# **USER MANUAL** Xedio Ingest Organizer

Version 4.35 - August 2013



Xedio.





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## What's New?

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

No section has been updated in the Xedio Ingest Organizer manual from Xedio Suite 4.03 and 4.35 (compared to Xedio Suite 4.02).



## 1. Introduction

The Xedio Ingest application allows a user to control encoder channels to digitize any incoming video into high resolution, low resolution or both simultaneously (a panel of different codecs is available). The Xedio Ingest application can control multiple incoming feeds simultaneously and offers a VGA monitoring feed of the incoming video as it is being encoded.

As a fully integrated part of the Xedio Suite of applications the files are entered into the database as they are being ingested and can be used by other applications in the Suite even before the encoding process has been completed.

The Xedio Ingest is a server/client based system and therefore consists of two elements:

**Xedio Ingest** (server) – Software which runs on the hardware encoder to enable the control of the ingest process.

**Xedio Ingest Organizer** (client) – Software which runs on any workstation within the Xedio environment and controls the ingest process of all encoders that are part of the system.

## 2. Xedio Ingest - Server

The Xedio Ingest (server) application running on a hardware encoder is usually set up to auto start when the computer is switched on. If however it is not set up in this way the program can be started manually. Click on the **Xedio Ingest** icon on the desktop to start the application.



A dialogue box will then appear and ask the user to start the application. At this point a password can be set up and ticking the check box can set the auto start option.

When the application is started the message window shows the progress of the connection to the Client application and displays any problems it may have in the set up.

📲 Xedio Ingest 🕬 🕮				_ 🗆 ×
	Stop			✓ Auto Start ✓ Force Unlock
Logical Channel : CDM 1	IP : 1	.1.70.13	Port : 1024	Network : Connected
DB : XSTORE70110 (03.00	36)	Status	: Connected	
Encoder Low : CDMLORES	IP : 1	.1.70.13	Status : READY	
Encoder High : CDMHIRES	IP : 1	.1.70.14	Status : READY	
Output				
01-12-2009 15:50:42			/anagement::Threa	dStatusManagement ) : S 🔺
01-12-2009 15:50:42		(CCleanG		Server TCP/IP started
01-12-2009 15:50:42	INFO	(CStatusN		dStatus) : Database is co
01-12-2009 15:50:42				dStatus) : Network is con
01-12-2009 15:50:42		(CStatusN	/lanagement::SetSta	atusEncoderHigh) : ENC_f
01-12-2009 15:50:42	INFO	(CStatusN		atusEncoderLow) : ENC_I
01-12-2009 15:50:44			rConnection::OnCo	nnect) : Client '1.1.70.11'
01-12-2009 16:01:40		(CGServe	rConnection::OnCo	nnect) : Client '1.1.70.11'
				•



## 3. Xedio Ingest Organizer - Client

## 3.1. User Interface

## 3.1.1. Opening Ingest Organizer

To start the Xedio Ingest Organizer application, click on the **Xedio Ingest Organizer** icon on the desktop.



This will display a login screen where you need to enter your username and password.

### 3.1.2. Overview of the Xedio Ingest Organizer Window

The Xedio Ingest Organizer window contains the areas highlighted on the screenshot below:

View Helo									-	
Scheduler	SCHED	ULER								
see		10.45 10.50	1 hour Para 10:55	neters 11:00	13h 11:05	11:10	10 · 3 · 234 11:15	11:20	11.25	11:30
		cip4	cipó							
	COM 1	Sport		lusic, Classic						
		01/12/2009 15:50 41 - 03/1	2/2009 10.55108							
CDM 1										
12-2005 10-25-30				12020 (12/02						
	1970 User Lo User									
	NFO (CRecor NFO (CRecor	dHanapesent : : Connect T dHanapesent : : Connect T		mpting to come ected to server						
	ABNING (CRecor ABNING (CRecor	dfanapesent : : ThreadSt dfanapesent : : ThreadSt		nction GetStatu nction GetStatu	from encoder	COM 1. LAIME (	00T) 00T)			
				Å						
				0						



#### Area Description

Part	Name	Description
1.	Outlook Area	This displays the list of the devices which can be controlled by the Ingest Organizer. The Outlook bar presents at least as many tabs as there are devices to control. Each tab provides access to a series of items. Once a category tab is selected, its specific items are shown as icons. Scheduler CDM 1 CDM 1 CDM 1 CDM 1 Fincoding Fincoding High BitRate Encoder Select any of these icons to display its relevant interface in the Work area.
		The set up of encoders and VTR devices is made in the Xedio Manager application.
2.	Work Area	The Work area displays a timeline with the ingests that are scheduled or took place over a period of time for each of the controlled devices. It interactively changes when an item is selected in one category from the Outlook area.
3.	Logbook	This lists the processes undertaken by the software and reports any error encountered during the processes.

The table below describes the various parts of the Xedio Ingest Organizer window:

## 3.2. Encoder Devices

#### 3.2.1. Overview of the Encoders Tab

Several items are available in the "Encoders" category. They are detailed below.



## 3.2.2. Encoding

#### Purpose

When you click the **Encoding** button for an encoder device, the following Encoder window is displayed in the Work area, allowing you to enter data for the encoded file, to select the method of recording that will be used and to start the recording process.



ENCODER - NOT INIT							
General Metadata							
Label :							
Id Feed :			External Ref				
Media Class :	EVS						
		Vi	deo Ratio : 🛛 Auto				
Source :							
Routing :							
Description :							
				Publish 🗹			
Recording Mode —			└ Status				
Manual			Server	Not Connected			
🔿 On Trigger	Start TC:		Low Bit Rate				
	Stop TC :		High Bit Rat	e -			
🔾 On Time Fro	om: 25/ Apr /12						
	To: 25/Apr/1:		Conne	ct Start Record			

#### **General Tab**

To create an output file, enter the relevant data into the fields displayed in the General tab:

Field	Description
Label	Name you give to the file that will be encoded
ld Feed	Identification given to a feed that could be provided by a press agency
External Ref	Reference which can help to identify the encoded media, such as a barcode from a VTR tape.
Media Class	Class categorizing the media. The classes are defined in the Class Manager of the Xedio Manager application.

Field	Description
Shooting Date	Date on which the media has been filmed. To update the date, click the <b>Shooting Date</b> button and select a date in the calendar displayed from the drop-down arrow.
Video Ratio	<ul> <li>Video ratio of the encoded media.</li> <li>Possible values:</li> <li>if the hi-res encoding profile is HD, the only option is Forced 16:9. This will obviously be the default value in HD.</li> <li>if the hi-res encoding profile is SD, the options available are Auto (it is automatically detected by the encoder and passed to Ingest Organizer), Forced 4:3, Forced 16:9. The default value in SD will be the last one used, per channel per user.</li> </ul>
Source	Original source of the feed.
Routing	Free text to describe how the feed was routed to the system.
Description	Optional text to describe the encoded media.
Publish	Allows to see the encoded media in the client workstations database lists.

#### Metadata Tab

In the Metadata tab, the users can select one of the available metadata profiles by clicking in the **Metadata Profile** field. Then, they can enter metadata values for the encoded media.

#### **Recording Mode Area**

☐ Recording Mode	e ———		
🖸 Manual			
📔 🔲 On Trigger		Start TC :	00:00:00:00
		Stop TC:	00:00:00:00
🗌 🔾 On Time	From :		00:00:00
	τ		
	10:		

The recording on an encoder from Xedio Ingest Organizer can be started in one of the three following modes:

 Manual: when you click the Start Record button, a dialog box allows you to enter a record duration. The encoding process starts as soon as you click the Start with Limits button.



- **On Trigger**: you can enter a start timecode and a stop timecode. The encoding process will start and stop at the specified timecodes.
- **On Time**: you can enter start and stop times and dates for the encoding process. This option is dimmed when the scheduler interface is available.

#### **Status Area**

Status Server	Connected
Low Bit Rate	Ready
High Bit Rate	Ready

The **Server** status shows if the Xedio Ingest Organizer application is connected by IP to the corresponding Xedio Ingest Server.

The **High** and **Low Bit rate** status show if Xedio Ingest Organizer is communicating with the encoder software for the specified encoder. **Ready** is displayed when the encoder is ready for the recording. During the recording process, **Rec** is displayed.

status Server	Connected
Low Bit Rate	Rec
High Bit Rate	Rec

The **Connect** button allows the user to make the connection manually if the status currently shows a disconnection.

The **Start Record** button becomes active to start the encoding process as soon as the status shows a connected state.

### 3.2.3. Encoder

Depending on the encoder type, a **Low BitRate Encoder** button and/or **a High BitRate Encoder** button are available.

When you click one of the **Encoder** buttons for an encoder device, the following Encoder window is displayed in the Work area, showing information about the encoder and a monitoring output of the current encoding file.



Note

The video shown will only be at a rate

- defined by the GOP structure with the CDM[1] encoders (MPEG2 I frames only will be displayed: about 2 per second) and
- defined by the setup of the system with the CDM[2] encoders.

With the CDM[2], only one monitoring at a time can be performed by a user.

## 3.3. VTR Device

### 3.3.1. Purpose





When you click the **Control VTR** button from the VTR category tab, the following VTR window is displayed in the Work area, allowing you to define data for the recorded file, to control the VTR and mark areas of the tape to be ingested.

Label : Id Feed : External Ref
Id Feed : External Ref
Media Class :
Shooting Date : 2/12/2009 Video Ratio :
Source :
Routing :
Description :
Publish
Channel
Logical Ch : cdm 2 paire 1 PM   Ready  Connect  Connect
VTR xdcam
O VIR
out bubblob DEXTERNAL
Legisland Log Config Ready Config
Start Batch Save line Add in list Import Batch stopped
Label 🛛 Tc In 🦸 Tc Out Media Class Publish Ra

### 3.3.2. General Tab and Metadata Tab

These areas have the same fields as the encoder control window. See sections "General Tab" on page 7 and "Metadata Tab" on page 8 for a description of those areas.

### 3.3.3. Channel Area



This parameter allows the user to connect to the logical channel that has been assigned to ingest the media from the tape in the VTR. Choose the channel and click the **Connect** button to establish the communication.

### 3.3.4. VTR Area

-VTR xdcam - 00:0	0:00:00	1	in out	00:00:00:00	Record Timecode
1 1		O Jog O Shuttle		Config	Ready
Start Batch			Impo	ort Bate	ch stopped

The VTR area provides transport buttons to control the VTR as well as **In** and **Out** buttons to mark sections of the tape to ingest.

The **Record Timecode** area allows the user to choose between the existing timecode on the tape or the external source of timecode connected to the encoder when the encoding is performed.

Each area of tape can be determined and added to a list using the **Add In List** button. When the selection from the tape is complete, the ingest is started by clicking the **Start Batch** button.

## 3.4. Scheduler

## 3.4.1. Purpose

The Scheduler tab displays a timeline with all the records already encoded, being encoded or scheduled to take place within the displayed time window.

Each logical encoder has its own timeline.



	S C H E D	ULE	R	Sun and		-					/
C	urrent Date :				Threa	d Activity :					
7				3 hours Para	meters			1 - 1 - 132			
		:00	15:15	15:30	15:45	16:00	16:15	16:30	16:45	17:00	17:15
	CDM 1	01/12/200	9 15:50:41 - 02/12	2/2009 15:35:17							

The green line is the nowline and reflects the current time. The thin red line corresponds to the time before which no action can be performed through the scheduler. Ingest media is displayed in the form of blocks in the timeline.

### 3.4.2. Timeline View Settings

#### **Time Span**

Clicking the **[Time]** button displays a contextual menu:

3 hours	
Zoom In	•
Zoom Out	+
15 minutes	
30 minutes	
1 hour	
2 hours	
3 hours	
4 hours	
6 hours	
10 hours	
16 hours	
24 hours	
48 hours	
Previous Zoom	F9

This setting sets the range of time displayed on the timeline. The mouse scroll button may also be used to change this range and zoom in or out the displayed range.

#### **Parameters**

Parameters	
Setup	F10
Gioto Now	F11
✓ Nowline Focus	F12
Block List Dialog	
Clip Display Settings	F8
Show Thumbnails	Ctrl + T
Refresh	F5
About	

Clicking the **Parameters** button displays a contextual menu with the following options:

Menu Items	Meaning
Setup	Gives options for the amount of encoders displayed on screen and the adjustment of the display refresh rates
	CleanGest Scheduler Setup ×
	Minimum number of visible encoders : 5 Ei To Page
	Minimum load interval ( > 0 ) : 2 days
	Now line update time ( > 1" ) : 10 seconds
	Check counter time ( > 5" ) : 10 seconds
	Show Encoders Alive Zone : 🗹
	Show Thread Activity : 🗹
	Database Thread Priority : BELOW NORMAL -
	UK Cancel
Goto Now	Returns to the current date and time.
Nowline Focus	If this option is selected, the timeline for all encoders is displayed in such a way that the nowline is always centered and only the range of the displayed period can be adjusted. If the option is not selected, the display can be set to show any time period at any date.
Block List Dialog	Displays the list of blocks present in the timeline for a specific period of time:



Menu Items	Meaning
Clip Display Settings	Allows to select the information to be displayed in the encoded block : Clip Display Settings  Label  Mone  FeedID  ExternalRef Media Class Cancel  ExternalRef Media Class Shooting Date Priority
Show Thumbnails	Shows a thumbnail for the encoding block.
Refresh	Refreshes the graphical interface.
About	Gives information about the version of Ingest Scheduler.

#### **Current Date**

The **Current Date** field allows to select the date for the timeline display. This is only available if the **Nowline Focus** parameter is disabled from the Parameters menu.

### 3.4.3. Timeline Content

#### **Block Status Colors**

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

Block Color	Status		
<i>வீத3</i> Sport	A blue block to the right of the nowline is a Scheduled ingest.		
८ इ.अ Sport	A currently <b>Recording</b> ingest is orange.		

Block Color	Status		
<i>ത്വം?</i> Sport	A green block to the left of the nowline is a successfully Recorded ingest.		

#### **Block Contextual Menu**

A contextual menu is available when you right-click in the timeline:

<u>N</u> ew Record(s) <u>M</u> odify Record(s) ⊻iew Record(s) <u>P</u> lay	Lowbitrate Highbitrate
Menu Item	Description
New Records	Opens an Edit Mode window allowing you to enter parameters for a new file to encode.
Modify Records	Available when right-clicking on a block. Opens an Edit Mode window allowing you to update the parameters of the encoding file.
View records	Opens a View Mode window showing you the parameters of the encoding file.
Play	Provides a sub-menu with the <b>Lowbitrate</b> and the <b>Highbitrate</b> options. Selecting one option opens the CleanEdit Player window from which you can view the encoded/encoding block.

#### **Block Tooltip**

Some of the metadata associated to an ingest can be easily viewed by placing the pointer over the corresponding block. A tooltip is displayed:

clij	z2 ⊳ Sp	ort		
	Start	Date Time	= =	02/Dec/09 17:29:07
	Durat: Label Class	ion		00:12:21 clip2 Sport



## 3.5. Recording TC Versus Media TC

The Xedio Ingest server usually pilots two encoders: one in hi-res (EncHi) and one in lores (EncLow).

Each encoder creates one Media file: hi-res media file and lo-res media file.

Xedio Ingest sends the recording command to both encoders at the same time. However, according to several parameters, such as the codec, the recording does not start at the same time on both encoders. So, the TC IN and TC OUT of the two Media files will differ. This is absolutely normal and there can be up to 10 seconds between both TC IN or between both TC OUT in some cases.

Once the recording is finished, the Xedio Ingest analyses the TC IN and the TC OUT of each Media file and creates a single Media file corresponding to the material common to both lo-res and hi-res files.

- The Media TC IN will be the highest value between both TC IN.
- The Media TC OUT will be the lowest value between both TC OUT.

This difference can be viewed in a player when TC Intra is displayed.

The recording existed from when the first encoder started until the last encoder stopped. So, in the scheduler:

- The Recording TC IN value will be the lowest between both TC IN.
- The Media TC OUT value will be the highest between both TC OUT.

In summary, the duration of one recording is always greater than the duration of the corresponding Media and its Media files. The duration of one Media is always smaller that the duration of its Media files and the corresponding recording.

Additionally, a clip can be created from a media. It will therefore always have its TC IN and TC OUT within the Media TC IN and TC OUT limits.

This is explained in the following diagram.

Xedio Ing	jest Timecodes		
	Reference TC+		
	Recording TCout —		
Xedio Indest: Ordaniz	er - Scheduler - Recording Block		
— HiRes MediaFile TCin	HiRes MediaFile TCout —		
Xedio HighRes	Encoder – HiRes MediaFile		
LowRes MediaFile TCin	LowRes MediaFile TCout -		
Xedio LowRes B	Encoder – LowRes MediaFile		
	Media TCout —		
	eanEdit - Media		
Clip TCin	Clip TCout -		
CleanEdit – Clip, V	irtual Clip or Edit Clip		
	- Player NowLine		
Medie "Start TC" in HiRes Reyar	On a HiRes station, the StartTC displayed in a		
Mada 'Start TC' in LowRes Player	software player will be the Delta with the 'HiRes MediaFile TCin'.		
I	On a LowRes station, the StartTC displayed in a software player will be the Delta with the 'LowRes MediaFile TCin'.		

We assume that the same Reference TC is used to encode the HiRes MediaFile and the LowRes MediaFile.

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