

# What's New for Avid® Media Composer® v8.5

## Revision History

Date	Description
March 04, 2016	Added <a href="#">“Context Menu Changes” on page 7</a> to the Menu Simplification list.
February 19, 2016	Added Read Audio Timecode to the Menu Simplification list.
February 1, 2016	Updated <a href="#">“Trimming with Sync Locks On” on page 9</a> .

## New Features

The following table describes What's New for the current editor release.

Feature	Description	For More Info
Menu Simplification	The editing application menu items have been reorganized and simplified.	See <a href="#">“Menu Simplification” on page 3</a> .
Changes to Linking Media	Avid has made some changes to the way Autodetect works when linking to media.	See <a href="#">“Changes to Linking Media” on page 8</a>
Adding a Track in the Timeline	You can simply drag a clip in the Timeline to create another track.	See <a href="#">“Adding a Track in the Timeline” on page 8</a> .
Live Timeline Dragging	You can see segments as they are moved in the Timeline.	See <a href="#">“Live Dragging in the Timeline” on page 9</a> .
Trimming with Sync Locks On	A new feature allows you to enable Sync Rollers for Sync Locked Tracks.	See <a href="#">“Trimming with Sync Locks On” on page 9</a> .
Adding Custom Columns	The procedure for adding a custom column has been simplified.	See <a href="#">“Adding a Custom Column to a Bin” on page 11</a> .
Adding Multiple Columns	The procedure for adding multiple columns to the bin has been simplified.	See <a href="#">“Adding Multiple Columns to a Bin” on page 11</a> .
Quickly Accessing a Setting dialog	The procedure for opening a Setting's dialog box has been simplified. Simply type the first letter of the setting you want to open,	See <a href="#">“Opening a Settings Dialog in the Project Window” on page 12</a> .

Feature	Description	For More Info
64 Audio Tracks	The editing application supports 64 tracks of audio.	See <a href="#">“Support for 64 Tracks of Audio”</a> on page 12.
Interactive Video Frame Cache	This release allows you to save generated frames of the current playing sequence into a memory storage cache.	See <a href="#">“Setting Video Memory and Video Frame Cache”</a> on page 14.
FrameFlex Rotation	You can choose to rotate the framing box in the FrameFlex source settings when straightening your source image.	See <a href="#">“Frame Flex Rotation”</a> on page 26.
Manage Preset Project Formats	You can modify or delete Custom raster dimensions that you have added to your project formats.	See <a href="#">“Manage Preset Project Formats”</a> on page 16.
HDR Support	This release includes color spaces for High Dynamic Range.	See <a href="#">“High Dynamic Range Support”</a> on page 16.
Effects Palette Update	The Effects Palette has been improved to allow you to find and filter effects quickly and easily	See <a href="#">“Effect Palette Update”</a> on page 17.
Changing the Background Color of the Project Window or Timeline.	You can change the background color of the Project Window and Timeline.	See <a href="#">“Changing the Background Color of a Project Window or Timeline”</a> on page 18.
Overriding the Font and Font Sizes	You can override the Project and Bin Font and Font Sizes.	See <a href="#">“Overriding Bin and Project Font and Font Size”</a> on page 19.
Group by Audio Waveforms	You can group clips by audio wave analysis.	See <a href="#">“Grouping Clips by Audio Waveform Analysis”</a> on page 20.
Timecode Burn-In Effect Update	The Timecode Burn-In effect includes updates for frame count.	See <a href="#">“Timecode Burn-In Effect Update”</a> on page 21.
Copy and Pasting Frame Numbers in a Bin Column	You can apply the same text to a column for multiple items.	See <a href="#">“Applying the Same Text to a Column for Multiple Items”</a> on page 22.
Linking and Importing Broadcast Wave files	Linking and importing Broadcast WAV files has been updated to ensure the beginning of an imported or linked audio clip is not cut off at the beginning of the clip.	See <a href="#">“Linking and Importing Broadcast Wave Files”</a> on page 22.
Audio track order terminology change	Audio Track ordering layout name changes were made to support interoperability with Pro Tools.	See <a href="#">“Audio Track Ordering Layout Name Change”</a> on page 24.

Feature	Description	For More Info
Identifying Rendered Effects	You can now choose to display rendered effects separate from Title and Matte key effects. This is helpful when trying to identify clips for deletion.	See <a href="#">“Identifying Rendered Effects” on page 25</a> .
Ancillary Data SCC Import	The editing application supports importing Scenarist Closed Caption File (.scc) files.	

## Menu Simplification

The menu items in the editing application have been reorganized. Some menu items have been moved to group them in a more logical location. For example, the Bin menu items now include items that relate to the bin's configuration. The Clip menu items now include items that operate on selected objects in the bin. And the new Timeline menu includes items that operate on the Timeline.

The table below lists the main menu **items that have moved**, where they appeared in the previous release, and where you can find them now.

Menu Item	Where it was...	Where it is...
New Bin	File > New Bin	File > New > New Bin
New Volume for Export	File > New Volume for Export	File > New > Volume for Export
New Script	File > New Script	File > New > New Script
AMA File Export	File > AMA File Export	File > Output > AMA File Export
Export	File > Export	File > Output > Export to File
Import	File > Import	File > Input > Import
Send To	File > Send To	File > Output > Send To
Import EDL	File > Import EDL	File > Input > Import EDL
Link to Media	File > Link to Media	File > Input > Link to Media
Link to Stock Footage	File > Link to Stock Footage	File > Input > Link to Stock Footage
Refresh Media Directories	File > Refresh Media Directories	File > Media > Refresh Media Directories

<b>Menu Item</b>	<b>Where it was...</b>	<b>Where it is...</b>
Load Media Database	File > Load Media Database	File > Media > Load Media Database
Unmount	File > Unmount	File > Media > Unmount
Timeline Quick Find	Edit > Timeline Quick Find	Timeline > Quick Find
Set Font	Edit > Set Font	Windows > Set Font
Set Bin Background	Edit > Set Bin Background	While in a Bin, right click and select Set Background Color
AutoSync	Bin > AutoSync	Clip > AutoSync
Group	Bin > Group	Clip > Group
Create Stereoscopic clips	Bin > Create Stereoscopic clips	Clip > Stereoscopic > Create Stereoscopic clips
Update Stereoscopic clips	Bin > Update Stereoscopic clips	Clip > Stereoscopic > Update Stereoscopic clips
Transform SubClips into Stereoscopic clips	Bin > Transform SubClips into Stereoscopic clips	Clip > Stereoscopic > Transform SubClips into Stereoscopic clips
MultiGroup	Bin > MultiGroup	Clip > MultiGroup
AutoVO	Bin > Auto VO	Clip > Auto VO
Autosequence	Bin > Autosequence	Clip > Autosequence
Refresh In-progress Linked Clips	Bin > Refresh In-progress Linked Clips	Clip > Refresh In-progress Linked Clips
Custom Sift	Bin > Custom Sift	Bin > Sift Bin Contents
Reverse Selection	Bin > Reverse Selection	Bin > Select Reverse
Select Offline Items	Bin > Select Offline Items	Bin > Select > Offline Items
Select Media Relatives	Bin > Select Media Relatives	Bin > Select > Media Relatives
Select Sources	Bin > Select Sources	Bin > Select > Sources
Select Unreferenced Clips	Bin > Select Unreferenced Clips	Bin > Select > Unreferenced Clips
Loop Selected Clips	Bin > Loop Selected Clips	Clip > Loop Selected Clips
Align Columns	Bin > Align Columns	Bin> Align and Fill > Align Columns

<b>Menu Item</b>	<b>Where it was...</b>	<b>Where it is...</b>
Align Selected to Grid	Bin > Align Select to Grid	Bin> Align and Fill > Align Select to Grid
Fill Window	Bin > Fill Window	Bin> Align and Fill > Fill Window
Fill Sorted	Bin > Fill Sorted	Bin> Align and Fill > Fill Sorted
Select Unrendered Title	Bin > Select Unrendered Titles	Bin > Select > Unrendered Titles
Reset Offline Info	Bin > Reset Offline Info	
New Sequence	Clip > New Sequence	Timeline > New > Sequence
New Video Track	Clip > New Video Track	Timeline > New > Video Track
New Audio Track	Clip > New Audio Track	Timeline > New > Audio Track
New Data Track	Clip > New Data Track	Timeline > New > Data Track
Freeze Frame	Clip > Freeze Frame	Composer > Freeze Frame
Center Pan	Clip > Center Pan	Clip > Audio > Center Pan
Remove Pan	Clip > Remove Pan	Clip > Audio > Remove Pan
Apply Gain	Clip > Apply Gain	Clip > Audio > Apply Gain
Change Sample Rate	Clip > Change Sample Rate	Clip > Audio > Change Sample Rate
Expert Renders at Position	Clip > Expert Renders at Position	Timeline > Expert Render
Render at Position	Clip > Render at Position	Timeline > Render
Clear Renders at Position	Clip > Clear Render at Position	Timeline > Clear Renders
Create Unrendered Title Media	Clip > Create Unrendered Title Media	Timeline > Create Unrendered Title Media
Modify Pulldown Phase	Clip > Modify Pulldown Phase	Clip > Modify Pulldown Phase
Alternates Relink and Unlink commands in Clip menu	(Windows) Shift + Ctrl + click Clip menu (Mac) Shift + Command + click Clip menu	Clip > Modify > Unlink Media
Archive to Videotape	Clip > Archive to Videotape	Removed
Restore from Videotape	Clip > Restore from Videotape	Removed

<b>Menu Item</b>	<b>Where it was...</b>	<b>Where it is...</b>
Add Filler at Start	Clip > Add Filler at Start	Timeline > Add Filler at Start
Remove Match Frame Edits	Clip > Remove Match Frame Edits	Timeline > Remove Match Frame Edits
Find Black Hole	Clip > Find Black Hole	Timeline > Find Black Hole
Find Flash Frame	Clip > Find Flash Frame	Timeline > Find Flash Frame
Split All Tracks to Mono	Clip > Split All Tracks to Mono	Timeline > Split All Tracks to Mono
Mute Clips	Clip > Mute Clips	Timeline > Mute Clips
Unmute Clips	Clip > Unmute Clips	Timeline > Unmute Clips
Site Settings	Special > Site Settings	Windows > Site Settings
Bin Settings	Special > Bin Settings	Windows > Bin Settings
Audio Mixdown	Special > Audio Mixdown	Timeline > Mixdown > Audio
Video Mixdown	Special > Video Mixdown	Timeline > Mixdown > Video
Data Mixdown	Special > Data Mixdown	Timeline > Mixdown > Data
Read Audio Timecode	Special > Read Audio Timecode	Clip > Read Audio Timecode
Sync Point Editing	Special > Sync Point Editing	Composer > Sync Point Overwrite
Show Phantom Marks	Special > Show Phantom Marks	Composer > Show Phantom Marks
Render On-the-Fly	Special > Render On- the-Fly	Composer > Render-On-the-Fly
MultiCamera Mode	Special > MultiCamera Mode	Composer > MultiCamera Mode
Remote Play and Capture	Special > Remote Play and Capture	Composer > Remote Play and Capture
Device	Special > Device	Composer > Device
Full Screen Playback	Special > Full Screen Playback	Composer > Full Screen Playback
Show Single Monitor	Special > Show Single Monitor	Composer > Show Single Monitor
Deactivate Software License	Special > Deactivate Software License	File > Deactivate Software License
Floating License	Special > Floating License	File > Floating Licenses

Menu Item	Where it was...	Where it is...
Capture Tool	Tools > Capture	Bin > Go to Capture Mode
List Tool	Output > List Tool	Tools > List Tool
Restore to Default	Special > Restore to Default	Windows > Restore to Default
Hardware	Tools > Hardware	Project Window > Info Tab > Hardware
Media Creation	Tools > Media Creation	File > Media > Media Creation Settings
Export to Device	Output > Export to Device	File > Output > Export to Device
Digital Cut	Output > Digital Cut	File > Output > Digital Cut

### Context Menu Changes

Some of the options that you could select by right-clicking an item in the Bin or right clicking in the Timeline have been reorganized in a more simplified way. For example, when you right click an item in the bin, options such as Center Pan or Remove Pan now appear under the Audio option. There are a few items that have moved from the right-click option and are located under other menu options. This table shows the items that you no longer access by right clicking in a bin or on an item in the bin or in the Timeline.

Menu Item	Where it was...	Where it is...
Extract DNxHD Data	Right-click on an item in the bin.	Clip > Extract DNxHD Data
Update Effects	Right-click on an item in the bin.	Clip > Update Effects
Revert Effects	Right-click on an item in the bin.	Clip > Revert Effects
Duplicate	Right-click on an item in the bin, or right-click in the Timeline.	Edit > Duplicate
Remove Redundant Keyframes	Right-click on an item in the bin.	Clip > Remove Redundant Keyframes
Get Bin Info	Right-click in a bin.	Bin > Bin Info
Add Bin to Favorites	Right- click in a bin	Bin > Add Bin to Favorites
Default Setup	Right-click in the Timeline	On the Timeline Fast Menu
Split All Tracks to Mono	Right-click in the Timeline	Timeline > Split All Tracks to Mono

## Changes to Linking Media

When you choose File > Input > Link to Media, the Files of Type menu defaults to the Autodetect Plug-in. Avid has made some changes to the way Autodetect works when linking to media. Due to this change, Avid recommends the following:

- When you link to a file, choose the applicable plug-in from the menu.
- When you link to a volume, choose Autodetect.

Note that the following plug-in choices **are no longer listed** when choosing a plug-in for linking:

- **AS-11:** You should now use Autodetect or the generic MXF plug-in
- **QuickTime (WAV, AIF, AIFF):** You should now use the WaveAiff plug
- **All (folder) plug-ins:** You should now use the Autodetect option

## Adding a Track in the Timeline

With this release of the editing application, you can add a track by simply dragging a clip in the Timeline.

### To add a track in the Timeline:

1. Click to select a clip in the Timeline.
2. Drag the clip vertically up or down the Timeline.
3. Once you let go of the clip, a new track is added to the Timeline.

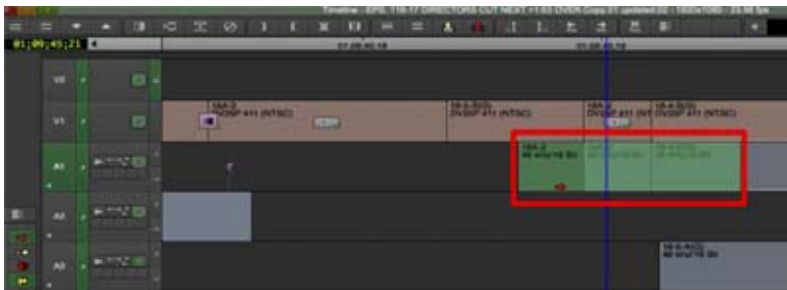


*You can only create as many tracks as you are dragging.*



## Live Dragging in the Timeline

With this release of the editing application, you can clearly see the segments as you drag them in either trim or segment mode. When you click and drag a clip you can see the clip as it moves in the Timeline. And as you drag a clip, the movement is transparent allowing you to see the clips you are dragging over in the Timeline. And if Waveforms are turned on, the waveform stays with the clip as you drag, making it much easier to line up clips as you are editing.



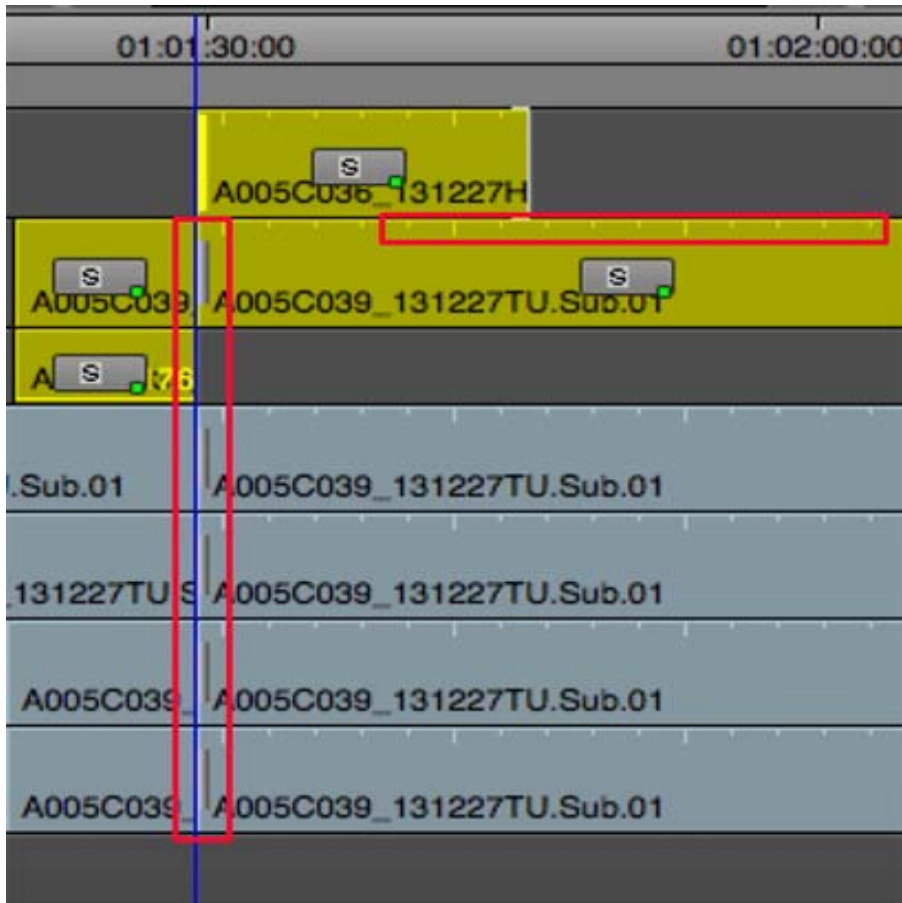
You can also see the rippling effect of single roller trim while trimming. Dragging a segment in lift/overwrite (red) mode will show the dragged segment and its contents, such as waveform and marker. Dragging a segment in extract/splice-in (yellow) mode will show the effect of inserting the segment into the track.



*If you prefer the old behavior where you did not see the clip moving in the Timeline, go to the Timeline Settings and enable Wireframe Dragging.*

## Trimming with Sync Locks On

A new feature allows you to enable Sync Rollers for Sync Locked Tracks. This change makes it easier for you to see what is happening in the Timeline when you perform a trim. In previous releases, you had to wait for the trim to end to see how sync was maintained. When you enter single roller trim, gray sync rollers appear on unselected sync locked tracks making it easier to see which tracks will be affected by the trim. When you are actually performing the trim you will see the effect that the trim has on the sync locked tracks as you are trimming. You will also see tick marks when trimming to show you movement of the segment. These tick marks are for visual reference only. They do not represent frames.



Gray sync rollers; Tick marks to show trimming movement



*When you <shift> select a transition on a track with a sync roller, the trim is changed to the selected transition instead of adding another roller.*

To enable this feature, select the Trim setting in the Project window, click the Features tab and enable Sync Rollers for Sync Locked Tracks.

## Adding a Custom Column to a Bin

In addition to the standard column headings, you can add your own column headings to describe information about clips and sequences. For example, you might want to add a column heading to describe what kind of shot (close-up, wide shot, master shot, extreme or close-up) is used in a clip.

### To add a custom column:

1. While in Text or Script view, place your cursor in any column heading, right click and select Add Custom Column.

The default name *Untitled* appears as the column heading name.

2. Type the desired name in the column heading and press Enter.

## Adding Multiple Columns to a Bin

If you select multiple columns to add to the bin, they will appear directly to the right of the selected column. In previous releases, the columns were placed throughout the bin and it was difficult to see where the added columns appeared in the bin.

### To add multiple columns:

1. While in Text view, place your cursor in any column heading and right click and select Choose Columns.

A Bin Column Selection dialog appears.

2. Shift + click the column headings you want, and press Enter (Windows) or Return (Macintosh).

Each of the additional columns appear to the right of the selected column.



*If you do not select a column, the new columns will be placed at the far right of the bin.*

# Opening a Settings Dialog in the Project Window

A small change has been made to the Project Window Settings tab that makes it easy to quickly access a Settings dialog. You no longer have to use the mouse in the Settings tab to open a setting's dialog box.

## To quickly open a Settings dialog:

1. In the Project window, select the Settings tab.
2. Type the first letter of the setting you want to open, scroll to the Setting and press Enter (Windows) or Return (Macintosh).

The applicable Settings dialog opens.

# Support for 64 Tracks of Audio

In previous releases of the editing application, you were limited to 24 tracks of audio. With this release, you can have 64 tracks of audio in a single sequence.



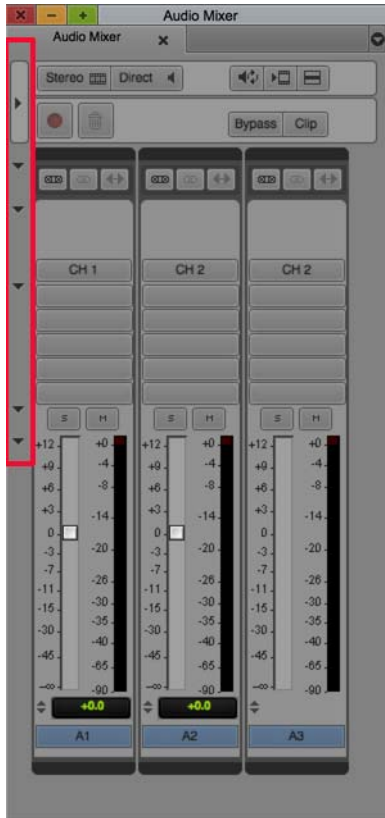
*If you create a sequence with 64 audio tracks in this version of the editing application and try to open it in a previous version of the editing application, you will receive an error message indicating it cannot open a sequence containing more than 24 audio tracks.*

The editing application has a 64 voice limitation:

- 64 - mono tracks = 64 voices
- 10 - 5.1 tracks + 4 - mono tracks = 64 voices
- 8 - 7.1 tracks = 64 voices

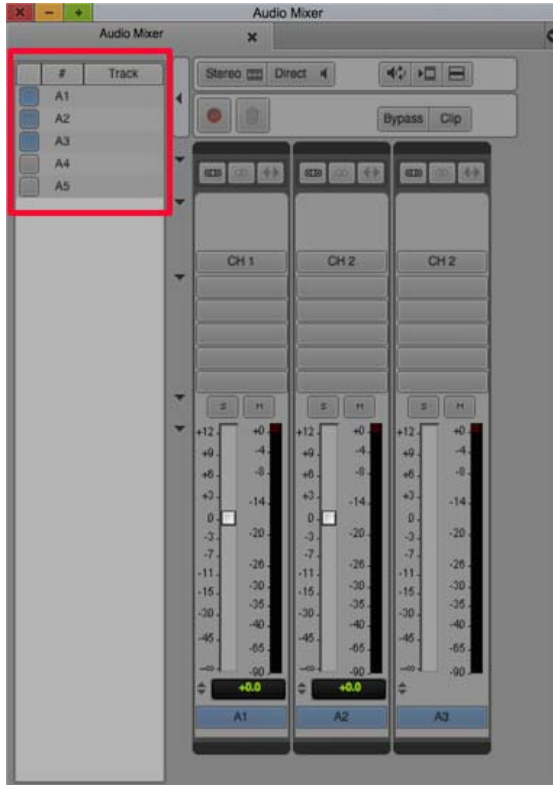
## Audio Mixer Tool Changes

The Audio Mixer Tool has been updated to support 64 tracks of audio. The tool includes triangular openers that allow you to control what parameters are displayed in the Audio Mixer Tool. This helps to easily optimize the vertical space of the Audio Mixer window.



Triangular openers from top to bottom: Show Track Sidebar, Show Group/link/mirror buttons, Show Pan controls, Show effect buttons, Show mute/solo buttons, Show faders/meters

Opening the top triangular opener opens the track selector sidebar. Use the track selector sidebar to select the tracks you want displayed in the Audio Mixer tool. This helps optimize horizontal space when working with higher audio track-counts.



You can sort the columns in the track sidebar. Click the first column heading to sort the tracks according to which are enabled. Click the # column to sort by track numbers. Click the Track column to sort by track label (if applicable).

## Setting Video Memory and Video Frame Cache

A new Video Memory tab has been added to the Media Cache Settings. Here you can allocate video memory for running the editing application. This might be useful for situations where you experience underruns.



*Increasing the video memory could reduce the underruns.*

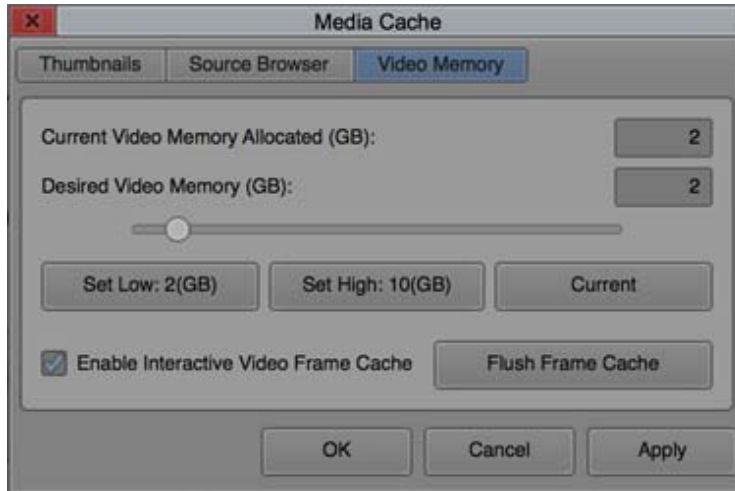
In the Video Memory tab of the Media Cache settings, you can also turn on interactive video frame cache. Turning the cache on allows you to save generated frames of the current playing sequence into a memory storage cache. This saves the need to regenerate each frame every time it is needed during subsequent playback of the sequence. Enabling the cache will result in faster response times while editing.

## Setting the Video Memory

### To set the video memory:

1. In the Settings list in the Project window, select Media Cache.
2. Click the Video Memory tab.

The Media Cache dialog box opens.



3. Do one of the following to have Media Composer reserve memory for the system whenever the editing application is running.
  - ▶ Click the Set Low button to set the memory allocation to the lowest recommended amount based on your system configuration.
  - ▶ Click the Set High button to set the memory allocation to highest recommended amount based on your system configuration
  - ▶ Use the slider to select a desired memory allocation.
4. Click Apply.
5. Click OK.

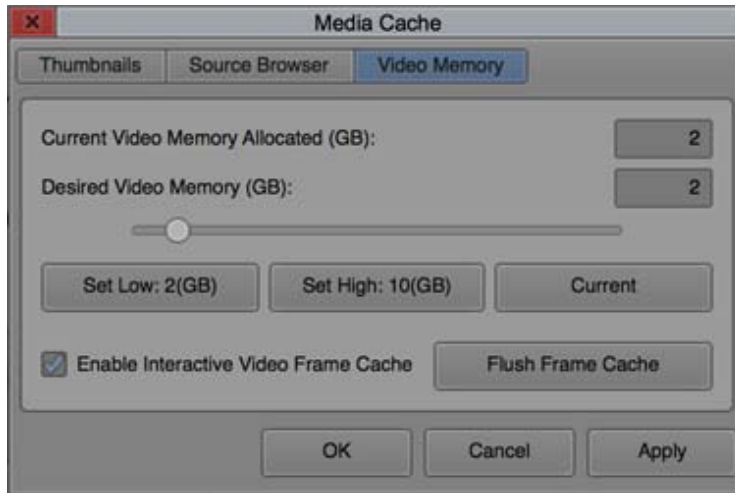
## Setting the Interactive Video Frame Cache

To specify the size of the cache perform the following.

### To set the cache:

1. In the Settings list in the Project window, select Media Cache.
2. Click the Video Memory tab.

The Media Cache dialog box opens.



3. Select Enable Interactive Video Frame Cache.



*Enabling the cache can improve performance by reusing recently played frames. Increasing the Video Memory increases the number of frames that are available for reuse.*

4. Click Apply.

5. Click OK.

## Manage Preset Project Formats

Custom raster dimensions that you have added to your project formats can now be modified or deleted. To modify your presets, click the Manage Presets button in the Project dialog box. In the preset manager, select a preset and overwrite any of the existing values. You can also add or delete presets from this dialog.

## High Dynamic Range Support

Media Composer now includes color spaces for High Dynamic Range (HDR). This provides support for a higher range of video signal (typically at 100 IRE).



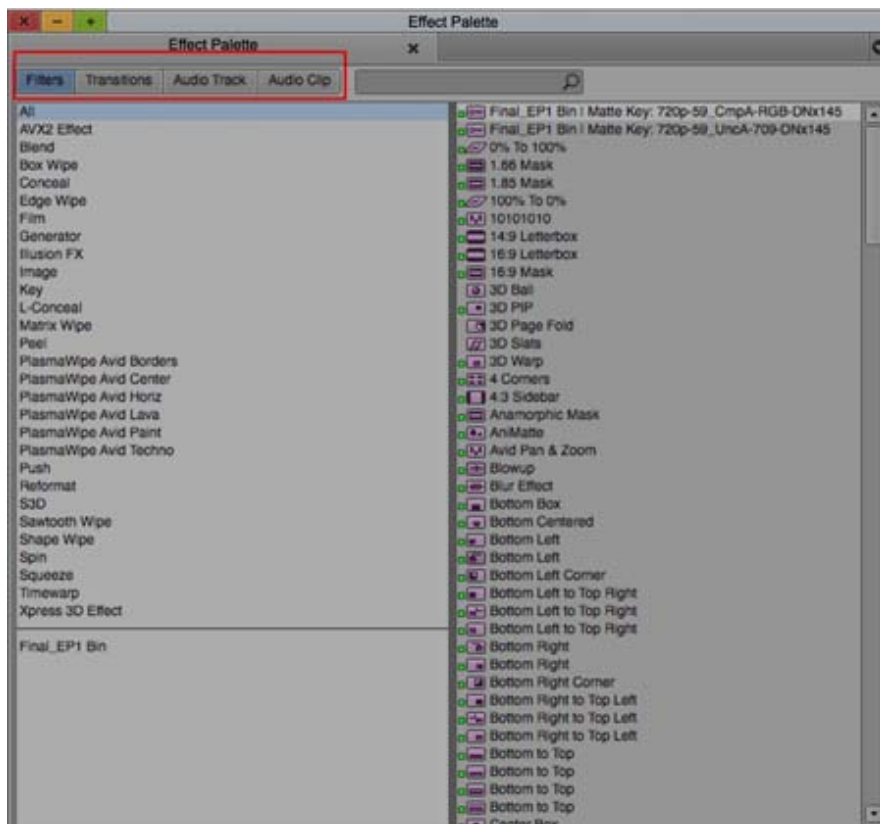
Once the HDR color space is set for the project, the color transformations are handled automatically for all source files. For example, a file with Rec. 709 color space will be mapped to equivalent values in an HDR curve so that you can then view it in an external HDR monitor and color grade with the expanded range.

If you are working in an HD project, Avid recommends using DNxHD444 and HQX because of their 10 bit resolution. For higher than HD, use DNxHR444 and DNxHQX which are 12 bit resolutions.

## Effect Palette Update

The Effects Palette has been improved to allow you to find and filter effects quickly and easily. Effects are now divided into two categories for video (Filters and Transitions); and two categories for audio (Clip Effects and Track Effects).

There is also a Quick Find allowing you search for a specific effect. By default, the search is done on all categories, but you can refine this search by selecting the appropriate category.



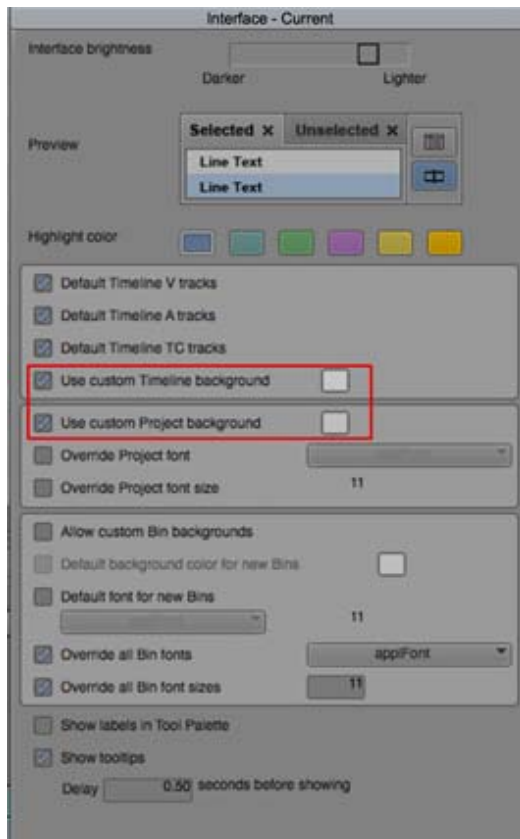
# Changing the Background Color of a Project Window or Timeline

You can easily change the background color of the Project Window and the Timeline.

**To change the background of the Project Window or the Timeline:**

1. In the Settings tab of the Project Window, open the Interface Settings.

The Interface Settings dialog opens.



2. If you want to change the background of the Timeline, select Use custom Timeline background and choose a color from the color picker.
3. If you want to change the background of the Project window, select Use custom Project background and choose a color from the color picker.
4. Click Apply.

The colors selected appear in the background of the Timeline and Project window.

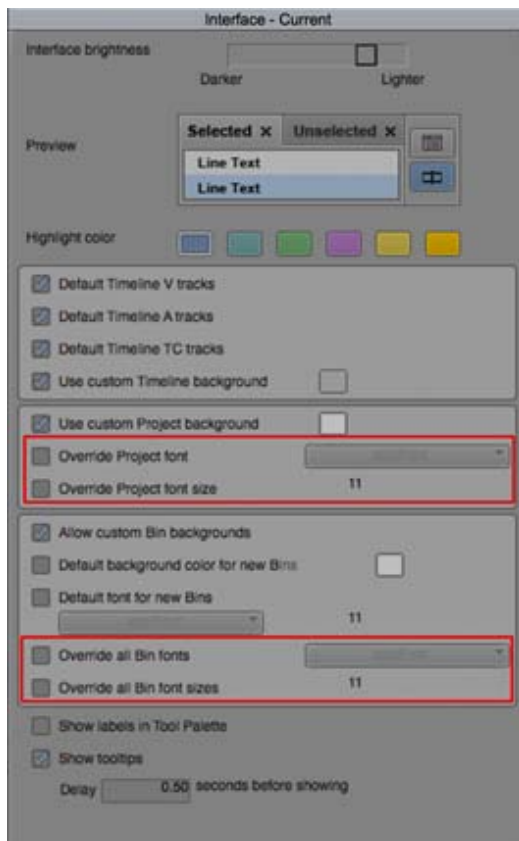
## Overriding Bin and Project Font and Font Size

Normally, project window fonts are stored in the project file and bin fonts are stored in each bin. You can easily override these fonts for all bins and/or projects via the Interface Setting, which is a User setting. This is useful if you share projects and bins with other users or if you are switching between systems. The font and font size you want to see on a desktop might be different than the one you want to see on a laptop. You can set up multiple Interface Settings and switch between them easily. If you turn off the overrides, you will see the original project and bin fonts.

### To override the bin or project font and font size:

1. In the Settings tab of the Project Window, open the Interface Settings.

The Interface Settings dialog opens.



2. To override the Project font, click Override Project font and select the desired font from the pulldown menu.
3. To override the Project font size, click Override Project font size and enter a value in the text box.
4. To override all Bin fonts, click Override all Bin fonts and select the desired font from the pulldown menu.
5. To override all Bin font sizes, click Override all Bin font sizes and enter a value in the text box.
6. Click Apply.

The project and bin font and font size change to the selected settings.

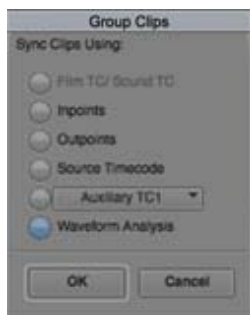
## Grouping Clips by Audio Waveform Analysis

In previous releases, you could group clips by IN points, OUT points, or Timecode. With this release, you can also group clips by audio waveform analysis.

### To group clips by audio waveform analysis:

1. In the bin, select the clips you want to group.
2. Select Bin > Group Clips.

The Group Clips dialog opens.



3. Select Waveform Analysis:
4. Click OK.

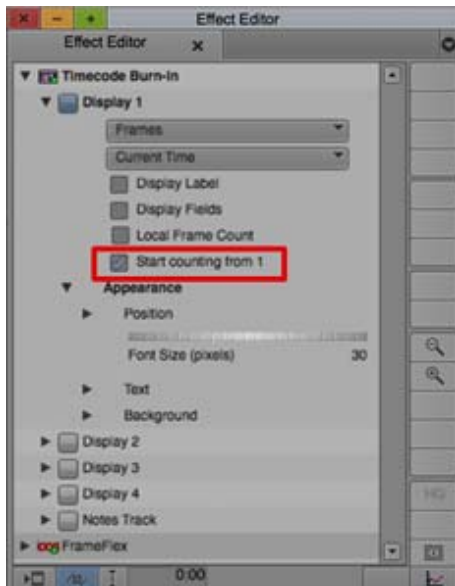
The editing application performs an analysis of the waveforms of the selected clips and creates a group clip. When the analysis is complete, the group clip appears in the bin, with the name of the first clip in the group, followed by the file name extension Grp.n.

The n is the incremental number of group clips with the same name in the same bin.

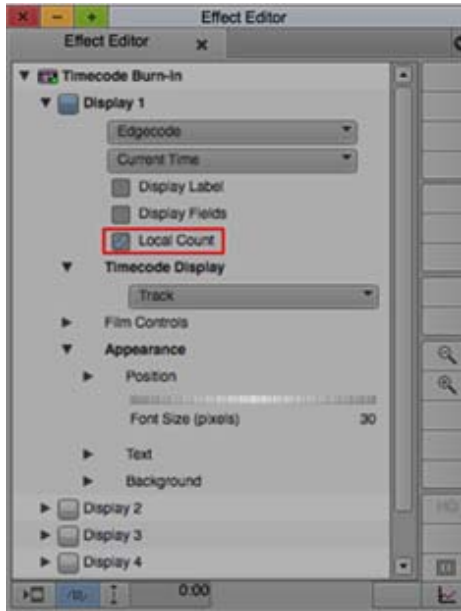
When you play the group clip in 4 split or 9 split mode you can see that the clips are synchronized properly.

## Timecode Burn-In Effect Update

In previous releases, the Timecode Burn-In effect would always count from frame 0. When working with third party vendors, some user's want the ability to refer to the first frame of a segment as frame 1 instead of frame 0. The Burn-In effect provides the option to set the starting frame count at 1.



You can also display a frame count for the effect in feet and frames (35mm 4perf). You can access this in the Timecode burn-in effect, by selecting Edgecode and then selecting Local count.



## Applying the Same Text to a Column for Multiple Items

You can now apply the same text in a Frame Count Start, DPX, and Ink Number column to multiple items in the bin. This is useful for example if you wanted to apply the same frame count start to multiple items in the bin.

### To apply the same text to a column for multiple items:

1. Select the items in the bin to which you want to apply the same text.
2. Right+click the column and select Set <column name> column for selected clips.
3. Enter the text you want to appear in the column for the selected items in the bin.

The text appears in the cells.

## Linking and Importing Broadcast Wave Files

Importing and linking Broadcast Wave files has changed with this release. The change ensures the beginning of an imported or linked audio clip is not cut off at the beginning of the clip.

## Importing Broadcast Wave Files

If importing from a broadcast wave format audio file, and the file indicates a start time in audio samples that is between video frame edges, the beginning of the clip is padded with silence that brings it back to a frame edge. In previous releases, the file's start time was taken to be the nearest frame edge, which meant that in some cases, it would drop samples from the beginning of the file in order to align it to the frame edge. This change is reflected in both the imported media, and in the computation of the start frame number.

The resulting imported clip will span from the beginning of the video frame that contains the first audio sample to the end of the video frame that contains the last audio sample.

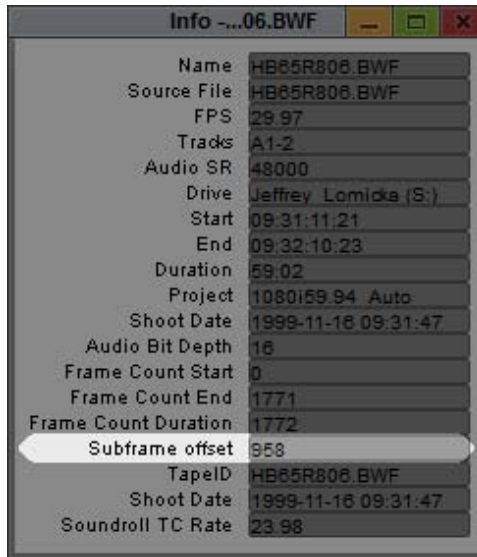
This behavior is controlled through an import setting "Subframe Alignment to Broadcast Wave Start Time." If the setting is off, the file imports with no padding at the beginning of the file.

## Linking Broadcast Wave Files

Prior to this release, AMA linked broadcast wave files linked to begin at the nearest video frame edge to the time indicated in the file. When media start times did not align with frame edges, this resulted in moving the audio by as much as a half-frame. This caused confusion when used in conjunction with media that is aligned more exactly to the time indicated in the file.

With this release, when broadcast wave media is linked through the WaveAIFF plug-in, and the media indicates a start time that is between frame edges, the beginning of the clip is padded with silence that brings it back to a frame edge. This change is reflected in both the linked media, and in the computation of the start frame number. The resulting linked clip will span from the beginning of the video frame that contains the first audio sample to the end of the video frame that contains the last audio sample. This will not apply to any previously linked media, which will continue to play exactly as it did previously.

The Get Info display on the linked master clip indicates how many samples of subframe offset are being applied to the selected clip.



Unlike the import behavior, there is no setting to control this.

Whenever subframe placement of the audio is desired for other downstream operations, it is highly recommended that you consolidate or mix down WaveAIFF linked media before export. This is because other applications are unaware of how to use the subframe alignment information required to nudge the audio data. Consolidated and mixed down media will contain the silence padding required to ensure it aligns correctly to video frame edges.

## Audio Track Ordering Layout Name Change

A new 7.1 track ordering layout is included with this release. This change supports interoperability with Pro Tools. The new track order name is 7.1 SMPTE-DS and represents the order specified in the SMPTE standard SMPTE ST 428. In addition, the 7.1 SMPTE option in previous releases has been renamed 7.1 EXT which aligns with the Microsoft Wave Extensible track ordering. The difference between these two track orders is the location of channels 5, 6, 7, and 8:

- For 7.1 EXT the order is: Left, Right, Center, Low Frequency Enhancement, Left Rear, Right Rear, Left Side Center, Right Side Center
- For SMPTE-DS (per the SMPTE Standard 428), the order is: Left, Right, Center, Low Frequency Enhancement, Left Side Center, Right Side Center, Left Rear, Right Rear

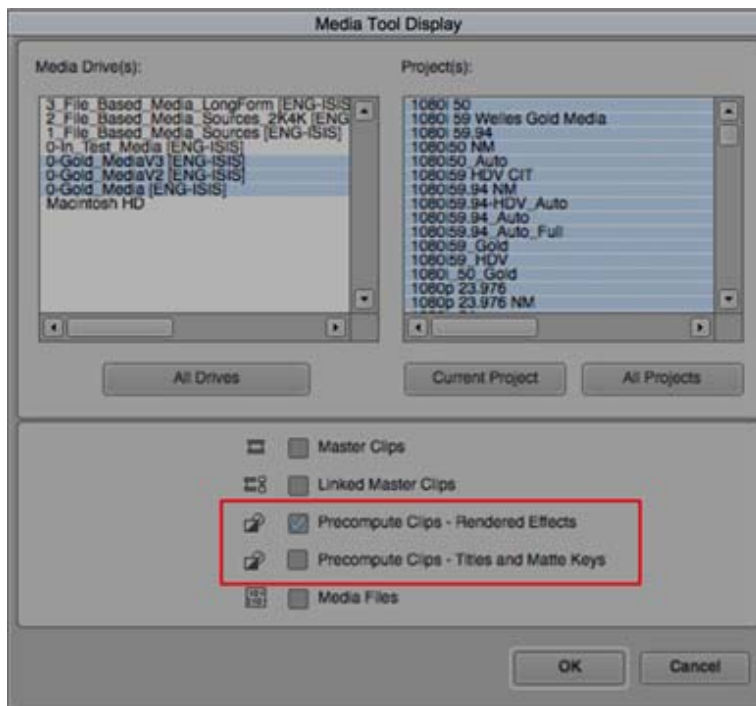


These options appear in the Capture Tool, the Modify MultiChannel Audio window, the Import Settings> Audio tab > Multichannel Audio Edit window, the Link Settings > Link Options > Multichannel Audio Edit window.

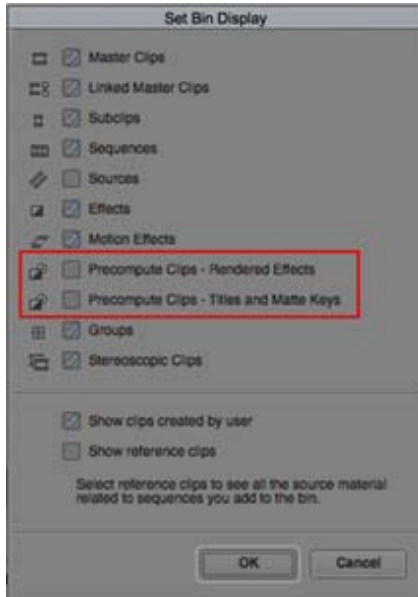
These options also appear in the audio Monitoring Mode menu, which is in the Output pane of Audio Project Settings, and in the Audio Mix tool.

## Identifying Rendered Effects

You can now easily identify rendered effects media. In previous releases, the Media Tool allowed you to select the option Precompute Clips, which included title media, matte key media, and rendered effects media. The Media Tool now includes options so you can choose to see rendered effect precompute clips separately from Titles and Matte Key precompute clips. This will make it easier to delete the rendered effects media.



You can also choose to display the rendered effect precompute clips and the title and matte key effect precompute clips separately in the bin by choosing the options in the Set Bin Display.

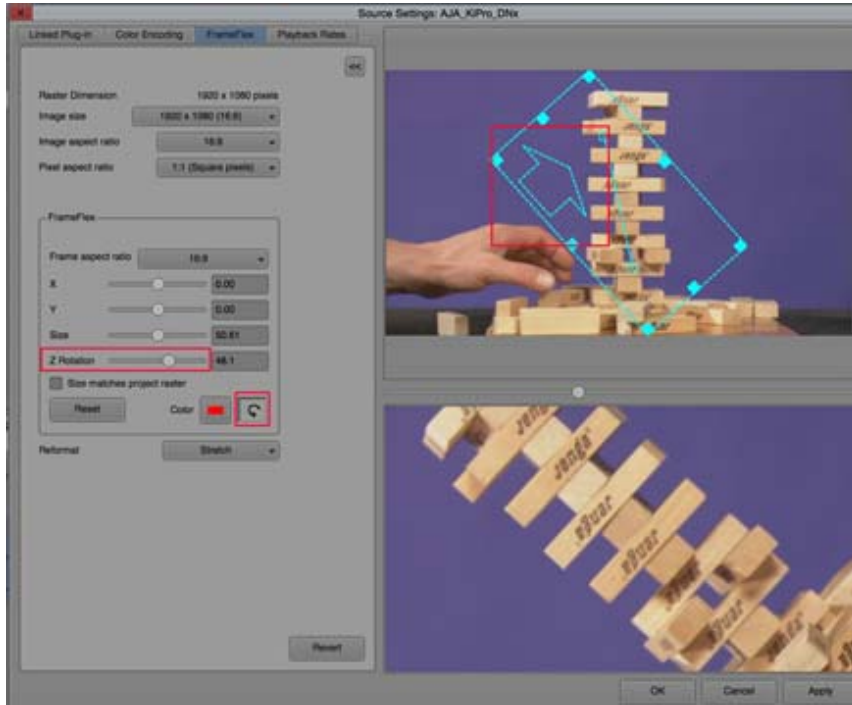


## Frame Flex Rotation

If you need to straighten or rotate your source image, you can now rotate the framing box in the FrameFlex source settings using the Z Rotation slider. There is also a button to turn ON/OFF the rotation handles (next to the color chip). It does not reset the rotation values. It simply hides the handles so you do not rotate by mistake. The ON/OFF button also appears in the Effect Editor. When the rotation handles are turned ON, an arrow appears to show the orientation.



**IMPORTANT: In Media Composer v8.5, if you use the Z Rotation parameter to rotate your media and then bring that media to a bin on a system running an earlier version of Media Composer, the Z-rotation parameter will no longer be applied when you bring that bin back to Media Composer v8.5.**



Left: Z Rotation Slider, Rotation handles ON/OFF button, Arrow showing rotation

Once on the Timeline, these adjustments can also be animated using the Effect Editor. All settings are saved with the clip metadata which can be exported to other applications if necessary. See [“Reframing your Media” on page 27](#).

## Reframing your Media

For various reasons, it is common practice to shoot at a higher resolution than the final output intentions. Framing charts, that define the dimensions of the final output, have been developed for camera viewfinders so that the camera people can keep the proper perspective in view while filming.

The framing chart used during the onset shoot is usually filmed as the first frame of the shot. Some digital cameras even include these framing parameters in the file metadata that is passed through to the Avid editing application. During post production, these framing parameters serve as guidelines for the editing process, and this intended action area can be automatically framed to the project frame size.

During the onset shoot, certain objects (such as lights, flags and other on-set equipment) may inadvertently be recorded within the main viewing area. As part of the dailies process, these objects may be trimmed out from the region of the image that is presented to editorial. If not, then the post editor is required to crop out and reframe the image as necessary.

If the framing parameters were included in the media metadata, then the Framing view will reflect the same area used during the onset shoot. If necessary, the editor can adjust these dimensions manually.

Clips are reframed by applying a spatial adapter on the clip in the bin. The Source Settings dialog has a FrameFlex tab where the dimensions of the framing box can be adjusted. The area within the framing box is what will finally be fit into the project frame when the clip is used in a sequence.

The reformatting settings for each clip are saved in the bin. When the clip is dropped on the Timeline, an icon appears on the clip to indicate that a source adapter effect has been applied. The application accesses the original image and applies the formatting during playback. Effects are applied and rendered based on these settings.



*For clips that have already been used in a sequence, the sequence can be refreshed to frame to the new dimensions.*

When transcoding a sequence that has spatial adapters applied, Avid recommends keeping the source dimensions so that the full dimensions of the media are used—see “Using the Transcode Command” in the Media Composer help.

#### **To set the framing dimensions:**

1. Select one or more clips in the bin, right-click and choose Source Settings.
2. If the image viewers are not displayed in the Source Settings dialog, click the Show Viewers checkbox.
3. Select the FrameFlex tab.

The framing options display with the framing box outlining the full image.



*If framing parameters were passed from a camera vendor that is an Avid partner, then the framing view used on set may be displayed in the viewer.*

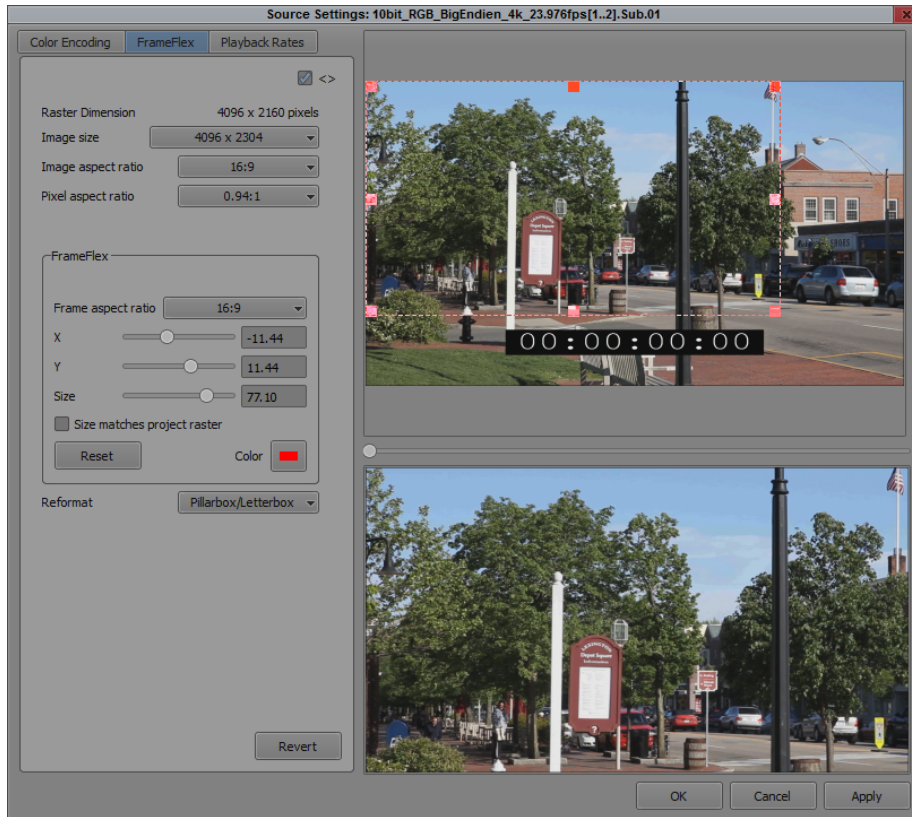
4. In the FrameFlex box, adjust the Framing parameters to set the new dimensions of the framing box.

Option	Description
Raster Dimension	Actual dimensions of the image.

Option	Description
Image Size	<p>Allows you to override the image resolution for the selected clip. This field is also a good indicator for source media that may have been preprocessed to a proxy resolution.</p> <p>For example, you transcode a clip from 4K to HD (without applying the reformatting). When you inspect the source properties, the raster dimensions will be HD (e.g. 1920 x 1080), however you will see that this clip is still 4K in size, telling you that you are currently using a proxy and you will likely relink to the full 4K at some point.</p>
Image aspect ratio	Allows you to change the size of the image according to the selected aspect ratio.
Pixel aspect ratio	Changes the image size according to the selected pixel size. A value of 1 would indicate square pixels (1:1).
Frame aspect ratio	Changes the size of the framing box according to the selected aspect ratio.
X	Reposition the framing box along either the X or Y axes.
Y	
Size	Resize the framing box proportionally.
Z Rotation	Rotate the framing box.
Size matches project raster	Sets the framing box to the same size as the project dimensions.
Color	Set color of framing box outline in the viewer.
Reset	Resets the framing to the original size.
Reformat	
Stretch	Stretches the image (disproportionally, if necessary) to fill the project frame.
Pillarbox/Letterbox	<p>Scales the image proportionally until either the height or the width extends to the project frame. Black bands will appear on the sides (Pillarbox), or on the top and bottom (Letterbox) in order to pad the empty areas of the frame.</p>

Option	Description
Image Size	<p>Allows you to override the image resolution for the selected clip. This field is also a good indicator for source media that may have been preprocessed to a proxy resolution.</p> <p>For example, you transcode a clip from 4K to HD (without applying the reformatting). When you inspect the source properties, the raster dimensions will be HD (e.g. 1920 x 1080), however you will see that this clip is still 4K in size, telling you that you are currently using a proxy and you will likely relink to the full 4K at some point.</p>
Image aspect ratio	Allows you to change the size of the image according to the selected aspect ratio.
Pixel aspect ratio	Changes the image size according to the selected pixel size. A value of 1 would indicate square pixels (1:1).
Frame aspect ratio	Changes the size of the framing box according to the selected aspect ratio.
X	Reposition the framing box along either the X or Y axes.
Y	
Size	Resize the framing box proportionally.
Z Rotation	Rotate the framing box.
Size matches project raster	Sets the framing box to the same size as the project dimensions.
Color	Set color of framing box outline in the viewer.
Reset	Resets the framing to the original size.
Reformat	
Stretch	Stretches the image (disproportionally, if necessary) to fill the project frame.
Pillarbox/Letterbox	<p>Scales the image proportionally until either the height or the width extends to the project frame. Black bands will appear on the sides (Pillarbox), or on the top and bottom (Letterbox) in order to pad the empty areas of the frame.</p>

Option	Description
Centre Crop	Scales the image proportionally to fill the project frame. Areas that fall outside of the project frame will be cropped.
Centre, Keep Size	Centers the image in the viewer without modifying its original size. Areas that fall outside of the project frame will be cropped.
Revert	Reverses any changes you made since the last time the Apply button was clicked.
Apply	Applies all selections that you made so that you can see the changes in the viewers.



5. The bottom viewer displays the framed area as it would appear within the actual project frame.

6. Click Apply.

The new framing of the image will be applied when you drop the clip in the Source viewer or on the timeline. A green dot on the clip in the timeline indicates that spatial changes (in the form of a spatial adapter effect) have been applied to this clip.

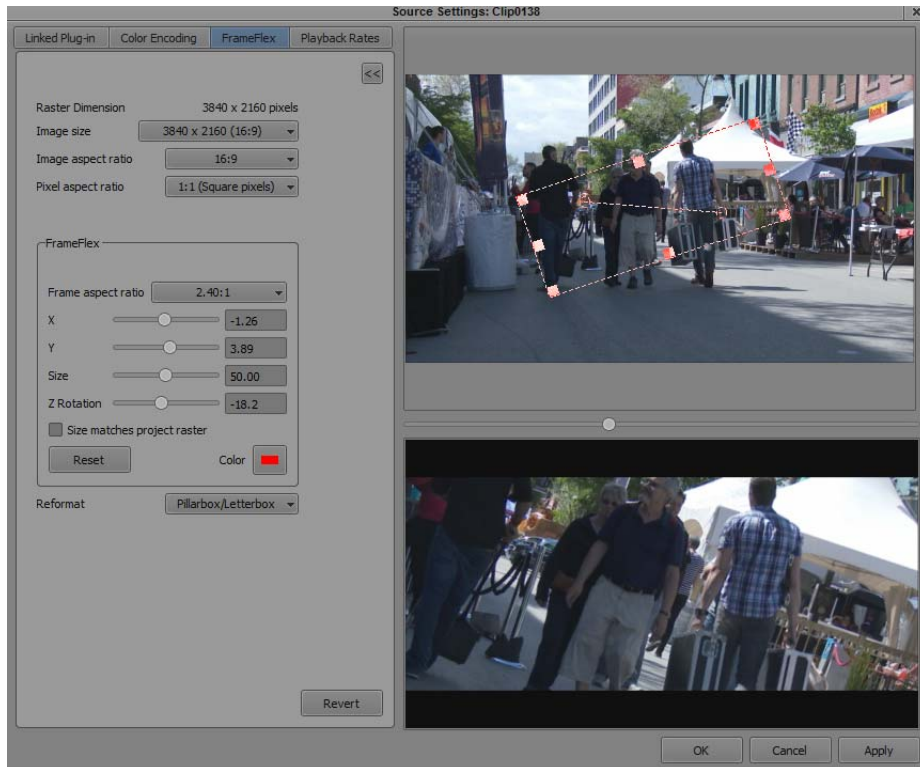
7. If you had placed your clip on the timeline before doing the reframing, you can refresh your timeline with the changes—see “Refreshing Clips to Use Current Clip Attributes” in the Help. (Choose Refresh Sequence > Aspect Ratio and Reformatting Options.)

8. If you want to make further changes to the framing box from the timeline, open the spatial adapter effect for this clip—see “Panning a Shot” in the Help.



## To rotate the image frame:

1. In the Source Settings dialog, use the Z Rotation option to rotate the image. Alternatively, you can use the center handlebar in the top viewer to rotate the image.



2. The bottom viewer displays the framed area as it would appear within the actual project frame.
3. Click Apply.

The new framing of the image will be applied when you drop the clip in the Source viewer or on the timeline. A green dot on the clip in the timeline indicates that spatial changes (in the form of a spatial adapter effect) have been applied to this clip.

4. If you had placed your clip on the timeline before doing the reframing, you can refresh your timeline with the changes—see “Refreshing Clips to Use Current Clip Attributes” in the Help. (Choose Refresh Sequence > Aspect Ratio and Reformatting Options.)

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