

## PART 11

#### Chapter 84

# Managing Databases and Project Servers

## Managing Databases and Project Servers

This chapter describes how to set up and use databases in greater detail, giving you more control over how projects are saved and organized, including how to set up project servers you can use to administer DaVinci Resolve projects that are available to multiple DaVinci Resolve workstations on the same network.

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#### Why Use a Project Server?

Multiple DaVinci Resolve workstations can access the same project when you set up a Project Server that shares one or more PostgreSQL databases over a local network. Once you've set this up, there are two ways of using a shared database.

#### **Multiple Users Sharing Projects**

The simplest case is for users to simply open up a project on the Project Server and work on it. Working this way, if you ever has to change rooms, or switch workstations, you can easily open that same project from any machine that's connected to the server on the same network without needing to export and import it first. For example, an assistant could be working with a colorist to prepare files for the next reel by conforming shots, managing VFX replacements, doing dust busting repairs, and so on in an unsupervised editing suite anywhere in the building, before saving their work and closing the project so the colorist can immediately open that same project in the grading theater across the hall.

Another way of taking advantage of shared Project Servers is to split large projects into sections, so multiple artists can work in parallel on different pieces of the whole in different suites, handing them off when necessary. For example, a feature film may be split into reels, or a film can be separated from the trailer and electronic press kit projects that it shares media with. In this case, each project can be edited, mixed, and graded by different people accessing the Project Server.

When a shared project is opened by someone else after it's already been opened, a dialog informs you that it's being opened in Read-only mode to prevent multiple users from accessing the project at the same time. If you load a Read-only project and decide you want to make changes anyway, you'll need to use the Save As command to create a duplicate project file using a new name in order to preserve your work.

#### **Using Collaborative Workflow**

Alternately, you can use the Collaborative Workflow features in DaVinci Resolve to enable multiple collaborators on multiple workstations in multiple rooms to open and work on the very same project at the same time. For example, an editor can be editing a project's main timeline in one room, while an assistant organizes media and adds metadata within the same project in another room, and a colorist grades dailies in that same project in yet another room, all accessing the same Project Server which allows them to work together in parallel. For more information, see Chapter 85, "Collaborative Workflow."

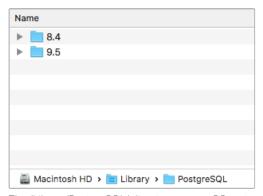
All participants in a Collaborative Workflow must have the Studio Version of DaVinci Resolve, and they must be using a PostgreSQL database on a Project Server that's properly set up.

## Know Which Version of PostgreSQL You're Using

Starting with DaVinci Resolve 12.5.4 on macOS, DaVinci Resolve requires PostgreSQL 9.5, which is necessary for compatibility with macOS 10.12 Sierra and macOS 10.13 High Sierra. All previous versions of DaVinci Resolve on macOS use PostgreSQL 8.4, and you must upgrade PostgreSQL before upgrading to Sierra or High Sierra.

IMPORTANT: If you're upgrading from a previous version of DaVinci Resolve that uses 8.4 to a new version of DaVinci Resolve that uses 9.5, it's vital you read the instructions located in /Library/Application Support/Blackmagic Design/DaVinci Resolve/Upgrade PostgreSQL/ before you upgrade.

If you're unsure what version of PostgreSQL you're using, check to see what versions appear in the /Library/PostgreSQL/ directory.



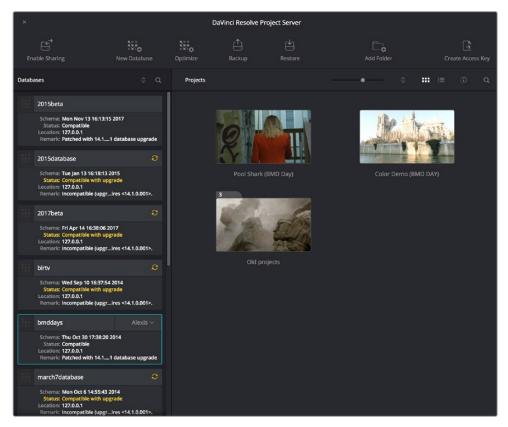
The /Library/PostgreSQL/ directory on macOS systems shows which versions of PostgreSQL you're using

## Using the DaVinci Resolve Project Server Application

When you install DaVinci Resolve, an additional application is installed in the DaVinci Resolve application directory on macOS and Windows, called DaVinci Resolve Project Server. This is a stand-alone application that lets you create, manage, backup, restore, and most importantly share project databases on any workstation. Using this application, it's not necessary to launch DaVinci Resolve just to manage your databases, and it's no longer necessary to use Terminal to set up database sharing as before (although you still can if you want to).

#### The DaVinci Resolve Project Server Interface

The DaVinci Resolve Project Server interface greatly resembles the DaVinci Resolve Project Manager with the Database sidebar open. However, a toolbar at the top exposes all of the database management tools that are available for creating and managing databases, including controls for sharing databases and creating Access Keys that are essential for quickly and easily creating and connecting to Project Servers.



The DaVinci Resolve Project Server Window

#### This window has three main UI areas:

 Databases list: Unlike the Databases sidebar in the Project Browser of DaVinci Resolve, in which you can disconnect databases you no longer want to use, the Databases list in the Project Server application shows every single DaVinci Resolve PostgreSQL database on your machine. This makes it easy to find databases you've disconnected that you want to reconnect.

- Projects browser: Shows all projects and folders within the currently selected database.
- Toolbar: A toolbar at the top of the window shows you all of the functions that are available for managing DaVinci Resolve databases on your workstation.

**Enable Sharing:** Selecting a database and clicking this button lets you turn the workstation you're on into a Project Server. When you select a database that's already shared, this button changes to Disconnect Database. This process is described in greater detail in the next section.

New Database: Lets you create new databases without needing to open Resolve.

**Optimize:** Only available for PostgreSQL databases. Sometimes, databases in DaVinci Resolve can become so large that the size affects performance. In these cases you may need to optimize it to improve access speed by "vacuuming" the database of unnecessary spaces and reindexing it.

**Backup:** You can back up databases just like any other file. This provides added protection should your system drive fail, but a database backup can also be used to move multiple projects between systems (particularly if you're using PostgreSQL). Clicking this button exports the currently selected database, with all enclosed projects, to a self contained .resolve.backup file.

Restore: Imports .resolve.backup files to restore a backed up database.

Add Folder: Creates a project folder inside whatever database is currently selected.

**Create Access Key:** Selecting a database and clicking this button exports an access key file that you can send to other users to quickly connect their workstation to a shared Project Server. This process is described in greater detail in the next section.

## Using the Project Server Application to Manage Databases

The DaVinci Resolve Project Server utility is useful for accomplishing all kinds of administrative tasks.

#### **Creating New PostgreSQL Databases**

If necessary, you can create new PostgreSQL databases right within this utility.

#### To create a new PostgreSQL project database:

- 1 Click the New Database button in the toolbar.
- When the New Database window appears, type a name for the new database into the Name field. Because all projects in a PostgreSQL database are saved internally within the PostgreSQL database, no other changes are necessary.
- 3 Click Create, and the new disk database will appear in the Databases list.

#### **Backing Up and Restoring Databases**

You can also back up and restore databases without needing to open Resolve. Furthermore, you can back up databases even if they're out of date, making it easy to back up databases for safety before you upgrade them.

#### To back up a database for safekeeping:

- 1 Select the database you want to back up in the Databases list.
- 2 Click the Backup button in the toolbar.



The Backup Database button in the toolbar

3 Choose a location to which to save the backup in the Backup Database dialog, and click Save.

#### To restore a database you've backed up previously:

1 Click the Restore button in the toolbar.



The Import Database button

2 Find the database you need to import using the file import dialog, and click Open. The database you've restored should now appear in the Databases list.

#### **Upgrading Databases**

From time to time, new versions of DaVinci Resolve require changes to the way projects are created, which requires databases created with older versions of DaVinci Resolve to be upgraded before you can access the projects within. Fortunately, this is a simple process.

#### To upgrade a database made or used with an older version of DaVinci Resolve:

Right-click any database with an upgrade badge to the right of the database name, and choose upgrade from the contextual menu.

#### Reconnecting Databases You Previously Disconnected

Unlike the Project Manager in DaVinci Resolve, the DaVinci Resolve Project Server application shows you every single DaVinci Resolve database on your computer, whether it's connected to Resolve or not. For this reason, it's a good way to find the names of databases that have been disconnected, either deliberately or accidentally, in order to reconnect them.

#### To reconnect any database on your workstation:

- 1 Open the DaVinci Resolve Project Server application.
- 2 Find the database you want to reconnect in the Databases list at the left.
- 3 Open DaVinci Resolve.
- 4 When the Project Manager window appears, open the Databases sidebar, and then drag the database you want to reconnect from the DaVinci Resolve Project Server window to the Database list of the Project Manager. That database is reconnected and appears in the Database list.

## Sharing Databases to Create a Project Server

You can also use the DaVinci Resolve Project Server to easily set up a shared Project Server on your local network. However, for this to work, you need to adhere to the following requirements:

- All workstations need to be connected to the Project Server on a local network
- All network connections should be reasonably fast (preferably Gigabit Ethernet or faster)
- The computer functioning as the Project Server should be reasonably fast, but it doesn't need fast GPU processing
- The Project Server should have DaVinci Resolve installed, but it doesn't need a dongle or serial number, nor need it be the Studio version

The following procedures describe how to set up a shared Project Server, and how to export an Access Key with which to easily set up other workstations to connect to it.

#### To set up a workstation as a DaVinci Resolve Project Server:

- 1 Open the DaVinci Resolve Project Server application, found in the DaVinci Resolve application folder.
- 2 Select or Create a DaVinci Resolve project database you want to share, and click the Enable Sharing button.
- 3 When a dialog appears asking if you want to authorize the configuration of your PostgreSQL server. Click Authorize. That database can now be shared among other Resolve workstations on the same network.

Once you've set up a Project Server, it's easy to connect other machines to that server using access keys that you can create using the DaVinci Resolve Project Server application.

#### To create an Access Key to enable easy connection to a Project Server:

- 1 With the DaVinci Resolve Project Server application open, select a database that you've set up to share, and click the Create Access Key button to the right in the toolbar
- 2 Choose a location via the Create Access Key dialog, and click Save. An access key file is saved to the location you chose with the file extension .resolvedbkey.
- 3 Copy the .resolvedbkey file to the workstation you want to connect to the shared database.
- 4 Open Resolve, and when the Project Manager appears, open the Databases sidebar, and then drag the .resolvedbkey file and drop it anywhere within the Project Manager. The shared database should now appear in the Databases sidebar, and if you select it, you'll see all of the projects that are located in that database on the Project Server.

If necessary, you can also disable sharing for any database, preventing remote access to it from other workstations on the network.

#### To disable sharing:

- 1 With the DaVinci Resolve Project Server application open, select a database you enabled sharing for, and click the Disable Sharing button to the left in the toolbar.
- When a dialog appears asking if you want to authorize the configuration of your PostgreSQL server. Click Authorize. That database will no longer be shared.

#### Chapter 85

## Collaborative Workflow

#### **Collaborative Workflow**

Multi-user collaborative workflow has been significantly altered in DaVinci Resolve 14, using "bin locking" to manage who has access to what when multiple collaborators open the same project. However, as before, collaborative workflow allows multiple artists to do simultaneous editing, grading, and Media Pool clip management and metadata entry within a single project for which Collaboration has been enabled. Multiple users can simultaneously access the same Timeline within the same project to edit and grade at the same time, while other editors and assistants can open different bins containing different timelines within the same project to do their work. This chapter describes how to set up multiple DaVinci Resolve workstations to collaborate, and how to use bin locking to work together.

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#### **Requirements for Collaboration**

Multi-user collaborative workflow allows simultaneous editing, grading and Media Pool clip management by multiple people within a single project that has been enabled for collaboration. Using bin locking, multiple editors can simultaneously edit different timelines in different bins of the same project, while assistant editors can reorganize clips and edit the metadata in other bins within the same project. Using clip locking, multiple colorists can work together in the same Timeline of the Color page, without fear of overwriting one another's work. And colorists and editors can work together in the same Timeline of the same project without conflict.

#### In order to use collaborative workflow:

- All users must be using the paid Studio version of DaVinci Resolve.
- All users must be connected to a properly configured Remote Database Server.
   This Remote Database Server can be on one of the actively used DaVinci Resolve workstations, or it can be another computer on your network that simply hosts shared projects, but it should be on a computer that is never shut down or put to sleep, to prevent projects suddenly becoming unavailable.
- All machines participating in a collaborative workflow must be on the same network, and shared projects should use media on some type of fast storage area network (SAN), with each owner and collaborator connected to that SAN so the projects being collaborated on are linked to the same media. In a pinch, shared volumes over a network will work, but proper SANs will provide significant performance benefits.

For more information on setting up a Database Server, see Chapter 84, "Managing Databases and Database Servers."

#### **Enabling Project Collaboration**

Starting with DaVinci Resolve 14, the process of initiating a collaborative workflow has been vastly simplified over previous versions.

#### To open a project and initiate a collaborative workflow:

- 1 Open DaVinci Resolve on a computer that's connected to a Remote Database Server.
- Open any project on the remote database DaVinci Resolve is connected to using the Project Manager.
- 3 When the project is open, choose File > Enable Collaboration.

Once collaboration is enabled, two additional buttons appear at the lower right-hand corner of the DaVinci Resolve interface, next to the Project Manager and Project Setting buttons. These are the Collaboration Chat (left) and Collaboration (right) buttons.

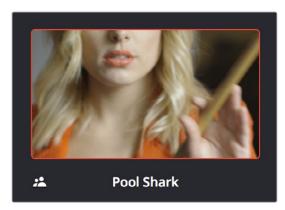


The Collaboration Chat button (far left) and the Collaboration button (second from left)

**NOTE:** When you enable collaboration, the "Auto conform missing clips as media is added to Media Pool" option in the General Options panel of the Project Settings is automatically disabled, as it interferes with collaborative workflow. Also, Live Save is automatically turned on in the Auto Save panel of the User Preferences, to ensure that all collaborators work is saved regularly to avoid conflicts between collaborators.

#### **Opening Projects for Collaboration**

Projects that have Collaboration enabled appear with a badge below their thumbnail in the Project Manager to let you know that project is available for collaboration.



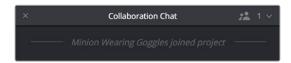
An icon indicates that a project in the Project Manager is available for collaboration

At this point, anyone else who has access to this Remote Database Server can simply open this project up and work collaboratively with you. Whenever a collaborator opens the same project you're working in, the Collaboration Chat button at the bottom of the DaVinci Resolve UI highlights to let you know you have a message.



The Collaboration Chat button highlights to let you know you have a message

Opening the Collaboration Chat window shows who's collaborating with you.



A new message in the Collaboration Chat window lets you know who else has opened the project you're working on

### Customizing Your Collaborator Identification

Once you've set up a project for collaboration, you want to make sure it's easy to tell all your collaborators apart. Clicking the Collaboration button opens a list of all collaborators, or project members, working in that project.



Opening the Collaboration list shows all the current project members

The top member is you, and you can change the name you use by editing the text field. Additionally, you can click the icon to the left and choose a new color for yourself. All the badges that indicate who has a lock on which folders, timelines, and shots are color-coded, so it's a good idea for everyone to choose their own custom color so you can tell who's doing what.



There are eight custom colors for collaborators to choose from

#### **How Collaboration Works**

At its simplest, collaborative workflow uses a "first come, first served" model to manage who has can make changes to what. Essentially, the first collaborator to select a bin in the Media Pool, open a timeline, or select a clip in the Color page gets a "lock" on that item. Once an item is locked (indicated by a colored badge), other collaborators can look at it, but they cannot make changes. This prevents versioning conflicts from occurring.

Locks are released when a collaborator selects a different bin, timeline, or clip in the Color page. At that point, the changes that have been made are available to all collaborators when they refresh their project (by clicking a circular refresh icon that appears in the Media Pool).

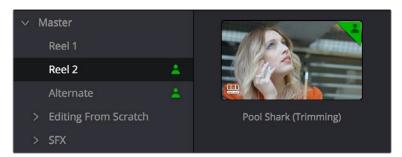
All changes collaborators make are automatically saved to the project as they're made. However, collaborators get to decide when they want to update what they're currently working on to see these changes, in order to prevent a kaleidoscope of alterations from being a distraction while working.

The following sections describe Bin and Timeline locking and Clip locking in more detail.

#### **Automatic Bin and Timeline Locking**

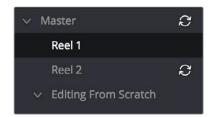
Whenever a collaborator opens a bin, that bin and its contents are locked to any other collaborators who open that project. Furthermore, when a collaborator opens a timeline in either the Edit or Fairlight pages, whatever bin that timeline is in is locked as well, along with whatever else is in that bin. Collaborators can open locked bins and see the contents, but they cannot make any changes with the exception of making alterations to clip grades in the Color page.

You can always tell when a collaborator has a lock on a bin and its contents because a badge appears to the right of the bin in the Bin list, and in the corner of timelines that are open. Hovering the mouse over that badge in the Bin list reveals a tooltip with that collaborator's name.



An icon indicates that another collaborator has a lock on the Reel 2 bin, the Pool Shark (Trimming) timeline, and the Alternate bin

Once a collaborator (someone other than you) makes changes to a bin's contents or to a timeline, you'll see a circular "refresh" badge appear by the affected bins in the Bin List of the Media Pool. Click these badges whenever you want to update your version of the shared project with all changes made by others.



An icon indicates that another collaborator has made changes, clicking it refreshes your project to show those changes

To release a bin or timeline, simply select another bin or timeline. It's that simple.

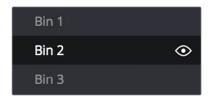
#### **Manual Bin Locking**

You can also manually control the locked state of bins. For example, if you want to lock one or more bins that you know you're going to be switching among so that nobody else inadvertently prevents you from having access, you can right-click one or more selected bins and choose Lock Bins to lock them, and keep them locked until you right-click them again and choose Unlock Bins. Manually locked bins remain locked even when you de-select them, until the collaborator who locked them unlocks them again.



Manually locked bins stay locked even when they're not selected

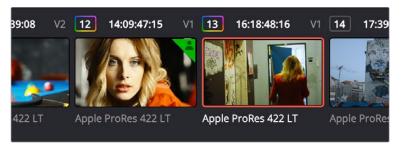
Additionally, you can choose not to lock a bin when you select it. For example, you may just want to look at the contents of a bin without keeping someone else from doing what they need to do inside of it. Simply Option-click any bin to open that bin in read only mode, which is indicated by an eyeball badge to the left of that bin in the Bin List. In this mode, any other collaborator can still lock that bin while you're examining its contents. Selecting any other bin will clear this read only status.



Selecting a bin in read only mode allows collaborators to lock that bin while you examine its contents

#### **Automatic Clip Locking**

Clip locking in the Color page is similar, but with an important difference. As multiple colorists work in the Color page, the first colorist to select any given clip has a lock on that clip, and other colorists will see a badge on that clip showing its locked state, so they know they can't do anything to that clip. In the following screenshot, a green badge at the corner of clip 12 indicates that clip is locked.



Badges in the Thumbnail timeline indicate which clips are locked because a collaborator is grading them

When you're finished with the clip you're working on, select another clip, and the changes you made to the previously selected clip are automatically saved and automatically pushed to all the other colorists who are working on that timeline in the Color page. No refresh is needed, and this is the main difference between clip locking in the Color page and bin locking.

## Examples of Collaborators Working Together

The rules of bin locking enable specific ways that different combinations of artists can work together on the same project at the same time. This section describes the most common scenarios.

#### **Multiple Editors Working Together**

The first collaborator that opens a timeline is the only person that can make editorial changes to that timeline in the Edit or Fairlight pages. Other collaborators who open that project are "locked out" of making changes to the Edit or Fairlight pages, but they can see the Timeline, and they can make grading changes in the Color page. This means it can be ideal to work on your project in separate "reels," where each reel of a project is a separate timeline that can be organized in a separate bin.

On the other hand, if two or more editors must both work on the same timeline, this can be accomplished using duplicate timelines and then merging the changes back together later on. For example, collaborating editor Anne can do the following to make changes to a timeline that editor Erin is already working on:

- First, Anne can duplicate the locked timeline into a separate bin from the one Erin has a lock on. Alternately, Erin could be proactive and duplicate the timeline into a separate bin in advance.
- Second, Anne will re-edit the duplicate timeline to make whatever changes are necessary to a different scene than the one Erin is currently working on. Working on different scenes is the cleanest and easiest way of using this workflow.
- Third, Anne uses Collaborative Chat to notify Erin that the changes are finished.
- Fourth, Erin then refreshes the project to see Anne's updated duplicate timeline in the Media Pool, right-clicks it, and chooses Compare With Current Timeline from the contextual menu to show the Timeline Comparison window that makes it possible to merge the changed section of the duplicate timeline with the original timeline that Erin already has open.

In the following screenshot, Erin's highlighted changes (made while Anne was working) can be seen at the left, and Anne's highlighted changes can be seen at the right. Right-clicking within the right highlighted area reveals an Accept Change command that lets that scene's changes be merged from the duplicate timeline back to Erin's original timeline.



Using the Compare With Current Timeline command lets you see the differences between two differently edited versions of the same timeline, and merge a scene's worth of changes that a collaborator has made (at right) back to the original timeline

For more information on comparing timelines, see Chapter 15, "Creating and Working with Timelines."

#### **Editors and Assistant Editors Working Together**

Collaborators can edit metadata, create new bins, and reorganize clips within unlocked bins only. This means that your project should be organized so that an editor can lock the contents of the bins they need to work with at a given point in time, while the assistants can work on additional timelines and media within the other bins of that project.

However, in addition to being able to copy timelines from a locked bin to a bin that you control, you can also copy clips from a locked bin to another bin that you control. In this way, if you absolutely need to make changes to source clips while the original source clips are locked, you can make your changes to copies of these clips.

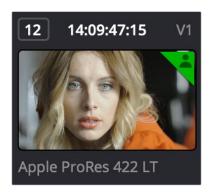
#### **Editors and Colorists Working Together**

Colorists and editors can work together very closely in DaVinci Resolve, as colorists can grade the shots of a timeline that an editor is currently working on, even though that timeline and the bin it's in are locked.

While a colorist is grading, the changes trigger Refresh badges to appear in the Media Pool for other collaborators working on that timeline in the Edit page, so the collaborating editor can decide when to update their timeline to see the changes that have been made.

#### **Multiple Colorists Working Together**

Only one colorist can work on a particular clip at a particular time, and the first colorist to select a clip puts a lock on that clip. Other collaborators looking at the Thumbnail timeline in the Color page will see a small icon that shows it's locked, letting them know they can't make any changes to it until whoever is grading that clip moves to another clip.



A small icon indicates that you're locked out because another colorist is grading that clip

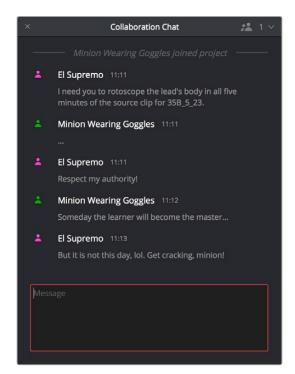
In order to prevent half-finished work from being disseminated to other colorists or editors, a clip that's in the process of being graded isn't updated for other collaborators that are looking at that timeline until the colorist who's working on it moves to another clip. These changes are then automatically refreshed for all other collaborators working in the Color page.

This makes it easy for multiple colorists to work together. For example, an assistant colorist can be notified via Collaborative Chat to draw a custom window that a senior colorist needs for a grade. The assistant opens that timeline in another suite, selects the appropriate clip, and draws the window. Once finished, the assistant simply selects a different clip, and the changes they've made are immediately available to the senior colorist.

**NOTE:** Collaborators working in the Edit or Fairlight pages will need to manually refresh their projects to see these changes, in order to control when they want to have the color change in their timeline.

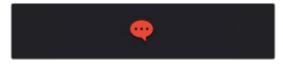
#### **Collaboration Chat**

To facilitate communication among collaborators, DaVinci Resolve has built-in text chat, called Collaboration Chat. Simply click the Collaboration Chat button to open the chat window, and chat away.



The Collaboration Chat window for communication among collaborators

The Collaboration Chat button at the bottom of the DaVinci Resolve interface highlights whenever someone texts while this window is closed, letting you know you have messages that are waiting.



The Collaboration Chat button highlights to let you know you have a message

## Remote Grading

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#### **Introduction to Remote Grading**

To enable colorists to work interactively with clients across the globe, DaVinci Resolve offers a remote grading option. It allows two matching DaVinci Resolve systems to be synchronized via an Internet connection such that changes made on the colorist's workstation are immediately applied on the remote client's workstation.

Cue commands are also synchronized to ensure that both systems are always on the same frame in the Timeline. Starting or stopping playback on the colorist's DaVinci Resolve also starts and stops the remote client system. While a remote grading session is in progress, input from the user at the remote client's DaVinci Resolve workstation is ignored.

Currently, the remote grading feature supports only color correction and does not allow editing or conforming during a session. The two colorist and remote DaVinci Resolve systems must have matching timelines and the number of clips, clip durations and system resolutions must match. The requirements and limitations of a remote grading session are summarized below.

#### Requirements for Remote Grading

The following requirements must be met for remote grading to work.

- The same version of DaVinci Resolve must be installed on both systems.
- The display resolution must be the same on both systems.
- The Timeline to be graded must be conformed on both machines prior to the start of the remote grading session.
- The number of clips on the Timeline and the duration of each clip must be identical.
- While grading, the active Timeline and versions on the remote client system are constantly updated. Creating, deleting, or switching the Timeline on the client's DaVinci Resolve is not allowed. Doing so will terminate the remote grading session immediately.
- You cannot make any grading adjustments on the remote client's DaVinci Resolve workstation until the remote grading session has ended.

NOTE: Remote grading does not require a shared database.

#### **Setting Up for Remote Grading**

To start a remote grading session, the client's DaVinci Resolve must be able to connect to the colorist's system using TCP/IP.

- 1 Open DaVinci Resolve on the remote client's workstation (the one that's being remotely controlled), log in, and open the project that will be remotely graded
- 2 Choose Workspace > Remote Grading (Ctrl-G) on the remote client's workstation. A window is displayed with text fields to enter the IP address and port number of the colorist's system.
- Set the IP address field to the IP of the colorist's DaVinci Resolve workstation. If the colorist's system already has a public IP address, the port number can be left at its default value (15000). If the colorist's system is on a private network, the colorist or their network administrator should set the port number to one on the public IP router that is internally routed to port 15000 of the colorist's DaVinci Resolve.
- 4 Once the remote client clicks Connect, the client's DaVinci Resolve system will attempt to establish a connection with the remote colorist's workstation.
- 5 Once the connection is established, a pop-up appears on the colorist's screen asking for permission to accept a Remote Grading connection.
- 6 Click OK to accept, minimize the size of this dialog window, and continue grading normally.

The Remote Grading session will remain active until one of the users chooses to disconnect or an error occurs causing DaVinci Resolve to automatically terminate the session.

#### **Remote Grading Restrictions**

To allow operation over low bandwidth and a potentially long latency Internet connection there are some restrictions to remote operation.

- When playback is started, the playback speeds on the two DaVinci Resolve systems may differ. The frame positions are only guaranteed to be synchronized when playback is stopped.
- Input/output/display LUTs applied from the Config page on the colorist's DaVinci Resolve will not have any effect on the client system. LUTs selected on the client's DaVinci Resolve will be applied instead.
- Presets applied from the Config/Color pages on the colorist's system will not have any
  effect on the client's system. Presets selected on the client's DaVinci Resolve will be
  applied instead.

#### **Regulatory Notices and Safety Information**

#### **Regulatory Notices**



#### Disposal of waste of electrical and electronic equipment within the European union.

The symbol on the product indicates that this equipment must not be disposed of with other waste materials. In order to dispose of your waste equipment, it must be handed over to a designated collection point for recycling. The separate collection and recycling of your waste equipment at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city recycling office or the dealer from whom you purchased the product.



This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this product in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at personal expense.

Operation is subject to the following two conditions:

- 1 This device may not cause harmful interference.
- 2 This device must accept any interference received, including interference that may cause undesired operation.

#### **Safety Information**

This equipment must be connected to a mains socket outlet with a protective earth connection.

To reduce the risk of electric shock, do not expose this equipment to dripping or splashing.

This equipment is suitable for use in tropical locations with an ambient temperature of up to  $40^{\circ}$ C.

Ensure that adequate ventilation is provided around the product and is not restricted.

No operator serviceable parts inside. Refer servicing to your local Blackmagic Design service centre.



Use only at altitudes not more than 2000m above sea level.

#### Warranty

#### 12 Months Limited Warranty

Blackmagic Design warrants that DaVinci Resolve control surface will be free from defects in materials and workmanship for a period of 12 months from the date of purchase. If a product proves to be defective during this warranty period, Blackmagic Design, at its option, either will repair the defective product without charge for parts and labor, or will provide a replacement in exchange for the defective product. Periodical updates to the operational software are not included under this warranty.

In order to obtain service under this warranty, you the Customer, must notify Blackmagic Design of the defect before the expiration of the warranty period and make suitable arrangements for the performance of service. The Customer shall be responsible for packaging and shipping the defective product to a designated service center nominated by Blackmagic Design, with shipping charges pre paid. Customer shall be responsible for paying all shipping changes, insurance, duties, taxes, and any other charges for products returned to us for any reason.

This warranty shall not apply to any defect, failure or damage caused by improper use or improper or inadequate maintenance and care. Blackmagic Design shall not be obligated to furnish service under this warranty: a) to repair damage resulting from attempts by personnel other than Blackmagic Design representatives to install, repair or service the product, b) to repair damage resulting from improper use or connection to incompatible equipment, c) to repair any damage or malfunction caused by the use of non Blackmagic Design parts or supplies, or d) to service a product that has been modified or integrated with other products when the effect of such a modification or integration increases the time or difficulty of servicing the product. THIS WARRANTY IS GIVEN BY BLACKMAGIC DESIGN IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED. BLACKMAGIC DESIGN AND ITS VENDORS DISCLAIM ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. BLACKMAGIC DESIGN'S RESPONSIBILITY TO REPAIR OR REPLACE DEFECTIVE PRODUCTS IS THE WHOLE AND EXCLUSIVE REMEDY PROVIDED TO THE CUSTOMER FOR ANY INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES IRRESPECTIVE OF WHETHER BLACKMAGIC DESIGN OR THE VENDOR HAS ADVANCE NOTICE OF THE POSSIBILITY OF SUCH DAMAGES. BLACKMAGIC DESIGN IS NOT LIABLE FOR ANY ILLEGAL USE OF EQUIPMENT BY CUSTOMER. BLACKMAGIC IS NOT LIABLE FOR ANY DAMAGES RESULTING FROM USE OF THIS PRODUCT. USER OPERATES THIS PRODUCT AT OWN RISK.

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