

Video Editing in Linux

Adrian Kosmaczewski

2021-07-30

Let's talk about the worst part of my Linux experience so far: video editing. It's not like I'm editing videos every day in my Linux machines, but every so often I have to do something around video, and seriously, it's a PITA.

- Shotcut
- Flowblade
- OpenShot
- DaVinci Resolve
- Lightworks
- Lumiera
- Pitivi
- KDenlive

The biggest pain point in the Linux platform is, without any doubt, non-linear video editors. I explored many options while creating the short-lived VSHN.timer video series from October 2020 to March 2021. Those videos were short; 3 minutes tops, so the projects were never very complicated or required lots of resources. Yet I had enough headaches with each one of them, as to drop the idea of doing them altogether.

And when I mean headaches, I mean: crashes; unusable user interfaces; audio input and output trouble; GPU support (or not); and more crashes. Oh, did I mention crashes? Yeah.

Frankly, and unsurprisingly, the best part of editing video in Linux is... using FFmpeg on the command line. That's it; the rest goes downhill from here. Modifying video files on the terminal is surprisingly straightforward and predictable: extract clips, change formats, all of that works extremely well. Non-linear editors? Nah.

TL;DR: KDenlive FTW.

Shotcut

I used Shotcut for the first few editions of VSHN.timer; and basically, it crashed all the time. I barely could finish the one or two videos I wanted to edit with it.

Flowblade

I used Flowblade for a few more VSHN.timer editions, and although it didn't crash or anything, I found the UI quite unusable. In particular the controls are extremely small, and it's all too easy to click on the wrong places. Disappointing.

OpenShot

OpenShot was much more stable than Shotcut, and it's easier to use. The brilliant thing about it is the story of the developer behind it: a C#/.NET developer without experience in Linux started the project in May 2008... and here it is now.

The project includes a whole C++ library for video and audio processing, but all in all, I didn't like it, I think it was not very usable. The UI was quite confusing, and it kept losing audio input randomly here and there.

DaVinci Resolve

DaVinci Resolve is apparently one of the biggest players in the market, used for big movies and everything.

In my experience, the biggest problem with DaVinci Resolve is that none of the two Linux machines I'm using (a Lenovo ThinkPad Carbon X1 with 16 GB RAM for work, and my personal TUXEDO InfinityBook Pro 14 v4 with 32 GB RAM) has a GPU supported by it, and as such, I could not make it work in neither machine. It installs, but does not start. It is unclear in the documentation which machines are supported and which aren't.

Infuriating; why isn't this detected at installation time?

Lightworks

Lightworks is another "big player" in the market. It looks very polished, very professional and filled with options and filters. When I first tried it in 2020, it didn't work with the audio on my ThinkPad, and the UI was extremely unstable; movie clips were disappearing from the UI and such. Unusable.

I tried it again a few months later in 2021, and although it seemed a bit more stable than previously, it was impossible to find out how to select the audio input for voiceover (I finally found out how to do it in the settings panel of the application) but I found it very cumbersome to add transitions, the app kept throwing unintelligible errors all over the place.

Finally, Lightworks being a commercial application, one needs a "pro" account to export to 1080p or higher. I didn't find it worth the money.

Lumiera

I discovered Lumiera last month, and apparently it's a rewrite of another video editor called Cinelerra-CV; never heard of either. I haven't tried neither of these yet, so I can't comment. I'm just adding it here for reference.

Pitivi

Another one I haven't tried yet, but appears here for reference: Pitivi.

KDEnlive

After all the back and forth, KDEnlive is the editor I used for most VSHN.timer videos. It has a very nice effect editor with keyframes (much more usable than in Flowblade) and in general, it has a very stable and snappy interface. It allowed me to work smoothly, simply, and with almost no crashes at all.

It isn't available for Mac though; only for Windows & Linux. As usable as it is, I struggled a bit to find out how to add a fade in effect.

All things considered, KDEnlive is the one I kept using the longest, and the one I recommend to other Linux users for their video editing needs.