Getting started - setting up a record

1) Connect an input or inputs

2) Assign inputs to a project (by default all inputs are assigned to project "1"

3) If desired, name the project, inputs, and encoders

4) In input tab, select input frame rate, pixel format and audio source

5) In encoder tabs, select codec, quality, wrapper, and timecode source for the recorded file, and other encode-specific settings such as audio routing within the file and disk destinations for each copy of the recording.

6) Return to record view and press record.

The basic setup process including defaults for naming and other settings are designed to allow for a minimum of setup time and a logical structure for folders and files.

There are, however. a number of more advanced options, particularly around file naming, that can greatly ease the file delivery and post process as well as increase efficiency in the day-to-day recording process. This is especially true in a multi-camera and multi-deck environment.

These customizations include creating custom naming templates to accommodate specific naming needs and keyboard shortcuts to frequently used dialogs that allow for very fast changes in naming duing live production.

In the tutorial below, necessary steps are in GOLD. Notes, advice, and miscellenia are in GRAY. Critical information is in RED.



The setup process is identical for all platforms. The only differences are that some audio, video and timecode input types or record formats are hardware-dependent and not all options shown may be available on all platforms.

The UI screens shown in this manual are taken from the RX3G and MX, which are the latest hardware. Where there are UI differences between current and legacy models, they are noted.

Record view at startup, RX/B and RX/30

Getting started -- set up a project



roiects view--create new proiec

						~ ~ ~	cicate			jeet					
						TC & automati							next enc prev		
	projects		scen				Project File	name	es and Paths	Expan	sion	Temp			
Ľ	LT2014		scene1												
-•	US_open		pre_show		Primary path		\Versace\runway\ISO1								
F	Robin_Hood														
F			pick ups										%P_%S_%I_%E_%t		
	1111 2013						Versace_ISO1								
_			B_roll			1									
	new project	manage projects	new scene			lock project setting		edi wile			oject adata				

the new project will appear in the list, highlighted as the "current" project for scene creation and path/filename template edits

a default scene 'scene1' is created by default whenever a project is created

this scene may be renamed and used or deleted and replaced with a new scen

Important: by default, scenes are not part of the path and file name templates and must be added by the user.

For the scene name to be used in the naming, the scene wildcard %S must be added to the templates in the projects tab

Getting started -- set up a project

	ISO1 overview											enc prev	
	projec		scen	es			Project Filer	iames and I	Paths Expa	insion	Templ	ate (click to	edit)
5) rename the default scene to	172014		doors			lers ne :es				proxy			
a meaningful name by selecting "rename" from the "manage	US_open	US_open p											
scenes" menu	Robin_Hood				Redund P	ant ath \Ver	\Versace\runway\ISO1				%P\%S\%I\%E		
	Versace		pick_ups		file na								
							Varraca ISO1				0/ D 0/ I	%P %I	
	B_roll												
additional scenes may be added at						ke# 1							
this time or at any time later using the "manage scenes" menu or CTRL+N								date %D = Date (\ %Y = 4 digit %y = 2 digit %m = 2 digit %M = 3 letter			te digit time digit hour digit minute digit second digit second ay of week ay of week (short)		
	new project	manage projects	new scene			lock project setting			F		scene metadata		

Projects view--create new scene

Overview--assign input to project

6) select the overview tab	ISO1 overview	, ISO1 master	[input] master	[input] proxy	projects	TC & automation	signal generator	prefs	next enc prev
8) assign the current channel	project	TCHEF		23B	tape/ %P_9 reel ID TCHE	%E Preview LUT EF_ISO1 Burn LUT	[none] [none]		
to the newly created project by	input settings	input source resolution SDI 2 1080i	frame rate 59.94	bit depth audio YUV8 Ana	source timecode alog Master	source tc offset au	to-rec sync source off Genlock	input conversion off	drop stop loss stop last on loss
choosing from the list of projects		codec quality DNx 145 audio type quali	wrap Avid I ity kHz	MXF delay	ork 1 \Avid n 4276GB Z:\Avid	nediafiles\MXF I mediafiles\MX	\1\%P_%E_%t <f\1\tchef_isc< td=""><td>01_001.mxf</td><td>segment TC break</td></f\1\tchef_isc<>	01_001.mxf	segment TC break
		video burn OFF	ort 48		2 Avid n E:\Avid E:\Avid	nediafiles\MXF mediafiles\MX	\1\%P_%E_%t (F\1\TCHEF_ISO	1_001.mxf	segment TC break
	proxy	codec quality Prores normal audio type quali	wrap MO ity kHz	per V Netwo V delay	ork 2 \ProRe	es\%P\%E\%P_ Res\TCHEF\ISC	%E_%x_%t 1\TCHEF_ISO1_	proxy_001.mov	segment TC break
	settings	4ch wav 24b video burn TC LUT	ort 48	ON cc off	4 S: 476GB MAV, 004	es\%P\%E\%P_ Res\TCHEF\ISO	%E_%x_%t 1\TCHEF_ISO1_	proxy_001.mov	segment TC break
7) name the inputs	input name	ISO1							
usualy this is a camera or feed number or type		V1	V2		8 not configured or no input	V4	s	copy channel ettings to	

for example, CAM1, ISO1, JIB, etc.



 10b) press "assign all inputs to this project" if all inputs will share a project (typical in a multicam environment)

ISO1 overviev	ISO1 master		[input] proxy		TC & automation	signal generator	prefs	next enc prev			
project	TCHEF	scene	23B	tape/ %P_ reel ID TCH	%E Previe LUT EF_ISO1 Burr	(none)					
input settings	input source resolution SDI 2 1080i	frame rate 59.94	bit depth audio so YUV8 Analo	ource timecode og Master	ion drop stop loss stop last on loss						
master encoder settings	codec quality DNx 145 audio type qual 4ch mono 24b video burn OFF	wrap Avid I ity kHz bit 48	per MXF delay off CC on	rk 1 76GB 2:\Avid r 2:\Avid r 2:\Avid r 2:\Avid r 2:\Avid r 2:\Avid r 2:\Avid r	\Avid mediafiles\MXF\1\%P_%E_%t Z\Avid mediafiles\MXF\1\TCHEF_JSO1_001.mxf \Avid mediafiles\MXF\1\%P_%E_%t \E\Avid mediafiles\MXF\1\TCHEF_JSO1_001.mxf						
proxy encoder settings	codec quality Prores normal audio type qual 4ch wav 24b video bum TC LUT	wrap MO ity kHz bit 48	per V V V delay ON CC off	rk 2 Verset	es\%P\%E\%P Res\TCHEF\IS es\%P\%E\%P Res\TCHEF\IS	_%E_%x_%t O1\TCHEF_ISO _%E_%x_%t O1\TCHEF_ISO	01_proxy_001.m 01_proxy_001.m	ov TC break			
input name											
input preview	V1	V2	V3	not configured or no input	V4		copy channel settings to	save and close			

Overview--assign scene to project

neiu.

11) to assign s scene to the **–** current project, select the scene

not part of the path and file name templates and must be added by the

For the scene name to be used in the naming, the scene wildcard %S must be added to the templates in the projects tab





Getting started - Projects - Naming templates - Paths



Templates simplify the naming of clips and the creation of organized folder structures to contain the clips.

The defaults ensure that at minimum, every take has a unique name and the folder structure and clip naming is reasonably decipherable to someone who was not present at record time.

The template concept centers on "wildcards" (variables) that get populated with data entered in various places in the UI. This may appear a bit daunting at first, but it's an extremely powerful way to very quickly generate filenames and folder structures that will simplify the job of anyone tasked with data management whether wrangler, editor, or achivist. There are many pre-defined wildcards and users can create their own for special purposes.

For instance, the default folder structure is created as follows:

by default, the video inputs are named: input1, input2, (RX) and input1, input2, input3, input4 (MX)

by default, the two encoders for each input are named: master and proxy

the default project is named: Project1

by default, the master path template is: %P/%I/%E

where % P is a wildcard representing the project name, in this case project1 where % I is a wildcard representing the input name, in this case input1 where % E is a wildcard representing the encoder name, in this case master

when "expanded" or "populated" with the names from the project, input, and encoder, the path becomes: [drive]:project1\input1\master

the way this appears in the Windows explorer is shown at the right

when accessed by a Mac, it appears in the finder as shown below



00		a RAID							
		•	٩						
▼ DEVICES	Shared Folder								
os 📃	Name	Date Modified	Size	Kind					
🔼 iDisk	🔻 🚞 project1	Today, 7:17 PM		Folder					
📕 RAID	🔻 🚞 input1	Today, 7:17 PM		Folder					
T DI ACCC	master	Today, 7:17 PM		Folder					
PLACES	proxy	Today, 7:17 PM		Folder					
A ada									
COa									
Applications									
Documents									

As can be seen, even if nothing is done beyond using the default settings, it would be the work of only a few minutes by the editor or logger to ascertain which camera/source is in which input folder, and rename the folders and clips appropriately. That said, taking the time to name things properly is never wasted.

Getting started - Projects - Naming templates - Paths - examples



we might want to add a scene wildcard (%S), which would then make the template:

%P/%S/%I/%E

where % S is a wildcard representing the scene name, in this case the default, scene1. "scene" is not required in the name, it could be act, segment, just a number.

when "expanded" or "populated" with the names from the project, input, scene, and encoder, the path becomes:

$[drive]:\project1\scene1\input1\master$

we then might want to give the variables meaningful names, for instance a one-off show with segments might look like:

project = Versace scene = preshow input = CAM1 encoder = ProResHQ

[drive]:\Versace\preshow\CAM1\ProResHQ

An opera with multiple acts might look like:

project = Turandot
scene = Act1
input = Line_dirty
encoder = DNx145

[drive]:\Turandot\Act1\Line_dirty\DNx145

On a live daily talk show, we might only use the current date by way of a user wildcard and the input name/encoder instead:

%1/%I/%E, where %1 = today's date (DO NOT USE %D in a path, as it will not work)

[drive]:\140612\JIB\XDCAM50_master

On an episodic show with many scenes and shoot days, one could use a template like:

%2/%1/%S/%I/%E [where %1 = today's date, and %2 is user wildcard for 'episode']

episode = BSG072 date = 140612 scene = 24A input = B_CAM1 encoder = 444master

[drive]:\BSG072\140612\24A\B_CAM1\444master

In this case, the use of keyboard commands for incrementing the scene name becomes very useful.

The possibilities are endless, and really any naming convention can be accommodated using the wildcards. The trick is to find the most efficient way of doing it which will require some experimentation.





Getting started - Projects - Naming templates - Clip names

input names and encoder	Projects										
names are important parts of											
any naming template	project1 scene1		all encoders use same templates								
ISO2 ISO3									%P\%S\%I\%E		
						project1/video1/master			%P\%S\%I\%E		
enter input names in the								%P_%I_%E_%t		file name template	
overview tab				project1_video1							
enc name									copy templates to	copy templates from	
enter encoder names in the encoder setup tab								time %T = 6 d %H = 2 d %m = 2 d %s = 2 d %W = Day %w = Day	igit time igit hour igit minute igit second y of week y of week (short)		
	new project	manage projects	new scene	manage scenes		lock project		projec metada	ct scene ata metadata	save and close	

Clip name templates operate exactly the same way as path templates The defaults ensure that every clip has a unique name by the inclusion of a unique identifier, a "take counter" that generates a 3 digit number (...001, 002, 003 etc) An optional unique identifier can be the start time code of the clip.

Except in very specific circumstances, it is not advisable to create clip name templates without a take increment or start timecode wildcard.

For instance, the default clip name structure is created as follows:

by default, the video inputs are named: input1, input2, (RX) and input1, input2, input3, input4 (MX)

the two encoders for each input are named: master and proxy

the default project is named: Project1

by default, the master clip name template is: %P_%I_%E_%t

where % P is a wildcard representing the project name, in this case project1 where % I is a wildcard representing the input name, in this case input1 where % E is a wildcard representing the encoder name, in this case master AND

where % t is a wildcard representing the take increment, for instance 001

when "expanded" or "populated" with the names from the project, input, and encoder, plus the next automatically derived take increment, the clip name becomes:

project1_input1_master_001.mov project1_input1_master_002.mov project1_input1_master_003.mov, etc.

and with the default path , [drive]:\%P\%I\%E the full name is:

[drive]:\project1\input1\master\project1_input1_master_001.mov so the clip name always contains the same component parts as the path

or, where the clip in question is opAtom MXF or MOV+WAV audio, a folder is created with the clip name, but no suffix. eg:

project1_input1_master_001,

the clip folder contains the separate audio and video files, with a _A or _V added to identify audio and video in opAtom tracks, or with meaningful naming in the case of MOV+WAV.

It's important to note that while the default clip name template follows the same pattern as the path template, this is not necessary. It may be useful to have the clips all in one folder, (path might be simply be the project %P), but to name the files with the full complement of project information and some custom wildcards, eq:

%P_%1_%2_%S_%I_%E or full expansion with path: [drive]:\QL_E27\QL_E27_DAY2_14B_ISO1_master

It's also not necessary to use the underscores to separate the components, but it does help with legibility.

Naming choice logic: descriptive is always better Project > project name (no mystery here) Input > what is the source? Eg CAM1, ISO1, GoPro_drumkit, etc. Encoder > what is it's purpose? Eg Master, Proxy, HiRes or Encoder > what is it? Eg ProResHQ, XDCAM50, JFIFproxy

MPORTANT NOTE

file name and path templates are not infinitely flexible due to the way the parser searches for existing clips in the clip folders at record time.

For instance, false positives for name collisions may arise when using date and time wildcards in paths.

Rather than using calculated date and time wildcards for these constructions, use a "user wildcard" which has the same value.

As an example, the date wildcard, %D, may be calculated as 130422, but %D may cause issues in a path template becuase it is calculated on the fly.

Instead, set user wildcard %1 = 130422, which achieves the same purpose, but because it is a static value, it will not cause a problem.

Getting started - Projects - Naming templates - keyboard



Clip name templates operate exactly the same way as path templates

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where % t is a wildcard representing the take increment, for instance 001

when "expanded" or "populated" with the names from the project, input, and encoder, plus the next automatically derived take increment, the clip name becomes:

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and with the default path , [drive]:\%P\%I\%E the full name is:

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or, where the clip in question is opAtom MXF or MOV+WAV audio, a folder is created with the clip name, but no suffix. eq:

project1_input1_master_001

and the clip folder contains the separate audio and video files, with Avid's naming in the case of opAtom, or with meaningful naming in the case of MOV+WAV.

It's important to note that while the default clip name template follows the same pattern as the path template, this is not necessary. It may be useful to have the clips all in one folder, (path might be simply be the date %D), but to name the files with the full complement of project information and some custom wildcards, eg:

%P_%1_%2_%S_%I_%E or full expansion with path: [drive]:\140201\QL_E27_DAY2_14B_ISO1_master

It's also not necessary to use the underscores to separate the components, but it does help with legibility.

Getting started -- set up a project -- input/encoders



Getting started -- set up a project -- encoder audio



select "source channel" number to open routing popup

delay (ms) 100 100

if the audio source is out of sync with ■ the video, a delay in milliseconds may be added to compensate

press "save/back" to return to encoder setup view

Getting started -- set up a project -- input audio delay



Encoder Audio Delay pop-up

• 100 ms

affects recorded files!!!



Getting started -- set up a project -- preferences

settings on this page may generally be left at defaults

preferences - options



Introduction - UI views - small record view

The small record view is where the operator will spend 95% of his or her time.

This view contains the majority of critical real-time feedback about the state of the

Small record view while idle





shows encoder settings for current master and proxy files, including system standard, bit depth, codec, quality, file name and wrapper.

When any of the write destination disks are approaching full, border will flash yellow.

59.94 4:2:2 YUV8 H.264 M

Introduction - UI views - input tab





Input tab - reference settings and signal loss behavior

Introduction - UI views - Master encoder tab



Master encoder tab et codec, quality, wrapper, timecode source, recording disks, etc

> generate an XML with recording and file parameters

TC break uses discontinuities in the source timecode to initiate the break. The primary use for this mode is acquisition from tape where a new clip is desired at each time code break

Available codec settings are dependent the input frame rate, pixel format, and frame size selected in the input tab. Available choices depend on on the columns from left to right. As selections are made, the available choices in subsequent columns are restricted based on those selections.

copy to other

A specific example is XDCAM, which as an 8bit codec does not support 10bit input. If YUV10 is selected as the input pixel format, there will be no valid quality selections available, and the UI will reflect that with a "not available" warning in the quality column.

Introduction - UI views - Proxy encoder tab



Master encoder tab



the source timecode to initiate the break. The primary use for this mode is acquisition from tape where a new clip is desired at each time code break

Available codec settings are dependent the input frame rate, pixel format, and frame size selected in the input tab. Available choices depend on on the columns from left to right. As selections are made, the available choices in subsequent columns are restricted based on those selections.

Proxy selections are fewer in number than master encoder selections as not all codecs support a proxy version., eg XDCAM.

Introduction - UI views - Setup - Overview tab

Small record view when fully configured



for display

Most information displays are also hotspots. For instance, touching the V2 preview will open the overview for that input, touching the master disk icon will open the master encoder tab for the current input, and touching the "scene" field will open the project current scene selection dialog. Other hotspots will open the relevant tab for entering that data.

There are also a growing list of keyboard commands to access many of the functions in the menus. The full list is available by entring CTRL+K from any view, or by selecting "show keyboard commands" from the [setup]:[prefs] view.