What's New for Avid® Media Composer® | Software v8.3

Revision History

Date	Description
February 3, 2015	Removed reference to working in an Interplay environment. This version of the editing application has not been qualified to work with an Avid Interplay environment.
January 9, 2015	Updated the New Features table to add information about 3rd party I/O support.
January 6, 2015	Updated High-Resolution Media Formats Supported by Media Composer.

New Features

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

Feature	Description	For More Info
High Resolution Sequence Formats Supported by Media Composer	The editing application supports higher than HD sequence formats.	See "High-Resolution Media Formats Supported by Media Composer" on page 3.
High-Res Output	The editing application supports exporting DPX (Windows and Mac) and exporting ProRes 444 (Mac only)	See "High-Res Output" on page 6.
Resolution Independence	You can now edit and playback UHD, 2K, and 4K sequences on your Timeline, as well as transcode, render and output high-resolution formats.	See "Resolution Independence" on page 3. See the *Avid High-Resolution Workflows Guide*.
Color Management	Media Composer supports BT/Rec. 2020 and DCI-P3 color spaces.	See "Color Management" on page 4.

Feature	Description	For More Info
Frame Rates	The editing application supports additional frame rates.	See "Frame Rates" on page 4.
DNxHR (High Resolutions)	A new Avid codec family, DNxHR will support any frame size to allow 4K and proxy workflows.	See "Introduction of DNxHR (High Resolution)" on page 5.
Play and Render Sequence in Proxy	You can work with a "Proxy Timeline". You can play your sequence at 1/4 or 1/16 of the current project resolution.	See "Play and Render Sequence in Proxy" on page 5.
High-Res 4K Monitor Support	You can preview your media at Full Size through the "Full Screen Playback" option.	See "High-Res 4K Monitor Support" on page 6.
Title Tool Replacement for High Resolution Projects	For higher than HD projects, use the New Blue Titler to create titles.	See "Title Tool Replacement (for High-Res projects)" on page 6.
Quick Filter in the Bin	A quick filter text box has been added to bins to allow you to filter items in a bin.	See "Filtering Items in the Bin" on page 7.
Using the List Tool	You can create EDLs, Cut Lists, and Change Lists within the editing application. The Lists Tool replaces the separate EDL Manager and FilmScribe applications.	See "Using the Lists Tool" on page 7.
The Color Info Tool	The Color Info tool allows you to see the RGB values for the pixels under the pointer.	See "The Color Info Tool" on page 25.
Exporting as DPX	The editing application supports exporting as DPX files.	See "Exporting as DPX" on page 28.
Additional Column Headings	Frame Count Start, Frame Count End, Frame Count Duration, and Reel columns have been added to the editing application.	See "Additional Column Headings" on page 30.
I//O devices	Avid has qualified the following 4K I/O hardware from 3rd parties: • AJA Kona 4 • AJA IO 4k Thunderbolt 2 • Blackmagic Design BMD Decklink 4K Extreme • Blackmagic Design UltraStudio 4K Thunderbolt 2	See 3rd party hardware documentation.

High-Resolution Media Formats Supported by Media Composer

Link via AMA

The following high-resolution (higher than HD) file formats can be linked by Avid Media Composer using AMA plug-ins:

- DPX
- XAVC-I
- RED
- QuickTime ProRes

Your system configuration, storage, media resolution, and frame rate will all play a factor in the real-time performance when playing back your sequences. For smooth playback, we recommend transcoding your high-res media.

Import

The following high-resolution (higher than HD) file formats can be imported by Avid Media Composer:

- QuickTime ProRes

Consolidate

The following high-resolution (higher than HD) file formats can be consolidated by Avid Media Composer:

- DNxHR

Output

The following high-resolution (higher than HD) file formats can be exported from Avid Media Composer:

- DPX (from AMA File Export menu)
- QuickTime ProRes (Mac systems only with ProRes codec installed)
- JPEG2000

Resolution Independence

Media Composer introduces full support for larger than HD projects. These High-Resolution formats include Ultra HD and DCP (2K and 4K). You can now edit and playback UHD, 2K, and 4K sequences on your Timeline, as well as transcode, render and output high-resolution formats.

Color Management

In addition to Rec. 709, Media Composer supports BT/Rec. 2020 and DCI-P3 color spaces. The source and record viewers also support these color spaces if your monitor has been calibrated for them. In addition, you can expand the color levels to show full scale video by right-clicking and selecting the Display Color Space > ... [full range] option in the list.

LUT Management

In the Color Management settings, it is now possible to install LUTs that will either be available across projects, or private to the current project.

LUT Effect

A new effect allows you to apply a Look-up table (LUT) on the timeline. This effect is available under Image > Color LUT > *installed LUTs*.

Frame Rates

Media Composer now supports the following high frame rates for progressive media: 47.952, 48, 50, 59.94, 60.

Editing Timebase

When editing with high frame rates, you will have the choice of editing within standard editing rate boundaries. Media Composer will accommodate frame rates that are divisible by 2. For example, when editing with 50p and 60p frame rates, the editing timebase is set to 25p and 30p respectively in order to avoid artifacts when moving these projects to lower standard rates.

Note that, the timecode display will show the current editing frame rate, but playback will still be done at the project frame rate.

For more information, see "Changing the Edit Timebase" in the *Avid High-Resolution Workflows Guide*.

Two-Frame Safety

This safety is especially useful when working with interlaced media to ensure that you maintain your cuts on the right field.

Playback Rate in Source Settings

If a clip's frame rate was previously converted to the project's frame rate, you can reset the clip to the original frame rate in the clip's source settings.

Alternatively, you may want to convert the clip's frame rate to match the project frame rate. This can also be done through the clips's source settings.

For more information, see "Setting the Playback Rate of a Clip" in the *Avid High-Resolution Workflows Guide*.

Introduction of DNxHR (High Resolution)

With the introduction of High-Res native editorial enhancements, Avid also solves high storage requirements by introducing DNxHR. The new Avid codec family, DNxHR will support any frame size to allow 4K and proxy workflows. This new codec family includes the following:

• DNxHR LB (low bandwidth)

• DNxHR SQ (standard quality)

• DNxHR HQ (high quality)

• DNxHR HQX (high quality 10-bit)

• DNxHR 444 (cinema quality)

DNxHD will still be used for HD resolutions. These codecs are only available for HD frame sizes.

Play and Render Sequence in Proxy

Improve your editing experience by working in "Proxy" mode. Use the Proxy setting in the Project Format dialog to play your sequence at 1/4 or 1/16 of the current project resolution. This will allow you to edit more fluidly from your original media, and render your effects to a proxy resolution. Set the Format settings back to Off, and you just need to re-render the effects to high-resolution. Should you switch back to proxy mode, the rendered proxy media will still be available.

For optimum performance, you can first transcode your media to 1/4 res and then set your timeline to playback at 1/4. By matching the proxy settings of the media and the timeline, there is no on-the-fly processing required when these clips are played. For more information, see "Using a Proxy Workflow" in the *Avid High-Resolution Workflows Guide*.

Project Settings

The project dialog box now contains additional settings that support high-resolution formats and proxy workflows. For more details, see "Creating a New Project" in the Media Composer help.

To give you a quick reference, the timeline header now displays the project resolution, frame rate and if the proxy mode is used.

New Transcoding Options

You will now be able to transcode to the Frame Size of your original media, regardless of the Project you are working in. You can transcode to the Original, 1/4 or 1/16 of the Frame Size. (Working at 1/16th will allow you to transcode your high-res media to even lower than HD resolutions).

When transcoding, you can now choose to keep the media at its original frame rate. This will allow you to relink back to the AMA source material after editing with the transcoded media (previously a limitation in Media Composer).

High-Res 4K Monitor Support

If you work with a 4K computer monitor, you can preview your media at Full Size through the "Full Screen Playback" option. You can also view your native High-Res media on a client monitor via third-party I/O hardware. Simply select the appropriate option from the Video Output tool.

High-Res Output

Media Composer will initially provide the following file-based output types that support greater than HD:

- DPX export through the Avid File Sequencer.
- QuickTime (ProRes 444 is supported on the Mac only)

Title Tool Replacement (for High-Res projects)

We are migrating our titling application to support 3rd party titling applications including NewBlue® Titler Pro, which is already bundled with Media Composer. At present, you can use the NewBlue Titler to create titles and rasters for high-res projects directly within Media Composer.

The old Media Composer Title Tool does not work with larger than HD projects or with HD projects with the new frame rates (30, 50, 59.94, 60).

Using the New Blue Titler, does not work from the clip menu. Either drop the NewBlue effect onto a clip or select the clip in the Timeline and right-click and select Add/Edit Title.

Filtering Items in the Bin

The editing application bins include a quick filter text box that allows you to quickly filter out items in a bin that match the filter criteria. This is helpful when you have a large number of items in a bin and want to quickly filter for specific items.

To filter items in a bin:

1. Open the bin.

2. Enter text in the filter text box.
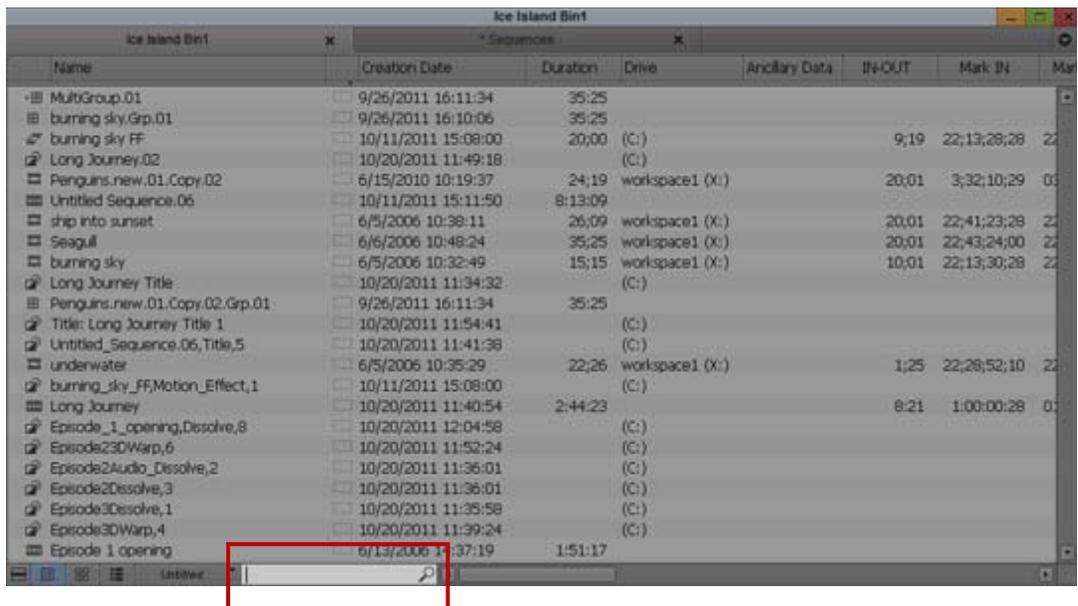
The search will display only those items in the bin that match the search criteria.

If individual columns are selected, the search is performed on the information in the selected columns. If no columns are selected, the search is performed on all displayed columns.

Using the Lists Tool

The following describes how to read and create lists in Avid Media Composer. You can generate EDLs, Cut Lists, and Change Lists. The List Tool provides one tool to create these lists. The options within the tool change depending on the output format you select.

What is an EDL?

An edit decision list (EDL) is an instruction list for edits you make. The EDL is used for exchanging information between editing systems. This list can include cuts, wipes, dissolves, fades, and black edits. It lets you take a project from Avid Media Composer to a high-end, nonlinear, online editing system. It is common to use EDLs in DI (digital intermediate) workflows.

What is a Cut List?

A cut list is generated the first time to conform a work print, negative, sound track, or optical effect to match the sequence.

What is a Change List?

A change list is generated to simplify the process of updating conformed cuts to match and compare changes in versions of the sequence or sequences.

The Lists Tool

The following describes the User Interface of the Lists Tool. Select Output > Lists Tool. The List Tool opens. The left side of the Tool is where you setup the EDL, Cut List, or Change List.
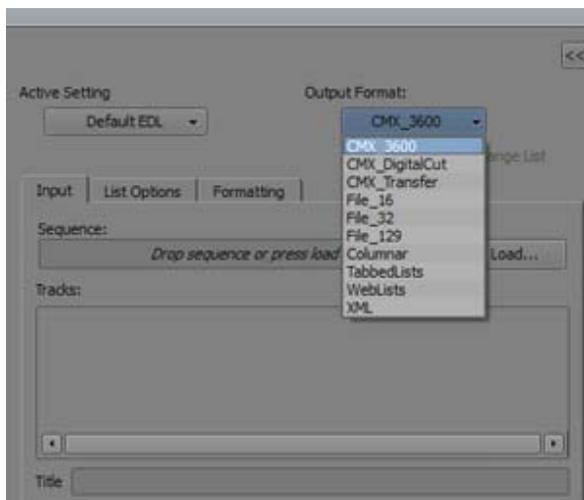
The options in the Output Format pulldown menu determine the output. The options in the List Options and Formatting tabs change depending on which Output Format you select.

Input Tab

The Input tab is where you drag and drop the sequence into the List Tool. You can also click the Load button to load the current sequence from the Timeline into the List Tool. The tracks for that sequence populate the Tracks pane in the Input tab. You can enable or disable any tracks to be included in the list.
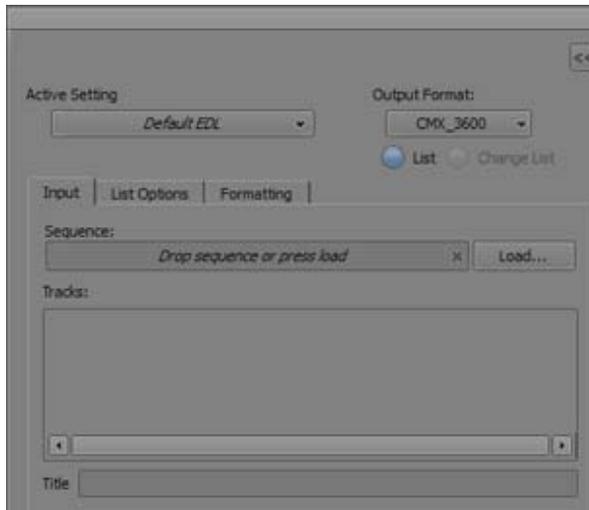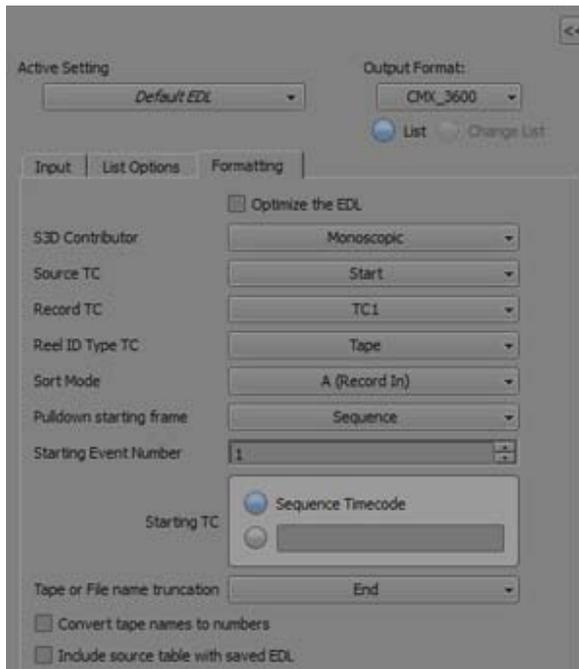

List Options Tab

The options in the List Options tab change depending on the Output Type.
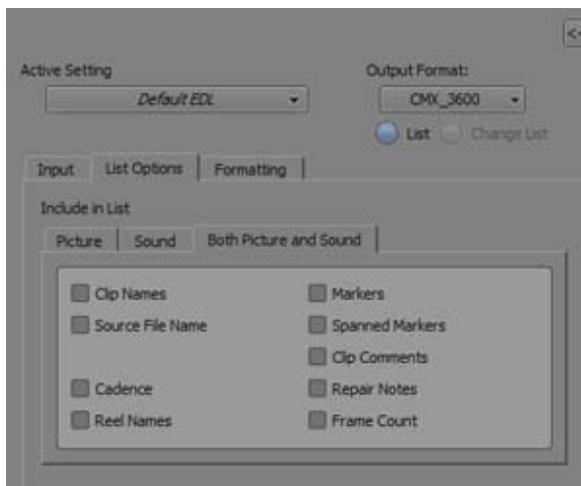
Formatting Tab

The options in the Formatting tab change depending on the Output Type. The options display if they are relevant to the selected Output Format.

Preview Pane

The right side of the Lists Tool displays the Preview pane. This is where you can preview, save or edit the EDL, Cut List or Change List.
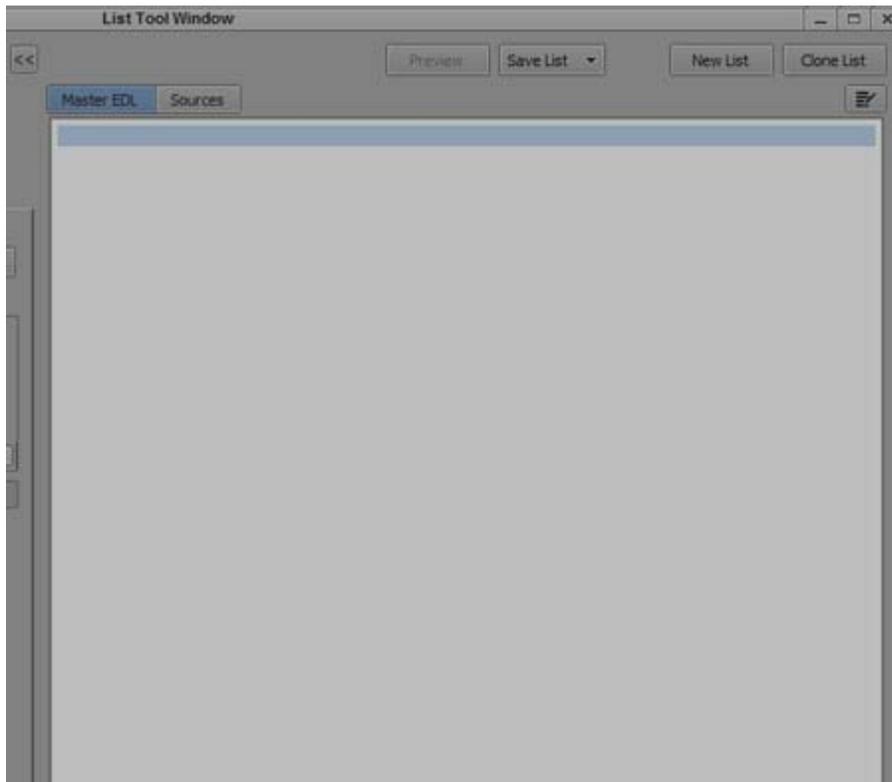
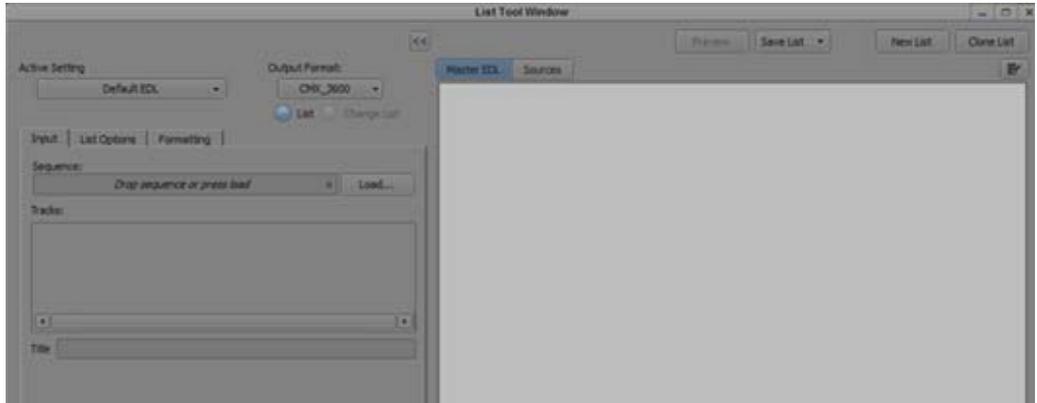Once you click the Preview button, the EDL or Cut List populates the window.

Creating a List

To create a List, perform the following.

To create a List:

1. Select Output > Lists Tool

   The Lists Tool opens.

2. From the Output Format pulldown menu, select the type of output you want to create.

   If you are creating an EDL list, choose one of the EDL Output Types; CMX_3600, CMX_DigitalCut, CMX_Transfer, File_16, or File_32, or File_129. If you are creating a Cut List or Change List, choose one of the Cut List or Change List Types; Columnar, TabbedLists, WebLists, or XML.

3. Drag the sequence from the bin into the Input tab Sequence field. Or load a sequence into the record monitor and click the Load button to load the current sequence from the record monitor.

   The title of the List is automatically populated based on the sequence name. You can choose to edit the List name. The tracks associated with the sequence appear in the Tracks pane.

4. By default, all video, audio and data tracks are enabled. Click to enable/disable the tracks you want to appear in the list.

5. Click the List Options Tab.

6. Select the options you want to appear in your output list. See the "EDL: List Options" on page 15 or "Cut List: List Options" on page 19 or "Change List: List Options" on page 22 depending on the Output Format.

7. Click the Formatting tab and select how you want the list to be formatted. See "EDL: Formatting Options" on page 15 or "Cut List or Change List: Formatting Options" on page 23.

8. Select the Preview button.

   The List appears.
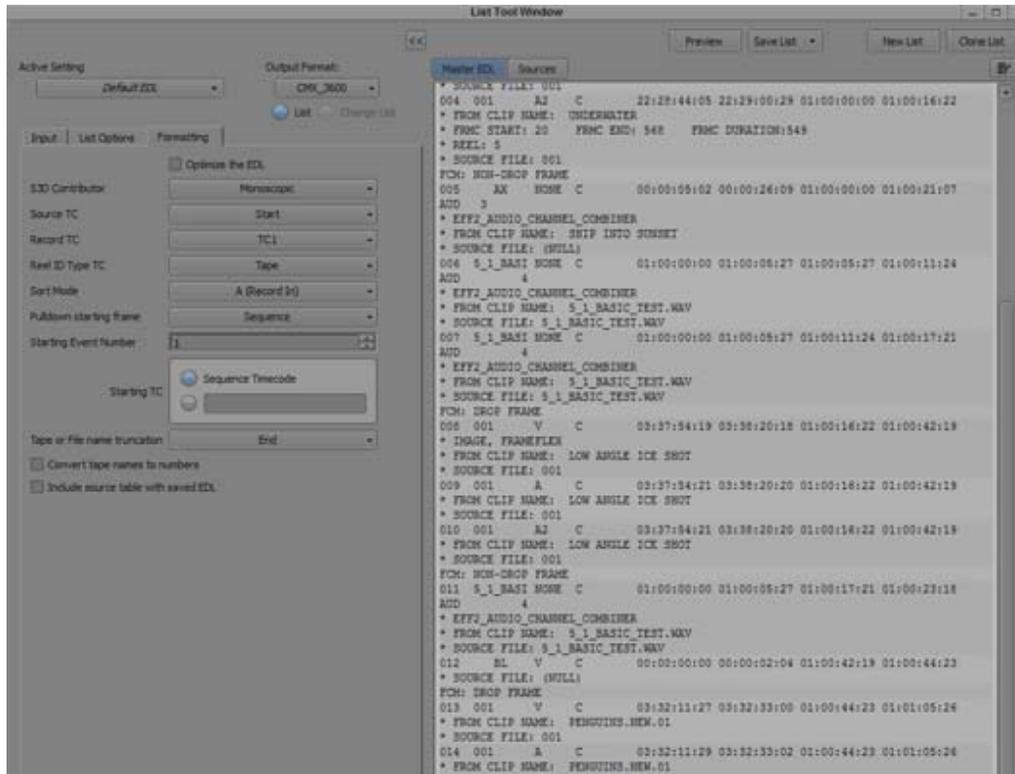
9. Click Save List to save the list to your system. You can choose to save the List as one file or multiple files. If you choose multiple files, the file names include the tracks; v1, v2, v3, if applicable.

10. (Optional) You can also click the New List button which opens a blank list. This might be helpful in creating a new list and comparing multiple lists.

11. (Optional) Click the Clone List button to open a duplicate list based on the current options and format settings.

12. (Optional) To compare the lists, simply click the collapse button and move the windows side by side.

Editing a List

Once you create an EDL, Cut List or Change List, you can edit it.

To edit a List:

1. Choose the list you want to edit.

2. Click the Preview button.

3. After creating a Preview list, click the Edit button in the upper right corner of the Preview window. Or, right mouse click inside the Preview window and select "Switch to Edit Mode."

4. Make your edits to the list.

5. (Optional) While in Edit mode, use Ctrl+F (Windows) or Commad+F (Macintosh) to open the Find Replace window at the bottom of the Preview List. Enter the text you want to search for and click the arrows to find the text. You can enter replacement text in the Replace text box. Click the arrows again to find the next instance. You can also choose to replace all instances of the text.
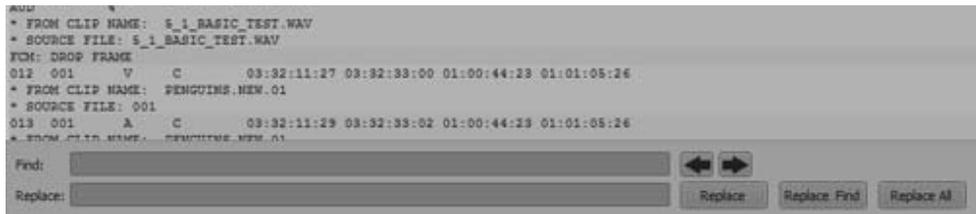
6. Click Save List to save the list to a location on your system. You can choose to save the List as one file or multiple files.

If you click Preview before saving the list, a List Tool message appears asking if you want to save the changes before Previewing another list.

Importing an EDL

You can import an EDL.

To import an EDL:

1. In the editing application, select File > Import EDL.

2. In the Select File to Open dialog, navigate to the location of the .edl file.

3. Select the file and click Open.

   A dialog opens.

4. Select the desire Frame Rate, Project Type and Audio Mapping options.

5. Click OK.

   The Select Bin window opens.

6. Select one of the bins listed inside the window or click New Bin to create a new bin.

   A message displays asking you to Decompose the sequence before trying to use it.

7. Click OK.

8. Click on the imported sequence inside the bin.

9. From the Clip menu, select Decompose.

10. Select the desired Decompose options.

11. Click OK.

The decompose process begins. When the decompose process is completed, the bin contains decomposed clips (.new) and a decomposed sequence if "Create New Sequence" was enabled inside the Decompose window. The Video resolution of the Decomposed clips is determined by the Capture tab inside the Media Creation Setting.

The Decomposed master clips and sequences are available for conform.

EDL: List Options

Choose from the following options:

Option	Description
Picture	Select the picture options you want included in your EDL. You can choose to include: Dissolves, Other Transitions, 3rd Party Transitions, Black Edits, Color Effects, Other Segment Effects, 3rd Party Segment Effects and Color Decision Lists.
Sound	Select the sound options you want included in your EDL: Dissolves, Volume, Track Patching, EQ Effects and Track Effects:
Both Picture and Sound	Select the picture and sound options you want included in your EDL: Clip Names, Source File Name, Cadence, Reel Names, Markers, Spanned Markers, Clip Comments, Repair Notes and Frame Count

EDL: Formatting Options

Choose from the following options:

Option	Description
Optimize the EDL	*Optimization* is a process that simplifies your EDL. An optimized EDL contains simplified text and events that are combined or condensed to speed up the online assembly process. If two tracks of video and one channel of audio share the same Record IN and Record OUT timecodes and they come from the same source tape, optimization expresses them as one edit instead of three.
S3D Contributor	Monoscopic: Set this option for standard sequences, or if you only want to use the "leading eye" clips in a stereoscopic sequence.
	S3D Left: Only displays the left eye clips.
	S3D Right: Only displays the right eye clips.

Option	Description
Source TC	Start: The starting timecode
	VITC: The vertical interval timecode
	Sound_TC: Audio timecode.
	Film_TC: Film timecode
	TC24: 24 fps
	TC25PD: 25fps with pulldown
	TC25: 25fps
	TC30: 30fps
	AUX_1_TC - AUX_5_TC: The timecode from the timecode column in the bin
	AUX_TC_24: 24 fps auxiliary timecode
Record TC	TCI: The timecode from the timecode column in the bin
	TC24: 24fps
	TC25PD: 25fps with pulldown
	TC25: 25fps
	TC30DF: 30fps drop frame
	TC30ND: 30fps non-drop frame
	TC30NP: 30fps without pulldown
Real ID Type TC	Tape: Uses the reel ID from the tape source from which you captured your video.
	Sound_Roll: Uses the reel ID from the sound roll source, (if you entered this information in the bin). Used for film projects.
	Camera_Roll: Uses the reel ID from the camera source (if you entered this information in the bin). Used for film projects.
	Lab_Roll:
	Disk_Label:

Option	Description
Sort Mode	Select the sort mode for the EDL.
	• A (Record In) Sorts by the Record In timecode. This results in Sequential editing from one IN point to the next. Use this when you have a short show, want to generate a simple, flexible EDL, or need to make many last-minute decisions.
	• B (Source, Record In) Sorts by the individual source reel, then by the Record IN timecode. This results in checkerboard editing on the record reel, one source reel to the next. Use this when the length of source material is roughly equivalent to the length of the finished show.
	• C (Source, Source In) Sorts by individual source reel, then by the Source IN timecode. This results in checkerboard editing on the record reel, with sequential playback of material from each source. Use this when the length of source material is much greater than the length of the finished show.
	• D (Source, Record In, Effects at End) Sorts by individual source reel, then by the Record In timecode. Sorts effects at the end. Use this when the length of source material is roughly equivalent to the length of the finished show, and there are many special effects.
	• E (Source, Source In, Effects at End) Sorts by individual source reel, then by the Source IN timecode. Sorts effects at the end. Use when the length of source material is much greater than the length of the finished show, and there are many special effects.
	• S (Source Start) Sorts by Source IN timecode only. This results in Direct sequential transfer of source material, in matching order on the record reel.
	• C (Source Start, Source In) Sorts by Source IN timecode, then by individual source reel. This results in Direct sequential transfer of source material by record reel. Use when the length of source material is much greater than the length of the finished show.
Pulldown starting frame	Selects the start frame for your generated EDL
Starting Event Number	You can modify the Starting Event Number.
Starting TC	Selects the sequence starting timecode. You can enter a new sequence starting timecode using drop-frame (;) or non-drop frame (:) numbers

Option	Description
Tape or File Name truncation	Determines which part of the tapename you want to save.
	• End - Truncates the end of the tape name. For example, CHICAGO138101 becomes CHICAGO1.
	• Middle - Takes half of the allowed number of characters from the front and the other half from the end of the tape name. For example, CHICAGO138101 becomes CHIC8101.
	• Beginning - Removes the beginning of the tape name. For example, CHICAGO138101 becomes GO138101.
	• First_N - Keeps the first character and the last character and removes everything in between. For example, CHICAGO138101 becomes CO138101.
Convert tape names to numbers	Changes all generated EDL reel ID names to numbers.
Include source table with saved EDL.	Includes the source table information whenever you save an EDL.

Cut List: List Options

Choose from the following options:

Option	Description
Assemble	The Assemble list shows the order in which a sequence's clips, optical effects, or standard dissolves and fades are assembled from start to finish in the edited sequence. The assemble list also flags duplicate frames.

- LFOA: (Last Frame of Action) Determines the duration of a sequence at the last frame that is part of the sequence, minus the length of the head and/or tail. Select the option and type the length of the head and/or tail.

- Mark Short Cuts: Searches the assemble list for cuts that are shorter than a user-specified minimum. All such cuts are flagged with a comment. Not included in XML output.

- Mark Jump Cuts: Searches the assemble list for jump cuts that are shorter than a user-specified minimum. All such cuts are flagged with a comment. A jump cut occurs when a short piece of material is "missing" between adjacent cuts from the same source material. Not included in XML output.

- Show Dupe Refs:

- Include Pull List:

- First Sort by: Controls how a list is sorted. None, Labroll, Camroll, Soundroll, Scene and Take, Name, and Reel #

- Second Sort by: Same choices as First sort by

- Third Sort by: KN Start, Auxiliary Ink, Transfer, DPX, VFX, Start TC, Film TC, Sound TC, Auxiliary TC1

- Order: Heads Out (ascending edge numbers) Tails Out (descending edge numbers)

- Place Separators: Select this option to control where separators are placed in the list. The options are First Sort Field, Second Sort Field, Keycode or Ink Prefix, and Prefix or every 1000 ft. The separator's appearance depends on the template; usually it appears as a horizontal line.

- Include Leader: Check this option to include leader in the list.

- Include Opticals: Check this option to include opticals in the list.

Option	Description
Optical	Optical lists specify the source material required to create special effects and any edit event other than a straight cut, such as a dissolve or fade that must be sent to an optical house for creation. The optical list presents each optical event in the order in which it appears in the sequence and includes specifications based on either ink numbers, Aux ink numbers, or key numbers. • Key Frames: Controls whether or not optical keyframes from the sequence are shown in the optical list.If you change the keyframe parameters of an effect, the change is reflected in the change list only if you select this option. • Optical Footage: Shows footage relative to the beginning of each optical. • Page Breaks Between Opticals: Each optical prints on a separate page. • Include Optical Pull List: • First Sort by: Controls how a list is sorted. None, Labroll, Camroll, Soundroll, Scene and Take, Name, and Reel # • Second Sort by: Same choices as First sort by • Third Sort by: KN Start, Auxiliary Ink, Transfer, DPX, VFX, Start TC, Film TC, Sound TC, Auxiliary TC1 • Order: Heads Out (ascending edge numbers) Tails Out (descending edge numbers) • Place Separators: Select this option to control where separators are placed in the list. The options are First Sort Field, Second Sort Field, Keycode or Ink Prefix, and Prefix or every 1000 ft. The separator's appearance depends on the template; usually it appears as a horizontal line. • Include Leader: Check this option to include leader in the list.
Dupe	Dupe lists refer to all the source material that the lab must duplicate before conforming the film negative. Additionally, dupe lists display unintended duplicate frames you might have edited into the sequence. • Assume Handles: Specify the number of frames for handles during dupe checking. The frames are added to the beginning and the end of each clip before checking for overlap. (The handles are not reflected in a list but are used for internal calculations.) • Print w/Handles: Specify the number of frames for handles after dupe checking. The frames are added and displayed at the beginning and end of each clip in the list.

Option	Description
Scan	The Scan list type is a pull list for all elements in the Timeline including effects and layers.
	• First Sort by: Controls how a list is sorted. None, Labroll, Camroll, Soundroll, Scene and Take, Name, and Reel #
	• Second Sort by: Same choices as First sort by
	• Third Sort by: KN Start, Auxiliary Ink, Transfer, DPX, VFX, Start TC, Film TC, Sound TC, Auxiliary TC1
	• Order: Heads Out (ascending edge numbers) Tails Out (descending edge numbers)
	• Place Separators: Select this option to control where separators are placed in the list. The options are First Sort Field, Second Sort Field, Keycode or Ink Prefix, and Prefix or every 1000 ft. The separator's appearance depends on the template; usually it appears as a horizontal line.
Picture	Select the picture options you want included in your Cut List or Change List. You can choose to include: Dissolves, Other Transitions, 3rd Party Transitions, Black Edits, Color Effects, Other Segment Effects, 3rd Party Segment Effects and Color Decision Lists.
Sound	Select the sound options you want included in your Cut List or Change List: Dissolves, Volume, Track Patching, EQ Effects, Track Effects, and AudioSuite Effects.
Both Picture and Sound	Select the picture and sound options you want included in your Cut List or Change List: Clip Names, Source File Name, Cadence, Reel Names, Clip Comments, Repair Notes and Frame Count

Change List: List Options

Choose from the following options:

Option	Description
Change	A change list is generated to simplify the process of updating conformed cuts to match and compare changes in versions of the sequence or sequences.
	• Show only changes: Limits the entries in the change list to insertions, deletions, trims, and moves. There is no explicit indication of sections that remain unchanged. If this option is not selected, the change list also contains events that explicitly show sections that remain unchanged.
	• Combine Deletions: Forces each group of adjacent deletions to be combined into a single event. If this option is not selected, each deleted clip has its own event in the change list.
	• Preview Code: Displays preview code numbering.
Change Pull	The change pull list is similar to the pull list, except that it lists only new clips or effects that you need to insert into the updated cut.
	• First Sort by: Controls how a list is sorted. None, Labroll, Camroll, Soundroll, Scene and Take, Name, and Reel #
	• Second Sort by: Same choices as First sort by
	• Third Sort by: KN Start, Auxiliary Ink, Transfer, DPX, VFX, Start TC, Film TC, Sound TC, Auxiliary TC1
	• Order: Heads Out (ascending edge numbers) Tails Out (descending edge numbers)
	• Place Separators: Select this option to control where separators are placed in the list. The options are First Sort Field, Second Sort Field, Keycode or Ink Prefix, and Prefix or every 1000 ft. The separator's appearance depends on the template; usually it appears as a horizontal line.
	• Include Leader: Check this option to include leader in the list.
	• Include Opticals: Check this option to include opticals in the list.
Change Discard	The change discard list displays each clip that has been removed from the updated sequence.
Change Optical	Key Frames: Controls whether or not optical keyframes from the sequence are shown in the optical list. If you change the keyframe parameters of an effect, the change is reflected in the change list only if you select this option.
	Optical Footage: Shows footage relative to the beginning of each optical.
	Page Breaks Between Opticals: When selected, each optical prints on a separate page.

Option	Description
Picture	Select the picture options you want included in your Cut List or Change List. You can choose to include: Dissolves, Other Transitions, 3rd Party Transitions, Black Edits, Color Effects, Other Segment Effects, 3rd Party Segment Effects and Color Decision Lists.
Sound	Select the sound options you want included in your Cut List or Change List: Dissolves, Volume, Track Patching, EQ Effects and Track Effects, AudioSuite Effects.
Both Picture and Sound	Select the picture and sound options you want included in your Cut List or Change List: Clip Names, Source File Name, Cadence, Reel Names, Clip Comments, Repair Notes and Frame Count

Cut List or Change List: Formatting Options

Choose from the following options:

Option	Description
Running As Mode	Specifies the format in which to display the incrementing count for the sequence.
Master TC Track	Select which timecode track you want to be used to display the master timecode in the list.
Start at:	Specify the footage to be used as a starting point in the master.
Display Handles	Select Display Handles, and then type a handle size. A new With Handles column is added to the lists for each source column for WebLists and TabbedLists templates. The column contains the start and end values of the column and adds a handle of the specified size.
Show events, hide markers	Select from the following to determine if both events and markers are included in your EDL. Choose from: Show events, hide markers; Show events, show markers; Show events with markers, hide makers; Show events with markers, show markers; or Hide events, show markers.
Separate List for Each Channel	Select this option to generate a separate set of lists for each selected picture track.
Show Prefix	Select this option to identify cuts in the cut list or change list by displaying the entire first and last key number for each cut.
Matchback Info	Select this option to display the matchback information in the list.

Option	Description
Disable Perf Slip	Select to instruct the Cut List tool to ignore any audio perf slipping and offset data when displaying ink numbers.
Show Icons	Select to include icons that graphically represent edit events in your lists. See "Cut List and Change List Icons" on page 24 and "Change List Icons" on page 25.
Ignore all Special Characters from Display	Select to exclude special characters.

Cut List and Change List Icons

The following table list the icons available in both the cut list and change list. The icons only appear if Show Icons is enabled in the Formatting tab. Icons only display in Columnar Cut Lists and Change Lists.

Icon	Event
	Fade Out
	Fade In
	Dupe
	Dissolve
	Optical
	Optical Media
	Media Offline

Change List Icons

The following table lists the icons available only in the change list. The icons only appear in the Change List if Show Icons is enabled in the Formatting tab.

Icon	Event
✂	Delete
◎	Insert
◎	Insert Head
◎	Insert Tail
✄	Delete Tail
✄	Delete Head

The Color Info Tool

The Color Info tool allows you to see the RGB values for the pixels located under the pointer on the screen. This is helpful if you want to see a color value without having to go to Color Correction Mode.

To use the Color Info Tool:

1. Select Tools > Color Info Tool.

   The Color Info Tool opens.
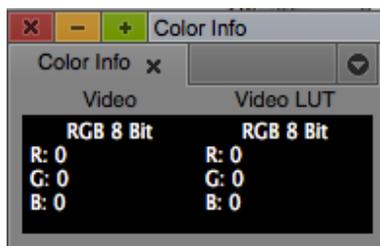
2. Move your pointer. The values in the Color Info tool display the color info for the pixels located under the pointer.

3. Right-click (Windows) or Control-click (Mac) the Color Info Tool window.

   The follow options appear:

4. Choose the color information you want displayed:

Option	Description
Active only for video monitors	When selected, moving the pointer over the source or record monitors will display color information in the Color Info tool. When deselected, moving the pointer anywhere on your screen will display color information in the Color Info tool.
Show video color after apply Display Color Space	You can choose to see the color values before and after applying a Display Color Space option (LUT)
RGB 8 bit	Measures on a scale from 0 to 255.
RGB 10 bit	Measures on a scale from 0 to 1024.
RGB Percent	Measures on a percentage scale. Percentage values can be lower than 0 or higher than 100.
IRE	Measures in IRE units.
mVolts	Measures in millivolts.

You can also access the Color Info tool by clicking the Color Info button in the Color Correction Tool.

Changes to Selecting Color in the Effect Editor

The following changes have been made when selecting a color using the eyedropper and opening the Color Picker.

To select a color using the eyedropper:

1. Position the pointer over the Color Preview window to activate the eyedropper.
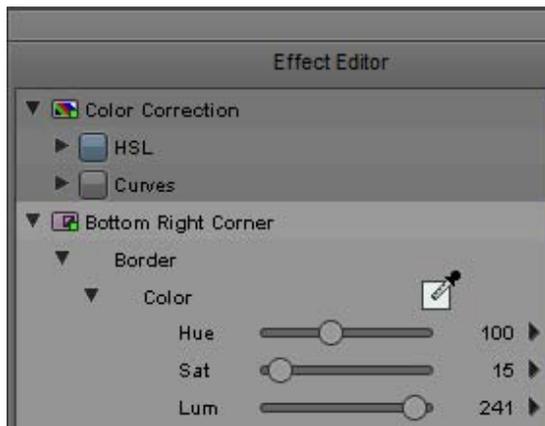
Example of Color Preview window with eyedropper active

2. Click the mouse button, then drag the eyedropper to the Effect Preview monitor, and click on the color you want to select from the video image.

   Your Avid editing application updates the parameter's numeric values, and the selected color appears in the Color Preview window.

To open the Color Picker dialog box:

▶ Double-click the swatch next to a color parameter.
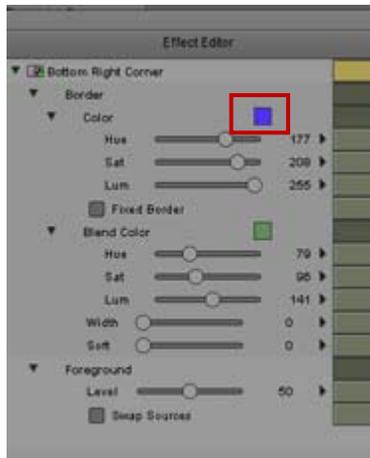
The Color dialog box opens.

Exporting as DPX

With this release of the editing application, you can export clips and sequences as DPX files.

To export as DPX:

1. Select the clip or sequence you want to export as DPX.

2. Right-click and select AMA File Export.

   The AMA File Export window opens.
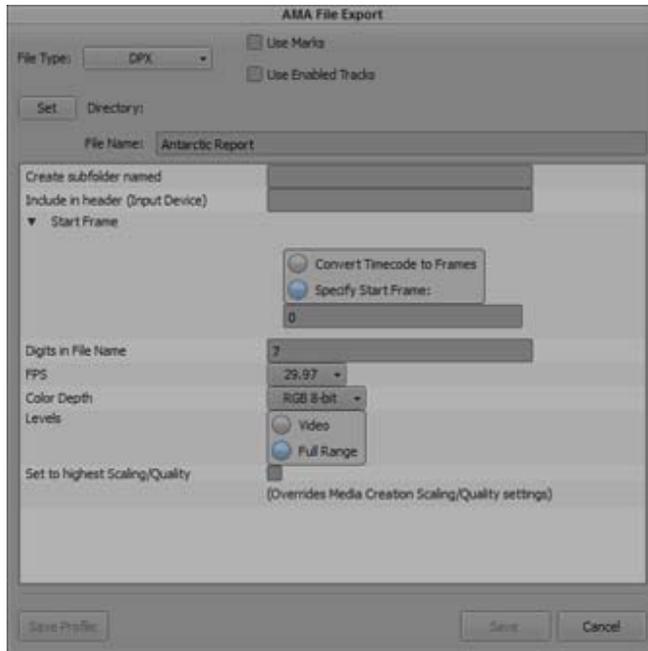
3. Click File Type and select DPX.

4. (Option) Select the Use Marks or Use Enabled Tracks option.

   ▸ When you select Use Marks, your Avid editing application uses current IN and OUT points in the selected clip or sequence to determine starting and ending frames for the export. To export the entire clip or sequence, deselect this option or mark the entire clip or sequence.

   ▸ When you select Use Enabled Tracks, your Avid editing application exports the tracks that are enabled in the Timeline. To export all the tracks in the sequence, deselect this option.

5. Click the Directory Set button and browse to the location where you want the DPX files saved.

6. Select from the following options:

Option	Description
Create subfolder name	This is the folder in the specified directory where the DPX files are exported.
Include in Header (Input Device)	Provide an ASCII string entry field up to 32 characters that will populate the Input Device (field 38) in the DPX header.

Option	Description
Start Frame	Enter a value from 0 to 999999999. Entering a value into this field will reflect the first frame in the export and will increment for all additional frames. For example if you enter 20 and have entered 7 into the number of digits in the file name, the first file name in the sequence would be: name.0000020.dpx.
Convert Timecode to Frames	Converts the Timecode of the Sequence or master clip to frames. For example the sequence timecode is 02:00:10:00 would show the file name as name.173040.dpx.
Digits in File Name	Determines how many digits are in the file name. The range is from 1 to 9. The default is 7. For example a value of 2 would be name.01.dpx, name.02.dpx, etc. If the count reached 99 an additional digit is added, name.100.dpx.
Color Depth	Supports RGB 8bit, RGB 10bit and RGB 16bit.
FPS	Declare a frame rate and embed it into the DPX header.
Set to highest scaling quality	Disabling this option accesses the scaling/quality settings from the Media Creation Settings. Enabling this option provides the highest available scaling/quality and overrides the Media Creation Settings.
Levels	Enabling Video provides 64-940. Full Range provides 0-1023.

7. Click Save.

The DPX files are exported to the folder set in Step 5.

Additional Column Headings

The following column headings are now included with the editing application: Frame Count Start, Frame Count End, Frame Count Duration, and Reel. The information in these columns applies to clips and subclips. The information does not apply to sequences or group clips.

• Frame Count Start: Displays the start frame for the clip. You can edit the number in the column to change the starting frame.

• Frame Count End: Displays the end frame count for the clip. This number is automatically adjusted if you change the Frame Count Start.

• Frame Count Duration: Displays the frame count duration of the clip.

• Reel: Displays the reel information from the camera or capture device for those devices that support REEL info.

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