

Quantel Rio Rio Assist

V4.0.0 New Feature List



Note:

This release will require a new V4 license. This is free to any customer with a support contract and can be obtained through your local SAM office or by calling the Helpdesk.

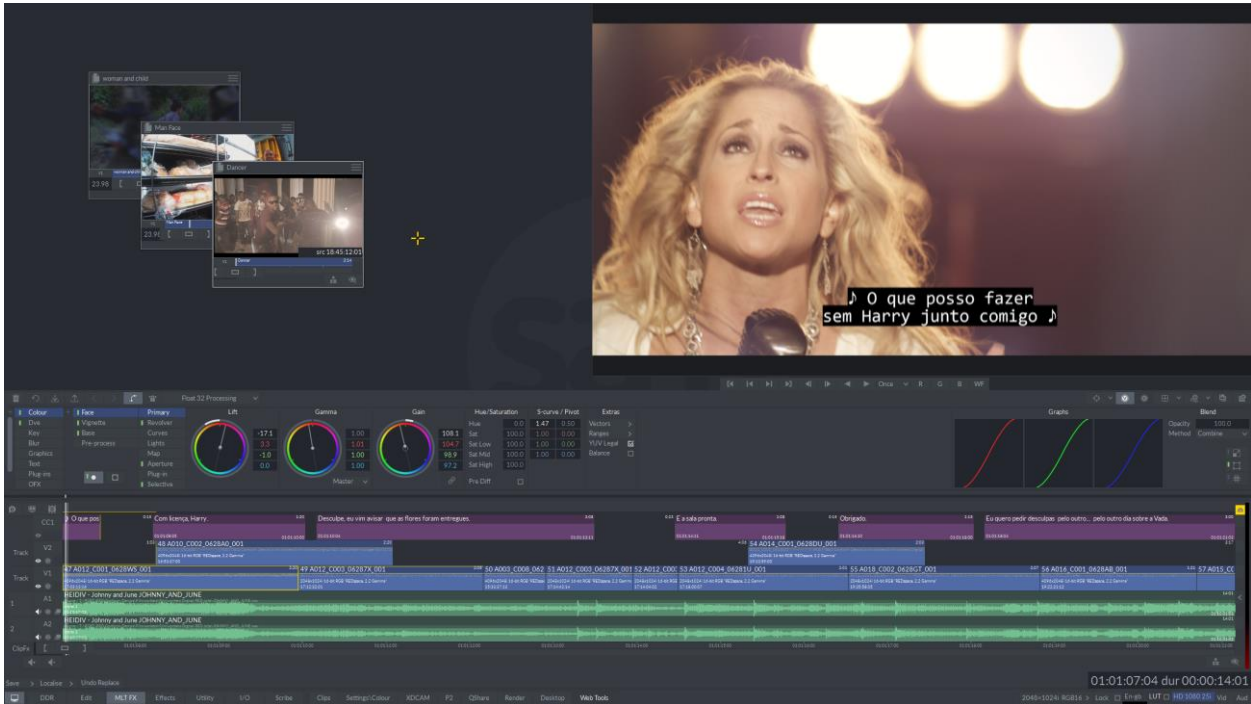
If you have any questions please contact Damon Hawkins
damon.hawkins@s-a-m.com

V4.0.0 – New Features – May 2016

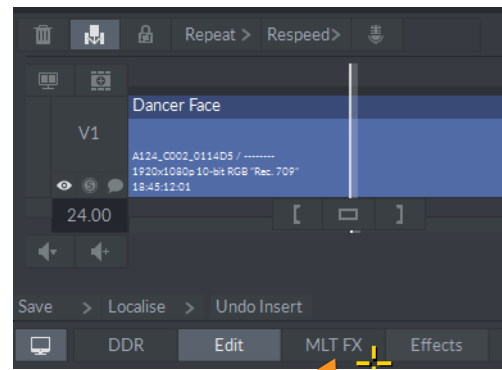
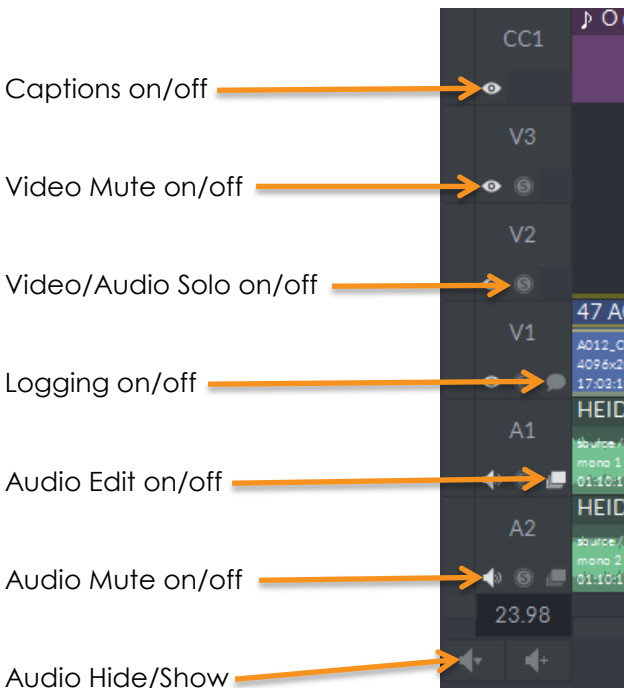
- New re-designed user interface
- New respeed option using Alchemist technology
- Improved Flow Motion respeeds
- All respeeds now with full history
- Conform – a choice of respeeds or none at all
- Conform - Avid profiled respeeds supported
- Avid re-link to exported MXF files (round tripping)
- EXR Export – additional compression options
- 12-bit RGB video output
- Ability to change a rush/segment attribute directly on the timeline
- Conform - F1 option to disable SDI
- Avid DNxHR support
- F1 HBR option for MXF files
- Additional transfer curves

New re-designed user interface

The user interface has been re-designed to provide a fresh more modern feel. This includes a greater use of icons and colors to make the system friendlier and more intuitive to new users.

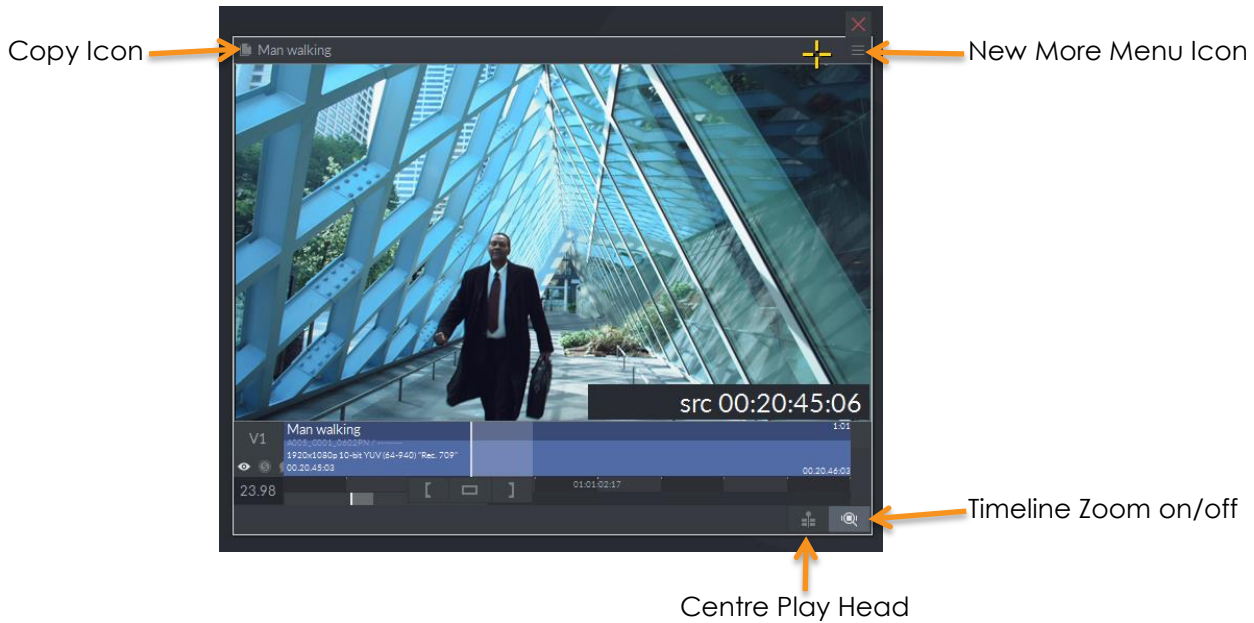


In most places buttons are still in the same locations allowing existing users to find themselves at home. There are some exceptions to this which are notably the timeline solo/mute buttons which are now located on the left-hand side of the timeline.



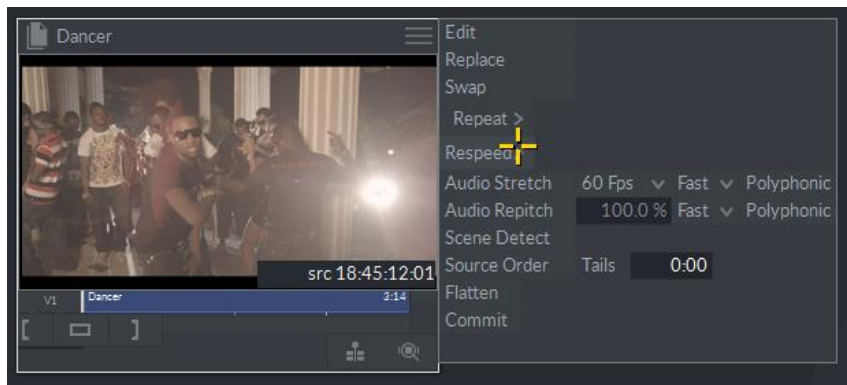
The MLT FX button has also been relocated to the main menu

The other area that has changed are the floating clips.

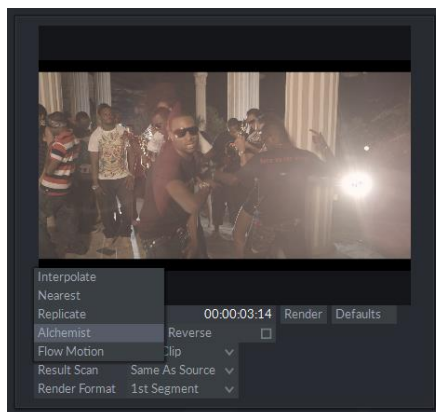


New Respeed option using Alchemist technology

The old Stretch menu has been renamed to 'Respeed' and now contains a consolidated list of Respeed methods.

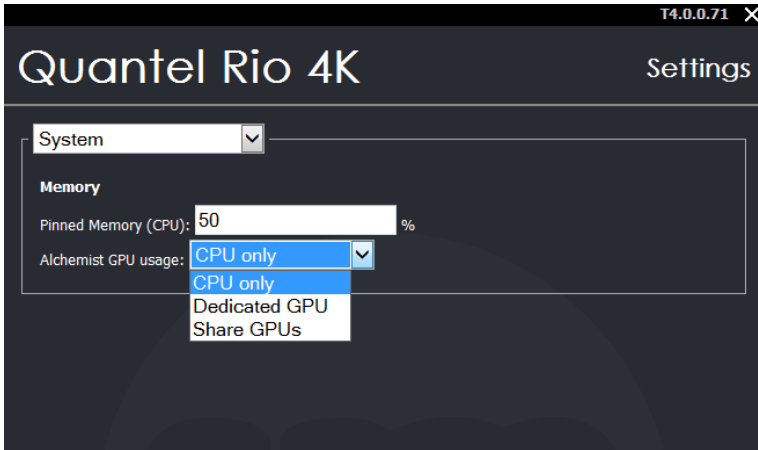


These now include one using the world renowned Alchemist technology to provide the ultimate in smooth motion respeed algorithms.



Alchemist respeed uses OpenCL not CUDA processing as a default and so some GPU memory restrictions need to be considered in its use. It requires a minimum of 4GBs GPU memory to process 4K media.

Depending on the number and type of GPU card installed (K20, K40, K80) there are 3 choices in the 'System' section of the Settings menu.



CPU only

CPU only. No GPU will be used and performance will be much slower

Dedicated GPU

For when there are two or more GPUs present (i.e. x2 K20s or x1 K80). The last GPU will be reserved for OpenCL processing. Each K80 card has x2 GPUs.

Shared GPUs

50% VRAM on the last GPU will be reserved for OpenCL processing.

If the available CUDA memory is <1.5GB then CPU will be used no matter what is selected in the menu.

Note:

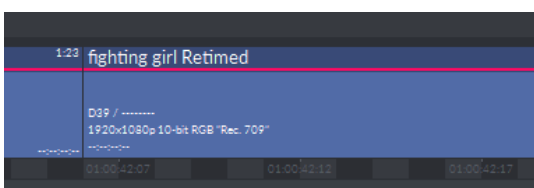
The default after first installation is CPU Only, so this setting should be changed if CUDA is available.

Improved Flow Motion respeeds

The Flow Motion algorithm has been optimised, vastly improving the speed of processing. It is now also a part of the main respeed options as shown above.

All respeeds now with full history

Any clip that has been retimed will be indicated in red and named with a 'Retimed' suffix as shown.



Red indicates respeed history

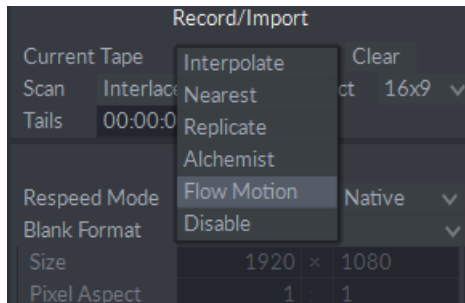
It will contain full history of the respeed and on entering the respeed menu this will be shown and an alternative type and/or speed can be chosen.



This is also true of profiled respeeds.

Conform – a choice of respeeds or none at all

All the respeed options are now available in the Conform menu.

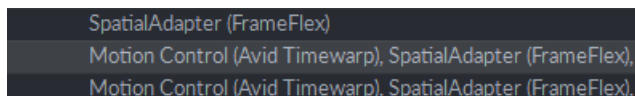


Please make sure you select the one you wish to use prior to pressing the Conform button.

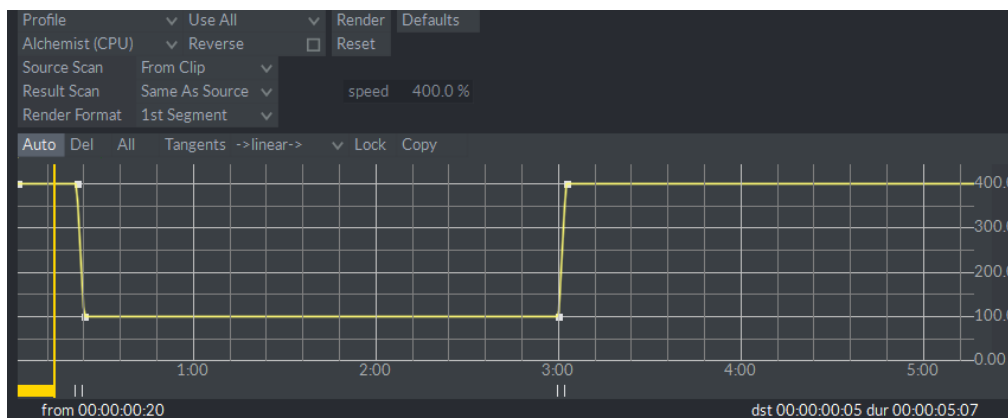
There is also an additional 'Disable' option which will prevent the conform from rendering any respeeds. When selected no respeeds will be rendered and each retimed rush will be a repeat of the first frame, but will contain the full respeed history. This provides the ability to conform a program and check for editorial accuracy without having to wait for respeeds to render. Each respeed clip can then be opened and rendered with the method of choice. Alternatively if the user is happy with the edit the conform can be done again selecting the respeed of choice – as the media will already be present only the respeeds will be rendered.

Conform - Avid profiled respeeds supported

If the AAF from an Avid MC contains a profiled respeed it may be shown in the Conform menu as highlighted below.



When conformed this 'profiled' respeed will be applied correctly to the media and the history displayed as shown. This of course can then be adjusted if required. This is set by speed information not positional from the AAF.



Only linear Positional Respeed information from Avid Media Composer is supported. Positional keyframes are not yet supported.

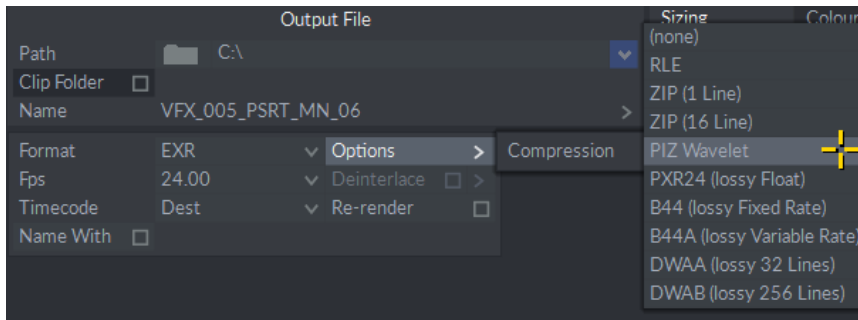
Avid re-link to exported MXF files (round tripping)

It is now possible to export MXF wrapped DNxHD files and re-link them in Avid. This allows program finishing in Quantel Rio and if required the finished media can be exported back to Avid, re-linked on the timeline for editing of finished promos or alternative versions.

It is important that the media contains a tape name. This may need to be modified in the Avid MC.

EXR Export – additional compression options

OpenEXR 2.2 is now supported and with this comes additional compression, of most note is the lossy DWAA format. The full list of supported formats is shown below.



(none)

Disables all compression.

Run Length Encoding (RLE)

This is a basic form of compression that is comparable to that used by standard Targa files.

Zip (per scanline)

Zip style compression applied to individual scanlines.

Zip (16 scanline blocks)

Zip style compression applied to blocks of 16 scanlines at time. This tends to be the most effective style of compression to use with rendered images that do not have film grain applied.

PIZ (wavelet compression)

This uses a new combined wavelet / Huffman compression. This form of compression is quite effective when dealing with grainy images, and will often surpass any of the other options under grainy conditions.

PXR24 (24 bit data conversion then zipped compression)

This form of compression from Pixar converts data to 24 bit then uses Zip compression. It is lossless for half and 32bit integer data and slightly lossy for 32bit float data.

B44

This form of compression is lossy for half data and stores 32bit data uncompressed.

B44A

An extension to B44 where areas of flat color are further compressed. Regular B44 compresses uniformly regardless of image content.

DWAA

JPEG-like lossy compression format contributed by DreamWorks Animation. Compresses 32 scanlines together.

DWAB

Same as DWAA, but compresses blocks of 256 scanlines.

12-bit RGB video output

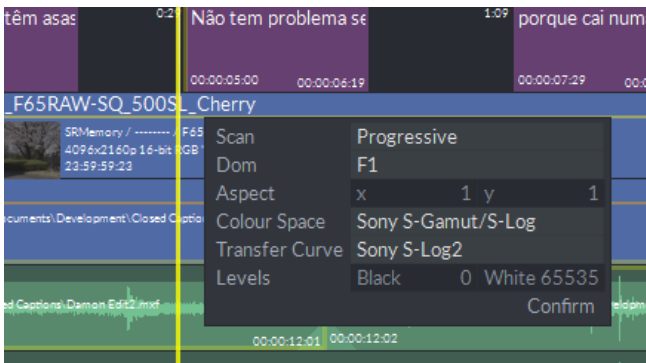
When using the AJA Corvid88 and the AJA Kona4, and the video standard is RGB and 2K or less, then the card will output 12-bit RGBA.

Note:

There is not enough memory on the AJA cards to support UHD/4K RGB @12-bit output which is why it is limited to 2K or less. Above 2K output remains as it is today @10-bit.

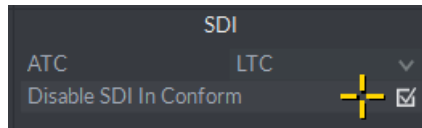
Ability to change a rush/segment attribute directly on the timeline

Change scan, field dominance, pixel aspect ratio, colorspace, transfer curve and levels directly from the timeline. A mouse right click or alt + tap with the pen will bring up the following menu.



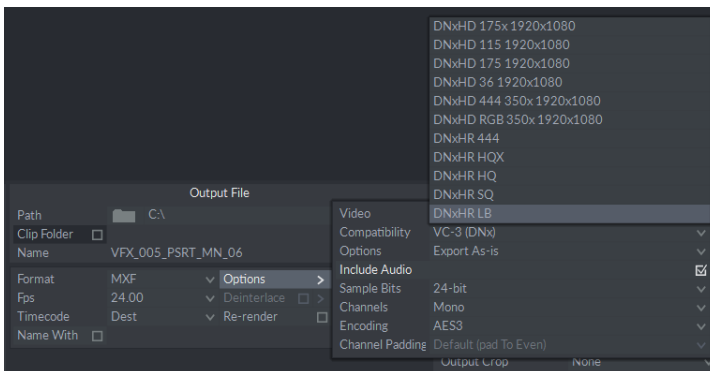
Conform - F1 option to disable SDI

To avoid feedback and noise when entering the Conform menu there is an F1 menu that when checked will disable the SDI inputs.



Avid DNxHR support

All formats of DNxHR are supported for both import and export.

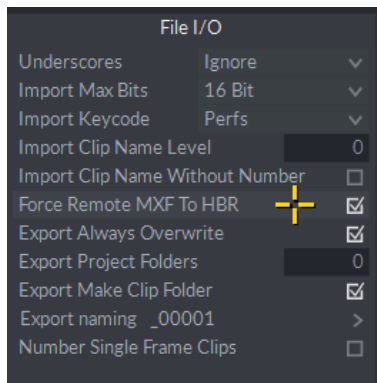


MXF wrapped DNxHR for export is supported under VC-3 as shown above.

All DNxHR MXFs are exported in Op1a format which is interoperable with Media Composer from 8.3.1 onwards.

F1 HBR option for MXF files

Some types of MXF files, for example XDCAM, when soft mounted default to LBR. This is primarily to provide performance on lower spec broadcast seats. However there is now an F1 function as shown below that will force all MXF soft mounted files to always be HBR.



Additional Transfer Curves

2.2 Gamma (rec.1886) and 2.6 Gamma (DCDM) have been added to the system.

DCI P3 uses P3 primaries with 2.6 Gamma (DCI)

DCI X'Y'Z' uses XYZ primaries with 2.6 Gamma (DCDM) which has headroom in the luminance for alternative white points. This has a curve that goes to slightly below 1.