Linux Installation Instructions
DaVinci Resolve 18

Pre-installation Notes

- DaVinci Resolve for Linux is a free download and does not require a license dongle or an activation.
- DaVinci Resolve Studio for Linux supports both the Mac/Windows dongle as well as the Advanced Panel dongle (previously known as the Linux dongle).
- The installer for DaVinci Resolve Studio supports stand alone CentOS/RHEL 7 installations.
- DaVinci Resolve and DaVinci Resolve Studio on Linux support decoding of ProRes media.
- Support for ProRes encoding is available in DaVinci Resolve Studio on Linux when using the Advanced Panel dongle.

Installation instructions for DaVinci Resolve and DaVinci Resolve Studio software:

1. Download *DaVinci_Resolve_Studio_18.1.1_Linux.zip* (if you have a DaVinci Resolve license dongle or activation code) or *DaVinci_Resolve_18.1.1_Linux.zip* from the Blackmagic Design website.
2. Installing from the terminal:
   cd /path/to/downloaded/software/location
   and
   unzip ./DaVinci_Resolve_Studio_18.1.1_Linux.zip
   or
   unzip ./DaVinci_Resolve_18.1.1_Linux.zip
   If the downloaded installer does not have executable permissions, you can restore executable permissions from the command line:
   chmod +x ./DaVinci_Resolve_Studio_18.1.1_Linux.run
   or
   chmod +x ./DaVinci_Resolve_18.1.1_Linux.run
   Execute the *.run command on the command line and enter the root password when prompted:
   sudo ./DaVinci_Resolve_Studio_18.1.1_Linux.run -i
   or
   sudo ./DaVinci_Resolve_18.1.1_Linux.run -i

   Please ensure that you are not logged in as root for the installation (either at Desktop login or on the Terminal).
   Installing Resolve as root may cause issues with file permissions when running Resolve as a non-root user.

3. Installing from the GUI:
   To install using a GUI based installer, unzip the file from your File browser and double click the installer file.
   Enter the root password when prompted on the GUI and follow the instructions in the installer.

Update instructions for updating the NVIDIA driver

For users who have not yet installed the recommended NVIDIA driver, instructions to update the driver are detailed below. Download the recommended driver from *https://www.nvidia.com/Download/driverResults.aspx/172376/en-us* by clicking on "DOWNLOAD" in the provided link. Then, perform the following steps:

1. Open a Terminal shell
2. You need to now become the root user. Type:
   su -
   When prompted, please enter your 'root' user's password.
3. You need to disable the Linux desktop and switch to a text interface. Type:
   init 3
4. You will be prompted for username to login as. Type:
   root
5. Enter your 'root' user's password.
6. Navigate to the folder with the downloaded driver. Type:
   cd /path/to/downloaded/driver/location
7. Run the NVIDIA driver installer. Type:
   sh NVIDIA-Linux-x86_64-460.73.01.run --silent --no-network
8. After the script completes, you should see the terminal prompt. Then, reboot the machine. Type:
   reboot

Update instructions for updating the DeckLink driver

For users who have not yet installed the latest DeckLink driver, instructions to update your driver are detailed below. Download the latest Desktop Video drivers for Linux from *https://www.blackmagicdesign.com/support/family/capture-and-playback*. Then, perform the following steps:

1. Open a Terminal shell
2. You need to now become the root user. Type:
   su -
   When prompted, please enter your 'root' user's password.
3. Uninstall the existing driver. Type:
   rpm -qa | grep desktopvideo | xargs rpm -e

4. Uncompress the downloaded driver package. Type:
   tar xvfz /path/to/downloaded/driver/location/Blackmagic_Desktop_Video_Linux_<driver_version>.tar.gz
5. Install the latest Desktop Video driver. Type:
   rpm -ivh Blackmagic_Desktop_Video_Linux_<driver_version>/rpm/x86_64/desktopvideo-<driver_version>.x86_64.rpm
6. After the installation completes, you should see the terminal prompt. Then, reboot the machine.
7. After the machine has rebooted, open a Terminal shell again
8. You need to now become the root user. Type:
   su -
   When prompted, please enter your 'root' user's password
9. You will now need to update the firmware on your DeckLink card. Type:
   BlackmagicFirmwareUpdater update 0
10. If a firmware update was applied, reboot the machine after it completes. If no firmware update was required, a reboot is not necessary.

Update instructions for updating the RED RocketX driver (if a RED RocketX card is being used)

For users who have not yet installed the recommended RED RocketX driver, instructions to update your driver are detailed below. Download the recommended drivers from *https://downloads.blackmagicdesign.com/DaVinciResolve/REDrocketX-2.1.34.0_Resolve.tgz*. Then, perform the following steps:

1. Open a Terminal shell
2. You need to now become the root user. Type:
   su -
   When prompted, please enter your 'root' user's password
3. Navigate to the target folder where the driver need to be installed. Type:
   cd /usr/local/driver
4. Uncompress the downloaded driver package. Type:
   tar xvfz /path/to/REDrocketX-2.1.34.0_Resolve.tgz
5. Open the folder with the RED RocketX driver. Type:
   cd /usr/local/driver/REDrocketX-2.1.34.0
6. Run the driver installation and setup script. Type:
   ./install_driver.sh
7. After the script completes, you should see the terminal prompt. Then, reboot the machine.
8. After the reboot is complete, open a Terminal shell
9. You need to now become the root user. Type:
   su -
   When prompted, please enter your 'root' user's password
10. Navigate to the folder where the driver is installed. Type:
    cd /usr/local/driver/REDrocketX-2.1.34.0
11. You now need to upgrade the firmware on your RED RocketX card(s). Type:
    ./rocketxup_1.4.22.18
12. After the upgrade completes, you should see the terminal prompt. Shutdown the machine entirely. Type:
    shutdown -h now
13. After the machine has powered down, restart the machine.

DaVinci Resolve CentOS Installation

For users setting up new systems or wishing to upgrade their DaVinci Resolve system, an ISO of the Resolve Installation DVD with CentOS 7.3 is available to download.

The ISO file for CentOS 7.3 can be downloaded from the following link:

https://downloads.blackmagicdesign.com/DaVinciResolve/DaVinci-Resolve-Linux-CentOS_7.3.iso

(MD5: *https://downloads.blackmagicdesign.com/DaVinciResolve/DaVinci-Resolve-Linux-CentOS_7.3.txt*).

This ISO file allows you to set up a functional CentOS environment that DaVinci Resolve can be installed in.

The Automatic configuration option on the DVD will erase all the files on your connected hard disks during installation. Please ensure that you only connect the single hard disk on which you would like to install the OS. To manually configure and select the disks and partitions during the OS installation, please select the Manual configuration option. Please note that you will need to first backup all of your files and Resolve databases externally prior to installing the OS. After the OS installation, you will need to manually restore this data. For more information regarding installation, backup and restoration, please contact your system administrator or DaVinci Resolve Linux reseller.

After completing your OS installation, please remember to check the Blackmagic Design support website for the latest DaVinci Resolve software version.

Note: DaVinci Resolve 18.1 and above have specific OS package dependencies. If these are missing or need to be updated, the installer will display an appropriate message and abort the installation. You can use the system package manager to install/upgrade the requisite packages and re-run the installation.

Updated Nov 22, 2022.