

Media Management



Media Management

Media Management in DaVinci Resolve refers to operations that let you copy, move, or transcode the media that's linked to clips in your timeline, with the option to eliminate unused media in the process. Even though Media Management is only available in the Media page, it's very typical that it be used to consolidate media from an edited timeline, or from a project nearing completion, so it's presented here in the editing section.

NOTE: The Media Management tool replaces the Consolidate Media function in previous versions of DaVinci Resolve.

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What is Media Management in Resolve?

If you've edited a program within DaVinci Resolve, you can use the Media Management command to take care of a variety of tasks, including but not limited to:

- Moving all clips used in a project to a specific storage location.
- Creating a duplicate of your project's clips that eliminates unused media in preparation for handing the media off to another facility.
- Transcoding all clips in a timeline to another format while eliminating unused heads and tails.

For example, if you're preparing to export a project to hand off to another Resolve user somewhere else, or even an XML or AAF to give to someone using a completely different NLE or finishing application, you can use Media Management in Resolve to consolidate and relink the media used by the timeline you're handing off, so the exported project or timeline references a smaller set of media.

Even if you're not handing a project off, if you've ingested an enormous amount of source media into a project, and after the majority of the editing decide that you want to create a consolidated set of the media you're using in order to lighten the project's load in the Media Pool, you can create a duplicate of the media to reconform to, omitting unused clips and trimming the unused heads and tails of the clips you are using in the process.

But Media Management isn't just useful for projects you've edited in Resolve. For example, if you're importing a project from another application and you've been given an enormous amount of source media to conform to, you may be hesitant to copy all of it to your accelerated storage volume, since (a) most of it is probably unused by the project file you've been given, (b) it'll take forever to copy from the cheap USB 2 hard drive they've given you, and (c) it will clog up your local storage, taking valuable space away from other projects. In this case, you can use the Media Management to copy a reduced set of media files consisting of only the clips used in the current timeline of the Edit page.

File Formats Compatible With Media Management

No matter what you use if for, Media Management is designed to work with all video formats that are have decode support within DaVinci Resolve, and is capable of outputting a few more formats than the Deliver page can. Compatible formats include but are not limited to:

- QuickTime
- MXF
- R3D
- Image-based raw media formats including CinemaDNG raw and Alexa raw
- DPX, EXR, JPEG 2000, TIFF, Cineon, and other compatible image sequence formats
- AVI

The "trim unused media" options of the Copy or Move operations are not compatible with clips that use codecs employing temporal compression, such as H.264, or for any format for which Resolve lacks encoding support. If you're trying to trim media in a Media Management operation for a project containing untrimmable media formats, the full media files will be moved or copied, instead.

Using Media Management

Using Media Management is simple.

To media manage clips and timelines in a project you've created:

- 1 Select the items you want to media manage, either clips or one or more Timelines.
- 2 Choose File > Media Management, and the Media Management window appears.

Media Management		
Entire Project	Timelines	Clips
Сору	Move	Transcode
Media Destination		
10 clips selected Copy all media Copy only used me		Browse
 Copy and trim used + More options 	d media keeping 0	frame handles
Current Pri 12.85 GB	oject	New Project 12.85 GB
	Ca	ancel Start

Media Management Window

3 Choose the scope of the Media Management operation, shown at the top of the window. You can choose to affect the Entire Project, only one or more Timelines, or only Clips. What you had selected prior to opening the Media Management window affects the scope that is selected when you open this window, but it doesn't limit to operation to only the selected items.

So, if nothing was selected in the Media Pool, then "Entire Project" is automatically highlighted. If any clips were selected, then "Clips" is highlighted automatically. If any Timelines were selected, then "Timelines" is highlighted. However, if for whatever reason the wrong option is highlighted, you need only click the option you want to select it instead.



Media Management scope options

- 4 Next, choose which operation you want to perform:
 - Copy: Creates duplicates of all media associated with clips or timelines at the destination.
 - Move: Relocates all media associated with clips or timelines to the destination, removing it from the original locations.
 - Transcode: Creates duplicates of all media associated with clips or timelines in a new format that you specify; all transcoded clips are written to the same destination.

Media Management operations

- 5 Click the Browse button and use the File Destination dialog to choose a location for the managed media to be written. The file path of this location appears in the Media Destination field.
- 6 Choose the options associated with the operation you selected. If you choose to media manage Timelines, then a Timeline Selection option lets you choose which Timelines you want to include in this operation. Additional options for advanced users can be revealed by clicking "More options." The current size of the selected media is listed below, alongside an estimate of the size of the media after the operation you've selected. Depending on which options you select, the estimate may be larger or smaller, but this will show you if you need to change the selected options to achieve a more desirable final size.

 Timeline Selection 1 out of 1 currently selected Rough Cut Copy all media Copy only used media files Copy and trim used media keeping 0	
Current Project 12.85 GB 3.94 GB	

Media Management options shown for copying trimmed media from a specific timeline

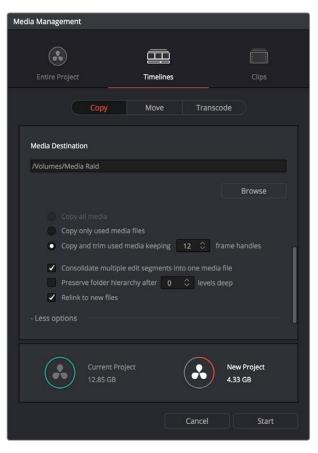
7 When you've finished choosing options, click Start. A progress bar appears showing you how long the operation will take.

The following workflow illustrates how you can use Media Management to cut down the amount of media you need to deal with when you're conforming a project imported from elsewhere, and you've been given far more media then you actually need, because you only need what's actually in the timeline you're importing.

To use Media Management to create a consolidated duplicate of media for a project you're conforming:

- 1 Connect the portable drive containing the media to be conformed to your workstation.
- 2 Import the AAF or XML project file you were given into the Edit page, and conform it to the media on the portable drive you connected in step 1. You're only doing this to identify what clips you need to Media Manage, not because you'll be working off that volume.
- 3 Choose File > Media Management. The Media Management window appears.
- 4 Choose Timelines at the top of the window, and then open the Timeline selection section and turn on the checkbox of the timeline you want to consolidate the media for.
- 5 Click the Browse button and choose the volume you want to write the consolidated media to.
- 6 Choose the following options for consolidating the media. For this operation, you'll want to enable:
 - Click the Browse button, and choose the accelerated storage volume you're using for all media you're using with Resolve.
 - Choose the "Timelines" Media Management scope, if it's not selected already, to manage all media from the selected timeline.
 - Choose "Copy" to make a duplicate of the media from the portable storage volume to your accelerated storage.
 - Choose "Copy and trim used media keeping 12 frame handles" if you're comfortable with 12 frame handles.
 - Open More Options and turn on "Consolidate multiple edit segments into one media file" if you don't mind having larger media files that preserve the relationship of what clips come from which single media files. This can make grading simpler later on.
 - Turn on "Relink to new files" to automatically relink the timeline you've selected to the new media that's being generated.
- 7 When you're done choosing these settings, click Start. A progress bar appears showing you how long the operation will take.

A subset of media used by that timeline is copied to the specified directory, and is automatically relinked to the timeline and clips in the Media Pool. You are now ready to continue working on the project.



The Consolidate dialog lets you choose how and where to copy the trimmed media (the Timeline Selection options are scrolled offscreen)

Options in the Media Management Window

The different Media Management operations offer different options.

- Copy/Move/Transcode all media: (Not available for Timelines) Choosing this option copies the full amount of source media for every single clip in the project.
- Media Destination: Click the Browse button to choose a destination to which to copy the managed media. To create a new directory, right-click a Volume icon in the File Browser list, choose New Folder, type a name into the resulting dialog, and click OK.
- Timeline selections: If you've selected the Timelines mode of media management, you can open the Timeline Selection controls and turn on the checkbox by each timeline with media you want to include.
- Copy/Move/Transcode all media: Copies all media available to that operation.
- Copy/Move/Transcode only used media files: Only copies media files for clips that are used in a timeline, and copies them in their entirety.
- Copy/Move/Transcode and Trim used media keeping x frame handles: Only copies media files that are used in a timeline, but eliminates unused heads and tails except for user-specified handles.

- Consolidate multiple edit segments into one media file: (found by opening more options) This option only becomes available if you've selected "Copy and trim used media..." If multiple clips in a timeline come from the same media file, then a single consolidated media file will be generated that contains all frames from all of these clips, along with whatever additional frames lie between them. Even though this option results in more media being copied or moved, it's extremely useful if you're consolidating media that you want to grade using the automatic grade linking of remote versions, as this preserves the original relationship between each Timeline clip and the source media file it's from.
- Preserve folder hierarchy after x levels deep: (more options) Retains a user-specified depth of the original directory structure used by a clip's corresponding source media file, recreating it when rendering new files for output. The number you select determines how many levels of subdirectories Resolve will automatically create within the currently specified "Render job to" directory to match the path used by the source files. Defaults to 0, which creates no matching subdirectories. The number of path levels is defined relative to the head of each media file path.
- Relink to new files: (Appears for the Copy operation only) Relinks the selected clips and/or timelines to the new media you've created by copying, wherever you've copied it to.
- Delete unused media: (Appears for the Move operation only) Moves all unused media to your file system's trash when you perform a Move operation. It's up to you to do the final deletion of the media being discarded, so proceed with caution.

Options for Transcode Only

The following options appear in the "More Options" area only when Transcode is the selected Media Management operation.

- Video format: Choose the video format to which you want to transcode. The format you select determines which codecs and other options will be available to choose from.
- Codec: A pop-up menu listing every codec that's available for the currently selected Video Format.
- Compression quality: Disabled for certain formats. Lets you choose the level of compression quality that's used, if available.
- Render at source resolution: A checkbox that lets you transcode each clip at the frame size of the original media file, rather than at the shared resolution selected below.
- Resolution: A pop-up menu lets you choose a specific resolution to transcode to.
- Frame rate: Depending on the frame rate of the original media files, this pop-up menu lets you choose a compatible frame rate that you can transcode to. For example, if the source media frame rate is 24 fps, you can choose between 23.98 and 24 in this pop-up.
- Audio format: Choose the audio format you want to transcode all audio channels to.
- Render: Choose how many audio channels you want to transcode. You can also choose "Same as source" if you want to transcode each clip with the same number of channels as its source media file.
- Audio bit depth: Choose the bit depth that you want to transcode the audio to.

File Naming When Consolidating During Media Management

When you're media managing clip-based formats like QuickTime or MXF, if the "Trim Used Media" option is on, and the "Consolidate Multiple Edit Segments Into One Media File" checkbox is off, then timelines that use multiple clips derived from the same media file will generate multiple trimmed media files. To prevent these files from overwriting one another, additional characters are appended to each trimmed media file coming from the same source; which characters are used depends on the video format.

- For DPX files, _0, _1
- For R3D files, _S000.RDC, _S001.RDC
- For QuickTime files: _S000.mov, _S001.mov