profile, the default profile will be displayed the first time each user create an item. Afterwards, each user who will have chosen another metadata profile at clip creation will get this new current profile at creation of the next item.

**Metadata Profile fields**

Fields belonging to the metadata profile selected in the **Current Profile** field.
The users can modify the values of the **Metadata Profile** fields, if they have appropriate user rights. The modifications will only apply to the given clip and not impact the default values of the profile.

### Hyperlinks in Text and Memo User Fields

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




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

The following conditions must be fulfilled regarding the hyperlink naming:

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

  Example: https://www.google.be/search?q=google&ie=utf-8&oe=utf-8&client=f

- files must be preceded with **file://**.

  Example: file://10.129.180.119/v740/Nearlines/PMU/Hi/EVS-pmu-20171024-0169-CamA.evs.xml

- local files must be preceded with **file:///**.

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

# 5.3. Rules when Using Start and Stop Buttons

## Rules Based on the Already Existing Ingests

Clicking the **Start** button will have the following effect, depending on the ingest being currently recording on the corresponding channel:

| Ingest Type | Button Display | Action of Start button |
|---|---|---|
| No ingest |  | Starts a new growing clip (without OUT point). This type of block has no stop time. It will continue recording until you stop it manually. |
| Growing clip |  | No action. |
| Recording ingest |  | Starts a new growing clip (without OUT point). |
| Growing clip and recording ingest overlapped |  | No action. |

Clicking the **Stop** button will have the following effect, depending on the ingest being currently recording on the corresponding channel:

| Ingest Type | Button Display | Action of Stop button |
|---|---|---|
| No ingest |  | No action. |
| Growing clip |  | Stops the recording of the growing clip. |
| Recording ingest |  | Stops the recording of the ingest. |
| Growing clip and recording ingest overlapped |  | Stops the recording of the selected clip.<br>If no clip is selected, the **Stop** button is unavailable. |

These rules apply to clips and to streams.

### Rules Based on the Channels Selection

See section "Channel Selection" on page 10 for ways to select channels.

- Clicking the **Start** button starts the recording of a growing clip or a stream on all the selected channels and all the channels ganged with the selected channels.
- Pressing the **CTRL** key + the **Start** button starts the recording of a growing clip or a stream only on the selected channels.
- Clicking the **Stop** button stops the recording of the clip or the stream on all the selected channels and all the channels ganged with the selected channels.
- Pressing the **CTRL** key + the **Stop** button stops the recording of the clip or the stream only on the selected channels.

# 5.4. Creating Growing Clips

## 5.4.1. Introduction

A growing clip is an ingest without any OUT point. This type of block has no stop time. It will continue recording until a user stops it manually.

It displays as follows, on the left of the nowline:

## 5.4.2. Possible Ways to Start to Record a Growing Clip

A growing clip can be started in several different ways listed below.

When starting to record a growing clip in one of the following ways, the New Schedule window will always open with the One-shot tab only and a start time only.

- From the Tree view of the Channel Explorer, right-click a recorder channel and select **Open Ingest Scheduler (new ingest)** or **Start XT Ingest** from the contextual menu.
- From the Recorder view of the Channel Explorer, right-click a recorder channel and select **Open Ingest Scheduler (new ingest)** or **Start Ingest on Selected Channels** from the contextual menu.
- From the Recorder view of the Channel Explorer, click the **Record Now** button  .

When starting to record a growing clip in one of the two following ways, the New Schedule window will or will not open, depending on the Autoname Clips setting defined in the **Tools > Settings > Ingest Scheduler > General** category. When it opens, only the One-Shot tab is displayed and a start time is set to the current timecode.

- Click the **Start** button on the right of the corresponding channel.
- Right-click a track outside a scheduled block and select **Start Ingest Now** from the menu.

**NOTE**

Only one growing clip may be recorded per recorder channel at a given time.

## 5.4.3. How to Create a Growing Clip when Using the New Schedule Window

If the **Auto-Name Clips** setting is not selected in the Ingest Scheduler settings, the New Schedule window will be displayed when you create your growing clip. In this case, you will define the clip name from this window.

1. Click the **Start Recording** button  or  on the right of the channel track.

   OR

   Right-click a track and select **Start Ingest Now** from the menu.

   The New schedule window appears with only the One-Shot tab. Start Time is set to the current timecode.
2. Enter a name in the **Name** field.
3. Select the recorder(s) to be used in the Schedule on area.
4. Click the **Save and Exit** button to save your scheduled ingest and close the window.

The recording of the growing clip will start immediately.

**NOTE**

When using the **Start Ingest Now** option, if a low resolution channel is associated to the server recorder, a growing clip is also started on the server low resolution channel.

# 5.5. Scheduling Ingests

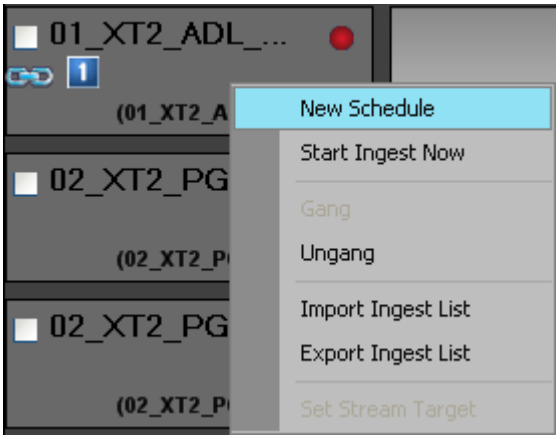
## 5.5.1. Introduction

A scheduled ingest can be programmed to happen once or to automatically be repeated at set intervals. The different procedures are explained in detail below.

## 5.5.2. Possible Ways to Schedule an Ingest

An ingest can be scheduled in several different ways listed below.

- Click the **New Schedule** button on the Menu bar
- Right-click one of the tracks and select **New Schedule** from the contextual menu




- Using the mouse, draw a block with a drag-and-drop operation by clicking within a sub-track from the desired IN point and moving to the right up to the desired OUT point


Each step corresponds to a fixed duration which varies according to the zoom factor applied to the timeline.

## 5.5.3. Rules for Channel Association

When an ingest is created by a drag-and-drop operation, the scheduled ingest blocks are also created on all associated recorders in case of multiselection or ganged channels.

If the user can view high resolution and low resolution channels, the following rules apply.

- An ingest created on a high resolution XT recorder is automatically associated to an ingest on the corresponding low resolution XT recorder.

- A low resolution stream is always associated to a high resolution XT clip and/or a high resolution stream.
- **CTRL** + **SHIFT** + drag-and-drop operation on a recorder channel will create an ingest on all the channels of the same source (high resolution XT recorder, low resolution XT recorder, high resolution and low resolution stream).

## 5.5.4. How to Schedule a One-Shot Ingest

To schedule a One-Shot ingest, proceed as follows:

1. Proceed in one way listed in section "Possible Ways to Schedule an Ingest" on page 40.

   The New Schedule window opens.
2. Enter a name in the **Name** field.
3. In the Schedule on area, select the recorder(s), to create an XT clip on the EVS video server and/or select the stream(s) to create a file on the default target.
4. Select a date in the calendar.
5. Set Start time / Stop time / Duration by entering data in two of the fields on the One Shot tab. The third field will automatically be calculated.
6. Click the **Pane Display** button to expand the New Schedule window and fill in any desired information.

   See section "New Schedule Window" on page 28 for more information on the New Schedule window.
7. Do one of the following:
   - Click the **Save and Exit** button to save your scheduled ingest and close the window.
   - Click the **Save** button to save your scheduled ingest and keep the window open and schedule another ingest.

A new block is created at the scheduled time in the tracks or sub-tracks corresponding to the selected channels.

See section "Ingest Block" on page 11.

## 5.5.5. How to Schedule a "Repeat" Ingest

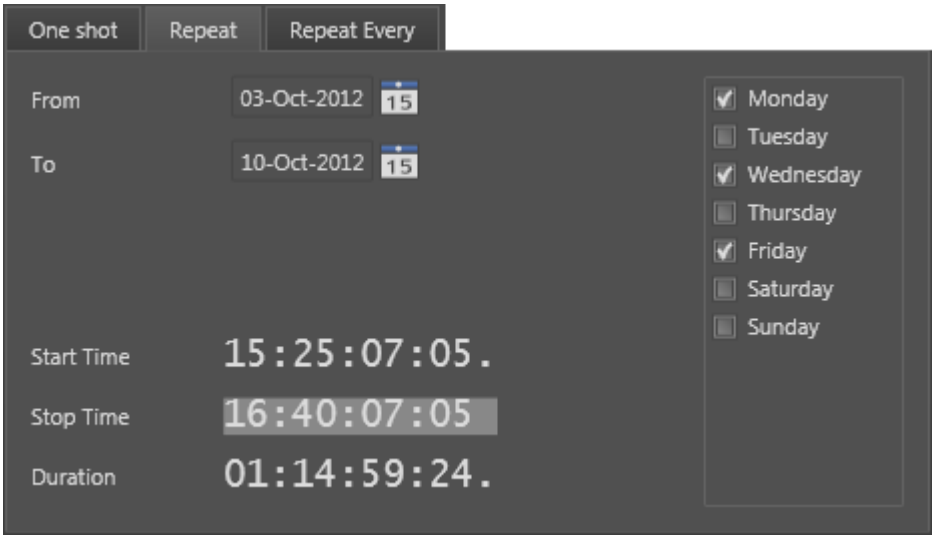
You can create multiple ingests with a defined start and stop time occurring every selected day of the week during a certain period of time. This is called a Repeat ingest.

To schedule a Repeat ingest, proceed as follows:

1. Proceed in one way listed in section "Possible Ways to Schedule an Ingest" on page 40.

   The New Schedule window opens.

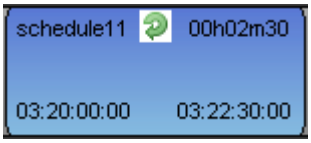
2. Click the Repeat tab.




3. In the Schedule on area, select the recorder(s), to create an XT clip on the EVS video server and/or select the stream(s) to create a file on the default target.
4. Define the period of time by setting the **From** and **To** dates in the date fields.
5. Set **Start time** / **Stop time** / **Duration** by entering data in two of the fields. The third field is calculated automatically.
6. Select the days of the week on which the recording is to be repeated.
7. Complete the Clip Options and Metadata fields, if necessary.
8. Do one of the following:
   - Click the **Save and Exit** button to save your scheduled ingest and close the window.
   - Click the **Save** button to save your scheduled ingest and keep the window open to schedule another ingest.

Blue blocks are created at scheduled times in the tracks or sub-tracks corresponding to the selected channels.

The following icon will appear on the block of the scheduled ingests.




On each "Repeat" block, the clip name is made of the clip name given in the New Schedule window and the iteration number, i.e. "clip1", "clip2",…

## 5.5.6. How to Create a "Repeat Every" Ingest

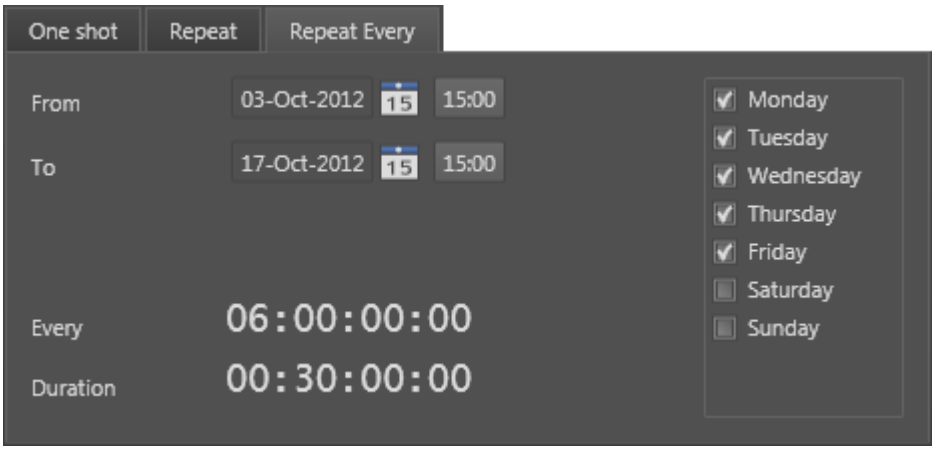
You can create multiple ingests with the same duration occurring at predefined time intervals every selected day of the week during a certain period of time. This is called a Repeat Every ingest.

To schedule a Repeat Every ingest, proceed as follows:

1. Proceed in one way listed in section "Possible Ways to Schedule an Ingest" on page 40.

   The New Schedule window opens.

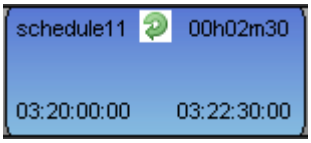
2. Click the Repeat Every tab.




3. In the Schedule on area, select the recorder(s), to create an XT clip on the EVS video server and/or select the stream(s) to create a file on the default target.
4. Define the period of time by setting the **From** and **To** dates in the date fields.
5. Set the **Every** (ingest periodicity) and **Duration** values.
6. Select the days of the week on which the recording is to be repeated.
7. Complete the Clip Options and Metadata fields, if necessary.
8. Do one of the following:
   - Click the **Save and Exit** button to save your scheduled ingest and close the window.
   - Click the **Save** button to save your scheduled ingest and keep the window open to schedule another ingest.

Blue blocks are created at scheduled times in the tracks or sub-tracks corresponding to the selected channels.

The following icon will appear on the block of the scheduled ingests.




On each "Repeat every" block, the clip name is made of the clip name given in the New Schedule window and the iteration number, i.e. "clip 1", "clip 2",…

### 5.5.7. How to Start a Scheduled Ingest Immediately

Once an ingest has been scheduled in the future, you may decide to start it immediately. To do so, proceed as follows:

1. Select the block you want to start earlier.
2. Right-click it.

   The Ingest Block contextual menu opens.
3. Select **Start Ingest Now**.

The block (or the blocks of each element of the clip) will then be extended and the recording will start immediately. The TC IN of all the clip elements is modified accordingly while the TC OUT remains the same.

## 5.6. Stopping an Ingest

### Rules for the Use of the Stop Button

See section "Rules when Using Start and Stop Buttons" on page 36 for more information on the availability of the **Stop** button and on the channels impacted by the use of those buttons.

### How to Stop a Running Ingest

To stop a recording ingest, proceed in one of the following ways:

1. Click the running ingest block you wish to stop.
2. Click the corresponding **Stop** button:

OR

1. Right-click the running ingest block you wish to stop.
2. Select **Stop Ingest** from the contextual menu.

The recording is automatically stopped for the whole clip.

# 6. Editing a Scheduled Ingest

## 6.1. Introduction

Different procedures exist, depending on whether you want to edit a one-shot ingest, all the blocks of a repeat ingest or a single block of a repeat ingest.

A block modification is automatically applied to the other blocks of the same clip. So, a change on a high resolution block will be applied to the corresponding stream block, low resolution block,…

## 6.2. Rules and Limitations for Editing TC IN, TC OUT and Duration

### "Repeat every" ingests

- "Repeat every" ingests can never be edited.

### "Repeat" ingests

- A multiselection of a "repeat" ingest can never be edited.
- A single block or all the blocks from a "repeat" ingest can be edited only if a single block is selected for the operation and
  - if ingests are still scheduled when users want to edit TC IN
  - if ingests are recording or scheduled when users want to edit TC OUT and duration

  The users will be asked whether they want to edit this occurrence only or all the occurrences of the series.

  The TC of all the clip elements will then be modified.

### One-shot ingests

- A multiselection of a one-shot ingest can never be edited.
- A single one-shot ingest can be edited only
  - if ingests are still scheduled when users want to edit TC IN
  - if ingests are recording or scheduled when users want to edit TC OUT or duration

  The TC of all the clip elements will then be modified.

## 6.3. How to Edit a One-Shot Scheduled Ingest

You can edit a one-shot scheduled ingest in one of the following ways:

- right-click a block and select **Edit**,
- double-click a block,
- drag-and-drop the block limits.

**NOTE**

The following limitations apply:
- The start time of a recording ingest cannot be changed.
- The limits of a recorded or failed ingest cannot be changed.
- The start time cannot be set to a lower value than the nowline.

## 6.4. How to Edit all the Blocks of a Scheduled "Repeat" Ingest

To edit all the blocks of a scheduled "repeat" ingest, proceed as follows:

1. Right-click the one block of the series you want to edit.
2. Select **Edit** from the contextual menu.

   The Edit an Ingest Block window opens.
3. Choose **Edit all occurrences**.

   The Edit Schedule window opens.
4. Make the desired changes.
5. Click **Save and Exit**.

The ingest blocks are modified accordingly, except for the ingests of the series already recorded.

## 6.5. How to Edit a Single Block of a Scheduled "Repeat" Ingest

To edit a single block of a scheduled "repeat" ingest, de one of the following:

1. Right-click the block you want to edit.
2. Select **Edit** from the contextual menu.

   The Edit an Ingest Block window opens.
3. Choose **Edit this occurrence**.

   The Edit Schedule window opens.
4. Make the desired changes.
5. Click **Save and Exit**.

The ingest block is then a stand-alone block and is modified accordingly.

## 6.6. How to Convert a Block to a One-Shot Ingest

To convert one block of a scheduled "repeat" ingest to a one-shot ingest, proceed as follows:

1. Right-click the block you want to edit.
2. Select **Convert to One-Shot** from the contextual menu.

The block is no more part of the group.

# 7. Deleting a Scheduled Ingest

## 7.1. Rules and Limitations for Deleting an Ingest

When a block is deleted, the corresponding clip elements (and media files) are also deleted.

### "Repeat every" Ingests and "Repeat" Ingests

- A multiselection of a "repeat every" ingest or a "repeat" ingest can never be deleted.
- A single block or all the blocks from a "repeat every" ingest or from a "repeat" ingest can be deleted only if a single block is selected for the operation. The users will be asked whether they want to delete this occurrence only or all the occurrences of the series.

### Hi-Lo Mode

- When the users do not select all the clip elements of an ingest and try to delete the selection, they will be asked whether they want to partially delete the block or they want to delete the whole block.
  - If the clip has already been recorded, the users will be able to delete some of the clip elements and not all of them.
  - If the clip has not yet been recorded, and the users delete a hi-res block (or lo-res block), the corresponding lo-res block (or hi-res block) is automatically deleted, as well.

    If the users delete a scheduled hi-res XT clip, the corresponding scheduled lo-res XT clip will be deleted. Only the blocks corresponding to the hi-res stream and to the lo-res stream will remain. A transparent block will be displayed in the hi-res XT recorder sub-track as explained in section "Ingest Block" on page 11.

## 7.2. How to Delete a One-Shot Scheduled Ingest

To delete a single one-shot ingest or several one-shot ingests, proceed as follows:

1. Select the block(s).
2. Right-click the block, or one of the blocks in case of multiselection, and select **Delete**.

   OR

   Click the **DELETE** key.

   A pop-up window will ask you whether you want to delete the block(s).
3. Confirm the deletion in the window that appears.

The selected block(s) is/are deleted. Corresponding clips are removed from the database.

## 7.3. How to Delete Blocks from a Repeat or Repeat Every Scheduled Ingest

You will not be able to delete a multiselection of a "repeat" or "repeat every" series of ingests.

To delete one or several blocks of a "repeat" or "repeat every" series of ingests, proceed as follows:

1. Right-click the block you want to delete or one of the blocks of the series you want to delete and select **Delete.**

   OR

- Select the block you want to delete or one of the blocks of the series you want to delete and click the **DELETE** key.

  The Delete an Ingest Block window opens.

2. Click
   - **Delete this occurrence** to delete a single block
   - **Delete all occurrences** to delete all the blocks of the "repeat" or "repeat every" ingest.

# 8. Copying an Ingest

## 8.1. Introduction

Ingest Scheduler provides two ways to perform an ingest copy.

Users have the possibility to perform a drag-and-drop operation, as described in section "How to Copy a Scheduled Repeat Ingest by a Drag-and-Drop Operation" on page 52. In this case, the way to copy a block depends on the option selected in **Tools > Settings > General > Select a way to copy/move an element**: Windows Style, Google Style or Dialog Box Style.

Users may also copy an ingest by editing the scheduled block and adding ingest channels in the channel selection, as it is described in section "Editing a Scheduled Ingest" on page 45.

## 8.2. Rules and Limitations for Copying an Ingest

- When ingests are copied to a recorder ganged with another one, blocks will be created on the ganged recorders as well.
- When copying a block to another ingest channel, blocks are created on the same channel type than the original block (hi-res XT recorder, lo-res XT recorder, hi-res stream, lo-res stream).
- If a lo-res channel is defined in the original ingest channel or in the target ingest channel but no lo-res channel is defined in the target channel or in the original channel respectively, no lo-res block is copied.

### Repeat Every ingests

- "Repeat every" ingests can never be copied.

### Repeat ingests

- A multiselection of a "repeat" ingest can never be copied.
- A single block or all the blocks from a "repeat" ingest can be copied to the same track or to another track only if still scheduled and if a single block is selected for the operation. The users will be asked whether they want to copy this occurrence only or all the occurrences of the series.

### One-shot ingests

- A single one-shot ingest can be copied to the same track or to another track if it is still scheduled.
- A multiselection of one-shot ingests can be copied to the same track if they are still scheduled. The same timecode interval will be applied between the different selected blocks and the copied blocks.
- A multiselection of one-shot ingests can be copied to another track only if they are all selected on the same track and if they are still scheduled.

## 8.3. How to Copy a Scheduled One-Shot Ingest by a Drag-and-Drop Operation

To copy a scheduled one-shot ingest, proceed as follows:

1. Click the block.
2. Drag the block to a new location, on the same channel or on another channel.

   A popup window is displayed asking you if you want to copy or move the block:


3. Click **Copy**.

A new block will be created with the same duration, category, metadata and recorders. The ingest start time and stop time will be changed accordingly. All the other information will remain unchanged.

# 8.4. How to Copy a Scheduled Repeat Ingest by a Drag-and-Drop Operation

You will not be able to copy a multiselection of a "repeat" series of ingests.

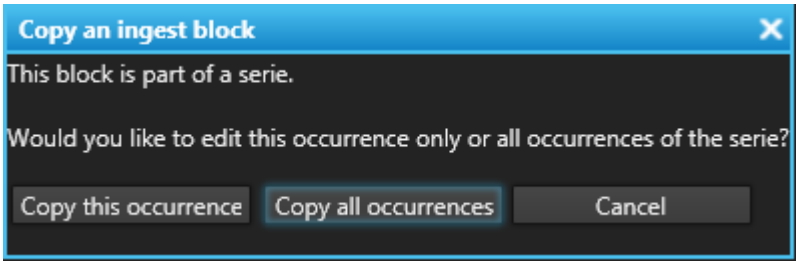
To copy one or all the blocks of a scheduled "repeat" ingest series,

1. Click one block of the "repeat" ingest series.
2. Drag the block to a new location, on the same channel or on another channel.

   A popup window is displayed asking you if you want to copy or move the block:


3. Click **Copy**.

   A pop-up window will ask you whether you want to copy this occurrence only or all the occurrences of the series.




A new block will be created with the same duration, category, metadata and recorders. The ingest start time and stop time will be changed accordingly. All the other information will remain unchanged.

# 9. Moving an Ingest

## 9.1. Possible Methods

Ingest Scheduler provides two ways to perform an ingest move.

Users have the possibility to perform a drag-and-drop operation, as described in the procedures of the current section. In this case, the way to move a block depends on the option selected in **Tools > Settings > General > Select a way to copy/move an element**: Windows Style, Google Style or Dialog Box Style.

Users may also move an ingest by editing the scheduled block and changing ingest channels in the channel selection, as it is described in section "Editing a Scheduled Ingest" on page 45.

## 9.2. Rules and Limitations for Moving an Ingest

### "Repeat every" ingests

- A "repeat every" ingest can never be moved.

### "Repeat" ingests

- A multiselection of a "repeat" ingest can never be moved.
- A single block or all the blocks from a "repeat" ingest can be moved to the same track or to another track only if still scheduled and if a single block is selected for the operation. The users will be asked whether they want to move this occurrence only or all the occurrences of the series.

### One-shot ingests

- A single one-shot ingest can be moved to the same track or to another track only if it is still scheduled.
- A multiselection of one-shot ingests can be moved to the same track only if they are still scheduled.
- A multiselection of one-shot ingests can be moved to another track only if they are still scheduled and if they are all selected on the same track.

# 9.3. How to Move a Scheduled One-Shot Ingest

To move a scheduled one-shot ingest, proceed as follows:

1. Click the block.
2. Drag the block to a new location on the same channel or on another channel.

   A popup window is displayed asking you if you want to copy or move the block:


3. Click **Move**.

The ingest start time and stop time will be changed accordingly. All the other information will remain unchanged.

**NOTE**

A recorded block or a recording block cannot be moved.

# 9.4. How to Move a Scheduled Repeat Ingest

You will not be able to move a multiselection of a Repeat series of ingests.

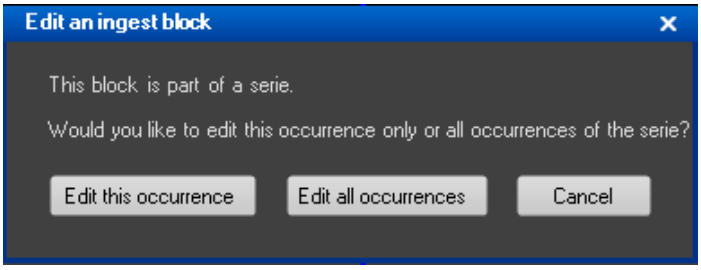
To move one or several blocks of a scheduled Repeat ingest,

1. Click one block of the Repeat ingest.
2. Drag the block to a new location on the same channel or on another channel.

   A popup window is displayed, asking you if you want to copy or move the block.

3. Click **Move**.

   A pop-up window will ask you whether you want to copy this occurrence only or all the occurrences of the series.




The ingest start time and stop time will be changed accordingly. All the other information will remain unchanged.

# 10. Publishing an Ingest

## Context of Use

An ingest can be published to individual users, or to groups of users. In this case, it is made visible to members of the group(s) it is published to.

The publication can be done at ingest creation, from the New Schedule window, or afterwards from the Ingest Scheduler or from the Database Explorer.

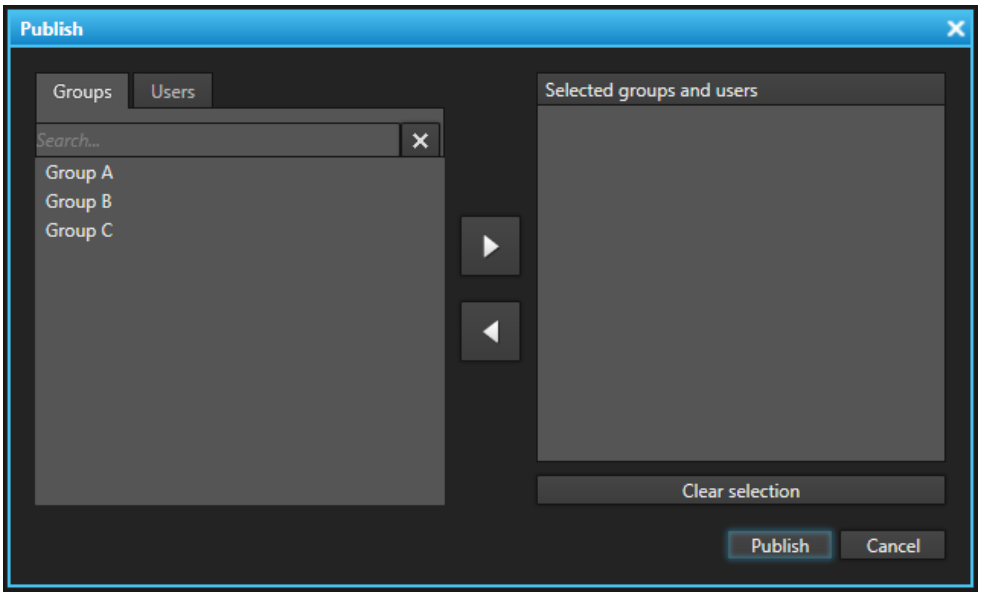
See also sections "Fields in the New Schedule Window" on page 33 and the "Publishing" sections in the Database Explorer user manual.

## How to Publish an Ingest

To publish an ingest to groups of users, or to individual users, from Ingest Scheduler,

1. Right-click the ingest block
2. Select **Publish** from the contextual menu.

   The Publish window opens.




3. Select the user group(s), or the individual users, to which you want to publish the ingest in the Available Groups area on the left. Keep **CTRL** pressed to select multiple groups.

**TIP**

Use the **Search** field to search for a group or to search for a user from the corresponding lists.

4. Click the **Right Arrow** button to move the selected groups / users from the Available Groups to the Selected Groups area on the right.

5. Click the **Publish** button.

When a user group has been selected, all users belonging to the selected user group and having visibility rights on the ingests will be able to view it.

To un-publish a ingest to a group of users, or the individual users, repeat steps above and perform the opposite operation: select the user group, or user, in the Selected Groups area and click the **Left Arrow** button.

# 11. Linking Ingests with Logsheets

## 11.1. Purpose

Once an ingest has been scheduled for a recorder channel, Ingest Scheduler allows the users to link the ingest to a logsheet. Logs created in IPLogger on the media recorded by the same recorder channel during the ingest duration will automatically be associated to that clip. Once ingested, the clip will automatically be protected.

From Ingest Scheduler, it is also possible to link an ingest block to an existing logsheet or to create a new logsheet and associate it to the ingest.

## 11.2. How to Create a Logsheet from an Ingest Block

To create a logsheet from an ingest block, proceed as follows:

1. Right-click an ingest block.

   The Ingest Block contextual menu is displayed.
2. Select **Create Logsheet from Asset**.
3. The Create a New Logsheet Wizard opens. Step 3 "Relevant Recorders Definition" is already filled with the recorder from which the ingest is scheduled.

   Complete the steps for creating a new logsheet as explained in the IPLogger user manual.

## 11.3. How to Associate an Existing Logsheet to an Ingest Block

To associate an existing logsheet to an ingest block, proceed as follows:

1. Right-click an ingest block.

   The Ingest Block contextual menu is displayed.
2. Select **Link Logsheet to Asset**.
3. The Open a Logsheet window appears.
4. Select an existing logsheet from the list.

# 12. Importing and Exporting Ingest Lists

## 12.1. Purpose

From Ingest Scheduler, the users can exchange lists of scheduled ingests with third party applications.

## 12.2. How to Import an Ingest List

To import an ingest list, proceed as follows:

1. Right-click the Recorder Channels Status area or the Timeline and Ingest Overview area.

   The contextual menu is displayed.
2. Select **Import Ingest List**.

   The Import Ingest window opens.
3. Browse to locate the desired ingest list.
4. Select the .xml file corresponding to the ingest list to import.
5. Click **Open**.

   Ingest blocks are created for scheduled items present in the imported ingest list.

## 12.3. How to Export an Ingest List

Schedules can be exported for reporting or synchronization purposes.

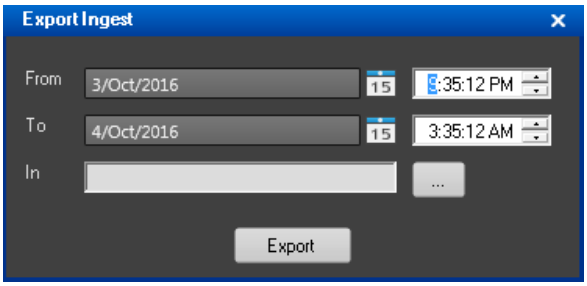
To export an ingest list,

1. Right-click in the Recorder Channel Status area or the Timeline and Ingest Overview area.

   The contextual menu is displayed.

2. Select **Export Ingest List**.

   The Export Ingest window appears:




3. Enter dates in the **From** and **To** fields to define the dates between which the scheduled ingests will be exported.

4. Browse to the desired export folder by clicking the **Browse** button: 

   This will open the Save Ingest To window.

5. Browse to the destination folder to export your file to, select an export file format in the **Save as type** field (XML or CSV) and enter a file name.

6. Click **Save**.

7. Click **Export** in the Export Ingest window.

   All the ingest schedules defined between the From date and the To date will be exported.

# 13. Managing Ingests from a Video Router

## 13.1. Creating Ingests from a Video Router

### 13.1.1. Purpose and Context of Use

Video routers can be used with IPDirector to increase the number of incoming feeds manageable by EVS server recorder channels. An EVS server recorder channel will be physically connected to an OUT port of the router, so the recorder channel records the feed received by the IN port of the router associated to this OUT port.

As described in section "Managing the Links with a Video Router" on page 24, IPDirector users with appropriate user rights have the possibility to switch the assignment between router IN ports and router OUT ports from the IPDirector user interface.

Ingest Scheduler offers an additional way to switch this assignment. When users schedule an ingest, they can choose to use a specific router IN port, which can differ from the one currently used. The switch between the current OUT port-IN port association to the other one will be done when the ingest starts to be recorded.

A growing clip can only be recorded from the router IN source currently associated with the selected recorder channel.

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

### 13.1.2. Ingest Overview Display

#### Router IN Port

When an ingest is scheduled on a recorder channel associated with a router IN port, or when a growing clip is started on such a recorder, the name of the IN port is displayed within the block:

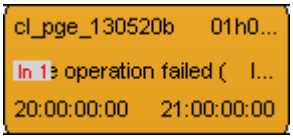
### IN Ports Switch Display

In case the router IN port to be used for the scheduled ingest is not the same as the one currently associated with the recorder channel, the names of both IN ports are shown on each side of the block and the switch is represented by a vertical dotted line in the channel track:


Actually, the system will switch to the right router IN port slightly before recording the scheduled ingest. The **Maximum Switch Latency** setting defines the period of time when the system will switch before the recording starts. This is set from the Remote Installer (Configure > Router Control Channels tab).

### Failed Process

If the clip cannot be totally ingested from the scheduled IN port, the color of the block becomes orange as soon as the clip recording ends.




## 13.1.3. Scheduling an Ingest from Another Recorder Source

### Introduction

When a recorder channel is associated with a router IN port, users scheduling an ingest will be allowed to select the IN port from which it will be recorded.

The selection of a specific IN port is available for one-shot ingests, "Repeat" ingests and "Repeat every" ingests.

### Prerequisites

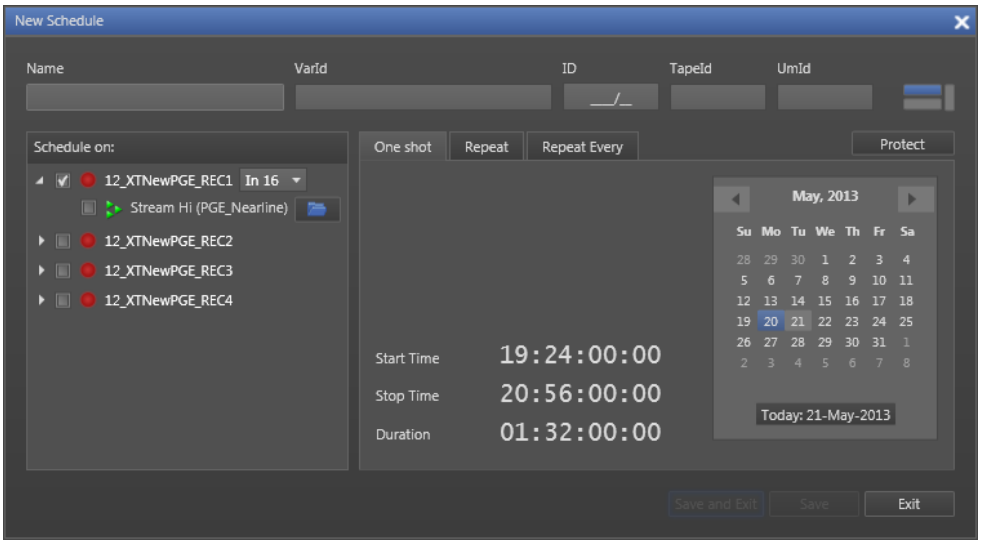
- The appropriate configuration must have been done from the Remote Installer regarding the communication parameters and the association of router OUT ports physically linked to recorder channels.
- The Router Control service is started.
- The user has the appropriate user rights.
- The **Autoname Clips** setting must not be selected, so the New Schedule window will be displayed when scheduling an ingest.

## How to Schedule an Ingest from another Recorder Source

To schedule an ingest from a recorder channel and change the router IN port associated with the recorder channel, proceed as follows:

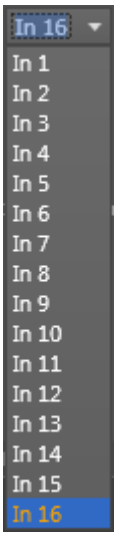
1. Draw a block on a channel track with a drag-and-drop operation by clicking the mouse from the desired IN point and moving to the right up to the desired OUT point.

   The New Schedule window opens. It displays the name of the current IN port next to the recorder channel:




2. Select the One shot tab, or the Repeat tab, or the Repeat Every tab, depending on the required frequency for the ingest recording.
3. Enter the appropriate data for the ingest in the window fields, as described in section "Fields in the New Schedule Window" on page 33.
4. Click the arrow next to the **Router IN Port** field.

   The list of all the router IN ports is displayed:



5. Select an IN port.

   The **Router IN Port** field is highlighted to warn the users that the selection has changed:


6. Click **Save and Exit**.

The block corresponding to the scheduled ingest is displayed in the channel track. The name of the current router IN port and the name of the router IN port to be used for the scheduled ingest are written on each side of the block:


Actually, the system will switch to the right router IN port slightly before recording the scheduled ingest. The **Maximum Switch Latency** setting defines the period of time when the system will switch before the recording starts. This is set from the Remote Installer (Configure > Router Control Channels tab).

## 13.1.4. Scheduling Overlapping Ingests from Different Recorder Sources

**WARNING**

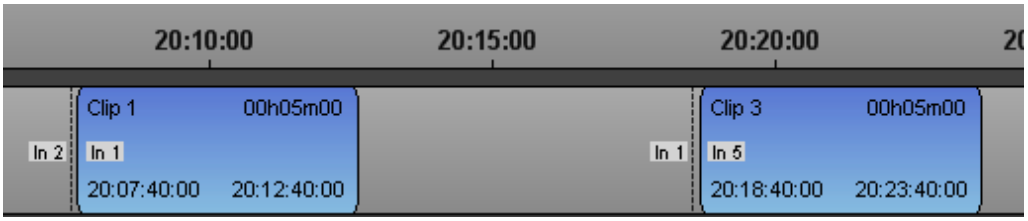
Scheduling overlapping ingests on different router IN ports should not be a usual practice. However, the system does not forbid their creation. So, different levels of user rights can be set to manage the system behavior in case of overlap.

### Authorized Overlapping

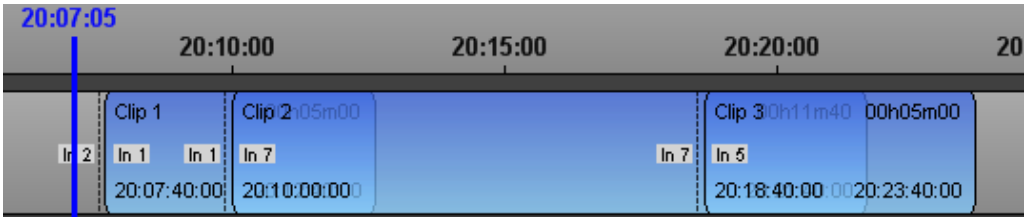
Users must have appropriate user rights to be allowed to schedule overlapping ingests on different recorder sources.

The following screenshots give an example of overlapping scheduled ingests on different router IN ports.

**Before Overlap:**



**After Overlap:**




In this case, the following rule applies:

- The switch of router IN port is done on the TC IN of each new ingest block encountered.

So, in the example shown on the screenshot:

- clip 1 will be recorded from IN port 1 until the TC IN of clip 2, then clip 1 will be recorded from IN port 7 until its TC OUT.
- clip 2 will be recorded from IN port 7 from its TC IN until the TC IN of clip 3, then clip 2 will be recorded from IN port 5 until its TC OUT.
- clip 3 will be fully recorded from IN port 5.

### Unauthorized Overlapping

When users do not have the appropriate user rights to schedule overlapping ingests on different recorder sources, the following rule applies:

- The priority is given to ingest blocks scheduled before the creation of the overlapping block.

So, in the example shown on the screenshot:

- clip 1 will be fully recorded from IN port 1.
- clip 3 will be fully recorded from IN port 5.
- clip 2 will be recorded from the TC OUT of clip 1 until the TC IN of clip 3.

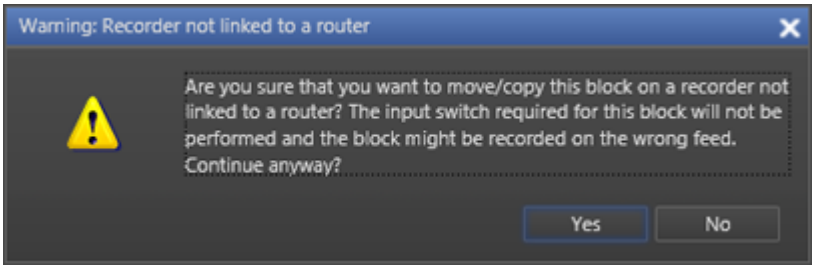
## 13.2. Moving or Copying a Scheduled Ingest

A block for an ingest scheduled on a recorder channel associated with a router IN port can be moved or copied to the track of another recorder channel.

Different situations can occur:

- If the new recorder channel is also linked to the video router, the selected router IN port will be kept.

- If the new recorder channel is not linked to the video router, the following warning message is displayed:




By answering **Yes**, the block is copied or moved and the information related to the In port is lost.

By answering **No**, the block is not copied/moved.

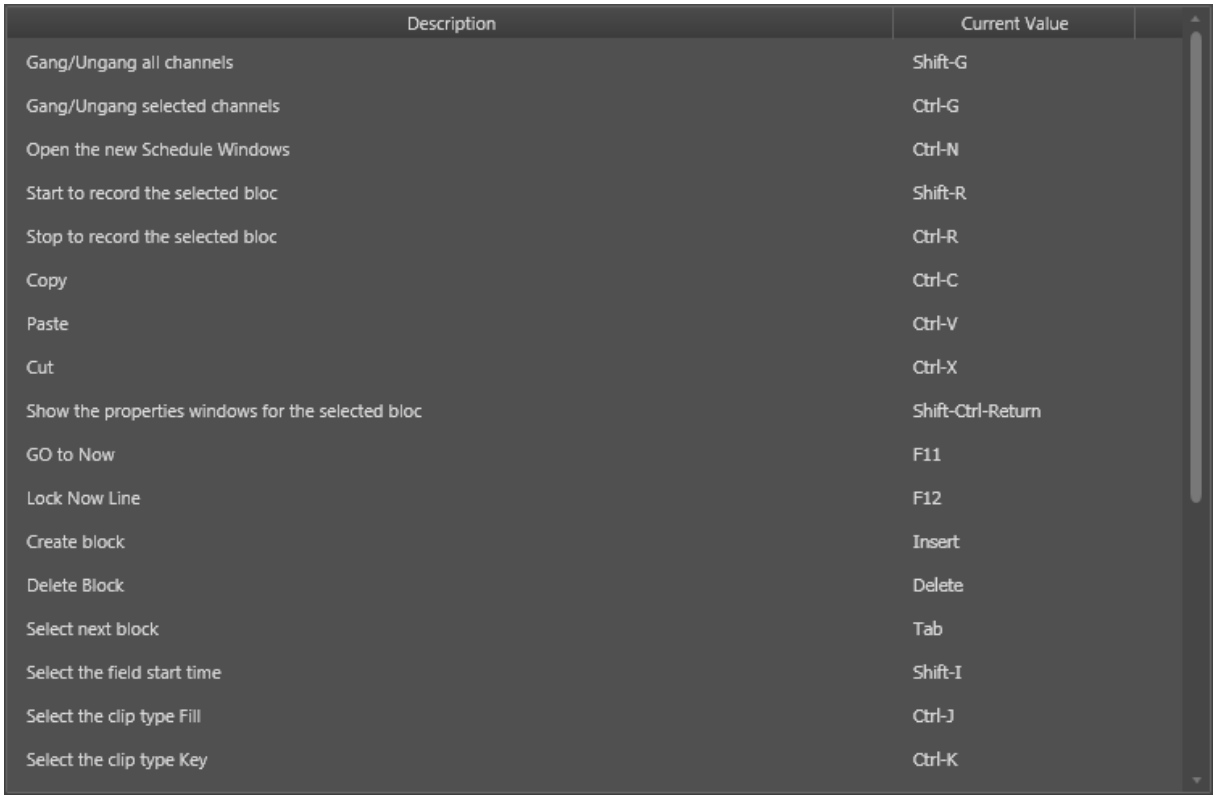
# 14. Ingest Scheduler Shortcuts

Keyboard shortcuts are available to perform some operations.

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

The shortcuts can be redefined to suit individual preferences.

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



| Description | Current Value |
|---|---|
| Gang/Ungang all channels | Shift-G |
| Gang/Ungang selected channels | Ctrl-G |
| Open the new Schedule Windows | Ctrl-N |
| Start to record the selected bloc | Shift-R |
| Stop to record the selected bloc | Ctrl-R |
| Copy | Ctrl-C |
| Paste | Ctrl-V |
| Cut | Ctrl-X |
| Show the properties windows for the selected bloc | Shift-Ctrl-Return |
| GO to Now | F11 |
| Lock Now Line | F12 |
| Create block | Insert |
| Delete Block | Delete |
| Select next block | Tab |
| Select the field start time | Shift-I |
| Select the clip type Fill | Ctrl-J |
| Select the clip type Key | Ctrl-K |

| | |
|---|---|
| Select the clip type Normal | N |
| Select the field IsmId | Shift-M |
| Select the field Name | Shift-N |
| Select the field stop time | Shift-O |
| Save | S |
| Save and Exit | X |
| Select the interest level 0 | NumPad0 |
| Select the interest level 1 | NumPad1 |
| Select the interest level 2 | NumPad2 |
| Select the interest level 3 | NumPad3 |

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