

USER MANUAL

PART 10 - DIRECTOR'S CUT

Version 6.0 - November 2012



IP. Director



Copyright

EVS Broadcast Equipment S.A. – Copyright © 2005-2012. All rights reserved.

Disclaimer

The information in this manual is furnished for informational use only and subject to change without notice. While every effort has been made to ensure that the information contained in this user manual is accurate, up-to-date and reliable, EVS Broadcast Equipment cannot be held responsible for inaccuracies or errors that may appear in this publication.

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>.



Table of Contents

TABLE OF CONTENTS	III
1. INTRODUCTION	1
1.1. Product Overview	1
1.2. Typical Workflow	2
1.3. Starting the Application	3
1.4. Overview of the Director's Cut Window	3
2. CONFIGURING THE PRODUCTION	5
2.1. Overview of the Configuration Area	5
2.2. Configuring A/V Sources and Destinations	6
2.2.1. Setting Audio/Video Parameters	6
2.2.2. Setting Destination Targets	9
2.2.3. Managing A/V Sources and Destinations Configurations	11
2.3. Configuring the Production	12
2.3.1. Overview of the Production Management Window	12
2.3.2. Selecting a Production	13
2.3.3. Editing a Production	15
2.3.4. Managing Productions	16
2.4. Opening the Working Bin	17
3. WORKING WITH TAKES	18
3.1. Overview of the Takes Grid Area	18
3.2. Managing Scenes	19
3.3. Recording Takes	20
3.4. Sending the EDL	21
4. STATUS BAR	23

1. Introduction

1.1. Product Overview

Description

Director's Cut is an IP Director module allowing production operators to stream the director's cut and the ISOs clips from the EVS production servers to post-production NLE systems, and to send associated metadata (all the cut points from the switcher input) as an EDL, in native formats.

Director's Cut is dedicated to single live or near-live post-produced multi-camera productions, like shows, entertainment, operas, music concerts, special events, awards... It reduces production times, drastically reduces post-production time, and allows editors to focus more on the artistic aspect.

Configuration of the Production

Before working on a production, a few parameters must be configured:

- Video input(s) (with associated audio inputs, if needed)
- Destinations target(s) (they may differ from a video input to another)
- A file format for the streamed clips
- The timecode of the production
- A metadata profile (if needed)
- A bin to store the media of the production (optional)

The configuration settings can be saved, so that they can be easily reused later.

See section "Configuring the Production" on page 5.

Scenes and Takes Edition in the Production

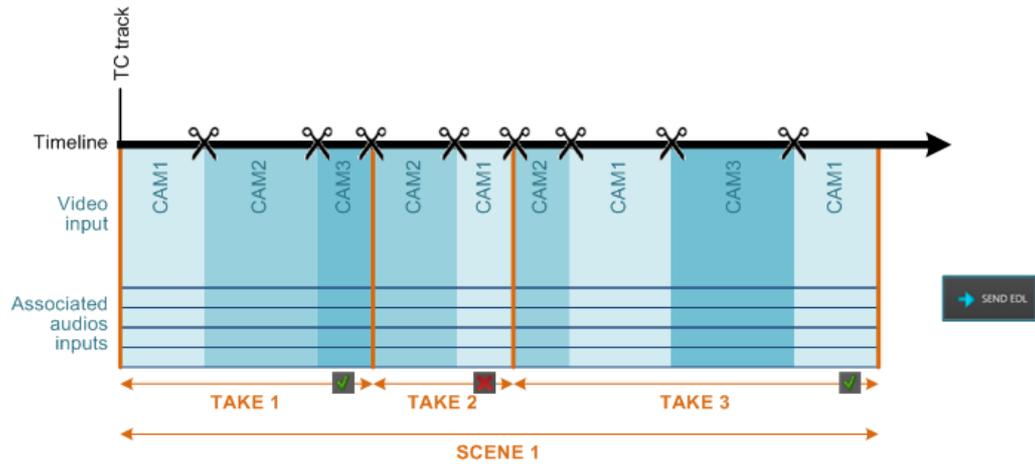
After the production has been configured, the operator will start and stop recording takes. He might organize them into scenes, or set some as "bad" takes.

Whenever during the production recording (as soon as at least one take has been shot and is complete, most often when the production is ended), the operator can send the EDL. The EDL contains all the director's cut points. The different camera angles are grouped so that they can be displayed in a multi-camera viewer. The audio channels are also associated in the EDL.

A Transfer Monitoring window inside the module allows to follow up the current transfers.

A review channel can be picked out to replay the current production takes.

See section "Working with Takes" on page 18.

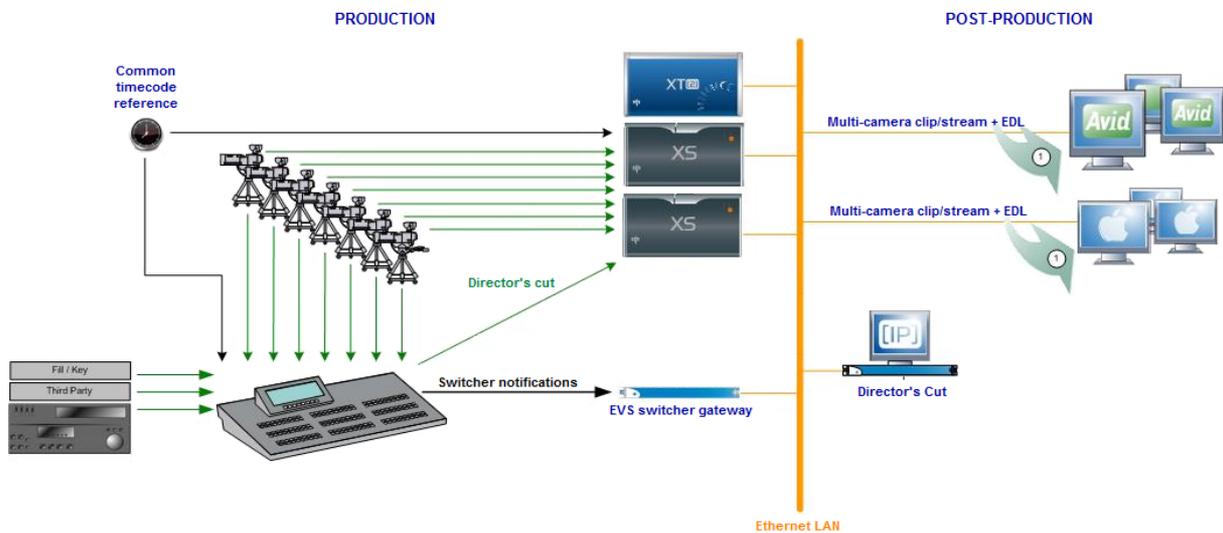


Supported EDL Formats

Director's Cut supports the following EDL export formats:

- AVID media composer (AAF)
- AVID interplay (webservice AAF checkin)
- FCP (XML EDL)
- IPDirector NL or targets (basically on removable HDD)

1.2. Typical Workflow



A common timecode reference is shared between the EVS servers, the switcher, and the EVS switcher gateway.

Camera inputs are connected to the switcher inputs and to the EVS server recorders.

The switcher output is connected to one EVS server recorder, and to the EVS switcher gateway over Ethernet. The EVS switcher gateway understands the output from most switchers on the market, and can translate this information for the Director's Cut module.



When assigning a switcher gateway to the production (in the configuration settings), all the information about cameras and director's cut points is automatically retrieved from the switcher output. It can be then integrated in the EDL for the post-production team. For a complete information about the EVS switcher gateway, refer to the DC-100 – Technical Reference Manual.

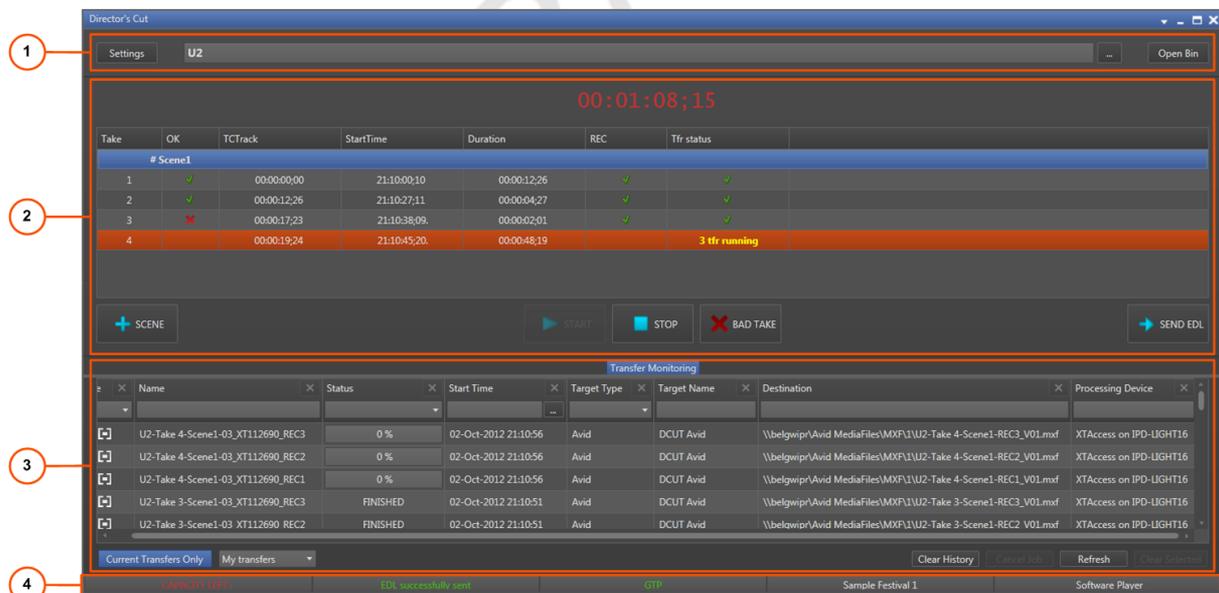
Director's Cut can work in a connected/shared environment, or not. The destination targets can be directly available for the post-production operators through network connections, or can be transportable storage devices. When the production and post-production entities are connected, as shown on the diagram, all the scenes and takes are directly sent to the targets as growing clips as soon as the record starts. This makes it possible for the editor to start working even if the show is not over. When the production and post-production entities are not connected, all the scenes and takes are streamed to removable hard disks with the director's cut EDL. The disks are then transported to the post-production facility and ingested there.

1.3. Starting the Application

To open the Director's Cut module, select the corresponding icon  on the main IPDirector toolbar. The Director's Cut window will open.

1.4. Overview of the Director's Cut Window

The Director's Cut window contains the areas highlighted on the screenshot below:



The table below describes the various parts of the Director's Cut window:

Area		Description
1.	Configuration area	This area allows you to configure the production. See section "Configuring the Production" on page 5.
2.	Takes grid	This area allows you to edit the takes, to organize scenes, and to send the EDL. See section "Working with Takes" on page 18.
3.	Transfer monitoring area	This area displays information about transfers, as explained in the General Functions manual.
4.	Status bar	This bar displays information on current settings and statuses. See section "Status Bar" on page 23.

DRAFT

2. Configuring the Production

2.1. Overview of the Configuration Area

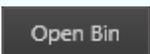
General Description

The Configuration area allows you to access configuration settings, and to manage the current production.

Illustration



Area Description

Part	Description
	Opens the Configuration window, that allows you to define current working parameters, as audio/video inputs assignments, or destination targets. See section "Configuring A/V Sources and Destinations" on page 6. Those working parameters can be saved as a configuration, so that they can be re-used in another production. See section "Managing A/V Sources and Destinations Configurations" on page 11.
Production text area	Displays the current production name.
	Opens the Production Management window, that allows you to select, update, create and remove a production. See section "Configuring the Production" on page 12.
	Opens a Database Explorer window focused on the bin containing the production materials. See section "Opening the Working Bin" on page 17.

2.2. Configuring A/V Sources and Destinations

2.2.1. Setting Audio/Video Parameters

Introduction

The audio/video parameters must be set through the A/V Config tab of the Configuration window.

The A/V Config tab allows to select a switcher gateway, to manage the video inputs assignments, as well as optional audio inputs assignments.

A/V Config

Connected

Switcher Gateway

GTP

Video Input Assignment:
Refresh List

Input	Recorder	InputType	Capacity	Audio
Video1	03_XT112690_REC1	DirectorsCut		<input checked="" type="checkbox"/>
Video2	03_XT112690_REC2	Camera		<input checked="" type="checkbox"/>
Video3	03_XT112690_REC3	Camera		<input type="checkbox"/>

Add Input Remove

Audio Input Assignment:

Input	Channel N°	Name
Video1	7	FrontL
Video1	8	FrontR
Video2	1	BackL
Video2	2	BackR

Selecting a Switcher Gateway

Select the EVS switcher gateway from the **Switcher Gateway** dropdown list.

When the system tries to establish the connection to the switcher gateway, a status message is displayed above the field: "Connecting ...". If the connection has failed, the message becomes "Connection error ...". When the connection is successfully established, the message becomes "Connected", and the recorders video inputs are automatically added in the **Video Input Assignment** list.



Note

When working without an EVS switcher gateway, the operator must manually add the recorders video inputs. In this case, the director's cut points will not be written in the metadata EDL.

Managing the Video Inputs

Possible Actions



Note

Managing video inputs manually is possible only if no switcher gateway is selected.

In order to ...	Proceed as follows:
Add a video input	Click the Add Input button. An item is appended to the list of video inputs.
Remove a video input	Select an item from the list of video inputs, and click the Remove button. The selected item disappears. <hr/>  Warning There is no confirmation asked when removing an item. This action is not reversible.
Actualize the list	Click the Refresh List button.

List of Video Inputs

The list of video inputs displays the following information:

Field	Description
Input	Video input name.
Recorder	Recorder assigned to the input.
InputType	Type of the input. The user must tell the application which video input is the director's cut, and which are camera inputs.
Capacity	The capacity left on the recorder (for example, two hours).
Audio	Checkbox allowing to add in the list of audio inputs below as many audio lines as audio channels available for the recorder assigned to the current video input.

Managing the Audio Inputs

Possible Actions

In order to ...	Proceed as follows:
Add audio inputs	In the list of video inputs, tick the audio checkbox of the associated recorder. Audio inputs (4, 8, 16) are added in the list.
Remove audio inputs	In the list of video inputs, untick the audio checkbox of the associated recorder. Audio inputs are removed from the list.

List of Audio Inputs

There can be at most 24 audio inputs in the list, regardless of the number of video inputs they are associated to.

The list of audio inputs displays the following information:

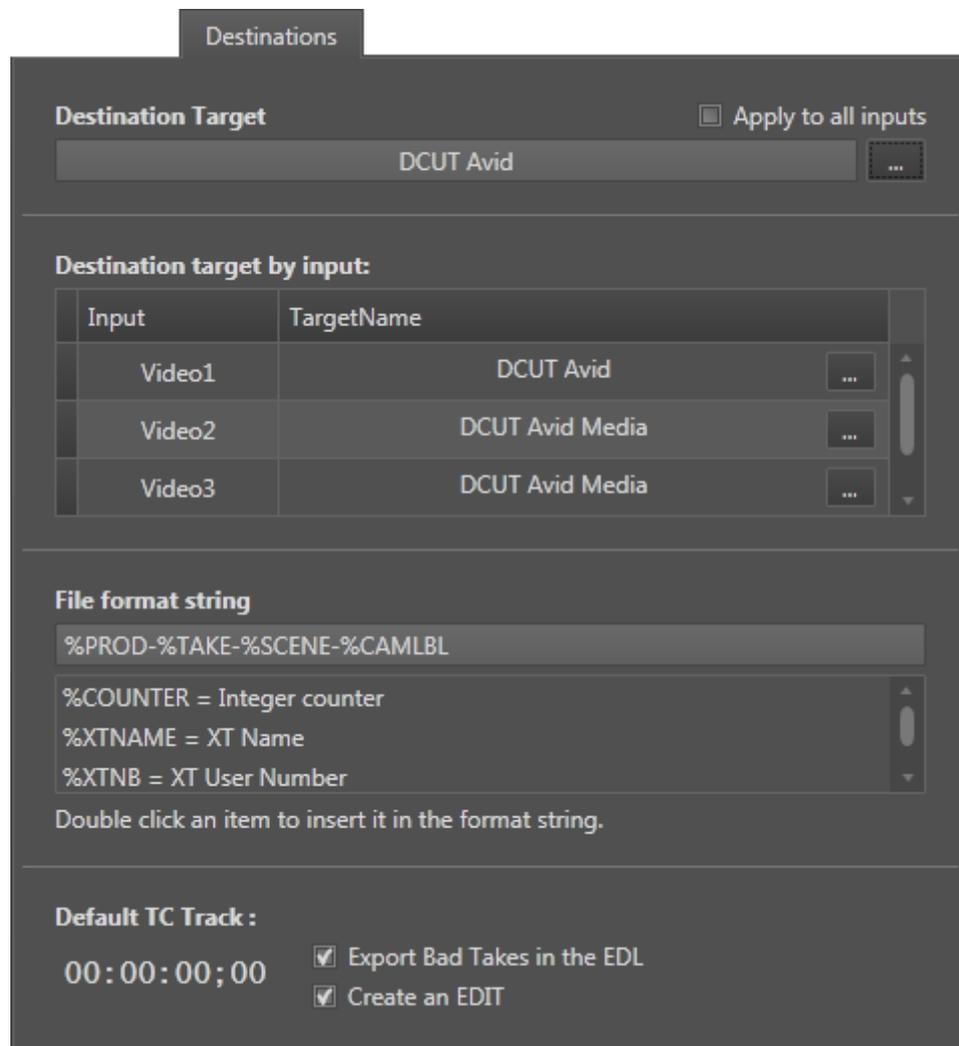
Field	Description
Input	Name of the associated video input.
Channel N°	Audio channel number.
Name	Name of the audio input. If needed, edit the field and set a name to the audio input, for example "FrontL", "BackR", etc.

2.2.2. Setting Destination Targets

Introduction

The destination parameters must be set through the Destinations tab of the Configuration window.

The Destinations tab allows to browse for destinations targets (that may differ from an input to another), to define a string pattern for the name of streamed videos, to set the timecode of the production, and to enable other options.



Assigning a Destination Target to All Inputs

1. From the **Destination Target** area, tick the **Apply to all inputs** checkbox.
2. Then, click the  button. The Target window opens.
3. Browse through the available target folders, and select a target folder. Click **OK** to validate.

Assigning a Destination Target to Each Input

1. From the Destination Target area, make sure that the **Apply to all inputs** checkbox is not ticked.
2. From the **Destination Target by Input** area, click the  button in each input line you want to assign a target to. The Target window opens.
3. Browse through the available target folders, and select a target folder. Click **OK** to validate.

Defining a Pattern for the Export Filename

You can define a pattern for the filename of the videos streamed to the destination targets. The filename pattern can combine static text as well as dynamic variables (as the production date, or the production owner). The variables available for use in the file naming are shortly described in a text area below the **File format string** field.



Tip

Double-click a variable in the scroll list to insert it directly in the field.

For example, with a file format string defined as %PROD-%TAKE-%SCENE-%CAMLBL, the recorded video clips of one take would be named U2-Take 1-Scene1-03_XT112690_REC1, U2-Take 1-Scene1-03_XT112690_REC2, and U2-Take 1-Scene1-03_XT112690_REC3.

Defining the TC Track

By default, the timecode reference for the production is set to 00:00:00:00. To change the timecode, edit the **Default TC Track** field, and click **ENTER** to validate.

The timecode is set once for the whole production. It runs when a take is being recorded; it stops when a take is stopped or the system is idle.

Exporting Bad Takes in the EDL

All the takes, good or bad, are streamed as video clips. The metadata of the bad takes can be written in the EDL. If you do want the bad takes metadata to be available for the post-production, you can tick the **Export bad takes in the EDL** checkbox.

Creating an EDIT

Tick the **Create an EDIT** checkbox if you will use the streamed videos with IPEdit or Xedio CleanEdit.



Note

Xedio CleanEdit supports 5 audio channels. If the production is configured with more than 5 audio inputs, information will be lost when creating an EDIT.

2.2.3. Managing A/V Sources and Destinations Configurations

Introduction

The configuration settings (A/V sources and destinations) can be saved and named as a configuration from the Configuration window, so that they can be re-used later.

Possible Actions

In order to ...	Proceed as follows:
Select a configuration	Select an existing configuration from the drop-down list.
Create a configuration	<ul style="list-style-type: none"> Click the New button, type a name for the new configuration, and click OK to confirm. A new configuration with default settings has been created. <p>OR</p> <ul style="list-style-type: none"> Click the Save As... button, type a name for the new configuration, and click OK to confirm. A new configuration with the current settings has been created.
Rename a configuration	Click the Rename button, type a new name for the configuration, and click OK to confirm.

In order to ...	Proceed as follows:
Save a configuration	<ul style="list-style-type: none"> Click the  button to save the current configuration. <p>OR</p> <ul style="list-style-type: none"> Click the  button to save the current configuration and exit the Configuration window. <p>OR</p> <ul style="list-style-type: none"> Click the  button to save the current settings as a new configuration.
Delete a configuration	Click the  button, and click Yes to confirm. The Configuration window displays default configuration settings.

**Note**

Giving the same name as an existing configuration does not replace the existing configuration. Both configurations will coexist in the dropdown list (with the same name).

2.3. Configuring the Production

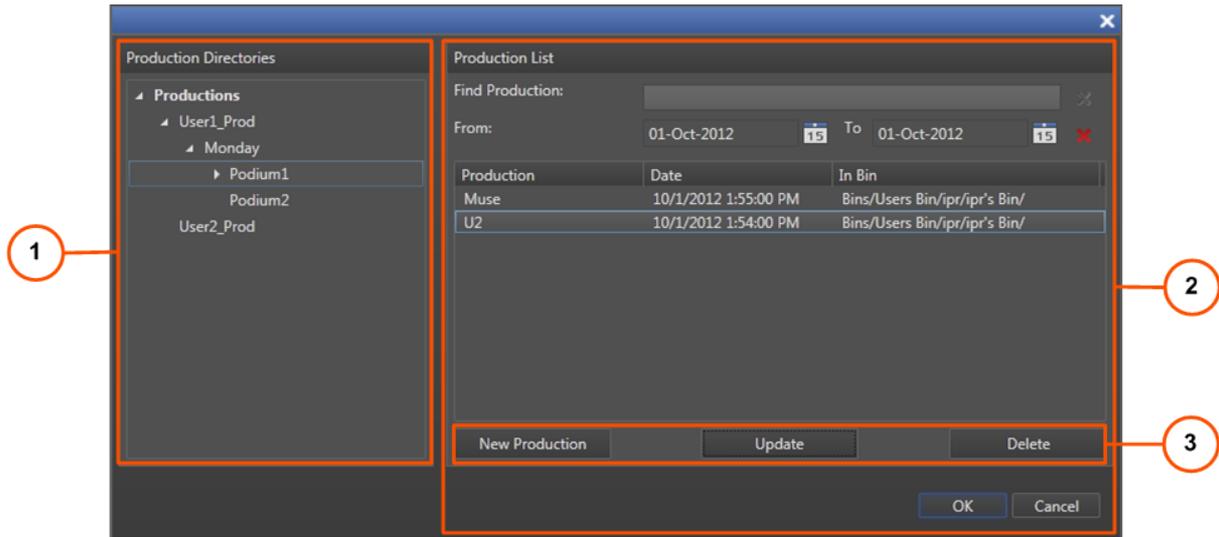
2.3.1. Overview of the Production Management Window

General Description

The Production Management window allows you to select an existing production from the Production directories, and to manage productions.

The Production Management windows opens when you click the  button from the Configuration Settings area of the Director's Cut main window.

Illustration



Area Description

Area		Description
1.	Production Directories Area	This area displays the <code>Productions</code> folder as a tree.
2.	Production Selection Area	This area lists the productions found in the directory selected in the <code>Productions Directories</code> area, and provides fields to filter the list.
3.	Productions Management Toolbar	This toolbar features buttons allowing you to create, edit and delete productions.

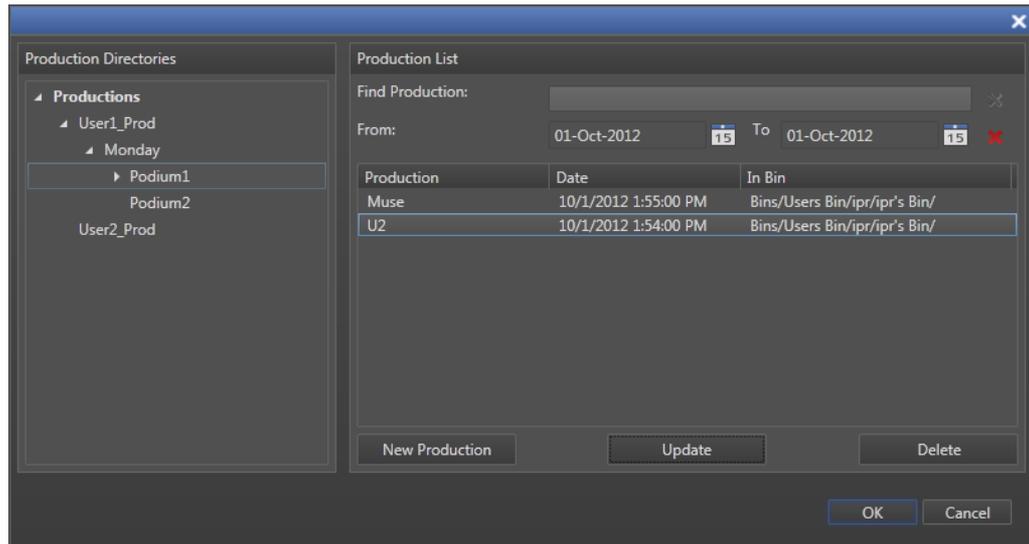
2.3.2. Selecting a Production

General Description

The Production Management window allows you to display a list of the productions found in the `Productions` directory (and sub-folders), and to select a production from this list. To facilitate the selection, the list can be filtered out.

The Production Management windows opens when you click the  button from the Configuration Settings area of the Director's Cut main window.

Illustration



Possible Actions

In order to ...	Proceed as follows:
Select the directory of the production	<ol style="list-style-type: none"> By default, the <code>Productions</code> directory does not contain any sub-folder. Use the right click to create, rename, publish and delete sub-folders in the <code>Productions</code> directory. From the tree folder structure, select a directory. All the productions found in this directory are displayed in the productions list. <hr/> <p> Note Any new production will be created in the directory selected here.</p>
Select a production from the productions list	<ol style="list-style-type: none"> Click the production row. It is highlighted. Click OK from the Production Selection toolbar to validate the selection and exit the window.
Filter the list on the production name	Enter in the Find Production field the characters contained in the production name.
Filter the list on the production date	Click the calendar icons  next to the From and To fields.
Remove a filter	Click the  at the right of the filter line.

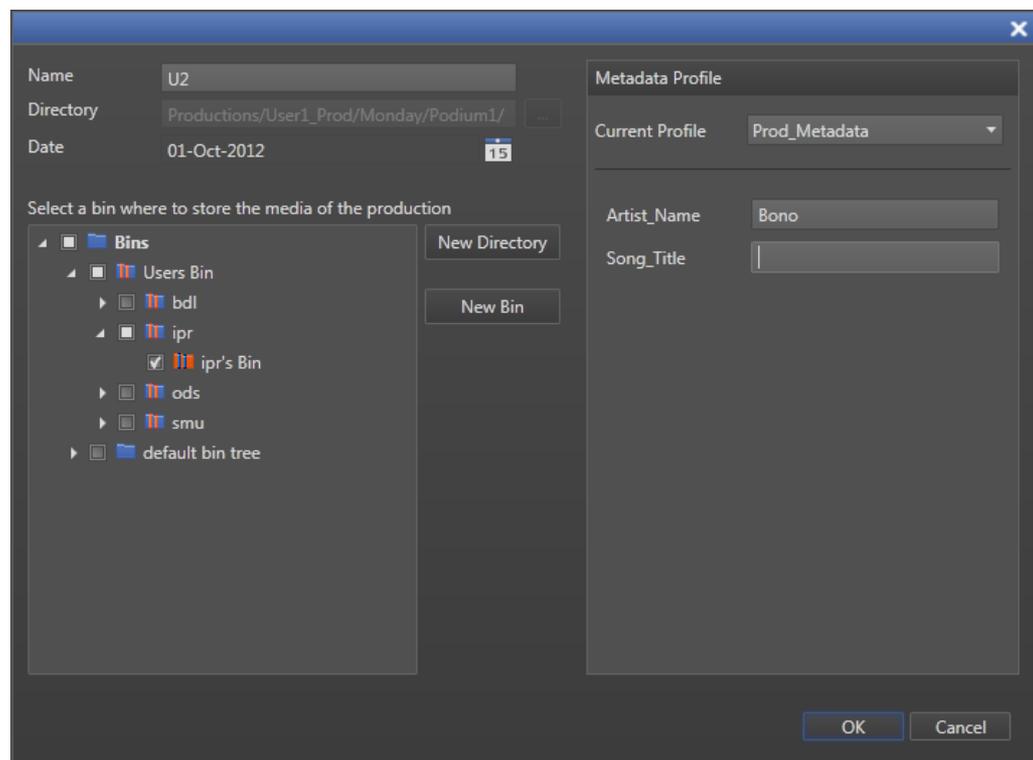
2.3.3. Editing a Production

General Description

The Production window allows you to set a production name and date, to select a working bin where to store the production materials, or to associate a metadata profile to a production.

The Production windows opens when you create or update a production from the Production Management window.

Illustration



Possible Actions

In order to ...	Proceed as follows:
Name the production	Edit the Name field.
Set a date for the production	By default, the current date is pre-set. Click the calendar icon  next to the Date field to change it.
Select a bin where to store the media of the production	If needed, select or create a bin from the bins tree folder structure where to store the production materials.

In order to ...	Proceed as follows:
Select a metadata profile to be associated to the production	If needed, select a metadata profile from the dropdown list. The metadata will be written in the EDL. For further information about metadata profiles, refer to the General Functions manual.

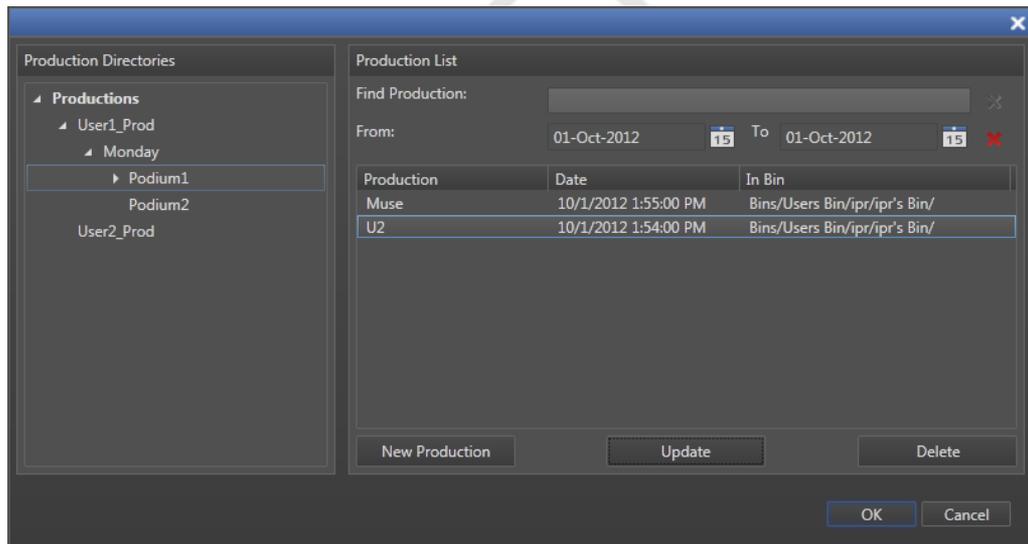
2.3.4. Managing Productions

General Description

The Production Management window allows you to create, edit, and delete productions.

The Production Management windows opens when you click the  button from the Configuration Settings area of the Director's Cut main window.

Illustration

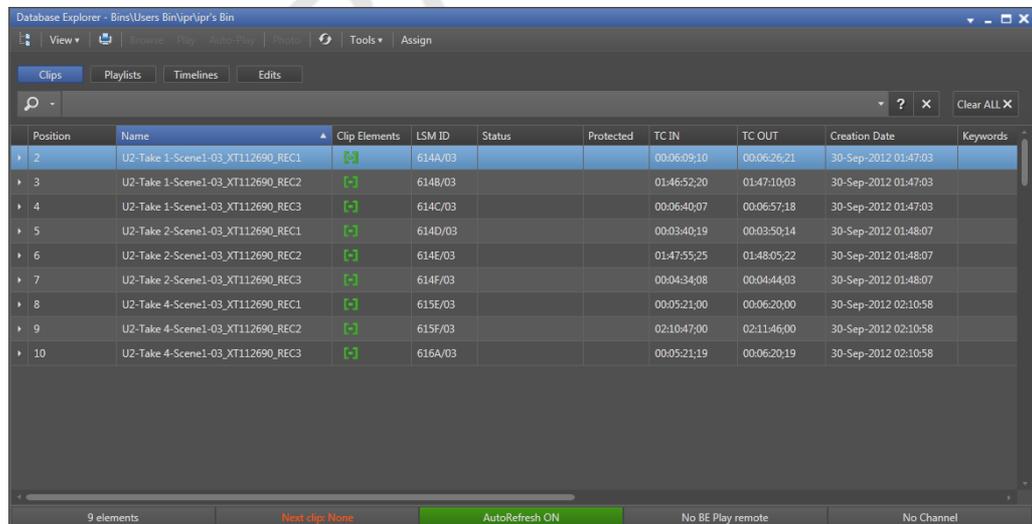


Possible Actions

In order to ...	Proceed as follows:
Create a new production	<ol style="list-style-type: none"> From the Production Directories area, select the directory where you want the new production. Click the  button from the Production Management toolbar. The Production window opens with empty settings.
Edit a production	Click the  button from the Production Management toolbar. The Production window opens.
Delete a production	Click the  button from the Production Management toolbar. Click Yes to confirm the deletion.

2.4. Opening the Working Bin

From the Configuration Settings area of the Director's Cut main window, click the **Open Bin** button to open a Database Explorer window, focused on the bin associated to the production.



Note

If no bin has been specified, the **Open Bin** button is grayed off.

See section "Editing a Production" on page 15.

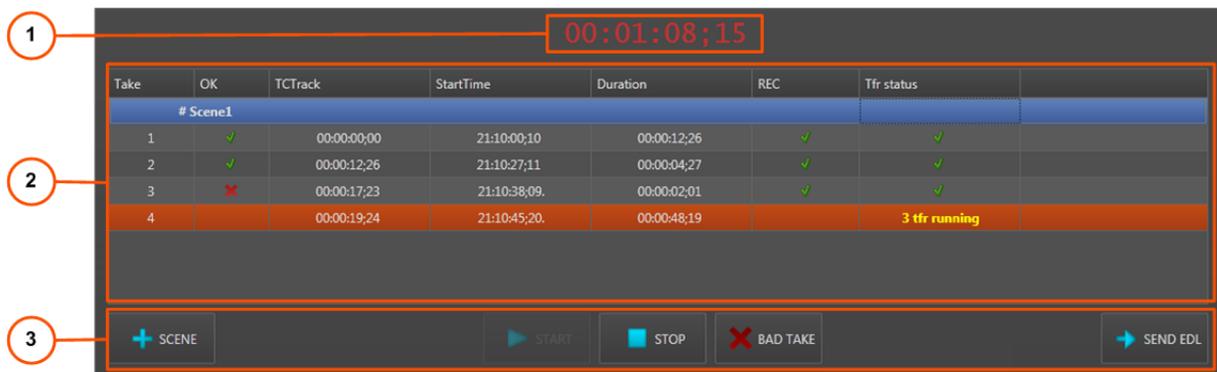
3. Working with Takes

3.1. Overview of the Takes Grid Area

General Description

The Takes grid area contains information on the current production timecode, the takes (and scenes) of the current production, and a toolbar to manage and edit the takes.

Illustration



Areas

Area		Description
1.	Timecode field	This field displays the current timecode of the production. (By default, the starting timecode of a production is set to 00:00:00:00.) The timecode is incremented each time a take is recorded. It stops when the take recording is stopped or the system is idle.
2.	Scenes/takes list	This tables displays information about the scenes and takes of the production.
3.	Toolbar	This area allows you to manage scenes, to start and stop the recording of takes, and to send the EDL.

Fields in the Scenes/Takes List

Field	Description
Take	Take number.
OK	Quality of the take. A take can be good  or bad  .
TCTrack	Timecode when the take has been started (according to the timecode set in the production configuration).
StartTime	Timecode when the take has been started (according to the EVS server timecode reference).
Duration	Duration of the take.
REC	Status of the clip transfer from the recorder to the EVS server. It should be  , or an error occurred.
Tfr status	Status of the take transfer to the destination target(s). It should be running, then  , or an error occurred.

3.2. Managing Scenes

Introduction

By default, the takes grid displays an empty scene, named "Scene 1". This scene can be renamed, but it can not be deleted. If the production is not meant to be divided in several scenes, record all the takes in that unique scene.

Possible Actions

In order to ...	Proceed as follows:
Add a scene	 <p>Click the  button from the toolbar. An empty scene is appended to the production.</p>
Rename a scene	Right-click the scene row in the table, and select 'Rename' from the dropdown list. Enter a new name for the scene, and click OK to confirm.
Delete a scene	<p>Right-click the scene row in the table, and select 'Delete' from the dropdown list. Click Yes to confirm the deletion.</p> <hr/> <p> Warning Deleting a scene deletes all the takes included in the scene. This is not reversible.</p>

3.3. Recording Takes

Introduction

The Takes Grid area features controls to start and stop recording takes.

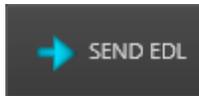
Possible Actions

In order to ...	Proceed as follows:
Start the recording of a take	 <p>Click the  button from the toolbar. The take starts being recorded in the current scene.</p> <p>When a take has been started, the switcher gateway starts recording the incoming switcher notifications. The system creates a growing clip, and streams all selected inputs in the A/V configuration to the destination target(s):</p> <ul style="list-style-type: none"> • AVID Interplay : the files are automatically checked in Interplay and dropped to the destination folder. • FCP and Nearline : files are dropped in the destination folder. <p>The new assets are inserted in the bin of the production. The current take is added in the list of takes, below the current scene. During the recording process, the system updates the current take information (duration and running streams) and the TC track accordingly.</p>
Stop the recording of a take	 <p>Click the  button from the toolbar.</p> <p>When a take has been stopped, the system stops the streams and closes the files. By default, the new take is flagged as a good take.</p>
Flag a take as bad	 <ul style="list-style-type: none"> • Click the  button from the toolbar. The take is set to bad, and the recording is stopped. <p>OR</p> <ul style="list-style-type: none"> • Right-click the item in the grid, and select 'Set as BAD'.
Flag a take as good	Right-click the item in the grid, and select 'Set as GOOD'.
Review a take	Double-click the item in the grid. The take is played on the defined review channel. See section "Status Bar" on page 23.
Retry a take transfer	Right-click the item in the grid, and select 'Retry'.
Delete a take	Right-click the item in the grid, and select 'Delete'.

3.4. Sending the EDL

Exporting EDL from Director's Cut

When the show is completed, or any time during the show, as soon as at least one take has been shot and is completed, you can export the EDL to the destination target.



To send the EDL, click the **SEND EDL** button from the Takes Grid area.

The system creates an EDL with all the takes recorded so far, and sends it to the destination target(s).

The EDL file has the same name as the production, with the `.xml` (FCP) or `.aaf` (AVID) extension.

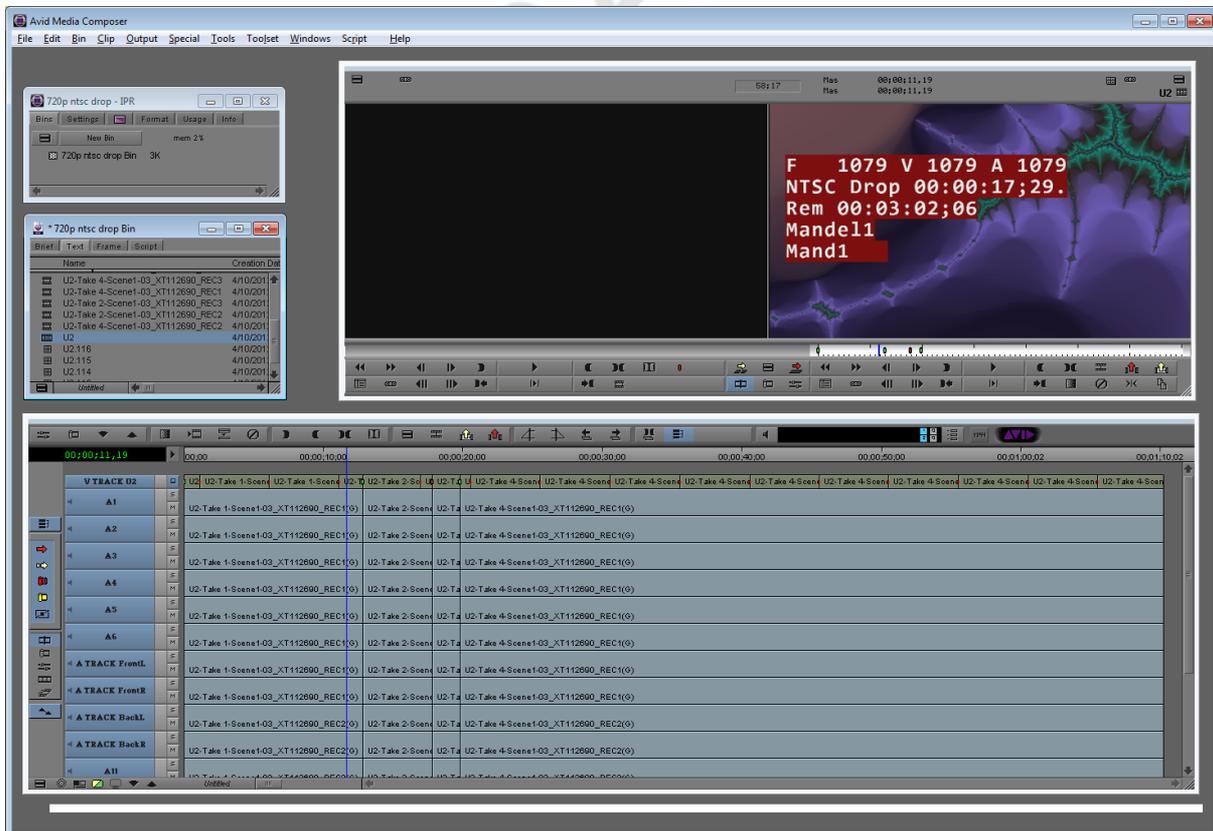


Note

If used, non-linear transition effects between cameras in the director's cut are converted in simple constant mixes in the EDL.

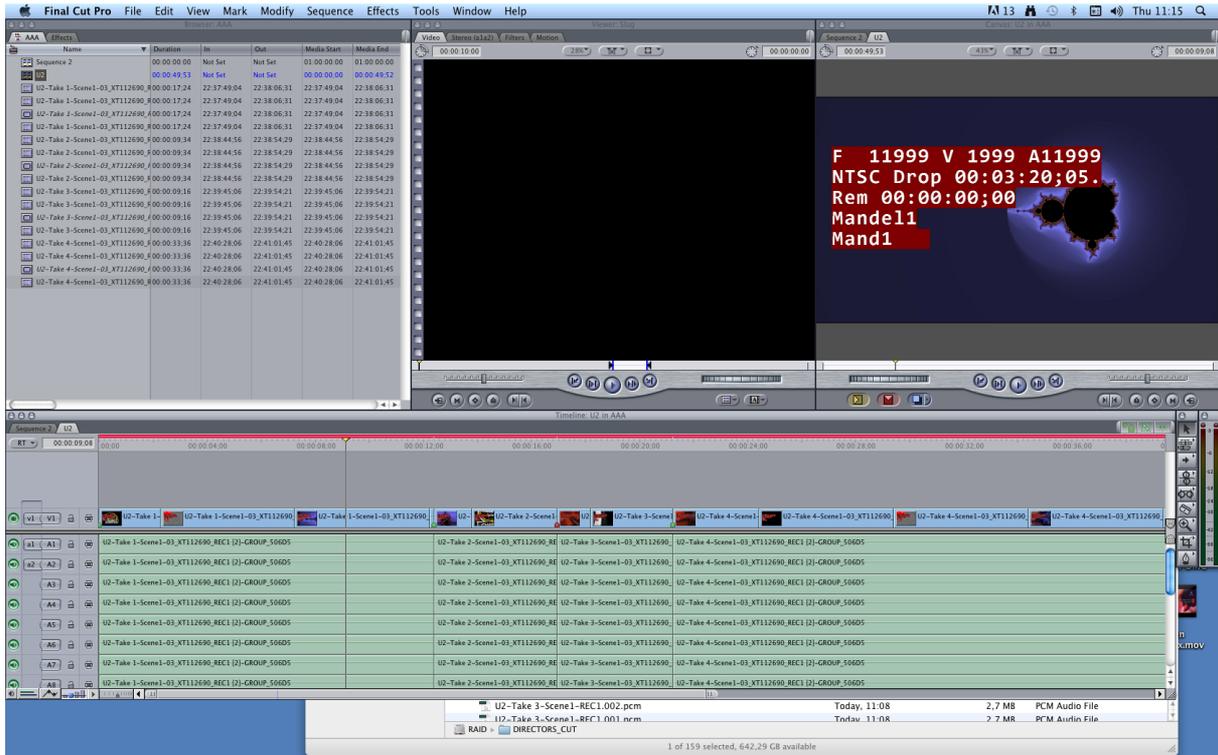
Recovery of the EDL in Avid Media Composer

With Avid Media Composer, the EDL information is shown as follows:



Recovery of the EDL in Final Cut Pro

With Final Cut Pro, the EDL information is shown as follows:



4. Status Bar

General Description

The status bar displays status information, and allows you to set a review channel for the production takes.

Illustration



Area Description

The status bar at the bottom of the main window displays the following information:

Field	Description
Capacity left	Not currently available.
EDL sending status	Last EDL transfer status.
EVS switcher gateway	Name of the EVS switcher gateway, as set in the Configuration window. See section "Managing A/V Sources and Destinations Configurations" on page 11.
Configuration name	Current configuration name, as set in the Configuration window. See section "Managing A/V Sources and Destinations Configurations" on page 11.
Review channel	Associated channel where to review the takes. See section "Recording Takes" on page 20.

Assigning a Review Channel to the Production

1. Right-click the Review channel area at the right of the status bar, to display a dropdown list of available channels.
2. Select one of them. When you double-click a take from the Takes Grid area, it is played on this channel.

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

Corporate
+32 4 361 7000

North & Latin America
+1 973 575 7811

Asia & Pacific
+852 2914 2501

Other regional offices
www.evs.com/contact

EVS Broadcast Equipment is continuously adapting and improving its products in accordance with the ever changing requirements of the Broadcast Industry. The data contained herein is therefore subject to change without prior notice. Companies and product names are trademarks or registered trademarks of their respective companies.



To learn more about EVS go to www.evs.com