Lesson 15

Managing Media and Databases

Unlike almost all other editing, audio mixing, or color grading software, DaVinci Resolve uses an industry-standard database to store all your projects, bins, clips, and timelines—basically, any item that is not an audio or video media file is kept in the database. As a result, DaVinci Resolve works a little differently from other apps when you want to move projects from one system to another or create backups of your projects. It's not any harder to do those things, and in some cases, it can be a lot easier. But it is different.

In this lesson, you will explore ways to back up and move projects and media, as well as learn how to manage the DaVinci Resolve database.

Time

This lesson takes approximately 20 minutes to complete.

Goals
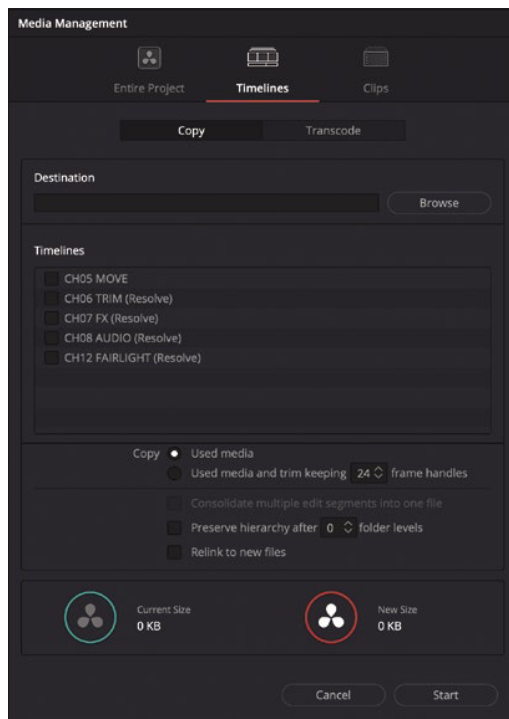
MEDIA

Consolidating Media

Before we explore database management, let's start with a topic that's a bit more down to earth: media management.

Almost every project will need some kind of media management. It might be just to copy media from one drive to another or to convert files from one format to another. The Media Manager performs these types of tasks in DaVinci Resolve. You can use it to copy, move, and even consolidate media.

When your hard drive cannot accommodate a complete copy of the original media, consolidating can help remove media that is no longer needed in your project. Using the Media Management dialog, consolidating gives you the option to copy only those pieces of media that are actually in use. For long-form projects with lots of media, consolidating is a great way to free up disk space and make backing up a project a quicker task.

Because the Media Management dialog can be used only when you are within a project, we will use the Age of Airplanes project.

1   With Age of Airplanes still open from the previous lesson, click the media page button.

2   Select the Rough Cuts bin, and then select all the timelines in the Rough Cuts bin.

3   Choose File > Media Management.

When timelines are selected, the Media Management dialog opens with the Timelines tab selected.

4   Click the Copy button.

The Copy function will create a duplicate set of media files on the destination location but leave the original files in place. This allows you to ensure the duplicates are copied safely and without errors before deleting the originals, if that is your goal.

5   Click the Browse button, and in the File Destination dialog, navigate to a location where you want to copy the media. Click OK.

The Timelines area of the window reveals all the timelines currently in the project. You can use the checkboxes to choose the timeline(s) you want to consolidate.

6   In the Timelines area, click the checkbox next to CH12 FAIRLIGHT (Resolve).

Timelines

☐ CH05 MOVE
☐ CH06 TRIM (Resolve)
☐ CH07 FX (Resolve)
☐ CH08 AUDIO (Resolve)
✓ CH12 FAIRLIGHT (Resolve)

The option to consolidate timeline media requires that you select one or more timelines to determine which files to keep. You have two choices for consolidating your media: you can choose to copy the clips that you have used in the selected timelines in their entirety or to copy just the portions of those clips that you have used in the selected timelines (including handles).

7   Choose "Used media and trim keeping # frame handles."

Copy ◯ Used media
      ● Used media and trim keeping 24 ⇕ frame handles
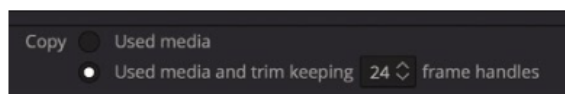
Choosing this option will trim the master clip files down to only those clip portions used in the selected timeline(s). A field is available in which you can enter the number

of frame handles you would like added to each side of a clip in case you will later need to trim or create transitions.

> **TIP** Compression formats that use interframe, temporal compression, such as H.264, can now be used with the "trim unused media" option in the Media Management dialog.

8 Enter 12 as the number of frame handles to add.

Because your project runs at 23.979 frames per second, entering this value this will enable a half-second of extra media on both ends of the clip for trimming and transitions.

If you were finalizing these steps, you would now click Start to begin consolidating the media, but in this case do not do so.

9 At the bottom of the Media Management dialog, click the Cancel button.

After you started the consolidation process, the files used in the timeline would be copied to the destination drive and then trimmed so that only the clip portions in use were saved to disk—along with a half-second handle on each side of a clip.

The selected timeline in your bin would now link to these new, shorter media files, but all the original clips would remain in their original locations. It would remain for you to delete them when you were confident that you would no longer need them.

Copying Projects and Media to a New Hard Drive

Although consolidating media can save you the most storage space, it addresses only the media. Your timelines, clips, and metadata are not included. The easiest way to copy, back up, or move a single project and all its content from one computer to another is to use DaVinci Resolve's archive and restore features. Archiving a project collects all your files (even if they are on different drives) and places them in the destination folder of your choice, along with the project file. To archive a project, you must do so using the Project Manager window.

> **NOTE** The following exercises use a second hard drive for copying and transcoding media. If you do not have a second hard drive or do not want to take up valuable disk space by copying and/or moving the training media from this book, you can still read through the lesson to gain an understanding of the process.

1   Open the Project Manager, right-click the Age of Airplanes project thumbnail, and choose Export Project Archive.
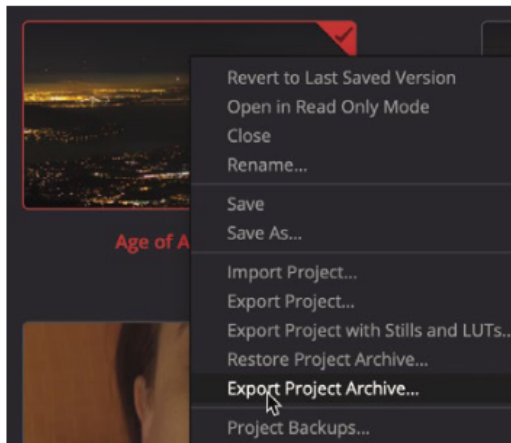
2   In the Archive dialog, navigate to a drive where you want to save the project and click Save.

All the media and the project file containing your bins and timelines are copied into a folder with the extension .dra. This folder contains everything you need to open your project on another computer.

Be assured that the original media remain in their original locations, and that the two sets of media are completely identical. It's up to you to decide whether you want to delete the original media from those original locations or leave them to work on later.

When you copy the archived folder to another computer, you must restore it in DaVinci Resolve to begin working with it.

NOTE Because you already have the project from the archive on your computer, the following steps are included for educational purposes and are not meant to be followed.

3   To restore an archived project, you open the Project Manager.

4   Then, you right-click anywhere in the Project Manager and choose Restore Project Archive.

5   In the dialog, you navigate to the ".dra" folder of the archive you want to restore and click Open.

The archived project opens into the Project Manager, and you can begin working on it.

Working with the DaVinci Resolve Database

Up until this point, you may have been unaware that DaVinci Resolve keeps all your projects in its own container, called a database. Unlike most applications you may be familiar with, your projects are not saved to a location of your choosing. They are all kept within the database. And while that may suggest a process that's more complicated than you may be accustomed to, it brings a lot of benefits. A database adds a level of organization to your projects without you doing a thing. You don't spend time keeping track of projects and bins because they already exist in the database.

Also, because projects are kept in a database, they can be stored on a server that can connect to multiple DaVinci Resolve workstations with the flexibility to access any project on any computer or work collaboratively on any project.

Creating and Switching Databases

When you first open DaVinci Resolve, it automatically creates a disk database, so it is largely transparent to you that a database is in use. In macOS, the database is stored in the Library folder, whereas in Windows, it is in the Program Data folder. Even though you know where the database is stored, the first rule of databases is to not rename or modify any of the folders or files in a database and certainly not to delete them!

In this exercise, you'll learn the right way to switch between databases, create your own database, and back up a database without ever altering it at the operating system level. You'll start by creating a new database.

1   In the upper-left corner of the Project Manager, click the Databases button to open the list of available databases.
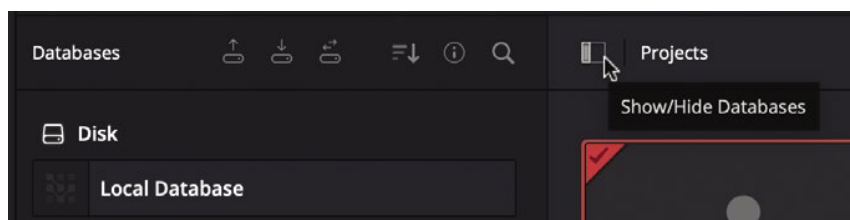
The Databases sidebar displays a single Local Database by default. It's the current default database that DaVinci Resolve created when you first started.

You can either Connect to an existing database that you have not previously connected to, or you can Create a new database. Creating a new database can be