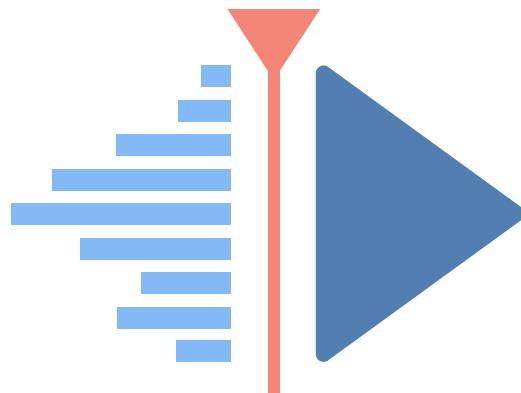


The Kdenlive Handbook

This documentation was converted from the KDE UserBase
Kdenlive page.



The Kdenlive Handbook

Contents

1	Introduction	20
1.1	Video editing features	20
2	Installation	21
2.1	Configuration Information	21
2.1.1	GNU/Linux	21
3	Quick Start	22
3.1	Creating a new project	22
3.2	Adding clips	24
3.3	Basic Timeline Workflow	25
3.3.1	Basic Effects	28
3.3.2	Music	30
3.4	Rendering	31
4	Written Tutorials	33
5	Video Tutorials	34
6	Windows Issues	35
6.1	Timeline: right-click menu close immediately after releasing mouse button	35
6.2	Icons are missing	35
6.3	Cannot open projects made with previous version, timeline snaps back, cannot import clip	35
6.4	Windows 10: timeline stuttering or Kdenlive hangs.	35
6.5	Clip is invalid, will be removed	36
6.6	Any critical bug	36
6.7	JPG files appear as white picture after rendering	36
6.8	Play/Pause Issue	36
6.9	Qt rendering crash	36
6.10	Kdenlive cannot be deleted, running process on exit	36
6.11	Kdenlive cannot be uninstalled	37
6.12	Kdenlive crash or green Monitor	37

The Kdenlive Handbook

7 General Issues	38
7.1 Audio Pops and Ticks in Render	38
8 Project and File management	39
8.1 File Structure	39
8.2 The Project Bin	40
8.2.1 Project Bin - Right-Click Menu	42
8.3 Project	43
8.4 Project Settings Dialog	43
8.4.1 Project Settings Tab	43
8.4.1.1 Project Folder	44
8.4.1.2 Video Profile	44
8.4.1.3 Tracks	44
8.4.1.4 Thumbnails	44
8.4.1.5 Proxy Clips	44
8.4.2 Project Files Tab	45
8.4.3 Metadata Tab	45
8.4.4 Notes	46
8.4.5 Archiving	47
8.4.6 Backup Feature	48
8.4.7 Clips	48
8.4.7.1 Clips (Video, Audio and Images)	48
8.4.7.2 Color clips	50
8.4.7.3 Title clips	50
8.4.7.4 Slideshow clips	50
8.4.7.5 Create Folder	51
8.4.7.6 Online Resources	51
8.4.7.7 Stop Motion	51
8.4.7.8 Proxy clips	52
8.4.7.9 Clip Properties	53
8.4.7.9.1 File Info	53
8.4.7.9.2 Properties	53
8.4.7.9.3 Markers	55
8.4.7.9.4 Metadata	56
8.4.7.9.5 Analysis	56
8.4.7.10 Generators	56
8.4.7.10.1 Counter	56
8.4.7.10.2 White Noise	57
8.4.7.10.3 Color Bars	58
8.4.7.11 Full Luma	58
8.4.7.11.1 Advance Clip Property - Full Luma Range	58

The Kdenlive Handbook

9 Timeline	60
9.1 Timeline Cursor/Position Caret/Playhead	61
9.2 Tracks	61
9.3 See also	61
9.4 Editing	62
9.4.1 Seeking through your project	62
9.4.2 Cutting a clip	62
9.4.3 Resizing a clip	62
9.4.4 Removing Space Between Clips	63
9.4.5 Middle Tool Bar	63
9.4.6 Bottom Tool Bar	65
9.4.7 Button Descriptions	66
9.4.7.1 Track Compositing - None	66
9.4.7.2 Track Compositing - Preview	66
9.4.7.3 Track Compositing - HighQuality	66
9.4.7.4 Timeline Edit Mode - Normal Mode	66
9.4.7.5 Timeline Edit Mode - Overwrite Mode	66
9.4.7.6 Timeline Edit Mode - Insert Mode	67
9.4.7.7 Selection Tool	68
9.4.7.8 Razor Tool	68
9.4.7.9 Spacer Tool	68
9.4.7.10 Fit Zoom to Project	68
9.4.7.11 Zoom project	68
9.4.7.12 Split Audio and Video Automatically	69
9.4.7.13 Automatic Transitions	69
9.4.7.14 Show Video Thumbnails	69
9.4.7.15 Show Audio Thumbnails	69
9.4.7.16 Show marker comments	69
9.4.7.17 Snap	69
9.4.8 Cutting Footage from multiple aligned tracks - Ripple Delete	70
9.5 Grouping	70
9.5.1 How to Group Clips	70
9.5.2 Cutting Grouped Clips	70
9.5.3 Removing Clip Grouping	71
9.5.3.1 FAQ	72
9.6 Guides	72
9.6.1 Clip in Timeline - Right-Click Menu	73
9.6.2 Empty Space in Timeline - Right-Click Menu	74
10 Alphabetical List of Effects and Transitions	75

The Kdenlive Handbook

11 Transitions	83
11.1 How To Add a Transition	83
11.2 Properties Tab (version >= 15.12)	83
11.3 Transition Tab (pre version 15.12)	85
11.4 How to create transitions with a single click	86
11.5 Automatic Transitions	86
11.6 Mixing titles, images and Videos with Transitions	87
11.7 Keyframe Animations Using Transitions	87
11.8 List of Transitions	87
11.9 FAQ	88
11.10Affine Transition	88
11.10.1 Example 1	88
11.10.2 Dissolve using Affine Transition	89
11.10.3 Rotation using Affine Transition	89
11.10.4 Example 2 - Rotate Y	89
11.11Composite Transition	90
11.11.1 Alpha operations	91
11.11.2 Tutorial 1	92
11.11.3 Tutorial 2 - composite transition and Blue Screen	93
11.11.4 Tutorial 3 - Video Masks	93
11.12Hue	93
11.13Transitions - Wipe	94
11.14addition transition	95
11.15Addition_alpha transition	95
11.16alphaover transition	96
11.17alphaatop transition	96
11.18alphain transition	97
11.19alphaout transition	98
11.20alphaover transition	98
11.21alphaxor transntion	99
11.22Transitions - Screen	100
11.23Alpha operation transitions	100
12 Effects	104
12.1 Effects Tab	104
12.2 The Properties Tab and its Menu	105
12.2.1 The Properties Tab	105
12.2.2 Reset Effect	107
12.2.3 Save Effect	107
12.2.4 Create Group	107
12.2.5 Create Region	108

The Kdenlive Handbook

12.3 Using Keyframes in effects	108
12.4 Seek To Active Frame	108
12.5 Effects Demos	109
12.6 Effects Categories	109
12.7 FAQ:	110
12.8 Effects - Alpha manipulation	110
12.8.1 General Information about Alpha Manipulation	110
12.8.2 Effects in the Alpha Manipulation Category	111
12.8.3 Compositing Reference Material	111
12.8.4 Alpha gradient	111
12.8.5 Alpha operations	111
12.8.5.1 Tutorial 1	112
12.8.6 Alpha Shapes	112
12.8.6.1 Shape Options	113
12.8.6.2 Tilt	113
12.8.6.3 Position X and Y	113
12.8.6.4 Size X and Y	113
12.8.6.5 Transition Width	113
12.8.6.6 Operations	114
12.8.6.7 Min and Max and Operations - Worked examples	114
12.8.7 Chroma Key	121
12.8.7.1 Basic Chroma Keying Tutorial	122
12.8.7.2 Video Tutorial	122
12.8.7.3 See also	122
12.8.8 Color Selection	122
12.9 Basic Technique	122
12.10 All Options	123
12.10.1 See Also	124
12.10.2 Tutorial	125
12.10.3 Details	125
12.11 Rectangular Alpha Mask	126
12.12 Rotoscoping	127
12.12.1 What is Rotoscoping?	127
12.12.2 How to draw the region in Kdenlive?	128
12.12.3 How to move the mask to follow the action - keyframes	129
12.12.4 Rotoscoping options greyed out	130
12.12.5 Examples	131
12.12.6 Tutorial with Rotoscoping	131
13 Analysis and Data	132
14 Audio Spectrum Filter	133

The Kdenlive Handbook

15 Oscilloscope	134
16 Video Values	135
17 Artistic Effects	136
18 3LevelThreshold	137
19 Binarize	138
19.1 Effects - Audio	138
20 Mono to stereo	142
20.1 Effects - Audio Correction	142
21 Gain	143
22 Mono Amplifier	144
22.1 Audio Correction - Mute	144
23 Stereo Amplifier	145
23.1 Effects - Audio channels	145
23.2 Effects - Blur and Hide	145
23.3 Auto Mask	145
23.3.1 Demo	146
23.3.2 How to apply Auto Mask	146
23.3.3 Motion Tracking	146
23.3.3.1 Deleting Motion Tracking Data	148
24 Blur	150
24.1 Box Blur	150
24.2 Glow	150
24.3 Obscure	151
25 Softglow	152
25.1 Square Blur	153
26 Effects - Color	154
26.1 B effect	154
26.2 Chroma Hold	154
26.3 Contrast	155
26.4 Greyscale	155
26.5 Hue Shift	155
26.6 Invert	155
26.7 Primaries	155
26.8 RGB Parade	155
26.9 Saturation Effect	156
26.10 Sepia	156
26.11 Technicolor	156
26.12 Tint	156

27 Effects - Colour Correction	157
27.1 3 point balance	157
28 Bezier Curves	158
28.1 Brightness	158
28.2 Curves	159
28.3 Gamma	159
28.4 Levels	159
28.5 RGB adjustment	159
28.6 SOP/Sat Effect	160
28.7 White Balance	161
29 Effects - Crop and transform	162
29.1 Edge Crop	162
29.2 LetterB0xed	162
29.3 Position and Zoom	162
29.4 Rotate and Shear	163
29.5 Crop, Scale and Tilt	164
30 nosync0r	165
31 Transform	166
31.1 Effects - Custom	166
31.2 Effects - Distort	167
31.2.1 Distort - Corners	168
31.2.2 Defish	168
31.2.2.1 PARAMETERS	168
31.2.2.2 SOME APPLICATION NOTES	170
31.2.3 Distort	171
31.2.4 Lens Correction	171
31.2.5 Mirror	171
31.2.6 Pixelize	171
31.2.7 Wave	171
31.3 Effects - Enhancement	171
31.3.1 Denoiser	172
31.3.1.1 Tutorial 1	172
31.3.2 Sharpen	172
32 Spill Suppress	173
32.1 Effects - Fade	173
32.1.1 Fade From Black	173
32.1.2 Fade to Black	173
32.2 Effects - Fun	174
32.2.1 Charcoal	174
32.2.2 Dust	174
32.2.3 Grain	174
32.2.4 Old Film	175
32.2.5 Scratchlines	175
32.2.6 Vignette Effect	175
32.3 Effects - Misc	175

33 Audio Wave	178
33.1 Overlaying the Wave	178
33.1.1 Baltan	179
33.1.2 Cartoon	179
33.1.3 Color Distance	179
33.1.4 Color Effect	180
33.1.5 Colorhalftone	180
33.1.6 Delay grab effect	180
33.1.7 Dynamic Text	181
33.1.8 Edge Glow	181
33.1.9 Equaliz0r	181
33.1.10 K-Means Clustering	181
33.1.11 Misc - Light Graffiti	182
33.1.12 Luminance	182
33.1.13 Medians	182
34 NDVI Filter	184
34.1 Nervous	184
34.2 Regionalize	184
34.3 Sobel	185
34.4 tehroxx0r	185
34.5 Threshold	185
34.6 threshold0	185
34.7 Analysis and Data - Vectorscope	185
34.8 Vignette	186
35 cairogradient	187
36 cairoimagegrid	188
36.1 Colorize	188
37 Dance	190
37.1 Dither	190
37.2 Key Spill Mop Up	190
37.2.1 Tutorial	191
37.2.2 Details	191
38 Lumakey Effect	194
38.1 nosync0r	194
38.2 Pr0be	195
38.3 Pr0file	196
38.4 rgbnoise	197
38.5 scanline0r	197
38.6 sigmoidaltransfer	197
38.7 threelay0r	197
38.8 Timeout Indicator	197
38.9 twolay0r	198

The Kdenlive Handbook

39 Effects - Motion	199
39.1 Motion - Freeze	199
39.2 Motion Effects - Speed	199
40 Vectorscope Window	201
41 Titles	202
41.1 How to Save a Title	202
41.2 How to Load a Title	203
41.3 How to edit an existing title	204
41.4 Template Titles - User-Defined	204
41.5 Template Titles - Built In	206
41.6 Import an Image into the title	208
41.7 Draw Rectangle Toolbar Item	208
41.8 To make the title scroll vertically	209
41.9 To make the title scroll Horizontally	210
41.10 How to fade titles in and/or out	210
41.11 How to fade in more than one title sequentially	211
41.12 FAQ	212
42 Monitors	213
42.1 Resizing the Monitors	213
42.2 Clip Monitor	213
42.2.1 Widgets on the Clip Monitor	214
42.2.2 Creating Zones in Clip Monitor	214
42.2.3 Clip Monitor Right-click menu	214
42.3 Project Monitor	214
42.3.1 Project Monitor Widgets	215
42.3.2 Creating Zones in Project Monitor	215
42.3.3 Project Monitor Right-click menu	216
42.4 Record Monitor	216
42.4.1 Version 19.04	217
43 Separate Clip and Project Monitors	218
43.1 Clip Monitor - Right Click Menu	218
43.1.1 Play...	219
43.1.1.1 Play	219
43.1.1.2 Play Zone	219
43.1.1.3 Loop Zone	219
43.1.2 Go To	219
43.1.2.1 Go to Project Start	219
43.1.2.2 Go to Previous Snap Point	219

The Kdenlive Handbook

43.1.2.3 Go to Zone Start	219
43.1.2.4 Go to Clip Start	220
43.1.2.5 Go to Clip End	220
43.1.2.6 Go to Zone End	220
43.1.2.7 Go to Next Snap Point	220
43.1.2.8 Go to Project End	220
43.1.3 Markers	220
43.1.3.1 Add Marker	220
43.1.3.2 Edit Marker	220
43.1.3.3 Delete Marker	220
43.1.3.4 Delete All Markers	220
43.1.3.5 Go to marker...	220
43.1.4 Go to marker...	221
43.1.5 Save zone	221
43.1.6 Extract Zone	221
43.1.7 Extract frame	222
43.1.8 Set current image as thumbnail	222
43.1.9 Monitor overlay infos	222
43.1.10 Real time (drop frames)	223
43.2 Project Monitor - Right Click menu	223
43.2.1 Play...	223
43.2.1.1 Play	223
43.2.1.2 Play Zone	223
43.2.1.3 Loop Zone	223
43.2.2 Go To	223
43.2.2.1 Go to Project Start	223
43.2.2.2 Go to Previous Snap Point	223
43.2.2.3 Go to Zone Start	223
43.2.2.4 Go to Next Snap Point	223
43.2.2.5 Go to Project End	224
43.2.3 Extract frame	224
43.2.4 Split View	224
43.2.5 Monitor overlay infos	224
43.2.6 Real time (drop frames)	224
44 Menu Reference	225
44.1 File Menu	225
44.1.1 File Menu — New	225
44.1.2 File Menu — Open	226
44.1.3 File Menu — Open Recent	226
44.1.4 File Menu — Save	226
44.1.5 File Menu — Save As	226

The Kdenlive Handbook

44.1.6 File Menu — Revert	226
44.1.7 DVD Wizard	226
44.1.7.1 Screen 1 of the DVD Wizard	226
44.1.7.2 Screen 2 of the DVD Wizard	227
44.1.7.3 Screen 3 of the DVD Wizard	227
44.1.7.4 Screen 4 of the DVD Wizard	228
44.1.8 Transcode Clips	230
44.1.9 File Menu - Close	231
44.1.10 File Menu — Quit	231
44.2 Edit Menu	231
44.2.1 Edit Menu — Copy	231
44.2.2 Edit Menu - Find	231
44.2.3 Edit Menu - Find Next	232
44.2.4 Edit Menu — Paste	233
44.2.5 Edit Menu — Paste Effects	233
44.2.6 Edit Menu — Redo	233
44.2.7 Edit Menu — Undo	233
44.2.8 Project Menu	233
44.2.9 Stop Motion Capture	234
44.2.10 Clean Project	235
44.2.11 Create Folder	235
44.2.12 Generators	236
45 Online Resources	237
45.1 Freesound Audio Library	237
45.2 Freesound Audio Library - Future version	238
45.3 Archive Org Video Library	240
45.4 Open Clip Art Graphic Library	240
45.4.1 Open Backup File	240
46 Reverse Clip	241
46.1 Rendering	241
46.1.1 Rendering Dialog Ver 17.04	242
46.1.2 Rendering Profile Categories	242
46.1.2.1 File Rendering - earlier Versions	243
46.1.2.2 Variable Bit Rate - earlier Versions	244
46.1.2.3 Constant Bit Rate - earlier Versions	245
46.1.2.4 DVD Rendering - earlier Versions	246
46.1.2.5 Websites - earlier Versions	247
46.1.2.6 Mobile Devices - earlier Versions	247
46.1.3 Create Custom Render Profiles	247
46.1.4 Rendering In Batch mode	249
46.1.5 Rendering Using the Guide Zone Option	249

The Kdenlive Handbook

46.1.6 Rendering Using the Selected Zone Option	249
46.1.7 Render Overlay	250
46.1.8 Export Metadata	250
46.1.9 Export Audio Checkbox	252
46.1.10 Encoder Threads	255
46.1.11 Scanning Dropdown	255
46.2 Adjust Profile to Current Clip	255
47 Analyse Keyframes	257
47.1 Tracks	257
47.1.1 Insert Track	257
47.1.2 Delete Track	258
47.1.3 Configure Tracks	258
47.1.4 Select All in Current Track	258
47.1.5 Select All	259
47.2 Tool Menu	259
48 Clip Menu	260
48.1 Markers Menu Item	260
48.2 Automatic Transition	261
48.3 Other Items	261
49 Automatic Scene Split	262
49.1 Clip In Timeline	262
49.2 Delete Clip	263
50 Duplicate Clip with speed change	264
50.1 Edit Clip	265
50.2 Extract Audio	265
50.3 Clip Menu — Locate Clip	266
51 Clip Menu - Markers	267
51.1 Add Marker	268
51.2 Edit Marker	268
51.3 Delete Marker	268
51.4 Delete All Markers	268
51.5 Go To marker	269
51.5.1 Rename Clip	269
51.5.2 Stabilize	269
51.5.2.1 Stabilize	270
51.5.3 Transcode Menu Item	272
51.6 Timeline Menu	273
51.7 Current Clip Menu	277
51.7.1 Cut Clip	278
51.7.2 Delete Selected Item	278
51.7.3 Edit Duration	278
51.7.4 Save clip	280

The Kdenlive Handbook

52 Insert Clip Zone in Timeline	282
52.1 Selection Menu	283
52.2 Timeline>Space	284
52.2.1 Insert Space	284
52.2.2 Remove Space	288
52.3 Monitor Menu	289
52.4 View Menu	289
52.4.1 View Menu — Save Layout As	292
52.4.2 View - Load Layout	292
52.4.3 View Menu — Show Title Bars	293
52.4.4 View>Timeline	293
53 Screen Grab	294
53.1 View>Project Tree	294
53.2 View Menu — Clip Monitor	294
53.3 View>Project Monitor	294
53.4 View>Effect Stack	294
53.5 View>Transition	294
53.6 View Menu — Effects	295
53.7 Vectorscope Window	295
53.8 Waveform	296
53.9 RGB Parade	297
53.10 Histogram	298
53.11 Audio Signal	298
53.12 Audio Spectrum	299
53.13 Spectrogram	300
53.14 View Menu — Undo History	301
54 Settings Menu	304
55 Settings Menu - Mac®OS X	306
55.1 Manage Project Profiles	307
55.2 Download New Wipes	308
55.3 Download New Render Profiles	308
55.4 Upload/Share Render Profiles	309
55.5 Download New Project Profiles	309
55.6 Download New Title Templates	309
55.7 Run Config Wizard	311

The Kdenlive Handbook

56 Settings>Themes	312
56.1 Toolbars Shown	312
56.2 Full Screen Mode	312
56.3 Configure Shortcuts	313
56.4 Configure Notifications	313
56.5 Configure Kdenlive	314
56.5.1 Misc	314
56.5.2 Project Defaults	314
56.5.3 Timeline	315
56.5.4 Environment	316
56.5.4.1 MLT Environment	316
56.5.4.2 Default Folders	317
56.5.4.3 Default Apps	317
56.5.5 Capture	317
56.5.5.1 Configure Firewire Capture	318
56.5.5.2 Configure Screen Grab Capture	319
56.5.6 Jog Shuttle	319
56.5.7 Playback	320
56.5.8 Transcode	321
56.5.8.1 Transcode Options	322
57 Rendering Using Guides and Rendering Scripts	323
57.1 Purpose	323
57.2 Picking Sections with Guides	323
57.3 Generating Rendering Scripts	326
57.4 Starting Your Rendering Scripts	328
57.5 Starting Your Rendering Scripts in a Command Line Terminal	329
57.6 Summary	329
58 Render Profile Parameters - How to read them	330
58.1 Render Profile Parameters - How to read them - ver 0.9.10	330
58.2 Render Profile Parameters - How to read them - earlier versions of Kdenlive	331
59 Capturing	333
59.1 Firewire	334
59.2 FFmpeg	335
59.3 Screen Grab	335
59.4 Blackmagic	336
60 Capturing Audio (dubbing)	337
60.1 Version 19.04	337

The Kdenlive Handbook

61 Toolbars	338
61.1 Main and Extra Toolbars	338
61.2 Configuring the Toolbars	338
61.3 Hiding and Showing the Toolbars	339
62 Shooting Hints	340
62.1 Using P2 footage from the Panasonic HVX200 on GNU/Linux (tested on Ubuntu)	340
62.1.1 Step One: FreeMXF	340
62.1.2 Step Two: Using mxfsplit	340
62.1.3 Conclusion	341
63 Troubleshooting and Common Problems	342
64 Kdenlive On Other Platforms	344
64.1 Non-KDE Desktops	344
64.2 Kdenlive on OS X	344
65 Useful Information	345
65.1 What components does Kdenlive use?	345
65.2 How do I fix Audio Sync Issues?	345
65.3 Keyboard Shortcuts	345
65.3.1 Editing	345
65.4 Editing Surround Sound with Kdenlive	346
65.4.1 External Tools Used Here	346
65.4.2 Creating New Surround Sound	347
65.4.2.1 Create and Edit Surround Sound with Audacity	347
65.4.2.2 Muxing Video and Audio Together	350
65.4.3 Editing Existing Surround Sound	350
65.4.3.1 Extract and Split the Audio Track	351
65.4.3.2 Import Audio Tracks into Kdenlive	352
65.4.3.3 Rendering the Project	353
65.4.3.4 Compose a Surround Sound Audio File	354
65.4.3.5 Muxing Video and Audio Together	355
65.5 Tips & Tricks	355
65.6 Useful Resources	356
66 Version History	357
67 Bug reports	358
67.1 Step 1: Upgrade to Kdenlive latest release	358
67.2 Step 2: Query open issues	358
67.3 Step 3: Report a bug	359
67.3.1 How to get useful crash information (backtrace)	359
67.4 Step 4: Upload some sample RAW footage	360
67.5 MLT bug reports	360

The Kdenlive Handbook

68 Credits and License	361
68.1 Program copyright	361
68.2 Documentation copyright	361
68.3 Licenses	361

Abstract

Chapter 1

Introduction

Kdenlive is an acronym for **KDE Non-Linear Video Editor**.

It is a free software ([GPL licensed](#)) primarily aimed at the Linux® platform. It also works on BSD¹ and MacOS as it relies only on portable components ([Qt](#) and [MLT](#) framework). Windows versions are also available, with some drawbacks. See [Windows Issues](#) for more information.

Non-linear video editing is much more powerful than beginners' (linear) editors, hence it requires a bit more organization before starting. However, it is not reserved to specialists and can be used for small personal projects.

Through the MLT framework, Kdenlive integrates many plugin effects for video and sound processing or creation. Furthermore Kdenlive brings a powerful titling tool, a DVD authoring (menus) solution, and can then be used as a complete studio for video creation.

1.1 Video editing features

- Multitrack edition with a timeline and virtually unlimited number of video and audio tracks, plus facilities for splitting audio and video from a clip in multiple tracks
- Non-blocking rendering. You can keep working on a project at the same time a project is being transformed into a video file
- Effects and transitions can be used with ease, and you can even create some wipe transitions of your own!
- Simple tools for easy creation of color clips, text clips and image clips
- Automatic slideshows creation from pictures directories, with crossfade transitions among the images
- Configurable keyboard shortcuts and interface layouts
- and much more!

¹ Berkeley Software Distribution

Chapter 2

Installation

Visit the [download](#) page of the Kdenlive Web site for up to date information on installing Kdenlive. (Aug 2017)

Follow this link for [Historical Install Information](#)

2.1 Configuration Information

Kdenlive's application-wide persistent settings are stored in the following locations, depending on your platform.

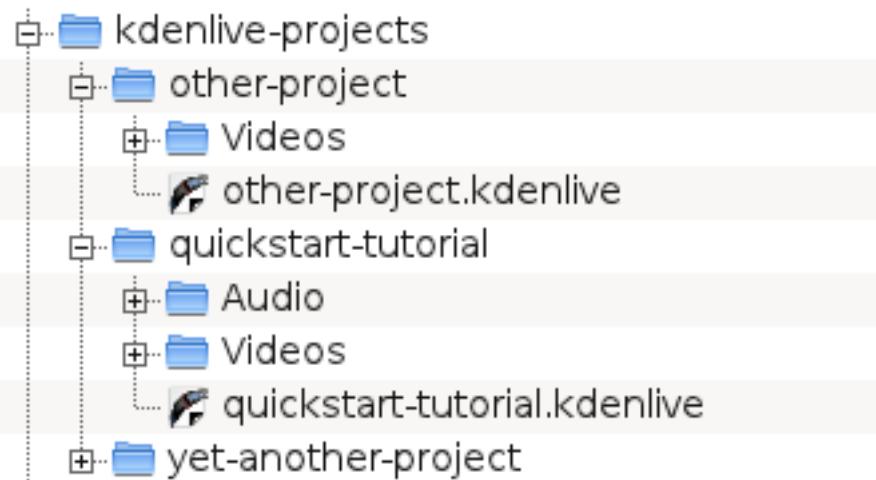
2.1.1 GNU/Linux

- `~/.config/kdenliverc` : contains the general settings of the application. Delete this and restart kdenlive to reset the application to 'factory' settings
- `~/.config/session/kdenlive_104534dcfdb61d887154xxxxxxxxx_154yyyyyy_98zzzz` : temporary session info
- `~/.cache/kdenlive`
- `~/.local/share/kdenlive` : lumas folder inside here contains the files used for [Wipes](#)
- `~/.local/share/stalefiles/kdenlive`

Chapter 3

Quick Start

3.1 Creating a new project



Kdenlive directory structure

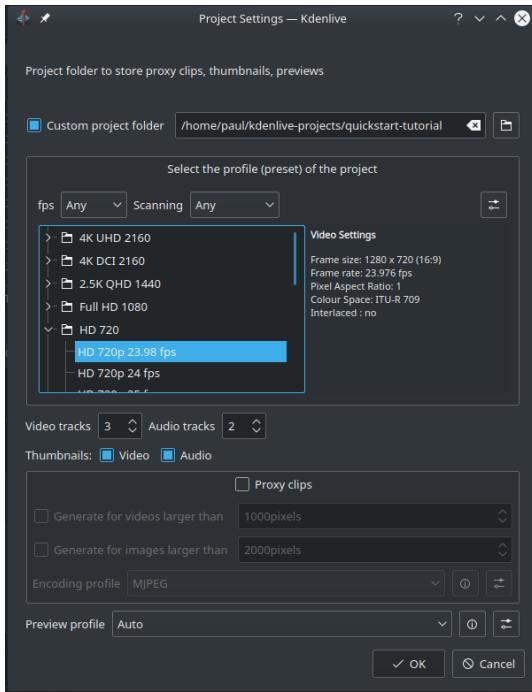
The first step is creating a new (empty) folder for our new project. I will call it `quickstart-tutorial/` in this tutorial. Then get some sample video clips, or download them from here:[kdenlive-tutorial-videos-2011-avi.tar.bz2](#) (7 MB)¹, and extract them to e.g. a `quickstart-tutorial/Video`s/ subfolder inside the project folder.

The image on the left shows the suggested directory structure: Each project has its own directory, with video files in the `Videos` subdirectory, audio files in the `Audio` directory, etc. ([read more](#))

(The tutorial from now on assumes that you use the sample videos provided, but it works with any.)

¹ If you prefer Theora (which you probably don't since Ogg Video usually causes problems), you can alternatively download [kdenlive-tutorial-videos-2011-ogg.tar.bz2](#).

The Kdenlive Handbook



New Project dialog

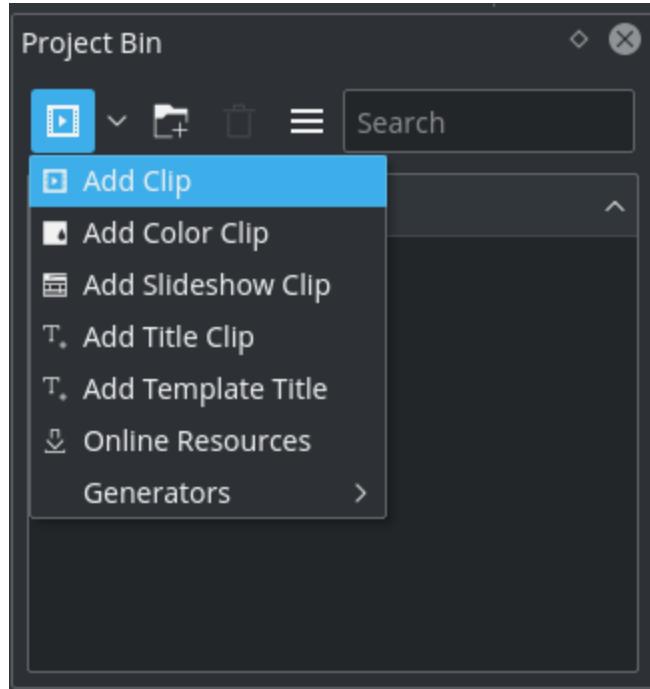
Open Kdenlive and create a new project (**File → New**).

Choose the previously created project folder (quickstart-tutorial/) and select an appropriate project profile. The video files provided above are 720p, 23.98 fps.² If you are using your own files and don't know which one to use, Kdenlive will suggest an appropriate one when the first clip is added³, so you can leave the field on whatever it is.

² 720 is the video height, p stands for **progressive scan** in contrast to **interlaced video**, and the fps number denotes the number of full frames per second.

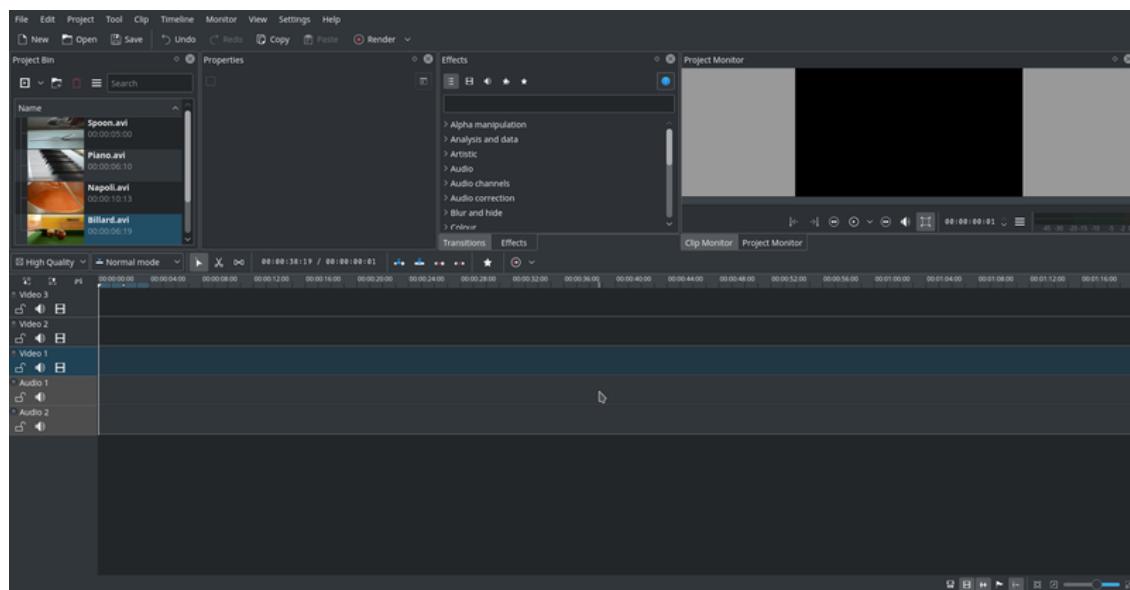
³ Provided Configure Kdenlive Settings under **Misc** is set to *Check if first added clip matches project profile*

3.2 Adding clips



Project Bin: Adding video clips

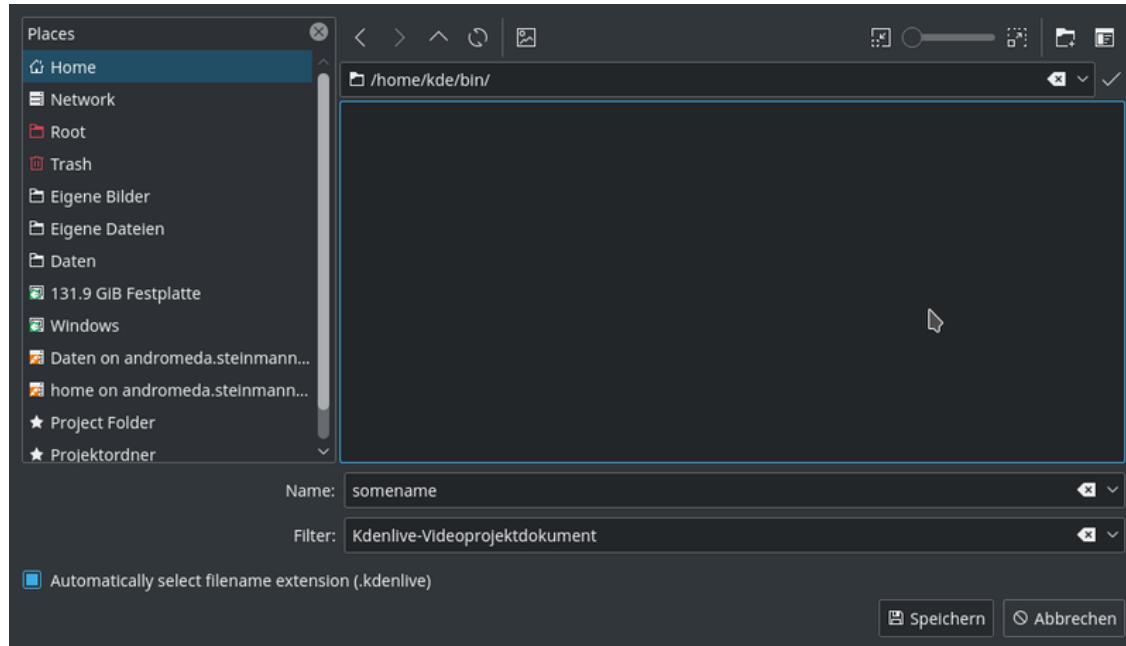
Now that the project is ready, let's start adding some clips (i.e. the ones you downloaded). This works via the *Project Bin* widget; a click on the **Add Clip** icon directly opens the file dialog, a click on the small arrow shows a list of additional clip types that can be added as well. Video clips, audio clips, images, and other Kdenlive projects can be added via the default **Add Clip** dialog.



Kdenlive window with the tutorial files

After loading the clips, Kdenlive will look similar to this. On the top left there is the already known project tree. Right of it are the monitors that show video; The clip monitor displays

video from the original clips, the project monitor shows how the output video will look, with all effects, transitions, etc. applied. The third, also very important, item is the timeline (below the monitors): This is the place where the video clips will be edited. There are two different types of tracks, Video and Audio. Video tracks can contain any kind of clip, audio tracks as well – but when dropping a video file to the audio track, only the audio will be used.



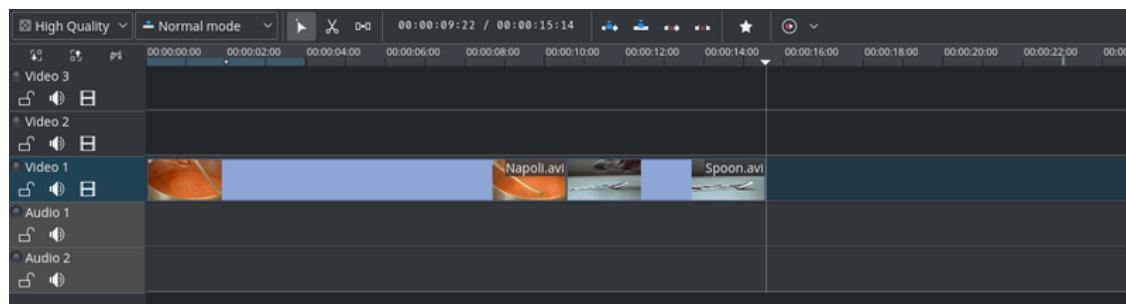
Saving a Kdenlive project

Let's save the work via **File → Save**. This saves our project, i.e. where we placed the clips on the timeline, which effects we applied, and so on. It can *not* be played.⁴ The process of creating the final video is called *Rendering*.

3.3 Basic Timeline Workflow

See also [Timeline section of the manual](#)

Now comes the actual editing. Project clips are combined to the final result on the timeline. They get there by drag and drop: Drag some Napoli (assuming you are using the files provided above, as in the rest of this quick start tutorial; If not, please make sure your screen is waterproof, and perhaps tomatoproof) from the project tree, and drop it onto the first track in the timeline.

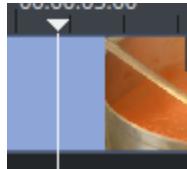


First clips in the timeline

⁴ To be correct, it *can* be played using `melt yourproject.kdenlive`, but this is not the way you would want to present your final video since it is (most likely) too slow. Additionally, it only works if melt is installed.

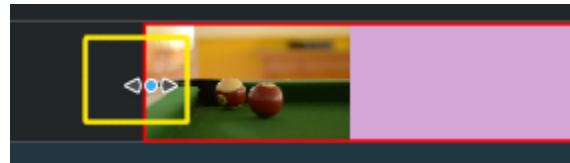
The Kdenlive Handbook

Since some cutlery is needed as well, grab the spoon clip and drop it on the first track as well. Then drag the Napoli to the beginning of the timeline (otherwise the rendered video would start with some seconds of plain black), and the Spoon right after the Napoli, such that it looks like in the image on the left. (Where I have zoomed in with **Ctrl-Wheel**.)



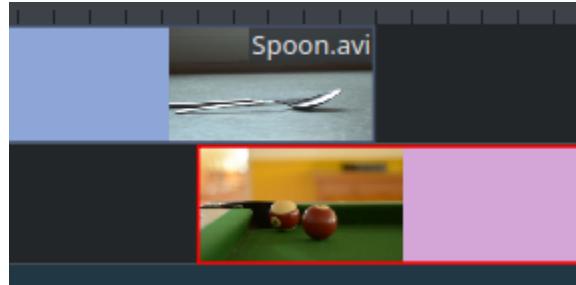
Timeline cursor

The result can already be previewed by pressing **Space** (or the **Play** button in the project monitor). You will see the Napoli directly followed by a Spoon. If the timeline cursor is not at the beginning, the project monitor will start playing somewhere in the middle; you can move it by dragging it either on the timeline ruler or in the project monitor. If you prefer keyboard shortcuts, **Ctrl-Home** does the same for the monitor that is activated. (Select the **Project Monitor** if it is not selected yet before using the shortcut.)



Resize marker

Since after eating comes playing, there is a Billiards clip. Add it to the timeline as well. For the first 1.5 seconds nothing happens in the clip, so it should perhaps be **cut** to avoid the video becoming boring. An easy way⁵ for this is to move the timeline cursor to the desired position (i.e. the position where you want to cut the video), then drag the left border of the clip when the resize marker appears. It will snap in at the timeline cursor when you move close enough.



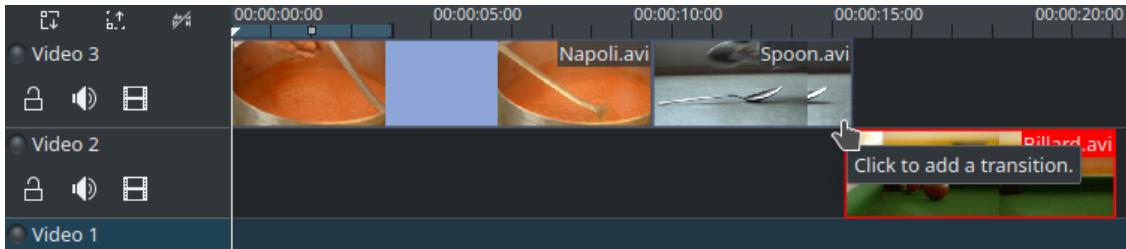
Overlapping clips

To add a *transition* between eating (the Spoon) and playing billiards, the two clips need to overlap. To be precise: the second clip should be above or below the first one and end some frames after the second one begins. Zooming in until the ticks for single frames appear helps here; it also makes it easy to always have the same transition duration, five frames in this case.

You can zoom in by either using the **zoom slider** at the bottom of the Kdenlive window, or with **Ctrl-Mousewheel**. Kdenlive will zoom to the timeline cursor, so first set it to the position which you want to see enlarged, then zoom in.

⁵ Writing it this way suggests that there are several ways of cutting a clip. This is in fact true.

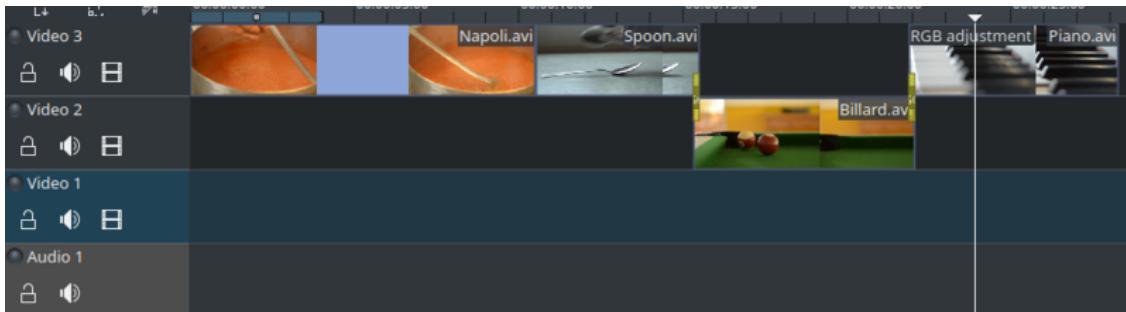
The Kdenlive Handbook



Transition marker

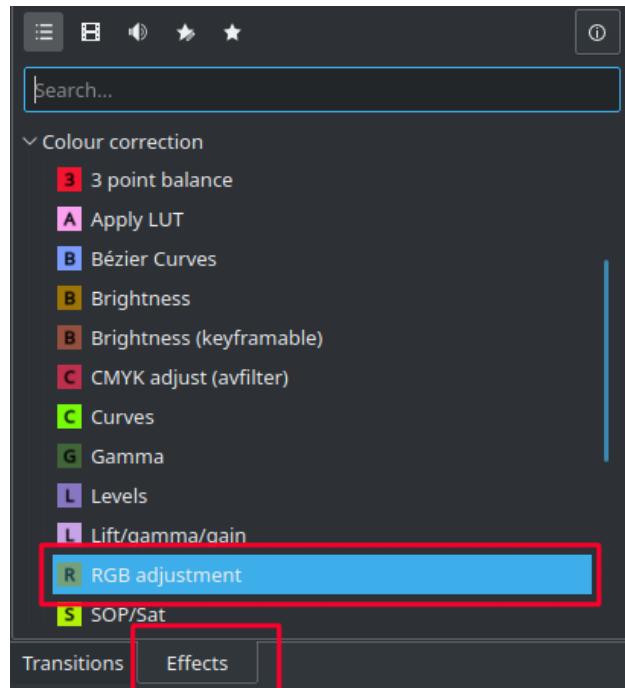
Now that the clips overlap, the transition can be added. This is done either by right-clicking on the upper clip and choosing **Add Transition** or, easier, by hovering the mouse over the lower right corner of the Spoon clip until the pointing-finger pointer is shown and the message 'Click to add transition' appears. The latter, by default, adds a dissolve transition, which is in this case the best idea anyway since the Spoon is not required for playing.

The dissolve transitions fades the first clip into the second one. See also [Transition section of the manual](#).



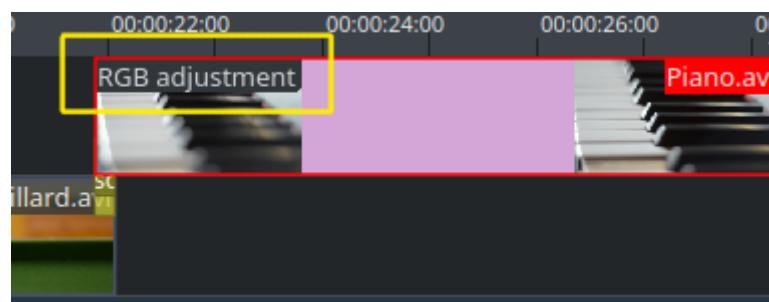
Let's now add the last clip, the Piano, and again apply a dissolve transition. When adding it on the first track of the timeline, you need to click on the new clip's lower left edge to add the transition to the previous clip.

3.3.1 Basic Effects



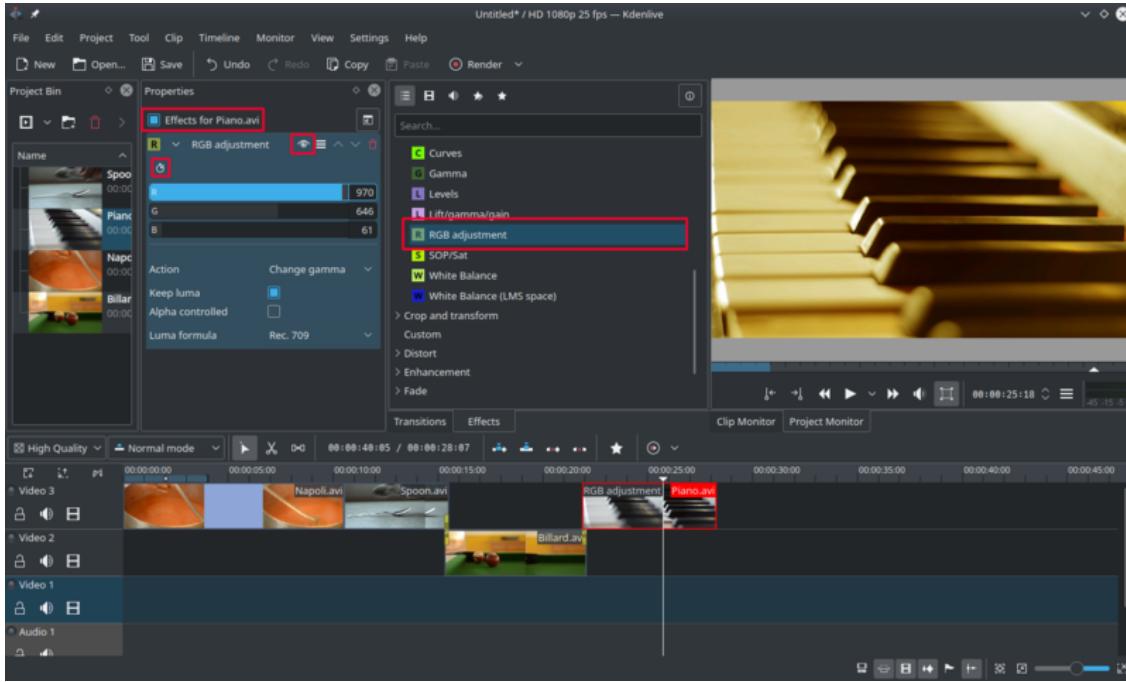
Effect List

The Piano can be colourized by adding an *effect* to it. Select the piano clip, then double-click the **RGB Adjustment** effect in the **Effect List**. If it is not visible, you can get it via **View → Effect List**.



Once the effect has been added, its name will be added to the timeline clip. It will also be shown in the **Properties** widget.

The Kdenlive Handbook



Effect Stack with RGB adjustment

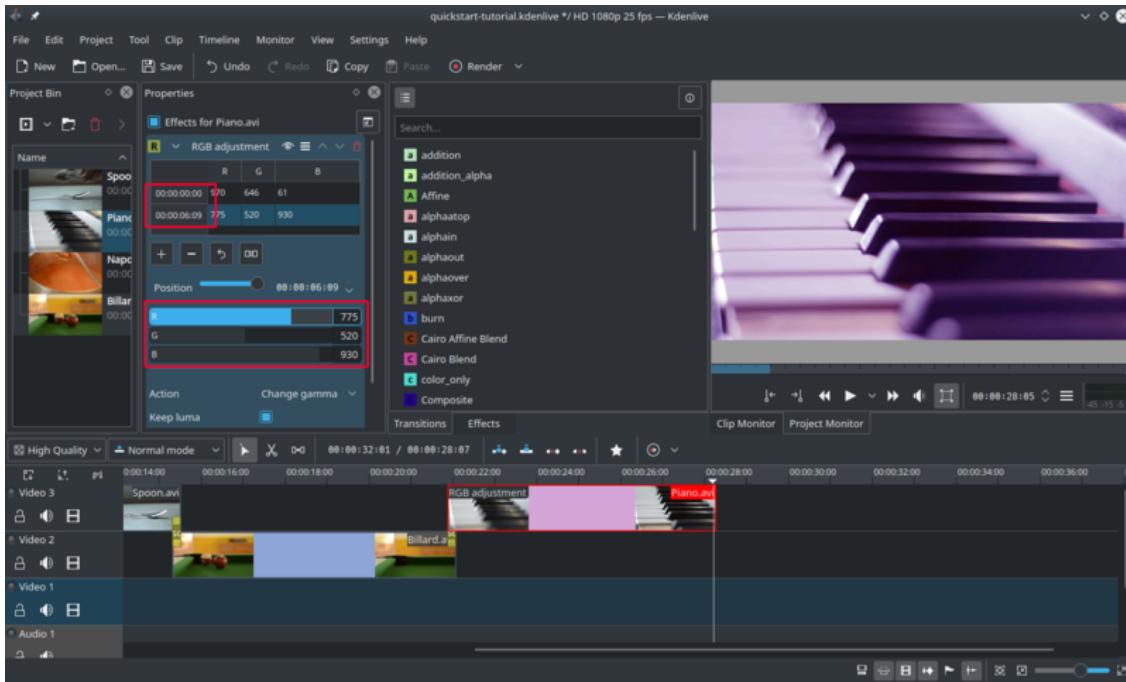
To get a warm yellow-orange tone on the image, fitting the comfortable evening, blue needs to be reduced and red and green improved.

The values in the Properties widget can be changed by using the slider (middle mouse button resets it to the default value), or by entering a value directly by double-clicking the number to the right of the slider.

The Properties widget always refers to the timeline clip that is currently selected. Each effect can be temporarily disabled by clicking the eye icon, or all effects for that clip can be disabled using the check box at the top of the Properties widget (the settings are saved though), this is e.g. useful for effects that require a lot of computing power, so they can be disabled when editing and enabled again for rendering.

For some effects, like the one used there, it is possible to add keyframes. The framed watch icon indicates this. Keyframes are used for changing effect parameters over time. In our clip this allows us to fade the piano's colour from a warm evening colour to a cold night colour.

The Kdenlive Handbook



Keyframes for effects

After clicking the **keyframe** icon (the clock icon framed in the previous image), the Properties widget will re-arrange. By default there will be two keyframes, one at the beginning of the timeline clip and one at the end. Move the timeline cursor to the end of the timeline clip, such that the project monitor actually shows the new colours when changing the parameters of the keyframe at the end.

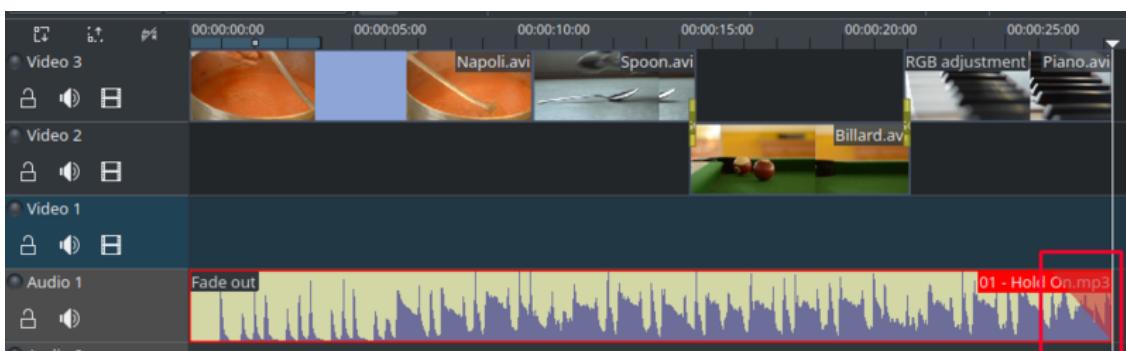
Make sure the last keyframe is selected in the Properties list. Then you are ready to flood the piano with a deep blue.

Moving the timeline cursor to the beginning of the project and playing it (with **Space**, or the **Play** button in the **Project Monitor**), the piano should now change the colour as desired.

Keyframing was the hardest part of this tutorial. If you managed to do it, you will master Kdenlive easily!

See also [Effects section of the manual](#).

3.3.2 Music

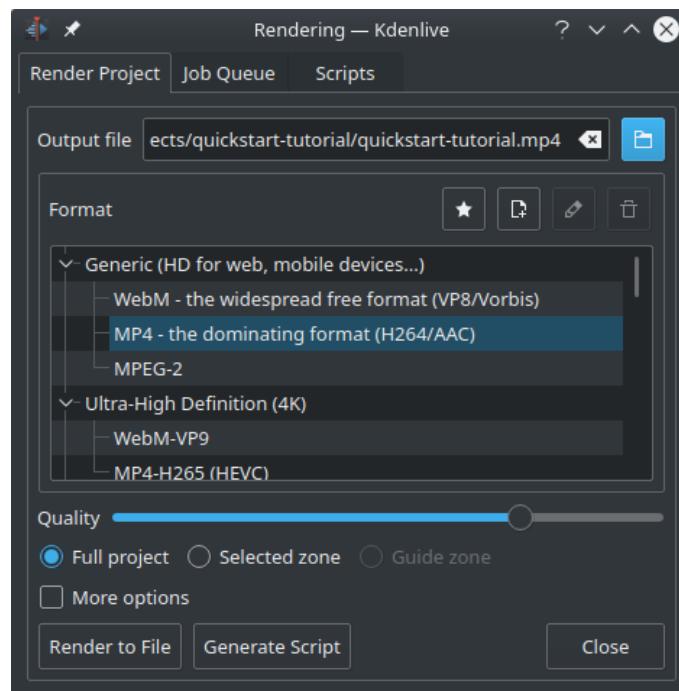


Audio fadeout

Since the clips do not provide any audio, let's search for some nice piece of music, from your local collection or on web pages like [Jamendo](#). The audio clip should, after adding it, be dragged to an audio track on the timeline.

The audio clip can be resized on the timeline the same way as video clips are. The cursor will snap in at the end of the project automatically. To add a fade out effect at the end of the audio clip (except if you found a file with exactly the right length) you can hover the top right (or left) edge of the timeline clip and drag the red shaded triangle to the position where fading out should start.⁶

3.4 Rendering

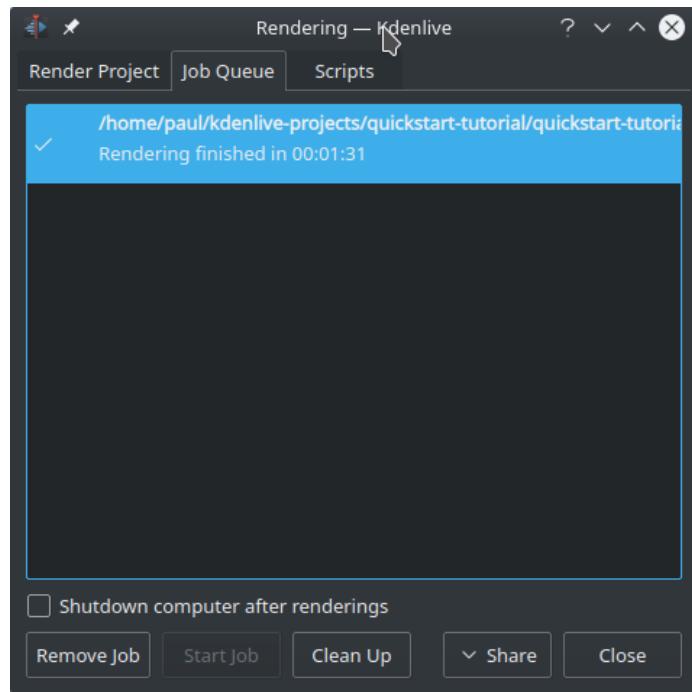


Rendering dialog

A few minutes left, and the project is finished! Click the Render button (or go to **Project → Render**, or press **Ctrl-Enter**) to get the dialog shown on the left. Select the desired output file for our new video with all effects and transitions, choose MP4 (works nearly everywhere), select the output file location and press the **Render to File** button.

⁶ This shaded triangle is a shorthand for adding the effect **Fade** → **Fade out**. Both ways lead to the same result.

The Kdenlive Handbook



Rendering progress

After some seconds rendering will be finished, and your first Kdenlive project completed. Congratulations!

Chapter 4

Written Tutorials

- See [Quick Start](#) for a step-by-step introductory tutorial
- [Quick Start](#)
- [Introduction to Kdenlive](#) by Seth Kenlon
- [10 tools for visual effects with Kdenlive](#) by Seth Kenlon
- [Basic masking in Kdenlive](#) by Seth Kenlon
- [Kdenlive Challenge \(Multiple Masks & Tracks\)](#) by Paul Browns
- [Wikibooks Kdenlive manual](#)

Chapter 5

Video Tutorials

[YouTube video](#)

[YouTube video](#)

[YouTube video](#)

More videos can be found using a [YouTube search](#) and on the [Vimeo Kdenlive Tutorial Channel](#)

Chapter 6

Windows Issues

The current Kdenlive on Windows® (April 2019, version 19.04.0) has a few issues that have workarounds. The purpose of this wiki page is to document these issues and their workarounds.

6.1 Timeline: right-click menu close immediately after releasing mouse button

Don't use the style **Fusion**.

Go to: **Settings** → **Style** → choose **Default** or **Windows**.

6.2 Icons are missing

Go to: **settings** → untick **force breeze icon theme**. Kdenlive restarts and you should see the icons.

6.3 Cannot open projects made with previous version, timeline snaps back, cannot import clip

Press **Win-R** (**Windows** key and **R** key simultaneously) and type **appdata**. Go to local and within it rename **kdenliverc** to **kdenliverc.old**. Start Kdenlive -> do nothing -> close Kdenlive -> and restart Kdenlive again.

If you have still problems delete proxy clips and other cached data by going to **Project** menu → **Project Setting** → **Cache Data tab** → there you can delete cached data.

If you have still problems try [Any critical bug](#).

6.4 Windows 10: timeline stuttering or Kdenlive hangs.

Most probably you got a major Win10 update (i.e 1809). If so you have to update all drivers for audio and video.

Intel driver can be updated with this updater: <https://downloadcenter.intel.com/en/download/28425/Intel-Driver-Support-Assistant>.

6.5 Clip is invalid, will be removed

This bug can appear if you do a clean reinstall of Kdenlive (see above). Simply close and open Kdenlive once, and it should be fixed.

Additionally this can be a problem either with the `kdenliverc` file (see here [Cannot open projects](#)) or you have some mismatch in the 'local' folder (see here [Any critical bug](#)).

6.6 Any critical bug

This describes the process of doing a clean install on Windows®.

Firstly, delete your normal Kdenlive folder (containing the application)

Access the **Appdata** folder (**Win-R** and then type **APPDATA** in full caps). Go to `local` and search for folder `kdenlive`.

NOTE

If you have any saved effects or clips stored in your library, make a backup of the library folder.

Then once you have backup up your library folder, delete the `kdenlive` folder.

Reinstall the latest version of Kdenlive from the [download page](#)

6.7 JPG files appear as white picture after rendering

This issue should be solved with Windows version 19.04.0. If not convert the JPG to PNG and it renders correctly.

6.8 Play/Pause Issue

This issue is solved with Windows version 18.08.2 (30. Oct 2018). Get the current version from the [download page](#).

6.9 Qt rendering crash

When switching from kdenlive for windows 17.12 → 18.04/18.08, a Qt rendering crash appears. To make sure this doesn't happen, you need to edit the `kdenliverc` file in the `appdata/local` folder. To access your appdata, press **Win-R** (**Windows** key and **R** key simultaneously) and type **appdata**. Go to `local` and within it rename `kdenliverc` to `kdenliverc.old`.

6.10 Kdenlive cannot be deleted, running process on exit

This issue is solved with Windows version 18.12.1. Get the current version from the [download page](#).

If you want to reinstall Kdenlive or re-run Kdenlive, it may tell you 'The file or folder is open in another program'. Windows® then won't let you delete or re-run Kdenlive.

To fix this you have to kill the running process: press and hold **Ctrl-Shift-Esc** & expand the task manager by clicking **all details**. Then find `kdenlive.exe` & `dbus-daemon.exe`, and click **End task** for both of them.

Or download the [Any critical bug](#). Unpack it and just double-click the batch file which kills all running Kdenlive processes.

6.11 Kdenlive cannot be uninstalled

If the uninstaller doesn't work you can delete following folder: `C:\Program Files\kdenlive`.

You have to manually delete in the start menu the Kdenlive folder.

6.12 Kdenlive crash or green Monitor

Get all newest Windows® updates. Afterwards, update your graphic card driver and your sound card driver and your printer driver.

Some crashes could occur of incompatibility of the graphics card and sound card with the newest Windows®10 updates (18.09 update).

After you have updated the drivers re-start the computer and try again by starting `kdenlive.exe`.

If this is not solving the problem switch your standard printer to "Microsoft XPS Document Writer" and try again to start Kdenlive.

Delete the `kdenliverc` file as descript here under [Qt rendering crash](#).

Make sure you set processing thread to 1: **Ctrl-Shift-, (comma)** → **Environment** → **Processing thread** → set to 1

Chapter 7

General Issues

The current Kdenlive version (November 2018, version 18.08.3) has a few issues that have workarounds.

7.1 Audio Pops and Ticks in Render

If this problem appears make sure the audio file is: 16-bit PCM WAV.

Chapter 8

Project and File management

1. [The Project Bin](#)
2. [Project File Details](#)
3. [Settings](#)
4. [Annotating](#)
5. [Archiving](#)
6. [Backup](#)
7. [Clips](#)
8. [Importing](#)
9. [Management](#)

8.1 File Structure

As already pointed out in the [Quickstart](#), we suggest using a different project folder for each project. Kdenlive will generate the following folders for caching in the project folder:

- proxy/ for the [proxy clips](#) that have been generated
- thumbs/ for thumbnails to all used clips
- titles/ default location for the [titles](#) saved outside the project file
- .backup/ for your project's automatic [backup files](#)

These directories can be deleted if not required anymore (for example for saving space on the harddrive). Kdenlive will create them again when you load the project the next time.

WARNING

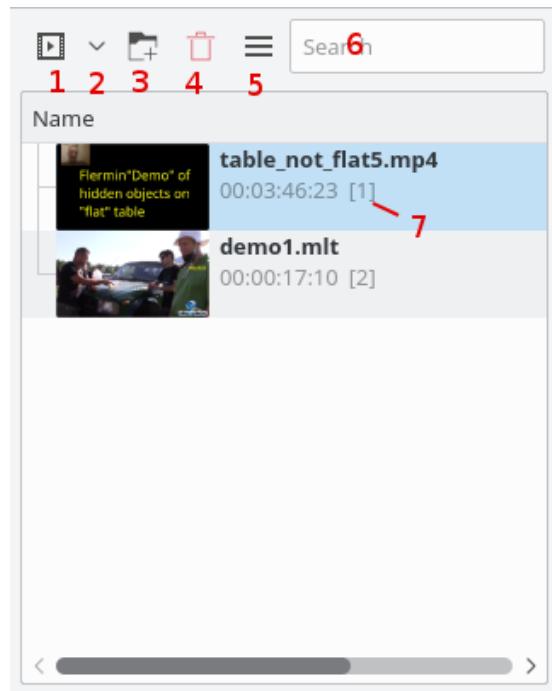
The titles/ directory is the default directory for saved .kdenlivetitle title files. Make sure that you did not save any important files in there before deleting it.

Source clips can be located anywhere. Still, here are some thoughts about their location:

- Material (images, clips, audio) that is used for one project only can be put into a subdirectory of the project folder as well. This keeps all important files together, and searching for the files takes less time.
- Material that is used by multiple projects is convenient when kept together. I've got a video collection the same way that I have a photo collection.

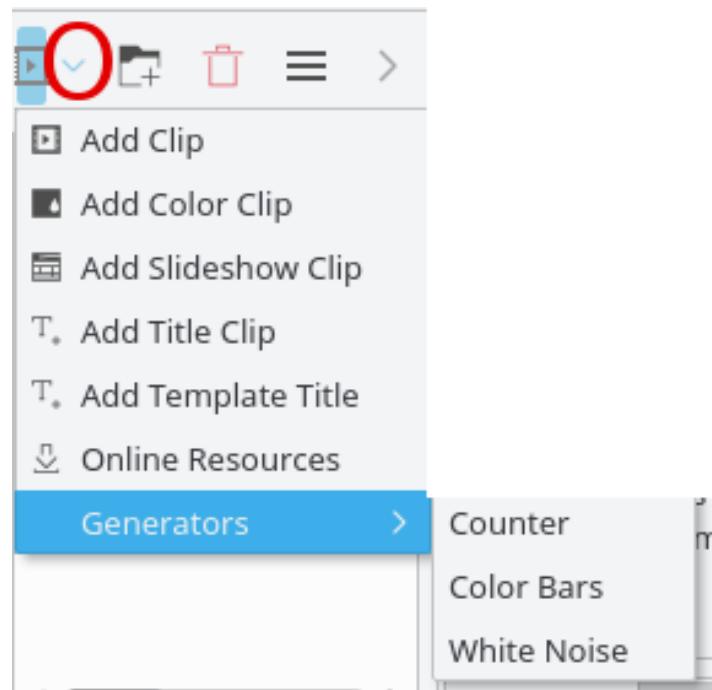
8.2 The Project Bin

The Project Bin is a view in Kdenlive which lists all the clips that are associated with the project. In earlier versions of Kdenlive this view was known as the Project Tree. In addition to the new name, versions 15.04 and higher introduced two new options to the view's toolbar. The list following the example describes the options represented by the icons on the toolbar (identified by the numbers in the screenshots).



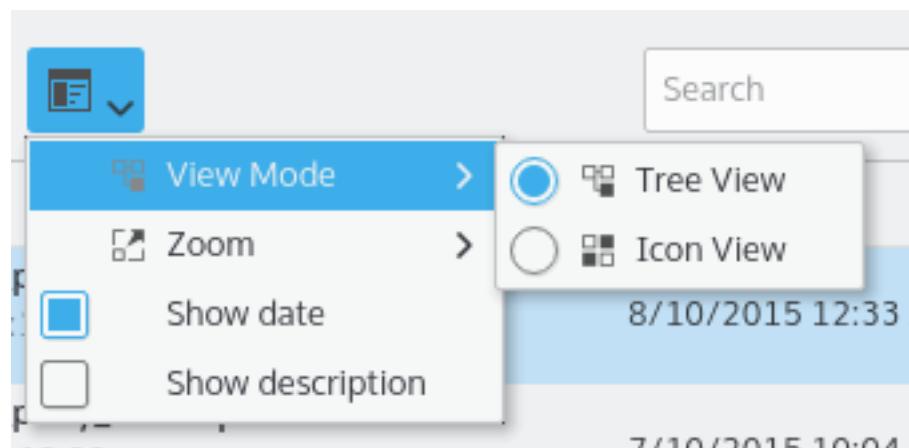
17.04+

1. Opens the Project Folder in a window for selecting video and audio clips to be added to the bin.
2. Displays a drop down list for adding other clip types to the Project Bin.



Options from Menu under Icon 2

1. Add Clip
 2. Add Color Clip
 3. Add Slideshow Clip
 4. Add Title Clip
 5. Add Template Title
 6. Online Resources
 7. Generators
3. Allows you to add folders to the Project Bin. These are not actual file system folders but virtual folders to help you organize large Project Bins. See [Create Folder](#)
4. Deletes the selected clip from the Project Bin (but not from the file system).
5. Brings up additional options shown below for customizing the Project Bin view .



Menu under Icon 5

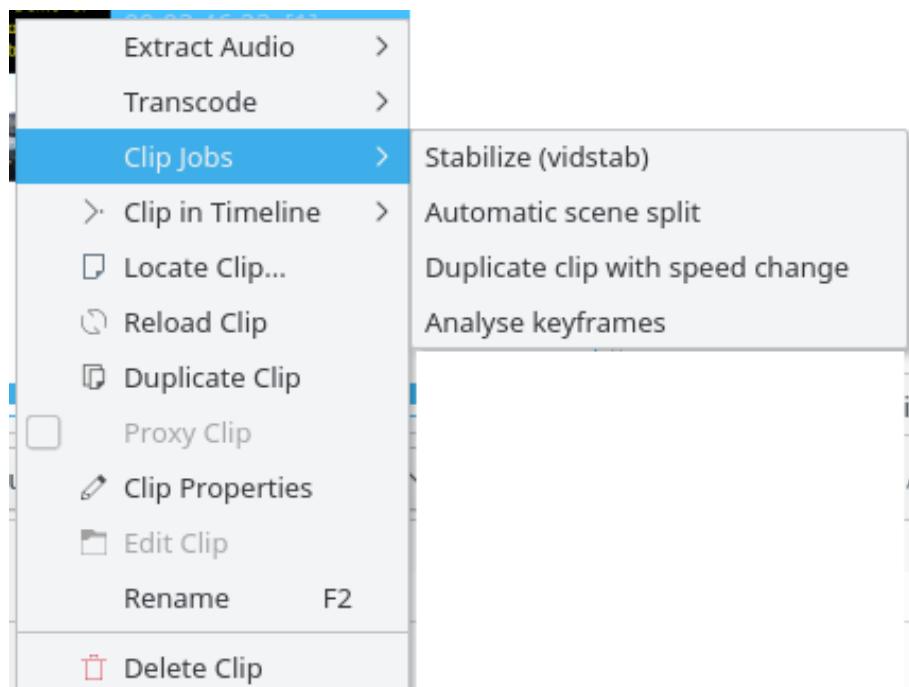
6. A search box to display all the clips in the bin whose filenames or titles contain the entered text.

7. Number of times this clip is used in the project timeline

Clips can be dragged from the Project Bin to the [Timeline](#).

8.2.1 Project Bin - Right-Click Menu

The images below show the menu items available when you right-click a clip in the Project Bin.



The menu items which appear when you right-click on an item in the Project Bin are also available from the [Clip Menu](#).

1. [Extract Audio](#)
2. [Transcode](#)
3. [Clip Jobs](#)
 - (a) [Stabilize](#)
 - (b) [Automatic Scene Split](#)
 - (c) [Duplicate Clip with speed change](#)
4. [Clip in Timeline](#)
5. [Locate Clip](#)
6. [Reload Clip](#)
7. [Duplicate Clip](#)
8. [Proxy Clip](#)
9. [Clip Properties](#)
10. [Edit Clip](#)

11. [Rename](#)
12. [Delete Clip](#)

If you want to reverse a clip you can do it via [Speed Effect](#) or by [Duplicate Clip with speed change](#)

8.3 Project

Kdenlive projects consist in a single .kdenlive file (in XML format), gathering :

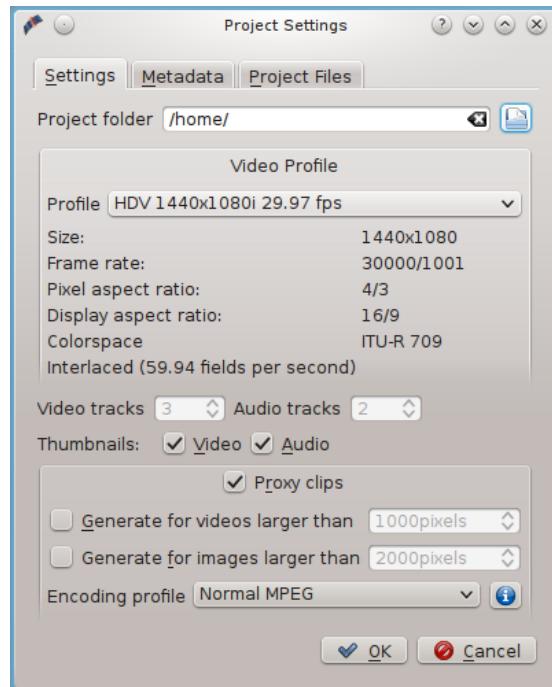
- target video and audio properties
- references to all the source materials (and to their lighter *proxies* work copies)
- clips arrangement on the timeline, with effects applied, and everything to get the final result

Project files are associated with a working directory, in which Kdenlive will generate *proxies* and *thumbs*, so that an overview of your media always shows up quickly (if you move your project file, you should declare the directory change in the project properties).

8.4 Project Settings Dialog

This is reached via [Project Settings](#) in the [Project](#) menu. This dialog has 3 Tabs.

8.4.1 Project Settings Tab



Project Settings dialog

The Project Settings dialog is shown when you start a new project ([File → New](#)). This allows you to set all basic properties for your project. You can also edit the properties of your current project in [Project → Project Settings](#).

8.4.1.1 Project Folder

As recommended in the [Quick Start](#) section, you should create a new folder for your project. This folder will hold all temporary files that are used during the editing of your project (thumbnails, proxy clips, etc).

8.4.1.2 Video Profile

The video profile will define the format of your project. A list of predefined formats is available in Kdenlive, for example *DV / DVD PAL, HD 1080i 25 fps*, etc.

The profile defines the video resolution, as well as display aspect ratio, color space and a few other parameters.

You should carefully choose your project format and select the one which best fits your desired output. All video operations on the project (like compositing, scaling, etc) will then use this profile. Advanced users can create custom project profiles in [Settings -> Manage Project Profiles](#).

For example, if your goal is to create a DVD, you should use a DVD profile with the correct frame rate (PAL / NTSC) and display ratio (widescreen or not).

8.4.1.3 Tracks

You can select the default number of audio and video tracks that your project will have. You can always add or remove tracks in an existing project.

8.4.1.4 Thumbnails

The Audio and Video thumbnails are shown in the [Timeline](#). They can also be enabled/disabled through buttons in the status bar.

8.4.1.5 Proxy Clips

'Proxy clips' is a feature that can be used if your computer is not powerful enough to display and edit your source video clips (similar to 'offline' or 'reduced quality' editing in other software). This is especially useful when working with full HD AVCHD sources that require a lot of resources.

When the **Proxy Clip** feature is enabled, Kdenlive will automatically create reduced versions of your source clips, and use these versions for your editing. Then, when you want to render your project, Kdenlive will replace the proxy clips with the originals for a full resolution rendering.

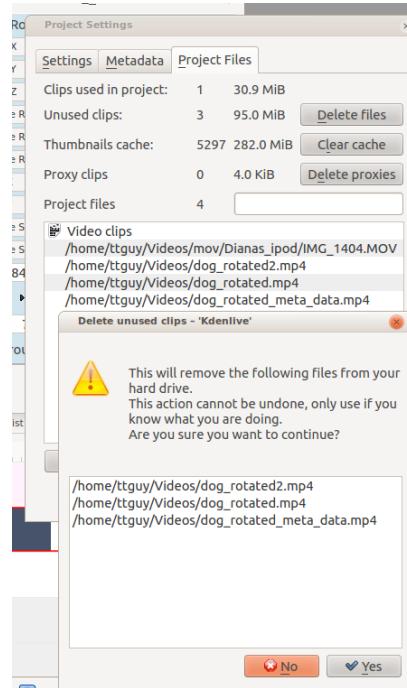
The **Generate for videos larger than x pixels** option will automatically create proxy clips for all videos added to the project that have a frame width larger than x. This also applies to images.

You also have the choice to manually enable / disable proxy clips for each clip in your project tree by right-clicking on the clip and choosing **Proxy Clip**.

You can choose an *Encoding profile* for the proxy clips, which will define the size, codecs and bit-rate used when creating a proxy. The proxy profiles can be managed from the Kdenlive Settings dialog ([Settings → Configure Kdenlive → Project Defaults](#)).

The Kdenlive Handbook

8.4.2 Project Files Tab

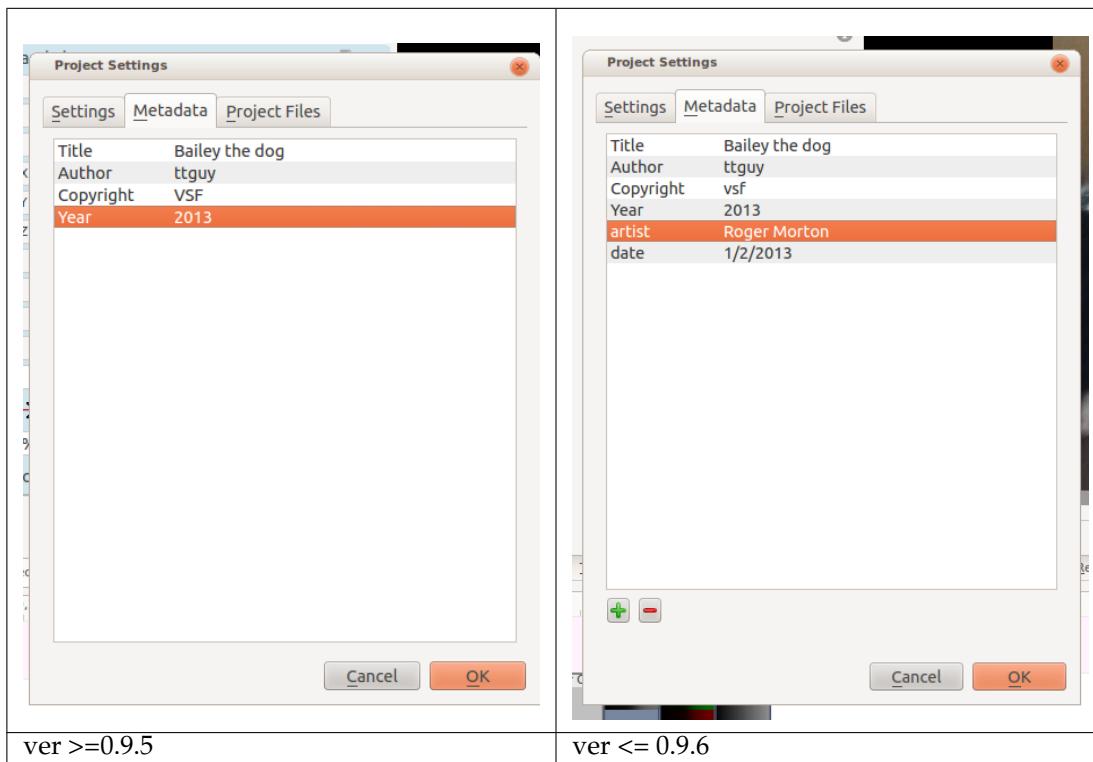


From here you can manage the files that are part of the project. You can clear the proxy files and thumbnails and delete unused clips.

Note: the **Unused Clips - Delete files** button deletes file from your hard drive not just from the project tree. If you just want to remove unused clips from your project but not delete them from your hard drive - use Project > [Clean Project](#).

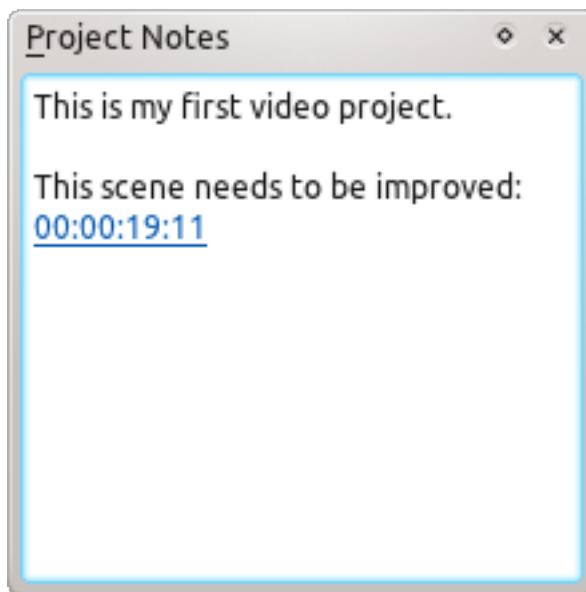
8.4.3 Metadata Tab

Screenshots below show the **Metadata** tab for two different versions of Kdenlive. Version 0.9.6 introduces buttons to add and subtract metadata fields.



Metadata set up here will be written to the files rendered from the project if [Export Metadata](#) is checked in File Rendering.

8.4.4 Notes



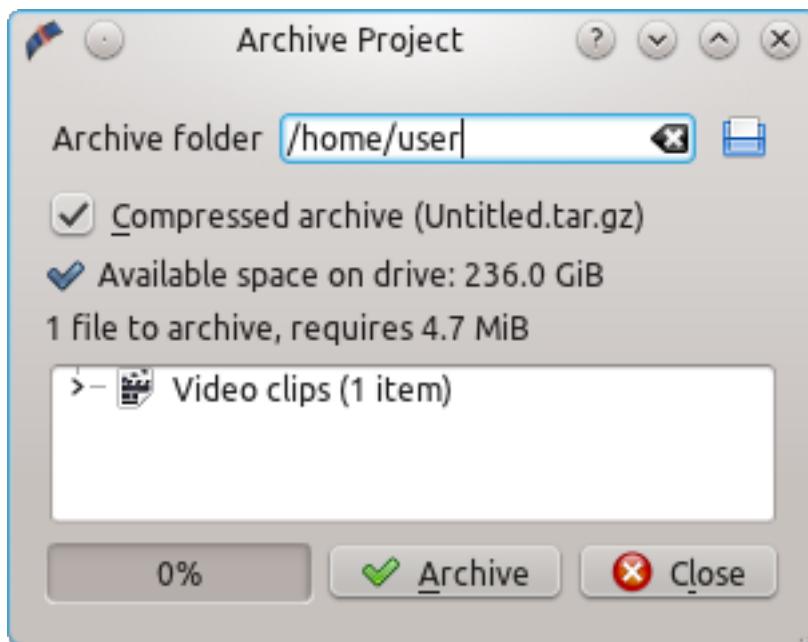
Sometimes, you want to keep some notes about your project to remember ideas or things to do. For this task, Kdenlive provides a 'Notes' widget that is available through **View → Project Notes**.

It is basically a small text editor, but also has the ability to create links to some places in your project's timeline. To add a timeline link as shown in the snapshot on the left, right click in the

Notes widget and choose **Insert Current Timecode**. That will add a clickable link to the current project monitor timecode.

You can also provide annotations using [Guides](#) or [Markers](#)

8.4.5 Archiving



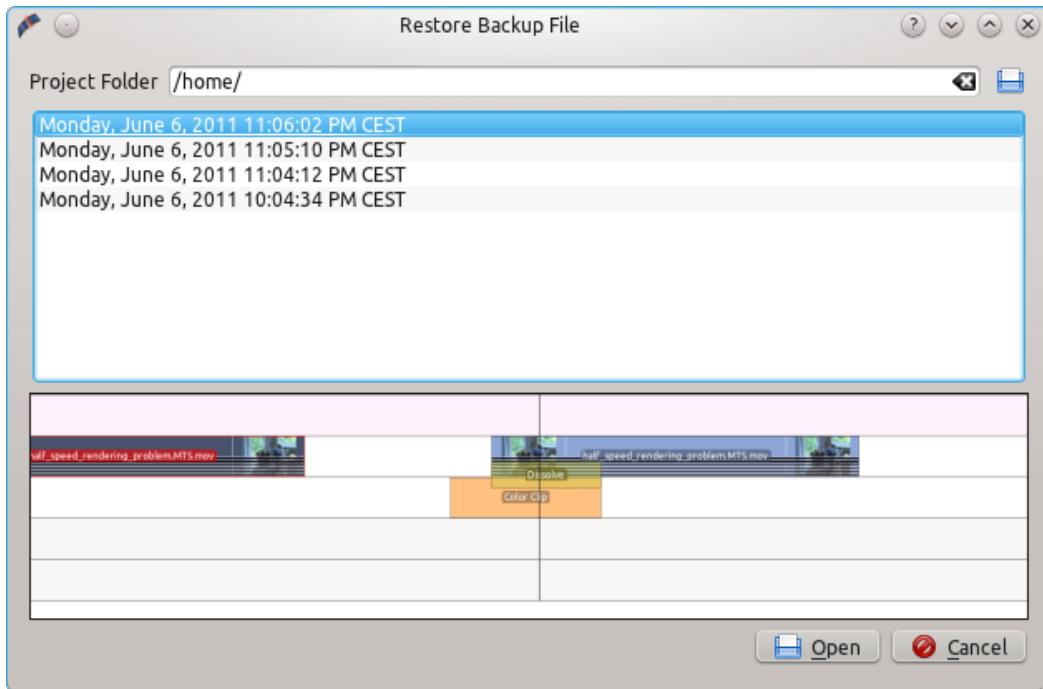
The Archiving feature ([Project → Archive Project](#), see [Project](#)) in Kdenlive allows you to copy all files required by the project (images, video clips, project files,...) to a folder, and alternatively to compress the whole into a tar.gz file.

Archiving changes the project file to update the path of video clips to the archived versions.

This can be useful if you finished working on a project and want to keep a copy of it, or if you want to move a project from one computer to another.

The resulting tar.gz file can be opened directly in Kdenlive. Kdenlive will uncompress it to a location you specify before opening it.

8.4.6 Backup Feature



Backup widget

The Backup widget, found in **Project → Open Backup File** allows you to restore a previous version of your project file.

In case something went wrong (corrupted project file, unwanted change, ...), you can now restore a previous version of the file using this feature. Just select the version you want and click **Open**.

The backup files are automatically created each time you save your project. This means that if you save your project every hour, the backup widget will show you a list of all the saved files, with a small image of the timeline at the time you saved the project.

Kdenlive keeps up to 20 versions of your project file in the last hour, 20 versions from the current day, 20 versions in the last 7 days and 20 older versions, which should be sufficient to recover from any problem.

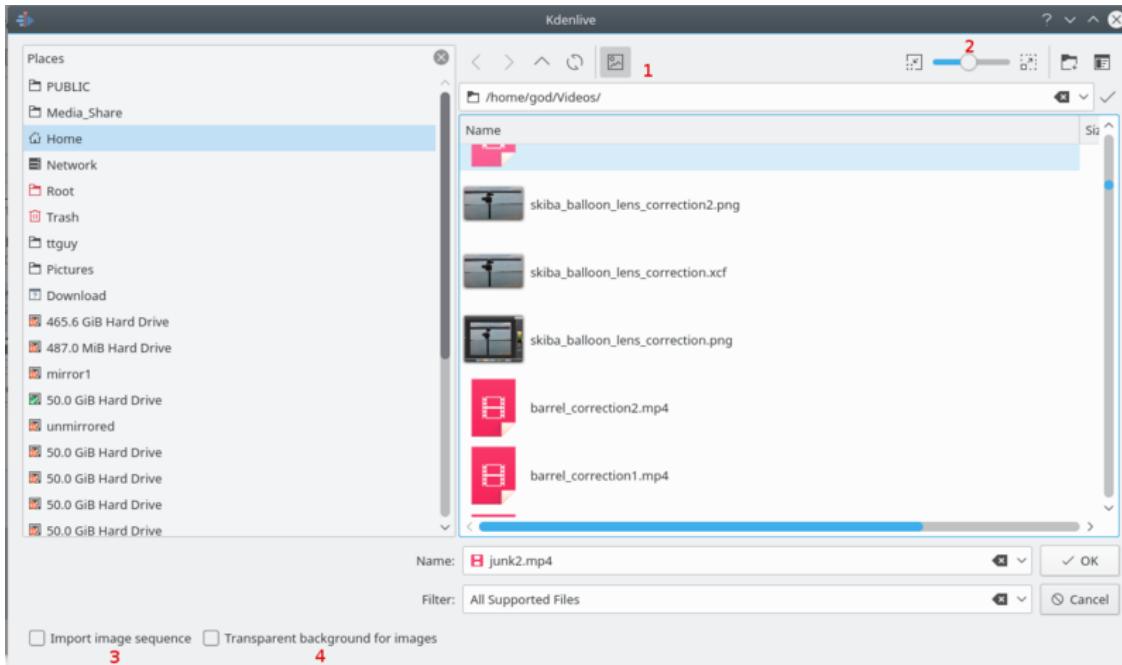
8.4.7 Clips

See also [Clip Menu](#).

8.4.7.1 Clips (Video, Audio and Images)

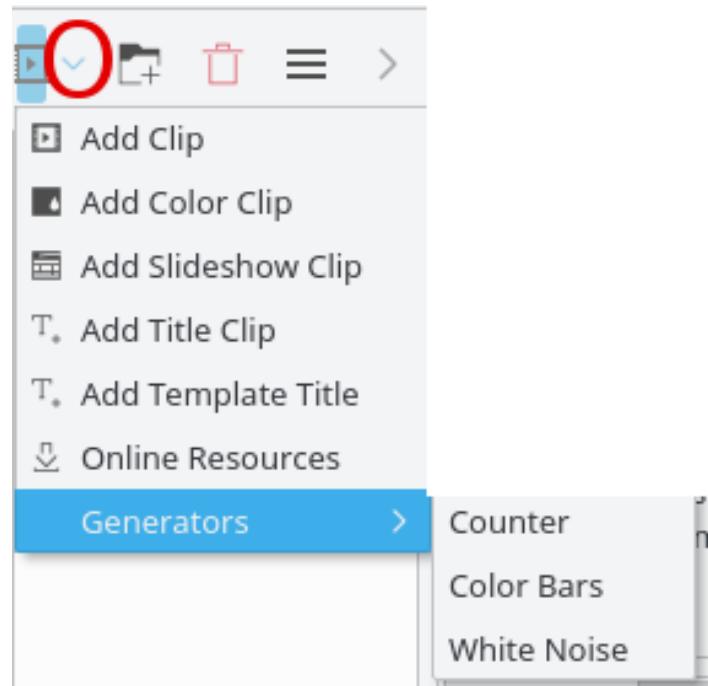
The  button (Add Clip) brings up the **Add Clip Dialog** where you can choose video, audio or still image clips to add to the [Project Bin](#).

The Kdenlive Handbook



The button labeled 1 toggles File Preview on and off (applies to image files only). The slider labeled 2 adjusts the size of the preview icons. The **Import image sequence** checkbox labeled 3 enables the import of a series of images that can be used to make a stop motion animation. The **Transparent background for images** checkbox labeled 4 makes the process respect an alpha channel in the source images [ref](#).

You can add other types of clips by choosing a clip type from the menu brought up from the drop down button next to the button.

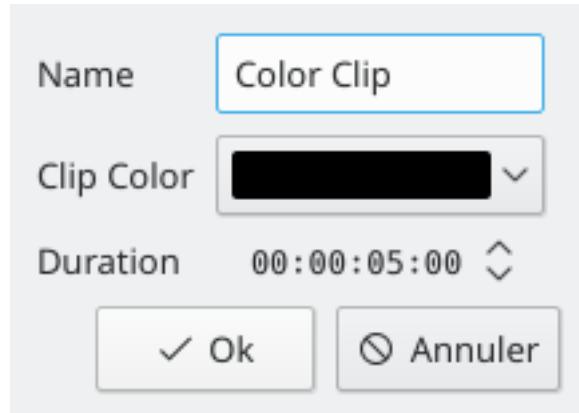


8.4.7.2 Color clips

Color clips are images composed of a single color that can be added to the Project Tree. They can be useful to provide a background on which to place titles.

Add color clips by choosing **Add Color Clip** from the drop down button next to the  button.

This brings up the **Color Clip** dialog from which you can choose a color and a duration.



Clicking **OK** adds the clip to the project tree. The clip can then be dragged to the timeline. The duration of the color clip can be adjusted on the timeline.

8.4.7.3 Title clips

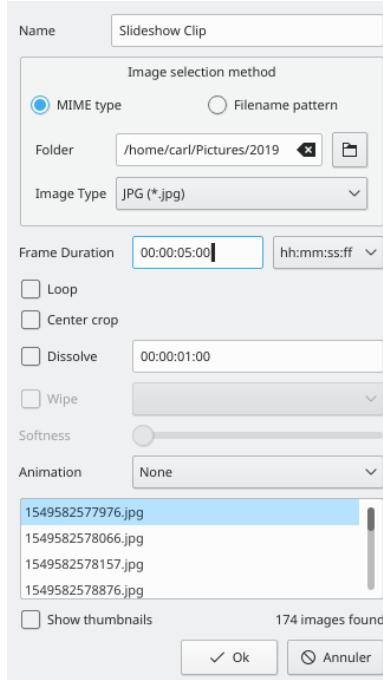
See [Titles](#)

8.4.7.4 Slideshow clips

Slideshow clips are clips created from a series of still images. The feature can be used to make an animation from a collection of still images or to create a slideshow of still images. To create the former, use a short frame duration; to create the latter, use a long frame duration.

To create a slideshow clip, choose **Add Slide Show Clip** from the **Add Clip** drop down list.

The Kdenlive Handbook



From the **Slideshow Clip** dialog choose **Filename pattern** as **Image selection method**.

Browse to the location of the images which will make up your slideshow and select the first image. The subsequent images that are to be used in the slide show will be selected based on some sort of filename algorithm that predicts what the next image file name should be.

For example, if the first image is `100_1697.jpg` then the next will be `100_1698.jpg`, etc.

Select an appropriate frame duration — this defines how long each image be displayed.

Then hit **OK**. A video file made up of all the images in the folder from which you selected the first frame file from will be added to the Project Tree.

You can then drag this video to the timeline.

Center crop: automatically fills the output video frame with the images while maintaining their aspect ratio by cropping equal amounts from each edge. Said another way, it removes the black bars that will appear when the photo orientation or aspect does not match the video's.

Animation: adds preset slow smooth pan and zoom effects also known as the Ken Burns Effect. You can choose no animation, pans only, zooms only, or a combination of pans and zooms. Each option also has a low pass filter to reduce the noise in the images that may occur during this operation. Low pass filtering is much slower, so you should preview without it, and then enable it to render.

8.4.7.5 Create Folder

See [Project Menu — Create Folder](#)

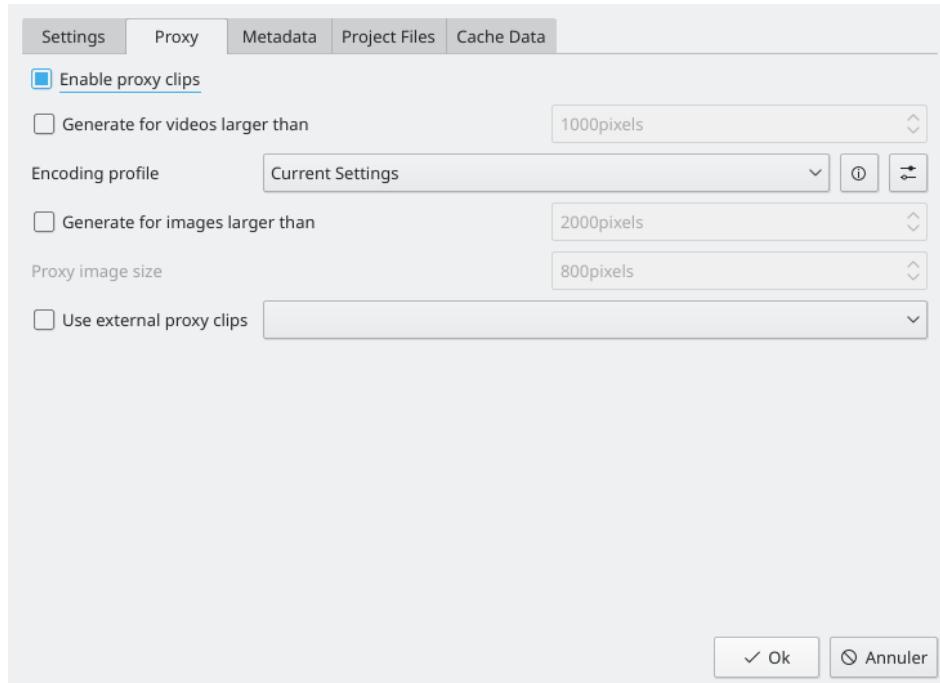
8.4.7.6 Online Resources

See [Project Menu — Online Resources](#)

8.4.7.7 Stop Motion

See [Stop Motion Capture](#)

8.4.7.8 Proxy clips



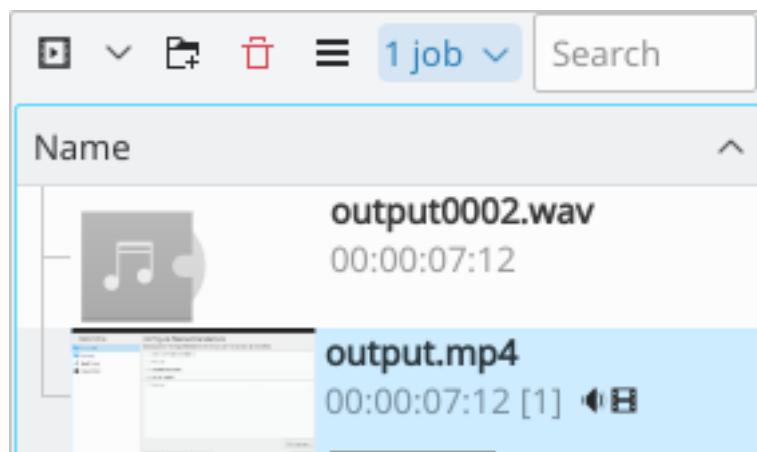
Activating proxy clips

Proxy clips are one of the most useful inventions for editing if you are not working on an ultra high-end machine. Even quite well specced PCs can struggle with High Definition footage if proxy clips are not turned on. The trick that the proxy clip feature does is that the original clips are replaced by clips with lower resolution and a less complex codec. Video decoding, e.g. of H.264 clips, requires a lot of computing power and computing power is required for rendering effects in real time. If insufficient power is available, playback will *stutter*. Proxy clips require hardly any computing power at all, which allows fluent playback.

Proxy clips can be enabled/disabled for the current project in the Project Settings (**Project** → **Project Settings** → **Proxy** → **Enable Proxy Clips**).

To enable proxy clips by default for new projects, go to **Settings** → **Configure Kdenlive** → **Proxy Clips** → **Enable Proxy Clips**.

See also the [Project Settings](#) page



As soon as proxy clips are enabled, they can be generated for specific project clips in the Project Tree widget via the context menu **Proxy Clip**. After you select **Proxy Clip** for a clip, a job will start to create the clip. You can view the progress of this job by looking at the little gray progress bar that appears at the bottom of the clip in the Project Tree — see picture. Clicking **Proxy Clip** again disables the proxy for this clip.

You can multi-select clips in the Project Tree and select **Proxy Clip** to start a batch proxy clip generation job which will queue up multiple proxy clip generation jobs.



Once the proxy clip creation has completed, the proxy clip will appear with a **P** icon in the Project Tree.

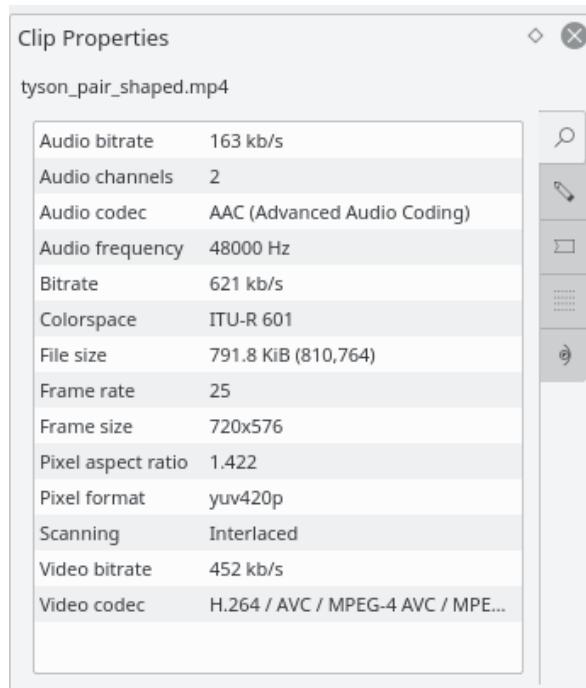
When rendering to the final output file, you can choose whether to use the proxy clips as well. It is disabled by default, but for a quick rendering preview it is useful.

8.4.7.9 Clip Properties

You can display and edit clip properties by selecting a clip in the **Project Bin** and choosing **Clip Properties** from the **Project** menu or from the right-click menu. Or by turning on the display of clip properties the **View → Clip Properties** check box.

8.4.7.9.1 File Info

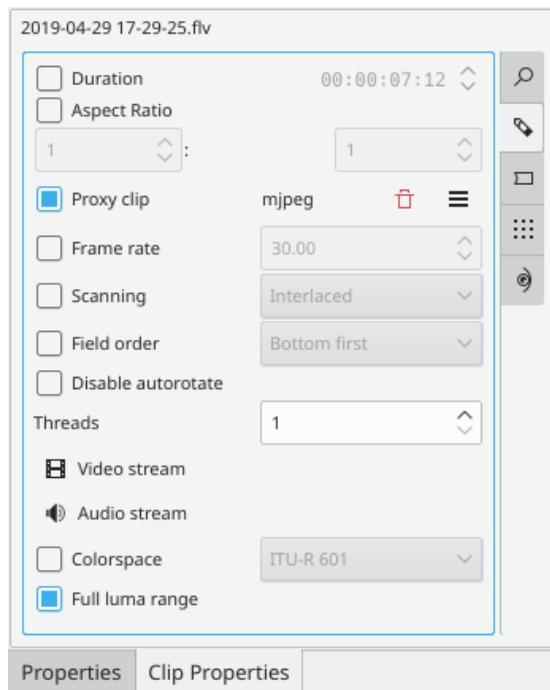
The **File Info** tab displays information about the file.



8.4.7.9.2 Properties

The **Properties** tab displays advanced properties of the clip where you can select a check box and then force the clip to take the property you specify. For example, you can use **Aspect ratio** to tell a clip that seems to have forgotten it was 16:9 ratio that it really is 16:9 ratio.

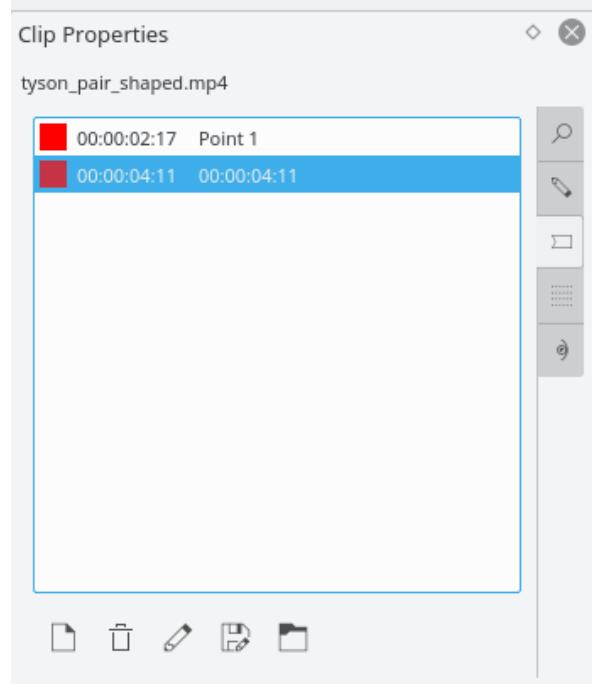
The Kdenlive Handbook



Advanced Clip property options are:

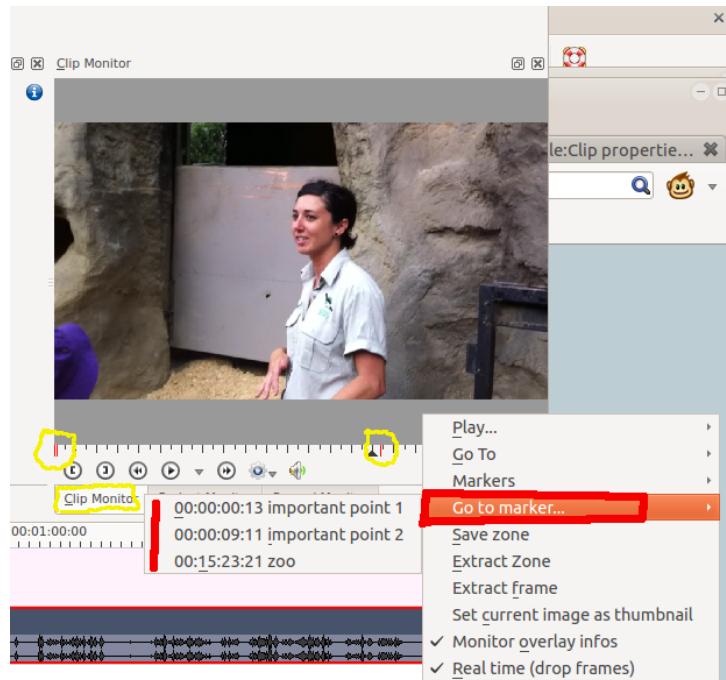
- Duration: Change the clip duration. If the duration is shorter than the clip duration, then the clip is **cropped**. If the duration is bigger than the clip duration, then the last image is repeated until the new duration is over.
- Aspect ratio: Change the clip aspect.
- Proxy clips: Enable a proxy clip for this clip. See [Proxy clips](#).
- Frame rate: Change the clip frame rate. See [Wikipedia Frame rate](#).
- Scanning
- Field order
- Disable autorotate
- Threads
- Video stream
- Audio stream
- Colorspace
- [Full Luma range](#)

8.4.7.9.3 Markers



You can use the **Markers** tab to add markers for certain points in the source file that are important. However, it is probably easier to add markers to your clips via the [Clip Monitor](#) because that allows you to preview the file at the location where you are adding the marker.

Once markers are put in your clip, you can access them in the [Clip Monitor](#) by right-clicking and selecting [Go To Marker](#) (see picture.) Also note how the markers appear as red vertical lines in the [Clip Monitor](#) (see yellow highlighted regions in the picture.) You can turn on the display of the marker comments in the timeline too (see [Show Marker Comments](#)).



Markers can also be added to clips on the timeline. Right-click the clip and choose **Markers**

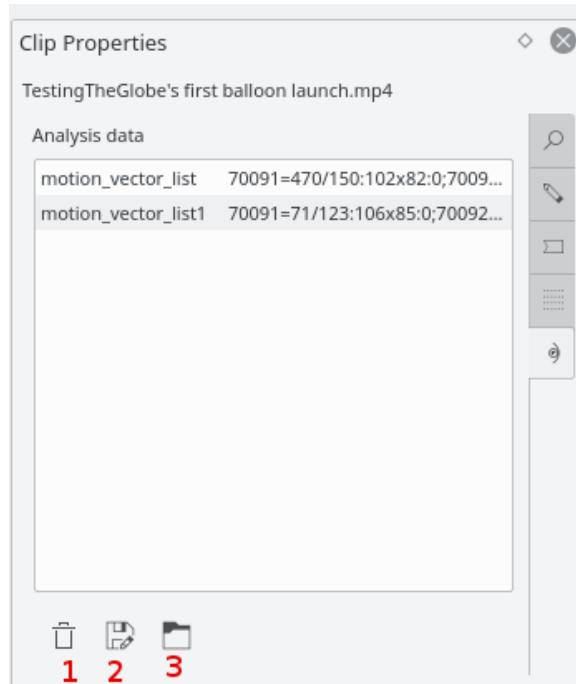
→ **Add Marker.** Markers added this way also appear in the clip in the Project Bin.

8.4.7.9.4 Metadata

You expect this to show any meta data that is contained in the clip. Does not appear to work.

8.4.7.9.5 Analysis

You can view and delete motion vector data that is associated with the clip from here. This is data created by [Auto Mask - Motion Tracking](#)

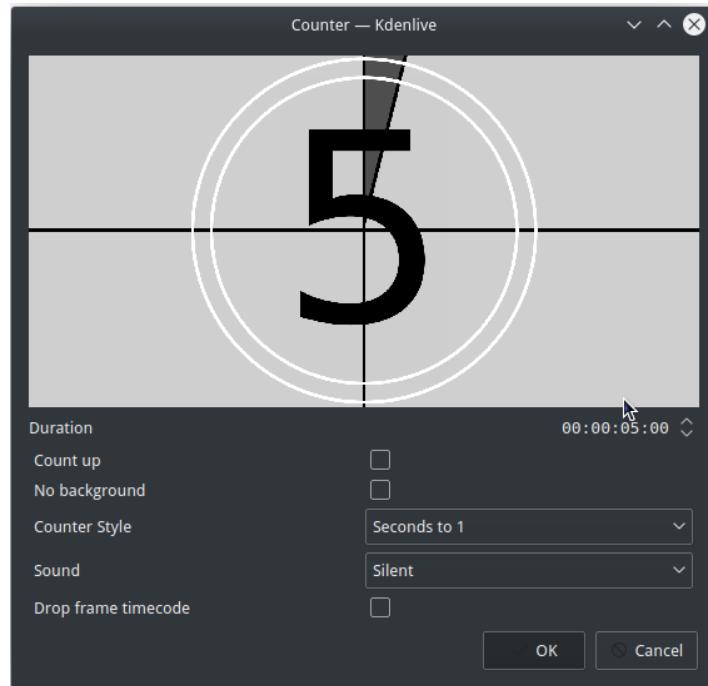


Button 1 Will delete the selected analysis data, Button 2 will allow you to export the data (semi colon delimited text file), Button 3 will allow you to import analysis data.

8.4.7.10 Generators

8.4.7.10.1 Counter

This generates a counter timer clip in various formats which you can put onto the timeline.



Previous versions of Kdenlive you could have the background to the counter be transparent.

There may be a defect here because it appears the *No Background* check box does not remove the background from the counter.

Apparently you need a [pan and zoom](#) effect to make the font of the countdown smaller

8.4.7.10.2 White Noise

This generates a video noise clip — like the 'snow' on an out-of-tune analogue TV.

In ver 17.04 it generates audio white noise as well as video snow.

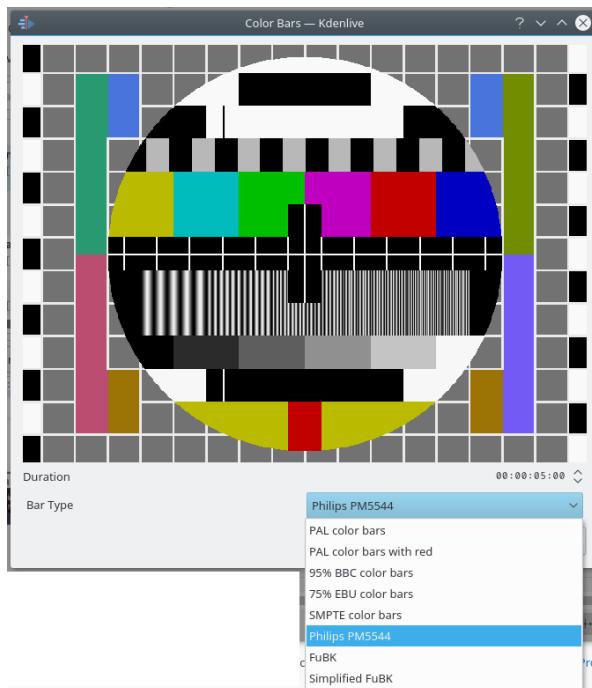


8.4.7.10.3 Color Bars

This generator came in to Kdenlive around ver 17.04.

Generates a color test pattern of various types.

Including PAL color bars, BBC color bars, EBU color bars, SMPTE color bars, Philips PM5544, FuBK



8.4.7.11 Full Luma

8.4.7.11.1 Advance Clip Property - Full Luma Range

A clip can have its full luma flag set from the [Clip -> Advanced properties](#)

From [this](#) forum post by Yellow

The full luma option refers to video sources with luma recorded outside of the typical 'broadcast', 'restricted' 16 - 235 8bit range.

This option fixes problems round tripping video files with luma outside of the 16 - 235 8bit range. By default when we import a video it is handled and displayed based on the 16 - 235 range, levels below ie: 0 to 15 and those above 235 to 255 are compressed to 0 and 255, so shadows get overly dark and highlights saturated, in the preview within Kdenlive for camera sources that are full range.

Then when we render out, those levels remain in the final video, compressed shadows and saturated highlights, so there is a mismatch between the levels in the video we import compared to that exported. **This only really matters for round tripping to an external application.**

For any playback on DVD's, bluray and including the web like Vimeo or Youtube our video levels in the final rendered output should be in the 16 - 235 range, otherwise we see so called 'gamma shifts', 'washed out' or saturated playback depending on playback handling.

However really we want to have control of the levels adjustment in Kdenlive i.e.: 0 - 255 into 16 - 235 so full luma option changes the handling of the files and preview / scopes are based on an alternative YCbCr to RGB calculation.

The Kdenlive Handbook

By setting the full luma on, which should only be done for camera sources known to be full range 0 - 255 or even 16 - 255 such as FS100, Nex5, HV20, HV30 and probably many more consumer cameras. Canon and Nikon DSLR's too but a little more complicated, we can export video with the levels as imported, BUT and it's a big but, that is without doing any RGB operations in Kdenlive, so no effects, color correction etc. If any effects are added then the output will be restricted range again.

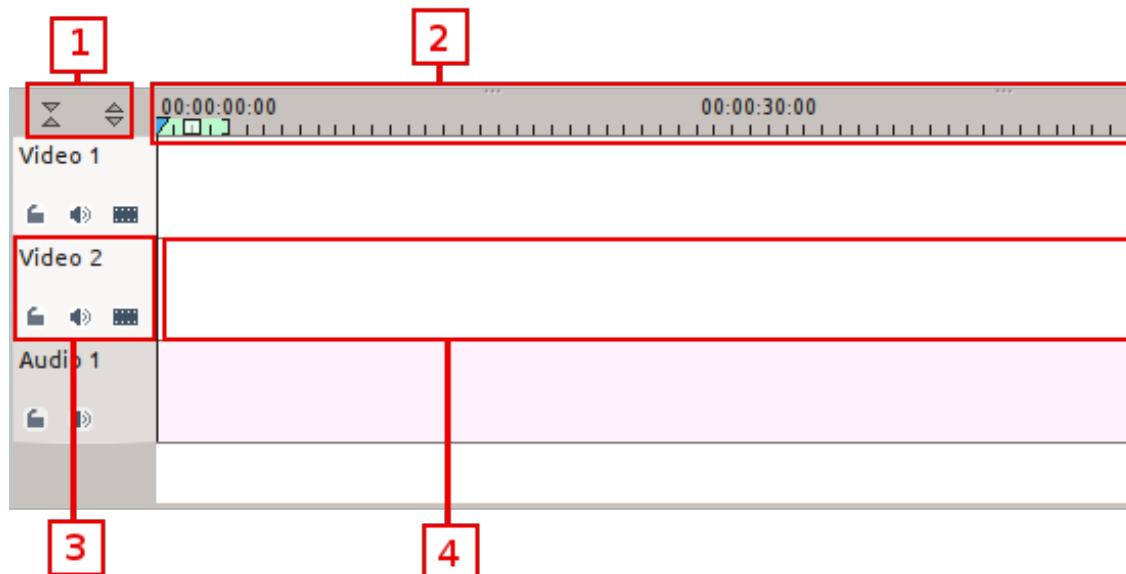
For me I use full luma all the time, it allows roundtripping a video edit and maintaining levels for grading in an external application that offers 32bit float precision. When it's necessary to otherwise happy with **Kdenlive's** SOP/SAT and scopes.

ToDo

ToDo

Chapter 9

Timeline



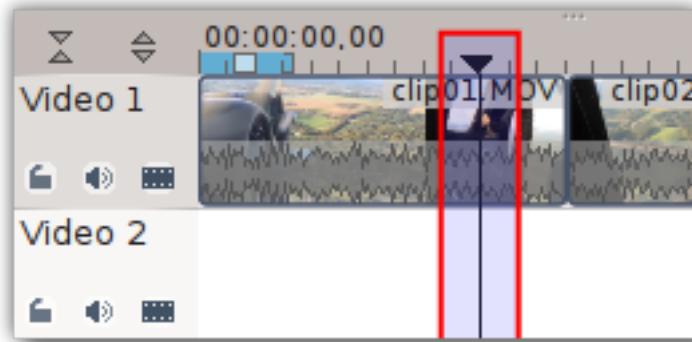
Timeline pane

The timeline is the central part of Kdenlive. It is made of 4 different areas (see screenshot).

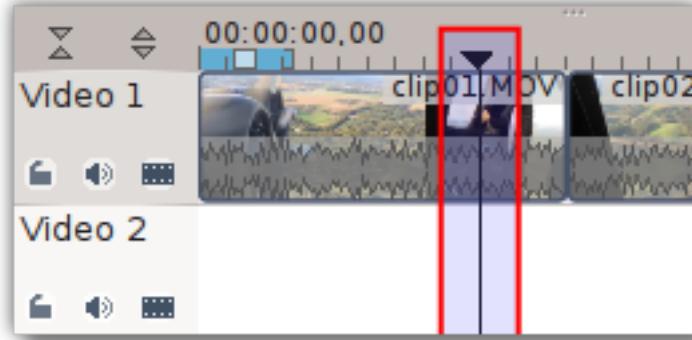
- 1 - Track resizing icon. These 2 icons allow you to increase or decrease the height of the tracks. They allow the track height to be adjusted to half the default height or double the default height. The default height of tracks can be configured in **Kdenlive's Settings dialog**.
- 2 - **Timeline ruler**. This shows the time in frames or in hh:mm:ss notation. The area highlighted in green is called the selection zone, and is useful if you want to render only a part of your project. Left clicking in the timeline ruler will move the **timeline cursor** and seek to that position. The Timeline ruler context menu allows you to manage **Guides**.
- 3 - **Track header**. This box shows some options for a track. First is the track name (Video 2 in the screenshot). That name can be changed by simply clicking in it. Below are icons to **Lock the track** , **Mute the track** , and **Hide video** .
- 4 - **Video track area**. Right clicking in the track header will give you a context menu allowing to manage (add / delete) tracks.

- 4 - The track itself, this is where you can drop your clips.

9.1 Timeline Cursor/Position Caret/Playhead



This indicates the position we are displaying in the



. You can scroll the position by dragging the Timeline cursor (a.k.a Position Caret or Playhead).

Beginning with version 0.9.4, dragging the timeline cursor will play the audio of the clip (a.k.a. Audio Scrubbing). This feature only works if you have checked **Use Open GL for video display** in [Settings -> Configure Kdenlive -> Playback](#).

9.2 Tracks

The timeline is made of tracks. There are two kind of tracks: audio and video. The number of tracks is defined when creating a new project in the [Project Settings Dialog](#). Adding a clip in timeline can be achieved by dragging it from the [Project Bin](#) or the [Clip Monitor](#).

9.3 See also

- [QuickStart-Timeline](#)
- [Editing](#)
- [Grouping](#)

- [Guides](#)
- [Right Click Menu](#)
- [Time Line Menu](#)

9.4 Editing

Editing is done in the [Timeline](#). Add a clip by dragging it from the [Project Tree](#) or the [Clip Monitor](#). Once a clip is dropped on a track, it can be moved (drag and drop it) to another place on the same track or onto another track.

9.4.1 Seeking through your project

The timeline cursor shows your current position in the project. The positions of the cursors on the timeline ruler and Project Monitor are always in sync. Position can be moved in following ways:

- Keyboard shortcut: right / left arrows for one frame, Shift+ right / left for 1 second
- Clicking/dragging in the [Timeline ruler](#) or in an empty area of the timeline.
- Clicking/dragging in the [Project Monitor](#) ruler.
- Rotating the mouse wheel while the pointer is over the [timeline ruler](#) or over the [Project Monitor](#)
- Editing the timecode in the [Project Monitor](#) timecode widget
- Clicking the up or down arrows on the [Project Monitor](#) timecode widget

9.4.2 Cutting a clip

To cut a clip, the easiest way is to place the timeline cursor where you want to cut the clip, then select the clip (left click in it) and use the menu **Timeline → Current Clip → Cut Clip** (default shortcut: **Shift-R**).

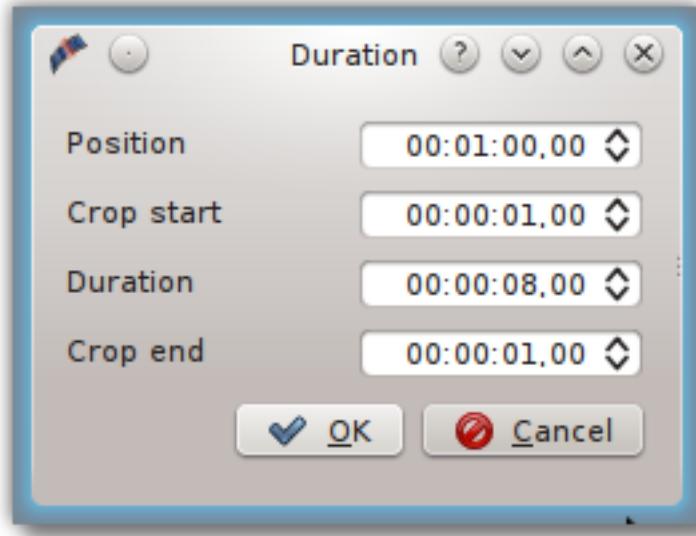
Or **Right Click → Cut Clip**

Alternatively - use the [Razor Tool](#).

9.4.3 Resizing a clip

A clip can be resized from its start or end by dragging its left or right edge. If you want a more precise resize, you can place the timeline cursor wherever you want the resize to end and use the menu **Timeline → Resize Item Start** (default shortcut: 1) or **Timeline → Resize Item End** (default shortcut: 2)

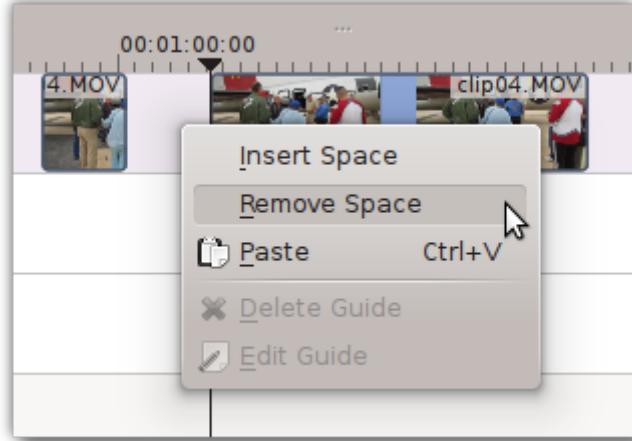
To even more precisely control the length of a clip, double click it in the timeline and adjust its duration using the [Clip duration](#) dialog. You can have frame-level accuracy with this method.



You can also resize a clip by cutting it with the [Razor Tool](#) and then deleting the bit you do not want.

9.4.4 Removing Space Between Clips

Right click in the space between the clips and choose **Remove Space**. Be aware however that if you have clips on multiple tracks in the timeline and they are not grouped, then removing space may disturb the alignment of the clips between the different tracks — the space is only removed from the timeline where you clicked. Under this situation it may be safer to use the [Spacer Tool](#).



9.4.5 Middle Tool Bar

There is a toolbar between monitors and the timeline that controls various aspects of the editor.

The Kdenlive Handbook



Middle Toolbar ver 17.04

1. **Track Compositing** drop down.

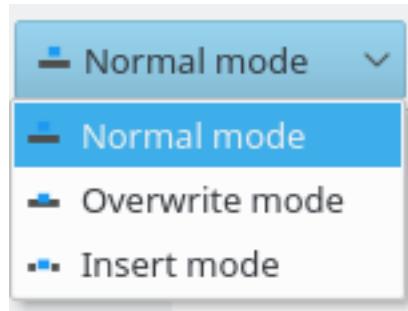
1a. [None](#)

1b. [Preview](#)

1c. [High Quality](#)

2. **Timeline Edit Mode** Drop Down

Note with ver 17.04 this mode is selected via a dropdown rather than toggle buttons.



ver 17.04

2a. [Normal Mode](#)

2b. [Overwrite Mode](#)

2c. [Insert Mode](#)

These same settings can be found under the **Tool** menu.

Tool Group (one of these 3 can be active)

Active buttons are grey.

3. [Selection Tool](#)

4. [Razor Tool](#)

5. [Spacer Tool](#)

6. Position indicator - displays the time point or frame number of the location of the hovering mouse. Click on the widget to change the display between time and frame number

7. Total length of the project

8. Insert Clip Zone in Timeline. See [Insert & Overwrite Advanced Timeline Editing](#) on Kdenlive Home page.

9. Overwrite Clip Zone in Timeline. See [Insert & Overwrite Advanced Timeline Editing](#) on Kdenlive Home page.

10. Extract Timeline Zone

11. Lift Timeline Zone
12. Favourite Effects
13. Start Preview Render
14. Stop Preview Render
15. Add Preview Zone
16. Remove Preview Zone
17. Remove All Preview Zones
18. Automatic Preview
19. Disable Timeline Preview
20. Manage Cached Data

Items 13-20 are covered by [Timeline preview rendering](#) article on the Kdenlive Home Page

21. Smaller Tracks (see [track resizing icon](#))
22. Bigger Tracks (see [track resizing icon](#))
23. Use timeline zone



/ Don't use timeline zone



for insert (toggles). See [Insert & Overwrite Advanced Timeline Editing](#) on Kdenlive Home page.

9.4.6 Bottom Tool Bar



Bottom toolbar ver 17.04

24. [Split Audio and Video Automatically](#)
25. [Automatic Transitions](#)
26. [Show Video Thumbnails](#)
27. [Show Audio Thumbnails](#)
28. [Show Marker Comments](#)
29. [Snap](#)

Zoom Tools

30. [Fit Zoom to Project](#)
31. [Zoom Out](#)
32. [Zoom Project](#)
33. [Zoom In](#)

9.4.7 Button Descriptions

9.4.7.1 Track Compositing - None

When Track Compositing is set to None you will not get tracks with alpha channel information to composite with the other tracks unless an explicit composite or affine transition is added between the clips. This is the behaviour that kdenlive displayed in older (<= ver 0.9.X).

9.4.7.2 Track Compositing - Preview

When track compositing is set to Preview tracks with alpha channel information will be automatically composited with the other tracks using an algorithm that is somewhat faster than the algorithm used with *Track Compositing - HighQuality* but which slightly degrades the colors.

9.4.7.3 Track Compositing - HighQuality

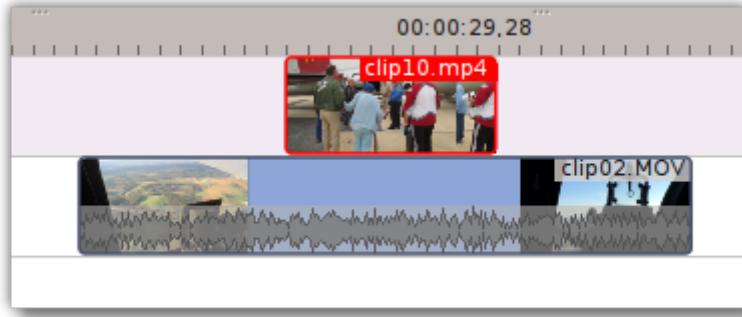
When track compositing is set to High Quality tracks with alpha channel information will be automatically composited with the other tracks using an algorithm (qtblend) that is somewhat slower than the algorithm used with *Track Compositing - Preview* but which retains higher fidelity colour information.

9.4.7.4 Timeline Edit Mode - Normal Mode

In this edit mode you can not drag clips on top of other clips in the same track in the timeline. You can drag them to another track in the timeline but not into the same track at the same time point as an existing clip. Contrast this to overwrite mode.

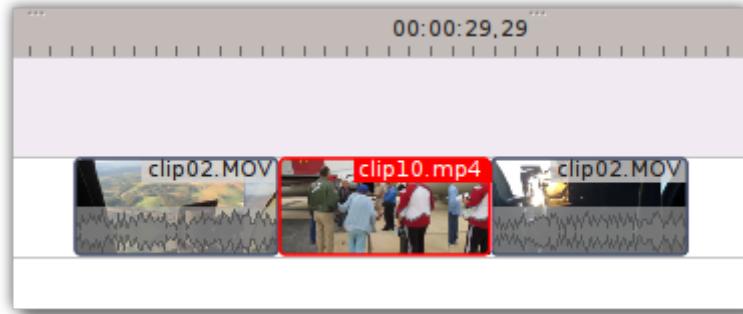
9.4.7.5 Timeline Edit Mode - Overwrite Mode

In this edit mode you can drag a clip onto a track where there is an existing clip and the incoming clip will overwrite that portion of the existing clip (or clips) covered by the incoming clip.



Before

The Kdenlive Handbook

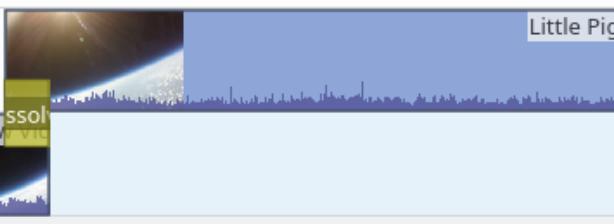
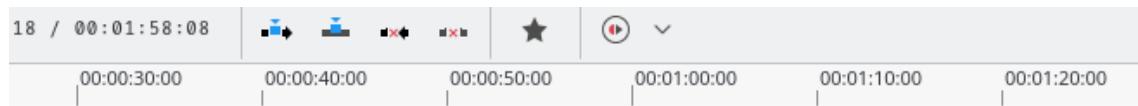


After

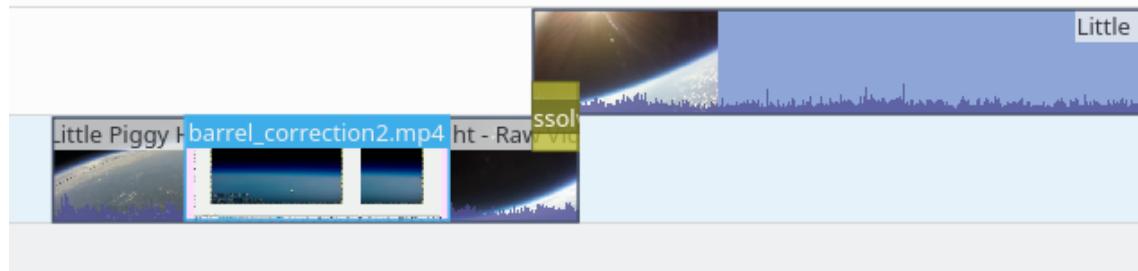
In the 'After' screenshot above, you can see that the clip which was dragged from the upper track has replaced a portion of the clip on the lower track.

9.4.7.6 Timeline Edit Mode - Insert Mode

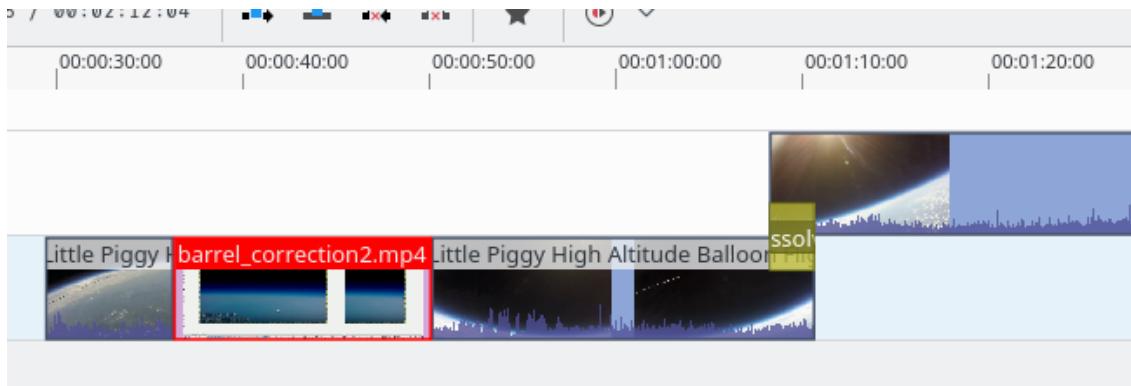
With this mode selected and you drop a selection into the time line the selection will be inserted into the time line at the point where the mouse is released. The clip that the selection is dropped on is cut and clips are moved to the right to accommodate the incoming clip.



Before



During



After. Incoming Clip inserted. Clips after the insert point are shifted Right

9.4.7.7 Selection Tool

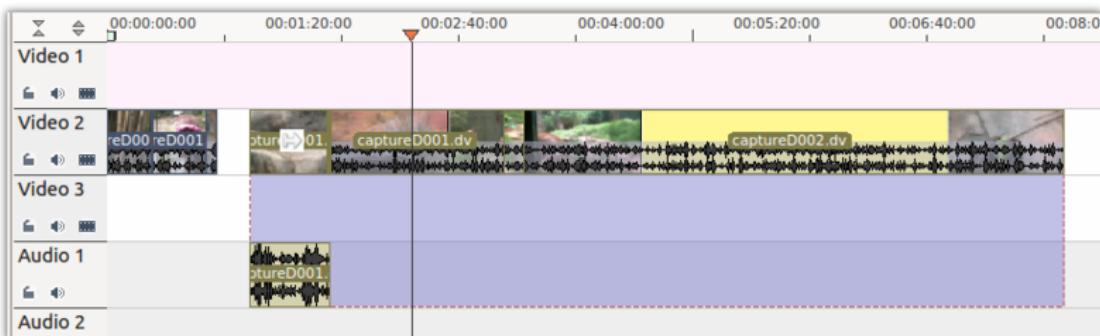
Use this to select clips in the timeline. The cursor becomes a hand when this tool is active.

9.4.7.8 Razor Tool

Use this to cut clips in the timeline. The cursor becomes a pair of scissors when this tool is active.

9.4.7.9 Spacer Tool

Use this tool () to temporarily group separate clips and then drag them around the timeline to create or remove space between clips. Very useful. Experiment with this tool to see how it works.



In the above example these clips are not grouped. However, the spacer tool groups them temporarily for you so you can move them all as a group.

9.4.7.10 Fit Zoom to Project

This will zoom the project out so that it all fits in the timeline window. This is the same function that is triggered by [Timeline](#) Menu item, **Fit Zoom to Project**.

9.4.7.11 Zoom project

The magnifying glasses zoom in or out on the timeline. The slider adjusts the zoom by large increments. These same settings are controlled by the [Timeline](#) menu items, **Zoom In** and **Zoom Out**.

9.4.7.12 Split Audio and Video Automatically

When this is on and you drag a clip to the timeline, the audio in the clip will end up on an audio track and the video on a video track. You can achieve the same result if you select the clip, [right click](#), **Split Audio**. When this is off and you drag a clip onto the timeline, both the audio and video tracks are combined into one video track.

9.4.7.13 Automatic Transitions

When active any transitions added to the time line will have the automatic transition option checked by default.

See [Automatic Transitions](#)

9.4.7.14 Show Video Thumbnails

When on, the video clips in the timeline will contain thumbnails as well a filename. Otherwise they just have the clip filename.

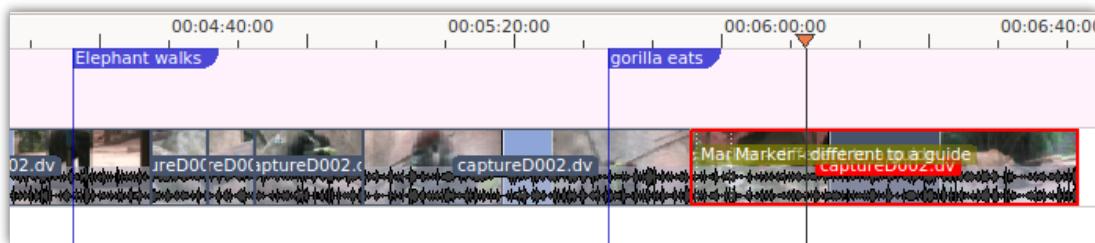
When the timeline is zoomed in to the maximum, the video track will show a thumbnail for every frame in the clip. When the timeline is not on maximum zoom, the video track will show a thumbnail for the first and last frame in the clip.

9.4.7.15 Show Audio Thumbnails

When on, the audio clip will have a wave representation of the audio data as well as a filename. Otherwise they just have the clip filename.

9.4.7.16 Show marker comments

This toggles on and off the display of the comments saved within **markers** (the text with the gold background in the example below) and within **guides** (the text with the purple background).



9.4.7.17 Snap

When this feature is on, dragging the beginning of one clip near to the end of another will result in the end of the first clip snapping into place to be perfectly aligned with the beginning of the second clip. As you move the two ends near to each other, as soon as they get within a certain small distance, they snap together so there is no space and no overlap. Note that this occurs even if the clips are on different tracks in the timeline.

Clips will also snap to the cursor position, markers and **guides**.

9.4.8 Cutting Footage from multiple aligned tracks - Ripple Delete

This is available on the **Timeline** menu under **All clips → Ripple Delete**¹.

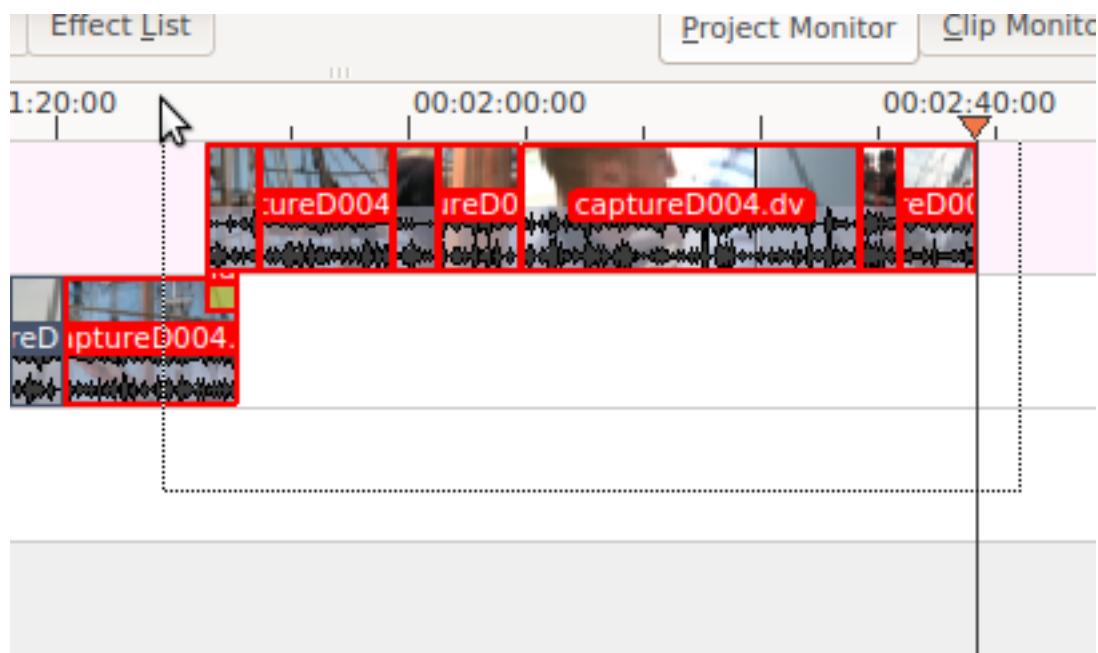
Mark In and Out points in the Project Monitor, then choose **Timeline → All clips → Ripple Delete** (or **Ctrl-X**). Kdenlive deletes all footage between the In and Out points in unlocked tracks, slides everything else back to fill the gap, and puts the playhead on the In point.

9.5 Grouping

Grouping clips allows you to lock clips together so that you can move them as a group and still retain their positions relative to each element in the group.

9.5.1 How to Group Clips

You can select multiple clips in preparation for grouping them by holding shift and clicking the mouse and dragging in the timeline.



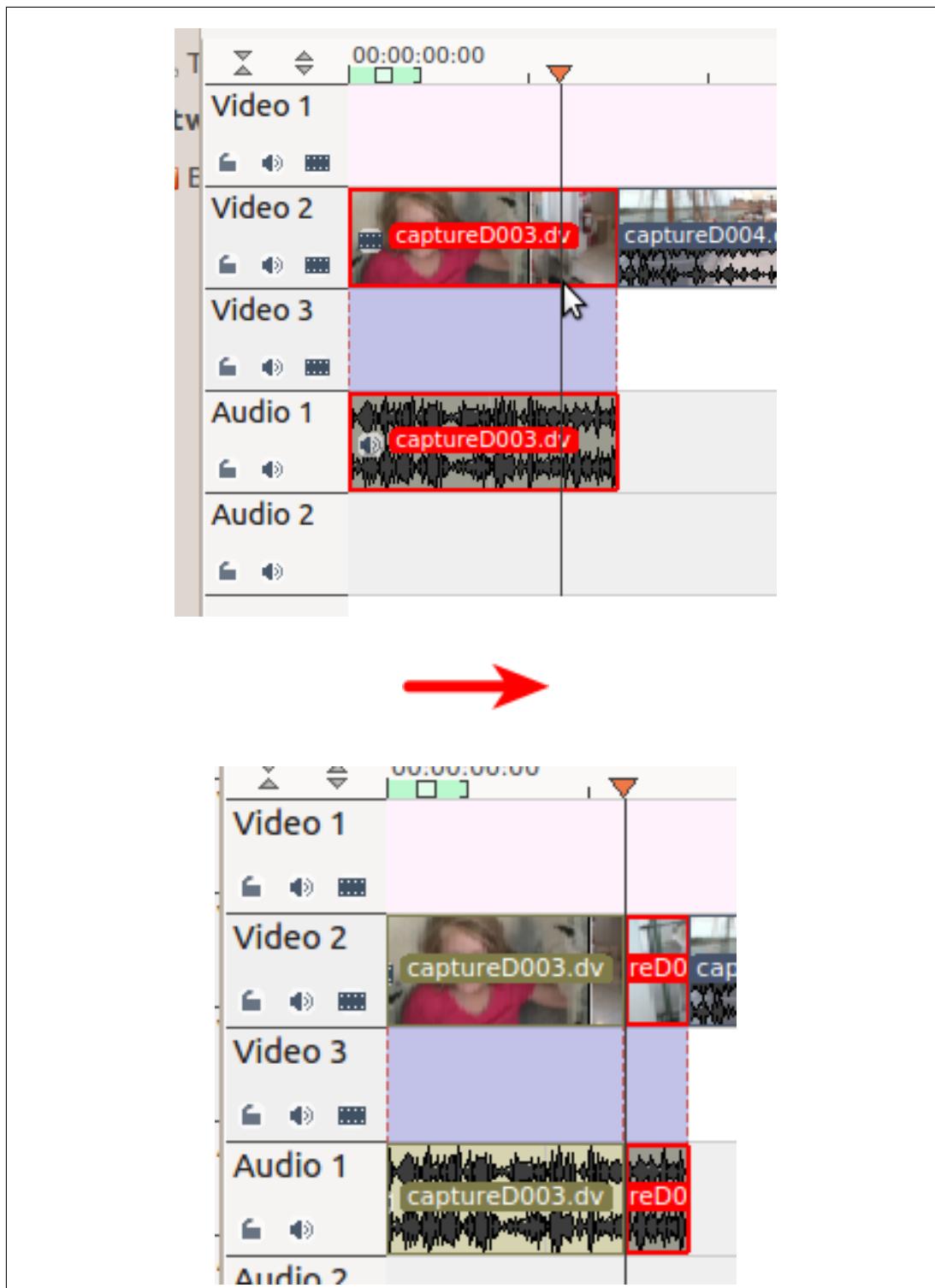
To group the selected clips select **Timeline → Group Clips** or right-click the selected clips and choose **Group Clips**.

9.5.2 Cutting Grouped Clips

Grouping is also useful if you have separate audio and video tracks and need to cut and splice both tracks at exactly the same point (e.g. for audio sync reasons).

If you cut the video clip using the **Razor Tool** when there is an audio clip grouped to it, then Kdenlive cuts the audio clip at the same point automatically.

¹ available on bleeding edge versions > 0.9.10 (Jan2015)



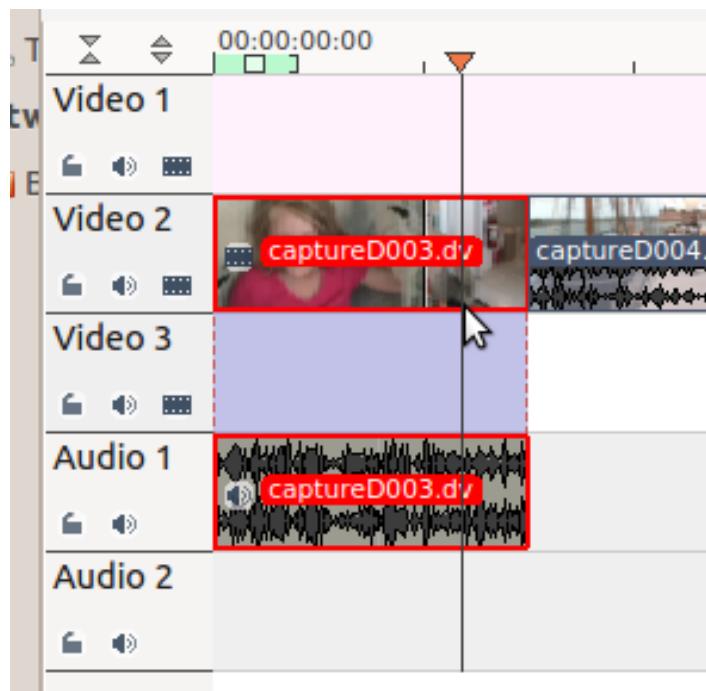
9.5.3 Removing Clip Grouping

To remove the grouping on clips, select the group of clips and choose **Timeline → Ungroup Clips**.

9.5.3.1 FAQ

Q: How to delete sound track only?

A: Right-click on the clip and choose **Split Audio**. The audio will move to an audio track but be grouped with the video track.



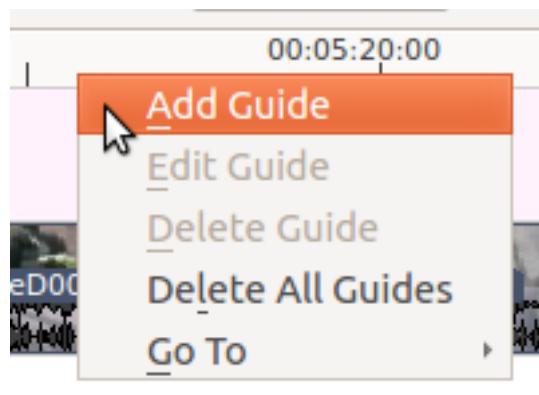
Right-click again and choose **Ungroup Clips**.

Then you can delete just the audio track.

Alternatively you can keep the audio in the clip and use the **Audio Correction → Mute** effect to just mute the soundtrack on the clip.

Yet another method is to select **Video only** from the [Clip Menu](#).

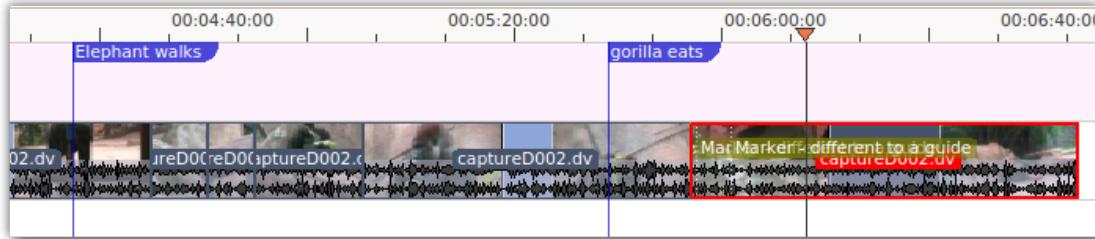
9.6 Guides



Guides are labels on the timeline that can be added by right-clicking at a spot on the timeline scale and choosing **Add Guide**. You can put a comment in the guide and make the comment

display by choosing [Show Marker Comments](#) in the **Timeline** menu or by clicking on the [Show Marker Comments](#) button.

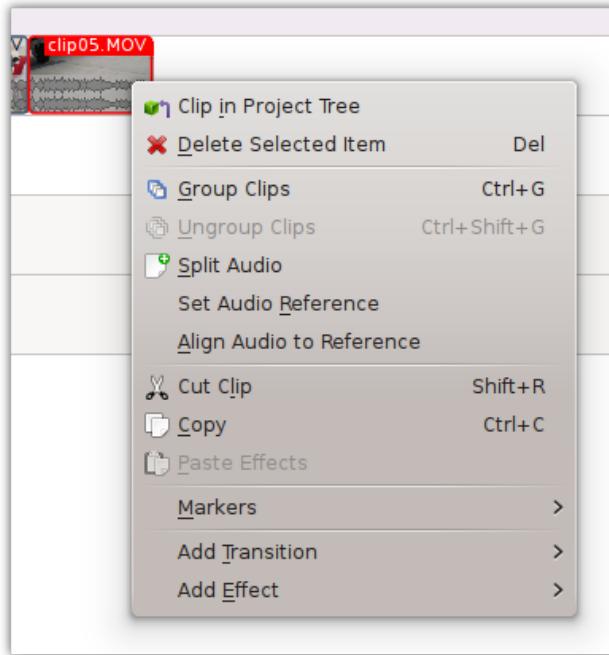
Guides in the pic below are the purple flags. Not to be confused with [markers](#) (gold in the picture below). Guides are static on the timeline and are stationary when clips are moved around. Markers are inside the clips and move with the clips.



Guides can be used to define regions for rendering. See [Rendering With The Guide Zone Option](#). Guides can also be used as chapters for DVD videos. See [DVD Rendering](#).

9.6.1 Clip in Timeline - Right-Click Menu

This is the context menu that appears when you right-click on a clip in the timeline. A different menu appears if you click in empty space in the timeline.

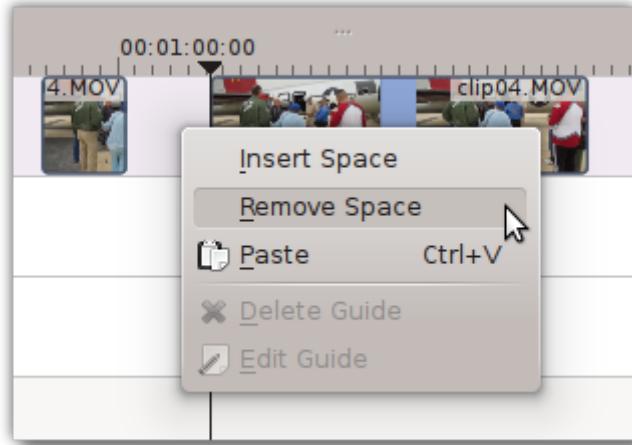


- **Clip in Project Tree** will cause the selected clip to be highlighted in the project tree.
- **Delete Selected Item** will delete the selected clip(s).
- Group Clips - see [Grouping](#)
- Ungroup Clips - see [Grouping](#)
- Split Audio - see [Split Audio](#)

- **Set Audio Reference** and **Align Audio to Reference** are used to align two clips on different tracks in the timeline base on the audio in the tracks. This is useful if two cameras recorded the same scene simultaneously. Kdenlive can use the almost identical audio track to align the two clips.
- To use this feature:
- Select the clip that you would like to align *to*.
- Right click, select **Set Audio Reference**.
- Select all the clips that you would like to get aligned.
- Right-click and select **Align Audio to Reference**.
- **Cut Clip**. Selecting this will cause the selected clip to be cut at the location of the position caret. See also [cutting a clip](#).
- Copy.
- [Paste Effects](#).
- [Markers](#).
- [Add Transition](#).
- [Add Effect](#).

9.6.2 Empty Space in Timeline - Right-Click Menu

A different menu appears if you click in empty space in the timeline.



Chapter 10

Alphabetical List of Effects and Transitions

Effect or Transition Name	Type	Category
4 x 4 pole allpass	Audio Effect	Audio
addition	Transition	-
addition_alpha	Transition	-
Affine	Transition	-
Aliasing	Audio Effect	Audio
Allpass delay line cubic spline interpolation	Audio Effect	Audio
Allpass delay line linear interpolation	Audio Effect	Audio
Allpass delay line noninterpolating	Audio Effect	Audio
Alpha gradient	Video Effect	Alpha Manipulation
Alpha operations	Video Effect	Alpha Manipulation
Alpha shapes	Video Effect	Alpha Manipulation
alphaatop	Transition	-
alphain	Transition	-
alphaout	Transition	-
alphaover	Transition	-
alphaxor	Transition	-
AM pitchshifter	Audio Effect	Audio
Apply LUT	Video Effect	Color Correction
Artificial latency	Audio Effect	Audio
Apply LUT	Video Effect	misc
Audio Divider (Suboctave Generator)	Audio Effect	Audio
Audio Levels	Audio Effect	Audio
Audio Pan	Audio Effect	Audio
Audio Spectrum Filter	Video Effect	Analysis and Data
Audio Wave	Video Effect	Analysis and Data
Auto Mask	Video Effect	Blur and Hide
Auto phaser	Audio Effect	Audio
Balance	Audio Effect	Audio Channels
Baltan	Video Effect	misc
Barry's Satan Maximiser	Audio Effect	Audio

The Kdenlive Handbook

Bezier Curves	Video Effect	Color Correction
Bezier Curves	Video Effect	misc
Binarize	Video Effect	Artistic
Binarize Dynamically	Video Effect	Artistic
Blur	Video Effect	Blur and Hide
Bode frequency shifter	Audio Effect	Audio
Bode frequency shifter (CV)	Audio Effect	Audio
Box Blur	Video Effect	Blur and Hide
Box Blur	Video Effect	misc
Brightness	Video Effect	Color Correction
Brightness (keyframable)	Video Effect	Color Correction
burn	Transition	-
Cairo Affine Blend	Transition	-
Cairo Blend	Transition	-
cairogradient	Video Effect	misc
cairoimagegrid	Video Effect	misc
Cartoon	Video Effect	misc
Cartoon	Video Effect	Artistic
Charcoal	Video Effect	Artistic
Chebyshev distortion	Audio Effect	Audio
Chroma Hold	Video Effect	Color
Chroma Key (formerly Blue Screen)	Video Effect	Alpha Manipulation
Color Distance	Video Effect	misc
Color Effect	Video Effect	misc
Color Selection	Video Effect	Alpha Manipulation
color_only	Transition	-
color_only	Video Effect	misc
Colorhalftone	Video Effect	misc
Colorize	Video Effect	Color
Colorize	Video Effect	misc
Colorize	Video Effect	misc
Comb delay line cubic spline interpolation	Audio Effect	Audio
Comb delay line linear interpolation	Audio Effect	Audio
Comb delay line noninterpolating	Audio Effect	Audio
Comb Filter	Audio Effect	Audio
Composite	Transition	-
Composite and transform	Transition	-
Constant Signal Generator	Audio Effect	Audio
Contrast	Video Effect	Color
Copy Channels	Audio Effect	Audio Channels
Corners	Video Effect	Distort
Crop Scale and Tilt	Video Effect	Crop and transform
Crop Scale and Tilt	Video Effect	misc
Crossfade	Audio Effect	Audio
Crossfade (4 outs)	Audio Effect	Audio
Crossover distortion	Audio Effect	Audio
Curves	Video Effect	Color Correction
Dance	Video Effect	misc

The Kdenlive Handbook

darker	Transition	-
DC Offset Remover	Audio Effect	Audio
darken	Video Effect	misc
darken	Video Effect	misc
Decimator	Audio Effect	Audio
Declipper	Audio Effect	Audio
Defish	Video Effect	Distort
Defish	Video Effect	misc
Delay grab	Video Effect	misc
delay0r	Video Effect	misc
Delayorama	Audio Effect	Audio
delay0r	Video Effect	misc
Denoiser	Video Effect	Enhancement
Denoiser	Video Effect	misc
difference	Transition	-
difference	Video Effect	misc
Diode Processor	Audio Effect	Audio
Dissolve	Transition	-
Distort	Video Effect	Distort
dither	Video Effect	Artistic
DJ EQ	Audio Effect	Audio
DJ EQ (mono)	Audio Effect	Audio
DJ flanger	Audio Effect	Audio
dodge	Transition	-
dodge	Video Effect	misc
dodge	Video Effect	misc
dodge	Video Effect	misc
Dust	Video Effect	Artistic
Dynamic Text	Video Effect	misc
Dyson compressor	Audio Effect	Audio
Edge Crop	Video Effect	Crop and transform
Edge glow	Video Effect	Blur and Hide
Edge glow	Video Effect	misc
Edge glow	Video Effect	misc
Emboss	Video Effect	Artistic
Emboss	Video Effect	misc
Equaliz0r	Video Effect	Color
Equaliz0r	Video Effect	misc
Exponential signal decay	Audio Effect	Audio
Equaliz0r	Video Effect	misc
Equaliz0r	Video Effect	misc
Fade from Black (video effect)	Video Effect	fade
Fade in (audio effect)	Audio Effect	fade
Fade out (audio effect)	Audio Effect	fade
Fade to Black (video effect)	Video Effect	fade
Fast Lookahead limiter	Audio Effect	Audio
Fast overdrive	Audio Effect	Audio
Fade to Black	Video Effect	misc
Flanger	Audio Effect	Audio
Flippo	Video Effect	misc
FM Oscillator	Audio Effect	Audio
Foldover distortion	Audio Effect	Audio

The Kdenlive Handbook

Fractionally Addressed Delay Line	Audio Effect	Audio
Flippo	Video Effect	misc
Freeze	Video Effect	motion
Frequency tracker	Audio Effect	Audio
Freeze	Video Effect	misc
Gain	Audio Effect	Audio Correction
Gamma	Video Effect	Color Correction
Gate	Audio Effect	Audio
Giant flange	Audio Effect	Audio
Glame Bandpass Analog Filter	Audio Effect	Audio
Glame Bandpass Filter	Audio Effect	Audio
GLAME Butterworth Highpass	Audio Effect	Audio
GLAME Butterworth Lowpass	Audio Effect	Audio
Glame Butterworth X-over Filter	Audio Effect	Audio
Glame Highpass Filter	Audio Effect	Audio
Glame Lowpass Filter	Audio Effect	Audio
Gamma	Video Effect	misc
Glow	Video Effect	Blur and Hide
Gong beater	Audio Effect	Audio
Gong model	Audio Effect	Audio
Glow	Video Effect	misc
Grain	Video Effect	Artistic
grain_extract	Transition	-
Greyscale	Video Effect	Color
GSM simulator	Audio Effect	Audio
GVerb	Audio Effect	Audio
Hard Limiter	Audio Effect	Audio Correction
hardlight	Transition	-
Harmonic generator	Audio Effect	Audio
Hermes Filter	Audio Effect	Audio
Higher Quality Pitch Scaler	Audio Effect	Audio
Hilbert transformer	Audio Effect	Audio
hardlight	Video Effect	misc
Hue	Transition	-
Hue	Video Effect	misc
Hue shift	Video Effect	Color
Hue shift	Video Effect	misc
Impulse convolver	Audio Effect	Audio
Hue shift	Video Effect	misc
Invert	Video Effect	Color
Inverter	Audio Effect	Audio
K-Means Clustering	Video Effect	misc
Karaoke	Audio Effect	Audio
Key Spill Mop Up	Video Effect	Alpha Manipulation
L/C/R Delay	Audio Effect	Audio

The Kdenlive Handbook

Lens Correction	Video Effect	Distort
Lens Correction	Video Effect	misc
LetterB0xed	Video Effect	Crop and transform
Levels	Video Effect	Color Correction
LFO Phaser	Audio Effect	Audio
Lift/Gamma/Gain	Video Effect	Color Correction
Light Graffiti	Video Effect	misc
Light Show	Video Effect	misc
lighten	Transition	-
LS Filter	Audio Effect	Audio
Lumakey	Video Effect	misc
LumaLiftGainGamma	Video Effect	Color
Luminance	Video Effect	Color
Luminance	Video Effect	misc
Luminance	Video Effect	misc
Luminance	Video Effect	misc
Mag's Notch Filter	Audio Effect	Audio
Matrix Spatialiser	Audio Effect	Audio
Matrix: MS to Stereo	Audio Effect	Audio
Matrix: Stereo to MS	Audio Effect	Audio
Matte	Transition	-
Medians	Video Effect	Blur and Hide
Mirror	Video Effect	Distort
Modulatable delay	Audio Effect	Audio
Mono Amplifier (ver >= 0.9.10)	Audio Effect	Audio Correction
Mono to stereo	Audio Effect	Audio
Mono to Stereo splitter	Audio Effect	Audio Channels
Multiband EQ	Audio Effect	Audio
multiply	Transition	-
Multivoice Chorus	Audio Effect	Audio
Mute	Audio Effect	Audio Correction
NDVI filter	Video Effect	misc
Nervous	Video Effect	misc
Nikon D90 Stairstepping fix	Video Effect	Enhancement
Nikon D90 Stairstepping fix	Video Effect	misc
Normalise	Audio Effect	Audio Correction
nosync0r	Video Effect	Crop and transform
Obscure	Video Effect	Blur and Hide
Oldfilm	Video Effect	Artistic
Oscilloscope	Video Effect	Analysis and Data
overlay	Transition	-
overlay	Video Effect	misc
overlay	Video Effect	misc
Pan	Audio Effect	Audio Channels
Pan	Video Effect	misc
Pitch Scaler	Audio Effect	Audio
Pixelize	Video Effect	Distort
Plate reverb	Audio Effect	Audio
Pointer cast distortion	Audio Effect	Audio
Position and Zoom	Video Effect	Crop and transform
Posterize	Video Effect	Artistic
Posterize	Video Effect	misc

The Kdenlive Handbook

Posterize	Video Effect	misc
Primaries	Video Effect	Color
Primaries	Video Effect	misc
Rate shifter	Audio Effect	Audio
Rectangular Alpha mask (Formerly Mask0Mate)	Video Effect	Alpha Manipulation
Region	Transition	-
Regionalize	Video Effect	misc
Regionalize	Video Effect	misc
Retro Flanger	Audio Effect	Audio
Reverse Delay (5s max)	Audio Effect	Audio
RGB adjustment	Video Effect	Color Correction
RGB Parade	Video Effect	Analysis and Data
rgbnoise	Video Effect	Artistic
rgbnoise	Video Effect	misc
Ringmod with LFO	Audio Effect	Audio
Ringmod with two inputs	Audio Effect	Audio
rgbnoise	Video Effect	misc
Rotate (keyframable)	Video Effect	Crop and transform
Rotate and Shear	Video Effect	Crop and transform
Rotoscoping	Video Effect	Alpha Manipulation
Rotoscoping	Video Effect	misc
Saturation	Transition	-
Saturation	Video Effect	Color
SC1	Audio Effect	Audio
SC2	Audio Effect	Audio
SC3	Audio Effect	Audio
SC4	Audio Effect	Audio
SC4 mono	Audio Effect	Audio
scanline0r	Video Effect	misc
Scratchlines	Video Effect	Artistic
screen	Transition	-
SE4	Audio Effect	Audio
Sepia	Video Effect	Color
Sharpen	Video Effect	Enhancement
Sharpen	Video Effect	misc
sigmoidaltransfer	Video Effect	Artistic
Signal sifter	Audio Effect	Audio
sigmoidaltransfer	Video Effect	misc
Simple amplifier	Audio Effect	Audio
Simple Delay Line	Audio Effect	Audio
Simple delay line cubic spline interpolation	Audio Effect	Audio
Simple delay line linear interpolation	Audio Effect	Audio
Simple Delay Line, noninterpolating	Audio Effect	Audio
Simple High Pass Filter	Audio Effect	Audio
Simple Low Pass Filter	Audio Effect	Audio
Sine Oscillator (Freq:Audio,Amp:audio)	Audio Effect	Audio
Sine Oscillator (Freq:Audio,Amp:control)	Audio Effect	Audio

The Kdenlive Handbook

Sine Oscillator (Freq:control,Amp:audio)	Audio Effect	Audio
Single band parametric	Audio Effect	Audio
Sinus wavewrapper	Audio Effect	Audio
Slide	Transition	-
Slide	Video Effect	misc
Smooth Decimator	Audio Effect	Audio
Sobel	Video Effect	Artistic
Softglow	Video Effect	Blur and Hide
softlight	Transition	-
SOP/Sat	Video Effect	Color Correction
Sox band	Audio Effect	Audio
Sox bass	Audio Effect	Audio
Sox echo	Audio Effect	Audio
Sox flanger	Audio Effect	Audio
Sox gain	Audio Effect	Audio
Sox phaser	Audio Effect	Audio
Sox stretch	Audio Effect	Audio
Speed	Video Effect	motion
Spill Suppress	Video Effect	Enhancement
Spill Suppress	Video Effect	misc
Square Blur	Video Effect	Blur and Hide
State Variable Filter	Audio Effect	Audio
Step Demuxer	Audio Effect	Audio
Stereo Amplifier (ver >= 0.9.10)	Audio Effect	Audio Correction
subtract	Transition	-
Surround matrix encoder	Audio Effect	Audio
Swap channels	Audio Effect	Audio Channels
Tape Delay Simulation	Audio Effect	Audio
Swap channels	Video Effect	misc
Technicolor	Video Effect	Color
TehRoxx0r	Video Effect	misc
Threshold	Video Effect	Artistic
Timeout indicator	Video Effect	Analysis and Data
Tint	Video Effect	Color
Transform	Video Effect	Crop and transform
Transient mangler	Audio Effect	Audio
Transform	Video Effect	misc
Triple band parametric with shelves	Audio Effect	Audio
Transform	Video Effect	misc
Transform	Video Effect	misc
UV Map	Transition	-
value	Transition	-
Valve rectifier	Audio Effect	Audio
Valve saturation	Audio Effect	Audio
Vectorscope	Video Effect	Analysis and Data
Vertigo	Video Effect	misc
Vertigo	Video Effect	misc
Vertigo	Video Effect	misc
Video Quality Measurement	Transition	-

The Kdenlive Handbook

Video Values	Video Effect	Analysis and Data
Vignette	Video Effect	Artistic
Vignette Effect	Video Effect	Artistic
Volume (keyframable)	Audio Effect	Audio Correction
VyNil (Vinyl Effect)	Audio Effect	Audio
Volume (keyframable)	Video Effect	misc
Wave	Video Effect	Distort
Wave shaper	Audio Effect	Audio
Wave Terrain Oscillator	Audio Effect	Audio
Wave	Video Effect	misc
White Balance	Video Effect	Color Correction
White Balance (LMS Space)	Video Effect	Color Correction
Wipe	Transition	-
Wipe	Video Effect	misc
z-1	Audio Effect	Audio
Wipe	Video Effect	misc
Wipe	Video Effect	misc

Chapter 11

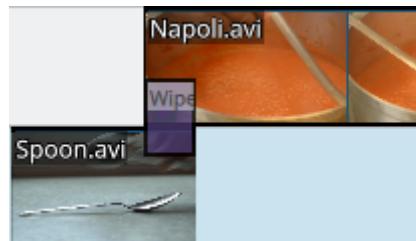
Transitions

Transitions govern how Kdenlive cuts from one clip to the next. You can add many different transition effects using **Kdenlive's** transitions.

11.1 How To Add a Transition



To add a transition, adjust clips in the timeline so that the end of one overlaps the beginning of another.



Then right-click in the timeline at the overlap point, select **Add Transition**, then choose one of the transitions from the flyout.

See [QuickStart - transition](#)

11.2 Properties Tab (version >= 15.12)

In kdenlive version 15.12 the effect stack is merged with the 'Transition' Tab to create a 'Properties' window/tab.

The Properties window displays the settings for the effects on the currently selected clip (Figure 1) or the settings for the currently selected transition (Figure 2) depending on whether it is a clip or a transition that is currently selected.

The Kdenlive Handbook

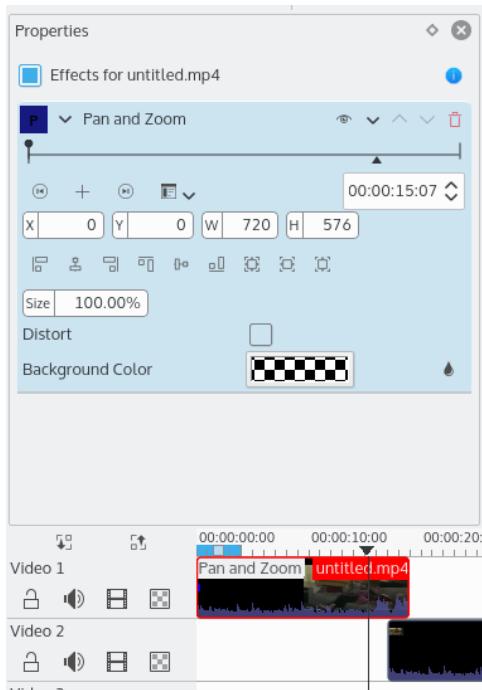


Figure 1 - Properties when a clip with effects is selected

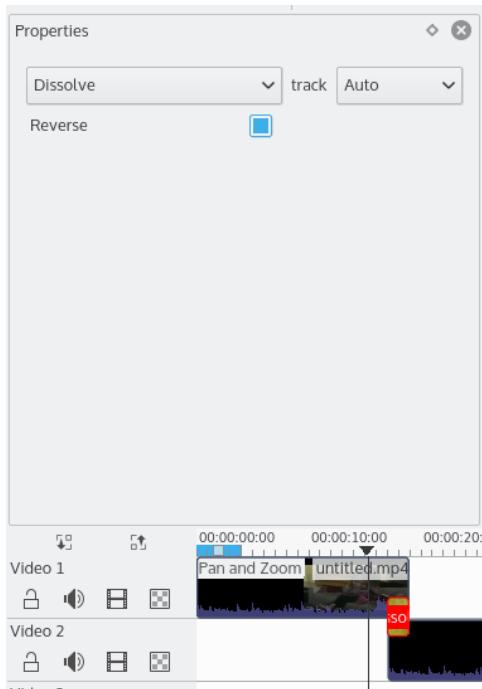


Figure 2 - Properties when a transition is selected

If you select the transition in the timeline



its properties will appear in the **Properties** tab (Figure 2).

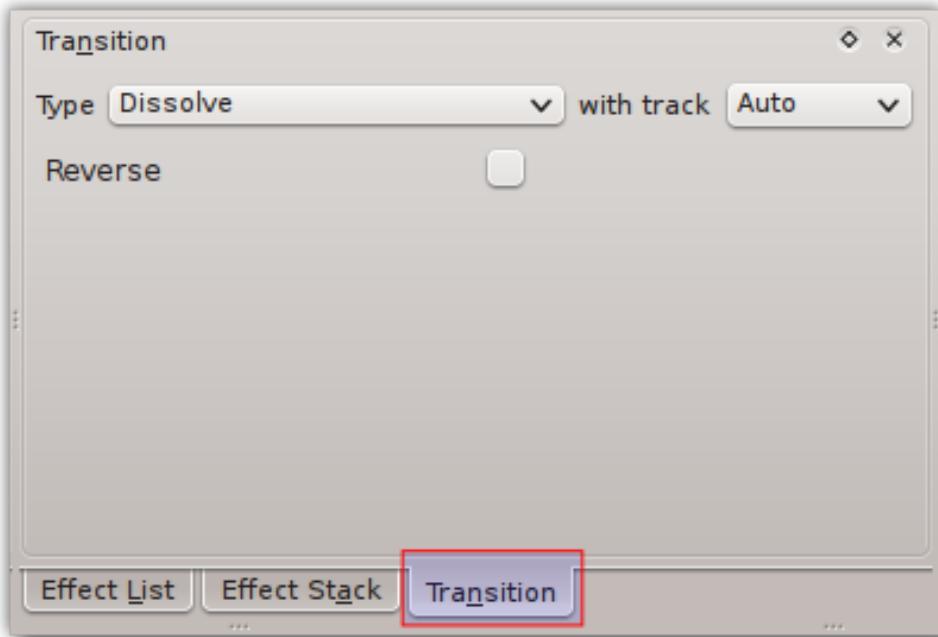
You should preview your transition to make sure it is running in the direction you expect. For example, if it is a Dissolve transition and it is running in the correct direction, then the first clip should dissolve into the second clip. But if it is in the wrong direction, the first clip will suddenly disappear (replaced by the second track). It will then fade back in and abruptly jump to second clip. If your transition is in the wrong direction, just select the Reverse check box in the Properties tab.

11.3 Transition Tab (pre version 15.12)

If you select the transition in the timeline



its properties will appear in the **Transition** tab.



If the **Transition** dialog is not visible, use **View → Transition** to add it.

You should preview your transition to make sure it is running in the direction you expect. For example, if it is a Dissolve transition and it is running in the correct direction, then the first clip should dissolve into the second clip. But if it is in the wrong direction, the first clip will suddenly disappear (replaced by the second track). It will then fade back in and abruptly jump to second clip. If your transition is in the wrong direction, just select the **Reverse** check box in the **Transition** tab.

11.4 How to create transitions with a single click

There is a shortcut for creating transitions between two tracks that overlap.

In Version 17.04 you hover the mouse over the lower grey rectangle that appears at the end of the clips on the timeline and a tool tip will appear saying 'Click to add Transition'. If you click a dissolve transition will be automatically added.

[YouTube video](#)

Older Versions:

If you hover the mouse over the overlapping region on the timeline, a green triangle will appear. Clicking this adds a dissolve transition between the tracks.

[YouTube video](#)

11.5 Automatic Transitions

If a transition is set as an 'Automatic Transition' and you adjust the overlap between the two clips involved in the transition, then the length of the transition will automatically adjust to cover the region where the clips overlap.

You can toggle off this feature on a transition by selecting the transition and choosing **Automatic Transition** from the **Clip** menu.

Transitions will be created with the Automatic transition property set to true by default if the [Automatic Transitions Button](#) is active.

When Automatic Transition is off and you move a clip to change the overlapping region, then the length of the transition does not automatically adjust.

11.6 Mixing titles, images and Videos with Transitions

[YouTube video](#)

11.7 Keyframe Animations Using Transitions

[YouTube video](#)

11.8 List of Transitions

See also [Effects and Transitions](#) for an alphabetical list of effects and transitions.

See also [alpha operation transitions](#) for a comparison of the various alpha operation-type transitions (addition, addition_alpha, alphaatop, alphain, alphaout, alphaover and alphaxor) .

1. [addition](#)
2. [addition_alpha](#)
3. [Affine](#)
4. [alphaatop](#)
5. [alphain](#)
6. [alphaout](#)
7. [alphaover](#)
8. [alphaxor](#)
9. [burn](#)
10. [Cairo Affine Blend](#)
11. [Cairo Blend](#)
12. [color_only](#)
13. [Composite](#)
14. [Composite and transform](#)
15. [darken](#)
16. [difference](#)
17. [Dissolve](#)
18. [dodge](#)
19. [grain_extract](#)
20. [hardlight](#)

- 21. [Hue](#)
- 22. [lighten](#)
- 23. [Matte](#)
- 24. [multiply](#)
- 25. [overlay](#)
- 26. [Region](#)
- 27. [Saturation](#)
- 28. [screen](#)
- 29. [Slide](#)
- 30. [softlight](#)
- 31. [subtract](#)
- 32. [UV Map](#)
- 33. [value](#)
- 34. [Video Quality Measurement](#)
- 35. [Wipe](#)

11.9 FAQ

Q: How to add a cross fading effect?

A: Make clips on two tracks overlap in time, then click the green triangle flashing in the bottom corner of the top clip (see [Transition](#)).

11.10 Affine Transition

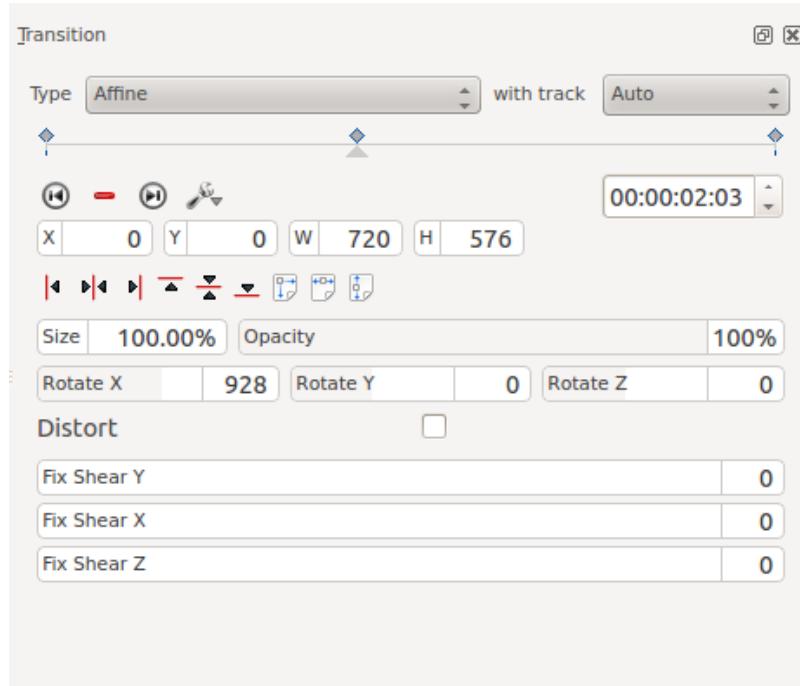
Generates image rotation in 3D space, skew and distortion.

Provides keyframable animated affine transformations with dissolve functionality.

In many applications, this transition can be used instead of a [Composite](#) transition and this provides a workaround to the composite transition 'green tinge' bug reported by some. (Mantis #2759)

11.10.1 Example 1

[YouTube video](#)



Affine Transition

11.10.2 Dissolve using Affine Transition

To add a Dissolve, change the opacity to zero percent.

11.10.3 Rotation using Affine Transition

To rotate the image, add a keyframe and enter values for rotation. The units are 10ths of degrees. (e.g. 900 = 90 degree rotation).

Rotate X rotates the frame in the plane of the screen.

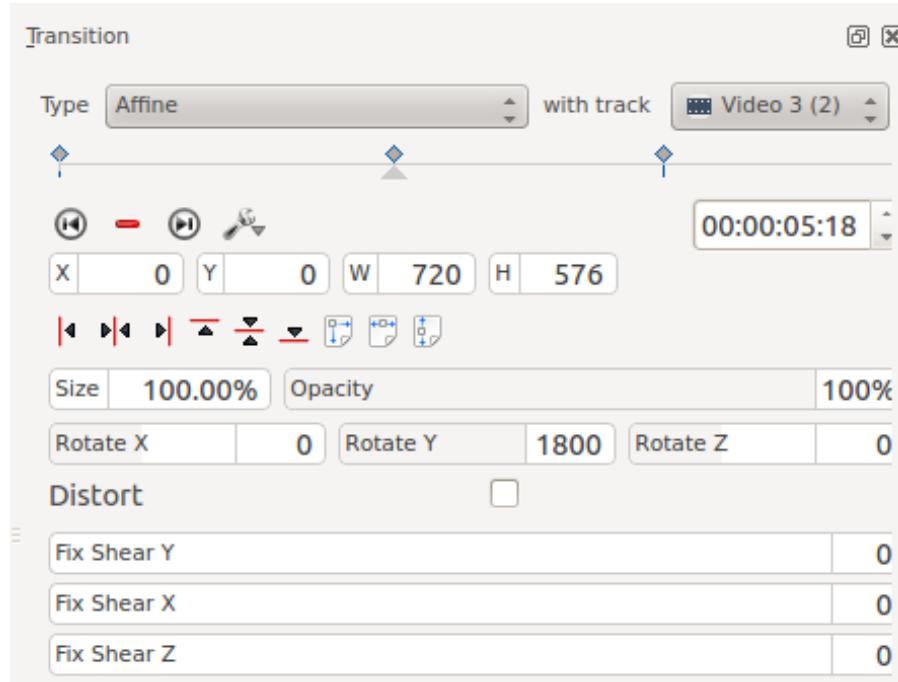
Rotate Y and **Rotate Z** create the illusion of 3D rotation when used dynamically with keyframes - see example below.

You can create a similar effect using the [Rotate \(keyframable\)](#) effect from the Crop and Transform group.

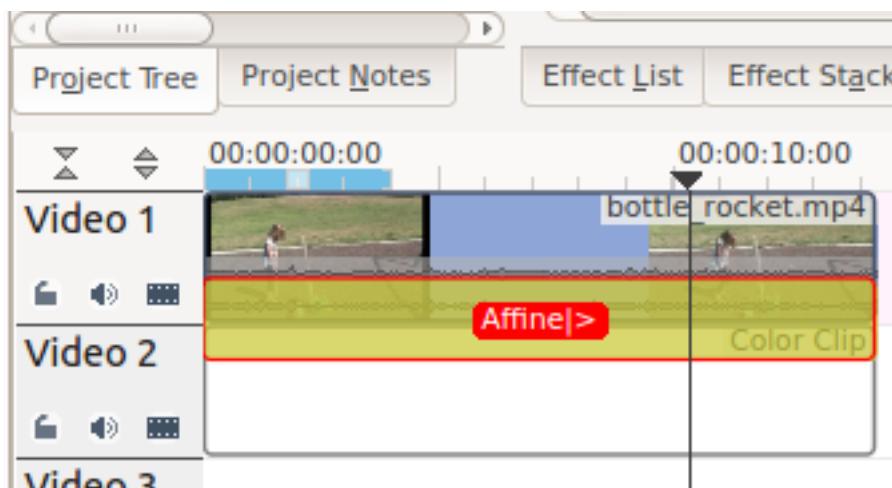
11.10.4 Example 2 - Rotate Y

[YouTube video](#)

This example is created using 3 keyframes. The second keyframe is shown below with a **Rotate Y** value of 1800 (=180 degrees). Keyframe one and keyframe three both have **Rotate Y** values of zero.



Keyframe two



Timeline for this demo clip

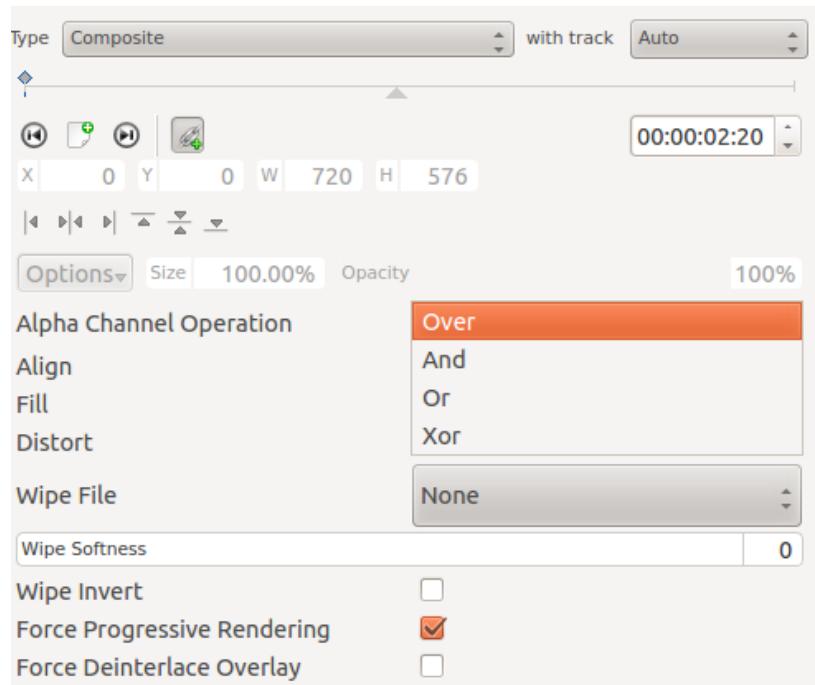
The difference between **Rotate Y** and **Rotate Z** is that the apparent rotation in **Rotate Y** appears to be around a horizontal axis. The rotation in **Rotate Z** appears to be around a vertical axis

11.11 Composite Transition

The Composite transition combines the video data from two video tracks into one. This transition is used in combination with Alpha Channel information supplied by one of the [Alpha Manipulation Effects](#) or by the use of a [Wipe File](#). This Alpha Channel data describes how the data from the two video tracks should be combined. Until you define some alpha channel data using an [Alpha Manipulation Effect](#) or a Wipe File, changes in the Composite transition settings will have no visible effect.

Note: The disadvantages of the **Composite** transition are: luma bleed, and less precise position control. When compared to **Affine**, the **Composite** transition, it does not support rotation or skewing but it is much faster, albeit at the cost of luma bleed.

11.11.1 Alpha operations



Alpha operation options are *Over*, *And*, *Or* and *Xor*

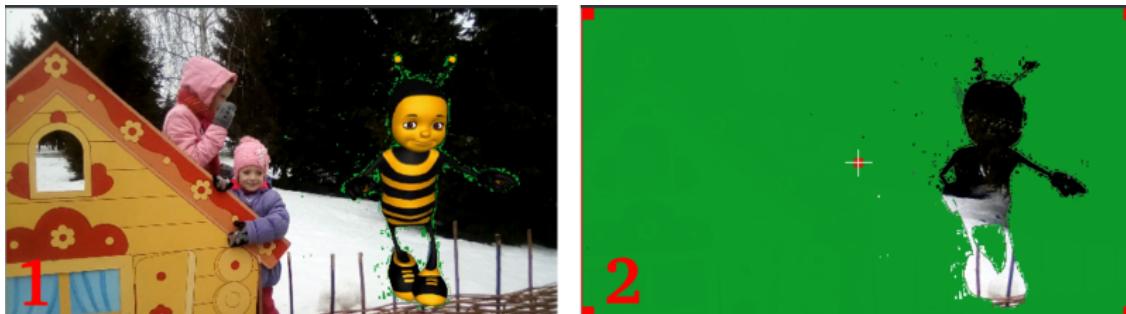
Operation Over

1. The clip with alpha information is located on the top track: the selected color acquires transparency.
2. The clip with alpha information is located on the bottom track: we see only the top clip.



Operation And

1. The clip with the alpha information is located on the top track: the selected color becomes transparent.
2. The clip with alpha information is located on the bottom track: everything in the image becomes transparent, except for the selected color.



Operation **Or** clears any alpha information



Operation **Xor**

1. The clip with alpha information is located on the top track: everything in the image becomes transparent, except for the selected color.
2. The clip with alpha information is located on the bottom track: the selected color acquires transparency.



11.11.2 Tutorial 1

See this [tutorial](#) that describes how to use:

- Alpha Manipulation -> [Blue Screen](#)
- [rotoscoping](#)
- Composite Transition.
- Crop and Transform -> [Pan and Zoom effect](#)
- Enhancement -> [Sharpen Effect](#)
- Alpha Manipulation -> [Alpha Operations](#)

11.11.3 Tutorial 2 - composite transition and Blue Screen

Tutorial showing how to use the ‘Blue screen’ function, composite transition and **Keyframes** to animate one image moving over another in the Kdenlive video editor.

[YouTube video](#)

11.11.4 Tutorial 3 - Video Masks

This tutorial uses the Composite transition and a custom video mask (a.k.a. a Wipe File or **matte**) to create an effect where you can make it appear that one video is playing on the screen of a still of a computer monitor.

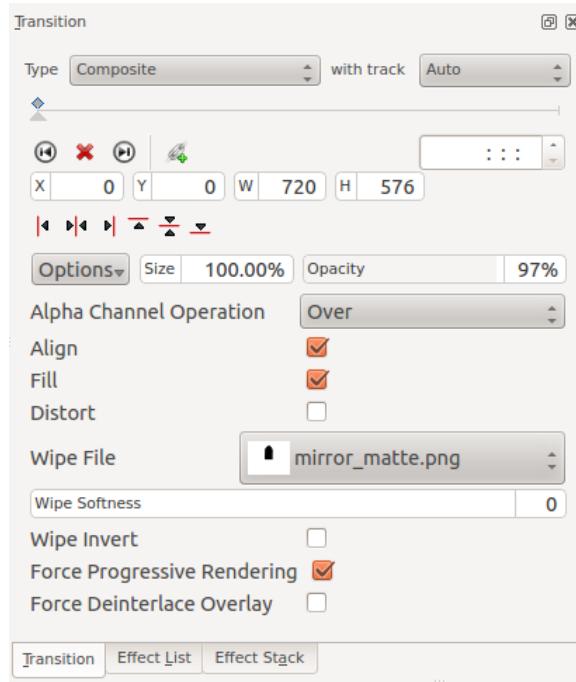
The mask/matte is created with **GIMP**.

Save your mattes to `/usr/share/kdenlive/lumas`.

It would appear that you need to stop and restart Kdenlive in order for it to pick up new matte/wipe files saved in the above directory.

There appears to be a defect in this functionality which means that when the composite is on 100% Opacity, the wipe file does not work. You need to change it to 99% to make the effect kick in.

[YouTube video](#)



Screenshot of Composite transition using a custom wipe file to mask out a section of video - as described in Tutorial 3.

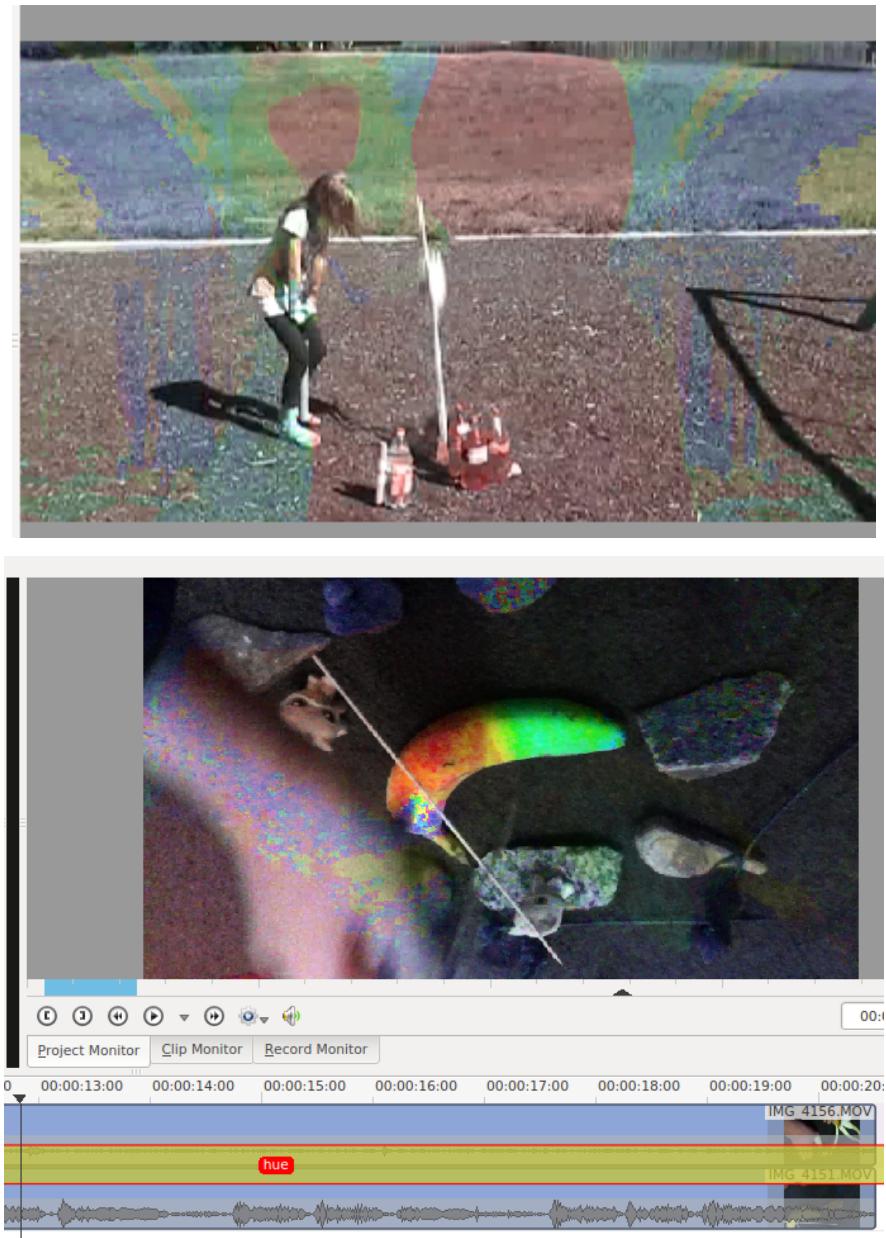
Aspirational goal - a compositing experiment made using detonation films free sample effects.

[YouTube video](#)

11.12 Hue

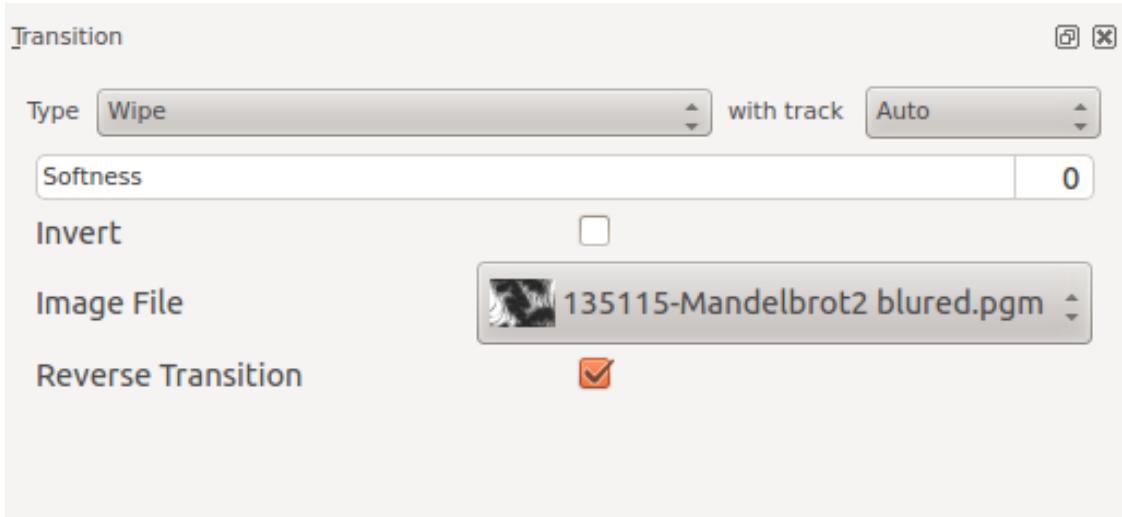
This is the **Frei0r hue** MLT Transition.

Perform a conversion to hue only of the source input1 using the hue of input2.



11.13 Transitions - Wipe

In this transition one shot replaces another by traveling from one side of the frame to another or with a special shape.



[YouTube video](#)

If the transition is to use a shape then this is chosen with the **Image File** option.

You can install new wipe files from [Download New Wipes](#) on the **Settings menu**.

There was a defect with the download new wipe files - it did not download them to where they are needed.

They should go here

`~/.local/share/kdenlive/lumas/HD/`

but were going here

`~/.local/share/kdenlive/lumas/`

To fix manually create a HD folder and move the .pgm files there

This defect does not appear in version 17.12.3

This clip has some examples of the different wipes Kdenlive is capable of.

[YouTube video](#)

See also [Composite Transition](#)

11.14 addition transition

[Frei0r-addition](#)

Perform an RGB[A] addition operation of the pixel sources.

11.15 Addition_alpha transition

[Frei0r-addition_alpha](#)

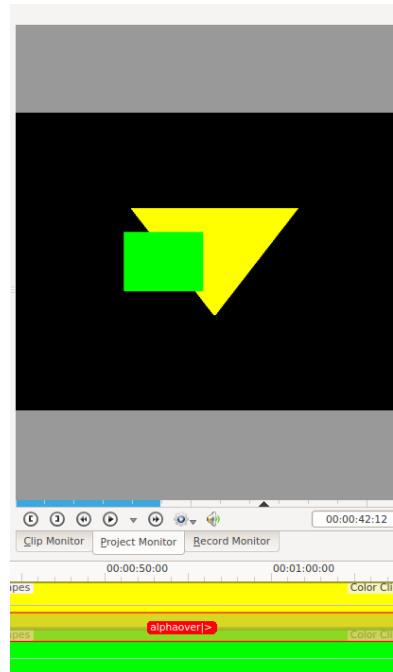
Perform an RGB[A] addition_alpha operation of the pixel sources

11.16 alphaover transition

Yellow clip has a triangle alpha shape with min = 0 and max =618.

Green clip has rectangle alpha shape with min=0 and max =1000

Alphaover is the transition in between



11.17 alphaatop transition

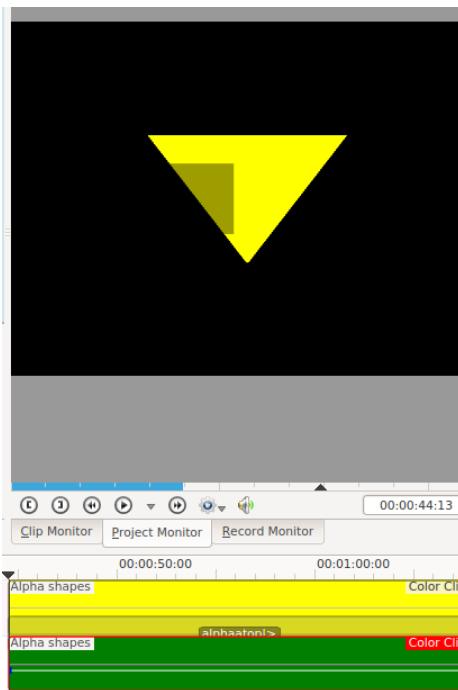
[Frei0r-alphaatop](#)

The alpha ATOP operation.

Yellow clip has a triangle alpha shape with min = 0 and max =618.

Green clip has rectangle alpha shape with min=0 and max =1000

alphaatop is the transition in between .



11.18 alphain transition

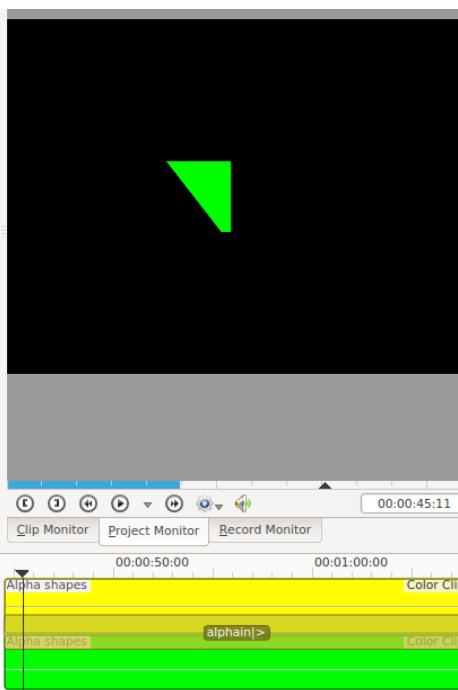
Frei0r-alphain

The alpha IN operation.

Yellow clip has a triangle alpha shape with min = 0 and max =618.

Green clip has rectangle alpha shape with min=0 and max =1000

alphain is the transition in between



11.19 alphaout transition

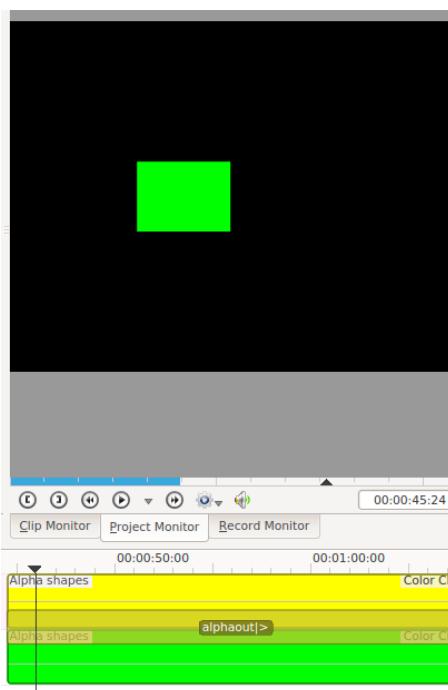
[Frei0r-alphaout](#)

the alpha OUT operation

Yellow clip has a triangle alpha shape with min = 0 and max =618.

Green clip has rectangle alpha shape with min=0 and max =1000

alphaout is the transition in between

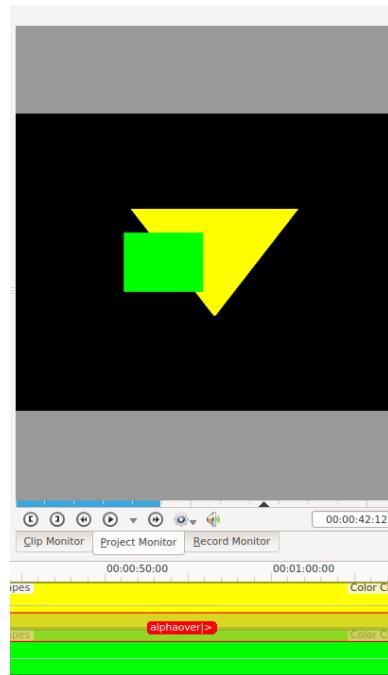


11.20 alphaover transition

Yellow clip has a triangle alpha shape with min = 0 and max =618.

Green clip has rectangle alpha shape with min=0 and max =1000

Alphaover is the transition in between



11.21 alphaxor transition

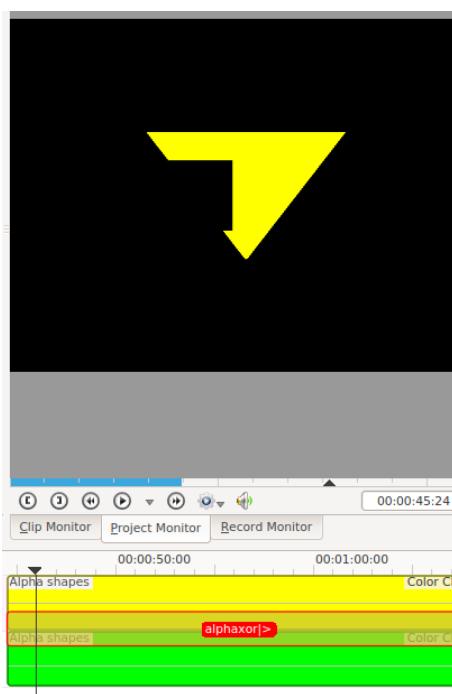
Frei0r-alphaxor

The alpha XOR operation.

Yellow clip has a triangle alpha shape with min = 0 and max =618.

Green clip has rectangle alpha shape with min=0 and max =1000

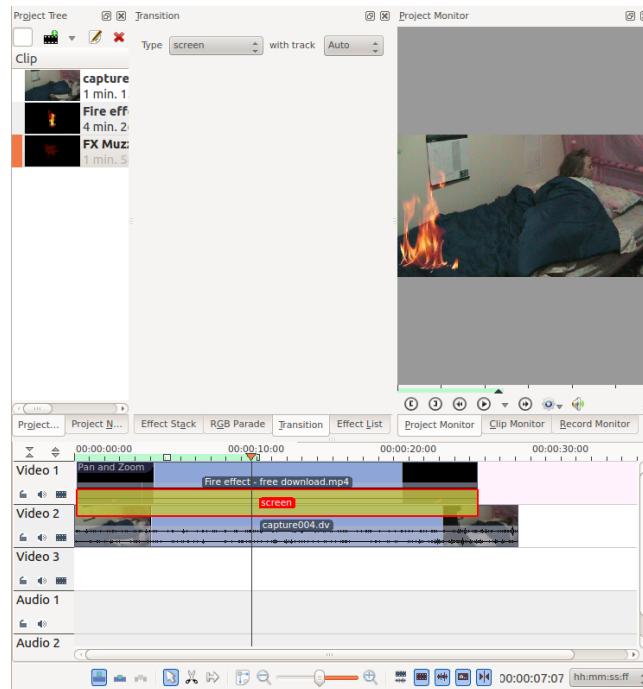
alphaxor is the transition in between



11.22 Transitions - Screen

This is very much like [blue screen](#) but it works with footage filmed against a black background.

Timeline showing how to apply the 'Screen' transition



This video composites a video of fire filmed on a black background into another bit of footage using the *Screen* transition.

[YouTube video](#)

11.23 Alpha operation transitions

The addition, addition_alpha, alphaatop, alphain, alphaout, alpha over and alphaxor transitions all perform alpha operations between the two video tracks. These transitions only have an effect if the videos on the tracks have alpha channel information in them.

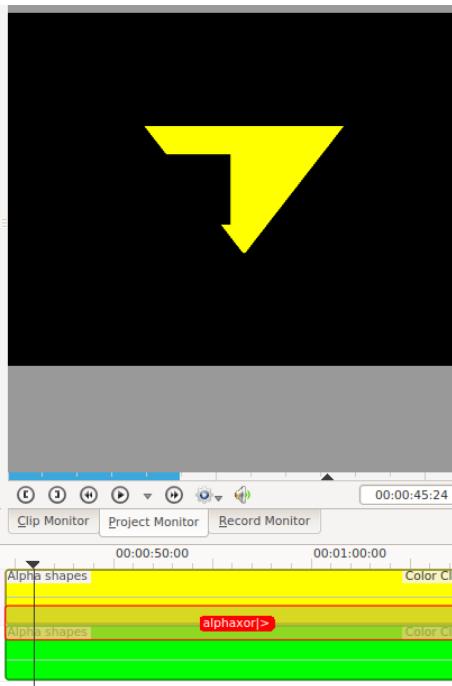
The Alpha Channel information is supplied by one of the [Alpha Manipulation Effects](#). This Alpha Channel data describes which regions of the video track is transparent and how transparent it should be. Until you define some alpha channel data using an [Alpha Manipulation Effect](#) changes in the alpha operation transition settings will have no visible effect.

The alpha operation transitions define how the two different alpha channel information should be combined to produce the final image. These operations are implementing the operations described at Wikipedia page on [Alpha Compositing](#).

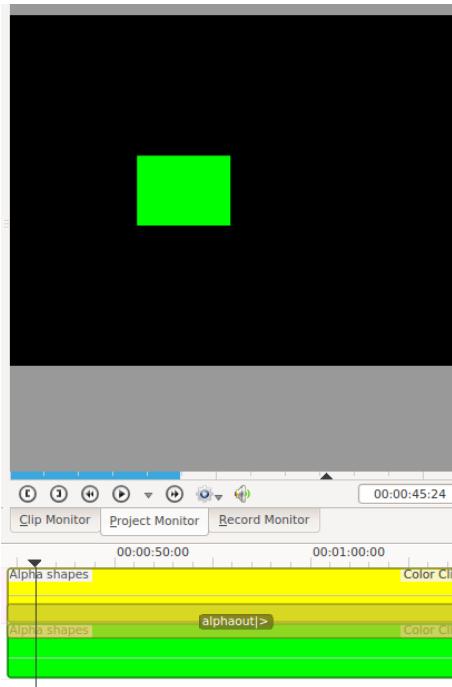
In the examples below the yellow clip has a triangle alpha shape with min = 0 and max = 618. This translates to 0% opacity outside the triangle and 61.8% opacity inside the triangle. Ie the alpha channel in the yellow track say show all the track underneath outside the triangle and show 38.2% of the underneath track inside the triangle

The Green clip has a rectangle alpha shape with min=0 and max =1000. This translates to make the clip 100% transparent outside the rectangle and 0% transparent inside the rectangle.

The Kdenlive Handbook

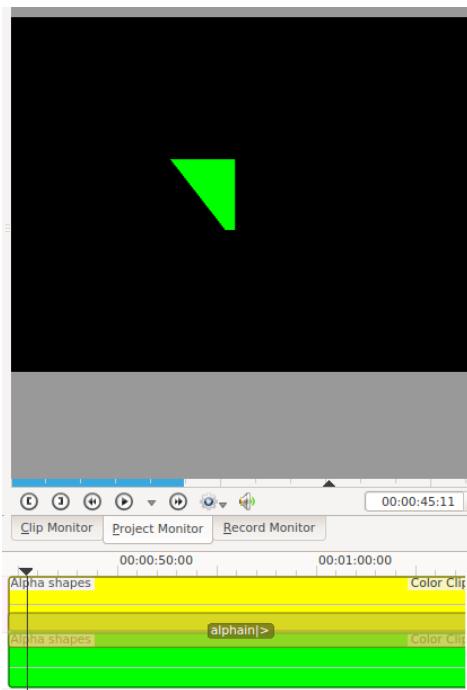


alphaxor

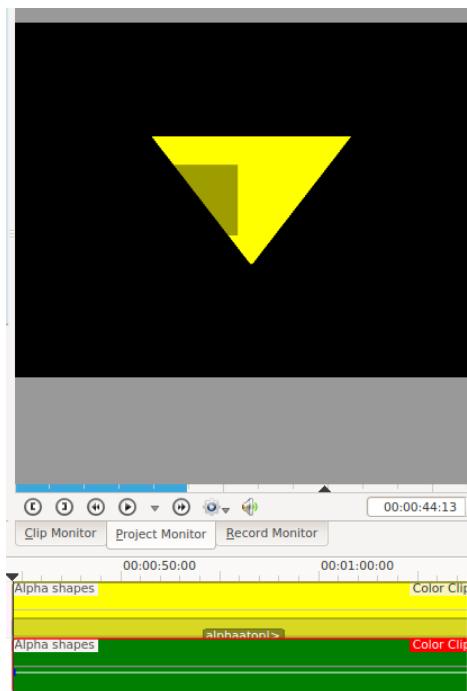


alphaout

The Kdenlive Handbook

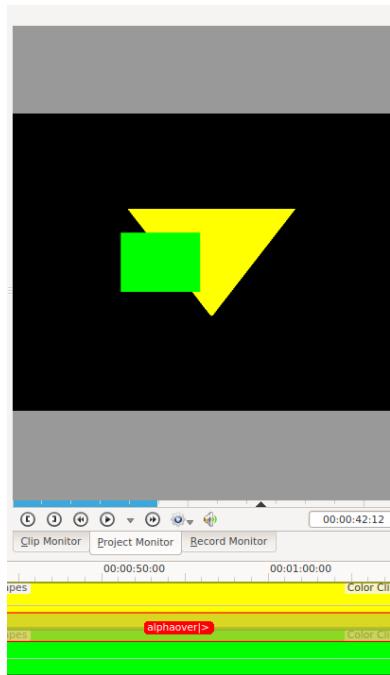


alphain



alphaatop

The Kdenlive Handbook



alpha over

Chapter 12

Effects

Effects in Kdenlive can be used to modify the audio and video properties of the source material.

You add effects to clips by choosing them from the **Effects Tab** and dragging them onto a clip in the timeline. Or by selecting a clip in the timeline and choosing **Add Effect** from the **Timeline menu** or **Add Effect** from Clip in Timeline **right click** menu . For more detail see [QuickStart - Effects](#)

The effects that are in play on a given clip can be viewed and edited via the Properties Tab that displays when the clip in question is selected in the timeline.

You can also apply effects to an entire track. This is achieved by dragging an effect from the **Effect Tab** to the **Track Header**. Or you can click on the track header and chose **Add Effect** from the **Timeline menu** . Tracks which have effects added in this fashion will have a gold star icon in the track header.

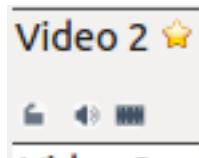


Figure 1a. Track header showing star icon indicating an effect has been added to this track.

12.1 Effects Tab

Make the Effects Tab visible from the **View** menu (**View → Effects**)

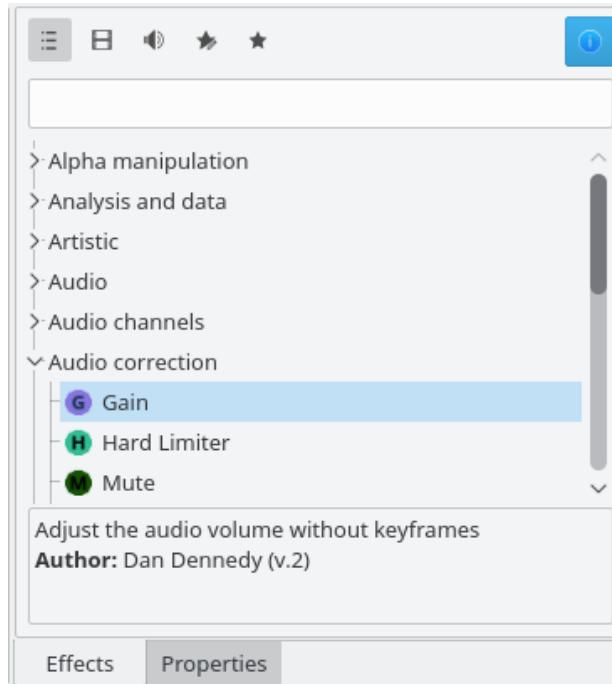


Figure 1b - effects tab. The Information icon has been toggled so that the tab displays a brief description of the selected effect at the bottom

To add an effect to a clip, simply drag it from the **Effects Tab** to the clip on the [timeline](#).

12.2 The Properties Tab and its Menu

12.2.1 The Properties Tab

The Properties Tab displays the settings for the effects on the currently selected clip (Figure 3) or the settings for the currently selected transition (Figure 4) depending on whether it is a clip or a transition that is currently selected.

The Kdenlive Handbook

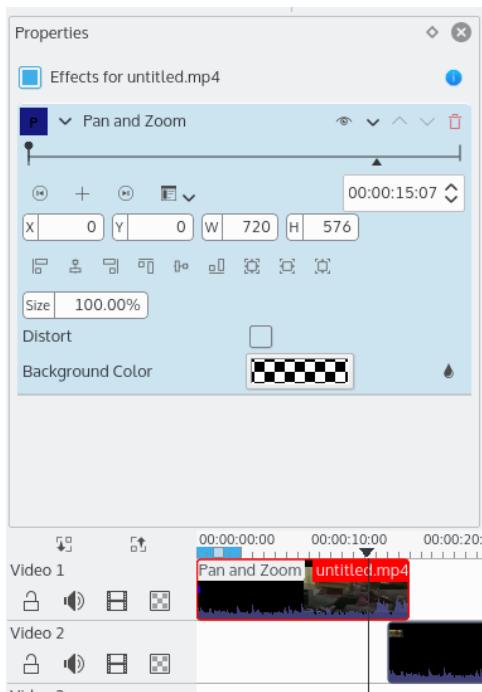


Figure 3 - Properties when a clip with effects is selected

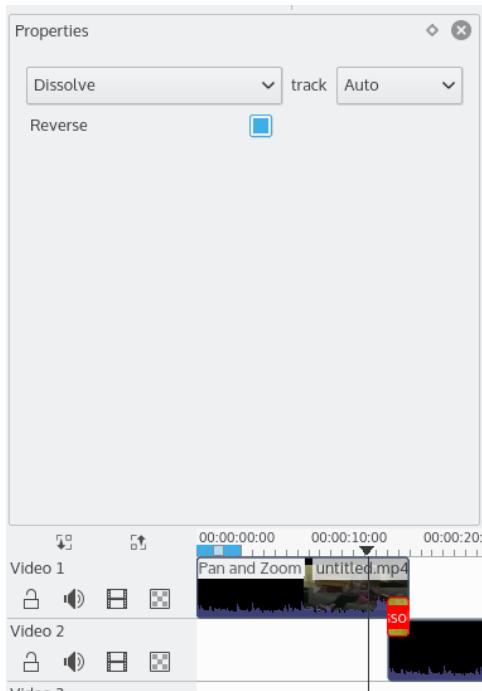


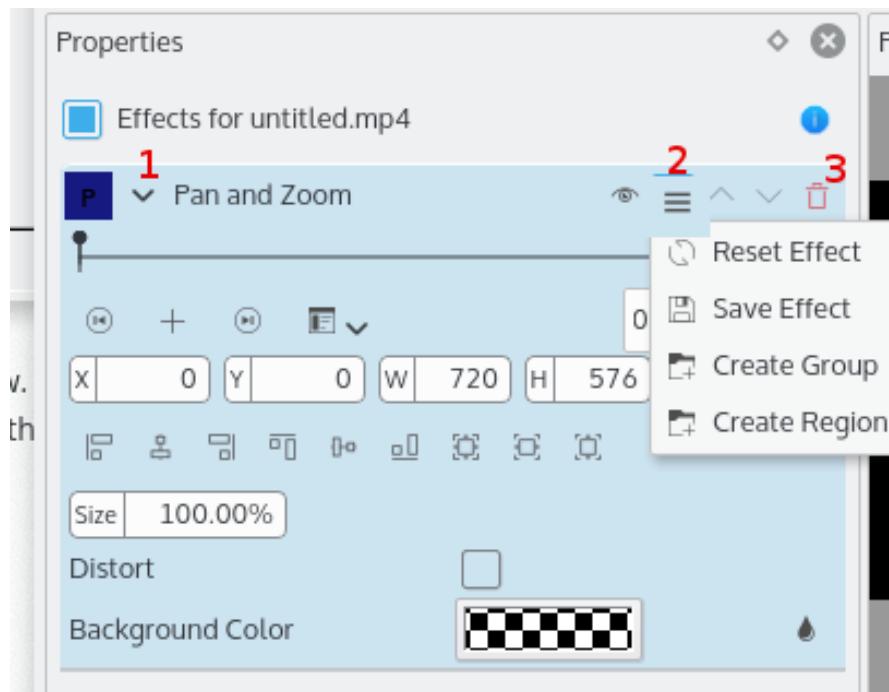
Figure 4 - Properties when a transition is selected

Click the eye icon shown at 2 to temporarily disable the effect and toggle the button to the state shown at 1.

Click the empty eye icon shown at 1 to re-enable a disabled effect and toggle the button to the state shown at 2.



To remove an effect from a clip, click the trash can icon labelled 3 in the image below. The arrow labelled 1 minimizes the effect in the Properties Window. And the icon labelled 2 brings up the Properties Tab menu shown.



12.2.2 Reset Effect

This reverts all the settings in the effect back to their default values.

12.2.3 Save Effect

This allows you to save the current effect and all its settings. The saved effect will appear in the Effect List in the Custom category.

12.2.4 Create Group

This creates an Effect Group. An Effect Group is a place holder for multiple effects. You can then save the group of effects — they will appear in the Effect List, in the Custom Section. You can then later apply the whole group of effects to other parts of the timeline.

To add effects to the group, first add the effect in question to a clip. Then drag that effect and drop it onto the Effect Group in the Properties Tab.

12.2.5 Create Region

New in ver >=0.9.3

The ‘Create Region’ feature enables a user to apply an effect to a part of a clip only. It is a really powerful feature but currently the UI is not fully ready to get its full potential.

Basically, you add an effect to a clip — for example ‘Sepia’ — then you go in the effect’s menu and select ‘Create Region’. This will now open a file dialog.

In that dialog, you need to point to an MLT clip with alpha transparency. This is where Kdenlive is not 100% ready because there are many ways we could create such clips, using for example a threshold filter or rotoscoping. But as a start, let’s say you can open any image with alpha transparency, or a title clip created with Kdenlive. Then, the ‘sepia’ effect will only be applied on the non-transparent areas of this ‘region’ clip.

12.3 Using Keyframes in effects

Many effects use the concept of ‘Keyframes’. Keyframes are user-defined points in your clip where you want an effect to start, stop or change. You can set the parameters for your effects to different values at different keyframes and Kdenlive will then gradually change the parameters between the two keyframes so that by the time the video has arrived at the next keyframe it will have adjusted the parameter to match that key frame. It interpolates between keyframes.

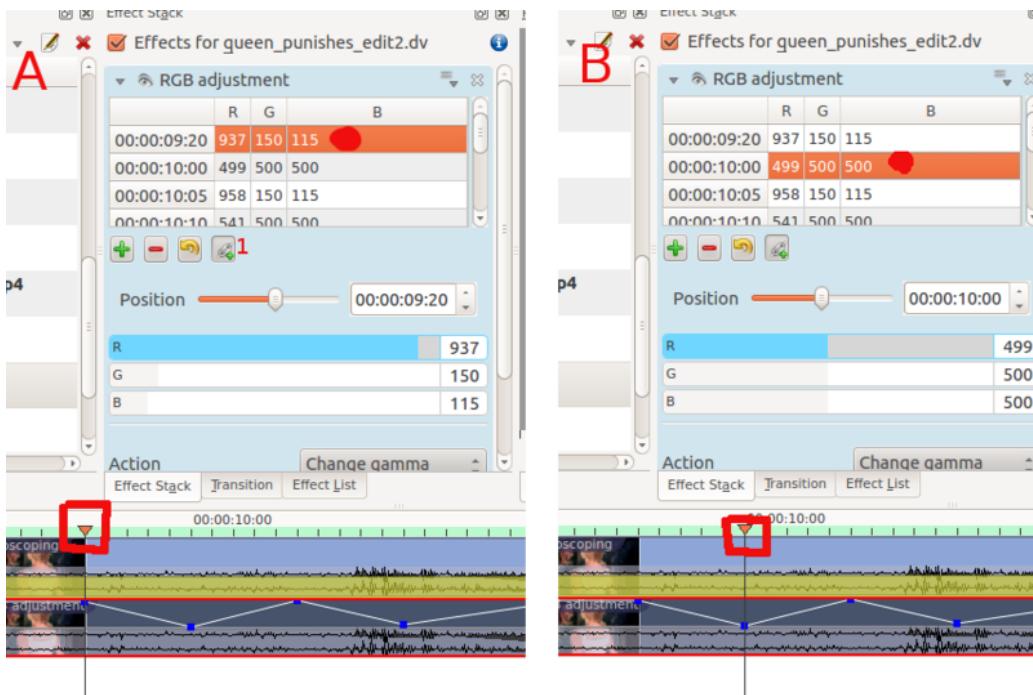
See [QuickStart - Effects](#) for an example on keyframing the RGB adjustment effect.

12.4 Seek To Active Frame

Some keyframe controls have a *seek to active frame* button



(labeled 1 in screenshot A below). When *seek to active frame* is toggled on and you click on one of the keyframes in the keyframe list, Kdenlive will scroll the preview window to that keyframe. In the example of the screenshot, we have selected the keyframe at 9:20 in A and the clip position caret (highlighted in red box) shows the location of this keyframe. Clicking the keyframe at 10:00 in B shows how the clip position has moved.



12.5 Effects Demos

The following three YouTube videos display the results of a number of the video effects available in Kdenlive (Spanish captioning).

[YouTube video](#)

[YouTube video](#)

[YouTube video](#)

Another YouTube video (English Captions).

[YouTube video](#)

See also this YouTube play list from [Franz M.P.](#)

12.6 Effects Categories

See also [Effects and Transitions](#) for an alphabetical list of effects and transitions.

The effects are divided into the following categories:

1. [Alpha manipulation](#)
2. [Analysis and Data](#)
3. [Artistic](#)
4. [Audio](#)
5. [Audio channels](#)
6. [Audio Correction](#)
7. [Blur and hide](#)
8. [Color](#)

9. [Color Correction](#)
10. [Crop and transform](#)
11. [Custom](#)
12. [Distort](#)
13. [Enhancement](#)
14. [Fade](#)
15. [Misc](#)
16. [Motion](#)

The available effects are defined by .xml files found in \$KDEDIR/share/kde4/apps/kdenlive/effects (e.g. /usr/share/kde4/apps/kdenlive/effects).

Or at /usr/share/kdenlive/effects on version 15.n.

These .xml files contain the default values for the effects parameters. So if you don't like the default values for the effects in Kdenlive, you can modify the defaults by editing these .xml files.

12.7 FAQ:

Q: How to duplicate an effect to use similar settings somewhere else?

A: Select your effect in the timeline. In the Properties Tab choose **Save** (from the [Properties Tab Menu](#)). You will now find this effect available in the **Effect List Custom** section.

A: Other solution: select a strip containing the effect, **Copy**, then, where you want to apply it again, right-click and select **Paste effect** instead of **Paste**.

Q: How to apply an effect on several clips (all) at the same time?

A: You can select multiple clips with **Shift + drag** (left mouse button) around them. Then right-click and group clips (or **Ctrl-G**).

12.8 Effects - Alpha manipulation

12.8.1 General Information about Alpha Manipulation

Alpha Manipulation, more commonly known as Chroma Key compositing is an effect that changes the background of the picture to a different background the editor may want.

More information can be found on the pages for the effects themselves:

1. [Chroma Key](#) (for simple chroma key effects)
2. [Color Selection](#) (for complex chroma key effects)

12.8.2 Effects in the Alpha Manipulation Category

1. [Alpha gradient](#)
2. [Alpha operations](#)
3. [Alpha shapes](#)
4. [Chroma Key](#)
5. [Color Selection](#)
6. [Rectangular Alpha mask](#)
7. [Rotoscoping](#)
8. [Key Spill Mop Up](#)

12.8.3 Compositing Reference Material

For some background, the Wikipedia article in [alpha compositing](#) is useful. See also Porter, Thomas; Tom Duff (1984). 'Compositing Digital Images'. Computer Graphics 18 (3): p253–259 1984 [pdf](#)

12.8.4 Alpha gradient

This is the [frei0r.alphagrad](#) effect

see also [Frei0r-alphagrad readme](#) file.

This effect fills the alpha channel with a gradient.

12.8.5 Alpha operations

This is Frei0r [alpha0ps](#) - Display and manipulation of the alpha channel.

Use this to shrink, grow, threshold and visualize the alpha channel.

This plugin can shrink, grow, threshold and invert the alpha channel. It is mainly intended to improve keying edges.

It can also display the alpha channel in various ways, to enable quick assessment of the effect.

It is cascadable, so for example one can do a soft shrink first and then threshold, which gives a slightly different result than a hard shrink.

Parameters:

Display:

what to display. There are seven options: **Image**, **Alpha as gray**, **Gray+red**, **Selection on black**, **Selection on gray**, **Selection on white** and **Selection on checkers**. This is intended for monitoring during adjustment mostly. After adjusting the parameters, it should be left on **Image**, which lets the unchanged input image through - this plugin is intended to change only the alpha channel...

Display input alpha:

use input alpha for the display function above. (Check what alpha we are getting on the input)

Operation:

select the operation to be done on the alpha channel. Currently there are six choices: **NO OP**, **Shave**, **Shrink hard**, **Shrink soft**, **Grow hard**, **Grow soft**, **Threshold**.

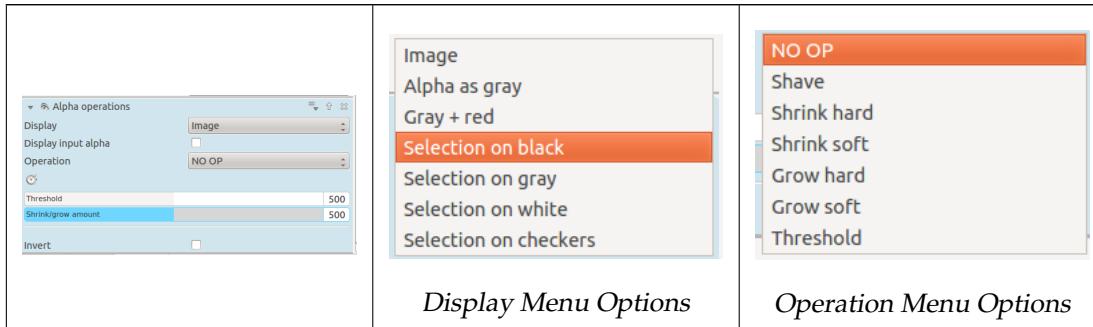
Shave try to remove the 'hairy' stuff, and also shrinks the selection a bit.

The *hard* operations introduce no new values to the alpha channel, so if you have a 'hard' key (only 0 and 255) it will stay that way.

The *soft* operations will introduce interpolated values, making the edge softer.

NOTE

The shave, shrink and grow operations are quite slow, because they do many conditional operations on each pixel.



Threshold:

This is only used for the **Threshold** operation.

Shrink/grow amount:

How far the shrinking/growing will extend.

Invert:

Inverts the input alpha channel, transparent will become opaque and vice versa.

12.8.5.1 Tutorial 1

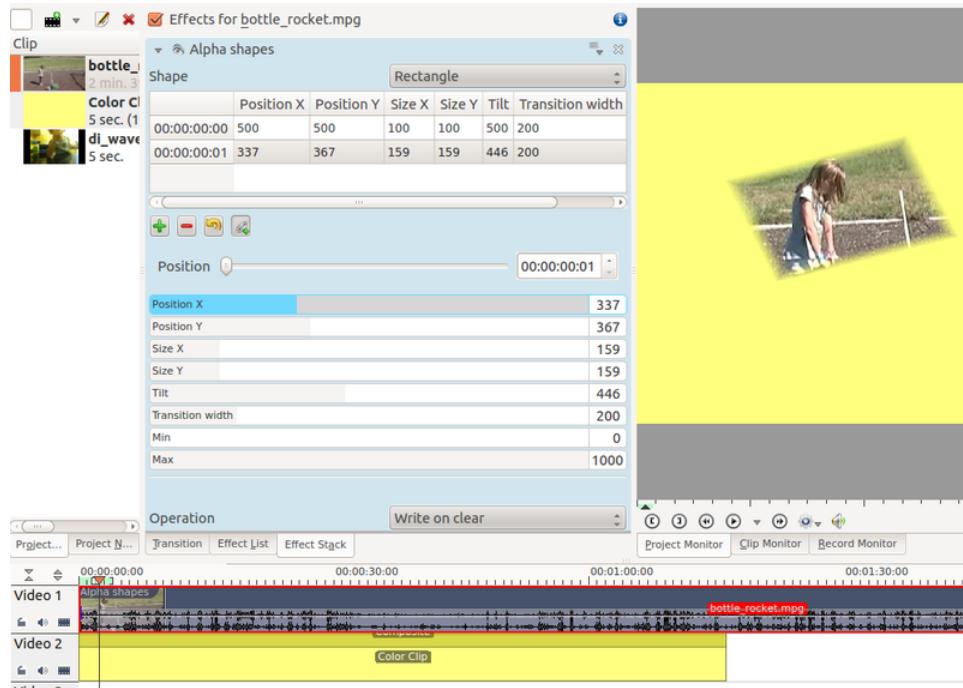
Shows usage of alpha operations - **Shrink hard** as well as the following effects: [blue screen](#), [denoiser](#) and [denoiser](#)

[YouTube video](#)

12.8.6 Alpha Shapes

This is the Frei0r filter [alphaspot](#)

see also [Frei0r-alphaspot readme file](#)



Use this in combination with a [composite transition](#) to place areas of transparency onto an overlaying clip such that the underlying clip shows through in places defined by geometric shapes. By default the area of transparency is outside the shape that is drawn. Inside the shape is an area of opacity where the overlaying clip is visible.

12.8.6.1 Shape Options

This controls the shape of the area of opacity that the effect will create.

Shape options are Rectangle, Ellipse, Triangle Diamond.

12.8.6.2 Tilt

This controls the angle the shape appears on the screen. The units are in 1000ths of a full rotation. eg a factor of 250 is one quarter of a circle turn and 500 is a 180 turn. ie 1000 tilt units = 360 degrees

12.8.6.3 Position X and Y

This defines the position of the shape on the screen

12.8.6.4 Size X and Y

Defines the size of the shape

12.8.6.5 Transition Width

Defines the width of a border on the shape where the transparency grades from inside to outside the shape

12.8.6.6 Operations

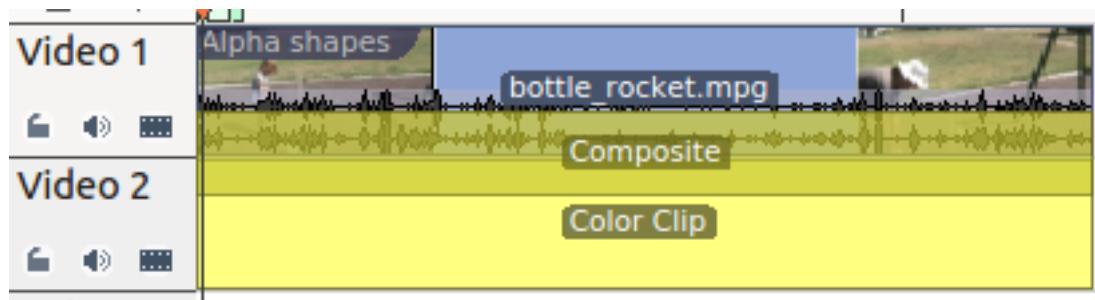
Operations define what is to happen when you have more than one Alpha effect on the clip.

Operations are Write On Clear, Max, Min, Add, Subtract.

- Write On Clear = existing alpha mask is overwritten
- Max = maximum(existing alpha mask, mask generated by this filter)
- Min = minimum(existing alpha mask, mask generated by this filter)
- Add = existing alpha mask + mask generated by this filter
- Subtract = existing alpha mask - mask generated by this filter

See the worked examples below to understand what these operations do.

12.8.6.7 Min and Max and Operations - Worked examples



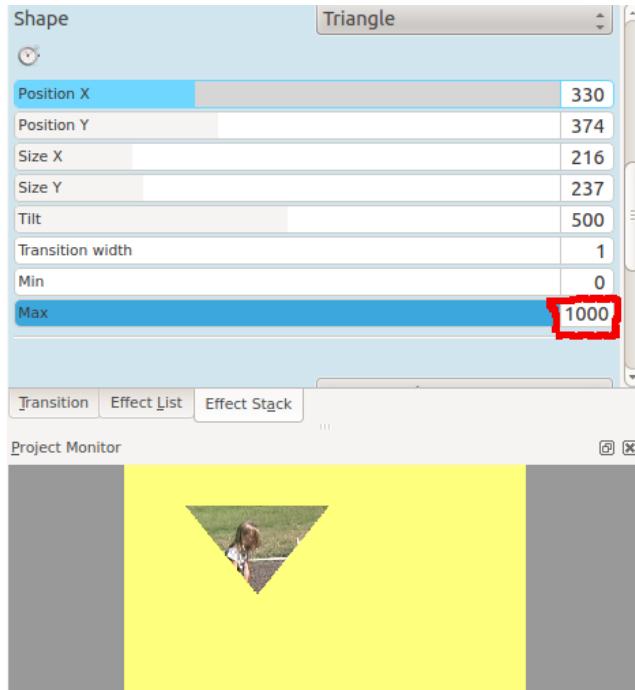
These examples are performed on a simple composite transition with a video file on Video track 1 and a color clip (yellow) on Video track 2.

Alpha shapes effect draws areas of opacity onto the image. The addition of this filter (with the default settings of Min = 0 and Max =1000) makes the whole frame transparent except for an area of opaqueness where the top image can be seen.

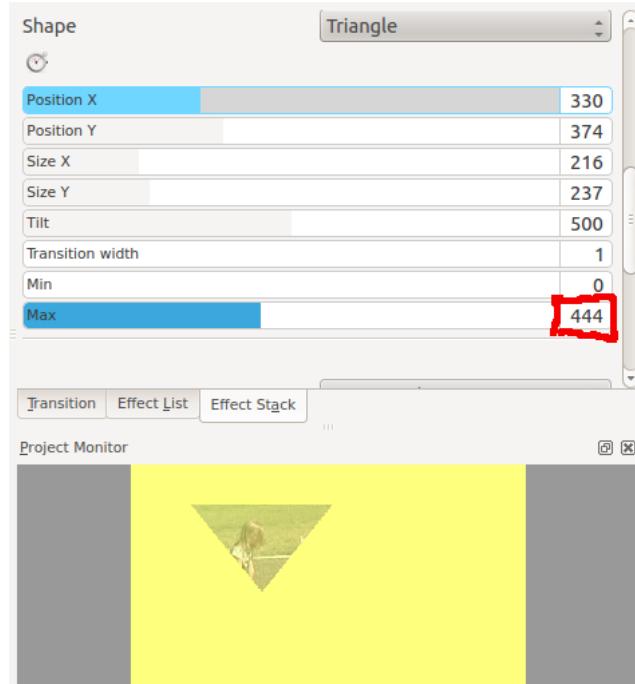
The Max and Min controls adjust the opacity of the image inside and outside of the shape respectively. A setting of 1000 is 100% opaque. A setting of zero is 0 % Opaque (ie 100% Transparent).

Max control

The Kdenlive Handbook



The Max control regulates how opaque it is inside the shape. At Max= 1000 it is completely opaque inside the shape and none of the background image shows through

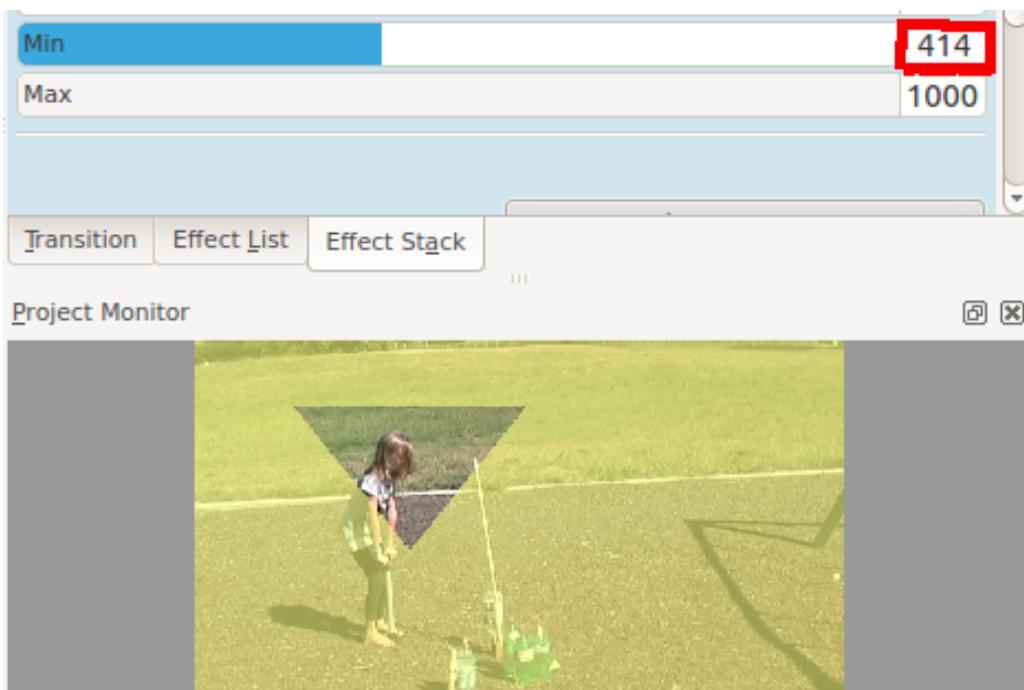


At Max = 500 it is semi transparent inside the shape and you can see the background bleeding through.

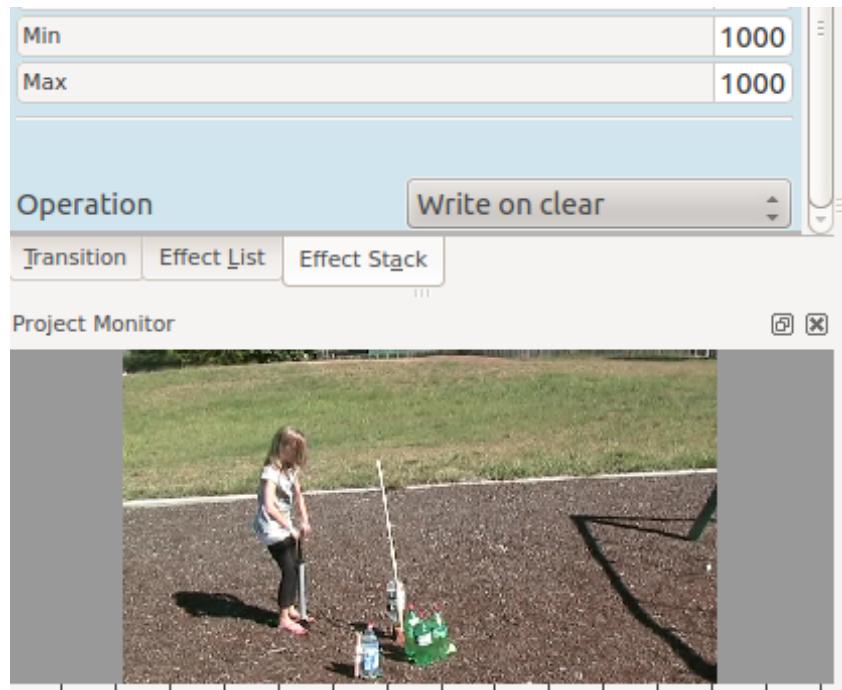


At Max = 0 inside the shape is completely transparent - the same as the rest of the foreground image - and you can see all background.

Min Control

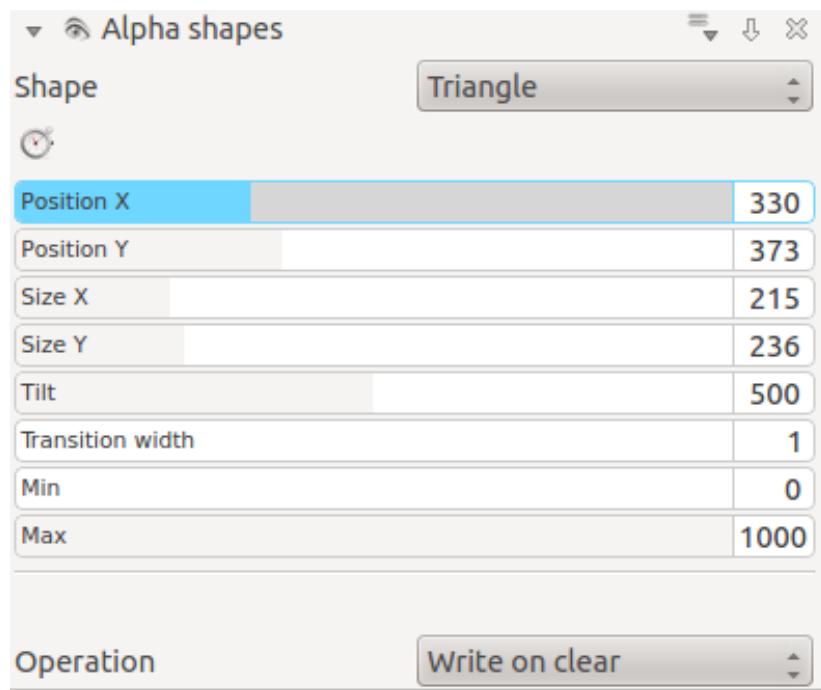


The Min control adjusts how opaque it is outside the shape. When Min = 0 outside the shape is completely transparent (opacity of zero) and at Min = 500 we see some of the foreground appear outside the shape.

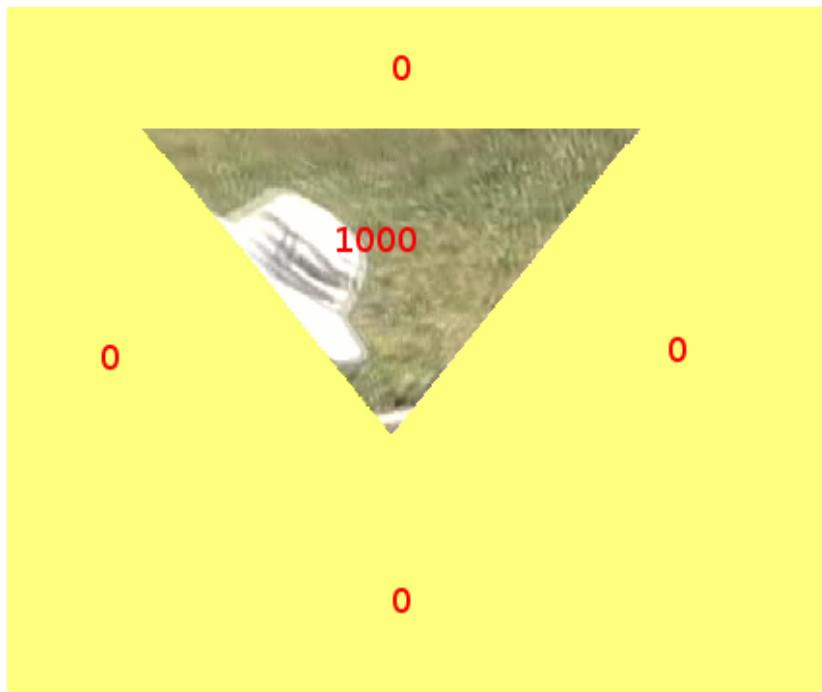


At Min = 1000 the opacity outside the shape is 100% and none of the background appears.

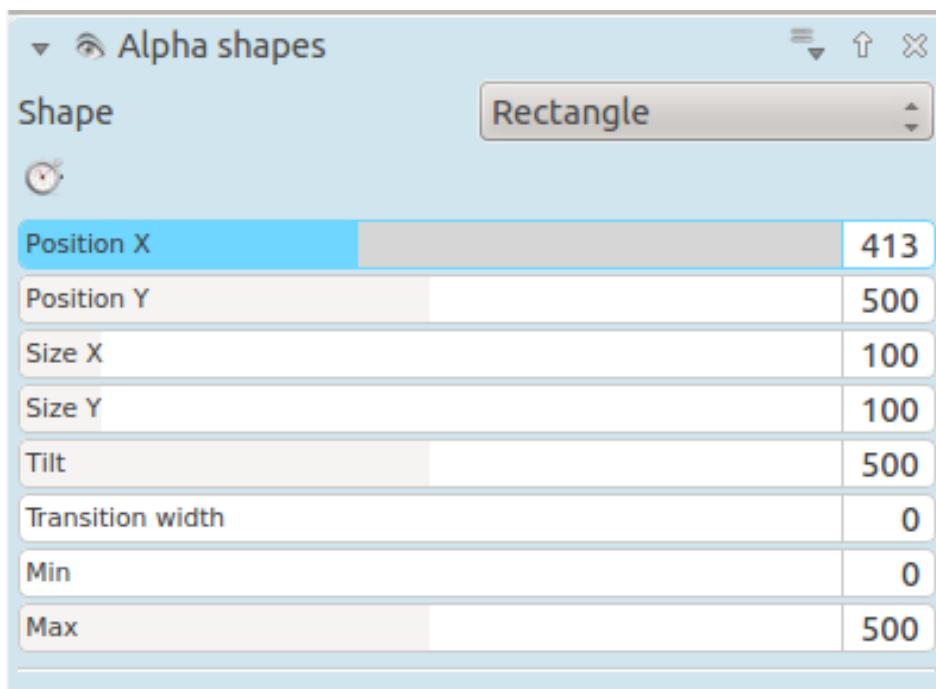
Combining Alpha Shapes - Operations



In this example I have a Triangle Alpha shape defined as shown and this is at the top of the effect stack with operation write on clear

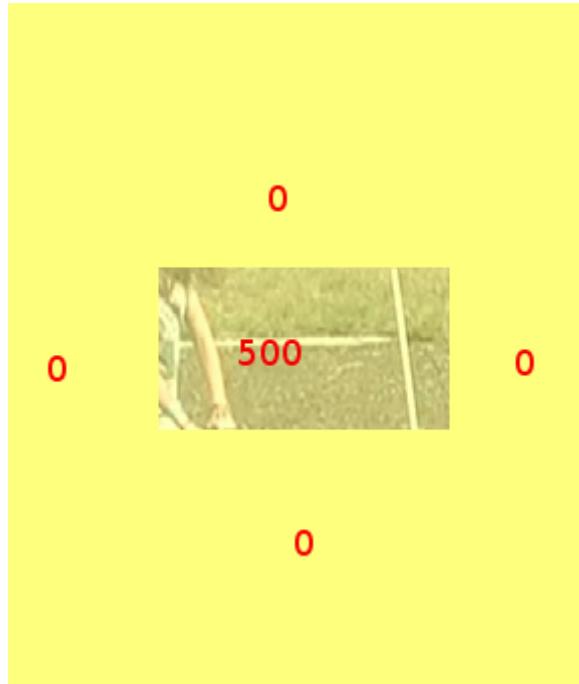


Which appears like this on its own



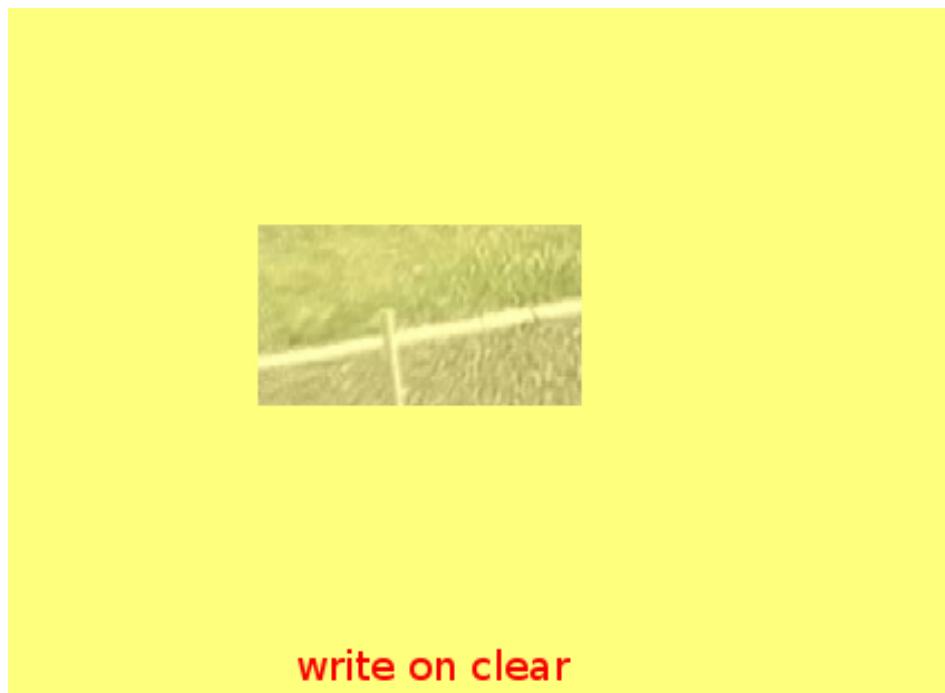
And I have rectangle alpha shape as shown which is at the bottom of the effect stack. Note the Max = 500 - i.e. 50% opacity inside the rectangle

The Kdenlive Handbook

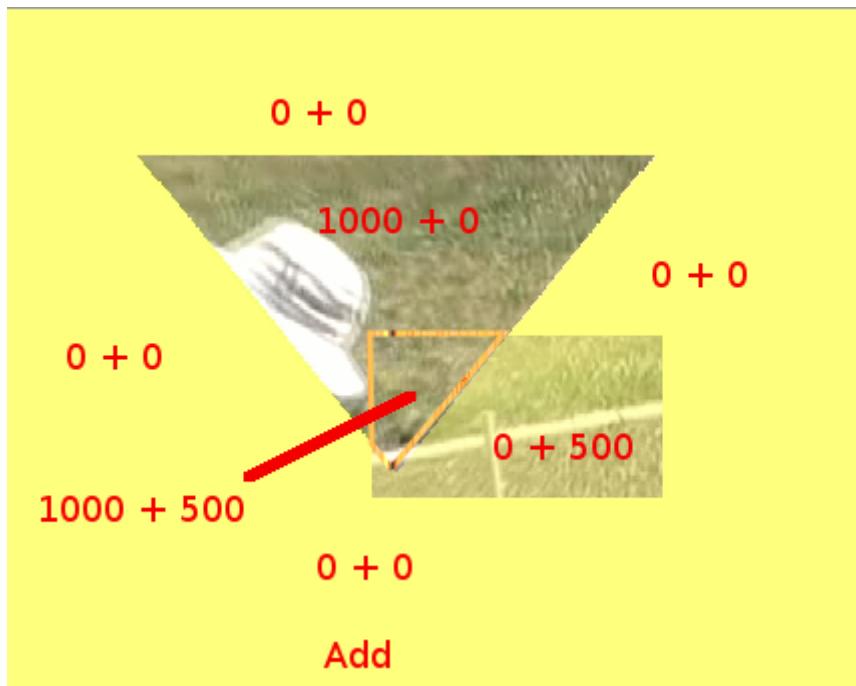


Which appears like this when on its own.

In the images below I demonstrate the effect of different alpha operations on the rectangle alpha shape.

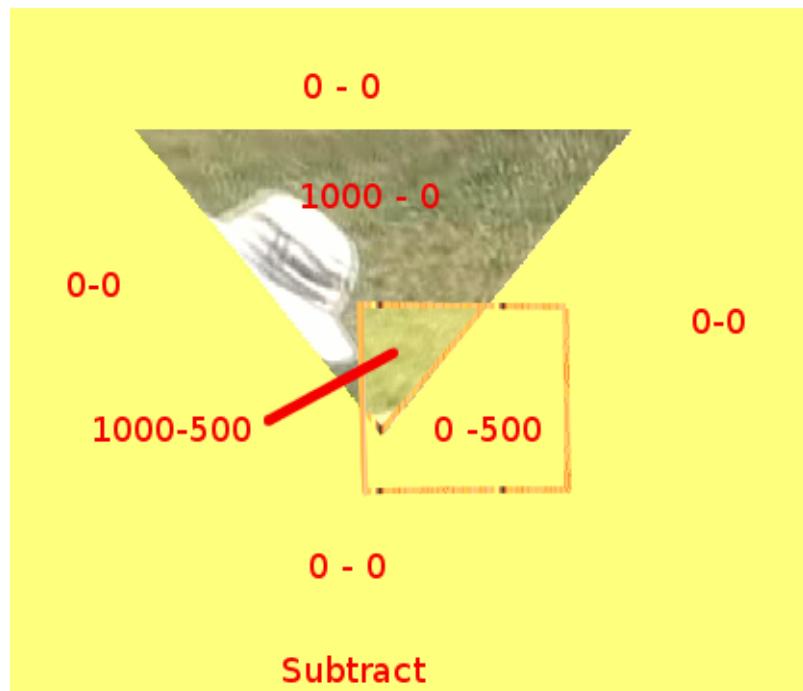


Write on Clear - existing alpha mask is overwritten



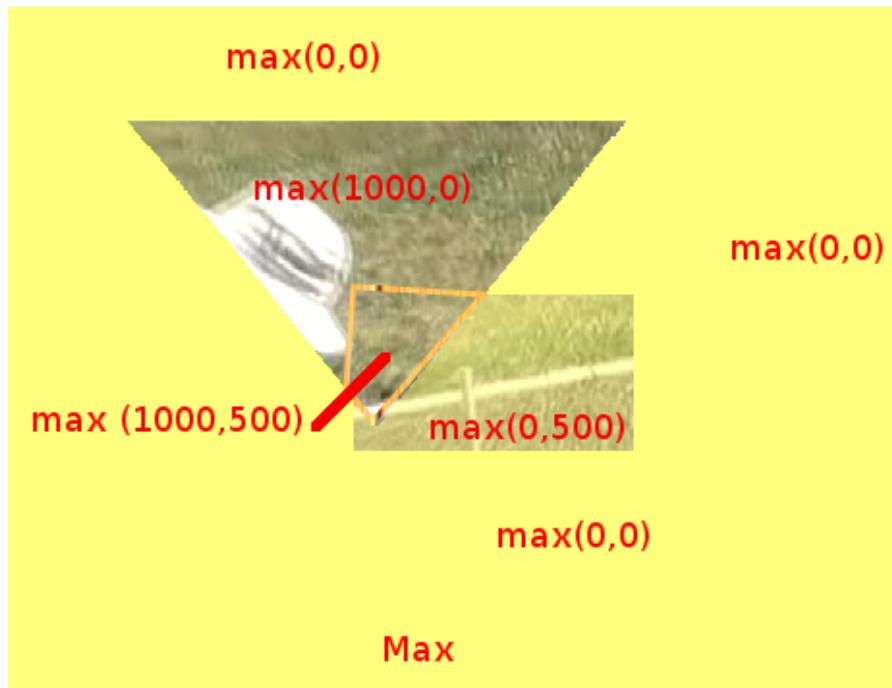
add = existing alpha mask + mask generated by this filter.

Note that areas with $1000 + 500$ opacity would be 150% opaque. But you can't get 150% opaque so they look the same as the 100% opaque areas

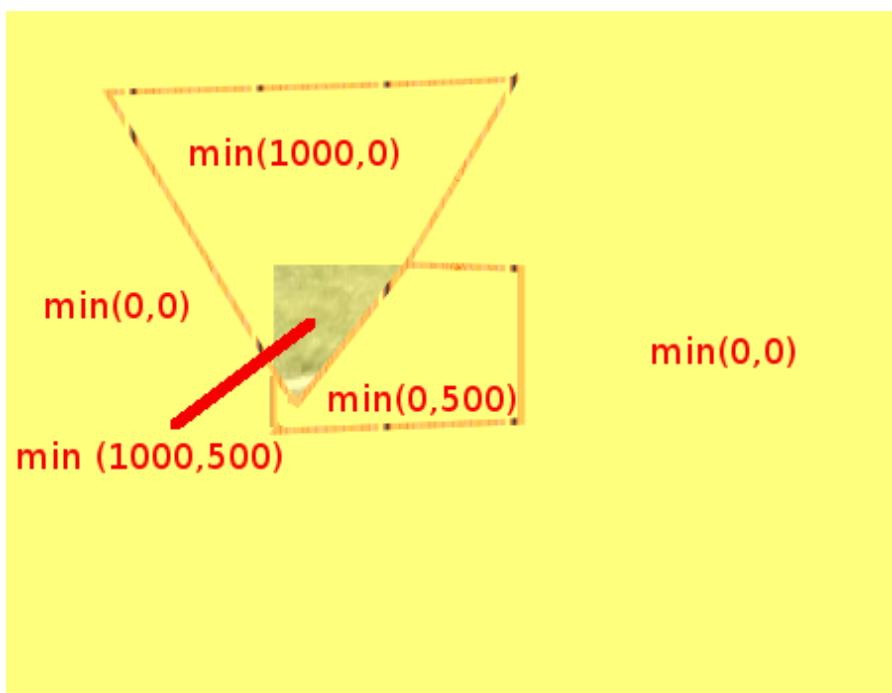


subtract = existing alpha mask - mask generated by this filter

Note that areas with $0 - 500$ opacity would be minus 50% opaque. But you can't get -50% opaque so they look the same as the 0% opaque areas



$\text{max} = \text{maximum}()$



$\text{min} = \text{minimum}()$

12.8.7 Chroma Key

This effect allows you to do Chroma Keying (also known as Green Screen or Blue Screen) in Kdenlive. Chroma keying is where you remove backgrounds of a similar colour. This effect is a very basic. For a more complication alpha manipulation/background removal effect, use [Colour Selection](#)

For black backgrounds, the [screen](#) transition is slightly more effective.

Here are some video tutorials on how to use chroma key.

12.8.7.1 Basic Chroma Keying Tutorial

1. Select the clip you want to chroma key in the timeline.
2. Search for 'chroma key' in the effects tab, and drag it onto the properties tab.
3. Click on the button that looks like a water droplet, and then click on the background of the video. This will chroma key out the background.
4. Use the variance slider to control the amount of background chroma keyed out. This will require adjustment if your chroma key didn't immediately turn out perfect

12.8.7.2 Video Tutorial

[YouTube video](#)

12.8.7.3 See also

See also [screen](#) effect. Rotoscoping is where you manual draw a region, and everything outside/inside that region will disappear. This is useful for backgrounds with multiple different colours.

See also [screen](#) effect in the Misc group. The Key Spill Mop Up effect can be used to improve the edges of the blue screen effect - when edge problems are caused by 'keyspill'. Keyspill is when the color of the screen used for colorkeying spills onto the subject due to light reflection.

See also [screen](#) which also does color based alpha selection, but in a much more detailed fashion. Use it for less contrasting or more complex backgrounds.

12.8.8 Color Selection

The **Colour Selection** effect (or **Color Selection**) is a more advanced version of the [Chroma Key](#) effect. Colour Selection allows for some basic feathering (by changing the **Edge Mode**) and much more fine-grained control over how much & in which way you remove the background.

This is better for backgrounds that have less contrast with the foreground, or more complex backgrounds. For simple backgrounds (such as green, blue, red or possibly black), use the [Chroma Key](#) effect.

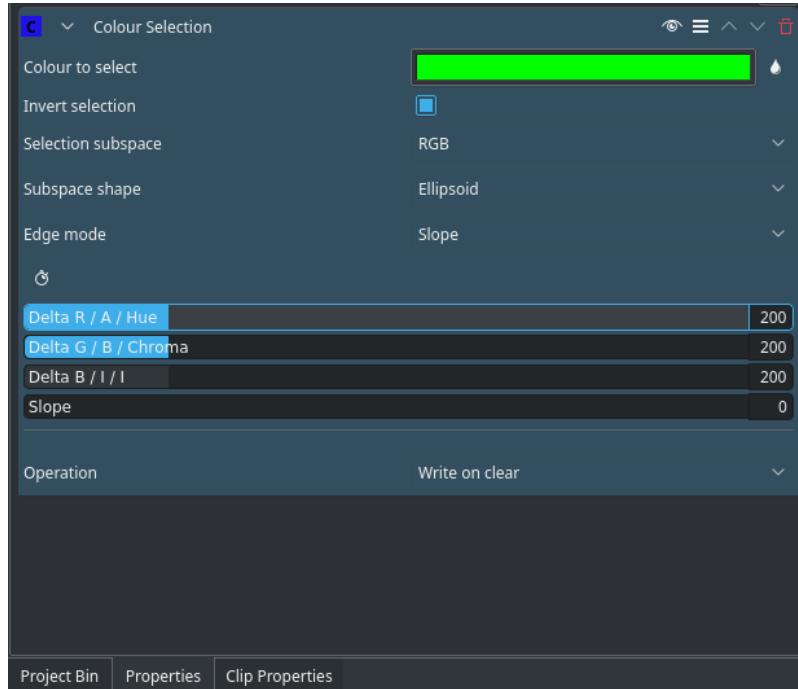
12.9 Basic Technique

Find a clip with a background (preferably multiple, or slightly complex, because the 'chroma key effect' can do easy backgrounds such as green or blue). Add the color selection effect to the clip.

After this, either chose the color using the little droplet button. Click on the droplet button, and then click on the background part of the clip you want to remove. Adjust the Delta sliders until the background is removed correctly. This might need to experimenting. If you find it isn't removing the background well, try changing the 'selection subspace' and experiment again. If you experimented and cycled through all the 'selection subspaces', and the background isn't still removed properly, then it is probably too complicated for kdenlive to remove. At this point you will need to use [screen](#).

If the effect took lots of time to experiment, and you will need to use this effect again, then click on the three horizontal lines in the top right corner, and then click 'Save effect'. Give the effect a name, and save. You can now search for this specific effect in your effects tab

12.10 All Options



Here is a outline of all the options:

Color to select: the color to select. This is the color that will be transparent/the only colour that is opaque.

Invert selection: When ON (default), the selected color will be transparent. When OFF the selected color will be opaque. Keeping the selected colour opaque may be more effective if the foreground is simple and the background is complicated

Selection Subspace options are: RGB (Red Green Blue), ABI and HCI (Hue Chromacity Intensity)

These different options yield different results. While RGB should yield the sharpest and best results, sometimes (as I have seen from experience) the other option, HCI & ABI, can yield much better results than RGB. So if RGB isn't producing good results then try one of the other options. Note:**Previews of video chroma keyed using HCI will be slow** since it has to calculate values for every single pixel.

Edge Mode Options are: Hard, Fat, Normal, Skinny, Slope

If the Edge Mode is set to slope, you can use the 'slope' slider. This slider determines the smoothness of the edges. The higher the value, the smoother the edges of your color selection will be.

'Hard' means there is no feathering (edges are not smooth at all). Any part of the image/video is either fully opaque and fully transparent. This means there will be no blur between the removed parts and the remaining parts whatsoever, and this option is useful if your chroma key turned out to be perfect.

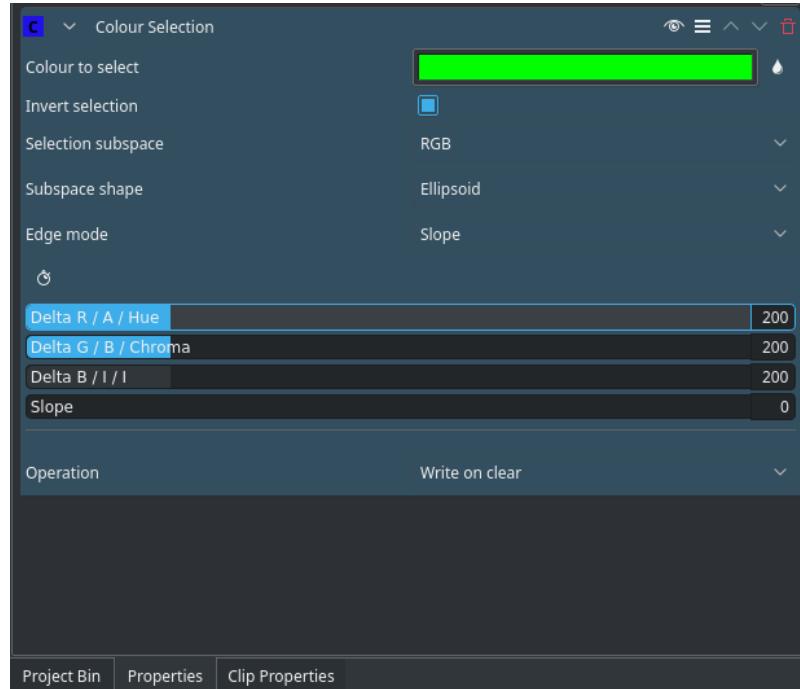
The remaining options ('Fat', 'Normal' and 'Skinny') create a gradual transition between transparent and opaque. The fatter the choice, the more the selected areas are filled towards the rim (AKA more feathering for fatter choices). This is useful if your colour selection did not turn out that well.

Delta XXXX:

These three parameters determine the tolerance of the chroma keying. The higher the value, the more of the background is removed. The lower the value, less is removed. A bit of experimenting is required to find the correct values for each clip

12.10.1 See Also

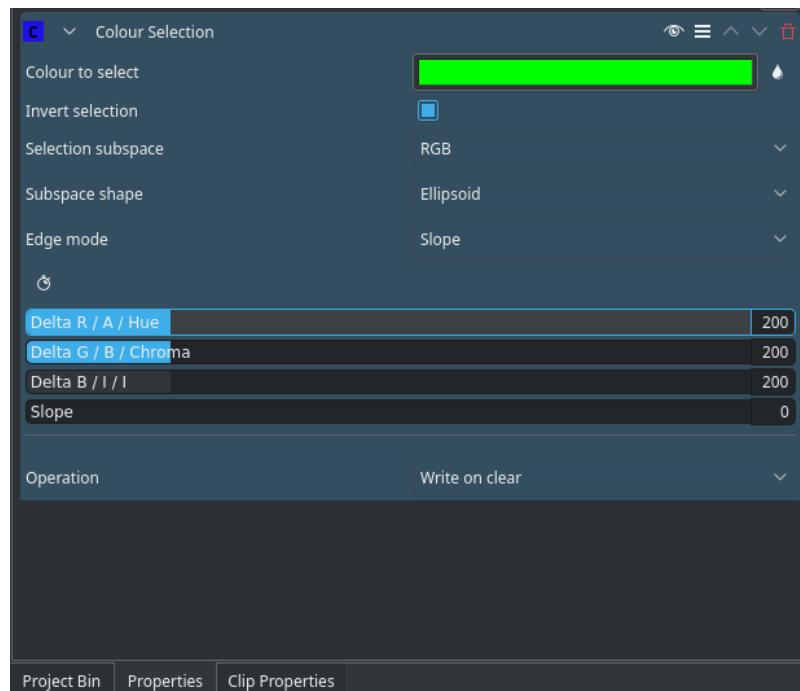
See also



which does color based alpha selection but is a bit simpler.

This [page](#) covers some Color Theory to help understand Hue, Chroma, Luminance etc.

This effect is used when using chroma keying (otherwise known as greenscreen or



effect). Its purpose is to compensate for the fact that sometimes the color from the green or blue screen reflects onto the subject and will make them a shade of blue or green - especially around the edges. This is known as 'keyspill'. This effect can attempt to compensate for this issue.

12.10.2 Tutorial

This tutorial shows usage of the following effects: Key Spill Mop Up, blue screen, alpha operations - shrinkhard and denoiser

Note: **This video is outdated.** In newer versions of kdenlive have the `screen` effect installed by default, and it is no longer required to use a composite transition.

[YouTube video](#)

12.10.3 Details

The README for the Key Spill Mop Up is this:

DESCRIPTION

After some experimentation with chroma keying, it looked to me that there is no single method of key cleaning, that works in all situations, like keyspill on bright, keyspill on dark, etc. So I included several cleaning options, which can be used alone or in combination. In short, it offers three ways of pixel selection (masking), that can be combined with four types of color changing operations. The three selection / masking modes are based on:

- similarity to key color
- transparency
- closeness to the edge

and the four things that can be done to the selected pixels are:

- move away from the key color (De-Key)
- move towards an target color (Target)
- desaturate
- luma (brightness) adjust.

MASKS

Color difference masks are based on the color of the image, and do not depend on the alpha from the preceding keying, except for ignoring the 100% transparent areas, to increase speed.

Transparency and Edge masks are based on the alpha channel from the preceding keying operation. Transparency masks will affect only the parts that are neither 100% opaque nor 100% transparent, based on the alpha values from the preceding keying operation. The effect will be proportional to the transparency.

NOTE

If a 'hard key' was used in the preceding keying, there will be no areas that T operations could affect. Edge maskss will affect only pixels close to the edge, with the effect diminishing away from the edge. The outer edge is the edge of the fully opaque part, where the alpha from the preceding keying is 1.0 (255).

NOTE

The edge masking algorithm is not yet what I would like it to be. I will have to look some more into this, and improve it, so consider it a 'temporary solution' that will change in the future.

All masks can be further pruned with two parameters: an ‘hue gate’, which will limit the mask to hues close to the key hue, and an ‘saturation threshold’, which will limit the mask to areas with color saturation above a threshold.

CASCADING

This plugin can be cascaded, but it is not possible to get the same color based mask in the second instance, because the colors will be changed by the first instance. To enable two operations with the same mask, each plugin instance can do two operations. With transparency and edge masks, cascading is a bit easier. If the hue gate and saturation threshold are not used, transparency and edge masks can be exactly the same in cascaded plugins.

PARAMETERS:

Key color: This should be the same or similar to the key color used for the preceding keying operation.

Target color: This is only used when ‘Target’ operation is used with one of the masks. The colors in the affected areas will be moved towards this color, according to the ‘Amount’ parameter.

Mask type: Selects the type of mask that will determine where the color altering operations will occur.

Tolerance: For the color difference mask, the range of colors around the key, that will be 100% affected. For the transparency mask, the ‘amplification’. For the edge mask, the width of the affected area.

Slope: For the color difference mask, the range of colors outside of ‘Tolerance’, that will be gradually less affected. No function for the transparency and edge masks.

Hue gate: Reduces the mask according to difference from key hue, to prevent change to pixels that are within the mask, but not polluted by key.

Saturation threshold: Reduces the mask according to color saturation, to avoid affecting the neutral areas.

Operation 1: Selects which of the four possible operations will be done on the mask-selected pixels. Apart from no operation, there are four possibilities: De-key, Target, De-saturate and Luma adjust.

Amount 1: The amount of the selected operation 1, how much the colors will change.

Operation 2, Amount 2: Enable a second operation to be performed with the same mask.

Show mask: This will show the selected mask as a greyscale image, to help with fine tuning of the masks. Should be OFF for the final render.

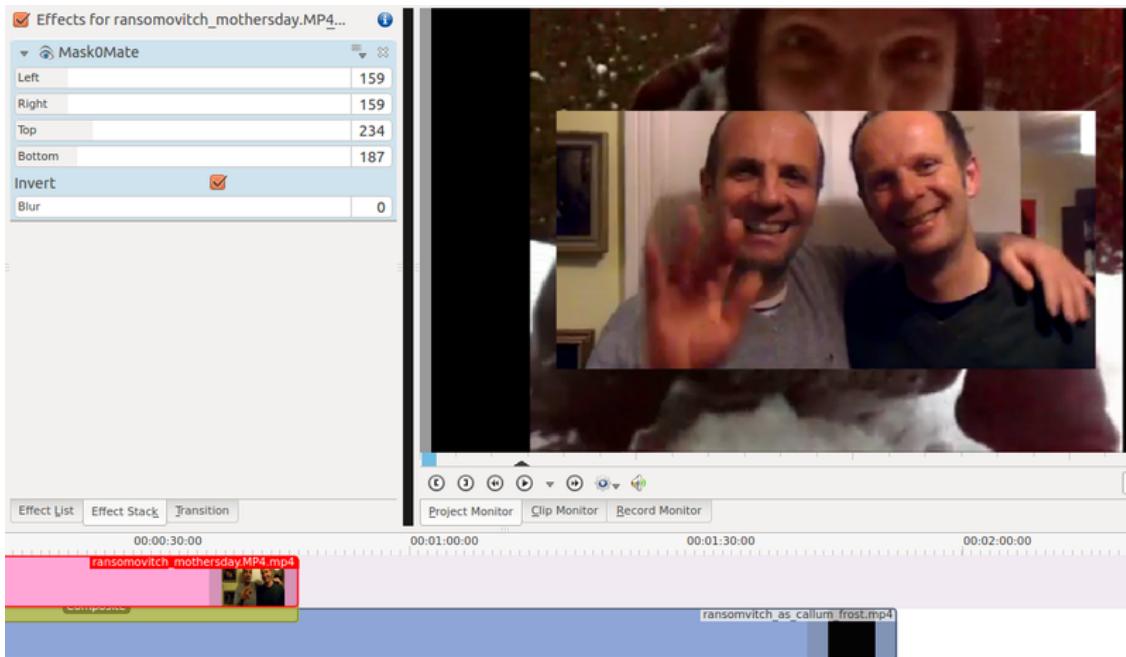
Mask to Alpha: Copies the active mask to the alpha channel. For all normal spill cleaning operations, this should be OFF. By setting it ON, the Key Spill Mop Up itself can be used as a keyer, or to generate some special effects.

12.11 Rectangular Alpha Mask

Previously known as Mask0Mate.

This is [FilterFrei0r-mask0mate](#)

Creates an rectangular alpha-channel mask



You may be looking for the page on [Rotoscoping](#). In many other video editors, such as sony vegas, the effect known as 'rotoscoping' in kdenlive is called 'Masking'. Masking / Making a mask is the same as rotoscoping

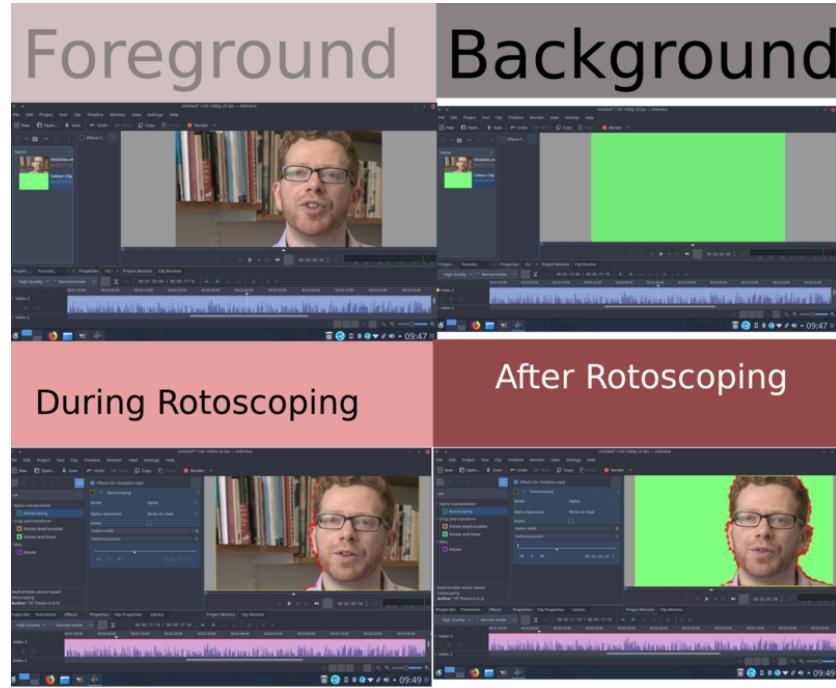
12.12 Rotoscoping

12.12.1 What is Rotoscoping?

'In the visual effects industry, the term rotoscoping refers to the technique of manually creating a matte for an element on a live-action plate so it may be composited over another background.'

[Wikipedia](#)

Draw a region on one video track, and everything outside/inside that region will disappear, showing the video track underneath.



12.12.2 How to draw the region in Kdenlive?

The region is drawn by adding nodes along your region. These act as edges for your rotoscope, and there is a line between each node.

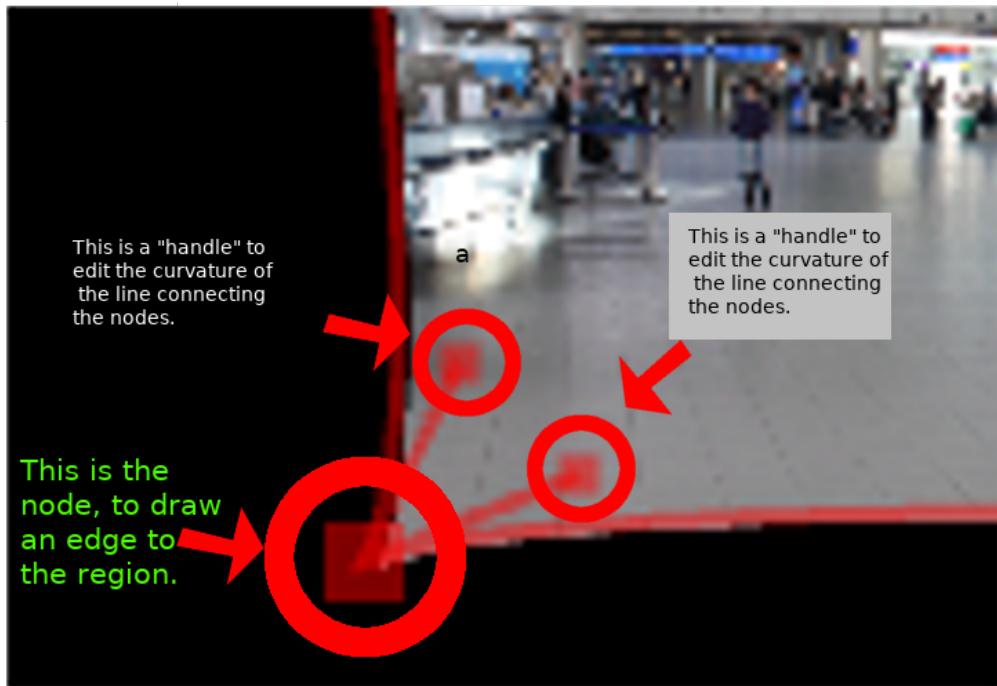
The line between each node can be made into a [Bézier_curve](#) using 'handles'.

Add nodes to the node by left clicking the mouse.

Close the region by right clicking the mouse on one of the noedes

Change the position of the region by moving a node.

Make a line curved by dragging the control 'handles'. These are the two dots on the ends of the straight lines that appear on the curve (see screen shot above).



To define if it is the inside or the outside of the curve that is transparent toggle the *invert* checkbox.

In a previous version of kdenlive you could add a new nodes by clicking on the line between existing nodes. You could subtract nodes by right clicking on them. But it looks like you can not do this with the 17.04 & 18.04 version.

12.12.3 How to move the mask to follow the action - keyframes

To make the drawn mask follow the action in a clip...

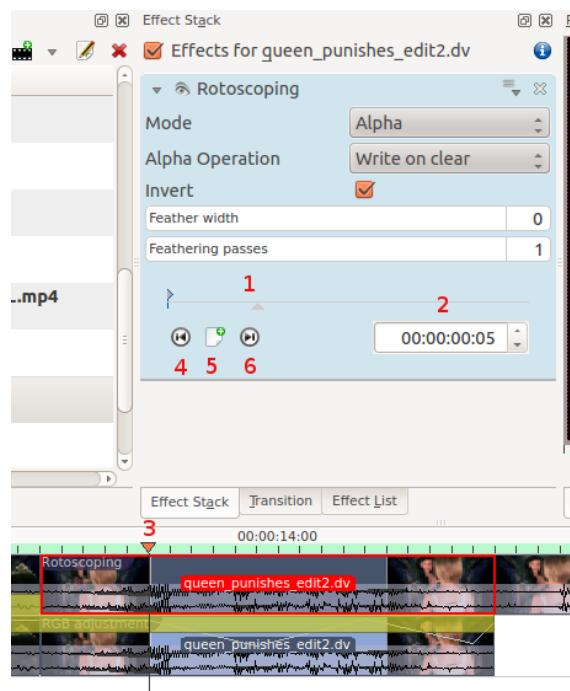
Move the position in the clip by dragging the carat on the time line (1 or 3 in screenshot below) or by using the time code control in the roto effect (2 in the screenshot)

Click *add key frame* (5 in the screen shot).

Now adjust the position of the nodes in the curve to match the action.

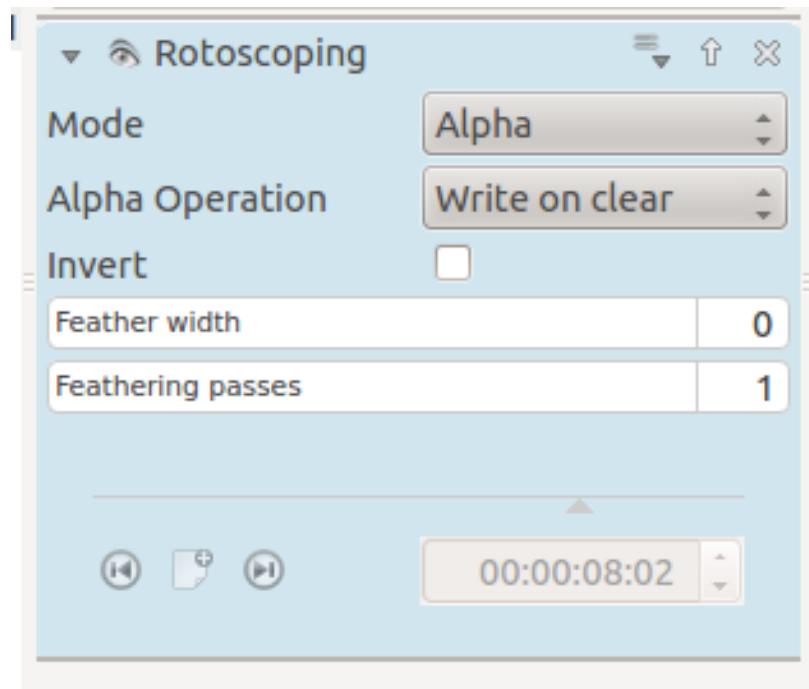
Kdenlive will calculate a path to move the nodes from the position they were in the previous key frame to the position you put them in at this keyframe. So you do not have to draw a curve for every frame in the clip.

To remove a key frame move to the frame with the key frame using the *Go to previous keyframe* (4) or *Go to next keyframe* (6) and then click the red X that the *add key frame* (5) becomes when you are on an existing keyframe.



This effect is based on the MLT [FilterRotoscoping](#)

12.12.4 Rotoscoping options greyed out



When you first add the rotoScope effect the keyframe options in it are greyed out. You can not even add a new keyframe.

Solution. Click in the project monitor and start drawing your rotoScope matte. Then the rotoScope keyframe options become enabled.

12.12.5 Examples

Examples of what you can do with the Rotoscoping effect.

[YouTube video](#)

[YouTube video](#)

see also Rotoscoping on [ttill's blog](#)

12.12.6 Tutorial with Rotoscoping

This video is about green screen on Kdenlive but he does use rotoscoping in it too.

[YouTube video](#)

Chapter 13

Analysis and Data

The Analysis and Data category of effects are useful for getting information about your video material rather than manipulating the imagery. The exception is Timeout Indicator - it can be used to add an effect to your video.

1. [Audio Spectrum Filter](#)
2. [Audio Wave](#)
3. [Oscilloscope](#)
4. [RGB Parade](#)
5. [Timeout indicator](#)
6. [Vectorscope](#)
7. [Video Values](#)

Chapter 14

Audio Spectrum Filter

This is the [audiospectrum](#) filter from MLT

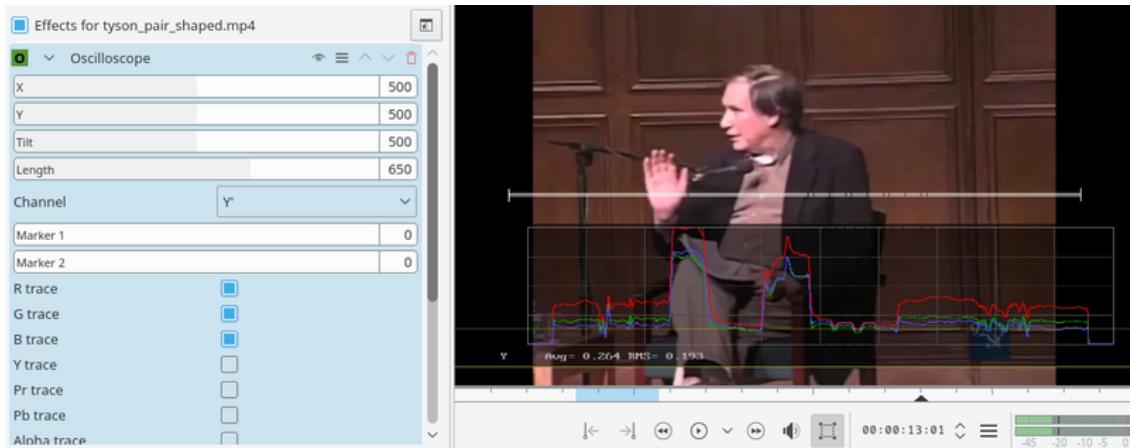
It is a audio visualization filter that draws an audio spectrum on the image.

Chapter 15

Oscilloscope

This is [frei0r.pr0file](#)

2D video oscilloscope



Chapter 16

Video Values

This is [frei0r.pr0be](#)

Measures video values.



Chapter 17

Artistic Effects

1. [3 Level Threshold](#)
2. [Binarize](#)
3. [Binarize Dynamically](#)
4. [Cartoon](#)
5. [Charcoal](#)
6. [dither](#)
7. [Dust](#)
8. [Emboss](#)
9. [Grain](#)
10. [Oldfilm](#)
11. [Posterize](#)
12. [rgbnoise](#)
13. [Scratchlines](#)
14. [sigmoidaltransfer](#)
15. [Sobel](#)
16. [Threshold](#)
17. [Vignette](#)
18. [Vignette Effect](#)

Chapter 18

3LevelThreshold

The effect takes no parameters.

Creates an effect like shown below.



Chapter 19

Binarize

Create a black and white image



19.1 Effects - Audio

The following effects are available under the **Effects List → Audio**. The links below are to the MLT framework documentation for these audio effects. Somewhat better documentation may be found at Steve Harris' LADSPA Plugin Docs [here](#).

[4 x 4 pole allpass](#)

[Aliasing](#)

[Allpass delay line cubic spline interpolation](#)

[Allpass delay line linear interpolation](#)

[Allpass delay line noninterpolating](#)

[AM pitchshifter](#)

[Artificial latency](#)

[Audio Divider \(Suboctave Generator\)](#)

[Audio Levels](#)

[Audio Pan](#)

[Auto phaser](#)

The Kdenlive Handbook

Barry's Satan Maximiser
Bode frequency shifter
Bode frequency shifter (CV)
Chebyshev distortion
Comb delay line cubic spline interpolation
Comb delay line linear interpolation
Comb delay line noninterpolating
Comb Filter
Companad
Constant Signal Generator
Crossfade
Crossfade (4 outs)
Crossover distortion
DC Offset Remover
Decimator
Declipper
Delayorama
Diode Processor
DJ EQ
DJ EQ (mono)
DJ flanger
Dyson compressor
Exponential signal decay
Fast overdrive
Fast Lookahead limiter
Flanger
FM Oscillator
Foldover distortion
Fractionally Addressed Delay Line
Frequency tracker
Gate
Giant flange
Glame Bandpass Analog Filter
Glame Bandpass Filter
GLAME Butterworth Highpass
GLAME Butterworth Lowpass
Glame Butterworth X-over Filter
Glame Highpass Filter
Glame Lowpass Filter
Gong beater
Gong model

The Kdenlive Handbook

GSM simulator

GVerb

Harmonic generator

Hermes Filter

Higher Quality Pitch Scaler

Hilbert transformer

Impulse convolver

Inverter

Karaoke

L/C/R Delay

LFO Phaser

LS Filter

Mag's Notch Filter

Matrix Spatialiser

Matrix: MS to Stereo

Matrix: Stereo to MS

Modulatable delay

Mono to stereo

Multiband EQ

Multivoice Chorus

Pitch Scaler

Plate reverb

Pointer cast distortion

Rate shifter

Retro Flanger

Reverse Delay (5s max)

Ringmod with LFO

Ringmod with two inputs

SC1

SC2

SC3

SC4

SC4 mono

SE4

Signal sifter

Simple amplifier

Simple Delay Line

Simple delay line cubic spline interpolation

Simple delay line linear interpolation

Simple Delay Line, noninterpolating

Simple High Pass Filter

Simple Low Pass Filter

The Kdenlive Handbook

Sine Oscillator (Freq:Audio,Amp:audio)

Sine Oscillator (Freq:Audio,Amp:control)

Sine Oscillator (Freq:control,Amp:audio)

Single band parametric

Sinus wavewrapper

Smooth Decimator

Sox band

Sox bass

Sox echo

Sox flanger

Sox gain

Sox phaser

Sox stretch

State Variable Filter

Step Demuxer

Surround matrix encoder

Tape Delay Simulation

Transient mangler

Triple band parametric with shelves

Valve rectifier

Valve saturation

VyNil (Vinyl Effect)

Wave shaper

Wave Terrain Oscillator

z-1

Chapter 20

Mono to stereo

There is a small bug in Kdenlive that makes this mono to stereo effect confusing (in 0.9.4).

In 0.9.4 you should set both 'To' parameters to the track you want to copy to and 'From' as the track you want to copy from. The swap option exchanges the two tracks instead of copying one onto the other.

Keep in mind that this effect (name is probably misleading) is not for mono clips.

This 'Mono to Stereo' effect is designed for clips that have 2 or more audio tracks, and allows you to duplicate one of the tracks on the other. For example if your left channel is bad for some reason, this will allow you to have the right channel copied onto the left one.

Source: [this](#) forum post by J-B-M.

20.1 Effects - Audio Correction

The **Audio Correction** group contains the following effects:

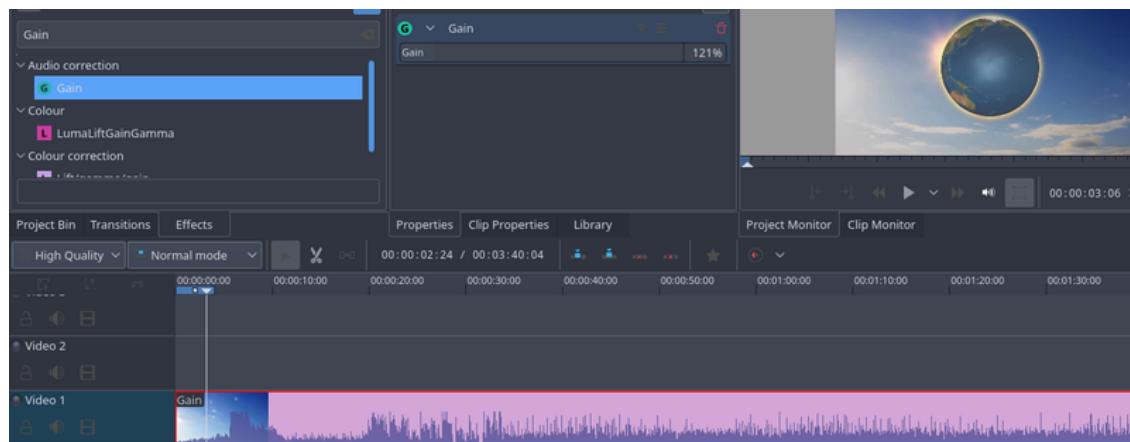
1. [Gain](#)
2. [Hard Limiter](#)
3. [Mono Amplifier](#) (ver >= 0.9.10)
4. [Mute](#)
5. [Normalise](#)
6. [Stereo Amplifier](#) (ver >= 0.9.10)
7. [Volume \(keyframable\)](#)

Chapter 21

Gain

An effect to increase or decrease the volume of a clip without the use of keyframes.

The effect changes volume in terms of percentage, not decibels like the effect **Volume (Keyframeable)**.



Chapter 22

Mono Amplifier

This is the LADSAP filter number [1048](#)

22.1 Audio Correction - Mute

This effect mutes the sound track on the video. The audio on the track will not be audible.

Chapter 23

Stereo Amplifier

This is the LADSAP filter number [1049](#)

23.1 Effects - Audio channels

The **Audio channels** group in the Effect List has the following effects:

1. [Balance](#)
2. [Copy Channels](#)
3. [Mono to Stereo splitter](#)
4. [Pan](#)
5. [Swap channels](#)

23.2 Effects - Blur and Hide

The Blur and Hide group of effects contains the following effects:

1. [Auto Mask](#)
2. [Blur](#)
3. [Box Blur](#)
4. [Edge glow](#)
5. [Glow](#)
6. [Medians](#)
7. [Obscure](#)
8. [Softglow](#)
9. [Square Blur](#)

23.3 Auto Mask

This effect can be used to mask peoples faces. It uses motion estimation to track subjects and mask faces. It is the MLT filter [autotrack_rectangle](#)

23.3.1 Demo

[YouTube video](#)

23.3.2 How to apply Auto Mask

See video below on how to use this effect. Warning: The effect is not 100% reliable.

[YouTube video](#)

23.3.3 Motion Tracking

The Auto Mask effect can also be used to track motion of an object and use it later as keyframes for an effect / transition.

NOTE

The method described here is a re-purposing of the motion tracking data that the Auto Mask effect calculates. You do not need to follow the method described below to generate an Auto Mask that will obscure faces. The instructions in the above video should be enough. Nor can you use the method described below to improve the tracking of the mask created by the Auto Mask effect.

To use this feature, first add the clip you want to analyse in timeline, and add the 'Auto Mask' effect to it - Figure 1.

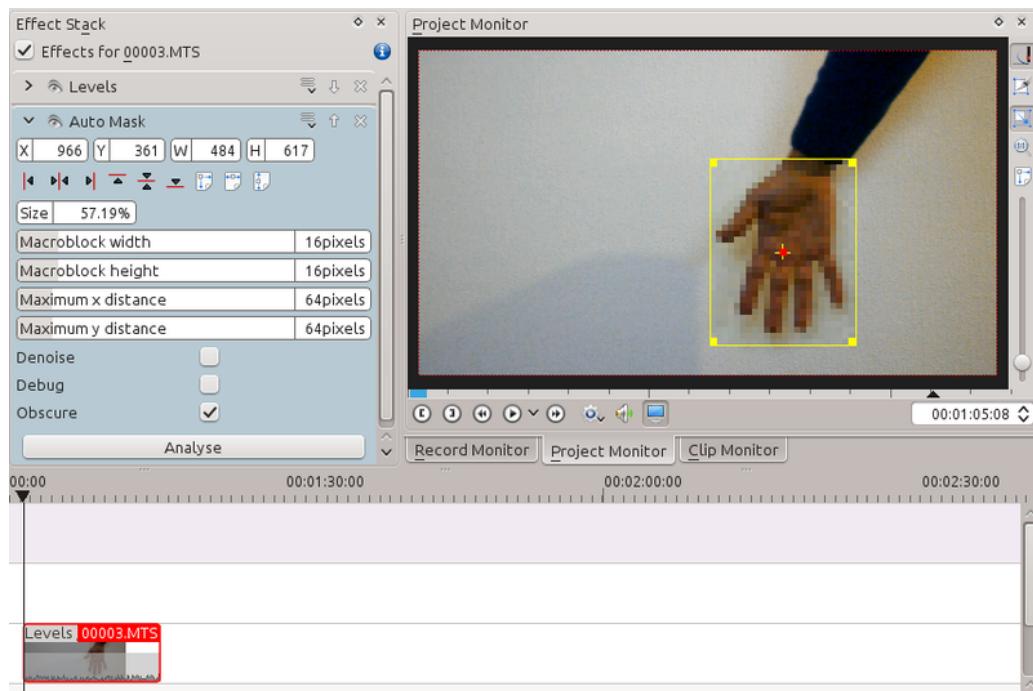


Figure 1.

Go to the first frame where your object is visible, and adjust the yellow rectangle so that it surrounds the object, like the hand in Figure 1.

Then click on the **Analyse** button in the effect options. This will start an analysis of the clip (you can follow its progress in the Project Tree view).

The Kdenlive Handbook

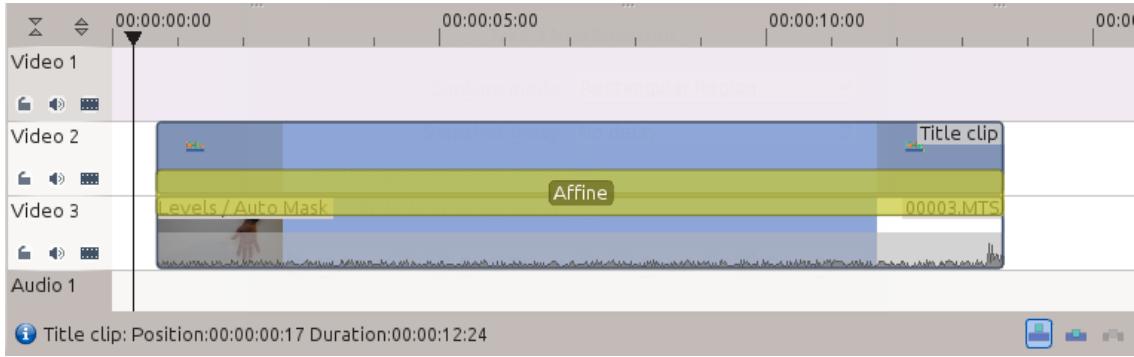


Figure 2.

When the job is finished, the motion tracking data is stored in the clip properties. To use this data, you can for example add a title clip and affine transition over the clip you just analysed, like in the screenshot in Figure 2..

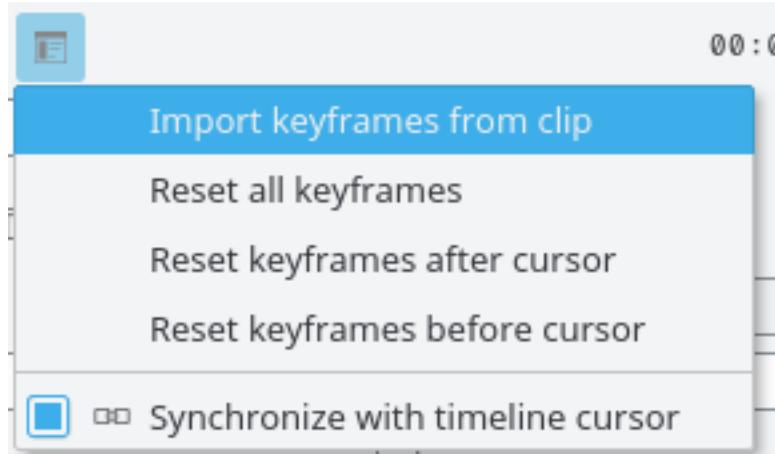


Figure 3.

Next step is to import the motion data in the transition. To do this, first select the clip you have analysed, then select the transition using the **CTRL** key so that both items are selected. Finally, go in the transitions's Options menu



and select **Import keyframes from clip**. You can now delete the 'Auto Mask' effect from the clip in timeline and play the project to see your title clip following the object.

The Kdenlive Handbook



Figure 4.

Checking the *Limit keyframes number* checkbox In the ‘Import Keyframes’ dialog (Figure 4) will cause Kdenlive to only import every nth frame (where n is the number selected in the combo box). This is a useful feature if you want to manually edit the keyframes that are imported because it allows you limit the number of key frames you will need to manually edit. If this check box is not checked then you import a key frame for every frame that is in the source clip.

23.3.3.1 Deleting Motion Tracking Data

The motion tracking data is saved with the [clip properties](#). You can view this data from the clip properties Analysis tab - Figure 5. Delete the data using button 1

The Kdenlive Handbook

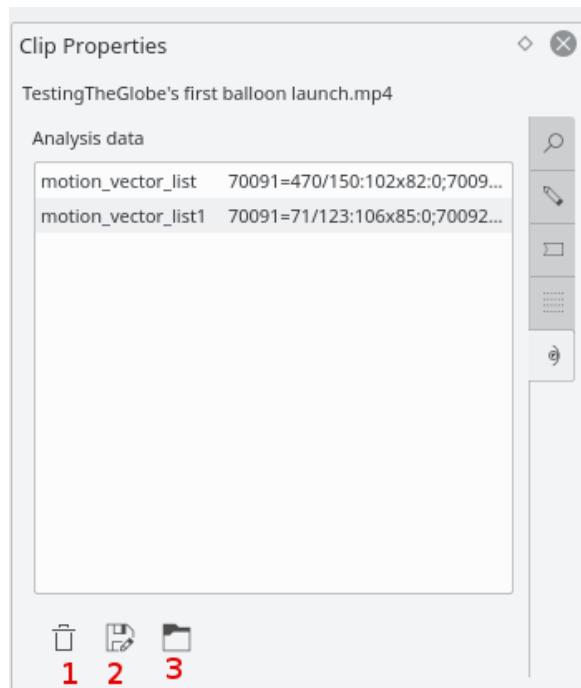
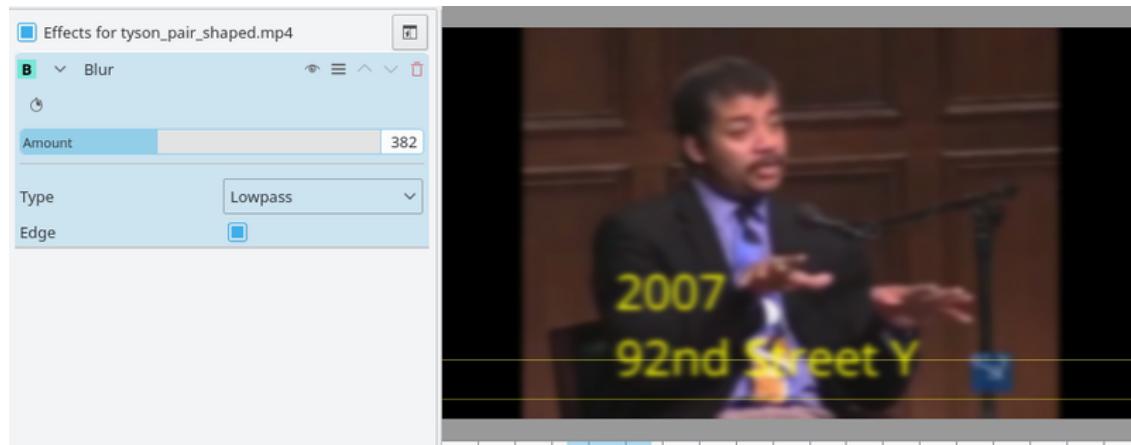


Figure 5 - Clip Properties - Analysis tab.

Chapter 24

Blur

Blurs the entire image.



24.1 Box Blur

This is the [Boxblur](#) MLT filter.

Separate horizontal and vertical blur.

The unit for the boxblur 'hori' and 'vert' parameters is 'pixels'. For each pixel in the image, the parameters indicate what pixels will be mixed with it in order to create the blur effect. For example, if you set 'hori' to 5, then each pixel will be blurred with the sample that is 5 pixels away on each side.

[YouTube video](#)

Not 100% sure if this sample is Box Blur or Square Blur. The caption on this sample was translated from Spanish. Original Spanish was Difuminar en cuadro.

[YouTube video](#)

24.2 Glow

This the [Frei0r glow](#) MLT filter.

Creates a Glamorous Glow.

[YouTube video](#)

[YouTube video](#)

24.3 Obscure

[Obscure](#)

Hide a region of the clip

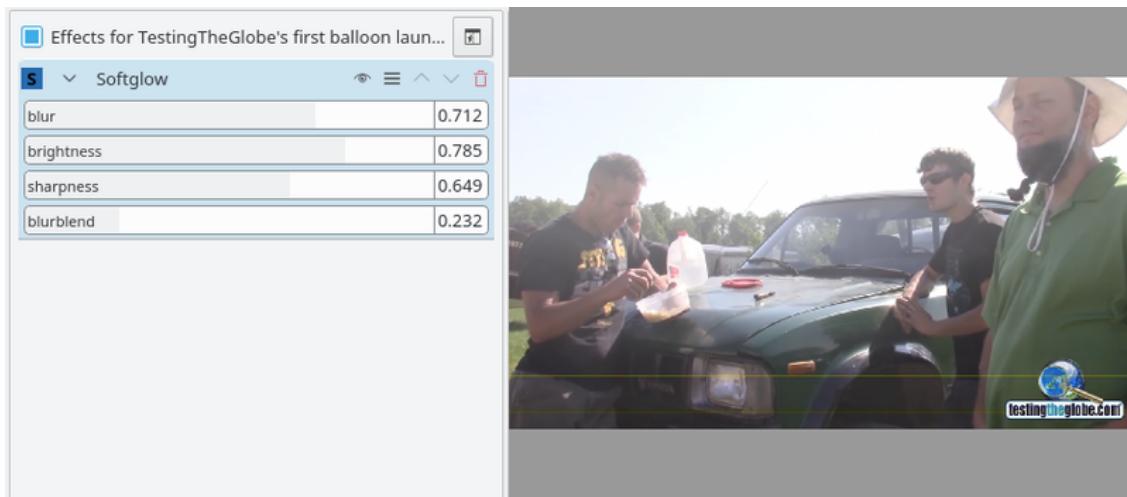
[YouTube video](#)

[YouTube video](#)

Chapter 25

Softglow

This is the Frei0r [softglow](#) filter



Softglow Applied



The frame without the Softglow

25.1 Square Blur

[Frei0r-squareblur](#)

Variable-size square blur

[YouTube video](#)

Not 100% sure if this sample is Square Blur or Box Blur. The caption on this sample was translated from Spanish. Original Spanish was Difuminar de cuadro

[YouTube video](#)

Chapter 26

Effects - Color

The Color group of effects contains the follow effects:

1. [Chroma Hold](#)
2. [Colorize](#)
3. [Contrast](#)
4. [Equaliz0r](#)
5. [Greyscale](#)
6. [Hue shift](#)
7. [Invert](#)
8. [LumaLiftGainGamma](#)
9. [Luminance](#)
10. [Primaries](#)
11. [Saturation](#)
12. [Sepia](#)
13. [Technicolor](#)
14. [Tint](#)

26.1 B effect

This rather minimally named effect is the [frei0r.B](#) effect from Richard Spindler.

This is down as 'Extract Blue from Image'. But to me it removes all colour and I get a grey image.

This effect appeared in Kdenlive ver 0.9.3 in the Color group. There are also frei0r.G and frei0r.R filters that extract Green and Red - but they are not in Kdenlive - dunno why.

Removed from Kdenlive ~ ver 17.04

26.2 Chroma Hold

This is the [FilterChroma_hold](#) MLT frame work filter.

Makes image greyscale except for chosen color.

[YouTube video](#)

[YouTube video](#)

26.3 Contrast

This is probably the [FilterSox-contrast](#) MLT frame work filter.

26.4 Greyscale

This is the [FilterGreyscale](#) MLT frame work filter.

Discards color information.

[YouTube video](#)

[YouTube video](#)

26.5 Hue Shift

This is the [FilterFrei0r-hueshift0r](#) MLT frame work filter.

Shifts the hue of a source image.

[YouTube video](#)

[YouTube video](#)

[YouTube video](#)

26.6 Invert

This is the [FilterInvert](#) MLT frame work filter.

Inverts colors.

[YouTube video](#)

26.7 Primaries

This is probably the [FilterFrei0r-primaries](#) MLT frame work filter.

[YouTube video](#)

26.8 RGB Parade

This is the [FilterFrei0r-rgbparade](#) MLT frame work filter.

In ver 17.04 this is found in the [Analysis and Data](#) category of Effects.

Displays a histogram of R, G and B components of the video data.

[YouTube video](#)

This is different from the [Analysis and Data](#) from the View Menu because the Effect version writes the histogram into the output video whereas the View Menu version just displays the histogram widget in the application while you preview your project.

26.9 Saturation Effect

This is the [FilterFrei0r-saturat0r](#) MLT frame work filter.

Adjusts the saturation of a source image.

See [TheDiveo's blog](#) for an example of the usage of the Saturation effect.

[YouTube video](#)

[YouTube video](#)

26.10 Sepia

This is the [FilterSepia](#) MLT frame work filter.

Turns clip colors to sepia.

[YouTube video](#)

[YouTube video](#)

26.11 Technicolor

This is probably the [FilterTcolor](#) MLT frame work filter.

[YouTube video](#)

26.12 Tint

This is probably the [FilterFrei0r-tint0r](#) MLT frame work filter.

[YouTube video](#)

Chapter 27

Effects - Colour Correction

The Colour Correction group of effects contains the following effects:

1. [3 point balance](#)
2. [Apply LUT](#)
3. [Bezier Curves](#)
4. [Brightness](#)
5. [Brightness \(keyframable\)](#)
6. [Curves](#)
7. [Gamma](#)
8. [Levels](#)
9. [Lift/Gamma/Gain](#)
10. [RGB adjustment](#)
11. [SOP/Sat](#)
12. [White Balance](#)
13. [White Balance \(LMS Space\)](#)

27.1 3 point balance

This is probably the [FilterFrei0r-three_point_balance](#) MLT frame work filter

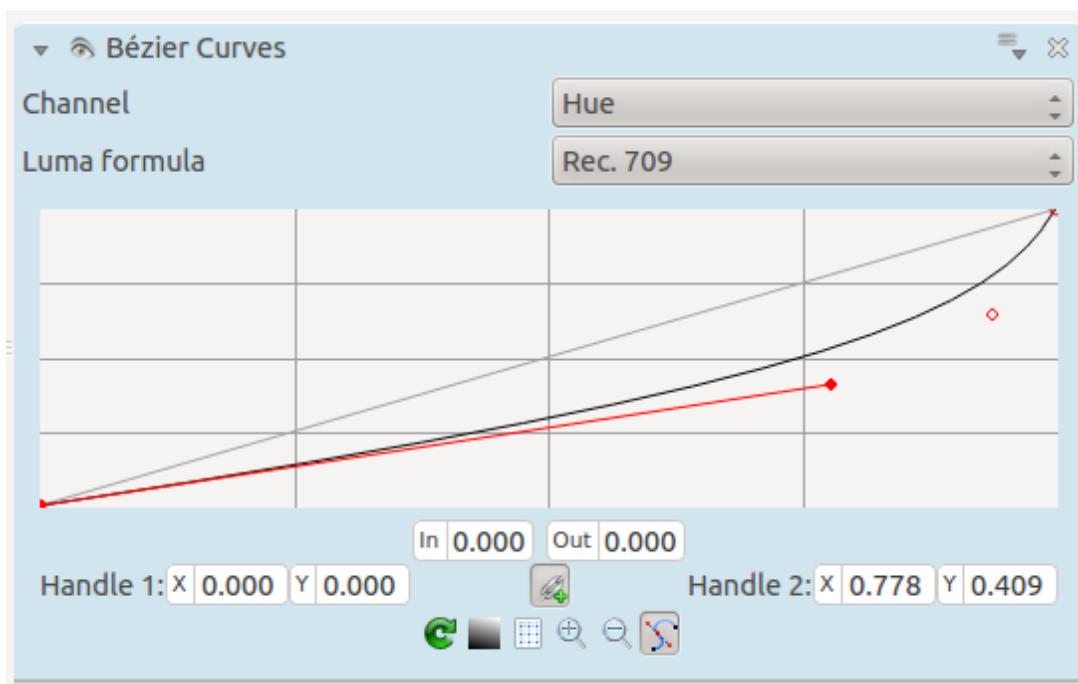
[YouTube video](#)

Chapter 28

Bezier Curves

This is the [Frei0r-curves](#) filter by Maksim Golovkin and Till Theato.

Adjusts luminance or color channel intensity with curve level mapping.



See [TheDiveo blog](#) for an example of how to use this effect to colour grade clips.

[Curves](#) is also an interface into this frie0r filter.

28.1 Brightness

This is the [FilterFrei0r-brightness](#) MLT frame work filter

[YouTube video](#)

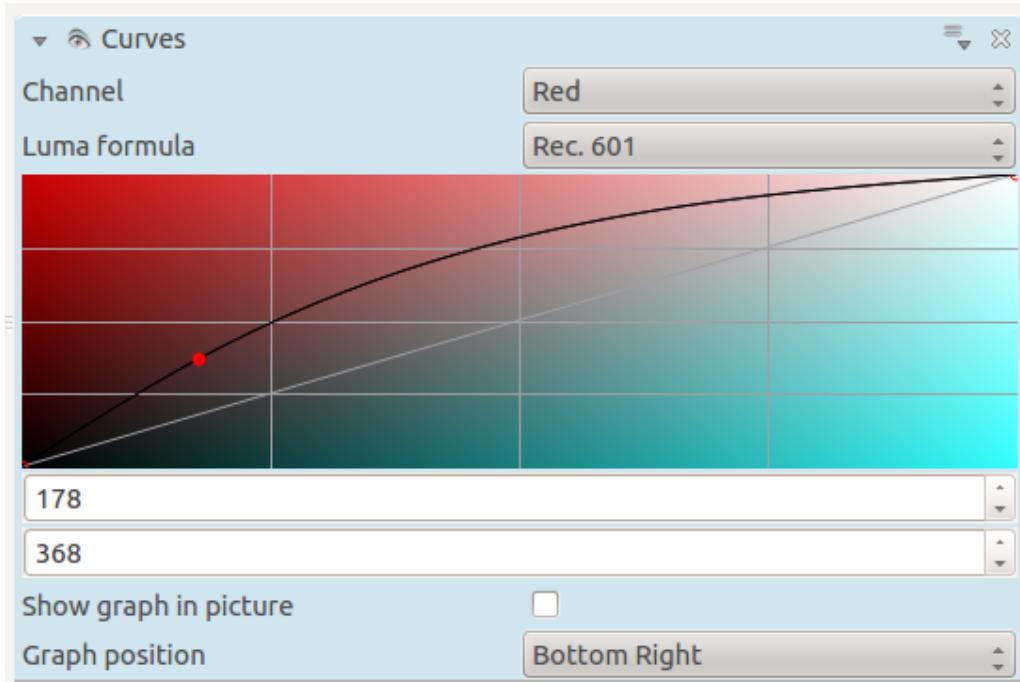
[YouTube video](#)

28.2 Curves

This is the [FilterFrei0r-curves](#) MLT frame work filter.

Adjusts luminance or color channel intensity with curve level mapping.

The [Bezier Curves](#) filter is also an interface to this same frei0r filter.



[YouTube video](#)

[YouTube video](#)

[YouTube video](#)

28.3 Gamma

This is the [FilterGamma](#) MLT frame work filter.

Changes gamma color value.

[YouTube video](#)

[YouTube video](#)

28.4 Levels

This is probably the [FilterFrei0r-levels](#) MLT frame work filter.

[YouTube video](#)

28.5 RGB adjustment

This filter is for simple manual color adjustment by RGB channel, either through adding constants, or changing the channel gammas or gains.

Simple means that it works channel-wise, no crosstalk. The off-diagonal elements of the transform matrix are zero - no color crosstalk, no color space rotation. But this should be sufficient for many tasks. For example, when shooting under tungsten light, the blue signal will not migrate into red, it will simply be too small. Amplifying the blue (and a bit of green too) should be all that is needed. Similar, an underwater shot will simply be red deficient, needing some red boost, etc.

Parameters:

R,G,B:

These determine the change in each of the three color channels.

Action:

- **Add constant** adds a fixed value between -150 and +150 (this is sometimes called 'black level' or 'setup').
- **Change gamma** changes channel gamma between 0.3333 and 3.0.
- **Multiply** multiplies channel with a value between 0.3333 and 3.0 (sometimes called 'gain' or 'contrast')

NOTE

To apply more than one action above, use cascaded instances of `coloradj_RGB`.

NOTE

Add constant simply shifts the RGB 'cube' colorspace. This means, that on one end we are left with empty space, which is filled with zeros, and on the other end, values can 'fall outside', and in this case they will be truncated to max (255). **Change gain** changes the size of the cube, keeping the 'black' corner fixed, affecting predominately highlights, but the other end can still 'fall out' and get 255 truncated. **Change gamma** keeps the whole cube in the same place, just stretches and squeezes its interior, so no zero filling or truncation is necessary.

To visualize this plugin's actions, apply it to a gray gradient, and watch the result with 'pr0file'.

Keep luma:

Fixes the luma value, so that the sliders only affect color.

This is the frei0r filter `coloradj_RGB`

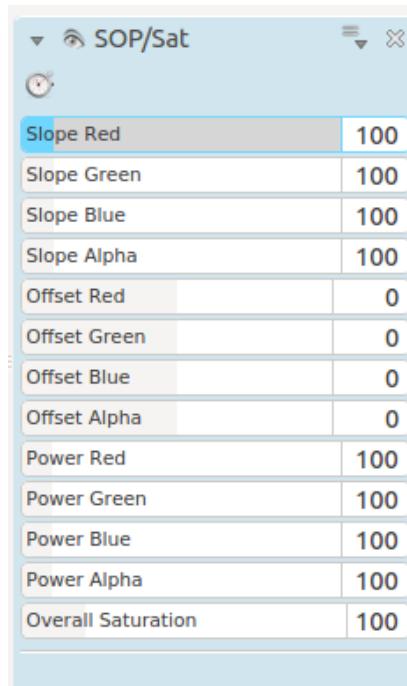
28.6 SOP/Sat Effect

This is the `FilterFrei0r-sopsat` MLT frame work filter.

It changes Slope, Offset, and Power of the color components, and the overall Saturation, according to the ASC CDL (Color Decision List) [reference](#)

Changing the slope means multiplying the pixel value with a constant value. Black pixels will remain black, whileas brighter ones will be changed. All effects can be observed well when applied on a greyscale gradient and looking at the RGB Parade monitor.

You can use this effect to achieve proper white balance.



This filter implements a standard way of color correction proposed by the American Society of Cinematographers: The Color Decision List, also known as the ASC CDL

More information about the ASC CDL can be found on [wikipedia](#).

The ASC CDL is a standard format for basic primary color correction (primary meaning affecting the whole image and not only selected parts).

Basically there are two stages in the correction:

1. SOP correction for each channel separately

2. Overall saturation correction

All corrections work on [0,1], so the RGB(A) values need to be transposed from {0,...,255} to [0,1].

1. SOP correction

* Slope: $\text{out} = \text{in} * \text{slope}; 0 \leq \text{slope} < \infty$

* Offset: $\text{out} = \text{in} + \text{offset}; -\infty < \text{offset} < \infty$

* Power: $\text{out} = \text{in}^{\text{power}}; 0 < \text{power} < \infty$

2. Saturation

* Luma: $Y = 0.2126 R + 0.7152 G + 0.0722 B$ (according to Rec. 709)

* For all channels:

$\text{out} = \text{luma} + \text{sat} * (\text{in-luma})$

As the values may exceed 1 (or 0), they need to be clamped where necessary.

See [Granjow's blog](#) where he uses the effect to adjust white balance of a clip.

28.7 White Balance

This is the [FilterFrei0r-balanc0r](#) MLT frame work filter

Adjust the white balance / color temperature

[YouTube video](#)

[YouTube video](#)

Chapter 29

Effects - Crop and transform

1. [Crop Scale and Tilt](#)
2. [Edge Crop](#)
3. [LetterB0xed](#)
4. [nosync0r](#)
5. [Position and Zoom](#)
6. [Rotate \(keyframable\)](#)
7. [Rotate and Shear](#)
8. [Transform](#)

29.1 Edge Crop

This effect by Dan Dennedy trim the edges of a clip.

It changed its name from *Crop* to *Edge Crop* in ver 0.9.3 of Kdenlive

29.2 LetterB0xed

This is [Transform](#).

Adds Black Borders at top and bottom for Cinema Look.

[YouTube video](#)

[YouTube video](#)

29.3 Position and Zoom

Adjust size and position of clip using smooth affine transformations. Formerly known as 'Pan and Zoom'

In this example we have two keyframes in the pan and zoom, one at the beginning and one at the end. Size is 25% at the start keyframe and 100% at the end. The images are centered on the screen at both keyframes.

[YouTube video](#)

[YouTube video](#)

See also this [tutorial](#) that describes how to use :

- Alpha Manipulation>[Blue Screen](#)
- [rotoscoping](#)
- [Composite Transition](#)
- Crop and Transform>Pan and Zoom effect
- Enhancment>[Sharpen Effect](#)
- Alpha Manipulation>[Alpha Operations](#)

[YouTube video](#)

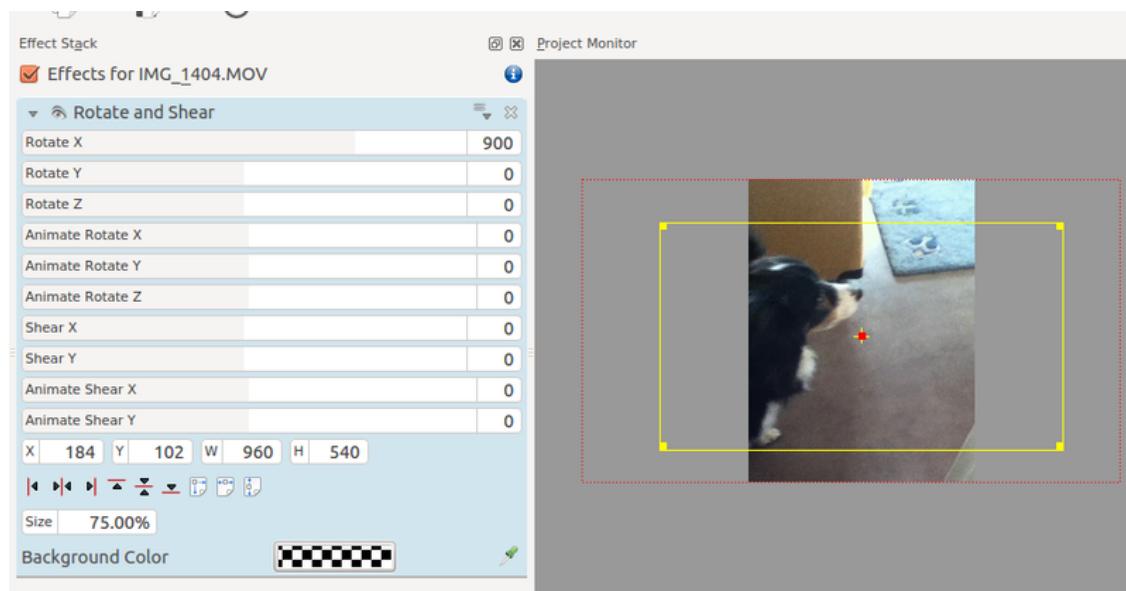
29.4 Rotate and Shear

This would appear to be the [Affine](#) MLT filter as defined in rotation.xml (/usr/share/kde4/apps/kdenlive/effects)

Rotate clip in any 3 directions

This screen shot shows settings for Rotate and Shear that can correct wide-screen footage shot while holding the camera the wrong orientation.

Do a rotate X of 900 units (the units are in tenths of a degree). You can also adjust the size with this effect



[YouTube video](#)

29.5 Crop, Scale and Tilt

This effect was previously named as **Scale and Tilt** and **Crop, Scale and Position**

This is the [Frei0r scale0tilt](#) MLT filter from Richard Spindler.

Scales, Tilts and Crops an Image

[YouTube video](#)

See also [Pan and Zoom](#) which can do very similar things and may do them better.

Chapter 30

nosync0r

Messes with the horizontal sync - to give you a broken TV effect



Chapter 31

Transform

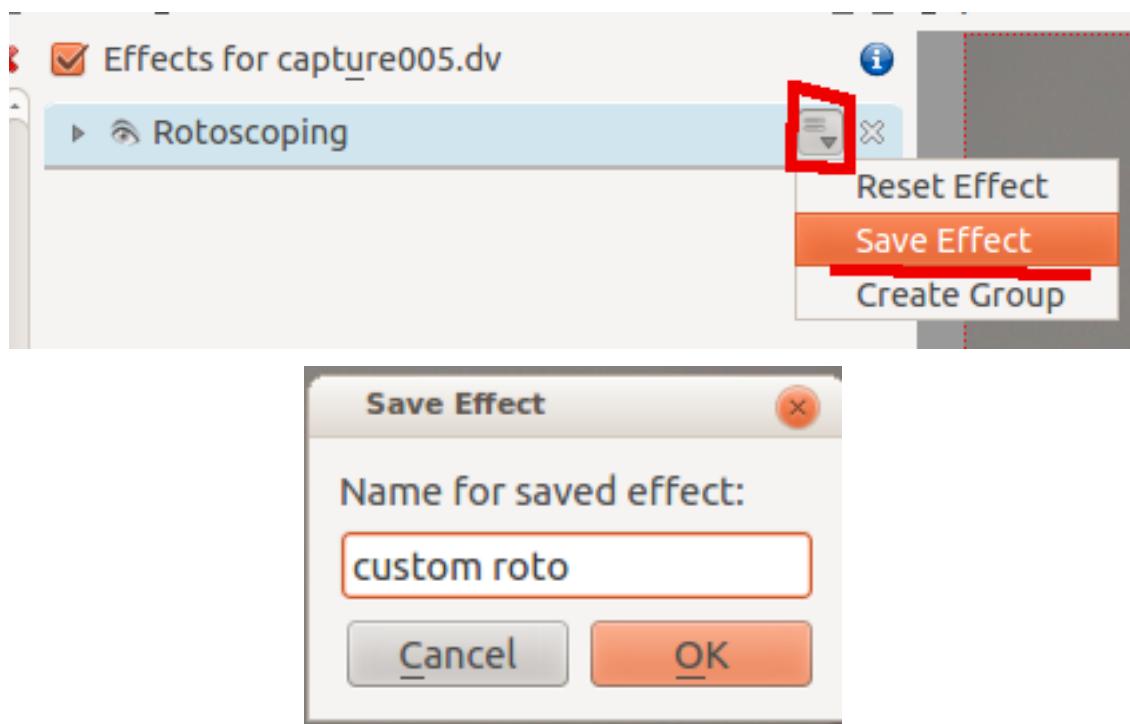
This is the [qtblend](#) effect.

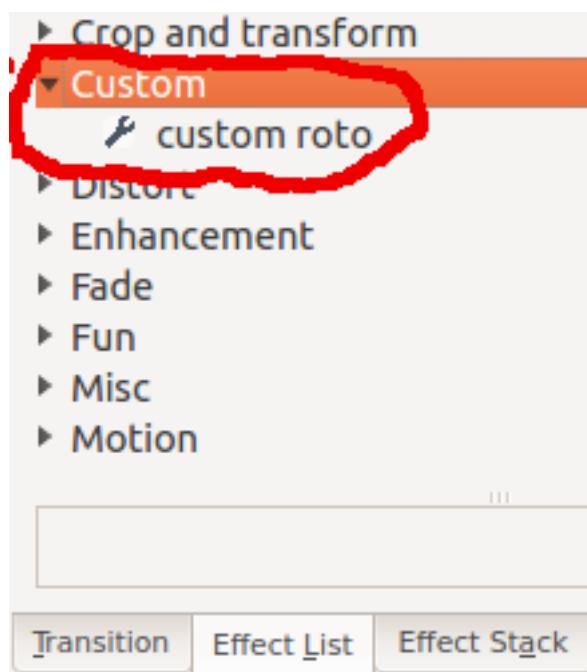
Manipulates Position, scale and opacity.

The Composition mode parameter of the effect is documented on the Qt doco under [QPainter CompositionMode](#)

31.1 Effects - Custom

The **Custom Group** in the **Effect List** is where effects appear when you choose **Save Effect** from an effect in the **Effect Stack**





31.2 Effects - Distort

1. [Corners](#)
2. [Defish](#)
3. [Distort](#)
4. [Lens Correction](#)
5. [Mirror](#)
6. [Pixelize](#)
7. [Wave](#)

31.2.1 Distort - Corners



See [till's blog](#)

31.2.2 Defish

This effect can transform footage shot with a fisheye lens, to look like it was shot with a rectilinear lens, and vice versa. It can also be used to straighten the video that was shot with one of these wideangle converters, which are only slightly curvy, or with a semi-fisheye camera, like the GoPro hero.

Effect Stack

- Effects for light_sabre_composite2.dv
- Rotoscoping
- Defish

Amount: 728

DeFish

- Type: Equidistant
- Scaling: Manual
- Manual Scale: 466
- Interpolator: Bilinear
- Aspect type: PAL DV
- Manual Aspect: 500

31.2.2.1 PARAMETERS

'Amount'

The Kdenlive Handbook

Controls the amount of (de)distortion applied to the video. It controls the ratio of fisheye focal length to image half diagonal, but

in an nonlinear inverse way, to make the control more ‘comfortable’. It can be adjusted beyond ‘reasonable’ values (which differ between the mapping function types), to produce some looney effects. When exploring this range, and the image disappears, check the scaling, could be that the image became too big or too small to see. For some unreasonable values the image might indeed disappear, when there are math overflows or imaginary results... (types 1 and 2 are more prone to image vanishing). Anyway, when working in the ‘special effect’ range, it is always worth to try manual scaling. If the video contains zooming through a curvy wideangle adaptor, the needed amount will vary. In this case use keyframing.

‘DeFish’

If checked, the transform direction is from fisheye to rectilinear, when not checked, it is rectilinear to fisheye.

‘Type’

Selects the fisheye angular mapping function used, among four possibilities:

- equidistant
- orthographic
- equiarea
- stereographic

Wikipedia has a nice article about these.

‘Scaling’

Select among three auto scaling options and manual scale:

- scale to fill
- keep center scale
- scale to fit
- manual scale

‘Fill’ means that no empty borders will be left, but some of the input image will be cropped. ‘Fit’ means that no part of the input

image will be cropped, but there will be blank areas at the borders.

‘Manual Scale’

When ‘Scaling’ is set to manual scale, this control directly affects the image scale, from 1/100 to 100X size. Only has effect when

‘Scaling’ is set to manual!

‘Interpolator’

Selects among seven different interpolators. This allows one to make a quality/speed tradeoff. The interpolators are ordered from fast, low quality to (very) slow high quality. The spline interpolating polynomials are from Helmut Dersch. For realtime use, option 0 is the fastest, in fact it is equal to no interpolation. In most cases bilinear should be good enough, and on a decent machine should still run in real time. Beyond bicubic, the quality gain is marginal for a single resampling. Lanczos takes an eternity!

- Nearest neighbor

- Bilinear
- Bicubic smooth
- Bicubic sharp
- Spline 4x4
- Spline 6x6
- Lanczos 16x16

'Aspect Type'

Selects among four pixel aspect ratio presets, and manual: To get the math right, Defish0r needs to know the pixel aspect ratio.

- Square pixels
- PAL DV 1.067
- NTSC DV 0.889
- HDV 1.333
- manual variable

'Manual aspect'

When 'Aspect Type' is set to option manual variable, this control directly affects the pixel aspect ratio, from 0.5 to 2. Only has effect when 'Aspect Type' is set to manual!

31.2.2.2 SOME APPLICATION NOTES

1. Tweaking the parameters for best defish

Take a shot of something like a brick wall or bathroom tiles, that has a lot of horizontal and vertical straight lines. Be careful to keep the optical axis as perpendicular as possible to the wall (=keep a maximally symmetrical image in the viewfinder). Use this image to tweak the parameters, primarily amount, type and aspect.

2. Some examples of Defish0r abuse

These were tried with PAL DV. These examples work best, when there is some interesting action near the center of the image.

For a kind of roundish kaleidoscope, try this:

Amount=775,

Defish = OFF,

Type = equidistant,

Scaling = manual scale,

Manual Scale = 300...400

Another crazy distortion:

Amount = 921,

Defish = OFF,

Type = stereographic,

Scaling = manual scale,

Manual Scale = 191

For an effect, reminiscent of some scenes from the '2001 Space Odyssey' try this:

Amount = 900,

Defish = ON,

Type = stereographic,

Scaling = fill

31.2.3 Distort

[YouTube video](#)

31.2.4 Lens Correction

This is the [Frei0r-lenscorrection](#) MLT filter.

Allows compensation of lens distortion.

[YouTube video](#)

[YouTube video](#)

31.2.5 Mirror

This is the [Mirror](#) MLT filter

Provides various mirror and image reversing effects.

[YouTube video](#)

[YouTube video](#)

31.2.6 Pixelize

This is the [Frei0r pixeliz0r](#) MLT filter.

Pixelize input image.

[YouTube video](#)

[YouTube video](#)

31.2.7 Wave

This is the [Wave](#) MLT filter

Make waves on your clip with keyframes.

[YouTube video](#)

[YouTube video](#)

31.3 Effects - Enhancement

1. [Denoiser](#)
2. [Nikon D90 Stairstepping fix](#)
3. [Sharpen](#)
4. [Spill Suppress](#)

31.3.1 Denoiser

This is the [frei0r hqdn3d](#) - a High quality 3D denoiser from Mplayer.

31.3.1.1 Tutorial 1

Shows usage of the denoiser effect as well as: [blue screen](#), [alpha operations](#) - shrinkhard and [denoiser](#)

[YouTube video](#)

31.3.2 Sharpen

The sharpen tool is a port of [unsharp mask](#) from Mplayer. The parameters are the usual ones for unsharp masking. The 'size' means the size of the blur, and the amount is how much of the blurred version gets subtracted.

See this [tutorial](#) that describes how to use

- Alpha Manipulation>[Blue Screen](#)
- [rotoscoping](#)
- [Composite Transition](#)
- Crop and Transform>[Pan and Zoom effect](#)
- Sharpen Effect
- Alpha Manipulation>[Alpha Operations](#)

[YouTube video](#)

Chapter 32

Spill Suppress

Remove green or blue spill light from subjects shot in front of green or blue screen

32.1 Effects - Fade

1. [Fade from Black](#) (video effect)
2. [Fade in](#) (audio effect)
3. [Fade out](#) (audio effect)
4. [Fade to Black](#) (video effect)

32.1.1 Fade From Black

[YouTube video](#)

32.1.2 Fade to Black

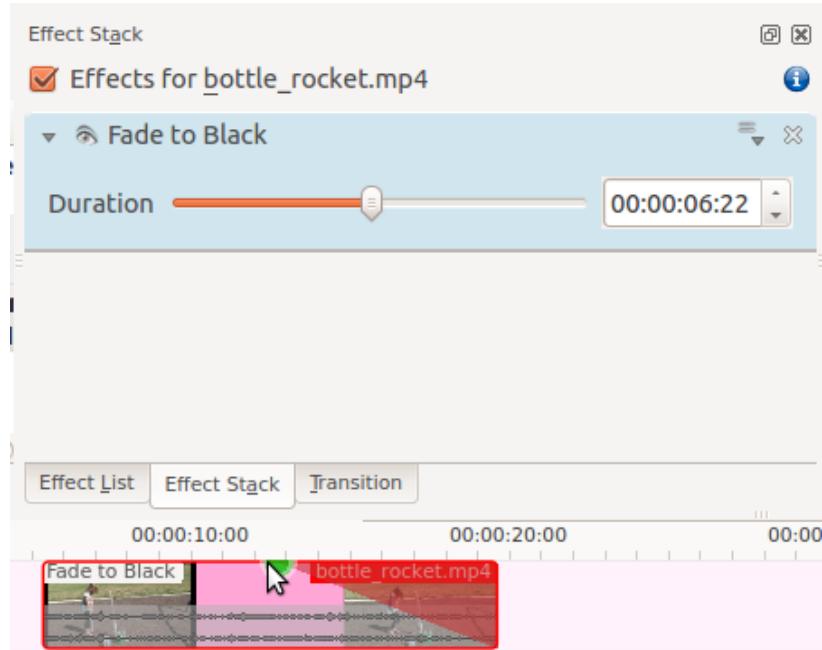
[YouTube video](#)

In version 17.04 of Kdenlive you can add Fade to Black and Fade from Black effects with a single click. And you can adjust the length of the fade with a drag of the mouse. Hover over the grey rectangle that appears in the top corner at the end of the clip on the time line and a tool tip will appear saying 'Drag to Add or Resize a Fade Effect'. And if you do Drag you will add a Fade to Black or a Fade From Black effect (depending on which end of the clip you are working on).

[YouTube video](#)

Adjusting the duration of the fade - older Kdenlive versions:

Adjust the duration of the fade by dragging the green blob that appears when you hover over the triangle vertex (see pic below) or by using the [effect stack](#) duration slider.



32.2 Effects - Fun

The fun category was removed in ~ver 17.04. All the effects in the Fun category are now found in the [Artistic Category](#)

32.2.1 Charcoal

[FilterCharcoal](#)

Charcoal drawing effect.

[YouTube video](#)

[YouTube video](#)

[YouTube video](#)

32.2.2 Dust

[Dust](#)

Add dust and specks to the video clip, as in old movies.

[YouTube video](#)

[YouTube video](#)

32.2.3 Grain

[YouTube video](#)

32.2.4 Old Film

This is the [OldFilm](#) MLT Filter.

Moves the video up and down and adds random brightness changes, making it look like old film footage.

[YouTube video](#)

[YouTube video](#)

32.2.5 Scratchlines

This is the [Lines](#) MLT filter.

Adds scratch lines over the picture.

[YouTube video](#)

[YouTube video](#)

32.2.6 Vignette Effect

This is the [Vignette](#) MLT filter.

Vignette around a point with adjustable smoothness, radius, position and transparency.

[YouTube video](#)

32.3 Effects - Misc

1. [Apply LUT](#)
2. [Baltan](#)
3. [Bezier Curves](#)
4. [Box Blur](#)
5. [cairogradient](#)
6. [cairoimagegrid](#)
7. [Cartoon](#)
8. [Color Distance](#)
9. [Color Effect](#)
10. [color_only](#)
11. [Colorhalftone](#)
12. [Colorize](#)
13. [Colorize](#)
14. [Crop Scale and Tilt](#)
15. [Dance](#)
16. [darken](#)
17. [darken](#)
18. [Defish](#)

19. [Delay grab](#)
20. [delay0r](#)
21. [delay0r](#)
22. [Denoiser](#)
23. [difference](#)
24. [dodge](#)
25. [dodge](#)
26. [dodge](#)
27. [Dynamic Text](#)
28. [Edge glow](#)
29. [Edge glow](#)
30. [Emboss](#)
31. [Equaliz0r](#)
32. [Equaliz0r](#)
33. [Equaliz0r](#)
34. [Fade to Black](#)
35. [Flippo](#)
36. [Flippo](#)
37. [Freeze](#)
38. [Gamma](#)
39. [Glow](#)
40. [hardlight](#)
41. [hardlight](#)
42. [hardlight](#)
43. [hardlight](#)
44. [Hue](#)
45. [Hue shift](#)
46. [Hue shift](#)
47. [K-Means Clustering](#)
48. [Lens Correction](#)
49. [Light Graffiti](#)
50. [Light Show](#)
51. [Lumakey](#)
52. [Luminance](#)
53. [Luminance](#)
54. [Luminance](#)
55. [NDVI filter](#)

- 56. [Nervous](#)
- 57. [Nikon D90 Stairstepping fix](#)
- 58. [overlay](#)
- 59. [overlay](#)
- 60. [Pan](#)
- 61. [Posterize](#)
- 62. [Posterize](#)
- 63. [Primaries](#)
- 64. [Regionalize](#)
- 65. [Regionalize](#)
- 66. [rgbnoise](#)
- 67. [rgbnoise](#)
- 68. [Rotoscoping](#)
- 69. [scanline0r](#)
- 70. [Sharpen](#)
- 71. [sigmoidaltransfer](#)
- 72. [Slide](#)
- 73. [Spill Suppress](#)
- 74. [Swap channels](#)
- 75. [TehRoxx0r](#)
- 76. [Transform](#)
- 77. [Transform](#)
- 78. [Transform](#)
- 79. [Vertigo](#)
- 80. [Vertigo](#)
- 81. [Vertigo](#)
- 82. [Volume \(keyframable\)](#)
- 83. [Wave](#)
- 84. [Wipe](#)
- 85. [Wipe](#)
- 86. [Wipe](#)

Chapter 33

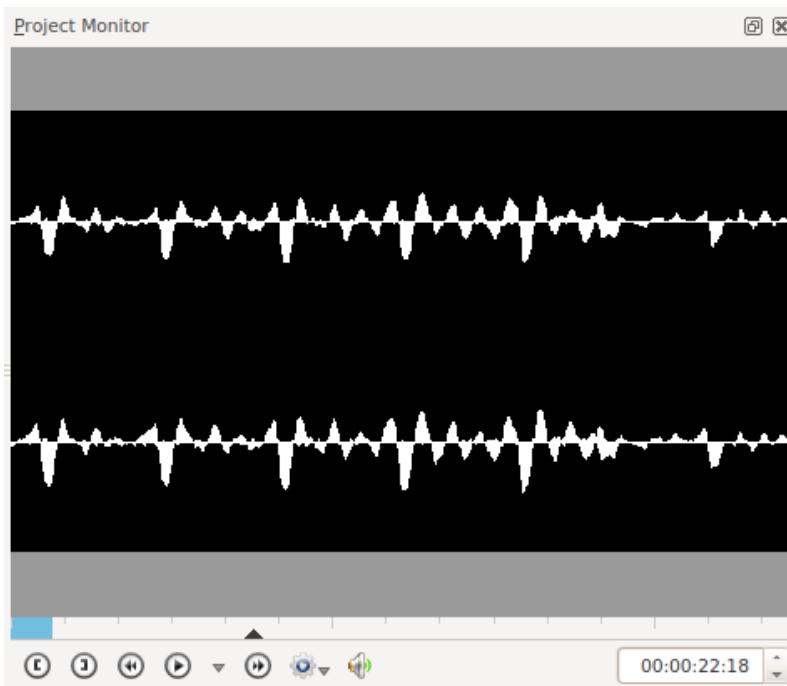
Audio Wave

This is the MLT filter [audiowave](#)

In ver 17.04 this is found in the [Analysis and Data](#) category of Effects.

Display the audio waveform instead of the video. Author Dan Dennedy.

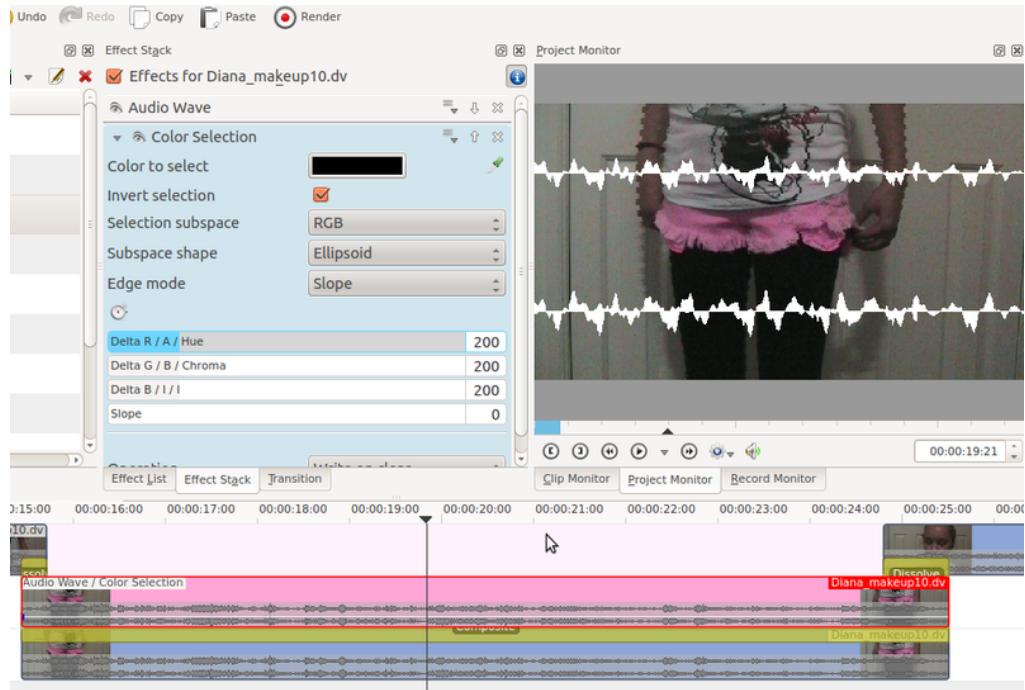
This does not work alone on audio-only clips. It must have video to overwrite. A workaround is to apply this to a multi-track with a color generator.



33.1 Overlays the Wave

This effect replaces the video. If you want the effect overlaying the video you can do something like shown below.

The Kdenlive Handbook



Duplicate the video track on a track below the one with the Audio wave on it.

Add a composite transition.

On the top video track (the one with the audio wave effect) add a [Color Selection](#) effect.

Make the color you are selecting black and check the invert selection.

33.1.1 Baltan

[YouTube video](#)

33.1.2 Cartoon

[Frei0r-cartoon](#)

Cartoonify video, do a form of edge detect

[YouTube video](#)

33.1.3 Color Distance

This is the [Frei0r Colordistance](#) MLT filter

Calculates the distance between the selected color and the current pixel and uses that value as new pixel value.

[YouTube video](#)

[YouTube video](#)

[YouTube video](#)

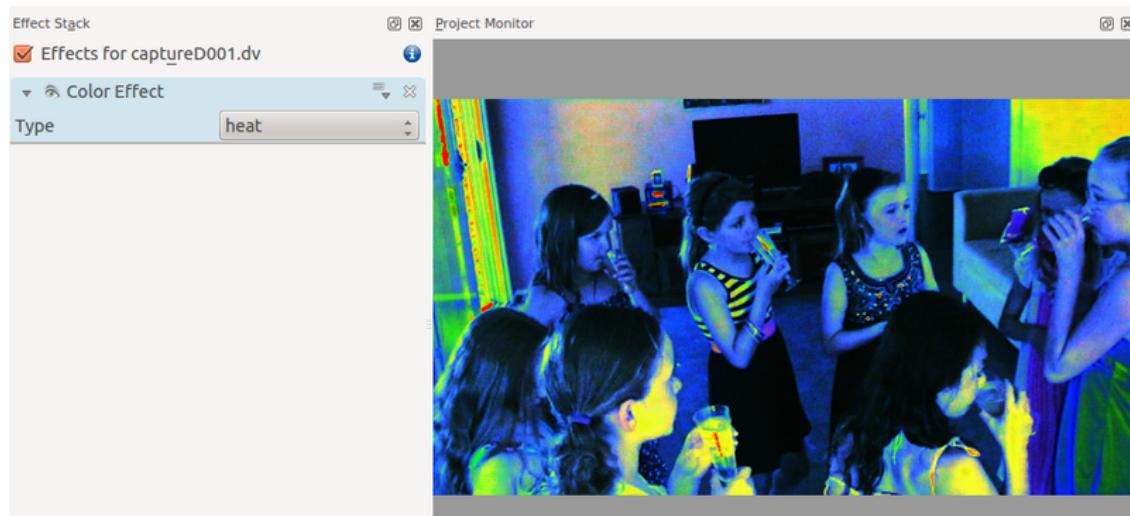
33.1.4 Color Effect

This is [frei0r.colortap](#)

Applies a pre-made color effect to image.

Possible effects are:

xpro, sepia, heat, red_green, old_photo, xraym, esses and yellow_blue.



33.1.5 Colorhalftone

Filters image to resemble a halftone print in which tones are represented as variable sized dots.



33.1.6 Delay grab effect

This effect is available from the misc group.

'Delayed frame blitting mapped on a time bitmap'

This is the [frei0r.delaygrab](#) MLT filter by Bill Spinhover, Andreas Scheffler and Jaromil

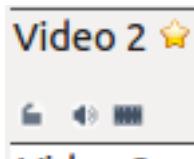
[YouTube video](#)

[YouTube video](#)

33.1.7 Dynamic Text

The 'Dynamic Text' effect allows you to overlay a timecode - which counts up relative to the start of the clip or timeline it is applied to.

Hint: You can add effects to entire video tracks by clicking on the **Track Header** and choosing *Timeline>Add Effect*. Video tracks that have effects added to them are marked with a yellow star in the Track Header



If you add this effect to the Video track rather than individual clips the timecode will not reset at the beginning of the next clip but rather count across the whole length of your project.

See also the [Render Overlay](#) option in the render dialog to add time code or frame count to the entire rendered project.

[YouTube video](#)

33.1.8 Edge Glow

[Frie0r edgeglow](#)

In version 15.n of Kdenlive this is in the Blur and Hide section.

[YouTube video](#)

[YouTube video](#)

33.1.9 Equaliz0r

[frei0r.equaliz0r](#)

Equalizes the intensity histograms.

(Moved to Color section in ver 15.n)

[YouTube video](#)

[YouTube video](#)

33.1.10 K-Means Clustering

This is the [Frei0r cluster](#) MLT filter.

Clusters of a source image by color and spatial distance

[YouTube video](#)

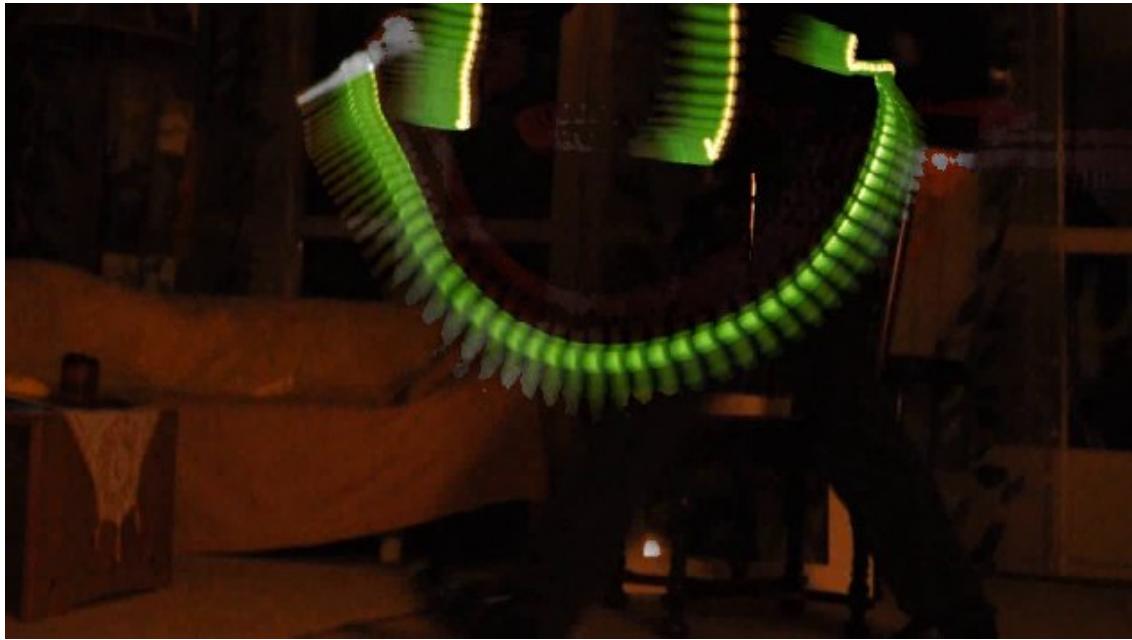
[YouTube video](#)

33.1.11 Misc - Light Graffiti

[till's blog](#)

http://vimeo.com/moogaloop.swf?clip_id=18497028&server=vimeo.com&fullscreen=0&show_title=1&show_byline=1&show_portrait=0

http://vimeo.com/moogaloop.swf?clip_id=20217266&server=vimeo.com&fullscreen=0&show_title=1&show_byline=1&show_portrait=0



33.1.12 Luminance

This is then [FreiOr luminance](#) MLT filter.

Creates a luminance map of the image.

Moved to color section in ver 15.n

[YouTube video](#)

[YouTube video](#)

33.1.13 Medians

This filter implements several median type filters.

INTRODUCTION

Median is a quite popular non-linear filter in image processing. Most often it is used to remove impulsive noise, like 'salt & pepper' noise, 'dead' and 'hot' pixels, dirt on film, etc. This is because it behaves kind of 'inversely' compared to linear denoisers. The more a bad pixel stands out from the surrounding area, the bigger residual it will leave with a linear filter - but the more probably it will be eliminated by the median.

The down side is that the median operation is quite slow. As an order-statistic filter, it is similar to sorting, that must be done for each pixel, so using a fast algorithm is very important. For the small medians, the algorithms of the type described in [this page](#) are used here, with some small modifications for a further slight improvement in speed. For the 'Variable size' median, code from ¹ is used. The compound filters (ArceBI, ML3D, ML3dEX) are made according to the

¹ Simon Perreault, Patrick Hebert: Median filtering in constant time, [PDF version](#), [HTML version](#)

formulas given in the corresponding work². For more info on median filtering see [Wikipedia article](#).

IMPLEMENTED ALGORITHMS

Cross5

Median of the pixel with its top, bottom, left and right neighbor.

Square3x3

Median of the pixel with the surrounding 8 pixels. (3x3 box)

Bilevel

First, make cross5 median, then make median of the pixel with its four diagonal neighbors, and finally take the median of the pixel and the two previously calculated medians. Slightly better preserves detail than the simple medians above.

Diamond3x3

Takes median of the pixel with 12 neighboring pixels arranged in a diamond pattern.

Square5x5

Median of the pixel with the 5x5 surrounding box.

Temp3

Temporal only median of three frames. Can be used to reduce single frame time-impulsive noise like photoflash. Delays the video by 1 frame.

Temp5

Temporal only median of five frames. Can be used to reduce double frame time-impulsive noise, but the artifacts on fast moving objects are stronger than with temp3. Delays the video by 2 frames.

ArceBI

Spatio-temporal multilevel median, as described by Arce. See the corresponding work. Delays the video by 1 frame.

ML3D

Spatio-temporal multilevel median, as described by Alp. See the corresponding work. Delays the video by 1 frame.

ML3dEX

Spatio-temporal multilevel median. Further development of ML3D by Kokaram, see the corresponding work. Delays the video by 1 frame.

VarSize

Simple spatial only median in a user selected size square box around each pixel. The effect could be described as 'quasi edge preserving, corner rounding, small stuff eliminator'. Or maybe just an 'artsy blur'.

PARAMETERS:

Type

Selects one of the eleven algorithms

Size

Only active when 'VarSize' type is selected. Determines the size of the square area over which the median is taken.

REFERENCES

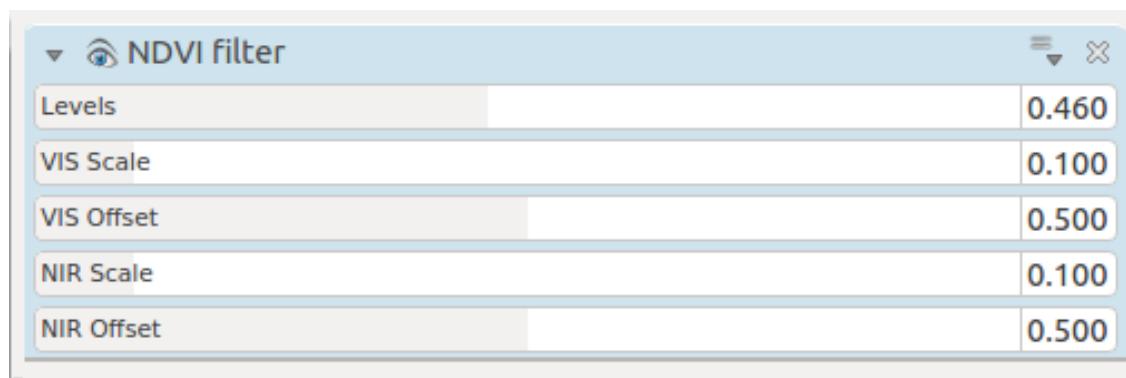
² Anil Christopher Kokaram: Motion Picture Restoration, Ph.D. thesis

Chapter 34

NDVI Filter

This is the frei0r filter [Frei0r-ndvi](#) created by Brian Matherly.

This filter creates a Normalized Difference Vegetation Index ([NDVI](#)) false image from an infrablue source.



34.1 Nervous

[YouTube video](#)

34.2 Regionalize

Apply subeffects to a region defined by a clip's alpha channel.

This is the mlt filter [region](#)

arguments:

File A file whose alpha channel will 'shape' the region. The string 'circle' is a shortcut but it requires pixbuf with the librsvg loader. The circle is automatically stretched to the region to create an ellipse.

Region Properties may be set on the encapsulated region transition. See 'region' transition for details.

34.3 Sobel

This is the [Frei0r sobel](#) MLT Filter.

Sobel filter is an edge detection filter.

[YouTube video](#)

34.4 tehroxx0r

This is the [Frei0r tehroxx0r](#) filter.

Something videowall-ish.

The effect might not show up during preview but it does appear in the rendered file.

This effect has one parameter — *interval* — with a range from zero to 1. This parameter controls the number of small video frames which appear around the border and how frequently they flash. Higher number = fewer frames and slower flashing.

[YouTube video](#)

[YouTube video](#)

34.5 Threshold

This is the [Threshold](#) MLT filter

Make monochrome clip

Different to [Threshold0r](#)

34.6 threshold0

This is the [Frei0r-threshold0r](#) filter

Thresholds a source image.

[YouTube video](#)

[YouTube video](#)

Different to [Threshold0r](#)

34.7 Analysis and Data - Vectorscope

This is the [frei0r.vectorscope](#) plugin.

Not to be confused with [Threshold0r](#) described on [Granjow's blog](#)

In ver 17.04 this is found in the [Analysis and Data](#) category of Effects.

It is recommended to use the vectorscope from [Threshold0r](#), because the effect Analysis and Data - Vectorscope is not correct - it uses a graticule from an analog NTSC vectorscope, but equations from digital video (Source: [this](#) forum post.)

[YouTube video](#)

[YouTube video](#)

34.8 Vignette

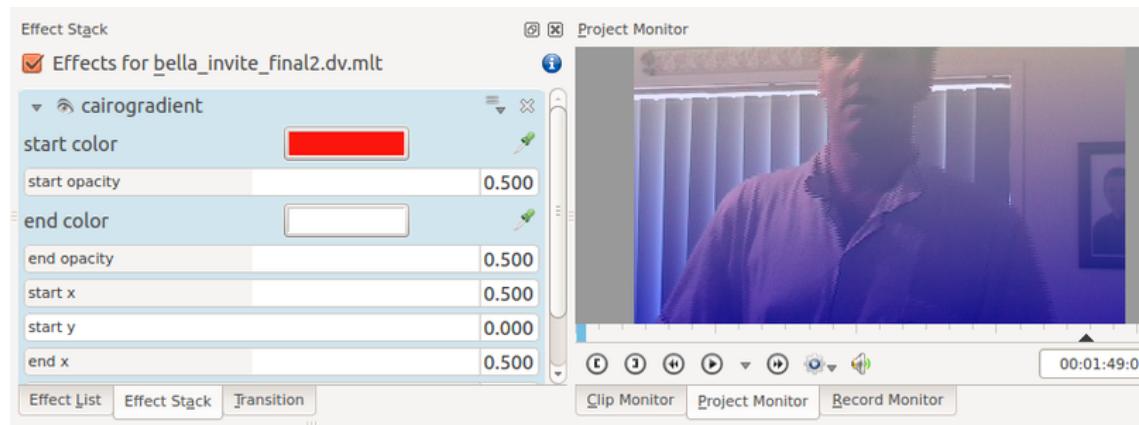
This is the [Frei0r-vignette](#) filter.

Lens vignetting effect, applies natural vignetting

Chapter 35

cairogradient

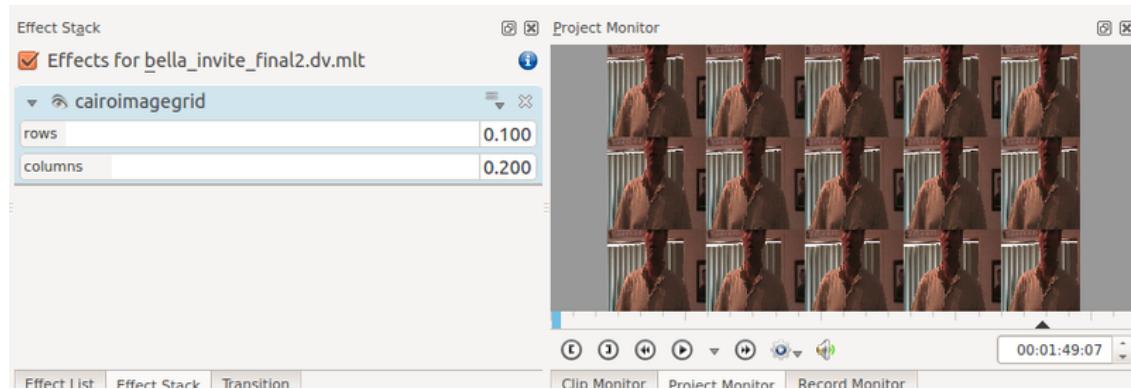
This effect adds a gradient of colour across the frame.



Chapter 36

cairoimagegrid

This effect creates a grid of copies of the video footage as shown in the screen shot



You adjust the number of rows and columns in the image with the rows and columns parameters. These take decimal fractions from zero to 1. The maximum value of 1 means 20 rows or columns. Number of rows/columns = $(p \times 20) + 1$ [where p = the value of the row or column parameter]

In this eg

rows = 0.1 -> means $(0.1 \times 20) + 1 = 3$ rows

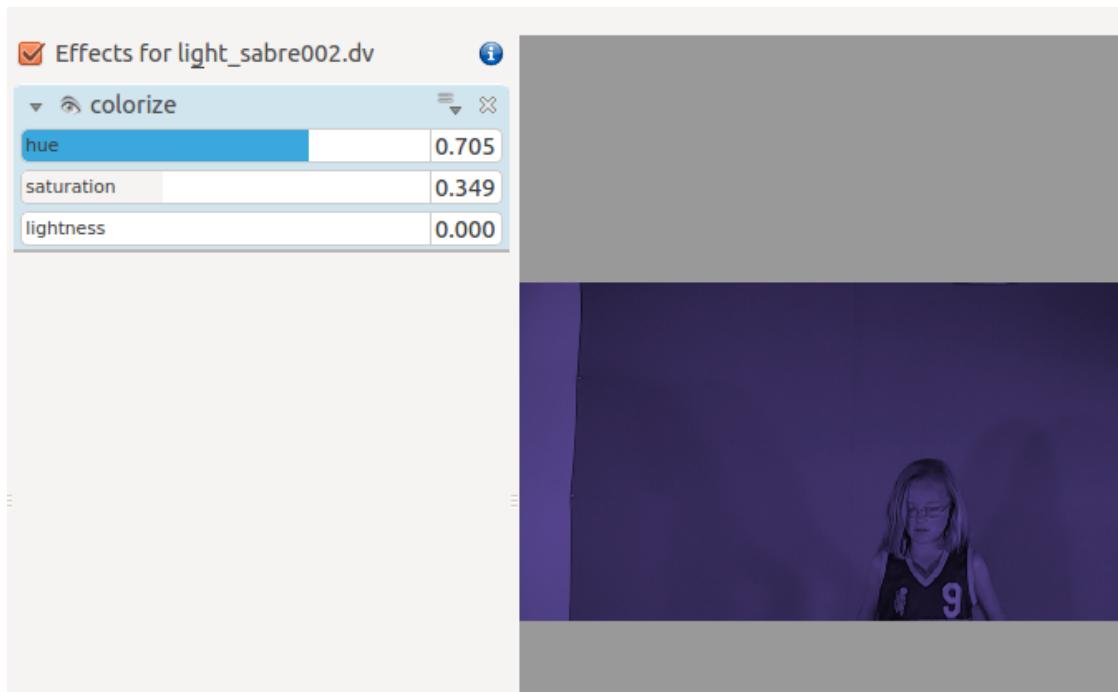
columns = 0.2 -> means $(0.2 \times 20) + 1 = 5$ columns

36.1 Colorize

Frei0r.colorize

Colorizes image to selected hue, saturation and lightness

The Kdenlive Handbook



Chapter 37

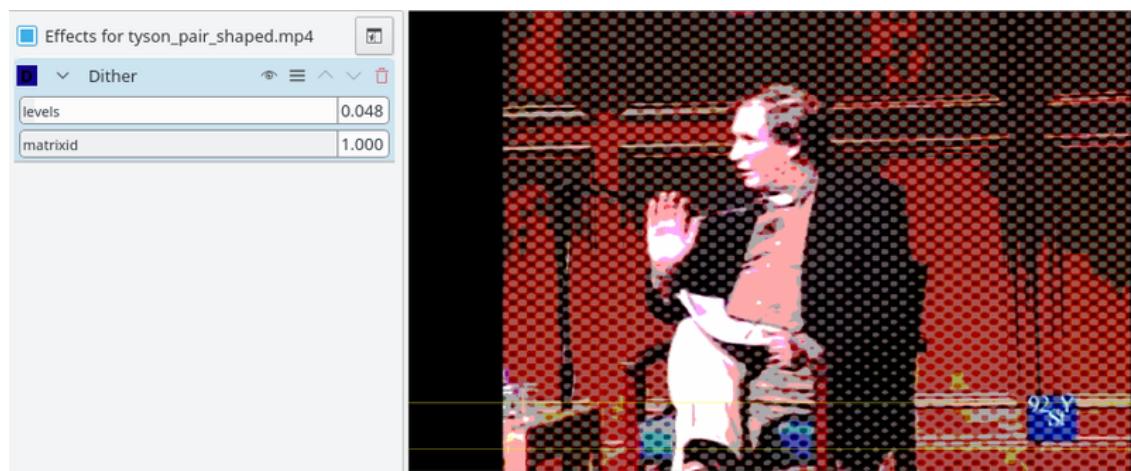
Dance

This effect causes the video frame to dance around the screen.

Add this effect to a video and include another video track below it and a composite transition between the two tracks.

[YouTube video](#)

37.1 Dither



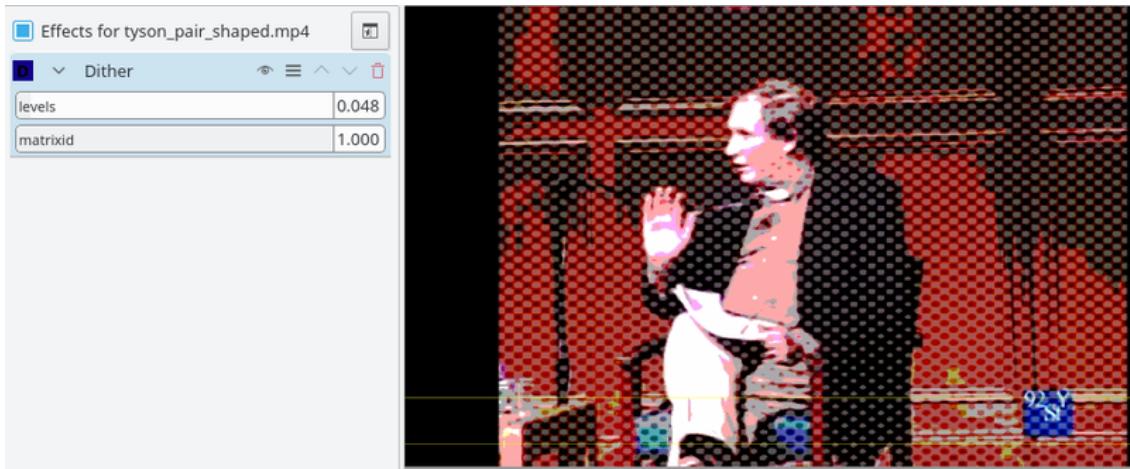
37.2 Key Spill Mop Up

WARNING

This page is outdated. You may find the new one [here](#)

This page is outdated. You may find the new one [here](#).

This effect is used when using chroma keying (otherwise known as greenscreen or



effect). Its purpose is to compensate for the fact that sometimes the color from the green or blue screen reflects onto the subject and will make them a shade of blue or green - especially around the edges. This is known as 'keyspill'. This effect can attempt to compensate for this issue.

This effect may not be installed in version 0.9.2 of Kdenlive. It can be installed from [sunab ppa](#) or you can compile it yourself following instructions at post 10 in [this](#) thread.

The effect may be found in the [Misc](#) group or in the [Alpha manipulation](#) group (ver >= 0.9.3)

See [this](#) thread for the genesis of this effect.

37.2.1 Tutorial

This tutorial shows usage of the following effects: keysplilm0pup, blue screen, alpha operations - shrinkhard and denoiser

[YouTube video](#)

37.2.2 Details

The README for the keysplilm0pup is this:

DESCRIPTION

After some experimentation with chroma keying, it looked to me that there is no single method of key cleaning, that works in all situations, like keyspill on bright, keyspill on dark, etc. So I included several cleaning options, which can be used alone or in combination. In short, it offers three ways of pixel selection (masking), that can be combined with four types of color changing operations. The three selection / masking modes are based on:

- similarity to key color
- transparency
- closeness to the edge

and the four things that can be done to the selected pixels are:

- move away from the key color (De-Key)
- move towards an target color (Target)
- desaturate

- luma (brightness) adjust.

MASKS

Color difference masks are based on the color of the image, and do not depend on the alpha from the preceding keying, except for ignoring the 100% transparent areas, to increase speed.

Transparency and Edge masks are based on the alpha channel from the preceding keying operation. Transparency masks will affect only the parts that are neither 100% opaque nor 100% transparent, based on the alpha values from the preceding keying operation. The effect will be proportional to the transparency.

NOTE

If a 'hard key' was used in the preceding keying, there will be no areas that T operations could affect. Edge maskss will affect only pixels close to the edge, with the effect diminishing away from the edge. The outer edge is the edge of the fully opaque part, where the alpha from the preceding keying is 1.0 (255).

NOTE

The edge masking algorithm is not yet what I would like it to be. I will have to look some more into this, and improve it, so consider it a 'temporary solution' that will change in the future.

All masks can be further pruned with two parameters: an 'hue gate', which will limit the mask to hues close to the key hue, and an 'saturation threshold', which will limit the mask to areas with color saturation above a threshold.

CASCADING

This plugin can be cascaded, but it is not possible to get the same color based mask in the second instance, because the colors will be changed by the first instance. To enable two operations with the same mask, each plugin instance can do two operations. With transparency and edge masks, cascading is a bit easier. If the hue gate and saturation threshold are not used, transparency and edge masks can be exactly the same in cascaded plugins.

PARAMETERS:

Key color: This should be the same or similar to the key color used for the preceding keying operation.

Target color: This is only used when 'Target' operation is used with one of the masks. The colors in the affected areas will be moved towards this color, according to the 'Amount' parameter.

Mask type: Selects the type of mask that will determine where the color altering operations will occur.

Tolerance: For the color difference mask, the range of colors around the key, that will be 100% affected. For the transparency mask, the 'amplification'. For the edge mask, the width of the affected area.

Slope: For the color difference mask, the range of colors outside of 'Tolerance', that will be gradually less affected. No function for the transparency and edge masks.

Hue gate: Reduces the mask according to difference from key hue, to prevent change to pixels that are within the mask, but not polluted by key.

Saturation threshold: Reduces the mask according to color saturation, to avoid affecting the neutral areas.

Operation 1: Selects which of the four possible operations will be done on the mask-selected pixels. Apart from no operation, there are four possibilities: De-key, Target, De-saturate and Luma adjust.

The Kdenlive Handbook

Amount 1: The amount of the selected operation 1, how much the colors will change.

Operation 2, Amount 2: Enable a second operation to be performed with the same mask.

Show mask: This will show the selected mask as a greyscale image, to help with fine tuning of the masks. Should be OFF for the final render.

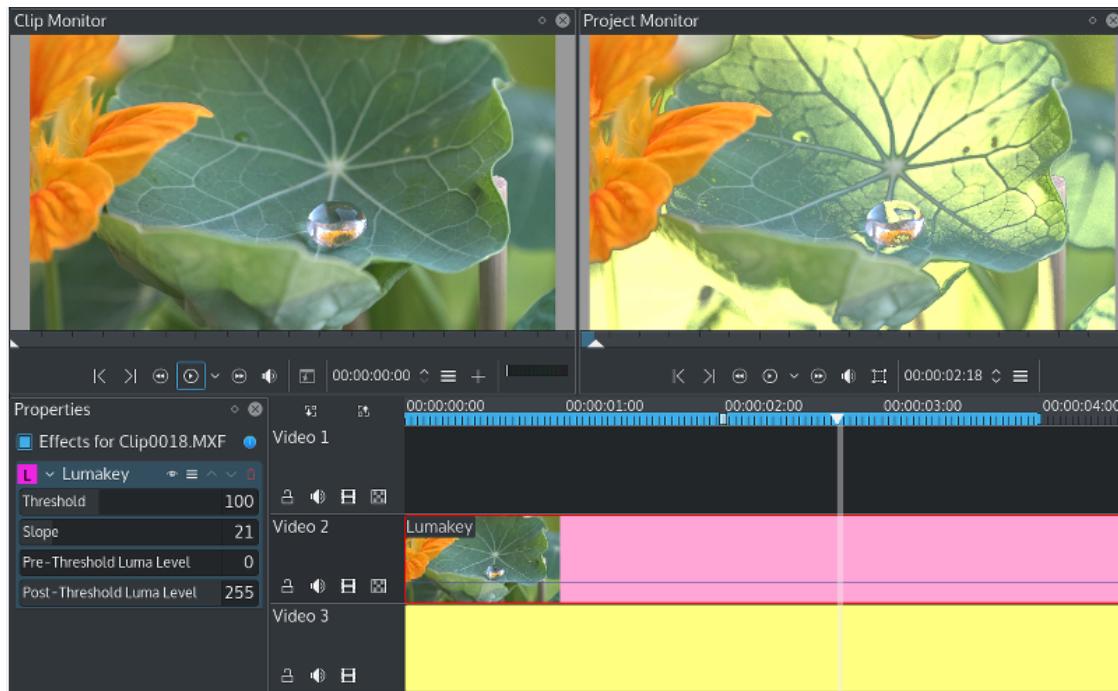
Mask to Alpha: Copies the active mask to the alpha channel. For all normal spill cleaning operations, this should be OFF. By setting it ON, the keyspillm0pup itself can be used as a keyer, or to generate some special effects.

Chapter 38

Lumakey Effect

Available in the Misc category of effects in version 15.n.

The Lumakey effect changes the clip's alpha channel. To see its effect, you need a transition (like the Composite transition that is available in tracks) and another clip beneath.



38.1 nosync0r

This is the [Frei0r-nosync0r](#) MLT filter

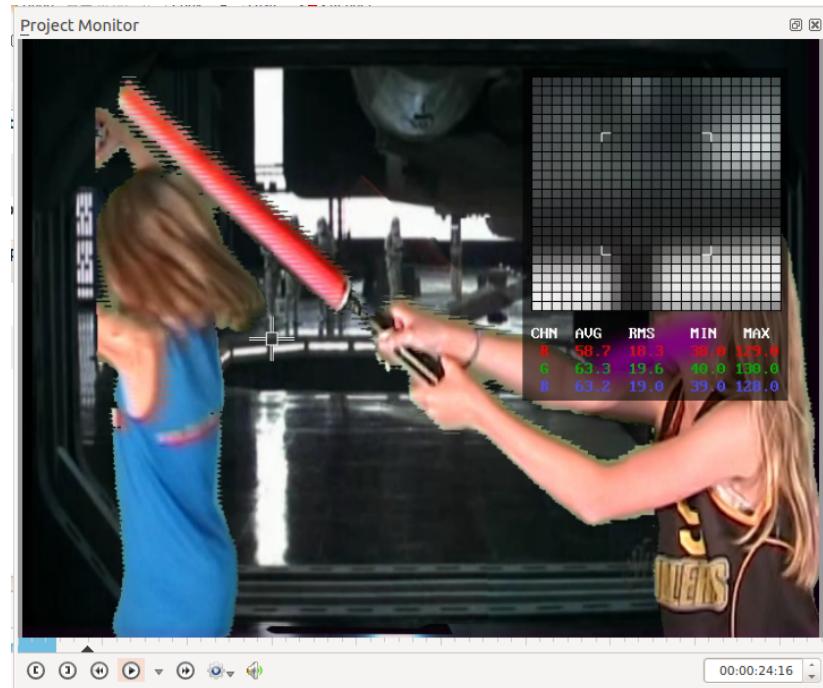
Video looks like a broken TV with bottom half of picture on the top of screen

[YouTube video](#)

[YouTube video](#)

38.2 Pr0be

This is a measurement tool, not an effect. It can show color values of single pixels or statistics of small rectangular areas. It is also useful as a pixel-peeping 'loupe'.



It can display the following values:

- RGB
- YCC in either rec 601 or rec 709 standards
- HSV
- HSL

The position and size of the measured area is set by the X, Y, Xsize and Ysize parameters. A small crosshair marker is shown in the image, where the measurement is being made.

If '256 scale' is checked, values are displayed as 0...255 integers, otherwise they are displayed as 0...1 floating point numbers.

If 'Show alpha' is checked, alpha channel values are displayed too.

If 'Big window' is checked, a bigger area around the center pixel is displayed in the 'loupe'.

Pr0be can also be used to measure image noise. Just place the measurement rectangle on an uniform part of the image, that contains no image detail or gradient, and read the RMS value.

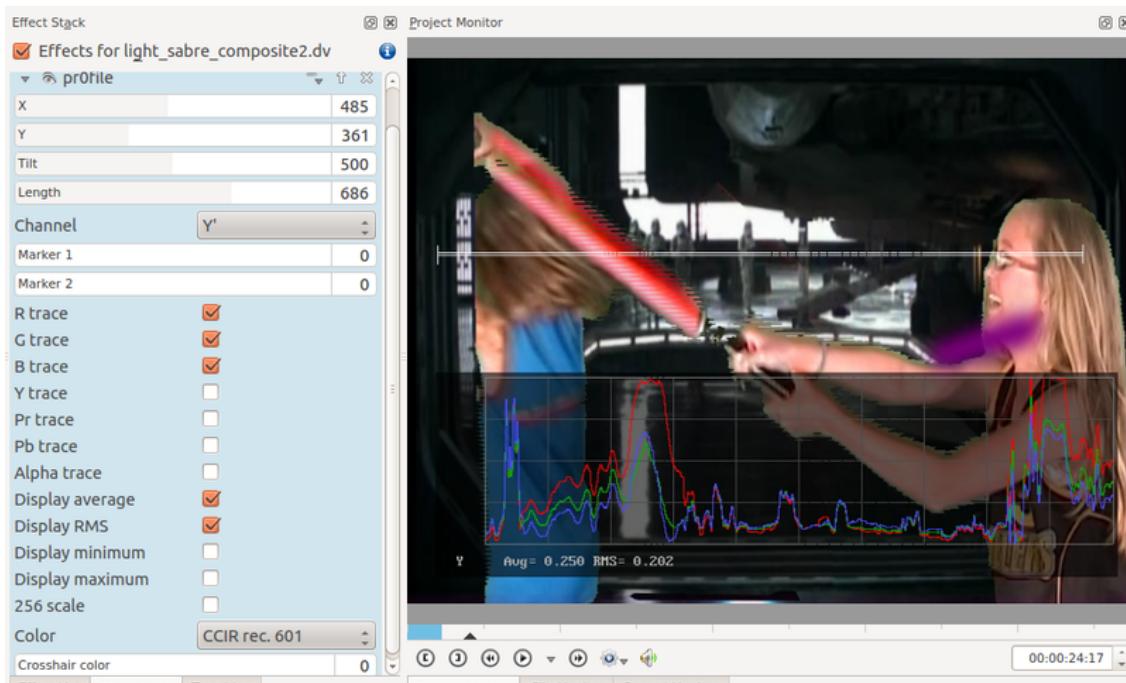
NOTE

The values are displayed with a rather small font, so they might not be readable, if the image is not displayed at a big enough scale (1:1 pixel is optimum)

38.3 Pr0file

This is a measurement tool, not an effect. It is like an video oscilloscope, that can show the profile along any direction in the image. It can be used for things like:

- fine tuning of sharpening / unsharp masking
- identify color subsampling
- together with test charts, measure the spatial frequency response
- etc.



The position, size and direction of the profile can be set with the X, Y, Tilt and Length parameters.

The 'Channel' parameter selects what will be displayed in the numerical readout.

Two markers can be set on the profile, to select individual values for the readout.

The next seven checkboxes select the channels to be drawn on the graph.

Next, there are four checkboxes which determine what statistics will be displayed numerically.

If '256 scale' is checked, values are displayed as 0...255 integers, otherwise they are displayed as 0...1 floating point numbers.

The 'color' parameter selects whether rec 601 or rec 709 formulas will be used for the luma and chroma calculation.

NOTE

The values are displayed with a rather small font, so they might not be readable, if the image is not displayed at a big enough scale (1:1 pixel is optimum)

38.4 rgbnoise

This is an effect in the Misc category.

This is the [frei0r.rgbnoise](#) filter from Janne Liljeblad.

It adds RGB noise to image and takes one parameter *noise* in the range 0 to 1 which controls the amount of noise added.

This effect appears to have arrived with version 0.9.5 of Kdenlive.

[YouTube video](#)

38.5 scanline0r

This is the [Frei0r.scanline0r](#) MLT filter.

interlaced black lines

[YouTube video](#)

[YouTube video](#)

38.6 sigmoidaltransfer

This is the [Frei0r.sigmoidaltransfer](#) filter from Janne Liljeblad.

Desaturates image and creates a particular look that could be called Stamp, Newspaper or Photocopy.

Two parameters:

Brightness: Controls Brightness of image. Range 0 to 1

Sharpness: Controls sharpness of transfer Range 0 to 1

Both parameters default to 0 in Kdenlive - which is unfortunate because this results in a totally black frame. You need to have numbers above zero to see the effect.

This effect appears to have arrived with version 0.9.5 of Kdenlive

38.7 threelay0r

[YouTube video](#)

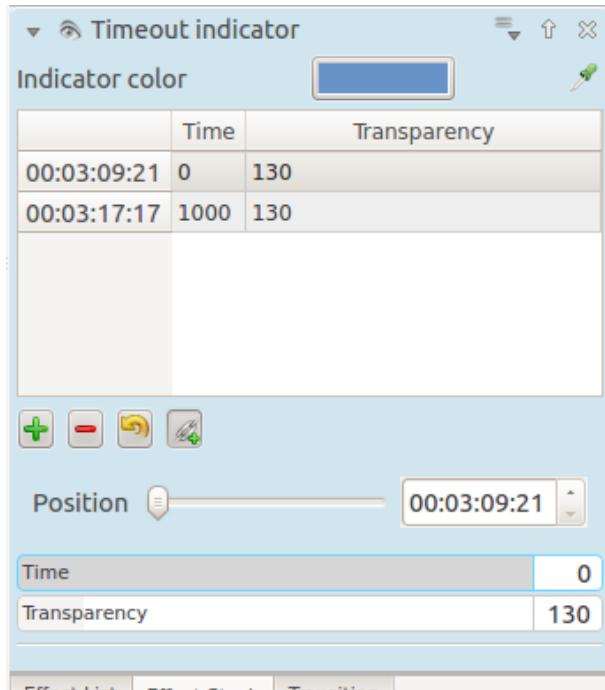
38.8 Timeout Indicator

This is [Frei0r.timeout](#) by Simon A. Eugster.

In ver 17.04 this is found in the [Analysis and Data](#) category of Effects.

This adds a little countdown bar to the bottom right of the video and is available in ver. 0.9.5 of Kdenlive.

The settings in this screen shot produced the sample video below.



[YouTube video](#)

38.9 twolay0r

This is the [Frei0r-twolay0r](#) filter.

Dynamic thresholding

[YouTube video](#)

[YouTube video](#)

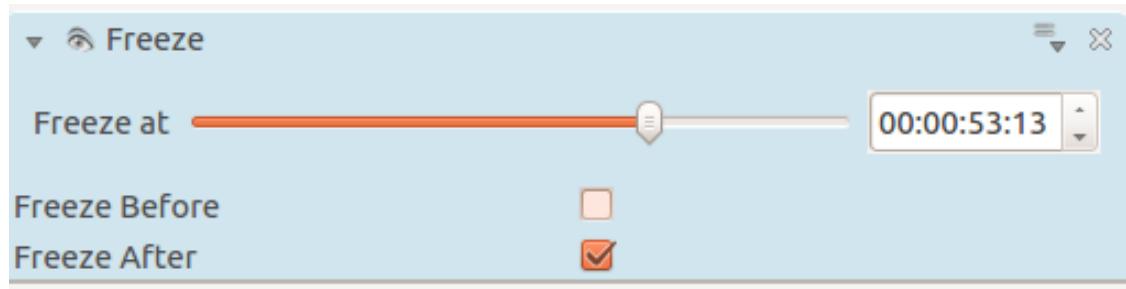
Chapter 39

Effects - Motion

1. [Freeze](#)
2. [Speed](#)

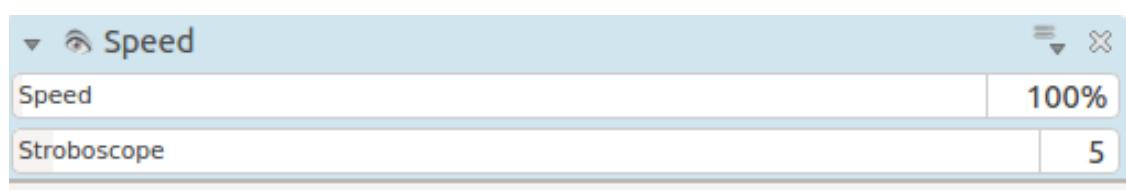
39.1 Motion - Freeze

This effect causes the video to freeze. If you add the effect and leave both check boxes unchecked, the clip will be frozen for its entire length. To change this, check either the *Freeze Before* or *Freeze After* setting and move the *Freeze At* slider to the time where you want the freeze to start or end. If *Freeze Before* is selected, the video will be frozen at the start and then start moving when it hits the *Freeze At* time. If *Freeze After* is selected, the video will be moving at the start and then freeze when it hits the *Freeze At* time. The audio in the video plays for the entire length, i.e. the **Freeze** effect does not alter the audio.



39.2 Motion Effects - Speed

Make clip play faster or slower. Use of this effect mutes the audio of the clip.



The *Stroboscope* setting defines the number frames the effect skips when playing back. For example, if *Stroboscope* is set to 5 then the effect will only show every fifth frame but will show these frames for five times as long, producing a jumpy, stroboscopic effect.

The Kdenlive Handbook

It has been reported that the **Speed** effect does not work very well on H.264-formatted source video. It is recommended to transcode your source material into the DNxHD format and apply the **Speed** effect to that. ([forum post](#))

Chapter 40

Vectorscope Window

This window allows you to monitor the colour properties of your clip in detail.
See Granjow's blog [here](#) and [here](#) on the Vectorscope.

Chapter 41

Titles

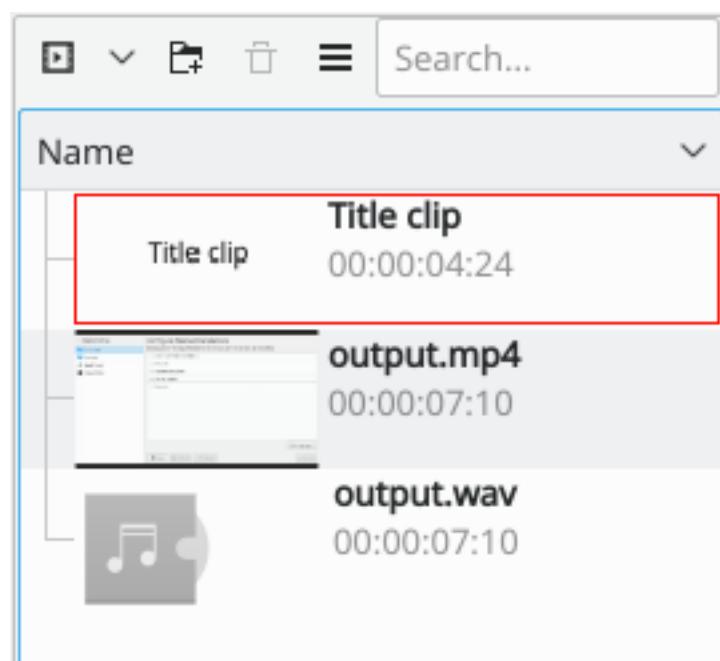
Titles are text elements that can be added to the timeline and appear over the top of other clips. Titles are created in the [Project Bin](#) and then dragged to the timeline like other video clips.

If you want titles to overlay other footage, you put title clips on video track 1 and have the other footage on video track 2. You also need to retain the affine transition that is automatically added to the title clips if you want the footage visible underneath.

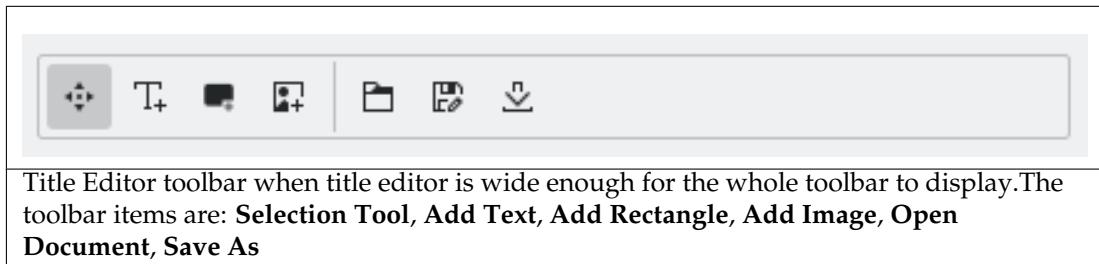
To create a title, choose **Add Title Clip** from the [Project Menu](#) or from the Right-Click menu in the [Project Bin](#)

41.1 How to Save a Title

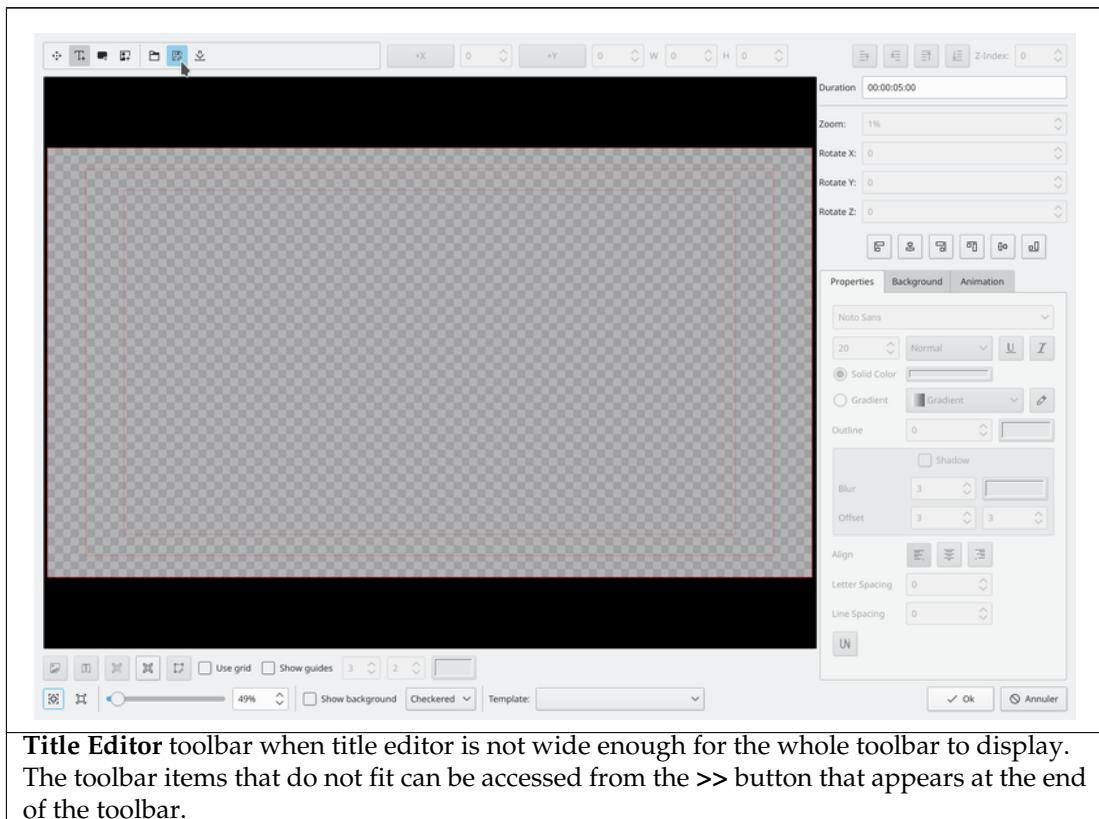
Open the title in the [Project Bin](#) by double-clicking it or right-click then choose **Clip Properties**.



Click the **Save As** button on the tool bar



or select **Save as** from the toolbar overflow menu which can be found under the » button on the toolbar - see picture.

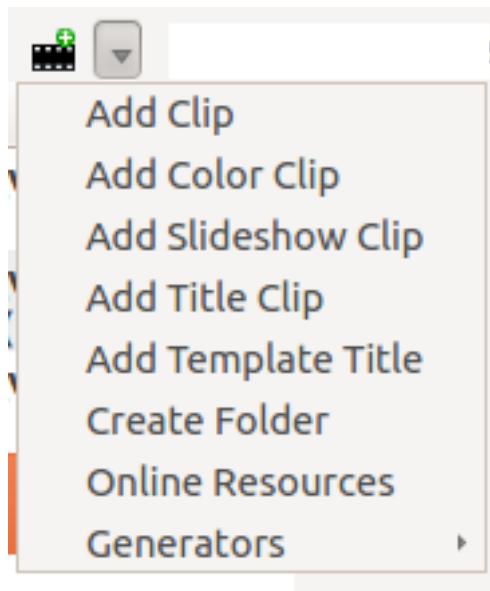


Choose a save location within your project.

The titles are saved as `.kdenlivetitle` type documents.

41.2 How to Load a Title

Choose **Add Title Clip** from the **Add Clip** drop down (see picture)



Click the **Open Document** button on the Title Clip editor toolbar or choose **Open document** from the » menu and load up a title saved earlier.

41.3 How to edit an existing title

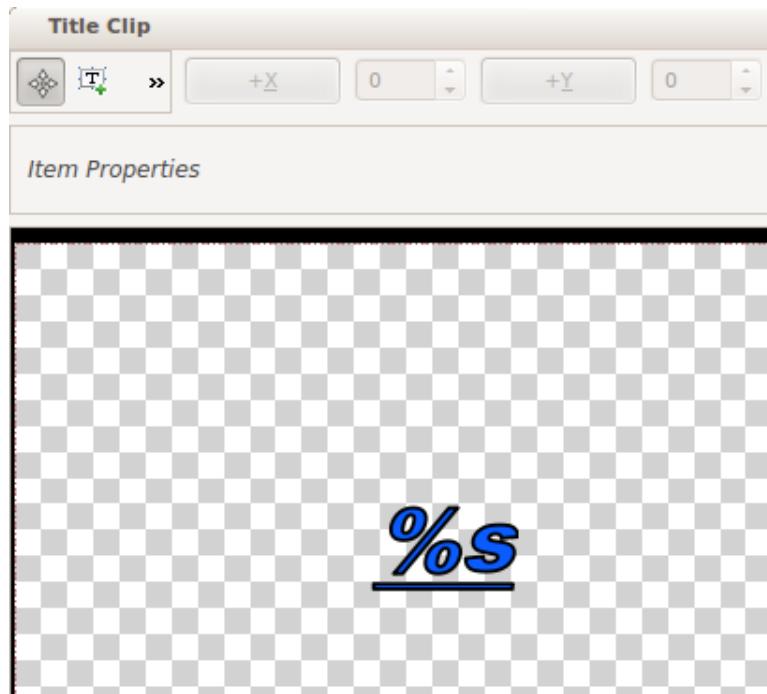
Right-click the title clip in the Project Tree and select **Clip properties**.

41.4 Template Titles - User-Defined

Template Titles allow you to create a template for other titles in your project. You create the template title with the settings that all the titles in the project should have and then base subsequent titles on the template. If you decide to change the look of your titles, you only need change the template title and the titles based on this template will automatically update to reflect any formatting changes you made to the template title.

To create a template title

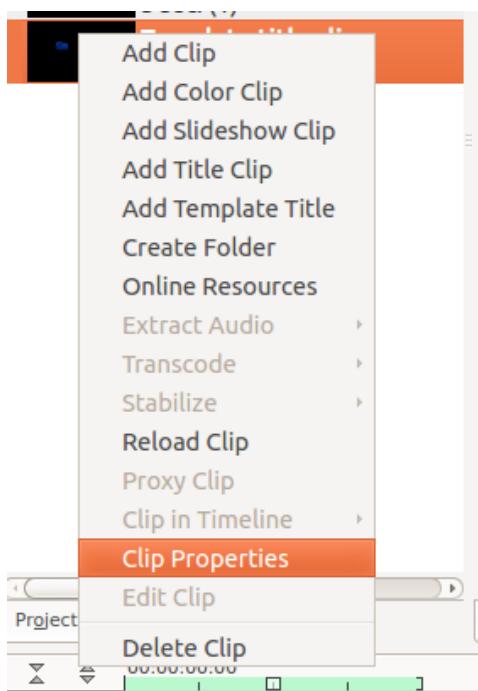
Choose **Add Title Clip** from the **Add Clip** drop down and create a title with the text `%s` in it and formatted how you desire it. Save this title as described above.



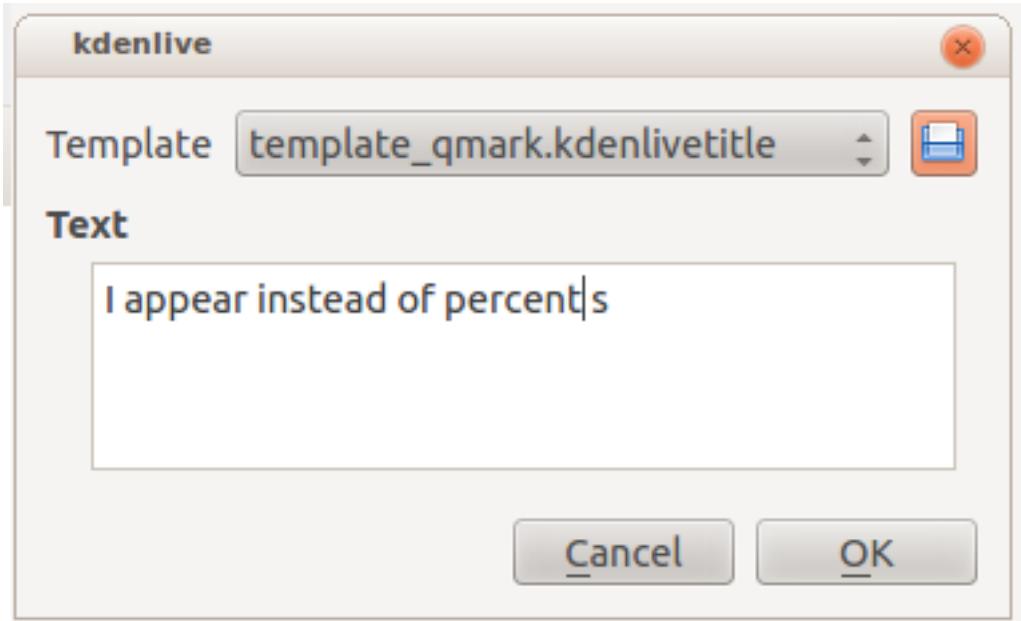
To use the template title

Choose **Add Template Title** from the **Add Clip** drop down and choose the title with the **%s** in it that you just saved.

Right-click this clip in the Project Tree and select **Clip Properties**,

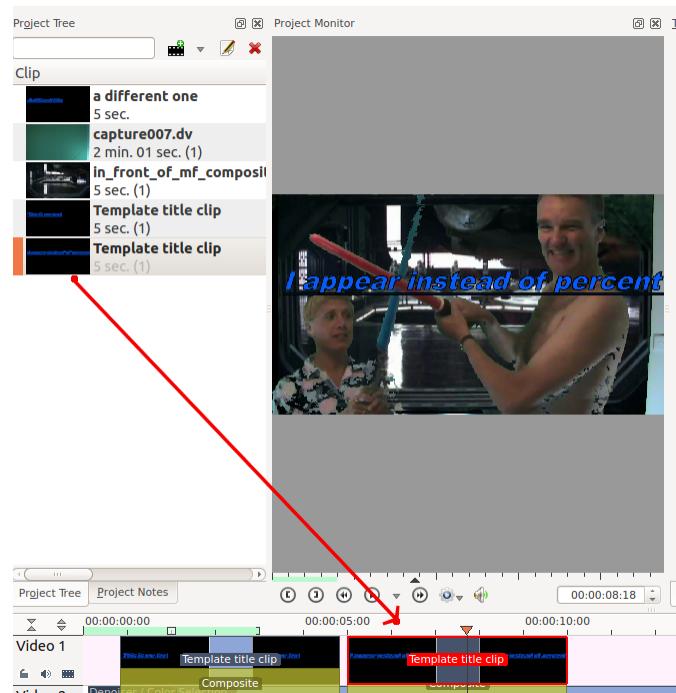


Enter the text that this title should display into the text field in the dialog that appears.



Drag the title to the timeline.

The %s in the template will be replaced with the text that you enter in the **Clip Properties → Text**.

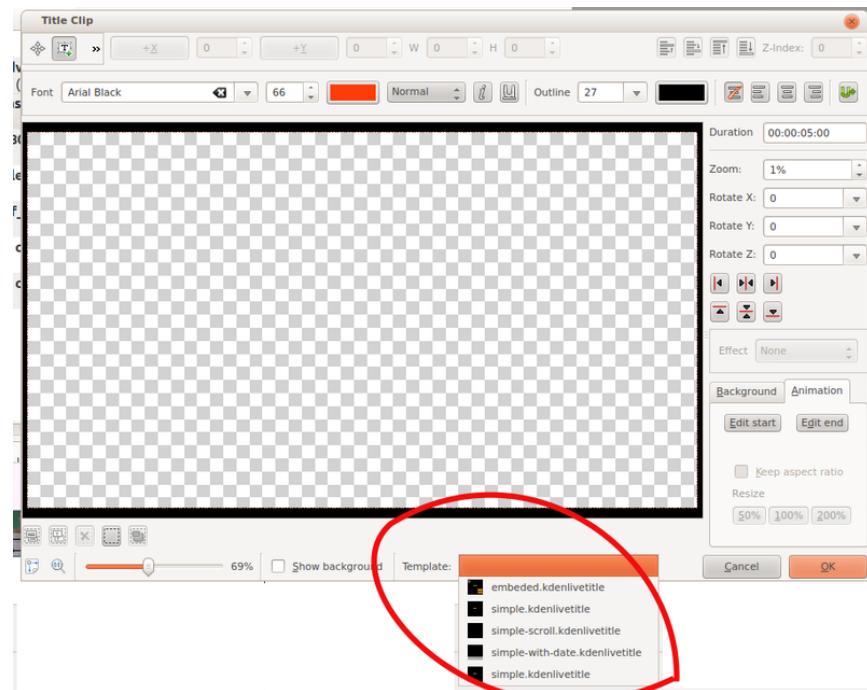


A known issue with template titles is that text centering does not work correctly for text replacing the %s - see [this forum post](#).

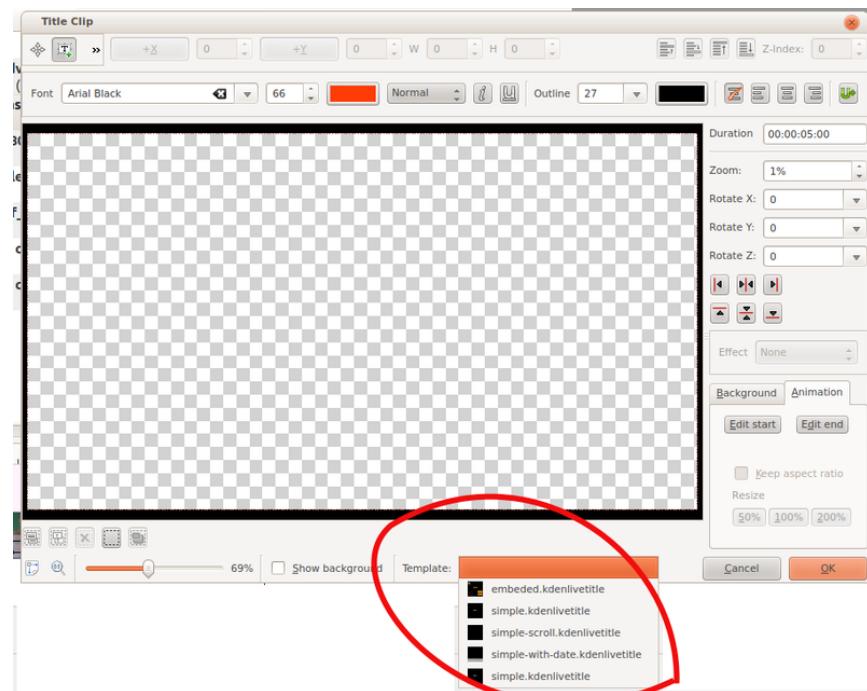
41.5 Template Titles - Built In

Kdenlive has some built-in title templates that can be accessed from the **Template** drop-down list found on the bottom of the **Title Clip** window - see below.

The Kdenlive Handbook



To install more built-in title templates choose

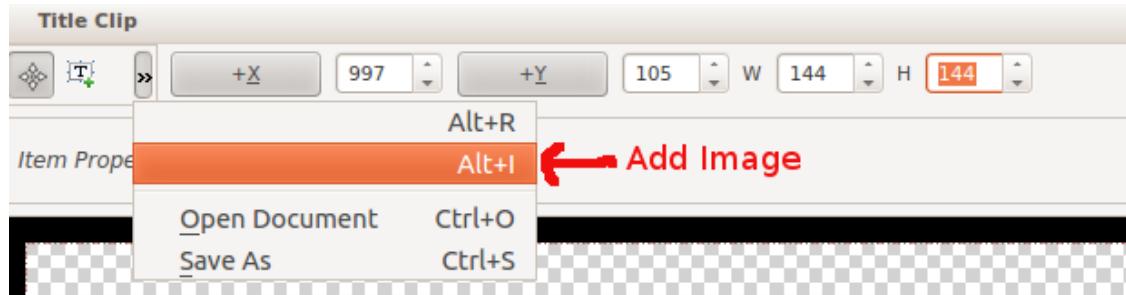


from the **Settings** menu.

The .kdenlivetitle files that supply these templates are installed to /usr/share/kde4/apps/kdenlive/titles/

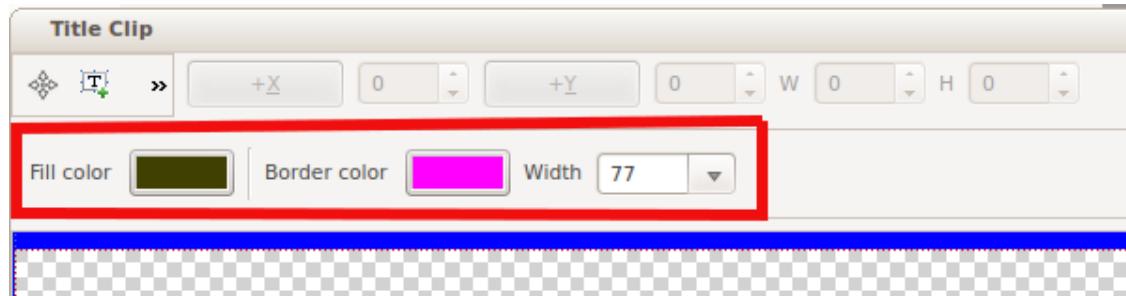
41.6 Import an Image into the title

On the Toolbar overflow menu (») shown in the picture below, the second menu item - (labeled only with **Alt-I** in ver 0.9.2 - fixed in ver 0.9.4) - is the **Add Image** Button. Selecting this brings up a file chooser where you can choose an image to be inserted into your title.

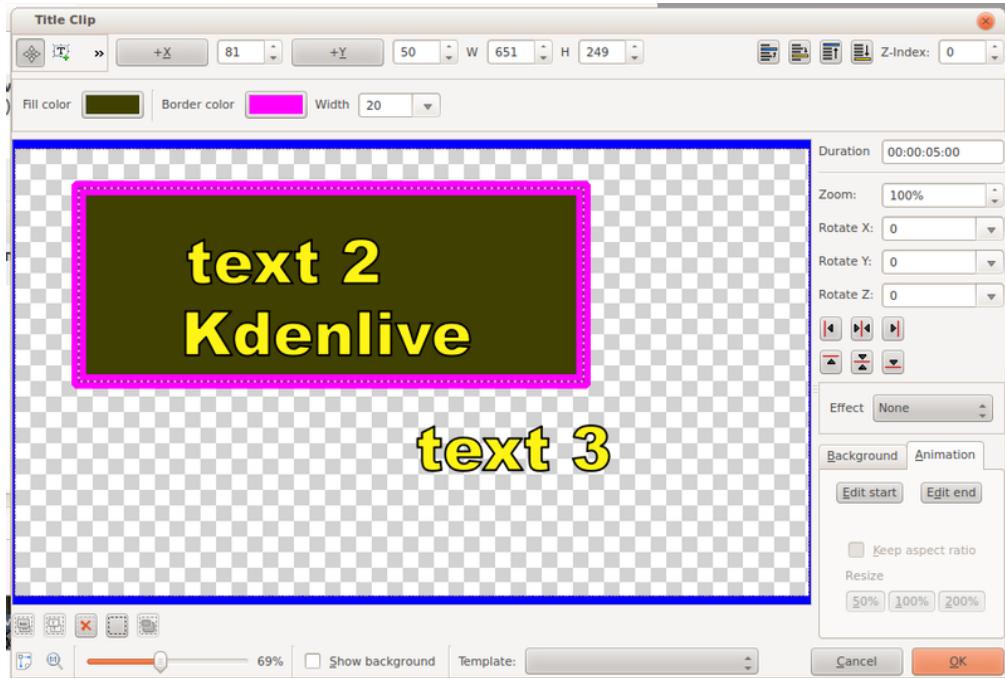


41.7 Draw Rectangle Toolbar Item

The 1st menu item shown in the picture above - (labeled only with **Alt-R** in ver 0.9.2 - fixed in ver 0.9.4) - is the **Add Rectangle** button. After selecting this, drag the mouse to draw a rectangle. Use the rectangle toolbar (shown below) to change the fill color, border color and border width of the rectangle.



The rectangles can be placed behind text by selecting them and the changing the Z-index (top right corner) to a lower value.



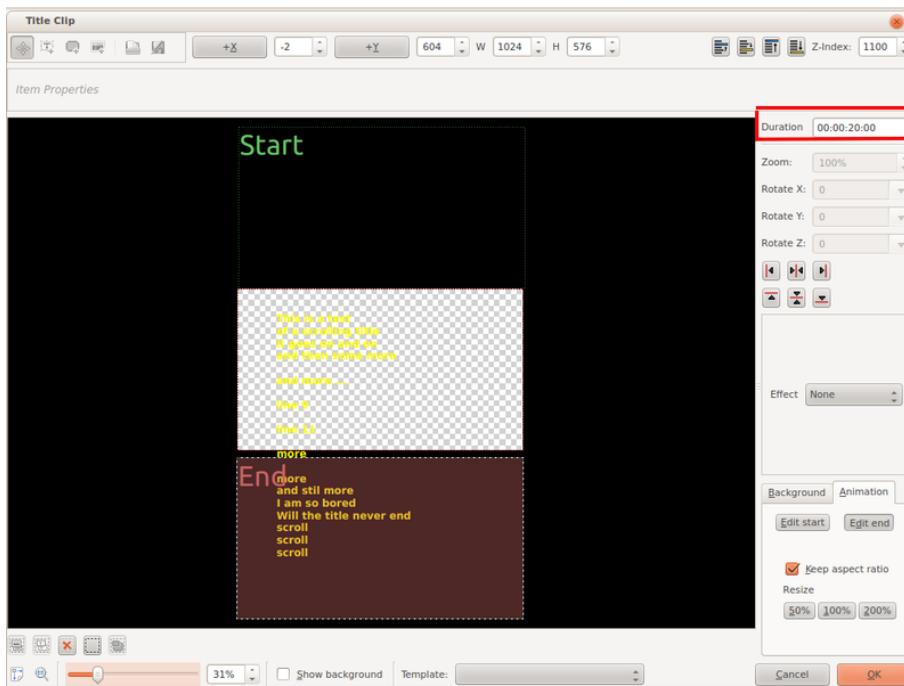
41.8 To make the title scroll vertically

Put a long title onto the title window. Zoom out so you can see it all. The text should run off the top (or bottom) of the viewable area.

Select the **Animation** tab and click **Edit start**. Now drag the start rectangle to above the viewable area.

Select **Edit end** and drag the end rectangle to below the viewable area.

Click **OK** and preview the scrolling title.



The text in the above title scrolls up the screen. It is as if the camera starts on the ‘start rectangle’ and then pans down to the ‘end rectangle’

To make the text scroll faster, change the duration field highlighted in red in the image above to a smaller value. To make the text scroll slower, change the duration to a larger value.

Note: changing the length of the title clip on the timeline does not change the scrolling speed. If the length of the clip on the timeline is longer than the duration specified in the title editor, the titles will pause on the screen between the time the title’s duration expires until the end of the clip.

If the length of the clip on the timeline is shorter than the duration specified in the title editor, the scrolling will not complete before the title clip finishes.

Note: the above description of title behaviour with respect to duration only applies to titles that don’t get edited after they have been placed on the timeline. If you expand the length of a title clip on the timeline and then edit the title (by double-clicking it in the Project Tree), its apparent duration will become the length that it currently has on the timeline (i.e., the scrolling will not pause at the end anymore) but the duration displayed in the title editor will not have changed.

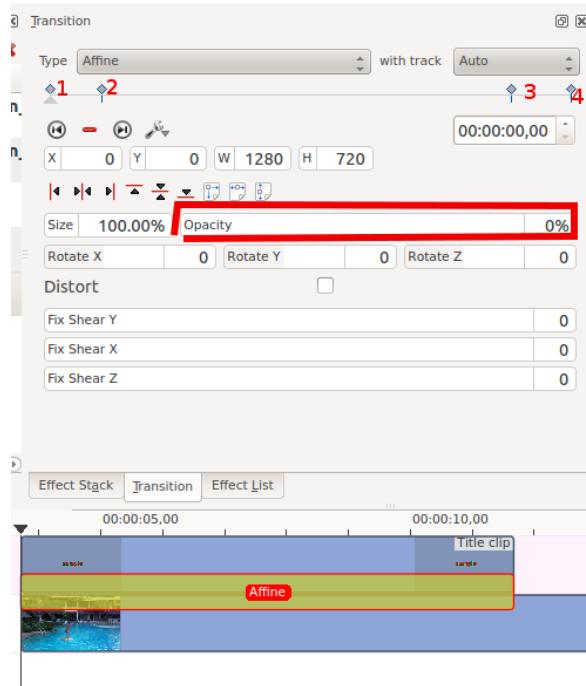
41.9 To make the title scroll Horizontally

Use the instructions for vertical scrolling - just put the start and stop rectangles off to the sides of the screen rather than the top and bottom

41.10 How to fade titles in and/or out

To make titles fade in and out, you modify the transition which gets automatically added between the title and the track below. The modifications consist of adding keyframes into the transition and adjusting the opacity of the transitions at these keyframes. In version 0.9.3 it is an [affine](#) transition that is automatically added between the title and the track below. In ver 0.9.2 it is a [composite](#) transition.

In the image below we have four keyframes (labeled 1 to 4). The first keyframe is the one currently displayed and we can see that the opacity on this keyframe is zero. The opacity at keyframes 2 and 3 is 100%. The opacity at the 4th keyframe is zero percent. The overall effect is that the title fades in between keyframe 1 and keyframe 2. And then it fades out between keyframe 3 and keyframe 4.

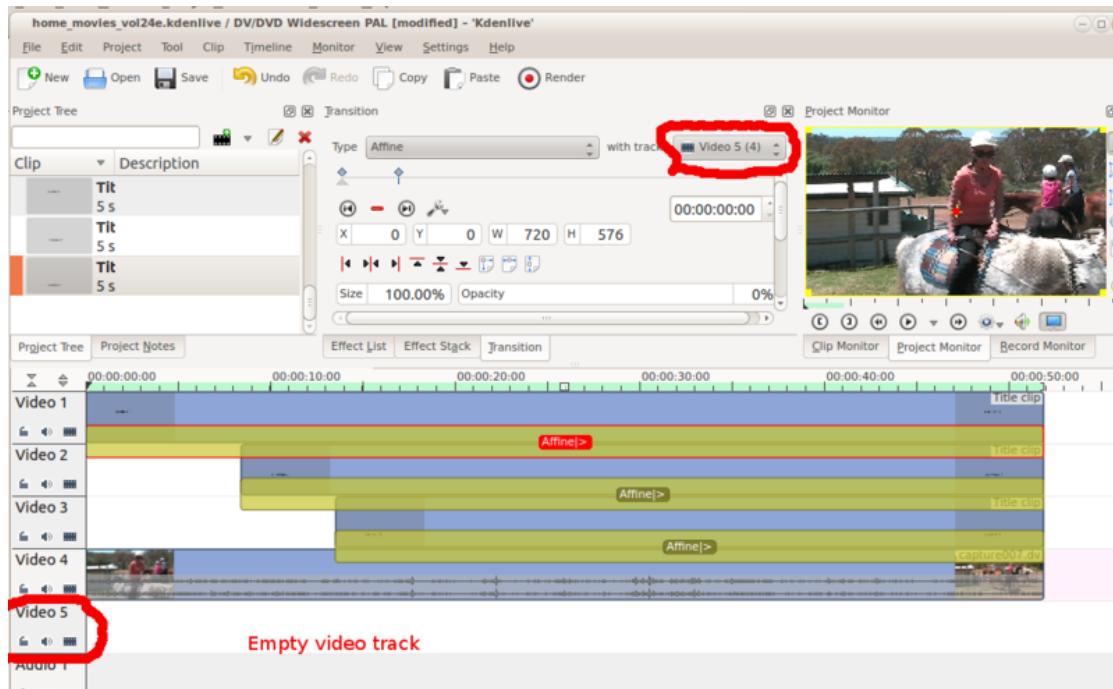


41.11 How to fade in more than one title sequentially

To create a title sequence like this ...

[YouTube video](#)

you put three titles on three different tracks but you make all three affine transitions go to the same empty video track (instead of the tracks directly below them, which is the default). See timeline screenshot below.



41.12 FAQ

Q: How to duplicate a title clip to modify it slightly.

A: You can save a copy of the title (see [How to Save a Title](#)) and then create a new title based on that saved version as described [above](#). Or you could use the [template titles](#) functionality to base the two slightly different titles on the one template.

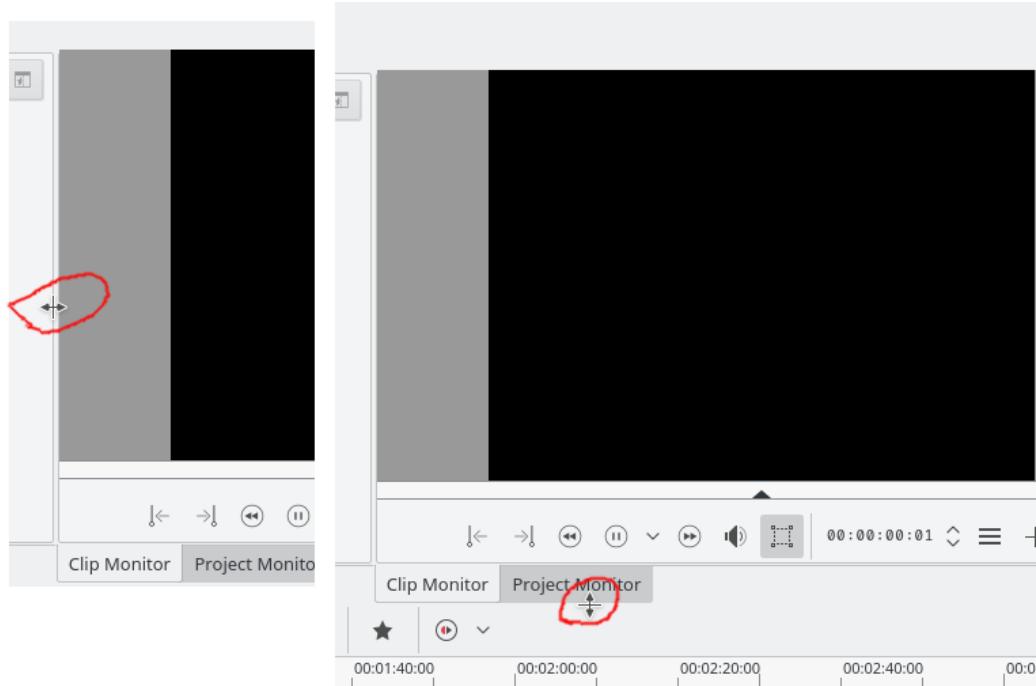
Chapter 42

Monitors

Kdenlive uses 2 monitor widgets to display your videos: **Clip Monitor** and **Project Monitor**. A third monitor - the **Record Monitor** - previews video capture. These monitors can be selected by clicking the corresponding tabs which appear at the bottom of the monitor window.

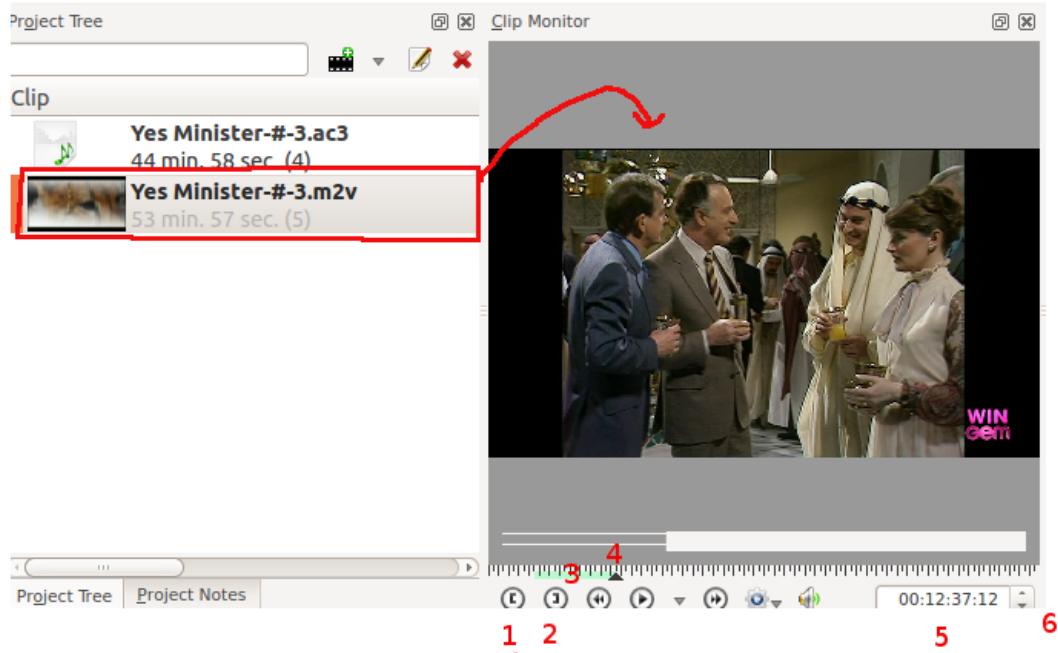
42.1 Resizing the Monitors

You can resize the monitors by dragging the sizing widget. It is a bit tricky to find the bottom widget. You need to hover just between the bottom of the monitor tab and the timeline



42.2 Clip Monitor

The **Clip monitor** displays the unedited clip that is currently selected in the Project Tree.



42.2.1 Widgets on the Clip Monitor

- 1) **Set zone start button** - click this to set an 'in' point.
- 2) **Set zone end button** - click this to set an 'out' point.
- 3) Zone duration indicator - selected by setting in and out points. Dragging the clip from the clip monitor to the timeline when there is a selected zone causes the selected zone, not the entire clip, to be copied to the timeline.
(Playback], audio will play as you drag this.)
- 4) Timecode widget - type a timecode here and hit **Enter** to go to an exact location in the clip. Timecode is in the format *hours:minutes:seconds:frames* (where *frames* will correspond to the number of frames per second in your project profile).
- 5) Timecode arrows - can be used to change the current position of the clip in the clip monitor.

42.2.2 Creating Zones in Clip Monitor

Zones are defined regions of clips that are indicated by a colored section in the clip monitor's timeline - see item 3 above. The beginning of a zone is set by clicking [(item 1 in the pic above). The end of a zone is set by clicking] (item 2 in the pic above)

42.2.3 Clip Monitor Right-click menu

The Clip Monitor has a right-click (context) menu as described [here](#).

42.3 Project Monitor

The **Project Monitor** displays your project's timeline - i.e. the edited version of your video.



42.3.1 Project Monitor Widgets

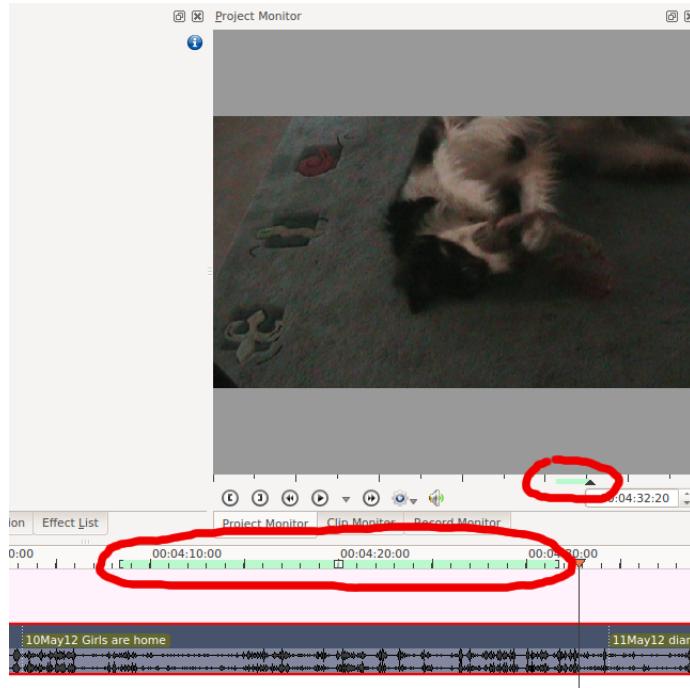
- 1) The position caret. Shows the current location in the project relative to the whole project. You can click and drag this to move the position in the project.
- 2) The timecode widget. You can type a timecode here and press **Enter** to bring the Project Monitor to an exact location.
- 3) Timecode widget control arrows. You can move the Project Monitor one frame at a time with these.

42.3.2 Creating Zones in Project Monitor

You can use the [and] buttons to create a zone in the Project Monitor the same way you make zones in the clip monitor.

The zone will be indicated by a colored bar both on the timeline and underneath the Project Monitor.

The Kdenlive Handbook



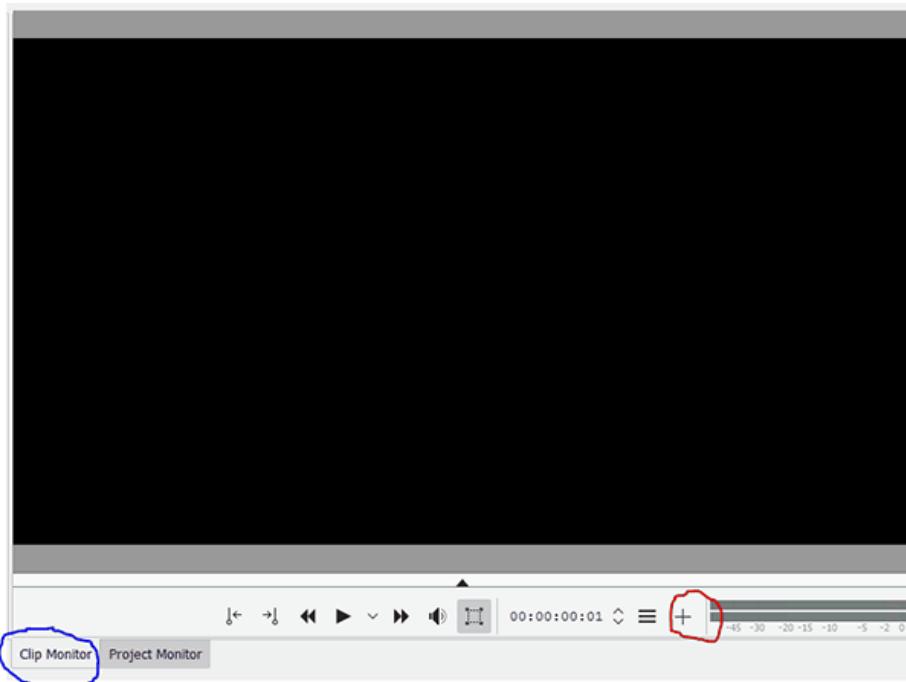
You can get Kdenlive to only render the selected zone - see [Rendering Using the Selected Zone Option](#).

42.3.3 Project Monitor Right-click menu

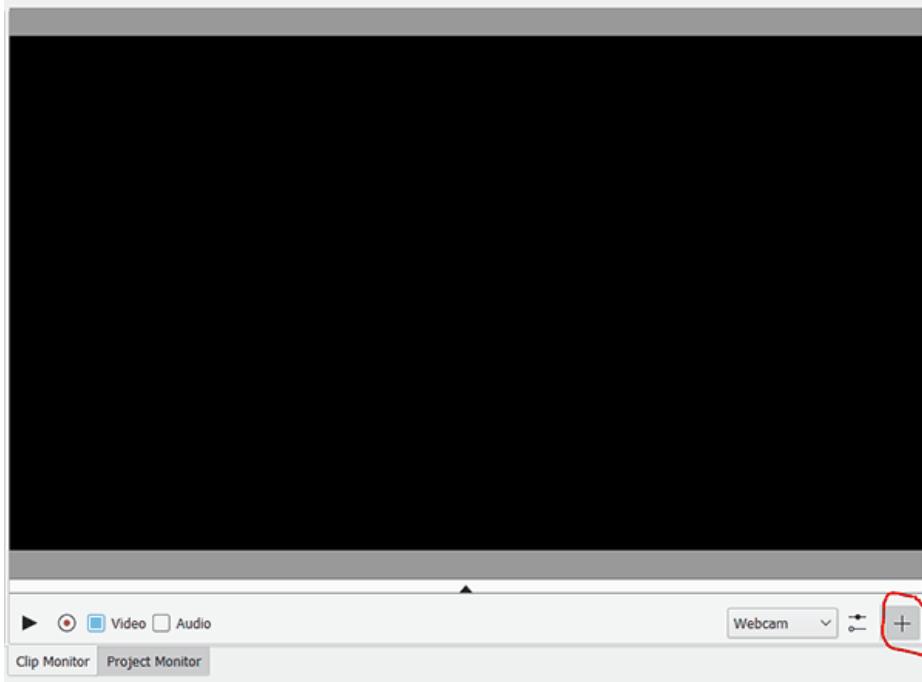
The project monitor has a right-click (context menu) as described [here](#).

42.4 Record Monitor

There is also a **Record monitor** that can be used to preview [capture](#) from Firewire, *Blackmagic cards* or through **FFmpeg / video4linux**.



To switch to the record monitor click in the clip monitor on the “+” sign.



To switch back to the clip monitor click in the record monitor the “+” sign.

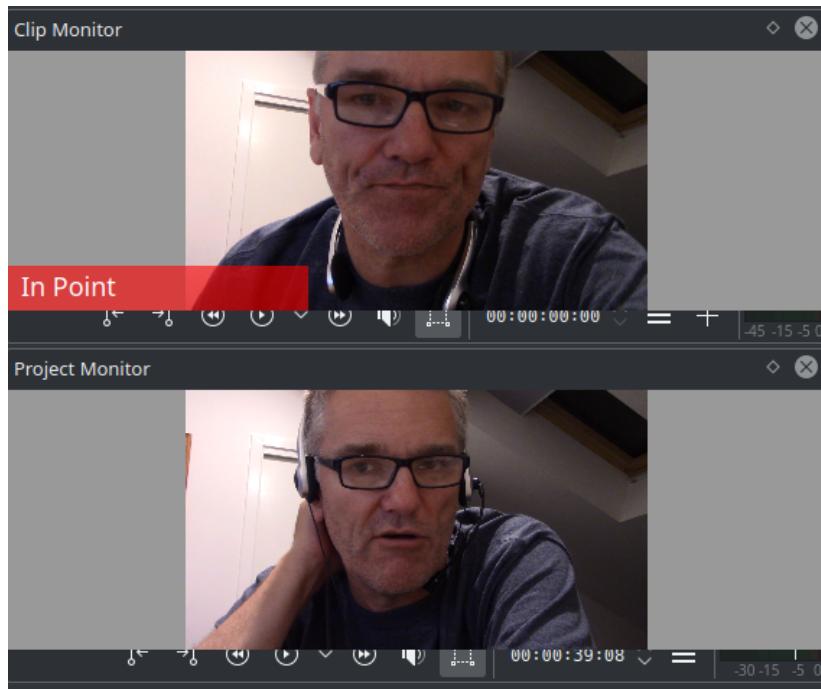
42.4.1 Version 19.04

Screen record is moved to **View → Screen Grab**

Chapter 43

Separate Clip and Project Monitors

You can click on the Tab names that label the Monitors and drag the monitor out into its own window.

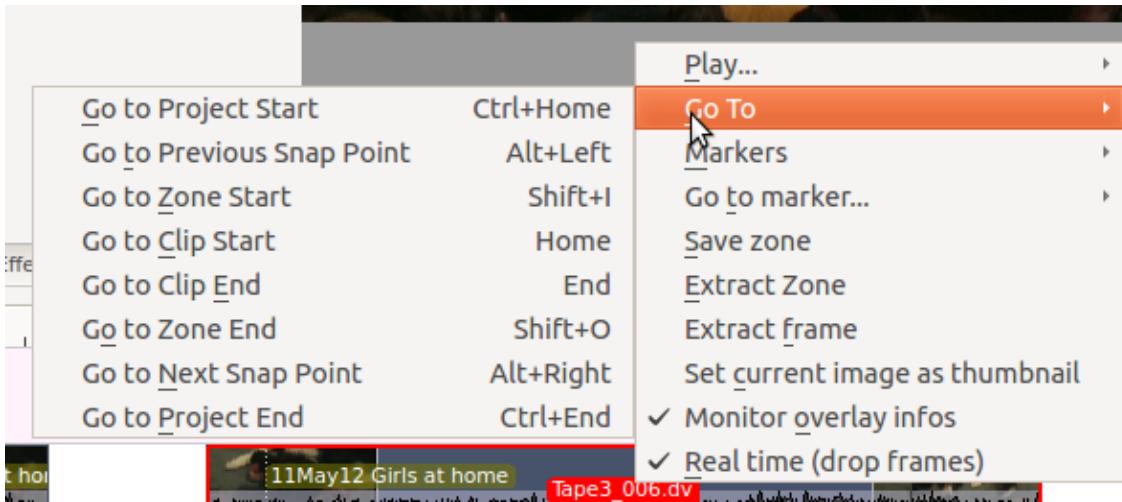


To put the monitors back into the Tabbed view - click on the monitor's title bar and drag the window on top of the other monitor window.

If the monitor has no title bar (intermittent defect) then you can not do this and you will need to reset kdenlive settings by deleting `~/.config/kdenliverc`

43.1 Clip Monitor - Right Click Menu

These are the menu items that are available when you right click a clip in the [Clip Monitor](#). These actions effect the clip that is currently selected in the [Project Tree](#). Similar menu items are available from a Right click menu in the Project monitor. However project monitor menu items effect the currently selected clip on the timeline.



43.1.1 Play...

43.1.1.1 Play

Plays the clip currently selected in the project tree

43.1.1.2 Play Zone

Plays the current zone and stops. (See [Creating Zones in Clip Monitor](#) for info about what a Zone is)

43.1.1.3 Loop Zone

Plays the current zone in a continuous loop. (See [Creating Zones in Clip Monitor](#) for info about what a Zone is)

43.1.2 Go To

43.1.2.1 Go to Project Start

When this item is selected from Clip Monitor it goes the beginning of the clip. (When selected in project monitor it goes to the beginning of the project)

43.1.2.2 Go to Previous Snap Point

Moves the clip position to the previous [Snap](#) Point. Snap points are sections in clips that other clips snap to when 'Snap' is turned on.

Snap points include markers, zone in-points, zone out-points, guides, transition start points etc

43.1.2.3 Go to Zone Start

Goes to the start of the Zone. (See [Creating Zones in Clip Monitor](#) for info about what a Zone is)

43.1.2.4 Go to Clip Start

Not working. Use Go To Project Start to make the clip monitor move to start of the clip.

43.1.2.5 Go to Clip End

Not working. Use Go To Project End to make the clip monitor move to end of the clip.

43.1.2.6 Go to Zone End

Goes to the end of the Zone. (See [Creating Zones in Clip Monitor](#) for info about what a Zone is)

43.1.2.7 Go to Next Snap Point

Moves the clip position to the next [Snap](#) Point. Snap points are sections in clips that other clips snap to when 'Snap' is turned on.

Snap points include markers, zone in-points, zone out-points, guides, transition start points etc

43.1.2.8 Go to Project End

When this item is selected from Clip Monitor it goes the end of the clip. (When selected in project monitor it goes to the end of the project)

43.1.3 Markers

43.1.3.1 Add Marker

Adds a new [marker](#) into the clip at the current time point.

43.1.3.2 Edit Marker

Brings up a dialog where you can edit the [marker](#) that is at the current time point. Use *Go to marker* to put the monitor at the marker you want to edit.

43.1.3.3 Delete Marker

Deletes the [marker](#) that is at the current timepoint. Use *Go to marker* to put the monitor at the marker you want to delete.

43.1.3.4 Delete All Markers

Deletes all the [markers](#) from the current clip.

43.1.3.5 Go to marker...

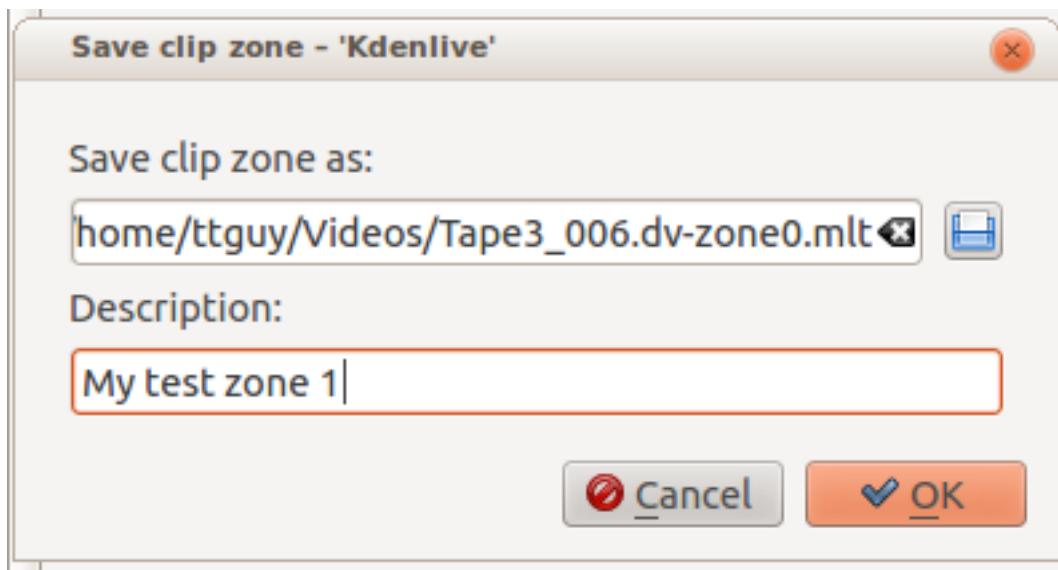
Same a Go to Marker [below](#).

43.1.4 Go to marker...

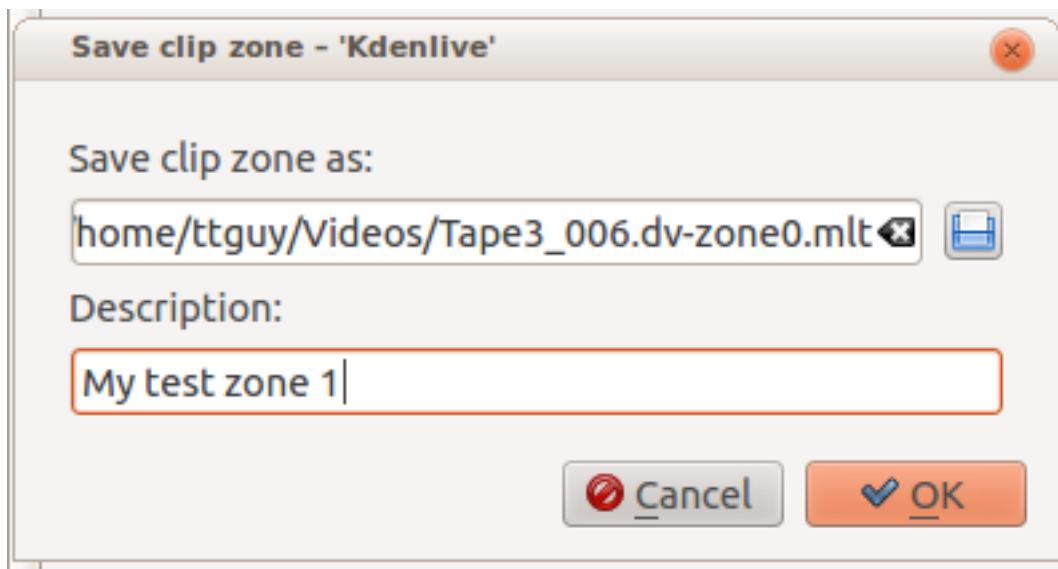
The menu item pops out a list of existing [markers](#) to select from. When one is selected the Clip monitor moves to that marker.

43.1.5 Save zone

This brings up the **Save Zone** dialog



This causes the current zone (see

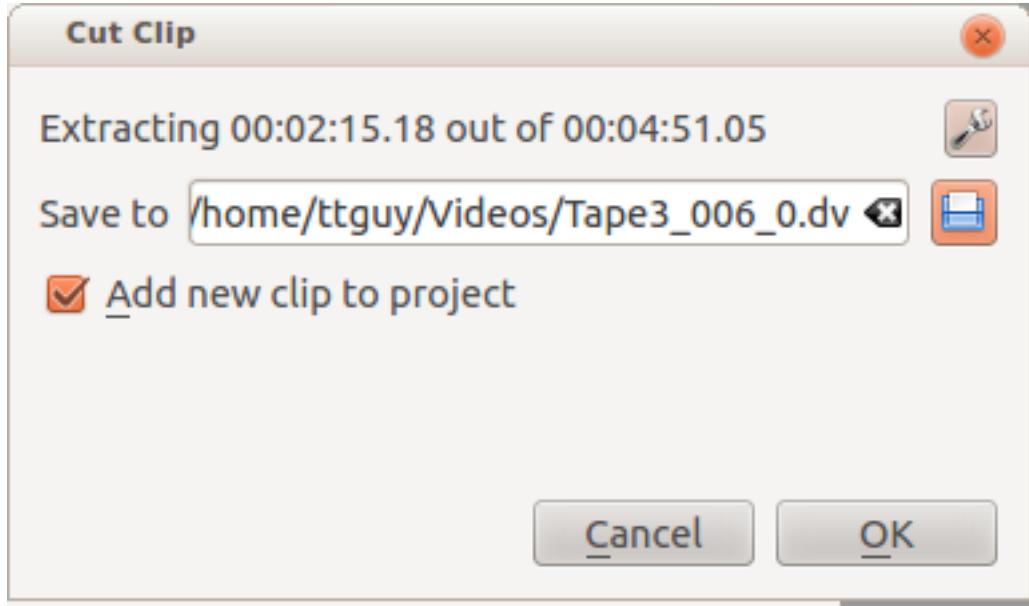


) to be saved as a `.mlt` file. This is a MLT video playlist file which is an xml format file describing the zone that we saved.

You can then load the `.mlt` files as clips into the project monitor and edit them like any other clip.

43.1.6 Extract Zone

This brings up the **Cut Clip** dialog which appears to be setup to extract the zone into a new file and add it to the project tree.



On the authors 0.9.2 and 0.9.5 version of Kdenlive this feature is broken for .dv format clips at least. It does work for .mp4 type clips. However, the accuracy of the cuts on the clip is way out.

```
ffmpeg version 0.8.3-4:0.8.3-0ubuntu0.12.04.1, Copyright (c) 2000-2012 the Libav developers
built on Jun 12 2012 16:37:58 with gcc 4.6.3
[dv @ 0x9d71480] Can't initialize DV format!
Make sure that you supply exactly two streams:
    video: 25fps or 29.97fps, audio: 2ch/48kHz/PCM
    (50Mbps allows an optional second audio stream)
Output #0, dv, to '/home/ttguy/Videos/Tape3_006_0.dv':
Metadata:
encoder : Lavf53.21.0
Stream #0.0: Video: dvvideo, yuv420p, 720x576 [PAR 64:45 DAR 16:9], q=-2-31, 28800 kb/s, 90k tbn, 25 tbc
Stream #0.1: Audio: pcm_s16le, 32000 Hz, 2 channels, 1024 kb/s
Stream mapping:
Stream #0.0 -> #0.0
Stream #0.1 -> #0.1
Could not write header for output file #0 (incorrect codec parameters ?)
```

43.1.7 Extract frame

Extracts the frame currently in the clip monitor as a .PNG image which you can save to the file system.

43.1.8 Set current image as thumbnail

This will change the thumbnail that represents this clip in the project tree to the frame that is currently selected in the clip monitor.

43.1.9 Monitor overlay infos

???

43.1.10 Real time (drop frames)

Setting this to the Checked state means the clip monitor will drop frames during playback to ensure the clip plays in real time. This does not effect the final rendered file - it just effect how the clip appears when being previewed in the clip monitor

43.2 Project Monitor - Right Click menu

These are the menu items that are available when you right click a clip in the [Project Monitor](#). These actions effect the clip that is currently selected in the timeline. Similar menu items are available from a Right click menu in the clip monitor. However clip monitor menu items effect the currently selected clip on the project tree.

43.2.1 Play...

43.2.1.1 Play

Plays the clip currently selected in the project tree

43.2.1.2 Play Zone

Plays the current zone and stops.

43.2.1.3 Loop Zone

Plays the current zone in a continuous loop.

43.2.2 Go To

43.2.2.1 Go to Project Start

When this item is selected from Project Monitor it goes the beginning of the project.

43.2.2.2 Go to Previous Snap Point

Moves the clip position to the previous [Snap](#) Point. Snap points are sections in clips that other clips snap to when 'Snap' is turned on.

Snap points include markers, zone in-points, zone out-points, guides, transition start points etc

43.2.2.3 Go to Zone Start

Goes to the start of the Zone.

43.2.2.4 Go to Next Snap Point

Moves the clip position to the next [Snap](#) Point. Snap points are sections in clips that other clips snap to when 'Snap' is turned on.

Snap points include markers, zone in-points, zone out-points, guides, transition start points etc

43.2.2.5 Go to Project End

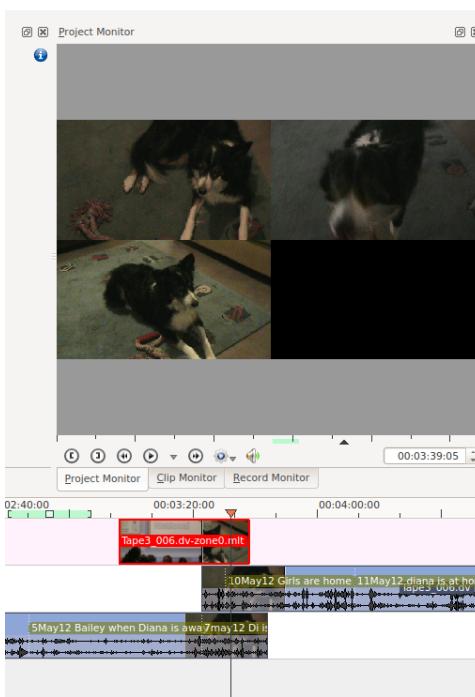
When this item is selected from Project Monitor it goes the end of the project.

43.2.3 Extract frame

Extracts the frame currently in the project monitor as a .PNG image which you can save to the file system.

43.2.4 Split View

Selecting this allows you to view all the video tracks at once in split screen in the project monitor. See picture.



43.2.5 Monitor overlay infos

???

43.2.6 Real time (drop frames)

Setting this to the Checked state means the clip monitor will drop frames during playback to ensure the clip plays in real time. This does not effect the final rendered file - it just effect how the clip appears when being previewed in the clip monitor

Chapter 44

Menu Reference

1. [File Menu](#)
2. [Edit Menu](#)
3. [Project Menu](#)
4. [Tool Menu](#)
5. [Clip Menu](#)
6. [Timeline Menu](#)
7. [Monitor Menu](#)
8. [View Menu](#)
9. [Settings Menu](#)

44.1 File Menu

1. [New](#)
2. [Open](#)
3. [Open Recent](#)
4. [Save](#)
5. [Save As](#)
6. [Revert](#)
7. [DVD Wizard](#)
8. [Transcode Clips](#)
9. [Quit](#)

44.1.1 File Menu — New

Creates a new Kdenlive project. The default keyboard shortcut is **Ctrl-N**.

See [Creating a new project](#).

The default settings that appear on this feature are defined under **Settings → Configure Kdenlive → Project Defaults**.

44.1.2 File Menu — Open

Opens a project that has been saved in a [.kdenlive](#) format file. The default keyboard shortcut is **Ctrl-O**.

44.1.3 File Menu — Open Recent

Displays a picklist of recently saved files (up to 10) to choose from. Click the **Clear List** choice when you want to start over with a fresh list.

44.1.4 File Menu — Save

Saves the current state of the project in a [.kdenlive](#) format file. Prompts for a file name if this is the first time the file is being saved. The default keyboard shortcut is **Ctrl-S**.

44.1.5 File Menu — Save As

Saves the current state of the project in a [.kdenlive](#) format file of your choice. The default keyboard shortcut is **Ctrl-Shift-S**.

44.1.6 File Menu — Revert

This abandons any changes to the project you have made since last saving and reverts back to the last saved version of the project.

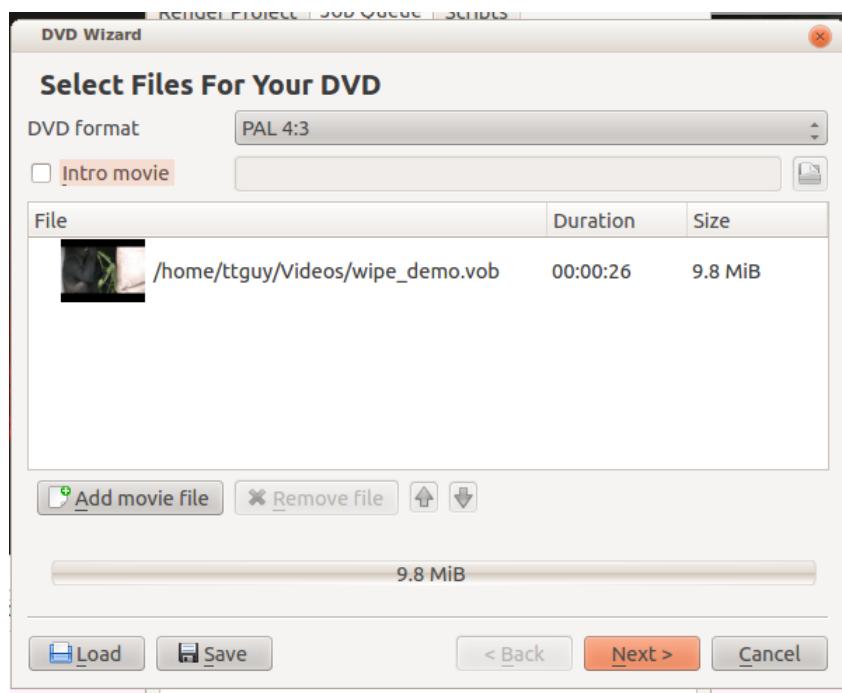
44.1.7 DVD Wizard

This feature allows you to author a DVD with a simple menu. Nothing flashy.

44.1.7.1 Screen 1 of the DVD Wizard

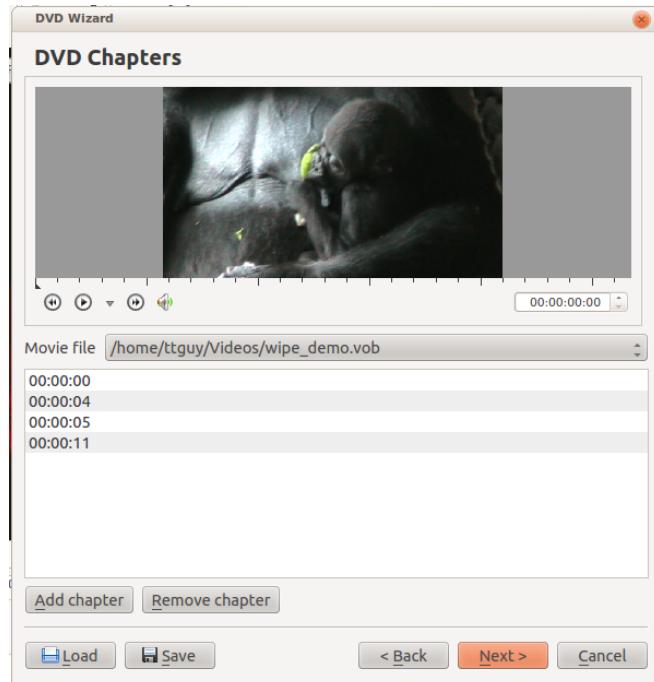
Select a file here that you have rendered using one of the [DVD render profiles](#).

The Kdenlive Handbook



44.1.7.2 Screen 2 of the DVD Wizard

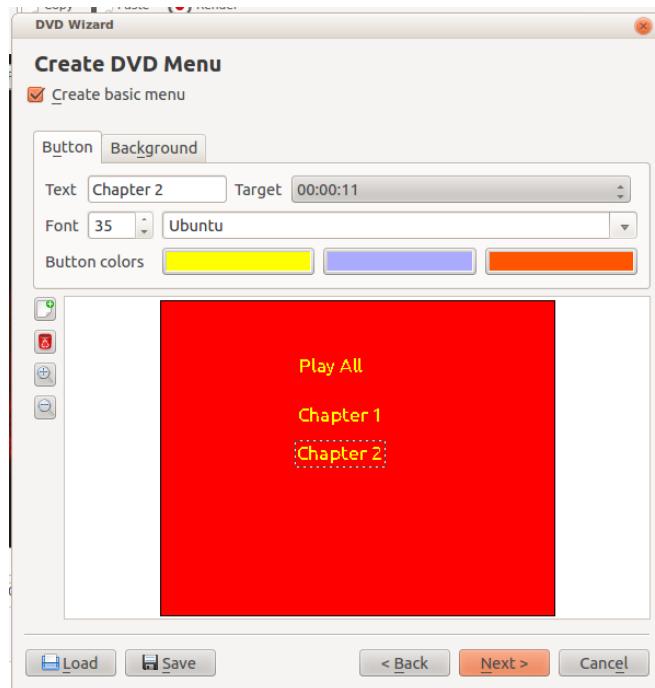
First click on the **00:00:00** in the center to select a file to play. Then play the file in the preview window and add chapters at the cursor's time point by clicking the **Add Chapter** button.



44.1.7.3 Screen 3 of the DVD Wizard

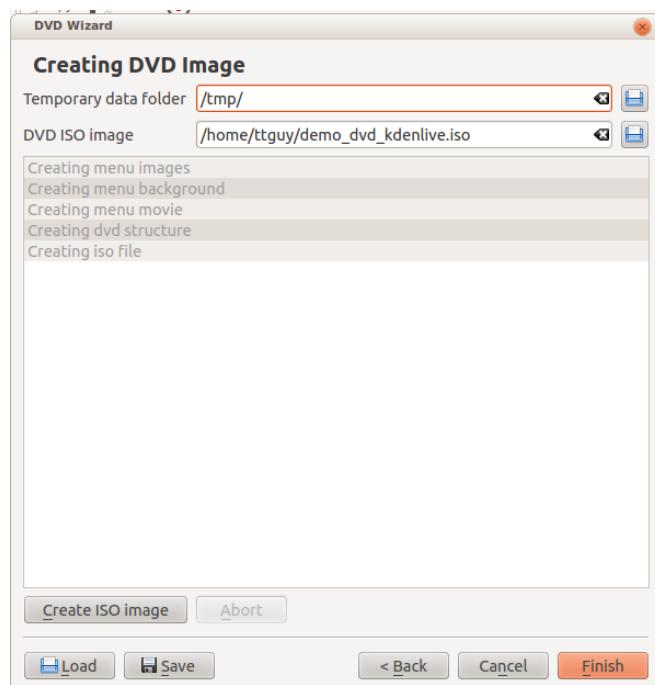
The first two buttons on the side allow you to add and delete menu buttons. You define what the button does using the **Target** drop down list.

The Kdenlive Handbook



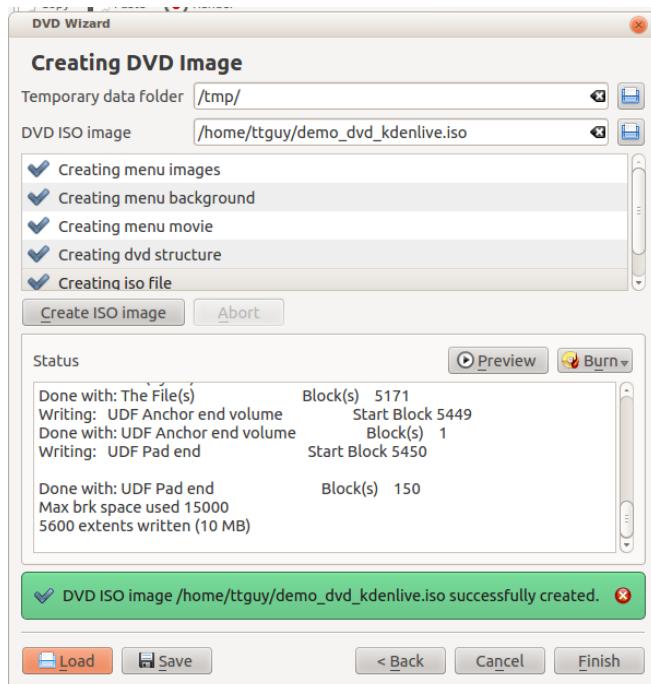
44.1.7.4 Screen 4 of the DVD Wizard

Click the **Create ISO Image** button on this screen to author your DVD. Click **Finish** only after you have clicked **Create ISO Image** button. Clicking **Finish** closes the DVD wizard without prompting for you to complete the job.

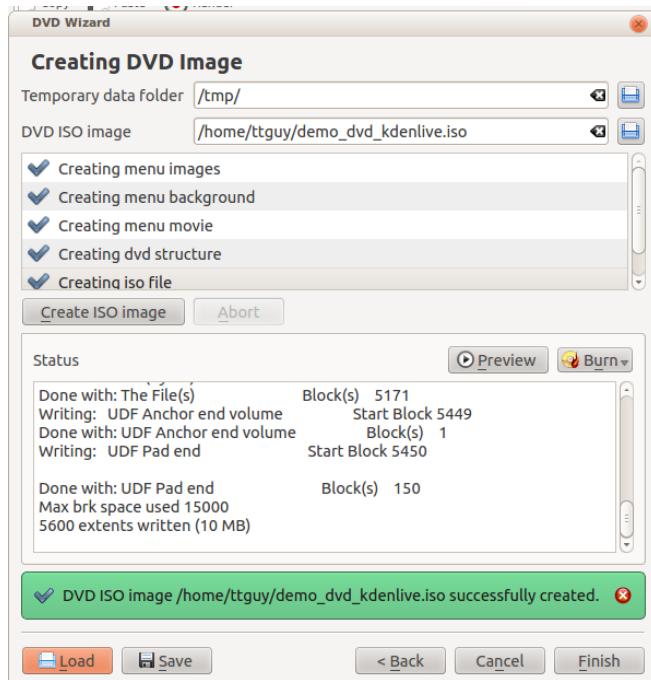


Result of successful DVD creation

The Kdenlive Handbook

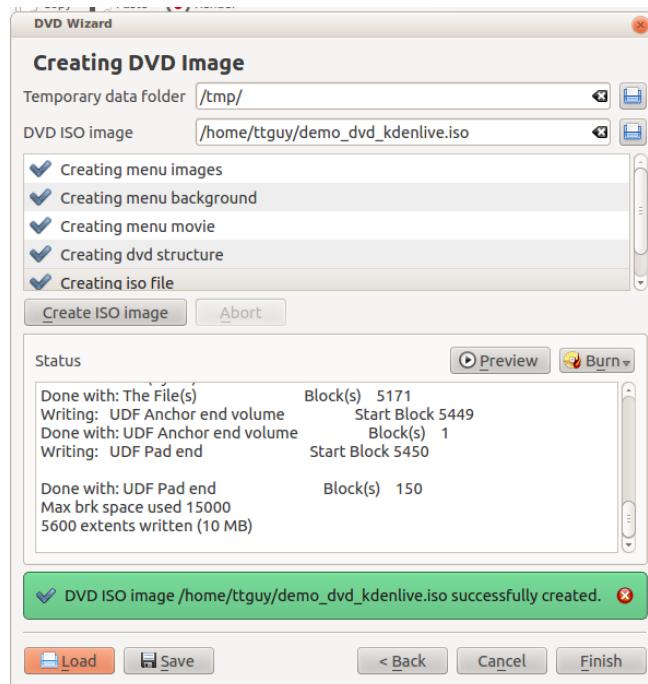


Resulting iso-file can then be written into writable DVD-disk using programs like



. File can also be viewed with most video player applications like

The Kdenlive Handbook

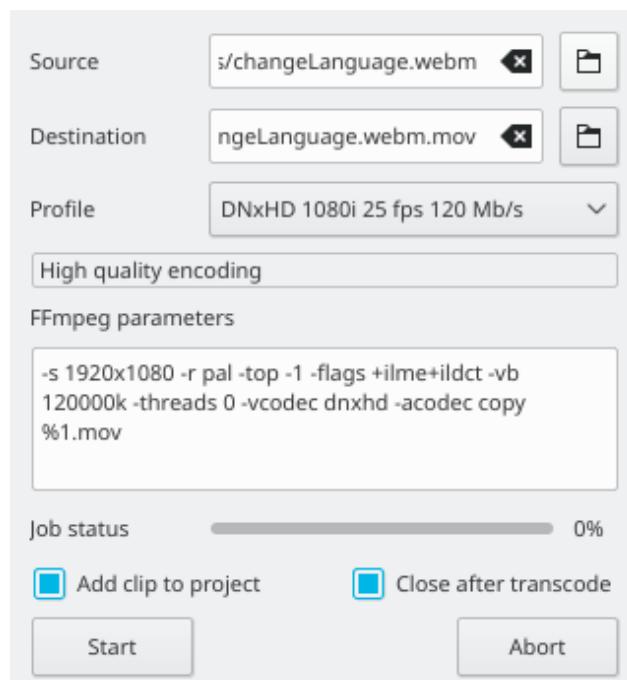


, Vlc or Smplayer (Disk menu might have issues to play correctly).

WARNING

This feature was temporarily removed from Kdenlive 19.04 and was reactivated in Kdenlive 19.04.1.

44.1.8 Transcode Clips



Use this to convert a video or audio clip from one codec/format to another.

Choose one source file or multiple source files and a profile that represents the desired destination codec/format. Optionally change the destination path and file name and hit **Start**. Otherwise, hit **Abort** to close the windows.

Transcoding a clip should be faster than loading the clip into the timeline and re-encoding it into a different format.

- **Add clip to project** controls if after the conversion, the new clip is added to the [Project Bin](#).
- **Close after encode** Uncheck this checkbox if there is the need to convert to another format after the conversion.

44.1.9 File Menu - Close

Not sure what this is supposed to do. It is always greyed out on my Kdenlive.

Maybe it is there ready for a version of Kdenlive that can have more than one project open at a time.

44.1.10 File Menu — Quit

Exits Kdenlive. Prompts you to save any unsaved changes. The default keyboard shortcut is **Ctrl-Q**.

44.2 Edit Menu

1. [Undo](#)
2. [Redo](#)
3. [Copy](#)
4. [Paste](#)
5. [Paste Effects](#)

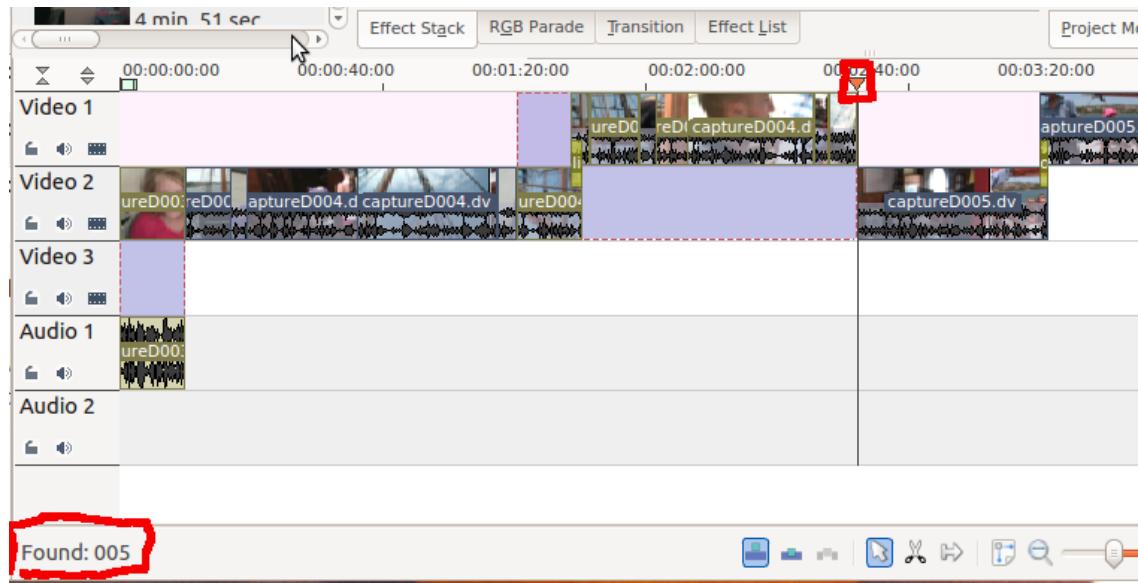
44.2.1 Edit Menu — Copy

Copies a clip selected in the timeline to the clipboard. The default keyboard shortcut is **Ctrl-C**. It also copies the effects attached to the clip to the clipboard. Use [Paste](#) to paste the clip into a different spot on the timeline. Use [Paste Effects](#) to paste just the effects from the copied clip onto a different clip.

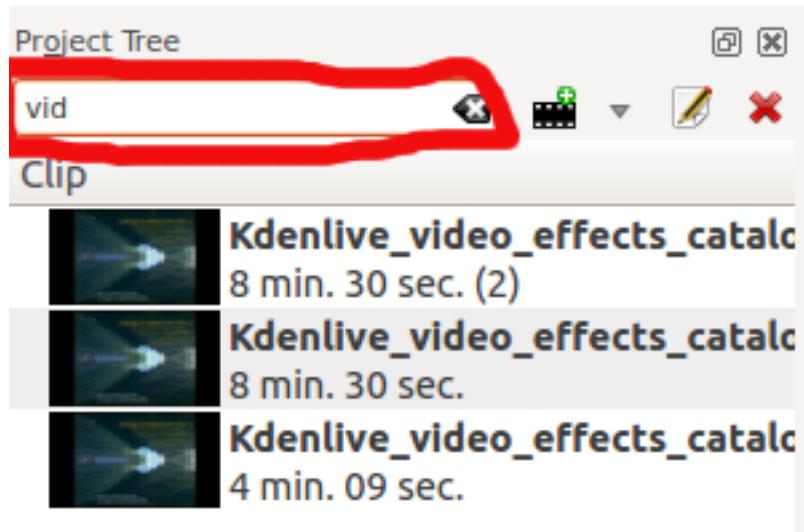
44.2.2 Edit Menu - Find

This feature can be used to quickly locate a clip or clips in the timeline. In order to use it, you must be in **Project Monitor** mode. Clicking **Edit → Find** (or the default shortcut **/**) turns on 'find text as you type' for five seconds or so. As you type, an incremental search is performed which attempts to match any part of a clip name to the characters you are typing. For instance, in the example shown below, as you type '0', the timeline cursor would move to the first clip on the timeline because that is the first clip that has a '0' in its name. After you've typed '00', the cursor has not moved because that clip is still a match. However, once you've typed '005', the cursor jumps to the clip shown since it's the first one that has a match for all three characters. The results of your search are displayed in the left corner of the status bar. If you pause typing for more than

five seconds, the ‘find text as you type’ timer will expire. See [Find Next](#) for how to find additional occurrences of matching clips.



There is also a find window at the top of the [Project Tree](#). Typing text in here causes the list of clips in the project tree to be filtered.



This clip filtering is independent of the [Edit → Find](#) menu item.

44.2.3 Edit Menu - Find Next

This feature is only enabled while an [Edit -> Find](#) operation is in progress and only after a successful match has been found. If you have the same clip used more than once in the timeline or you have multiple clips with similar names, you can find the additional occurrences of those clips using this feature. Once you get your first match using [Edit → Find](#), you can click [Edit → Find Next](#) (or better yet, the default keyboard shortcut F3, since you’ve only got five seconds to execute it!) and the cursor will move to the next clip(s) that contain a match for the characters you typed.

44.2.4 Edit Menu — Paste

Pastes an existing clip in the clipboard into a different spot on the timeline. The default keyboard shortcut is **Ctrl-V**.

44.2.5 Edit Menu — Paste Effects

Pastes just the effects from a clip existing in the clipboard onto a different clip.

44.2.6 Edit Menu — Redo

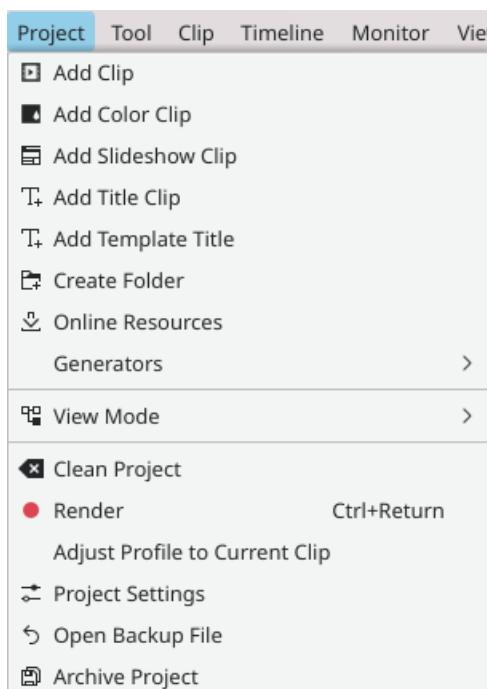
Edit → Redo reverses the previous **Undo** operation. The default keyboard shortcut is **Ctrl-Shift-Z**.

44.2.7 Edit Menu — Undo

Edit → Undo is used to reverse the last change you made or operation you performed in Kdenlive. If you have made multiple changes to your project, **Undo** can be used repeatedly to rollback each of the changes in the reverse order they were performed. **Undo** can also be executed from the icon on the **Extra Toolbar (Settings → Toolbars Shown)** or by using the keyboard shortcut **Ctrl-Z**.

To view a navigable list of all the changes which can be undone, see [Undo History](#).

44.2.8 Project Menu



Project Menu

1. Add Clip

2. [Add Color Clip](#)
3. [Add Slideshow Clip](#)
4. [Add Title Clip](#)
5. [Add Template Title](#)
6. [Create Folder](#)
7. [Online Resources](#)
8. [Generators](#)
9. [View Mode](#)
10. [Clean Project](#)
11. [Render](#)
12. [Extract Audio](#)
13. [Adjust Profile to Current Clip](#)
14. [Project Settings](#)
15. [Open Backup File](#)
16. [Archive Project](#)

<!-- # Stabilize (ver 0.9.2)

1. Clip Jobs> [Stabilize](#) (ver 0.9.3)
2. Clip Jobs > [Automatic Scene Split](#) (ver 0.9.3)
3. Clip Jobs > [Reverse Clip](#) (ver 0.9.6)
4. [Transcode](#)
5. [Tracks](#)
6. [Stop Motion Capture](#)
7. [Reload Clip](#)
8. [Proxy Clip](#)
9. [Clip in Timeline](#)
10. [Clip Properties](#)
11. [Edit Clip](#)
12. [Delete Clip -->](#)
13. REDIRECT [Delete Clip](#)

44.2.9 Stop Motion Capture

Capture images a frame at a time from a camera plugged into the HDMI port of a Linux®-compatible capture card to create stop motion animation. You can also transparently overlay the last captured frame on the monitor to easily see the difference with current live feed.

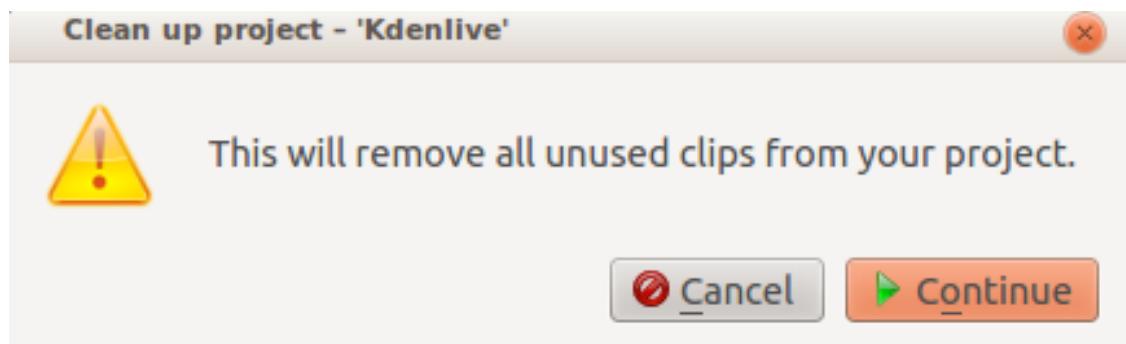
See [j-b-m's blog](#) on this feature.

1. REDIRECT [Delete Clip](#)
2. REDIRECT [Delete Clip](#)
3. REDIRECT [Delete Clip](#)

44.2.10 Clean Project

Available from the [Project](#) menu this function removes any clips from the Project Tree that are not currently being used on the timeline. The files remain on the hard drive and are only removed from the Project Tree.

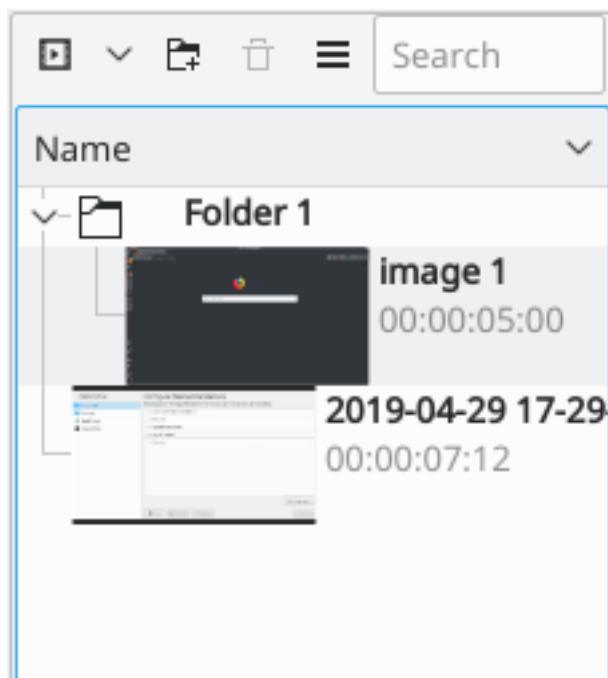
You can undo this action with **Ctrl-Z**.



This is different from the [Delete files](#) button on the Project Files tab in Project Settings which deletes files not used by the project from the hard drive.

44.2.11 Create Folder

There are three ways to access a menu containing this option: from the [Project](#) menu, the [Add Clip](#) dropdown on the Project Tree toolbar or by right-clicking on a clip in the Project Tree. This menu item creates a folder in the Project Tree. It is a virtual folder, not one created on your hard disk. You can use this feature to organize your Project Tree when it gets very large or complex by placing clips in folders, which can then be collapsed to free up space in the tree. Existing clips in the Project Tree can be moved to a folder using drag and drop. New clips can be added directly to a folder by first selecting the folder (or any clip in the folder) and then choosing an add clip option from one of the dropdown menus described above.



Click on the text **Folder** to the right of the icon to edit the name of the folder.

44.2.12 Generators

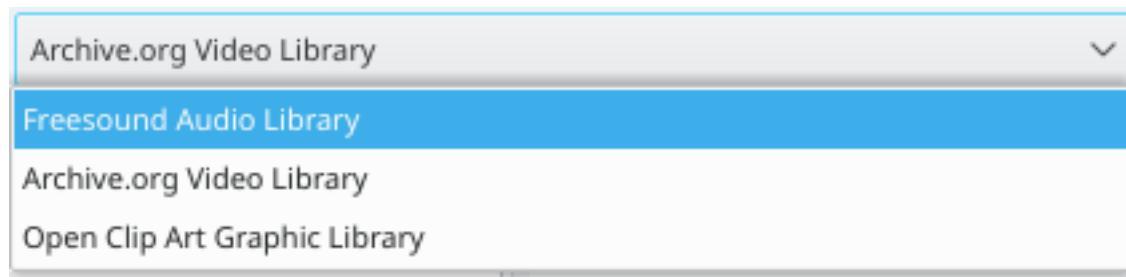
Used to create a clip with either a countdown timer or noise.

This option is also available from the Add Clip icon in the Project Tree — see [Generators](#).

Chapter 45

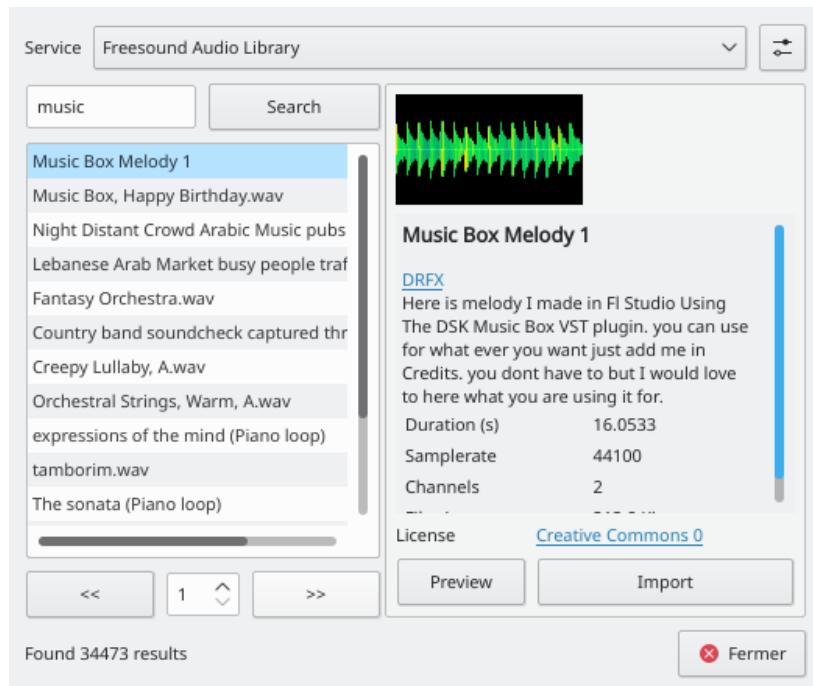
Online Resources

Available from the [Project](#) menu and the [Add Clip](#) dropdown, this feature allows you to search online audio, video and graphics libraries for resources to download.



45.1 Freesound Audio Library

The Freesound Audio Library part of this became non-functional on old versions of Kdenlive in October 2015 because freesound now requires user registration. If you are using an old version of Kdenlive, you can still download great audio clips from <https://www.freesound.org/> — just not through the Kdenlive interface.



Version 15.12 (December 2015) allowed users to automatically download the high quality .mp3 preview file from freesound using the **Online Resources** module.

45.2 Freesound Audio Library - Future version

A future version of Kdenlive will allow you to authenticate Kdenlive with your free freesound web account and download the high-quality files.

If the **Online Resources** dialog offers up this error,

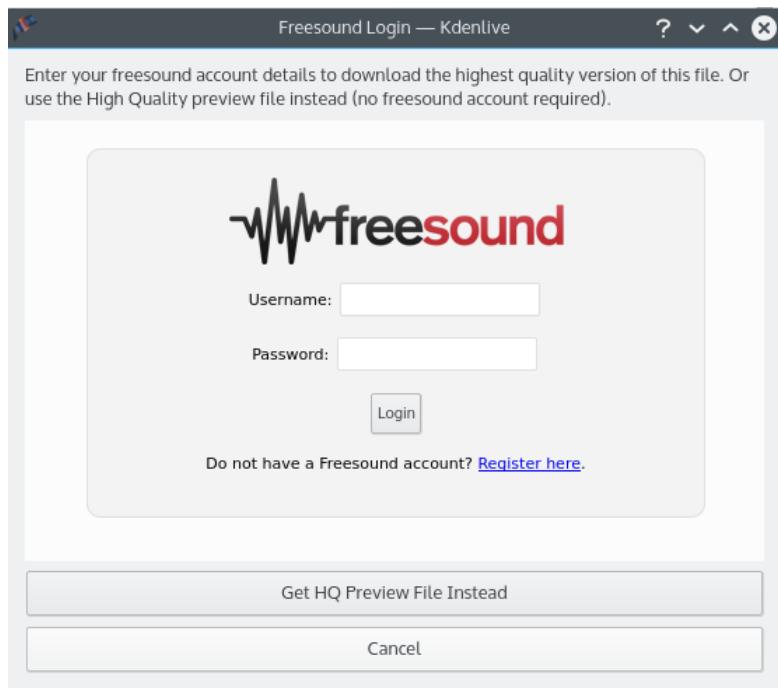
Error Getting Access Token from Freesound.

Try importing again to obtain a new freesound connection

hit the import button again to make it try to establish a new authentication handshake with the freesound web site.

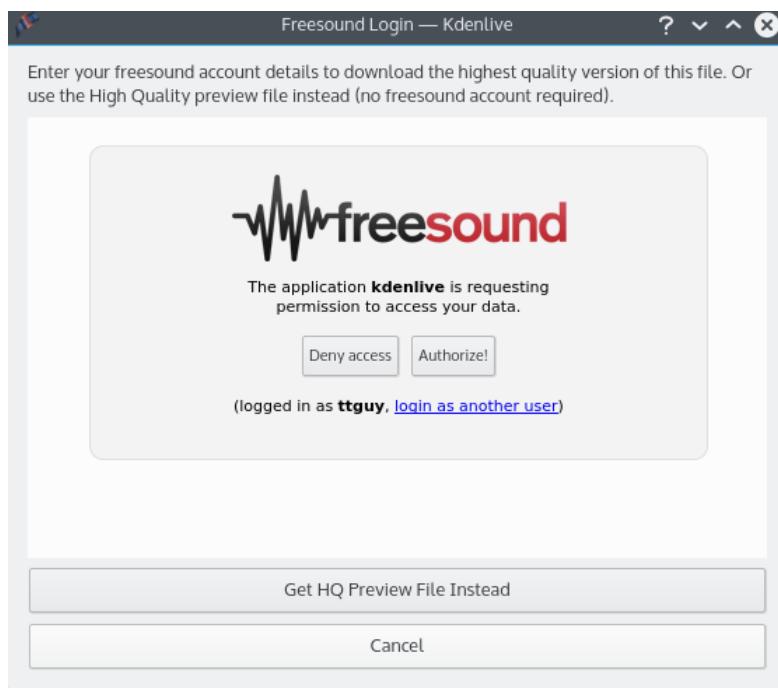
On hitting the import button, and if this is the first time you have used the freesound library, you will be presented with a login dialog where you can use your freesound account credentials to authenticate and download the highest quality version of the audio file. If you do not have a freesound account, you can choose to download the high-quality .mp3 preview version of the file instead.

The Kdenlive Handbook



It might take a few seconds for the freesound web page to load in the window — be patient.

Once you have logged into the freesound system, you must grant Kdenlive permission to access your freesound account.



You can revoke Kdenlive's access to your freesound account from the freesound website. Log in to your account and click the link in the App permissions section on the settings page 'Manage your list of permissions granted to API applications'

http://freesound.org/home/app_permissions/.

Once permission is granted, Kdenlive obtains authentication keys that it saves to the kdenlive config file (~/.config/kdenliverc). It uses these keys to automatically authenticate on future

file import requests. Delete the tokens from the kdenlive config file to prevent this.

45.3 Archive Org Video Library

This searches the internet archives video library for video files that you can import into Kdenlive.
Animated .gifs are displayed as video previews

45.4 Open Clip Art Graphic Library

This searches the Open Clip Art library for clip art that can be imported into Kdenlive

45.4.1 Open Backup File

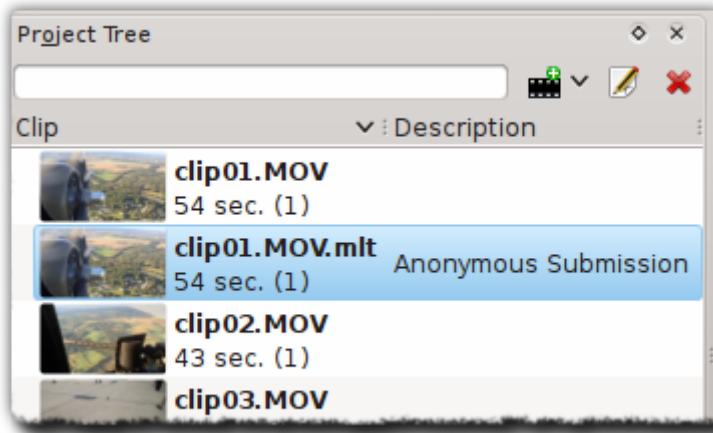
This allows you to open up the automatic backups of the projects that Kdenlive creates.
See [Backup](#).

Chapter 46

Reverse Clip

This menu item is available from the Clip Jobs menu that appears when you [right-click](#) on a clip in the Project Tree or from under the [Project](#) menu when a clip is selected in the Project Tree. It is used to create a clip which plays in reverse.

This feature became available in version 0.9.6 of Kdenlive.



When you select the **Reverse Clip** option from the menu, a new clip is created in the Project Tree. It has the same file name as the clip from which it was created, but with a .mlt extension appended. You can then add this clip to the timeline and when you play it, the video of the original source clip will play, but in reverse.

NOTE

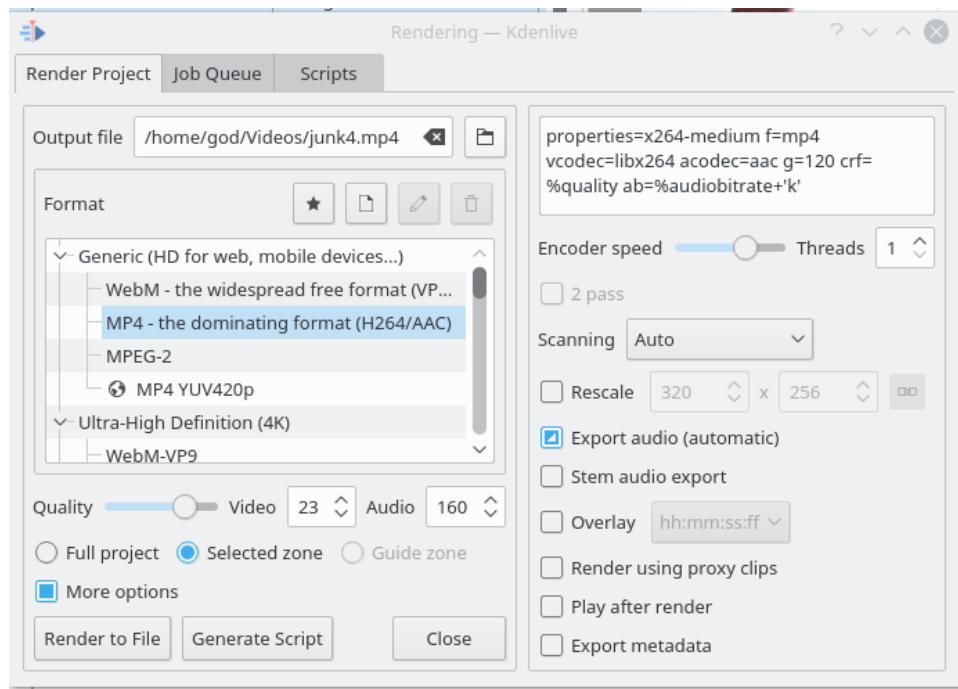
According to mantis [2933](#) some clips will only produce white image and error on reverse.

46.1 Rendering

Rendering is the process where the edited clips are saved into a single complete video clip. During the rendering process the video can be compressed and converted to a number of different video formats (aka codecs).

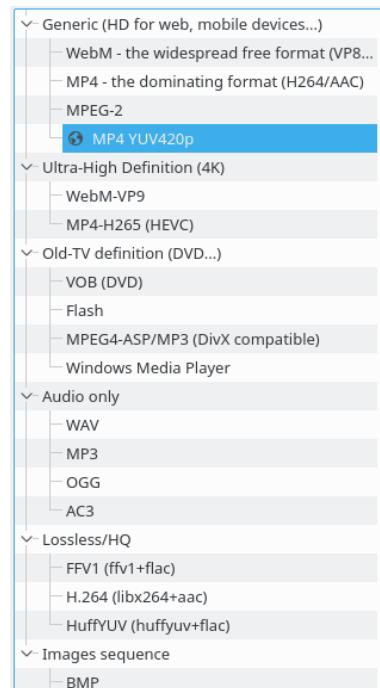
The rendering dialog is brought up from the render button **Render**  , from selecting [Render](#) in the [Project Menu](#) or by the [Ctrl-Enter](#) shortcut.

46.1.1 Rendering Dialog Ver 17.04



File rendering dialog - ver 17.04

46.1.2 Rendering Profile Categories



File rendering categories- ver 17.04

Kdenlive offers many different preset rendering profiles to choose from. The rendering profiles are grouped into categories. See picture Above.

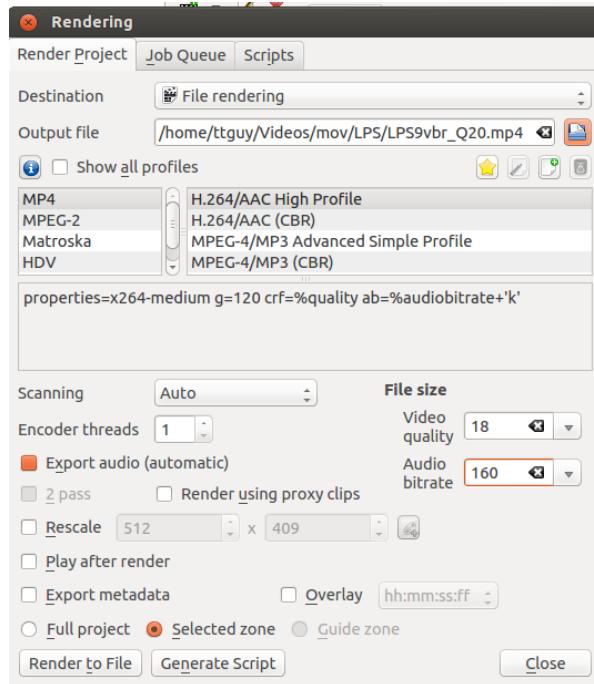


46.1.2.1 File Rendering - earlier Versions

The following figures show the render dialog when the **Destination** category is **File Rendering**. The first two figures show the layout of the dialog under ver 0.9.10 of Kdenlive and the third figure shows how the dialog appears in ver 0.9.8 of Kdenlive.

Version 0.9.10 of Kdenlive changes the render dialog significantly because it implements a method where you can choose to render the project with either a variable video bitrate (VBR) or a constant video bitrate (CBR)

46.1.2.2 Variable Bit Rate - earlier Versions



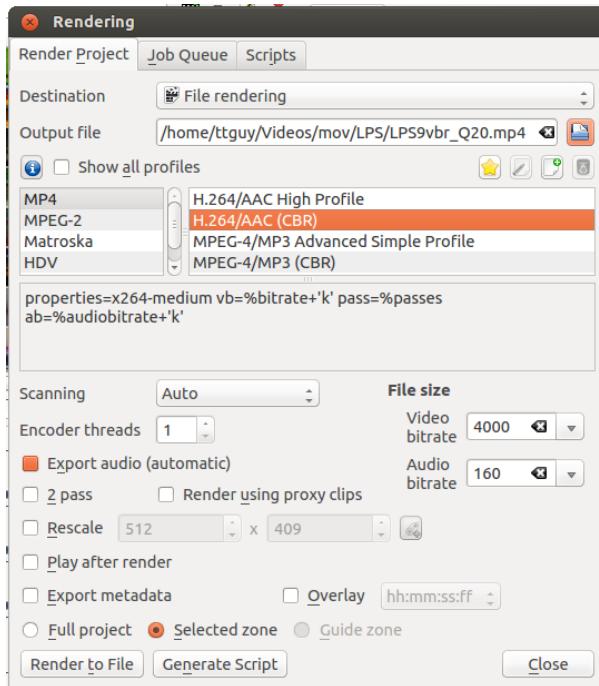
File rendering dialog Variable Bit Rate - ver 0.9.10

When a variable bitrate profile is selected, the **File Size** section displays a drop down for choosing the **Video quality** you want. This quality figure is a codec-dependent number representing the quality of the video that will be rendered. Generally, lower numbers mean higher quality video and larger file sizes (e.g. x264, MPEG2, VPx), but some codecs use opposite order (e.g. Theora). Profiles provided with Kdenlive offer these numbers ordered from best quality (almost lossless) to lower quality (still not degrading too much). The exact file size that is produced can not be predicted when using the VBR method. The idea behind this is that you specify a certain quality of video that you want through the entire video and the encoding optimizes bitrate to give you that constant quality, lowering data size for low action scenes and using more bits for high action scenes.

Example: 1min 55 seconds of 720 x 576 H.264 iPhone footage rendered at quality 15 with the H.264/AAC High Profile would produce a file size of 186 Mb. Whereas rendering the same footage at quality 20 produced an 83Mb file.

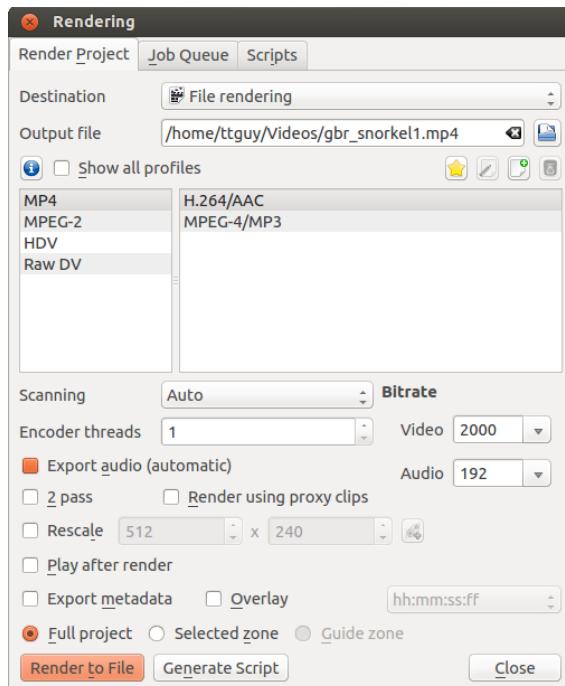
The Kdenlive Handbook

46.1.2.3 Constant Bit Rate - earlier Versions



File rendering dialog Constant Bit Rate - ver 0.9.10

When a constant bitrate (CBR) profile is selected, the **File Size** section displays a drop down for choosing the **Video bitrate** you want. This is similar to the ver <=0.9.8 behaviour of Kdenlive. You select the video bitrate you want and the video is encoded at that video bitrate across its entire length.



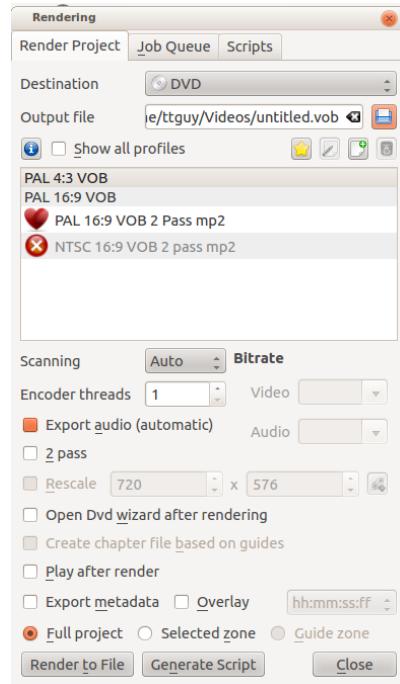
File rendering dialog - ver 0.9.8

46.1.2.4 DVD Rendering - earlier Versions

DVD Rendering produces files that are compatible with DVD authoring software. MPEG2 files created from [file rendering](#) profiles are less likely to be compatible with DVD software. For quality settings see [Variable Bit Rate](#) and [Constant Bit Rate](#). For DVD VBR lower [Video quality](#) setting number means better quality.

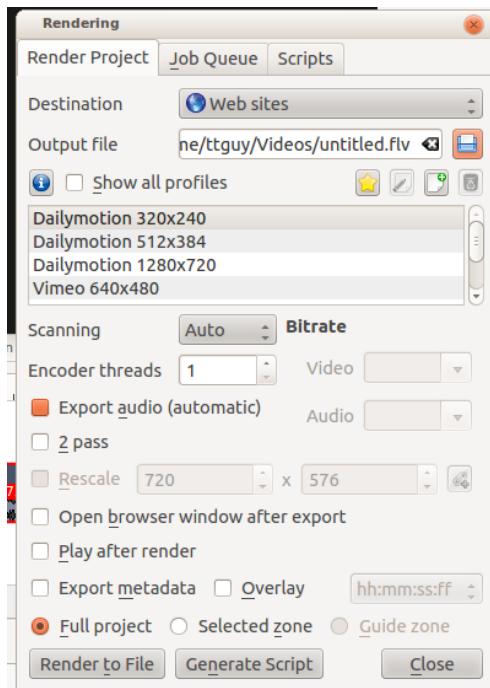
Note that this rendering does not create a DVD file system. It merely creates DVD-compatible MPEG2 files that can be used by DVD authoring software. If you check the [Open DVD Wizard after Rendering](#) check box, then the [DVD Wizard](#) will open and you can use it to create a DVD file system (in .ISO format). The DVD Wizard is also available from the [File Menu](#).

Create chapter file based on guides enables chapter markings on your DVD. Chapters work with the ‘next’ and ‘previous’ buttons on the DVD player and can populate scene selection menus. In order to create chapters this way you need to have marked chapters with [guides](#) on timeline. DVD wizard enables marking of chapters also during DVD creation step.

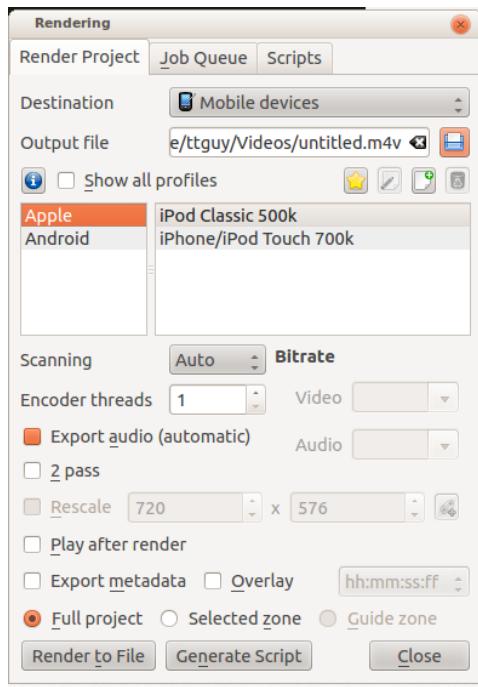


The Kdenlive Handbook

46.1.2.5 Websites - earlier Versions



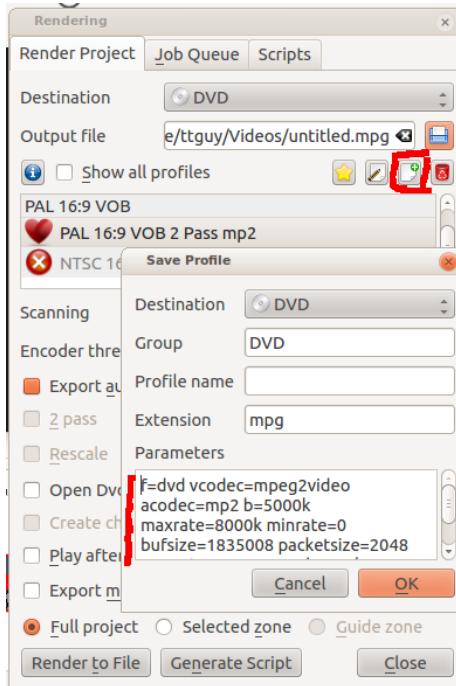
46.1.2.6 Mobile Devices - earlier Versions



46.1.3 Create Custom Render Profiles

You can create your own custom render profiles by clicking the button highlighted in the screenshot below.

The Kdenlive Handbook

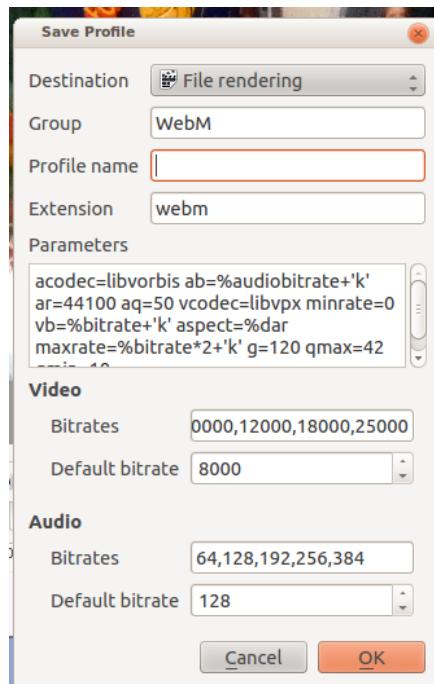


This will open the **Save Profile** dialog (also shown in the above screenshot) and the **Parameters** section will be filled in with the render parameters of the profile that you had selected when you clicked the button. You can edit values in the parameters and save your own custom render profile.

The parameters in the rendering profile are *melt* parameters. For an explanation of their meaning, check the [melt documentation](#) or type `melt -help` in a command prompt.

The above screenshot shows the **Save Profile** dialog as it appears in vers <=0.9.4 of Kdenlive.

In version >=0.9.5 there is an improved version of the **Save Profile** dialog (see below) which allows you to customize the bitrates that are offered in the render profile.

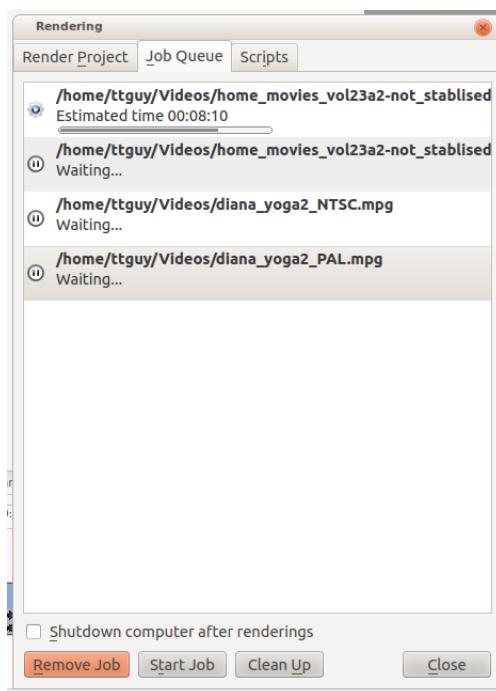


See also [Render Profile Parameters - How to read them](#)

46.1.4 Rendering In Batch mode

If you have a lot of rendering jobs to do, you can use Kdenlive to create rendering scripts which you can accumulate and then execute in batch mode overnight. See [Rendering Using Rendering Scripts](#).

Alternatively, once you have submitted a rendering job on a project and it is up and running in the **Job Queue**, you can drag the render window out of the way and edit the project some more or load a new project and render that one too. The second render job submitted will go into the **Job Queue**. Editing the project after a render job is submitted will not change the settings on that job.



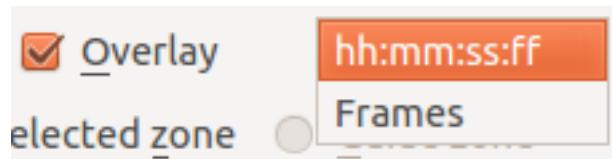
46.1.5 Rendering Using the Guide Zone Option

This makes use of [Guides](#) to define a region of the project that is to be rendered. See [Rendering Using Rendering Scripts](#).

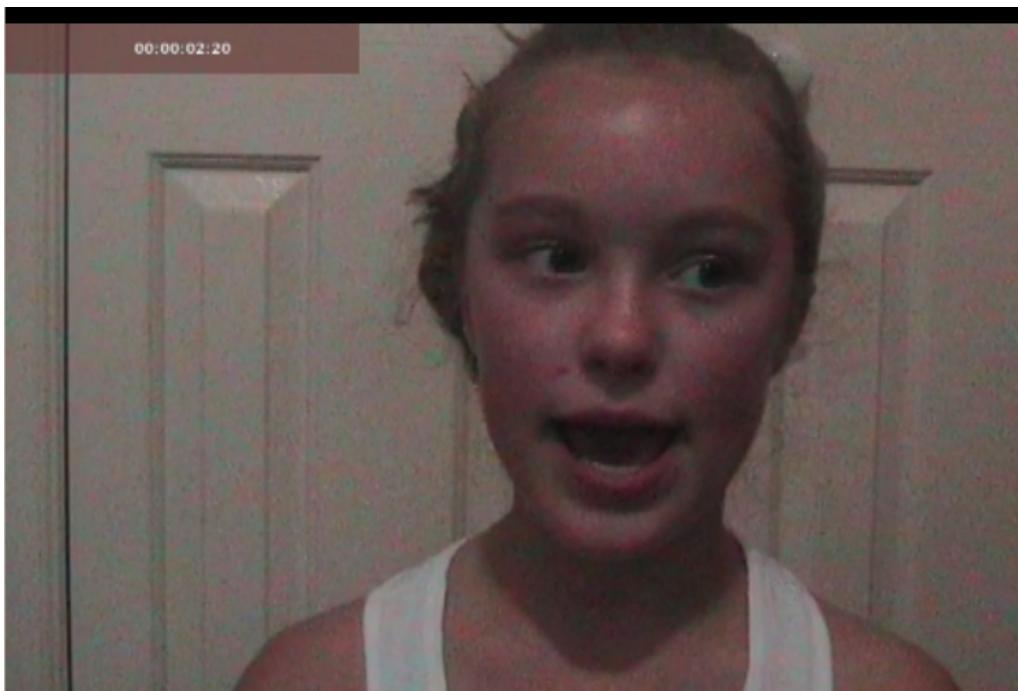
46.1.6 Rendering Using the Selected Zone Option

If you select the **Selected Zone** radio button from the bottom of the render dialog, Kdenlive will only render that portion of the project which has a selected zone created for it. See [Creating Zones in Project Monitor](#)

46.1.7 Render Overlay



This option overlays a time code or frame count over the rendered video. This will put the overlay over the entire rendered project. Alternatively you can use the [Dynamic Text](#) effect to overlay selected regions of the video.



render overlay result

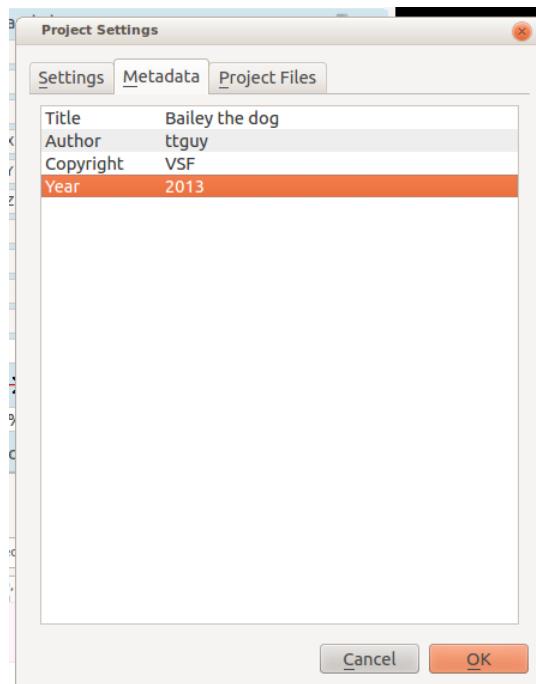
46.1.8 Export Metadata

Check this to have the metadata which has been entered under [Project Settings- > Metadata](#) placed into the metadata of the rendered file.

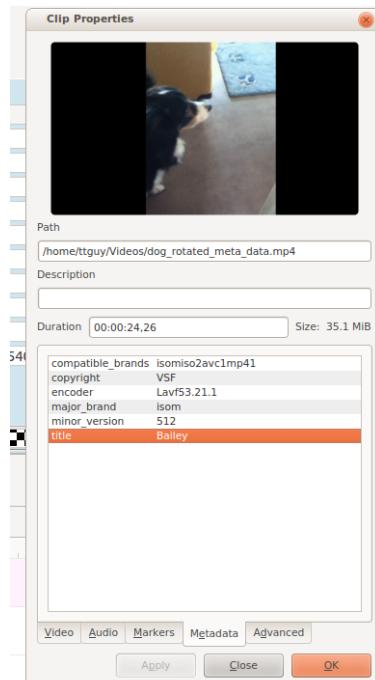
In version 0.9.6 for Linux®, you have to double-click the data area of a metadata field line to make the field available for input.

This image shows metadata settings for a project:

The Kdenlive Handbook



And this is the metadata on the resulting clip (rendered with **Export Metadata** checked).



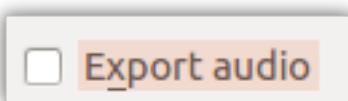
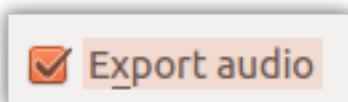
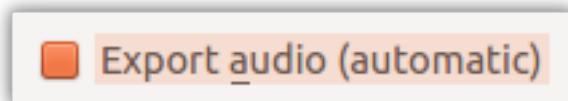
```
$ ffprobe dog_rotated_meta_data.mp4
```

```
Metadata:  
major_brand      : isom  
minor_version    : 512  
compatible_brands: isomiso2avc1mp41  
title           : Bailey  
encoder          : Lavf53.21.1  
copyright        : VSF
```

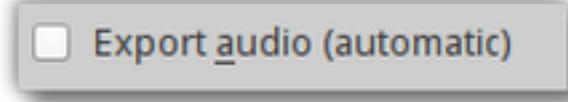
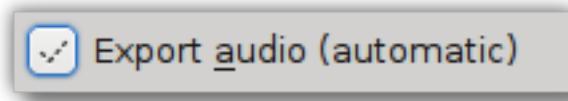
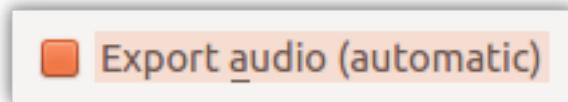
This reveals a bug in ver 0.9.4 of Kdenlive - the full title is not placed in the metadata - it is truncated at the first space. This has been fixed in 0.9.5 of Kdenlive as Mantis number [2996](#).

46.1.9 Export Audio Checkbox

This is an unusual one. Instead of a normal on/off checkbox toggle, the **Export Audio** checkbox cycles among three choices.



As if that weren't confusing enough, the *Export audio (automatic)* option may appear different depending on your combination of distribution, desktop environment and theme. See three examples below:



Regardless of how the checkbox on the *Export audio (automatic)* option may appear on your installation, rest assured that when that option is showing, it is enabled.

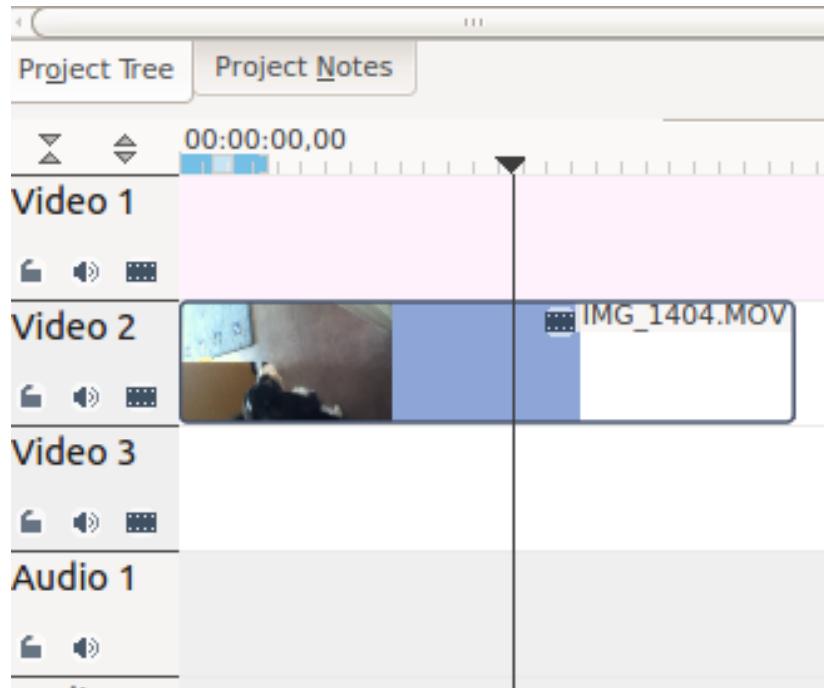
So what do the three options mean?

Export audio (automatic) means detect if an audio track is present and write the audio track if found

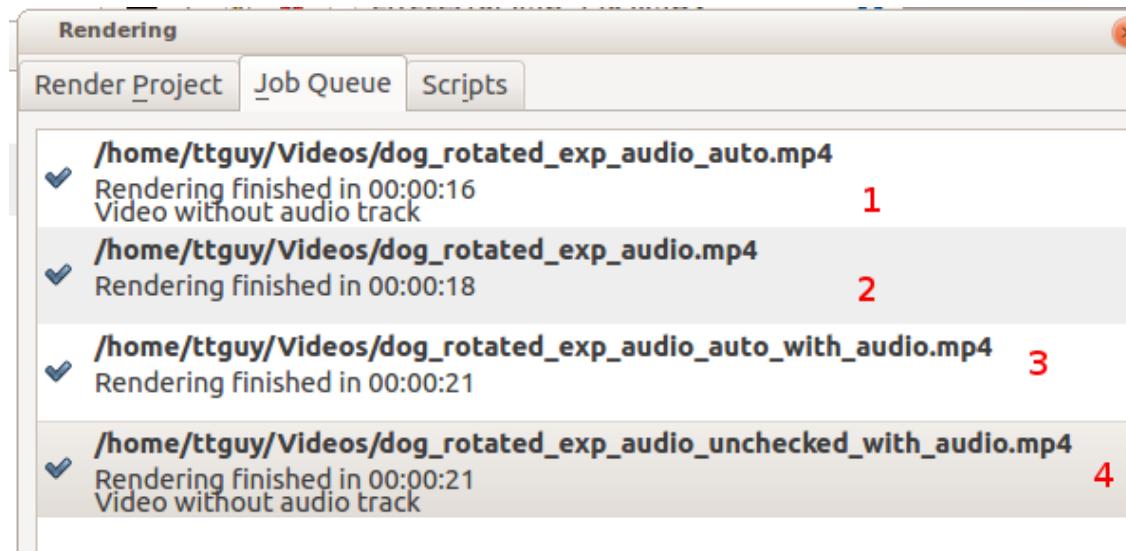
Export audio, when checked, means write an audio track in the rendered file even if there is no audio track to write.

Export audio, when unchecked, means do not write an audio track in the rendered file.

The difference in behavior between enabling *Export audio* versus *Export audio (automatic)* can be seen in the situation where you have a video on the timeline but there is no audio track on the timeline and the video in the video track also does not have an audio track. An example of such a situation is shown in the screenshot below.



In this situation, if you render with *Enable audio (automatic)*, the rendered file will not have an audio track (Result 1 on screenshot below). But if you render with *Export Audio* checked, then the rendered file will contain an audio track — the track will however be empty (Result 2 on screenshot below).



FFprobe on file generated from an audio-less track using *Export audio (automatic)*. Note only one stream — Stream #0.0 — a video stream. Kdenlive automatically detected there was not an audio track and so it did not write one.

```
$ ffprobe dog_rotated_exp_audio_auto.mp4
```

Metadata:

```

major_brand      : isom
minor_version    : 512
compatible_brands: isomiso2avc1mp41
encoder         : Lavf53.21.1
Duration: 00:00:03.62, start: 0.000000, bitrate: 12592 kb/s
Stream #0.0(und): Video: h264 (High), yuv420p, 1280x720 [PAR 1:1 DAR 16:9], ←
    12587 kb/s, 27.83 fps, 27.83 tbr, 30k tbn, 55.66 tbc

```

FFprobe on file generated from an audio-less track using *Export audio* checked. Note two streams — Stream #0.0 and Stream #0.1 — the latter being an aac audio track. We forced Kdenlive to write an audio track even though there was not any source audio to write.

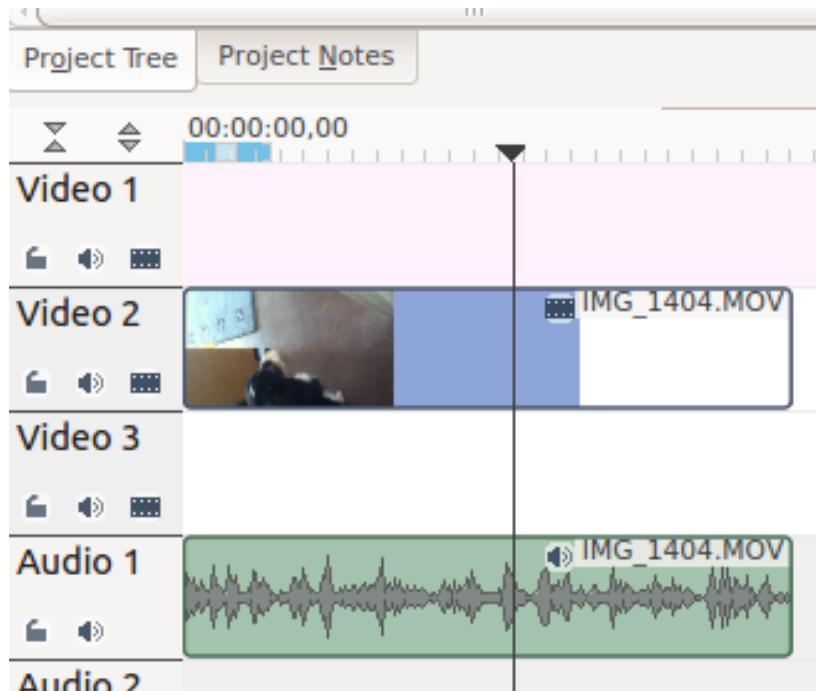
```
$ ffprobe dog_rotated_exp_audio.mp4
```

```

Metadata:
major_brand      : isom
minor_version    : 512
compatible_brands: isomiso2avc1mp41
encoder         : Lavf53.21.1
Duration: 00:00:03.62, start: 0.000000, bitrate: 12598 kb/s
Stream #0.0(und): Video: h264 (High), yuv420p, 1280x720 [PAR 1:1 DAR 16:9], ←
    12587 kb/s, 27.83 fps, 27.83 tbr, 30k tbn, 55.66 tbc
Stream #0.1(und): Audio: aac, 48000 Hz, stereo, s16, 2 kb/s

```

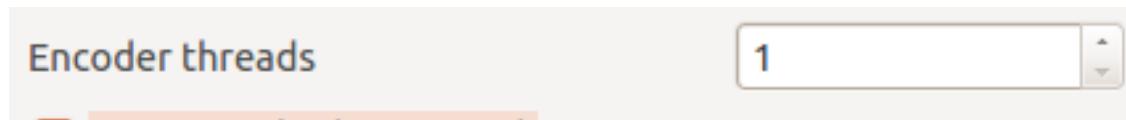
In cases where there is an audio track ...



Rendering with *Export audio* unchecked will produce a file with no audio track — result 4 in the screenshot above.

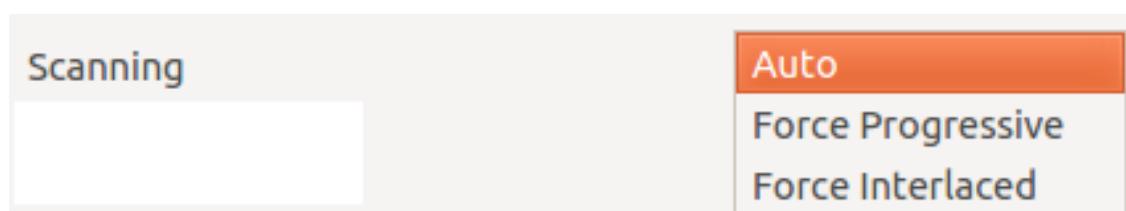
Rendering with *Export audio (automatic)* (result 3 in the screenshot above) or with *Export audio* checked will produce files with Audio tracks.

46.1.10 Encoder Threads



Determines the value of *Encoding threads* passed to melt. For encoding to certain codecs, namely MPEG-2, MPEG-4, H.264, and VP8, kdenlive can use more than one thread and thus make use of multiple cores. Increase this number to take advantage of this feature on multi-core machines. See [melt doco - threads](#) and [melt FAQ](#) on multi-threading.

46.1.11 Scanning Dropdown



This option controls the frame scanning setting the rendered file will have.

Options are *Force Progressive*, *Force Interlaced* and *Auto*.

Auto causes the rendered file to take the scanning settings that are defined in the [project settings](#). Use the other options to override the setting defined in the project settings.

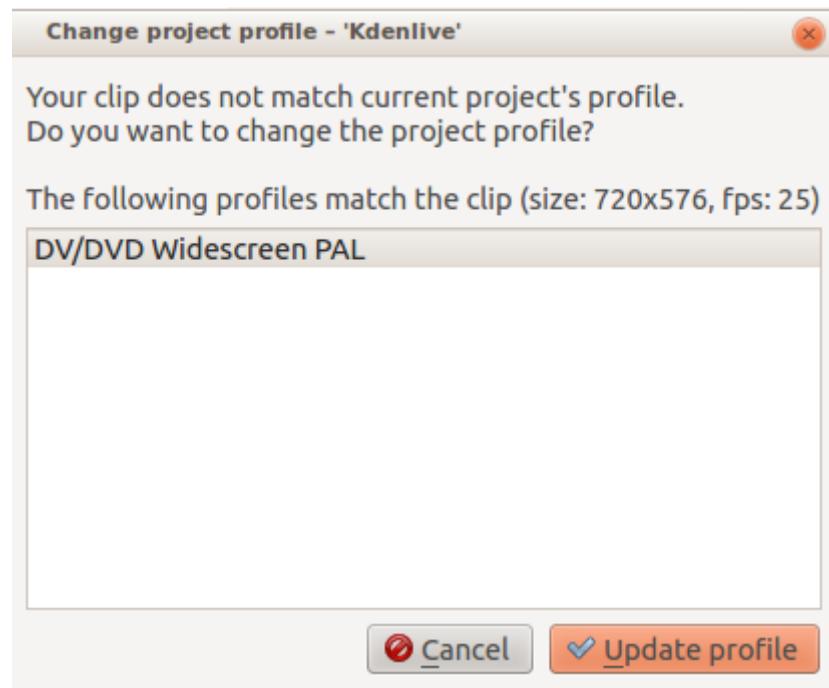
46.2 Adjust Profile to Current Clip

This function is available from the [Project](#) menu.

This function offers up a suggested Project Profile that would be most suitable for the properties of the currently selected clip (selected in the Project Tree?).

You get to see the profile it suggests and accept the suggestion or cancel.

The Kdenlive Handbook



Chapter 47

Analyse Keyframes

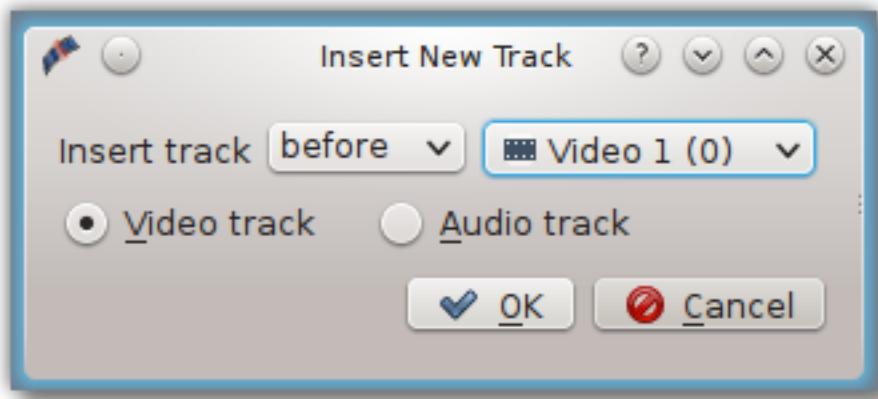
What is this menu Item supposed to do ?

This menu item is available from the Clip Jobs menu that appears when you right-click on a clip in the Project Tree

47.1 Tracks

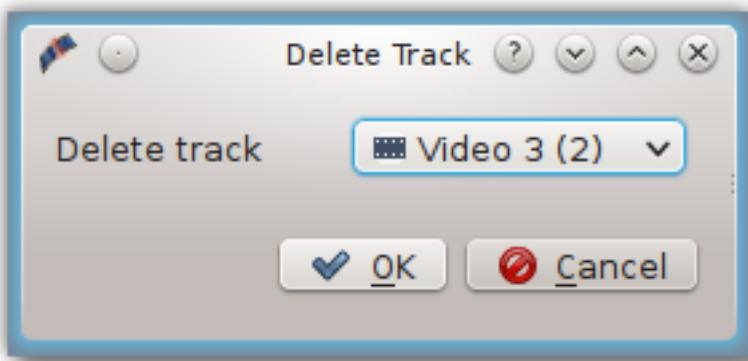
This submenu can also be displayed by right-clicking in the track header (anywhere but on the track name). It has the following options:

47.1.1 Insert Track



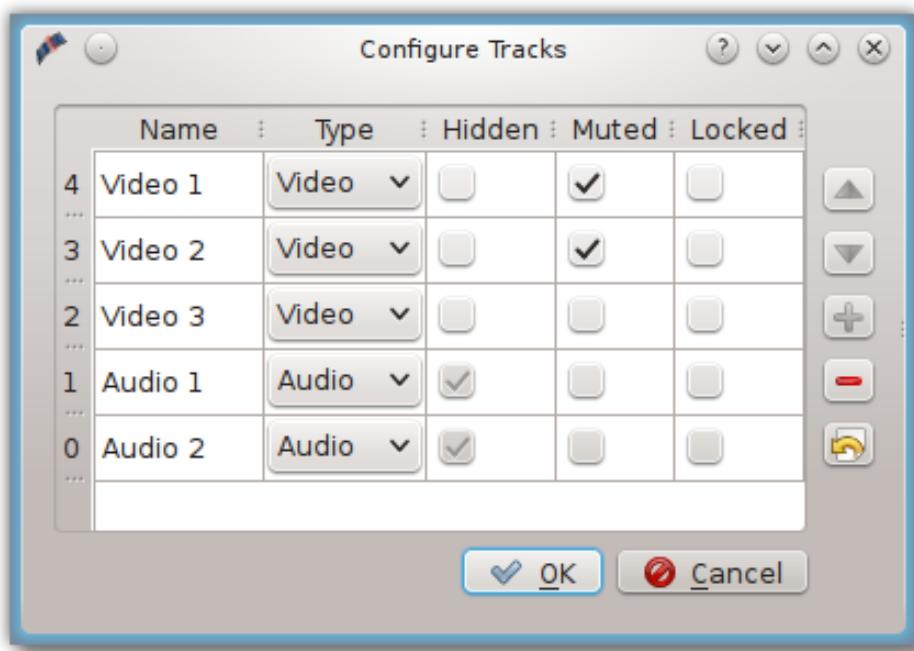
Displays a dialog which lets you choose which type of track to insert and where — before or after a specified existing track.

47.1.2 Delete Track



Displays a dialog which lets you choose which track to delete.

47.1.3 Configure Tracks



Brings up the configuration dialog for all tracks. The only functionality provided in this dialog that is not available elsewhere is changing the track type. Three buttons on the right side (for moving tracks up/down and adding new tracks) have not been implemented yet as of Kdenlive version 0.9.10. Changing the track name, hiding, muting and locking can all be done directly on the [track header](#).

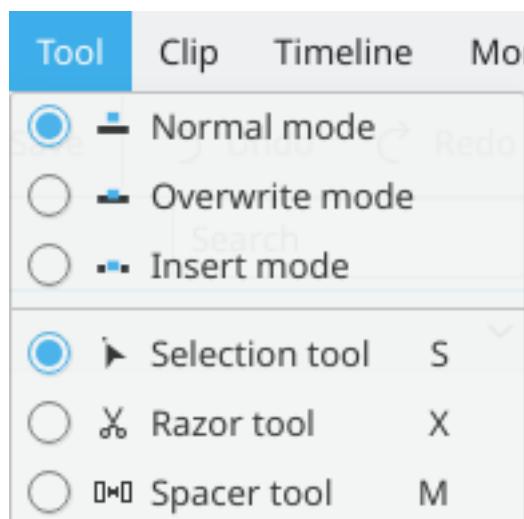
47.1.4 Select All in Current Track

Selects all clips in the current track.

47.1.5 Select All

Selects all clips in all tracks.

47.2 Tool Menu



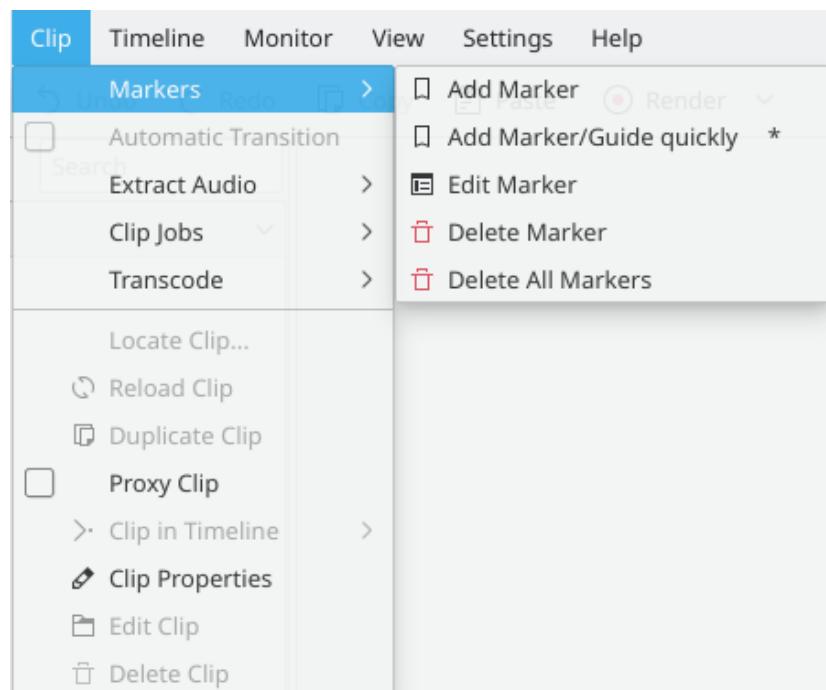
Tool menu

The options on this menu provide two modes and three tools which affect how operations are performed on clips in the timeline. These same options can also be accessed from the [Bottom Tool Bar](#) and more details on their usage can be found there.

Chapter 48

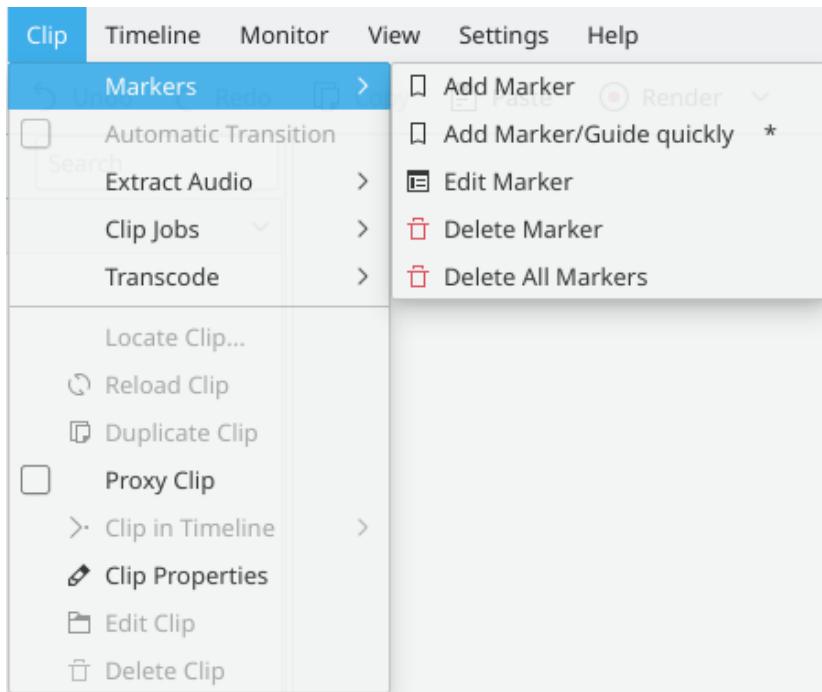
Clip Menu

The functions controlled from this menu affect the clip that is selected in the timeline. This is in contrast to [Project Menu](#) functions which affect the clips selected in the Project Tree.



48.1 Markers Menu Item

The context menu allows you to **Add**, **Edit** and **Delete**



48.2 Automatic Transition

When a transition is selected, this menu item allows you toggle the transition to and from [Automatic Transition](#) mode.

48.3 Other Items

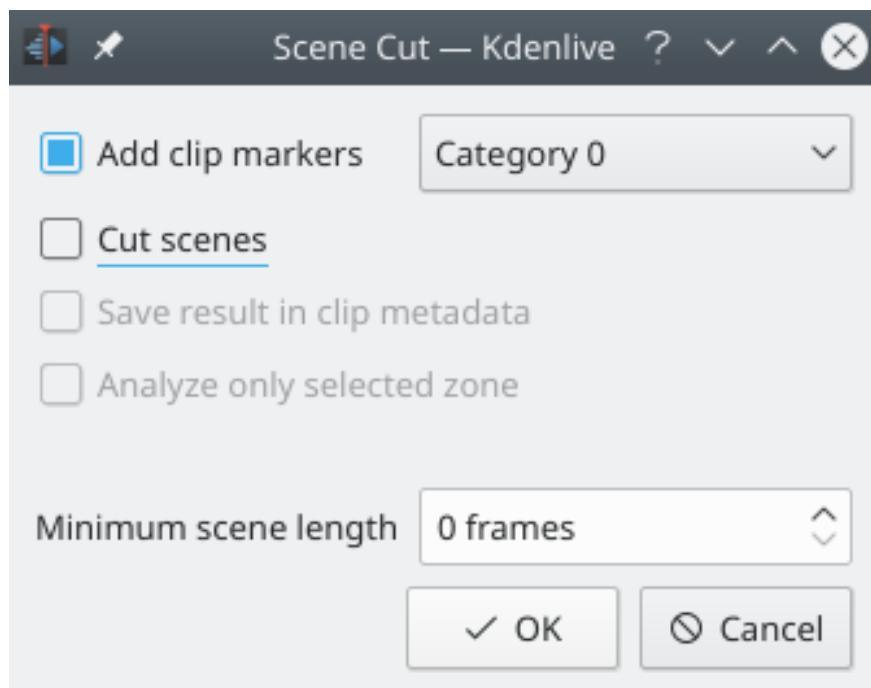
The other menu items which appear when in the Clip menu are also available from the [Project Bin - Right-Click Menu](#).

1. [Extract Audio](#)
2. [Transcode](#)
3. **Clip Jobs**
 - (a) [Stabilize](#)
 - (b) [Automatic Scene Split](#)
 - (c) [Duplicate Clip with speed change](#)
4. [Clip in Timeline](#)
5. [Locate Clip](#)
6. [Reload Clip](#)
7. [Duplicate Clip](#)
8. [Proxy Clip](#)
9. [Clip Properties](#)
10. [Edit Clip](#)
11. [Rename](#)
12. [Delete Clip](#)

Chapter 49

Automatic Scene Split

This job detects Scene changes in the clip and create markers or cut the clip into sub clips.

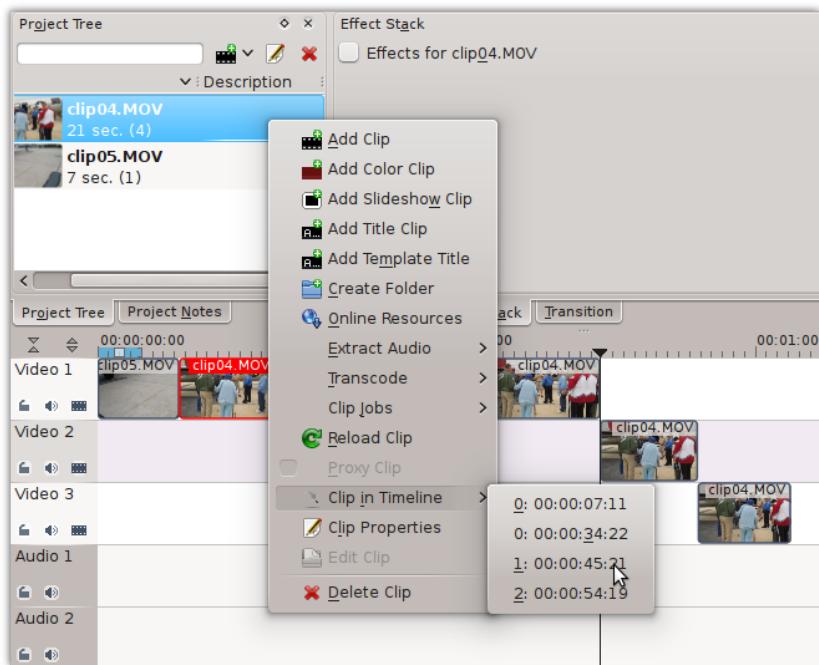


Both 'Add clip markers' and 'Cut scenes' work in 19.04. Cutted scenes are numbered and sorted under the clip in the project bin window. These scenes aren't saved with the project yet. All clip markers remain with the clip though also after re-opening the project.

This menu item is available from the Clip Jobs menu that appears when you [right-click](#) on a clip in the Project Tree

49.1 Clip In Timeline

This menu item is available from [right-click](#) on a clip in the Project Bin or under the [Project](#) menu when a clip is selected in the Project Tree. It is useful for quickly locating all the places where a clip is used on the timeline.



Selecting the **Clip In Timeline** menu item brings up a flyout that lists all instances of the selected clip, identified by their track and position on the timeline. Clicking on an entry in the list will reposition the playhead to the beginning of indicated clip. In the example, we have clicked on the third entry which is located on video track 1 at the 00:45:21 mark and the playhead is now located at the start of that clip. (Note: track numbers in the flyout start at 0 whereas in the Timeline window, they start with 'Video 1').

This option will be greyed out if the clip is not being used in the timeline.

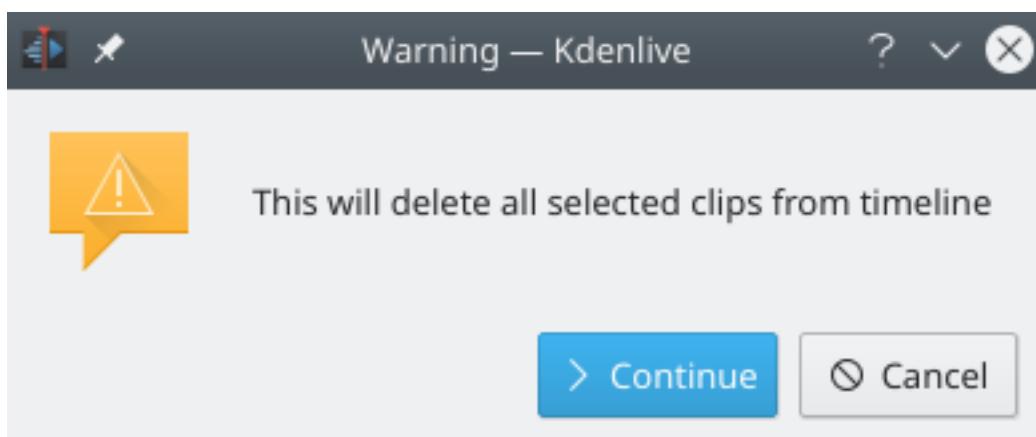
See also **Clip in Project Tree** found by [right-clicking](#) on a clip in the timeline.

49.2 Delete Clip

This menu item is available from [right-click](#) on a clip in the Project Bin or under the **Clip Menu** when a clip is selected in the Project Bin.

This function removes the clip from the Project Bin and from the timeline if it is being used on the timeline.

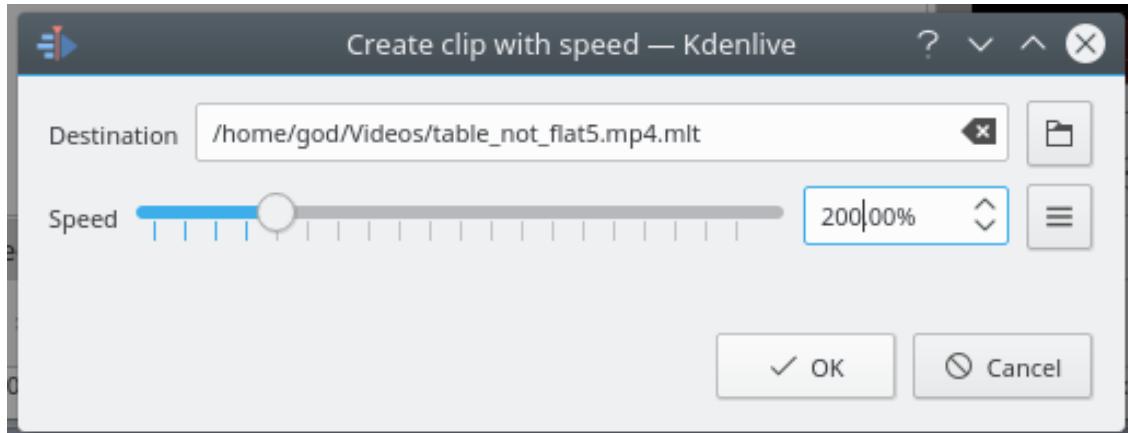
You are warned if the clip is in use on the timeline.



Chapter 50

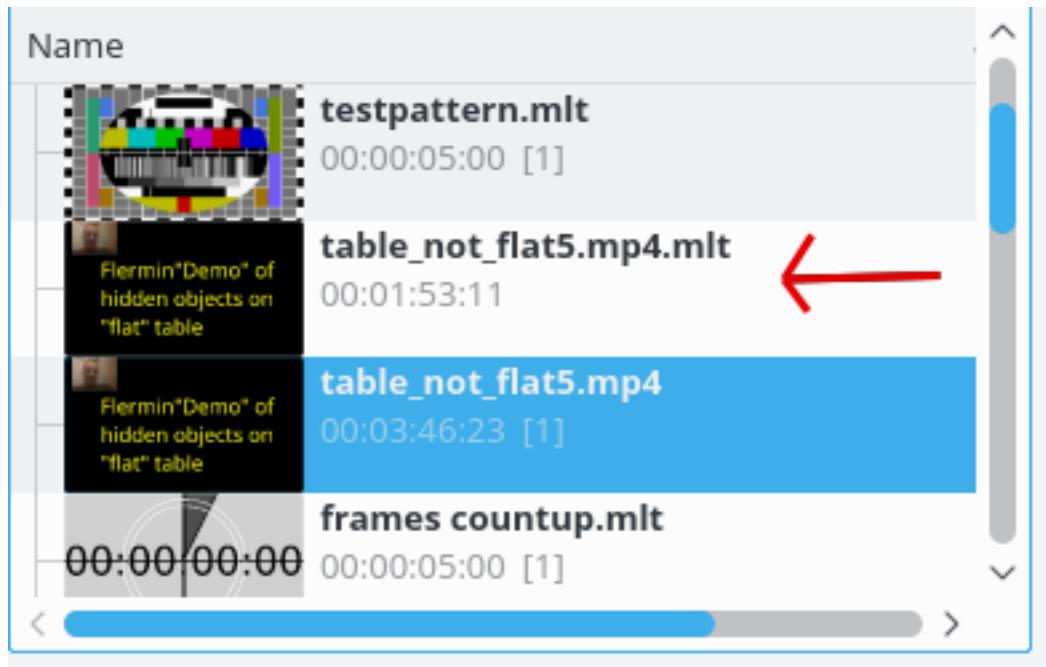
Duplicate Clip with speed change

This menu item is available from the Clip Jobs menu that appears when you [right-click](#) on a clip in the Project Tree or from under the [Project](#) menu when a clip is selected in the Project Tree.



This feature used to be *Reverse Clip* and was available from version 0.9.6 of Kdenlive. From version 17.04 it can still be used to reverse the clip - by entering a speed of minus 100%. But you can create clips of other speeds too.

With the new version of the clip job the sound in the clip is also reversed - so you can learn backwards talking!



When you select the **Duplicate Clip with speed change** option from the menu, a new clip is created in the Project Tree. It has the filename you supplied in the dialog with a .mlt extension. You can then add this clip to the timeline and when you play it, the video of the original source clip will played, but at the new speed (or in reverse).

50.1 Edit Clip

This option is available from [Clip Menu](#) for audio and image files. It is greyed out for video clips. It opens the clip in an external editor.

Selecting **Edit Clip** on audio clips causes the audio editing software specified in [Settings → Configure Kdenlive → Environment → Default Apps → Audio editing](#) to open the audio clip ready for editing. [Audacity](#) is the app that is configured by default to be the audio editing tool for Kdenlive.

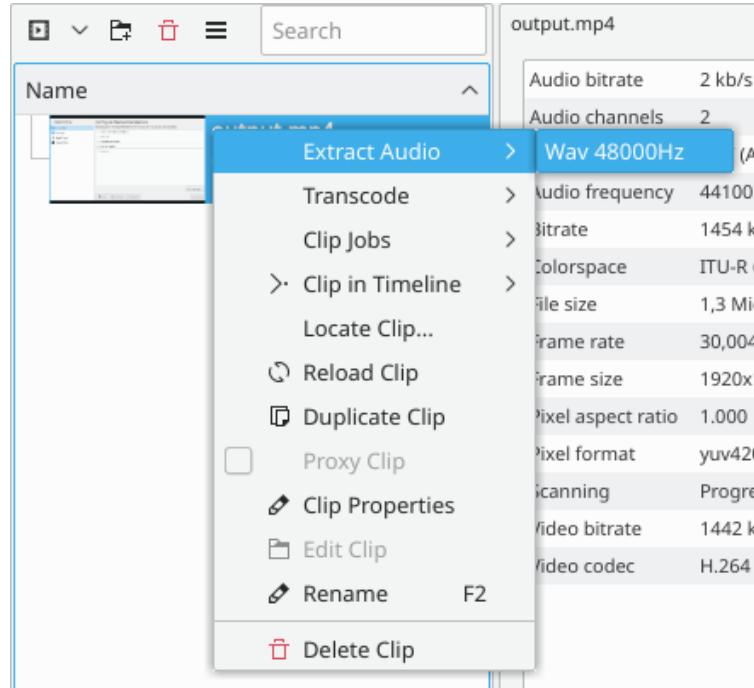
Selecting **Edit Clip** on image clips causes the image editing software specified in [Settings → Configure Kdenlive → Environment → Default Apps → Image editing](#) to open the image file ready for editing. [GIMP](#) is the app that is configured by default to be the audio editing tool for Kdenlive.

The option is not available for video clips because Kdenlive is the video editor - only audio and image clips are edited by external software.

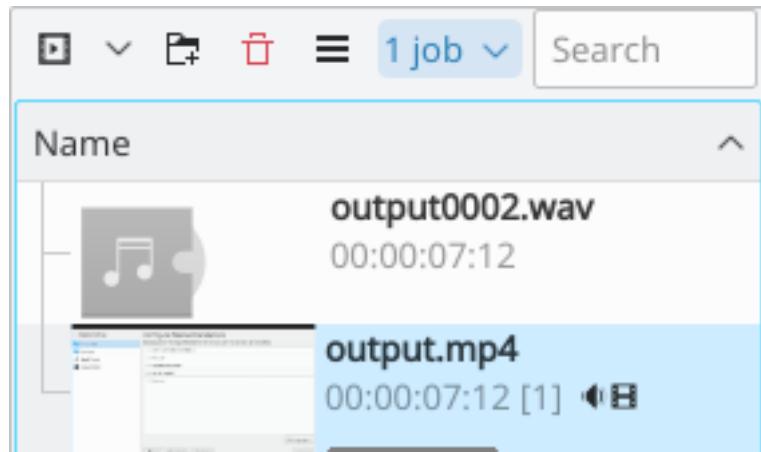
50.2 Extract Audio

This feature extracts the audio out of a video clip into a .WAV file and adds it to the [Project Bin](#).

This menu item is available from [right-click](#) on a clip in the Project Tree or under the [Clip](#) menu when a clip is selected in the Project Bin.



The process runs as a job in the Project Bin.

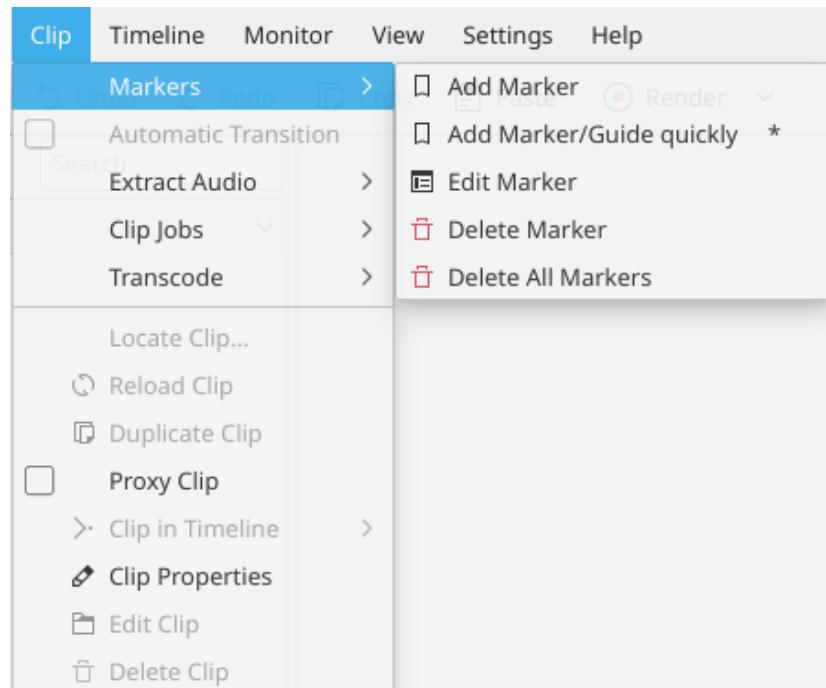


50.3 Clip Menu — Locate Clip

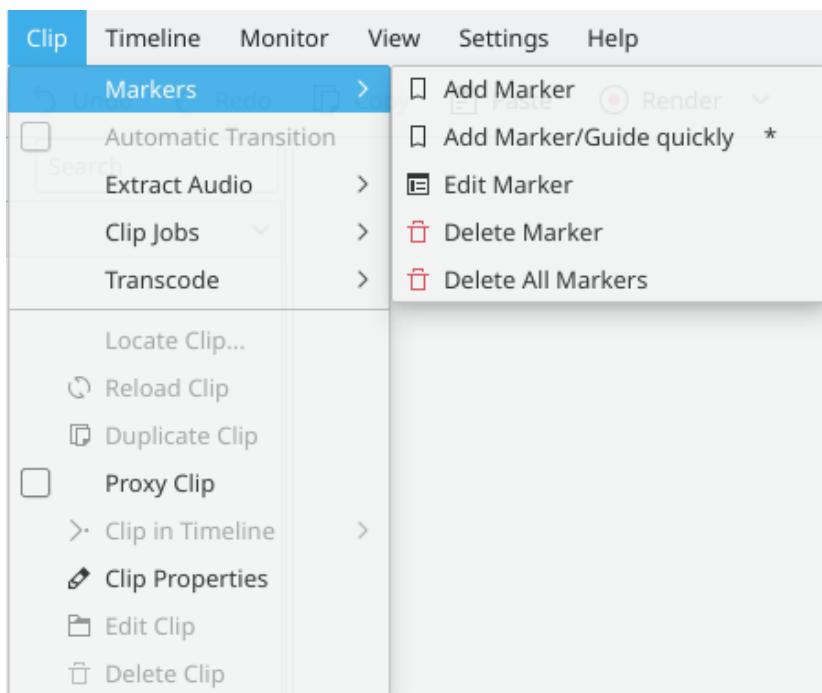
This menu item is available from [right-clicking](#) a clip in the Project Bin. Locate Clip opens up the systems file browser at the location on the file system where the selected clip is stored. Useful for tracking down the sources of clips in the project bin.

Chapter 51

Clip Menu - Markers



These menu items are for modifying the clip that is currently selected in the timeline. The Markers menu is also available from



The items that appear as sub-menu items on the Clip>Markers menu item are ...

51.1 Add Marker

Adds a marker to the clip at the current timepoint. Markers are properties of the clips in the project tree. So this action puts a marker in the clip in the project tree.

51.2 Edit Marker

For this to work the cursor caret needs to right on top of a marker. If you are not then you get an error on the bottom left 'No Marker found at Cursor time'. Since the Go To Marker for the clip menu does not work, it is some times a bit tricky to make this menu item work.

Editing a marker in the timeline causes the marker to update in the project tree and thus it also updates anywhere else the clip appears in the timeline.

51.3 Delete Marker

For this to work the cursor caret needs to right on top of a marker. If you are not then you get an error on the bottom left 'No Marker found at Cursor time'. Since the Go To Marker for the clip menu does not work, it is some times a bit tricky to make this menu item work.

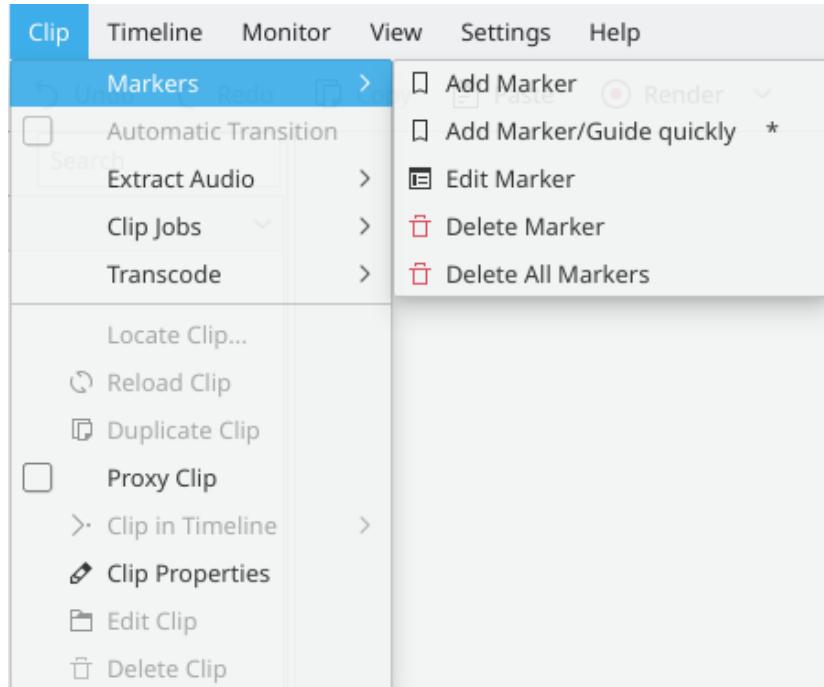
Markers are properties of the clips in the project tree. So this action removes the marker from the clip in the project tree and thus from any other instances of this clip in the timeline.

51.4 Delete All Markers

Deletes all markers from the current clip. Does not appear to work - get 'Cannot find clip to remove marker'

51.5 Go To marker ...

The Go To Marker menu item (clip menu) does not appear to work properly. Choosing a marker from this menu item causes the cursor caret to scoot to the end of the clip - it does not stop at the marker chosen. The

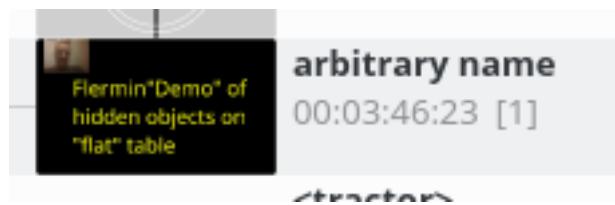


on the Clip Monitor right click menu does work.

51.5.1 Rename Clip

Change the name of a clip in the Project Bin to an arbitrary name. Does not rename the file on the file system.

This menu item is available from [right-click](#) on a clip in the Project Bin.



51.5.2 Stabilize

This menu item is available from [right-click](#) on a clip in the Project Tree or under the [Project](#) menu when a clip is selected in the Project Tree.

This feature applies image stabilization algorithms to the clip which can reduce the shakiness of a bit of footage.

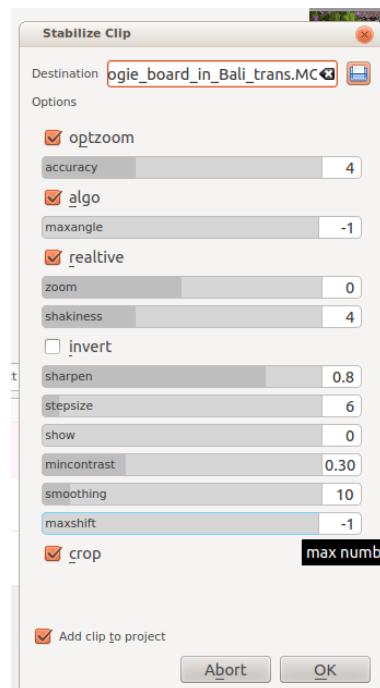
In versions 0.9.8 and earlier of Kdenlive, there were two different methods of stabilization available: vstab and transcode. In version 0.9.10, the vstab method was removed leaving us with just the 'transcode' method (based on [this work](#)).

This video shows a side by side comparison between vstab and transcode stabilize methods.

[YouTube video](#)

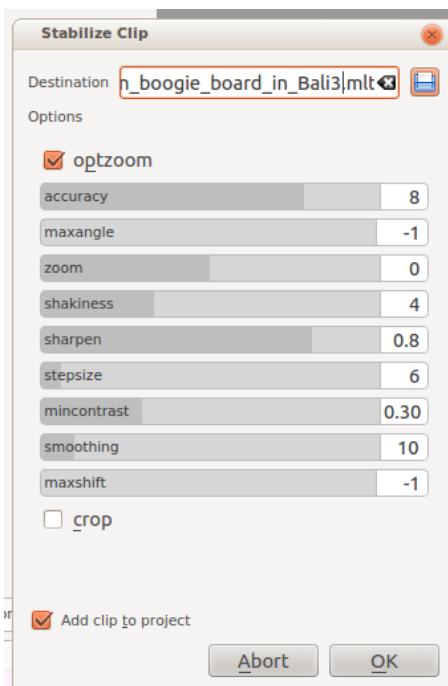
The Kdenlive Handbook

51.5.2.1 Stabilize



Transcode Dialog in version 0.9.2

This menu item was called *stabilize (transcode)* in versions 0.9.2 and earlier.



Transcode Dialog in version 0.9.3 and higher

In version 0.9.3, the transcode GUI was simplified.

Based on the tooltips from this screen and the docs [here](#), this is what all the options mean:

optzoom = use optimal zoom (calculated from transforms). Causes video to zoom until 90% of transformations are hidden. Default is checked. Hint: You can further zoom in with the zoom option.

accuracy = accuracy of shakiness detection. Should be \geq shakiness factor. 1: low (fast processing). 15: high (slow processing). Default: 4. Recommended: 8.

algo = algorithm used. Checked = small measurement fields. Default = checked. Unchecked means use brute force algorithm. The brute force algorithm is deprecated and this option is not available after version 0.9.3.

maxangle = maximum angle to rotate in radians. Default = -1, which means no limit.

relative Unchecked = absolute transform (don't use this). Checked = relative transform. Default is checked. This option is not available in version 0.9.3 - it uses relative transform.

zoom - Additional zoom during transform. Percentage to zoom > 0 = zoom in, < 0 = zoom out. The zoom specified here is in addition to the optimum zoom calculated by the program when optzoom is checked. Default = 0.

shakiness How shaky is the video? And how quick is the camera? 1: little (fast processing). 10: very strong/quick (slow processing). Default = 4. Note: large values may also reduce the accuracy. This is due to the internals of the movement-detection. Typically you don't need a value greater than 7.

invert Invert the transform. Default = unchecked. Inverting the transform is pointless - leave unchecked. This option is not available in version 0.9.3.

sharpen Sharpen transformed image. Amount of sharpening: 0: no sharpening. Uses filter unsharp with 5x5 matrix. Default = 0.8.

stepsize Step size of search process. Region around minimum is scanned with 1 pixel resolution. Default = 6.

show 0 = draw nothing, 1 or 2 = show fields and transforms. Use 1 or 2 to preview what the process is going to do. [example](#). Default = 0. Non-zero values of this parameter are not relevant in the Kdenlive implementation - use zero. This option is not available in version 0.9.3.

mincontrast Below this contrast, the field is discarded. Range 0-1. Default = 0.3. You may want to use a smaller value for a really low contrast clip.

smoothing Controls the amount of smoothing/stabilization. The larger the value for smoothing, the more camera movements are compensated. The resulting clip has a lower change in camera speed.

Technically it is the number of frames for lowpass filtering = (smoothing * 2) + 1.

For example, with a 25 fps clip, a value of 12 for the smoothing factor means we would smooth over one second - 12 frames behind the current frame + the current frame (1) + 12 frames after the current frame. Default = 10.

Demo of the difference [here](#) (top:3, bottom: 30).

maxshift Maximal number of pixels to translate image. Default = -1. No limit.

crop Unchecked means the border of the transformed frames contains the pixels from previous frames. Checked = black background. Default = unchecked.

Example of the effect of running stabilize - transcode from the original author - Georg Martius.

Side by side

[YouTube video](#)

Deshaked

[YouTube video](#)

Original

[YouTube video](#)

This is based on [this](#) work and is not available in versions of kdenlive >= 0.9.10.

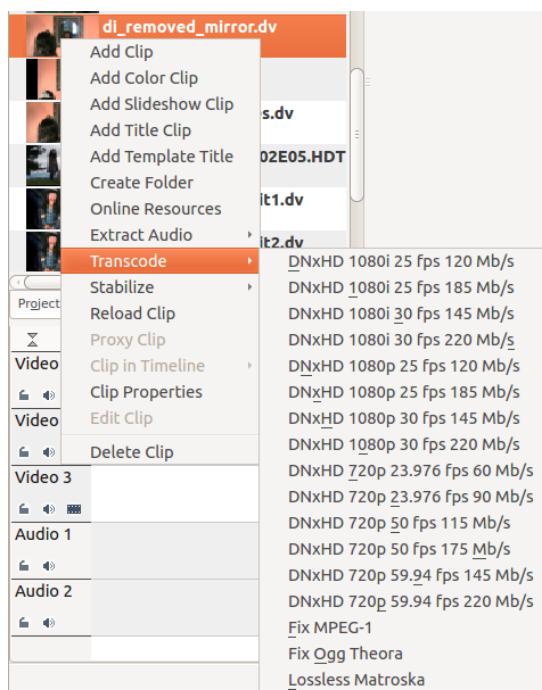
This tutorial shows how to use the stabilize feature - vstab version:

[YouTube video](#)

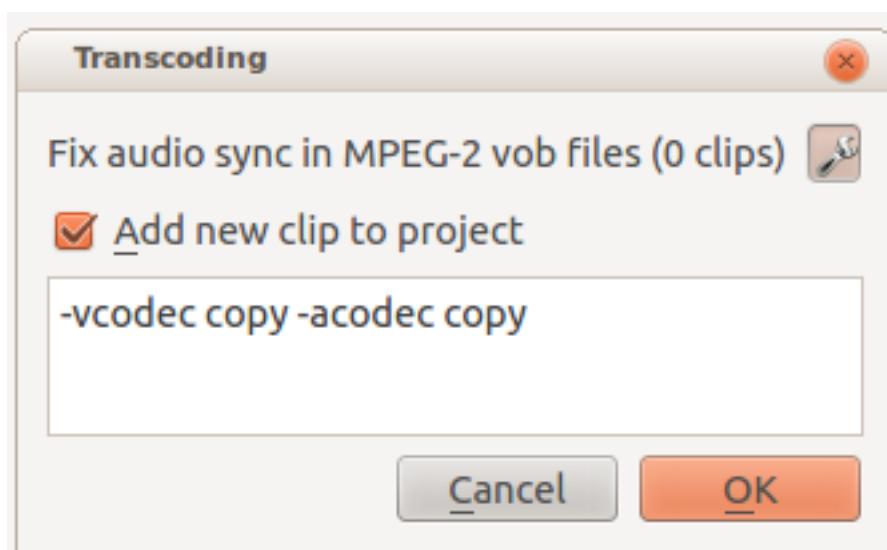
The ‘shutter angle’ setting that the narrator says he does not know what it does (1:35) ... Shutter angle is an angle that images could be maximum rotated for stabilization. see [here](#).

51.5.3 Transcode Menu Item

From right-click on a clip in the Project Tree, one of the items that appears in the menu is the **Transcode** submenu.



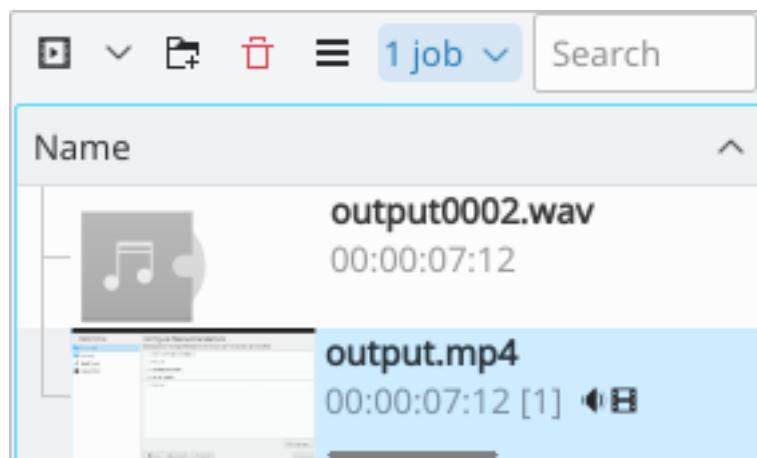
Choose a transcode profile from the available list to transcode the selected clip into a different video format. The options are controlled by [Configure Kdenlive->Transcode](#). The transcoding is done by the [ffmpeg](#) program.



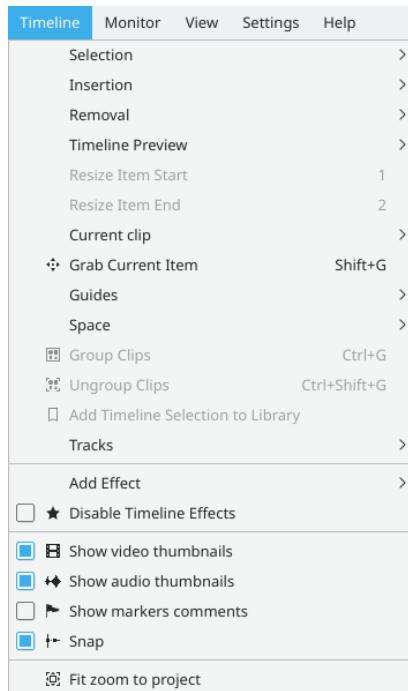
The above screenshot is the dialog presented after choosing a transcode profile for transcoding the clip. The wrench icon toggles the display of the details of the command that will be used for transcoding. The description comes from the description supplied in the [settings](#) for this functionality.

Use the checkbox to cause the transcoded clip to be added to the Project Tree once the transcode job has finished.

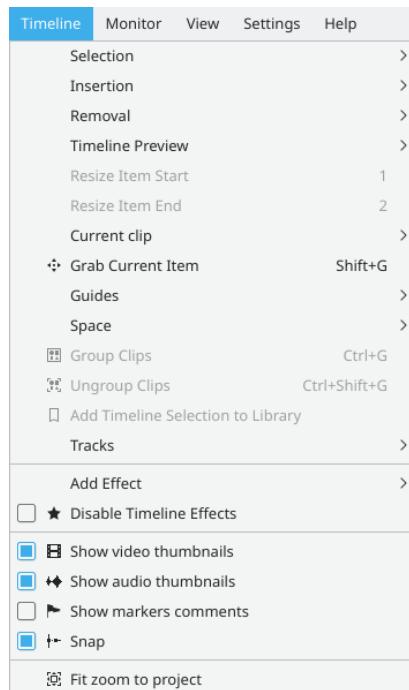
While the transcode job is running, the Project Tree will display a progress bar on the thumbnail of the clip and a job list menu item will appear at the top of the Project Tree.



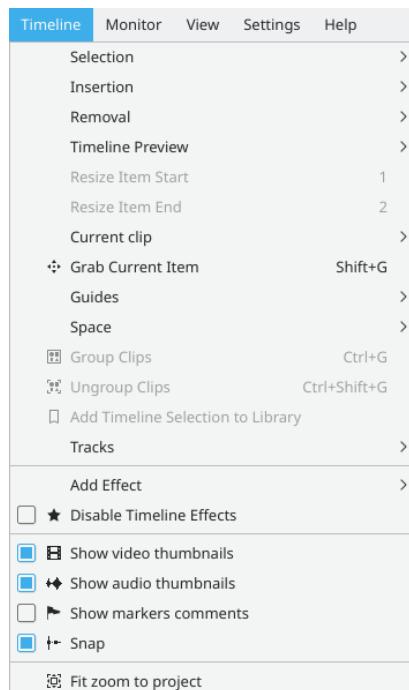
51.6 Timeline Menu



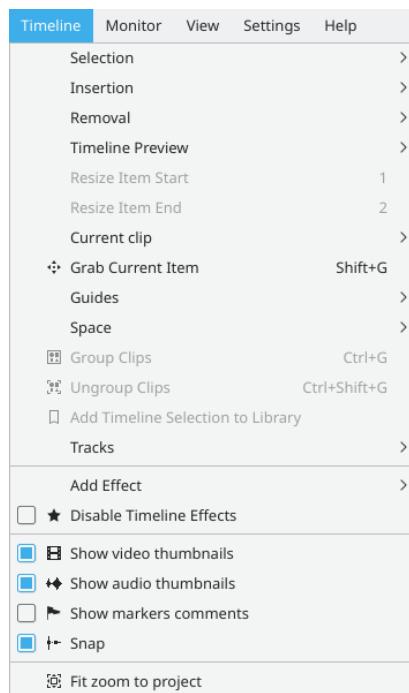
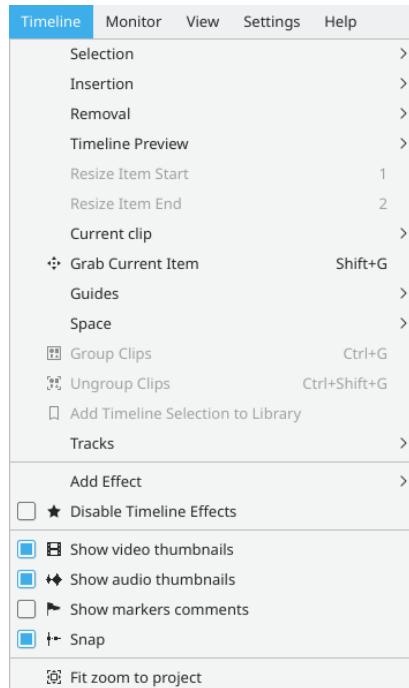
The Kdenlive Handbook



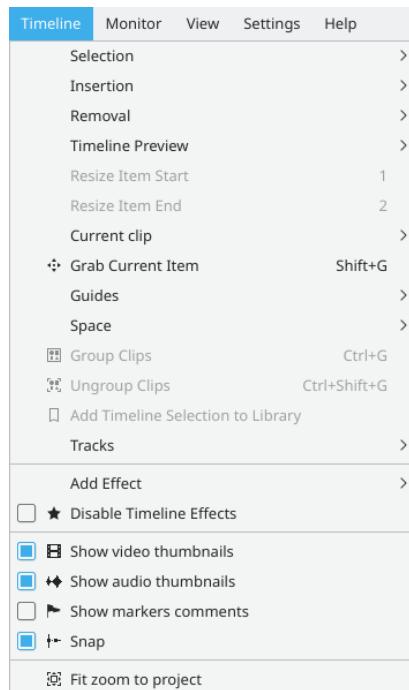
Insertion >



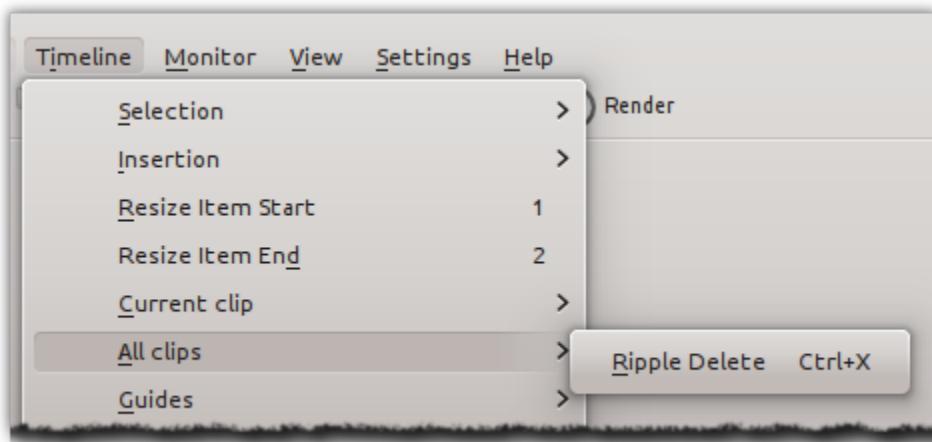
The Kdenlive Handbook

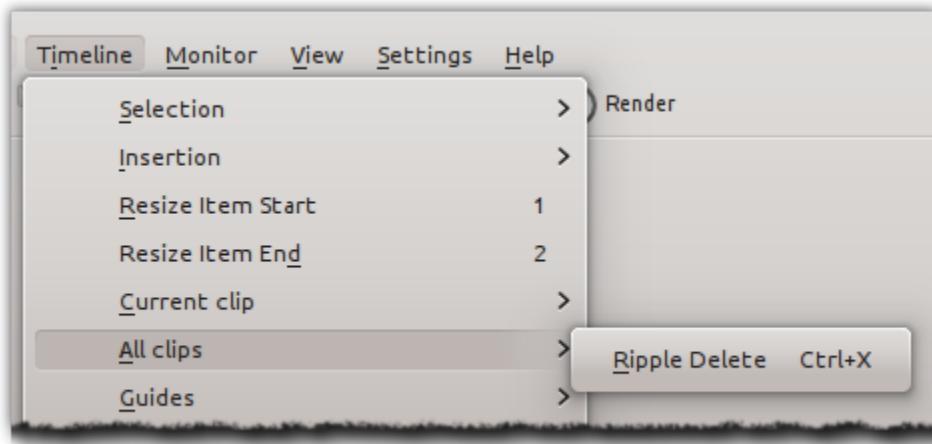


The Kdenlive Handbook



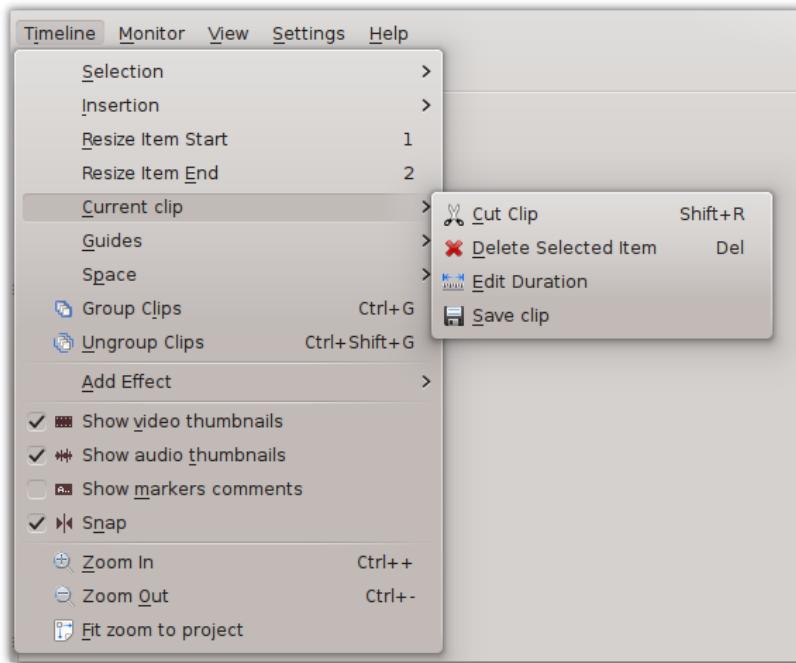
Guides





¹

51.7 Current Clip Menu



Before using the operations on this menu, you must first select the clip or clips on which you want to make the changes. The first two menu choices, **Cut Clip** and **Delete Selected Item**, can be performed on either a single clip or a group of clips. The other two, **Edit Duration** and **Save clip**, will only work on a single clip.

¹ available on bleeding edge versions > 0.9.10 (Jan2015)

51.7.1 Cut Clip

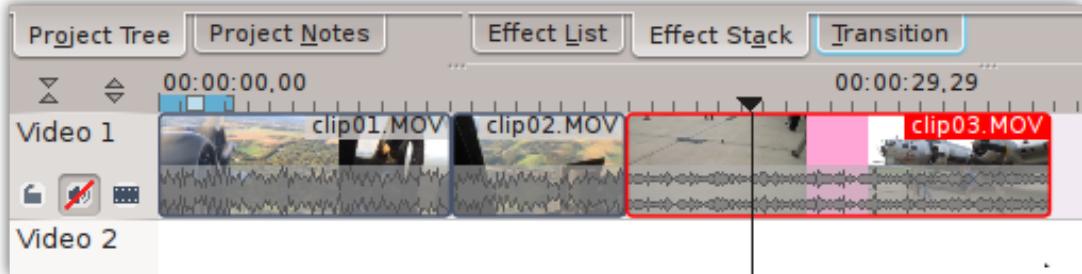


Figure 1.

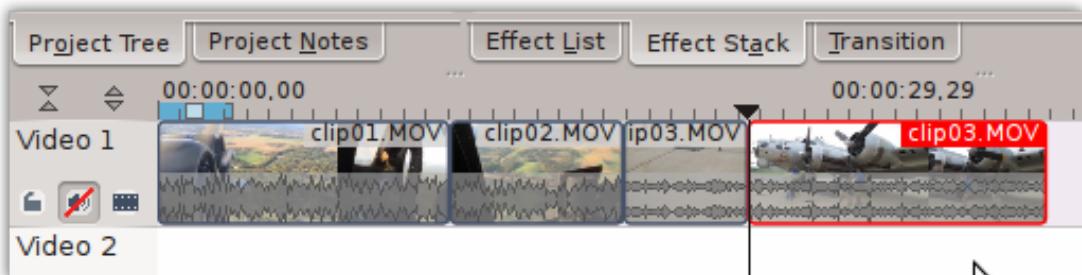


Figure 2.

Cut Clip performs the same operation as the [Razor Tool](#), but it works differently. When the Razor tool is enabled, you can click on any clip on the timeline and that clip will be cut where you clicked. To use **Cut Clip** from the menu or its Shift-R keyboard shortcut, you must first select the target clip or clip group and then position the playhead where you want the cut to occur. Figures 1 and 2 show the before and after of such an action. Unlike using the Razor tool, you can even cut a clip this way while it is playing (again, as long as it is selected first). If you try to perform the operation when the playhead is on an unselected clip, nothing will happen.

51.7.2 Delete Selected Item

This menu choice does just what it says. Selected clips will be deleted from the timeline (but not from the project). If multiple clips are selected or grouped, they will all be deleted.

51.7.3 Edit Duration

This option is an alternative to dragging with the mouse for changing not just the duration but also the position of clips on the timeline. Adjusting the time values directly with spin boxes gives more fine-grained control than dragging with the mouse. A quicker way than using the menus to bring up the **Duration** dialog is to simply double-click on a clip in the timeline.

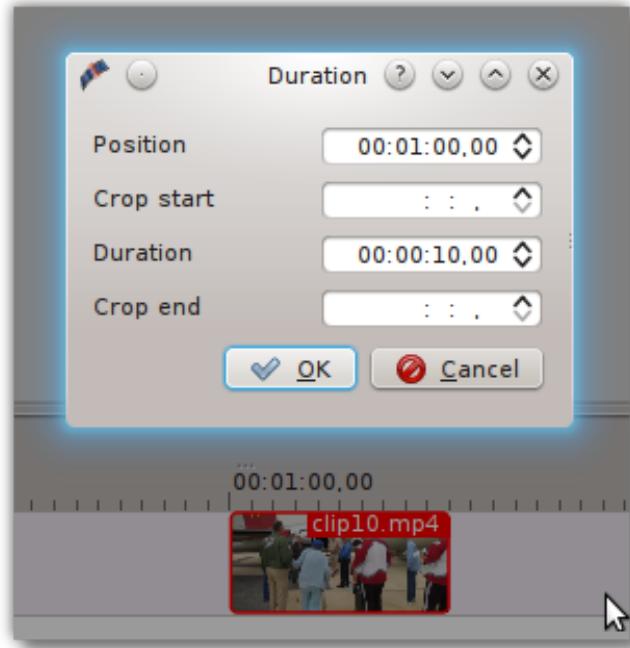


Figure 3.

Figure 3 shows an example of a 10-second clip located at the 1 minute position on the timeline. You can see that the *Crop start* and *Crop end* values are blank. This indicates that 10 seconds is the full, uncut length of the clip. We can't increase its duration (there's just no more material available) but we can crop it to remove material from the beginning, end, or both.

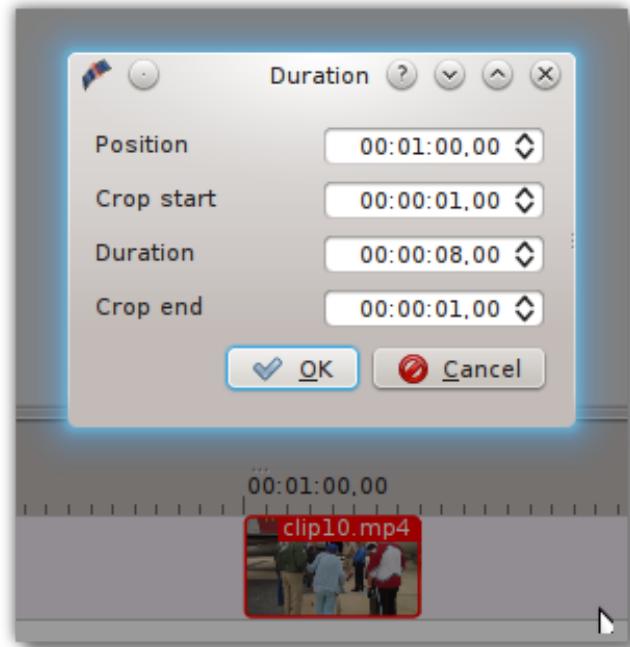


Figure 4.

Figure 4 shows the result of cropping 1 second from the start and end of the clip. This leaves an 8-second clip, still positioned at the 1 minute mark on the timeline. In the case of the example,

we could also adjust its position because there is empty space on either side of the clip. If there happened to be other clips adjacent to the selected clip, you would not be able to adjust its position with this method, even if you have [Overwrite mode](#) enabled. This is a case where dragging the clip with the mouse does have an advantage.

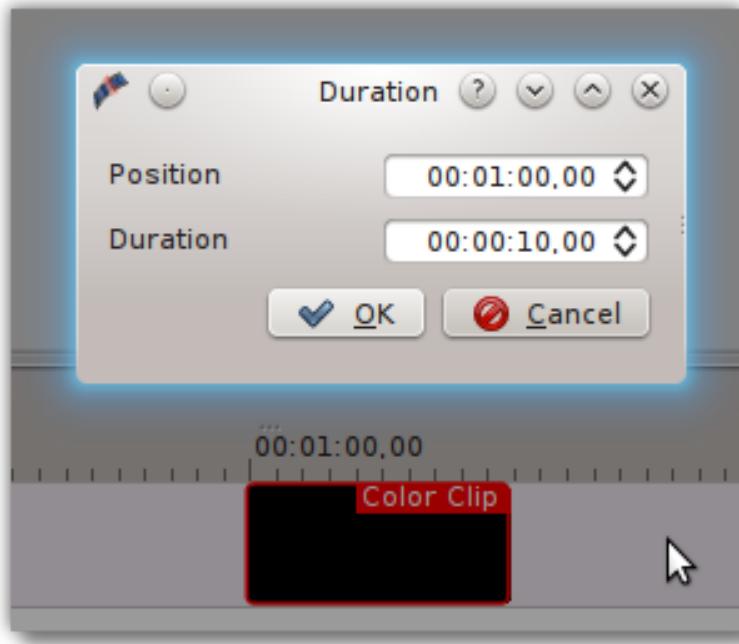


Figure 5.

The examples shown above apply to video clips. Still images, Color and Title clips are a slightly different. Since their content is static, the concept of cropping doesn't apply to them. Therefore, if you double-click on one of those clips, you will only be offered options to change *Position* and *Duration* (Figure 5).

51.7.4 Save clip

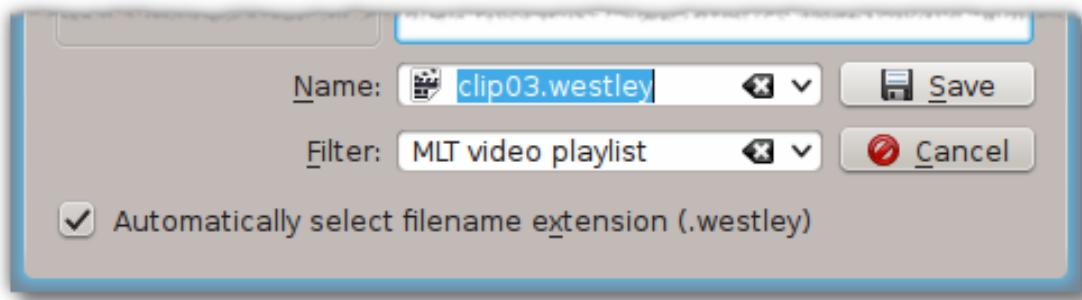


Figure 6.

Use this option to save a copy of the current clip as an XML file. When you select it, you will be presented with the **Save As** dialog, a portion of which is shown in Figure 6. The saved file is basically a proxy clip which points back to the original file. It not only references the original selected clip but also stores all the properties of that clip, including any effects (but not transitions) which were applied when you did the save. The saved file can be added back as a clip to the project and

The Kdenlive Handbook

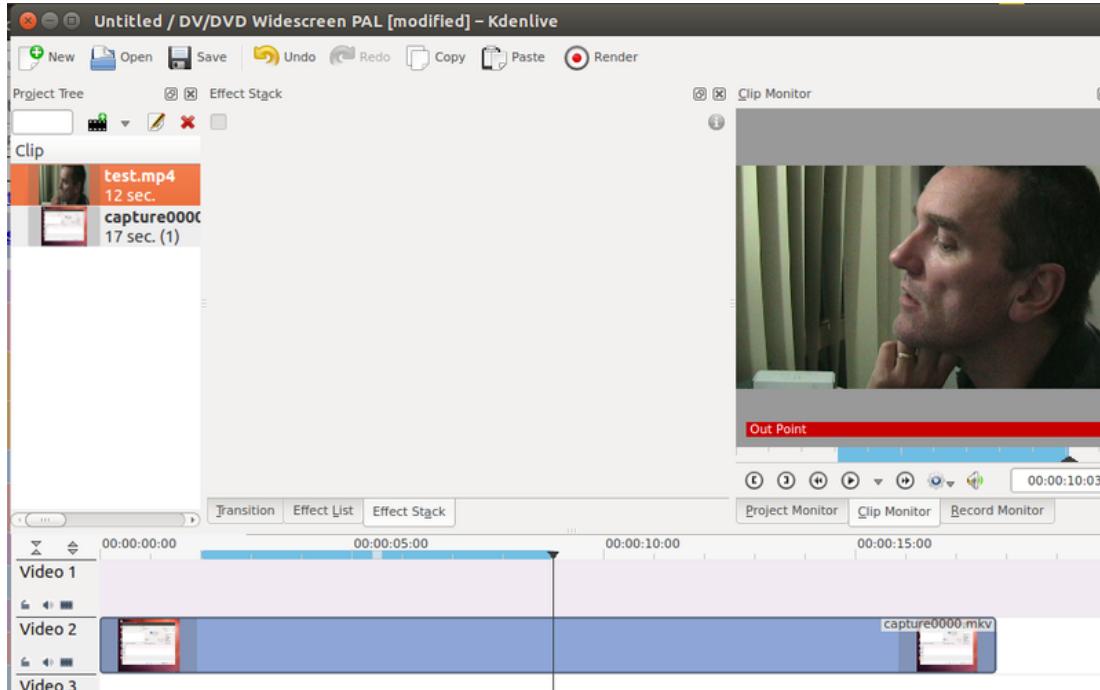
used on the timeline like a regular video clip. It will retain the properties of the original source clip as they were when you saved them, even if you go back later and modify the source clip.

Chapter 52

Insert Clip Zone in Timeline

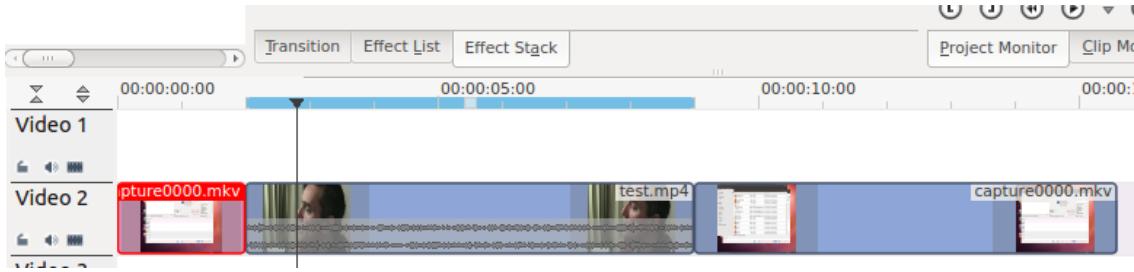
This menu item is available in the Timeline Menu on the Insertion sub menu. Short cut is 'V'

Say you have a 10 sec. zone defined on a clip in Clip Monitor and on the timeline you have a 20 sec. zone defined somewhere. When you press 'V' or select **Insert Clip Zone in Timeline (overwrite)**, it will insert the 10 sec. segment of the clip from the Clip Monitor at the beginning of the zone on the timeline. If there happens to be another clip there already, it will overwrite it, completely or partially, depending on how long the existing clip was.

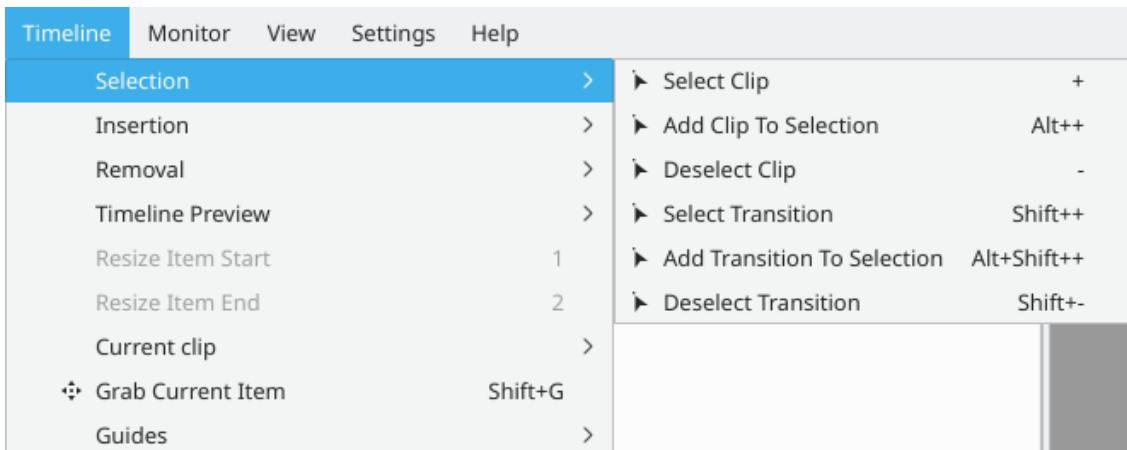


Regions selected on time line and in clip monitor - blue regions.

select **Insert Clip Zone in Timeline (overwrite)** and the section in the clip overwrites the section on the timeline



52.1 Selection Menu



The purpose of this submenu is to allow you to select multiple clips or transitions on the timeline for the purpose of performing operations on all of them simultaneously. However, it should be said up front that making selections this way is not very practical. That's because, in order to select a clip or transition using this menu, you must first position the playhead on it. A much quicker and easier way is to press **Ctrl-left-click** on each clip you want to add to the selection. The clips do not have to be contiguous to be selected using this method. If the clips you want to select are all contiguous, you can press **Shift-left-click** and drag your mouse over all the clips.

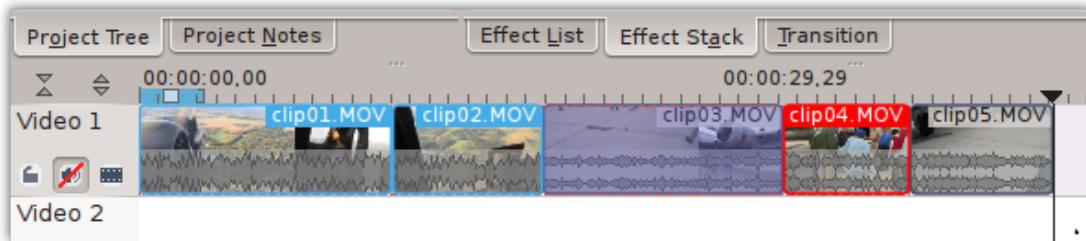


Figure 1.

In Figure 1, three of the five clips on the timeline have been selected using the **Ctrl-left-click** method. At first, it might be difficult to tell which clips are part of the selection because of the different colors. Kdenlive indicates that a clip is selected by changing the color of the filename text to white; unselected clips show the filename with black letters. So even though two of the selected clips have a light blue outline and the third is outlined in a red border, they are all part of the same selection (the *clipxx.MOV* filenames are all in white). Conversely, *clip03.MOV* and *clip05.MOV* are not part of the selection — their text is black.

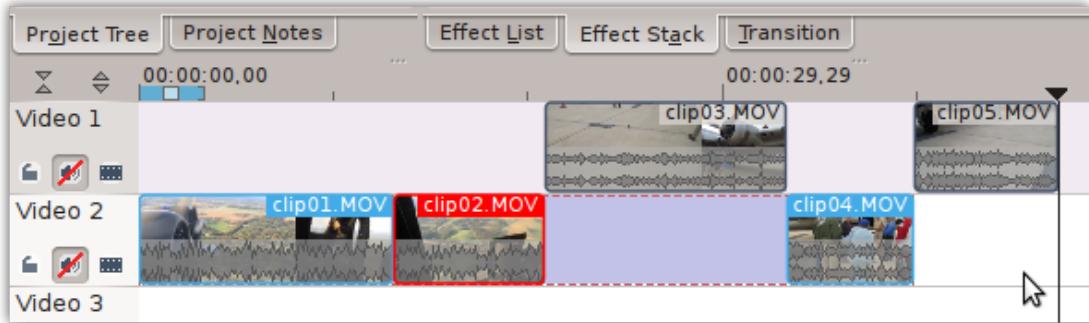


Figure 2.

Now that multiple clips have been selected, you can do things like moving, copying, pasting or deleting all of them at once. Or you can use the [Guides](#) option to perform other advanced operations on the clips. Figure 2 shows that the selected clips from Figure 1 have been moved to another track by grabbing any of the selected clips with the mouse and dragging them. Clicking anywhere outside of the selected clips will unselect all of them. Note however, that if you had used the **Group Clips** option on the selections, the clips will still be grouped even though they are no longer selected.

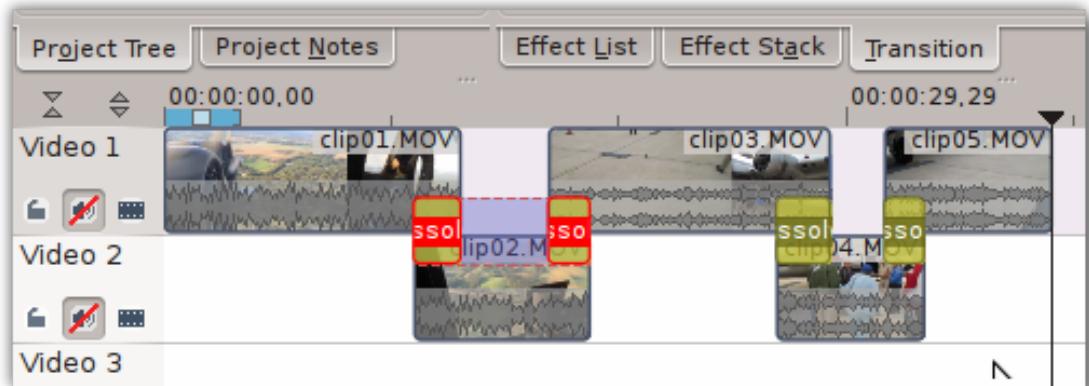


Figure 3.

Selecting multiple transitions works just like selecting clips. Click on the first one and then **Ctrl-left-click** on as many others as you'd like to add to the selection. Figure 3 shows two **Dissolve** transitions selected. These transitions can now be copied, moved, deleted, etc. just as with clips.

52.2 Timeline>Space

52.2.1 Insert Space

Space brings up a submenu with **Insert Space** and **Remove Space** options. Inserting a space is a useful feature when you want to push all the existing clips on the timeline aside to make room for new clips but also want to preserve the relationships among all the clips that were shifted, including their transitions.

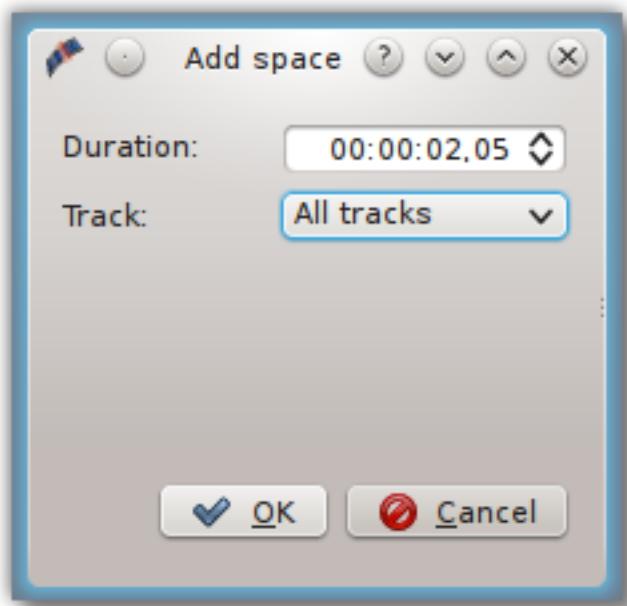


Figure 1.

In addition to invoking this menu from **Timeline → Space**, you can also bring it up by right-clicking on an empty spot on a track in the timeline. There are a couple of important differences with how **Insert Space** behaves, though, depending on which method you choose. First, using **Timeline → Space → Insert Space** brings up the **Add Space** dialog shown in Figure 1 where the default choice for **Track:** is *All tracks*.

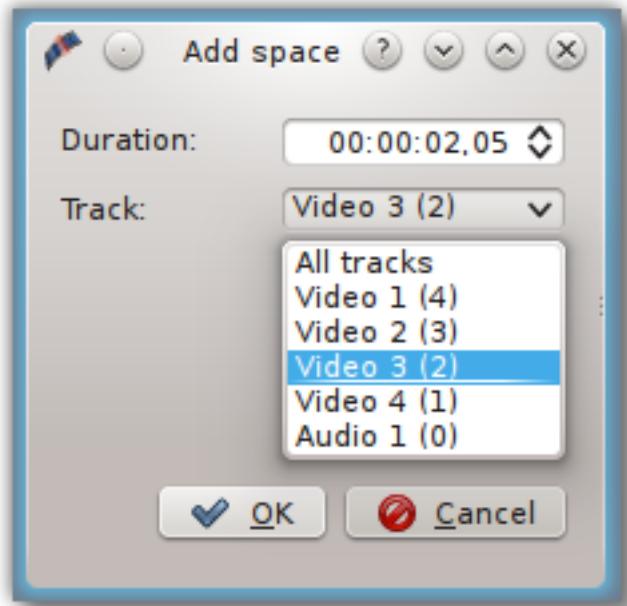


Figure 2.

When you access the menu by right-clicking on a track, the same dialog appears but the default is the track you clicked on. In either case, you can obviously override the default by picking another option (Figure 2). The other difference is that the insertion happens at the playhead when the

operation originates from the Timeline menu; it takes place at the mouse cursor position when right-clicking.

And in case you're wondering, the default **Duration** for the inserted space is 65 frames, which is not configurable in the Kdenlive or Project settings. 65 frames will equate to different amounts of time depending on the frame rate set in your project profile. In the example, our project's frame rate happens to be 30 fps and that's why the default **Duration** works out to be 00:00:02.05.

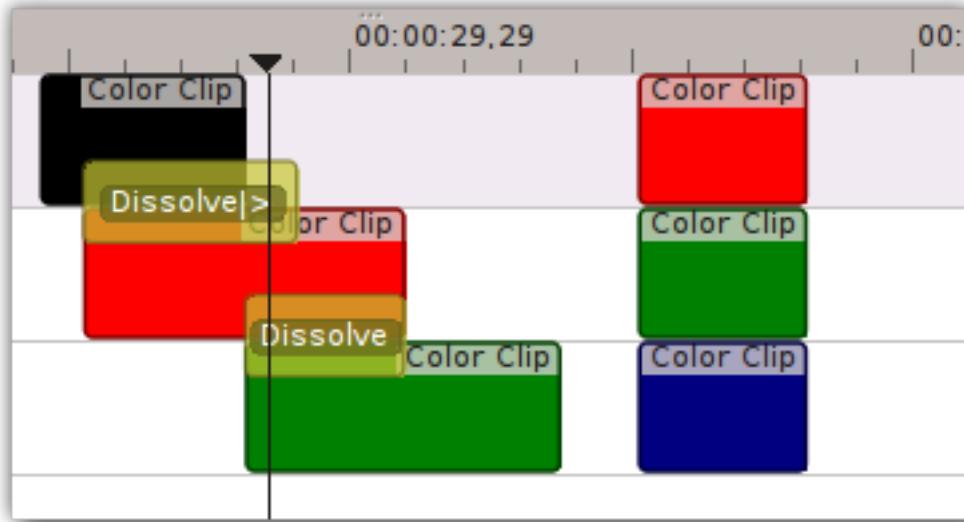


Figure 3.

Let's look at an example, albeit an unrealistic one, of how inserting a space from the playhead position will affect clips and transitions on different tracks. In general, inserting a space will shift any clips that the playhead is touching as well as all clips to the right of the playhead on the affected track(s). Transitions are a little trickier because they span two tracks. They are assumed to "belong" to the higher track (regardless of the direction of the transition) and so if the playhead is touching them, they will go if the higher track is included in the shift. Figure 3 shows a scenario with clips on three video tracks before inserting a space. All of the following examples assume we're starting from this position.

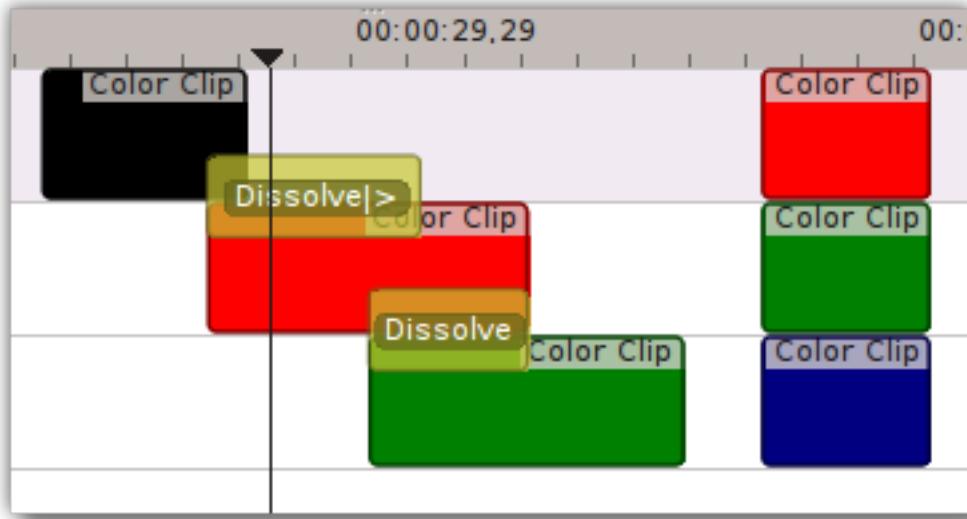


Figure 4.

In Figure 4, we have chosen to insert a space on *All Tracks*. Since the playhead was touching both transitions and the color clips on tracks 2 and 3, it shifted them, along with all the clips to the right of the playhead. It did not shift the black clip on track 1 because it was to the left of the playhead.

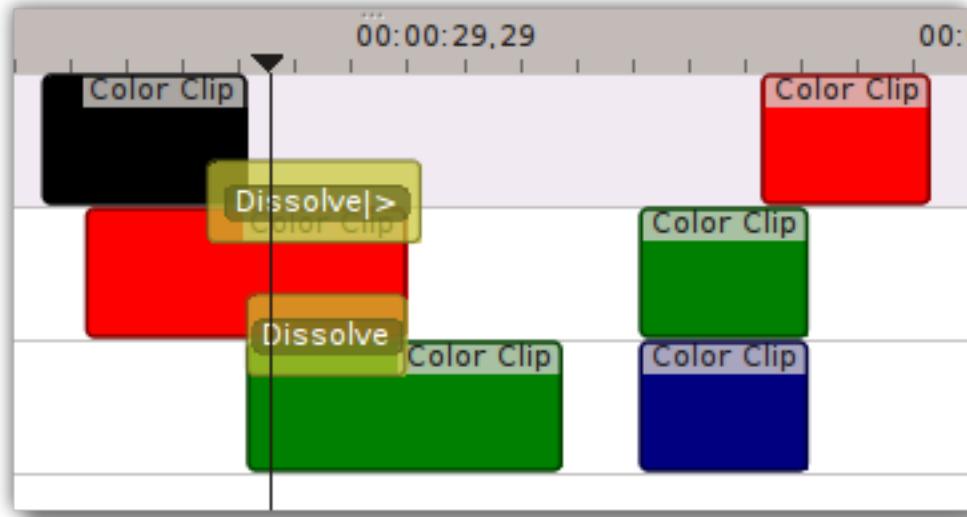


Figure 5.

In Figure 5, we chose Track 1. The transition went because it “belongs” to the black clip on track 1, but the clip itself did not go because it was to the left of the playhead. The red clip on track 1 also went because it was to the right of the playhead.

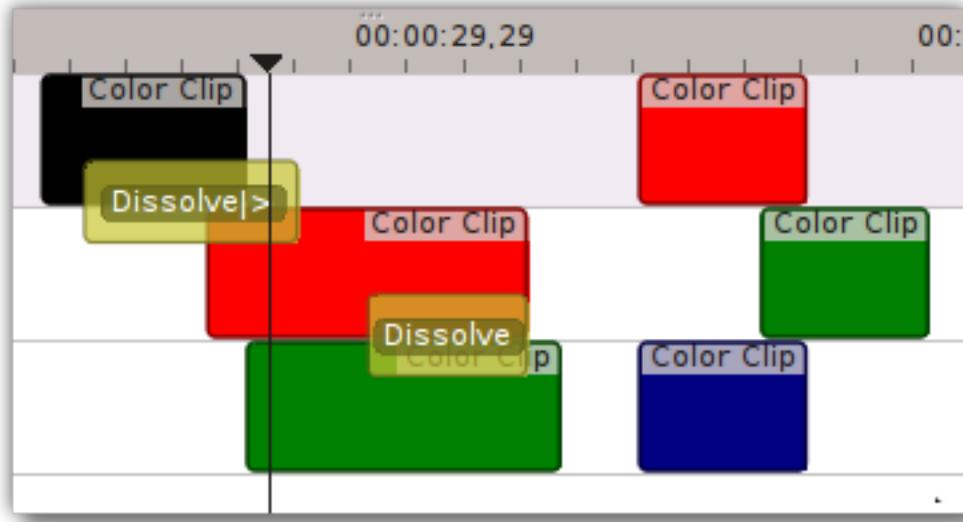


Figure 6.

In Figure 6, we shifted the clips on Track 2. Now the Dissolve transition between tracks 1 and 2 does not shift, even though the playhead was touching it, because it belongs to track 1. The other transition does go, because it belongs to the higher track 2.

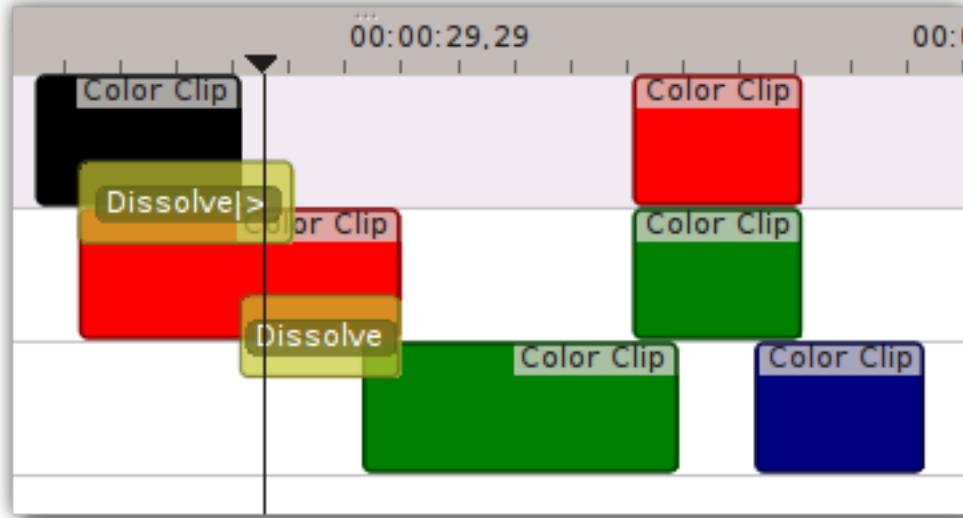


Figure 7.

Finally, In Figure 7, we chose track 3 and just the clips move.

If we had started this process by right-clicking on a spot on track 1 or track 3 which corresponds to the playhead position in the example, the results would have been the same.

52.2.2 Remove Space

Remove Space is not the exact opposite of **Insert Space**.

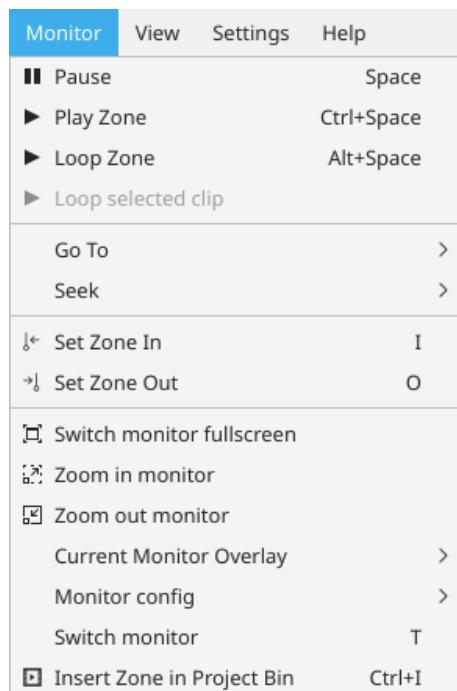
The similarities are:

- If you access **Remove Space** from the **Timeline** menu, the playhead governs where the removal will happen. When using right-click, it happens at the mouse cursor.
- Transitions will move with clips on the higher track.

There are the following differences:

- It only works on one track at a time — there is no *All Tracks* option.
- If you accessed **Remove Space** from the **Timeline** menu, the playhead must be on an empty space in the track where the space is to be removed.
- You can not set the duration of the space to be removed — all the empty space between clips is removed. All the clips and transitions to the right of the playhead or mouse cursor will be shifted left until the first clip encounters another clip or the beginning of the track.

52.3 Monitor Menu



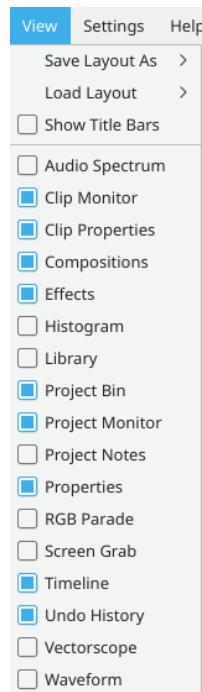
The monitor menu contains controls for viewing and navigating through the clips in your project for the purpose of making edits and seeing the effects of your changes. Depending on which monitor window you have selected at the time, the controls will affect either the currently selected clip in the Project Tree (**Clip Monitor**) or the playhead in the Timeline (**Project Monitor**).

With the exception of the **Deinterlacer** and **Interpolation** items, it is much more practical to perform the actions on this menu using the associated keyboard shortcuts or the buttons at the bottom of the monitor windows.

52.4 View Menu

From the View menu you can control which windows appear on the screen. You can also save the layout or load a saved layout.

The Kdenlive Handbook



1.

Save Layout As

1.

Load Layout

1.

Show Title Bars

1.

Audio Spectrum

1.

Clip Monitor

1.

Clip Properties

1.

Compositions

1.

Effects

1.

The Kdenlive Handbook

Histogram

1. Library
- 2.

Project Bin

- 1.

Project Monitor

- 1.

Project Notes

- 1.

Properties

- 1.

RGB Parade

- 1.

Screen Grab

- 1.

Timeline

- 1.

Transitions

- 1.

Undo History

- 1.

Vectorscope

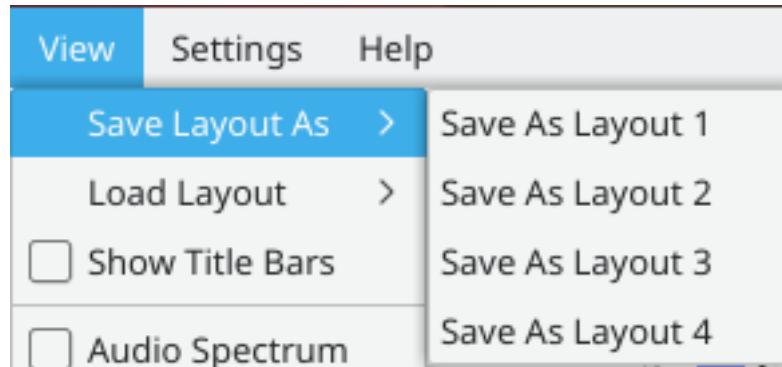
- 1.

Waveform

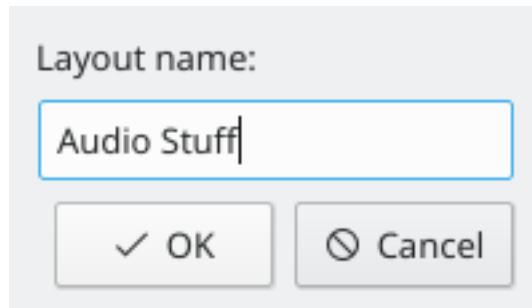
Spectrogram-->

52.4.1 View Menu — Save Layout As

Kdenlive allows a great deal of freedom to customize screen layout. You can choose which windows to display and where to position them. You can resize them or undock them and move them to a second monitor. Any changes you make to the layout will be automatically saved so that the next time you start Kdenlive, things will look as you left them. This is fine if you have one layout that works for all your projects. However, you may want to have different layouts for different types of projects and be able to switch between them as needed.



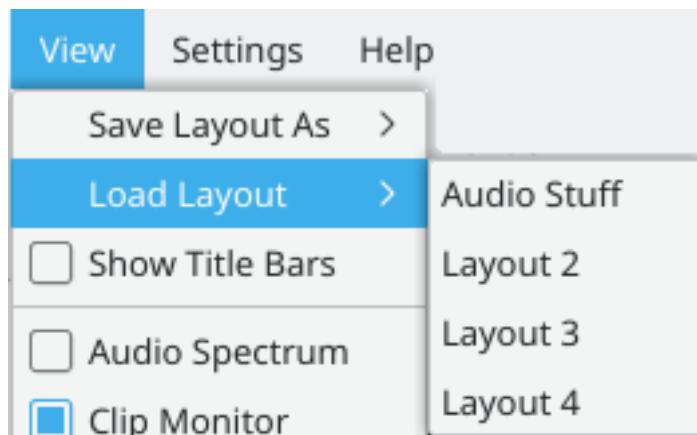
Kdenlive lets you name and save up to four custom layouts. In the example shown, no custom layouts have been saved yet so they are just labeled 1 through 4. Click **Save Layout As** and then choose one of the four choices presented.



The Save Layout dialog appears and you can give your custom layout a name.

Now you can easily switch to that layout whenever you'd like by choosing the corresponding **Load Layout** menu selection.

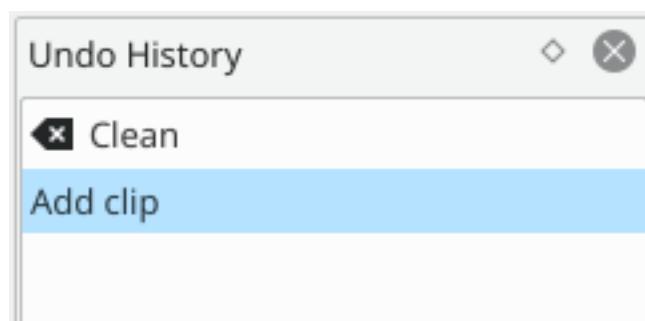
52.4.2 View - Load Layout



Lets you switch to a previously saved custom layout. Once you load a saved layout, that layout will remain the current one when starting Kdenlive until you switch to another saved layout or modify the current one. If you do make changes to a custom layout after loading it and then quit Kdenlive, you will not be prompted to save your changes to the named layout. The changes will be remembered and applied the next time you launch Kdenlive, but be aware that you are now working with an unnamed layout. If you like the layout and want to preserve it, save it back to the original name or save it as a new name.

52.4.3 View Menu — Show Title Bars

This toggles the display of the title bar and control buttons on dockable windows in Kdenlive.



Title Bar



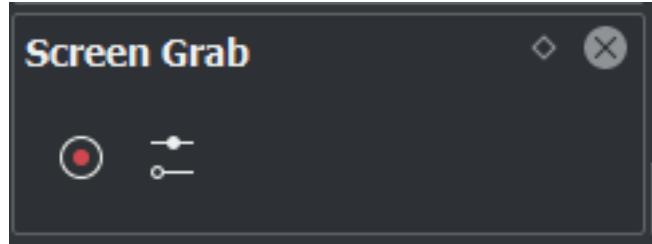
No Title Bar

52.4.4 View>Timeline

Toggles the display of the [Timeline](#)

Chapter 53

Screen Grab



Start recording: click the “record” button.

Stop record: click the ‘record’ button again.

Clicking on the configure button brings you to the [capture configuration](#) window.

53.1 View>Project Tree

Toggles the display of the [The Project Tree](#)

53.2 View Menu — Clip Monitor

Toggles the display of the [Clip Monitor](#).

53.3 View>Project Monitor

Toggles the display of the [Project Monitor](#).

53.4 View>Effect Stack

Toggles the display of the [Effect Stack](#)

53.5 View>Transition

Toggles the display of the [Transition Tab](#)

53.6 View Menu — Effects

Toggles the display of the [Effects Tab](#)

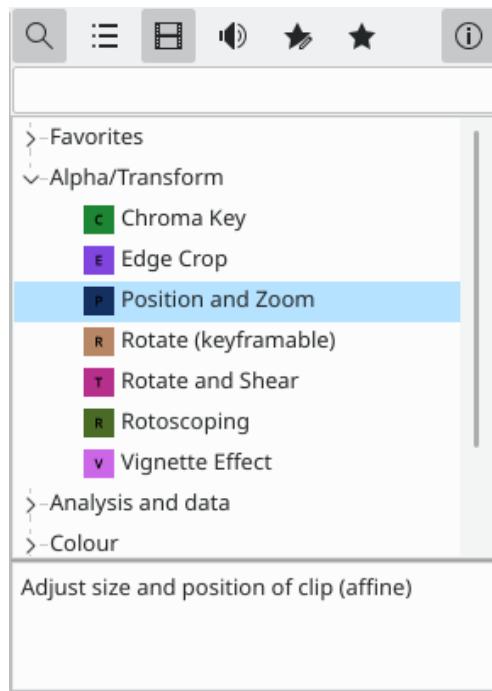


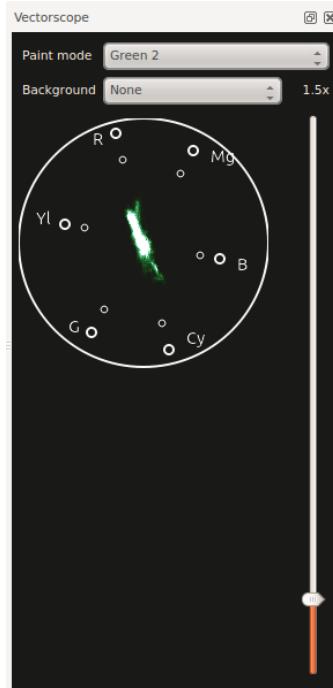
Figure 1b — effects tab. The Information icon has been toggled so that the tab displays a brief description of the selected effect at the bottom.

53.7 Vectorscope Window

This window allows you to monitor the colour properties of your clip in detail.

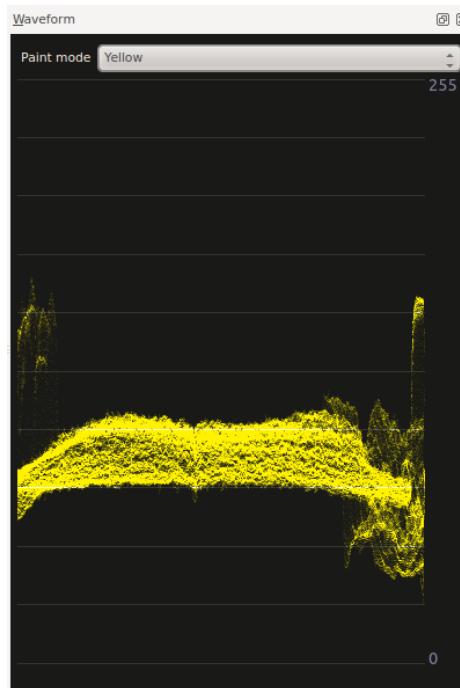
The Vectorscope shows the hue and saturation distribution in a way we can understand without problems. This is useful for quickly recognizing color casts, but also helps judging the color distribution of a clip and matching it to others.

See Granjow's blog [here](#) and [here](#) on the Vectorscope.



53.8 Waveform

This data is a 3D histogram. It represents the Luma component (whiteness) of the video. It is the same type of graph as for the [RGB Parade](#). The horizontal axis represents the horizontal axis in the video frame. The vertical axis is the pixel luma from 0 to 255. The brightness of the point on the graph represents the count of the number of pixels with this luma in this column of pixels in the video frame.



For more information see [Granjow's blog](#) on the waveform and RGB parade scopes. This blog

gives some information on how to use the data provided by the RGB parade to do color correction on video footage.

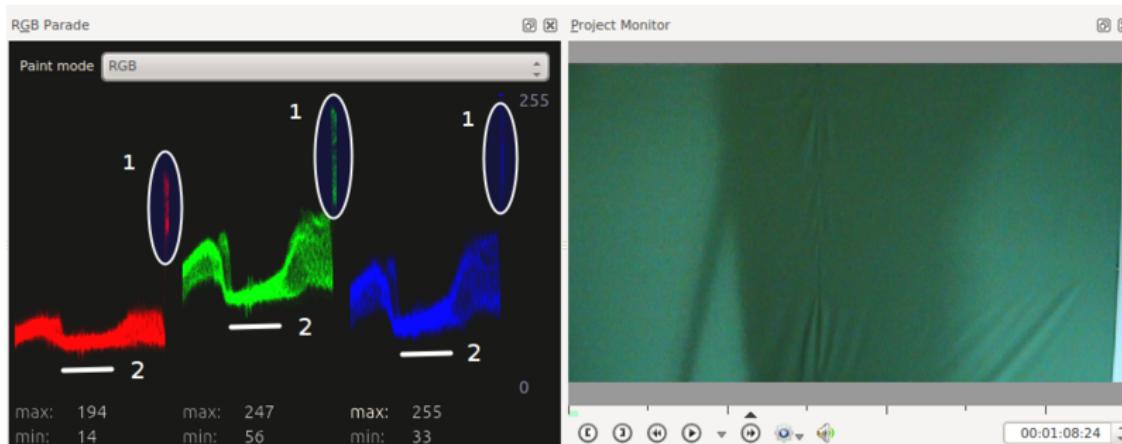
53.9 RGB Parade

Displays a histogram of R, G and B components of the video data. This data is a 3D histogram.

The horizontal axis represents the horizontal axis in the video frame. The vertical axis is the pixel luminance from 0 to 255. The brightness of the point on the graph represents the count of the number of pixels with this luminance in this column of pixels in the video frame.

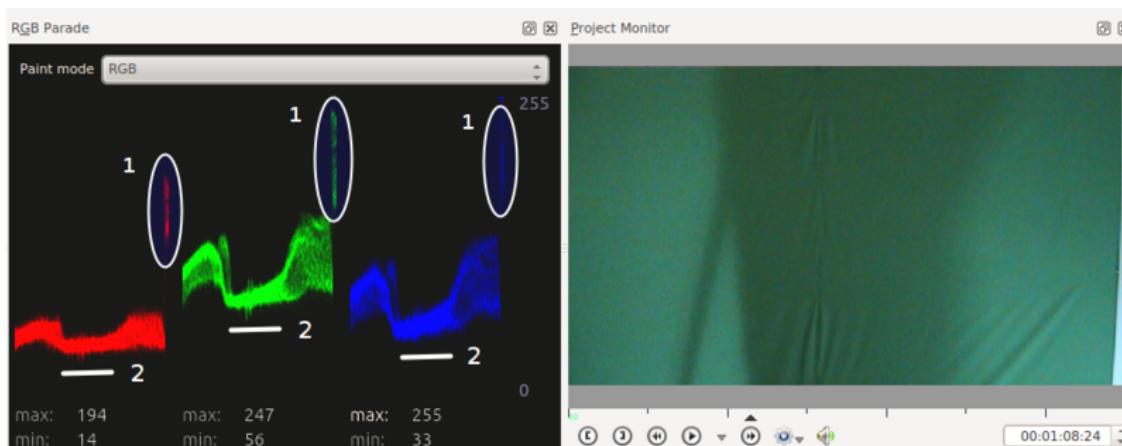
In the sample screenshot below of a green screen with a shadow on it and with a right edge that reveals a white wall, you can see how the scope works. The circled regions labeled 1 are on the right side representing the fact that there are several columns of pixels that are quite bright whitish/gray. So these regions are higher up on the Y axis.

The regions labeled 2 are in the middle of the scope and the dip in the graph there shows the shadow on the screen at this point. The average luminance of the pixels in these columns is lower.



For more information, see [Granjow's blog](#) on the waveform and RGB Parade scopes. This blog gives some information on how to use the data provided by the RGB Parade to do color correction on video footage.

The RGB Parade option in the View menu is somewhat different from the

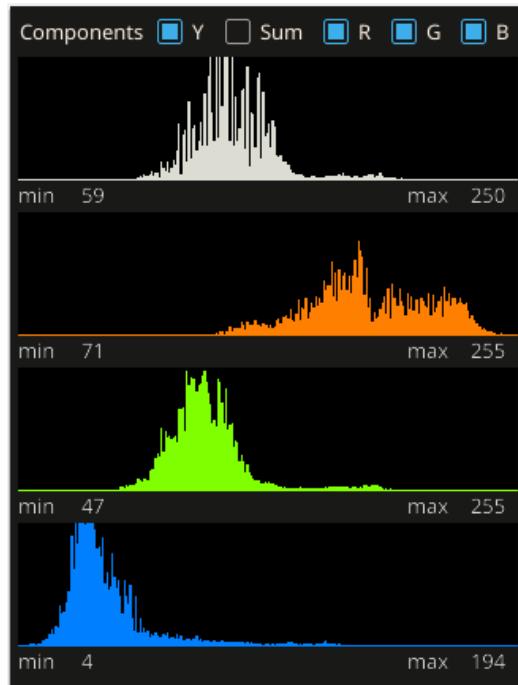


in that **View → RGB Parade** displays the histogram in the application whereas the **RGB Parade** effect writes the histogram into the video output file.

53.10 Histogram

This scope displays a frequency histogram of the luminance of the color components of the video. This information is useful when used in combination with color correction effects to perform color correction on the video. Color correction includes increasing the brightness or adjusting the white balance to ensure that white remains white and not blue.

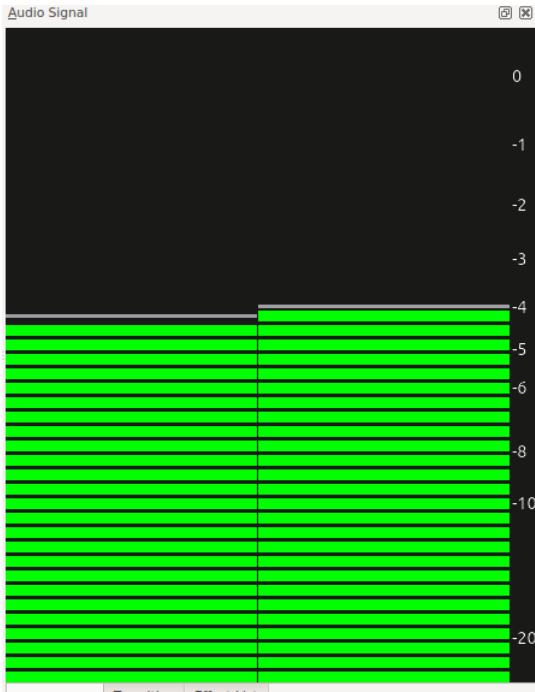
The histograms have the luminance on the horizontal axis going from 0 on the left to 255 on the right. The vertical (Y) axis represents the count of the total number of pixels in the current video frame with a given luminance.



For more information read [Granjow's blog](#) on the histogram scope.

53.11 Audio Signal

You can monitor the levels of the audio as the clip plays with this widget.

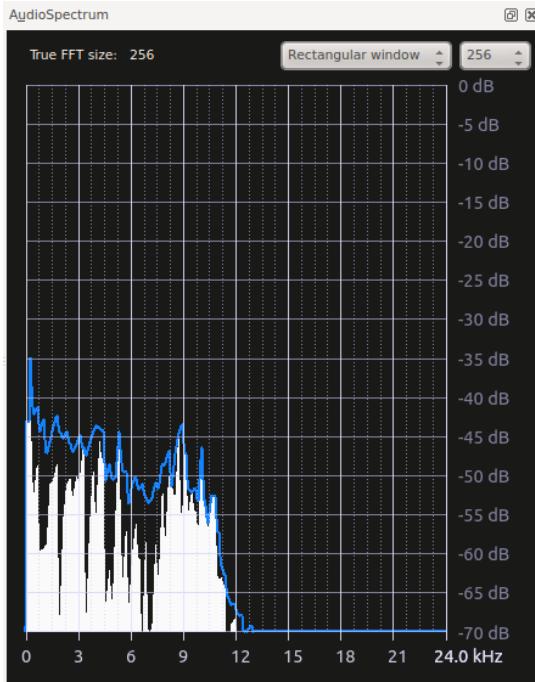


53.12 Audio Spectrum

This allows you to monitor the audio properties of your clip in detail. The graph only display data while the clip is playing in the clip or project monitor.

It graphs the loudness of the audio (in decibels - vertical axis) for each audio frequency (horizontal axis) in the current frame. The blue curve is +- the maximum over the previous few samples.

See also [Spectrogram](#) scope which displays a graphical representation of the audio spectrum over the entire clip.

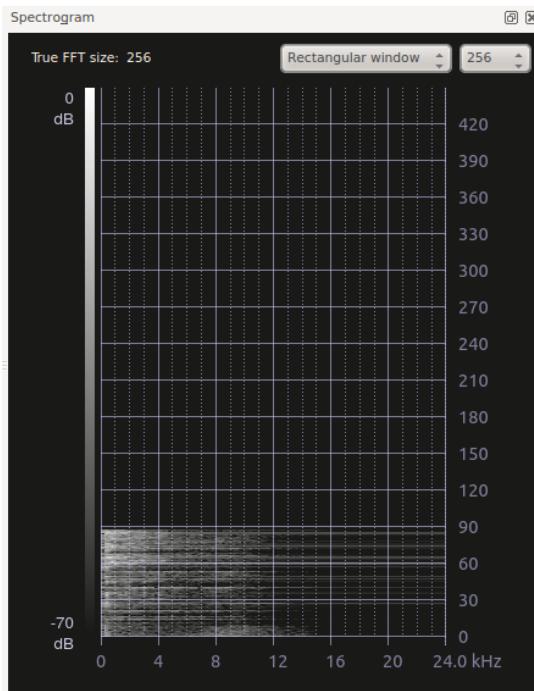


For more information see [Granjow's blog](#) on Audio Spectrum

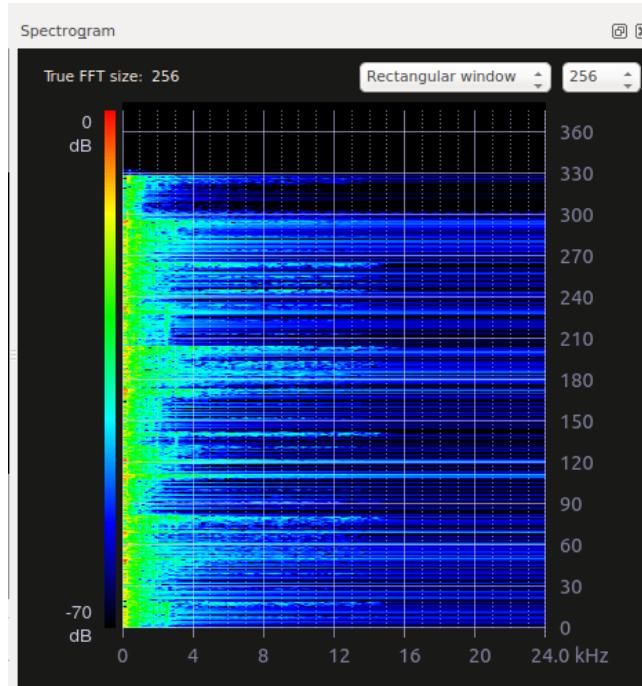
53.13 Spectrogram

This allows you to monitor the audio properties of your clip in detail.

The spectrogram displays the loudness (in decibels) of the audio at different audio frequencies over the entire length of the clip. In the spectrogram, the horizontal axis represents the audio frequency and the loudness is represented by the brightness (versions = 0.9.10) of the pixel on the graph. The vertical axis represents frame number.



Spectrogram monitor in versions 0.9.8 or lower.



Spectrogram monitor in versions 0.9.10 or higher.

For more information see [Granjow's blog](#) on Spectrogram

53.14 View Menu — Undo History

There may be times when you want to quickly restore your project to the state it was in several changes ago. Instead of repeatedly executing single undo operations, it might be more efficient to jump right to the operation in question — if you could easily locate it.

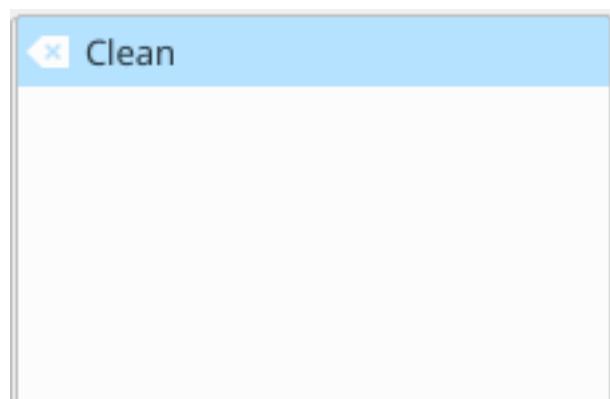


Figure 1

That's where **View → Undo History** comes in. It opens a dockable window which lists all the changes made to your project in the order they were made. When a project file is first opened, the window looks like Figure 1.

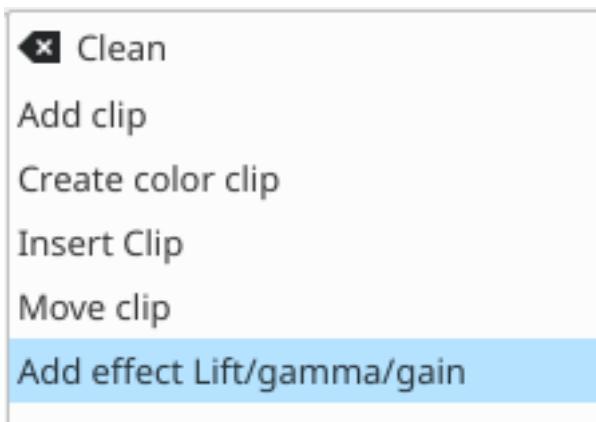


Figure 2

Each operation you perform from then on gets added to the list, as shown in Figure 2. Notice that the most recent operation you have performed is highlighted.

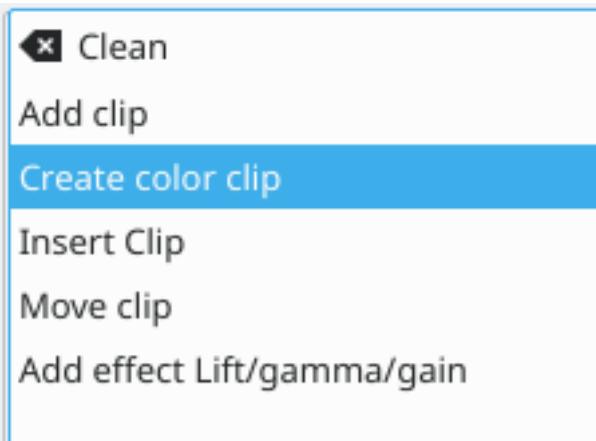


Figure 3

In this example, if you wanted to undo the last three operations with one click, all you have to do is click on the **Create color clip** entry and those three changes will be reversed in one fell swoop. At this point, if you are unhappy with undoing those changes, you can easily redo them by clicking on any of the entries which are still in the list.

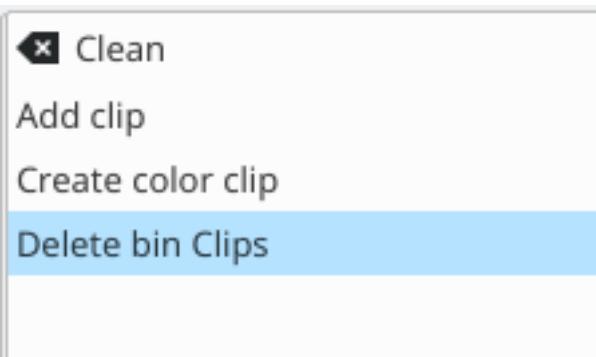


Figure 4

However, if you decided that reverting to that **Create color clip** entry looked good and you then made another change to the project, the three remaining operations that were in the list in Figure

The Kdenlive Handbook

3 will be flushed from the buffer and no longer available. They will be replaced by the new operation you just performed. See the result in Figure 4.

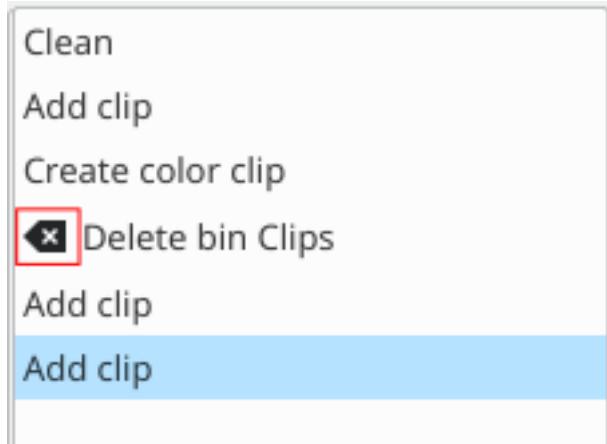
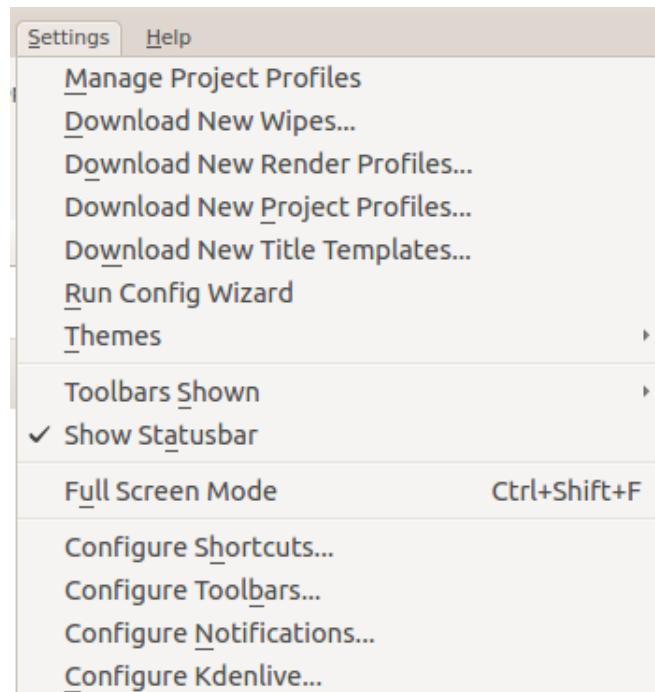


Figure 5

Whenever you save your project, the icon that looks like a broom with the red X is repositioned next to the most recent operation in the list. Figure 5 shows three additional operations which were performed after the file save shown by the circle. After saving the file, you can still revert back to changes which were made before the save.

Chapter 54

Settings Menu



1.

[Manage Project Profiles](#)

1.

[Download New Wipes](#)

1.

[Download New Render Profiles](#)

1.

[Download New Project Profiles](#)

The Kdenlive Handbook

1.

[Download New Title Templates](#)

1.

[Run Config Wizard](#)

1.

[Themes](#)

1.

[Toolbars Shown](#)

1.

[Full Screen Mode](#)

1.

[Configure Shortcuts](#)

1.

[Configure Toolbars](#)

1.

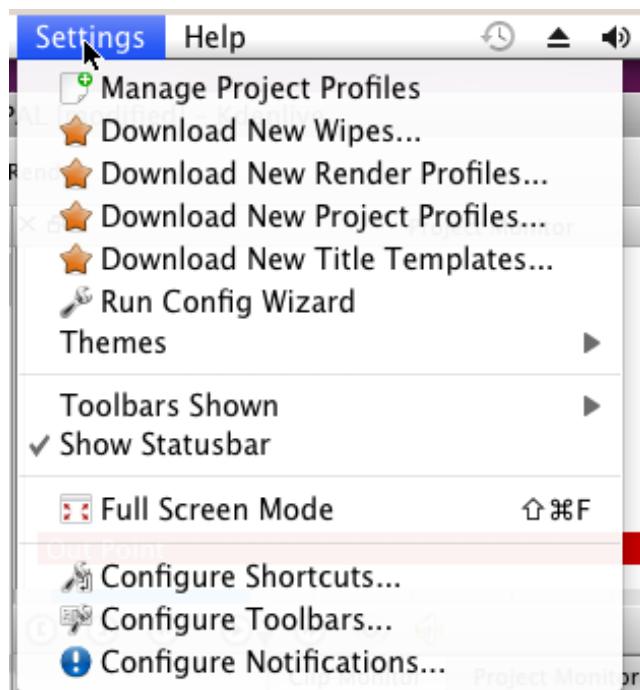
[Configure Notifications](#)

1.

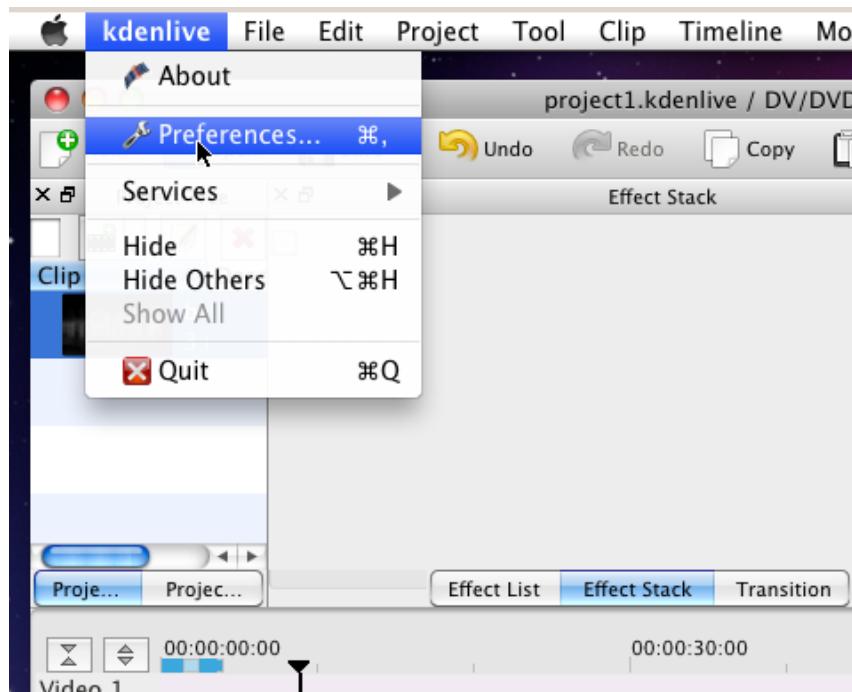
[Configure Kdenlive](#)

Chapter 55

Settings Menu - Mac[®]OS X

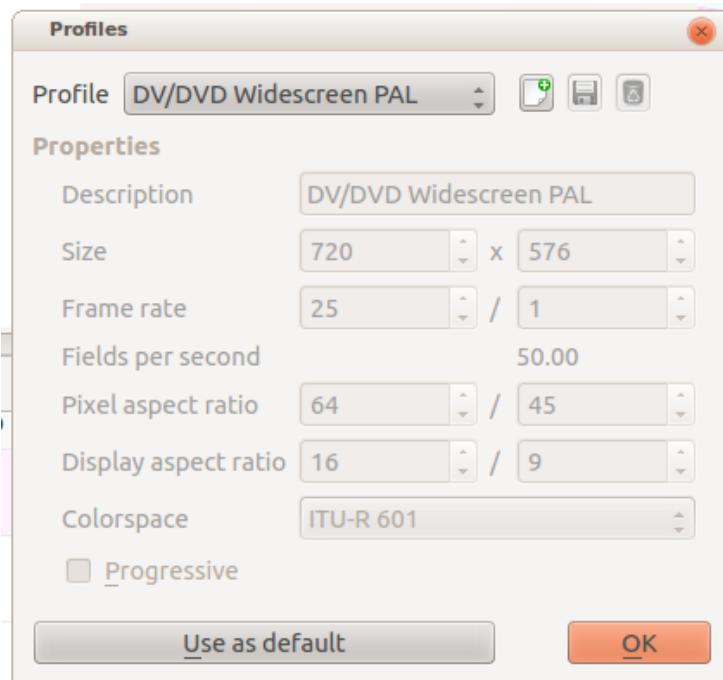


On the Mac[®] OS X build of Kdenlive the **Settings** menu does not contain the **Configure Kdenlive** menu item. The equivalent on Mac[®] OS X is the **Preferences** menu item found under the Kdenlive menu.



55.1 Manage Project Profiles

This is available from the **Settings** menu.



Once the dialog appears, select a profile to modify from the drop down.

Next, click the button with a green plus on it. This will make all the *Properties* fields editable.

Fill in the settings for your project profile, give it a new *Description* and click the **OK** button.

See also [HOWTO Produce 4k and 2K videos, YouTube compatible](#)

55.2 Download New Wipes

This feature allows you to download and install files that can be used as Wipe files in the [Wipe](#) transition. These files are greyscale images in the pgm format.

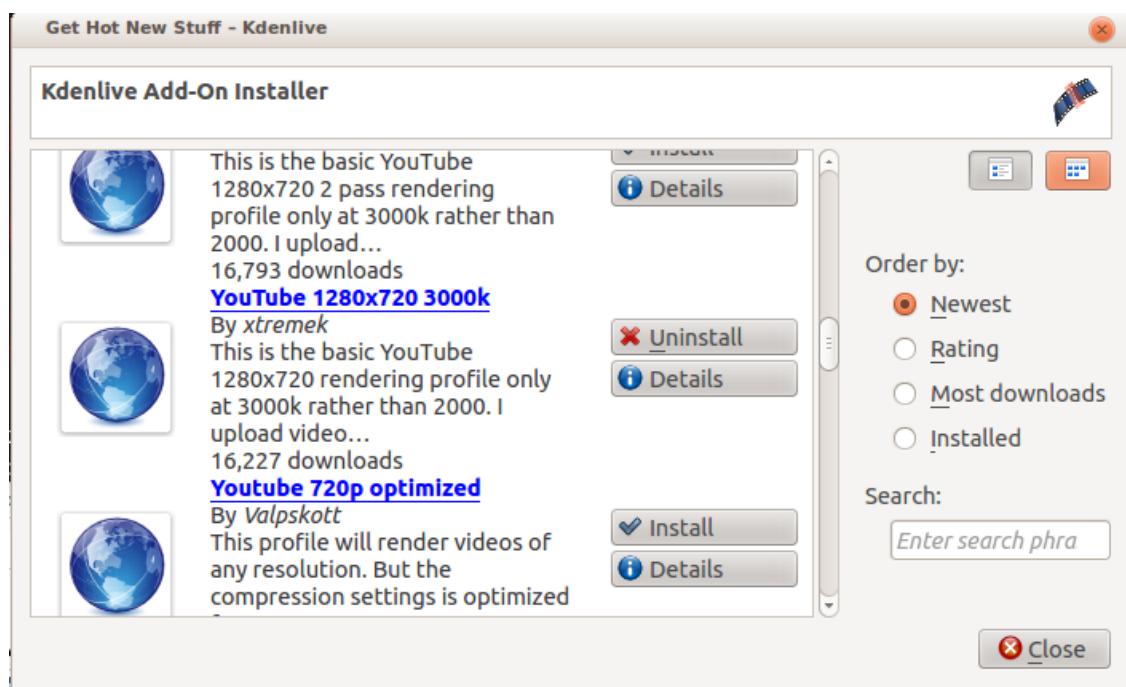
If you have your own wipe files that you would like to share with the community you can upload them to [store.kde.org](#) which should make them available from this *Download New Wipes* function.

55.3 Download New Render Profiles

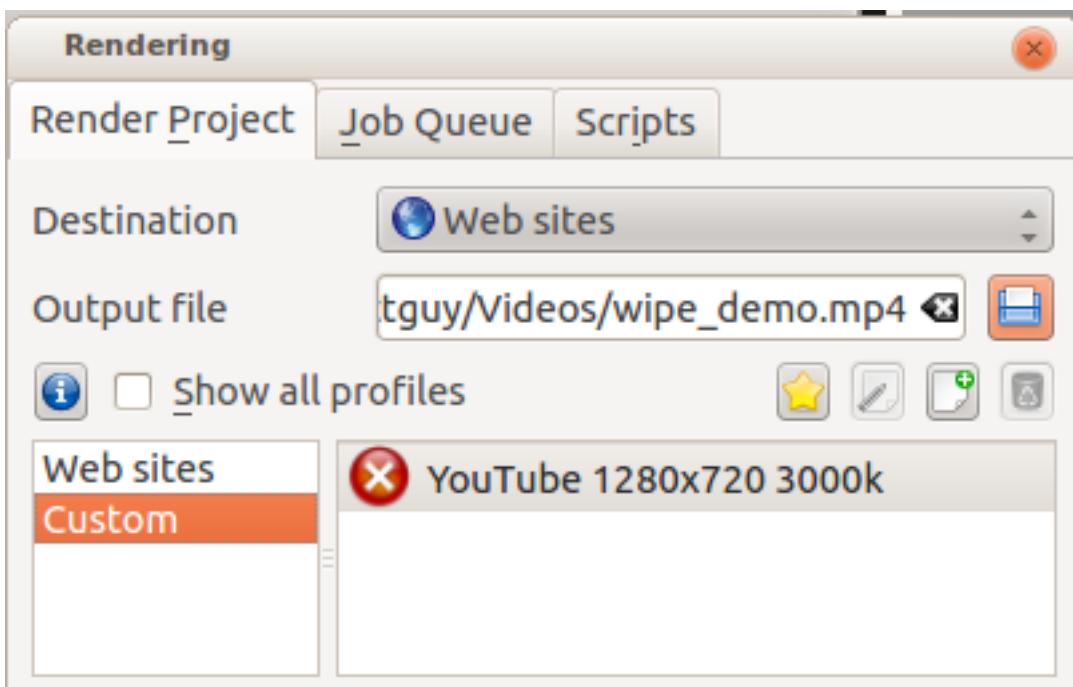
Note: Between August, 2013 and October 2014 this feature had been unavailable and the ‘Get Hot New Stuff’ window will wait forever to update. See Mantis [3133](#). From around Oct 2014 this feature has been re-instated. However as at Oct 2015 there are only two profiles available for download.

The workaround for this issue is to use Kdenlive ver 0.9.10 (or higher) and create your own new render profiles and make use of the *melt* property presets — as described [here](#).

This feature allows you to download new render profiles that have been shared by the community. These will then appear as options in the [Rendering](#) window.



The new render profile installed above shows up in the Web Sites category under Custom.



NOTE

It has the big red cross because the render profile is in need of an audio codec not installed on this machine

The installed files are placed in /usr/share/mlt/presets/consumer/avformat

55.4 Upload/Share Render Profiles

If you want to share a render profile you can do so at the [Create Rendering profile](#) page at kdenlive.org. Profiles submitted there appear in the *Download New Render Profiles*.

Unfortunately the Create Rendering Profile page is only available to users logged in to kdenlive.org and kdenlive.org is not taking on new members.

55.5 Download New Project Profiles

Note: Since around August, 2013 when the kdenlive.org web site was refurbished, this feature has been unavailable and the 'Get Hot New Stuff' window will wait forever to update. See Mantis 3133.

The Download new Render profiles is now working as at Oct 2105. However the download New Project Profiles is still not working as at Oct 2015.

55.6 Download New Title Templates

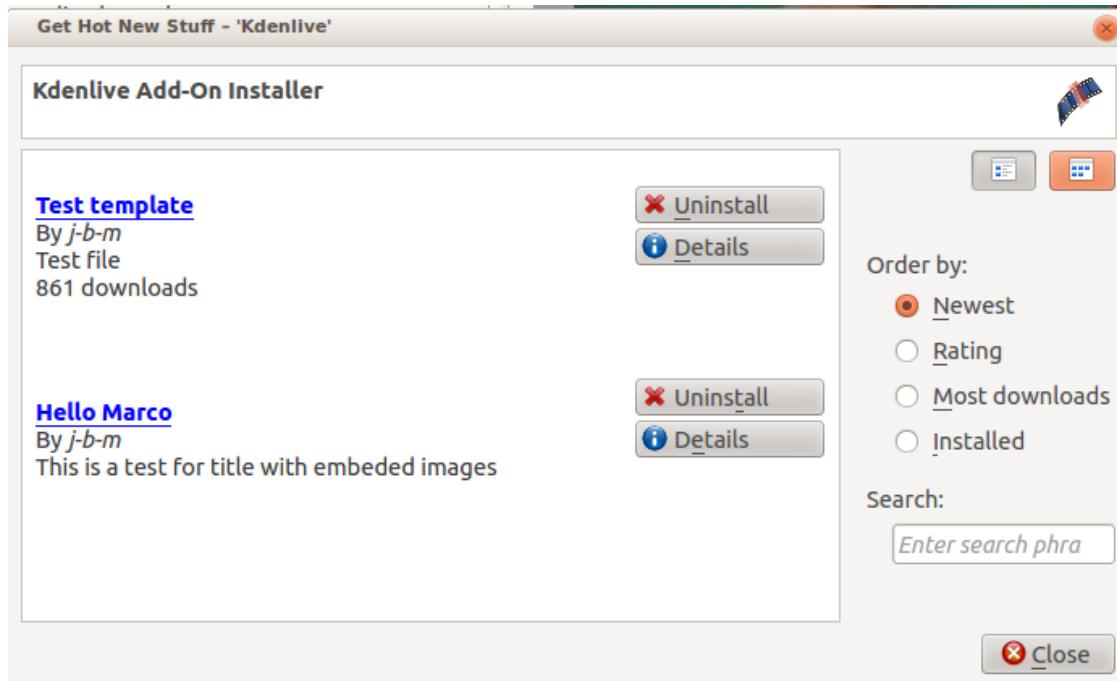
Note: Since around August, 2013 when the kdenlive.org web site was refurbished, this feature has been unavailable and the 'Get Hot New Stuff' window will wait forever to update. See Mantis

The Kdenlive Handbook

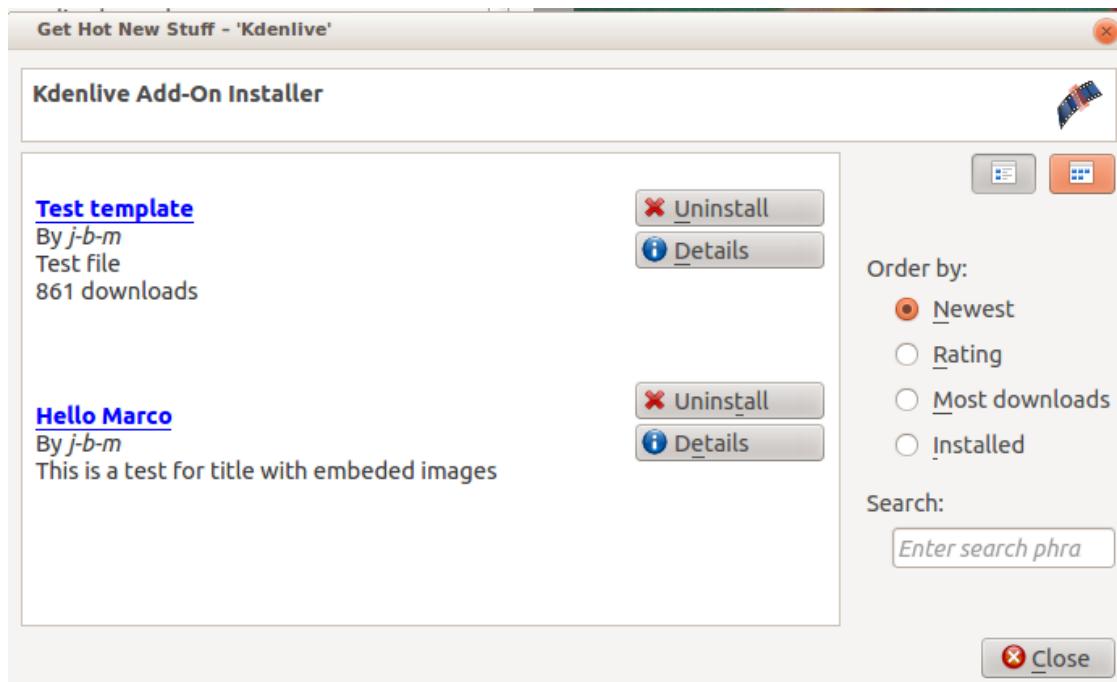
3133. Since this feature never really supplied us with worthwhile title templates anyway, its loss is no big deal.

Oct 2015 - the feature still does not appear to be working.

This feature does not appear to be being extensively used because it only has two options to download.



Once these title templates are installed, they can be accessed via the

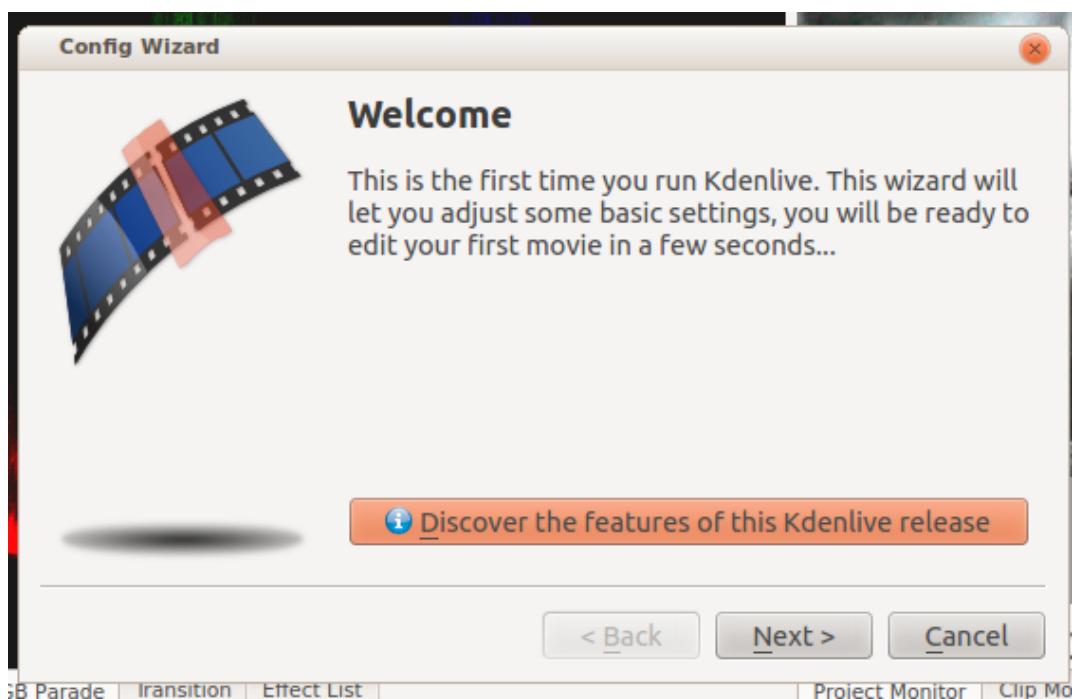


drop down on the Title Clip dialog.

The .kdenlivetitle files that are downloaded are installed to /usr/share/kde4/apps/kdenlive/titles/

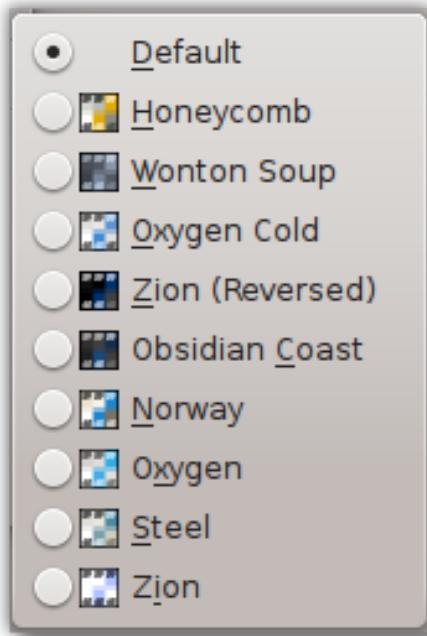
55.7 Run Config Wizard

This feature re-runs the config wizard that runs when you first install or upgrade Kdenlive. It gives you the opportunity to choose the default settings again for things like the default project settings. It also resets many settings back to 'factory defaults' so it can be useful to run this if the Kdenlive application is misbehaving.



Chapter 56

Settings>Themes



Brings up a list of pre-configured color themes to choose from. Some people have strong preferences about whether light or dark themes are better for a video editor. There are some of both to choose from here.

56.1 Toolbars Shown

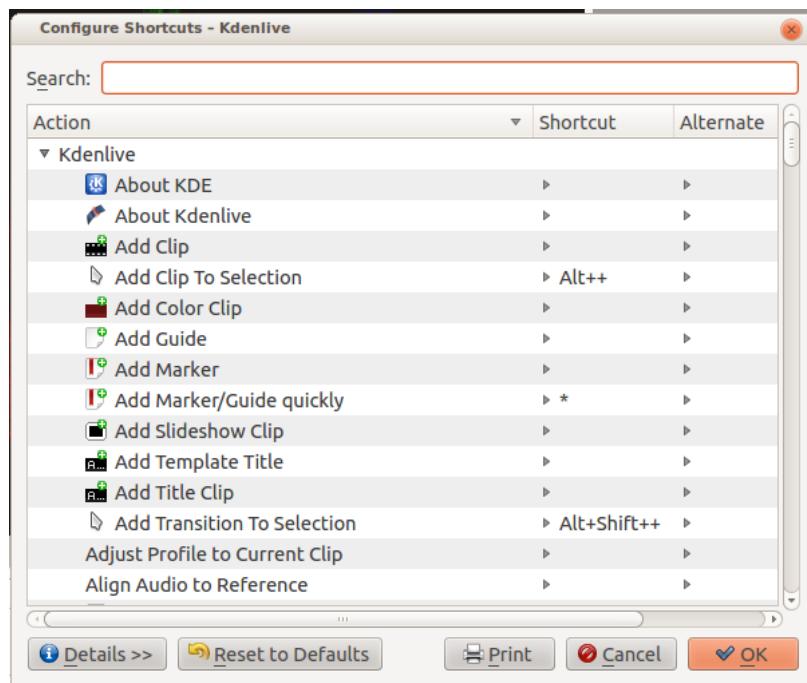
Toggles the display of the Main and Extra [Toolbars](#)

56.2 Full Screen Mode

Selecting this causes Kdenlive to fill the entire screen. Select this menu item again to undo full screen mode.

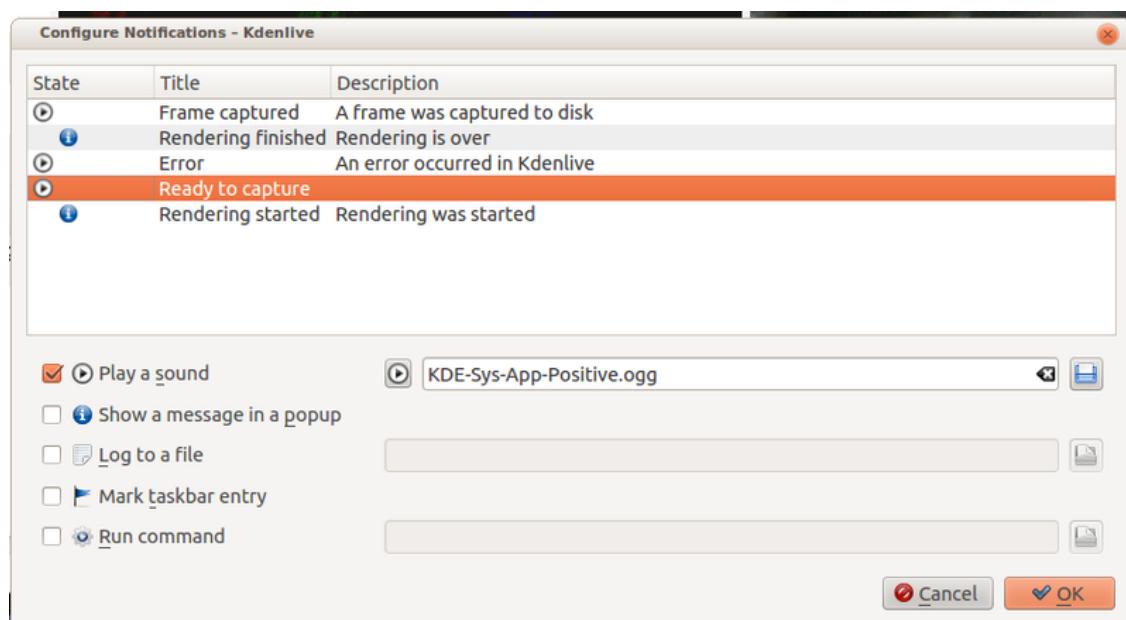
56.3 Configure Shortcuts

Allows modification of the keyboard shortcuts for various Kdenlive tasks.



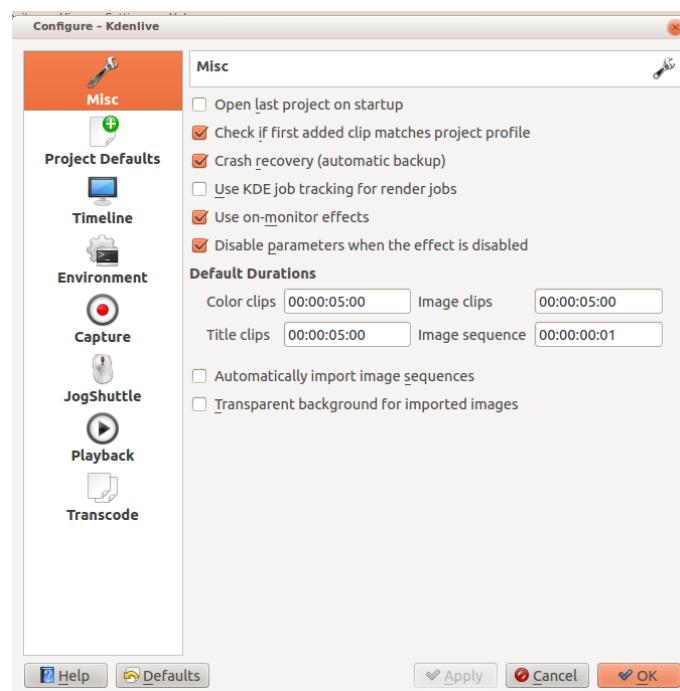
56.4 Configure Notifications

This feature allows you to customize the feedback the application provides when certain events happen. For example, you can change the sound effect that fires when rendering finishes.



56.5 Configure Kdenlive

56.5.1 Misc



Open last project on startup

Check if first added clip matches project profile

Crash recovery (automatic backup)

Use KDE job tracking for render jobs

Use on-monitor effects

Disable parameters when the effect is disabled

Default Durations

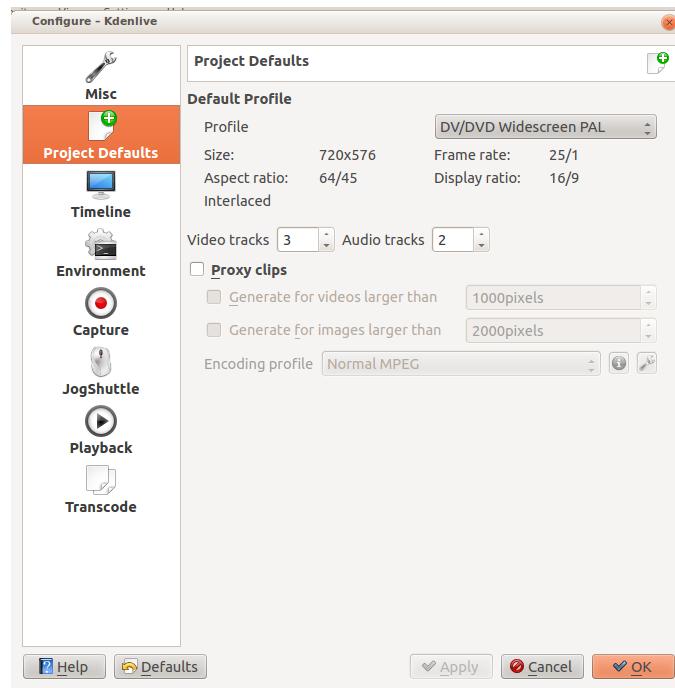
Automatically import image sequences

Transparent background for imported images

56.5.2 Project Defaults

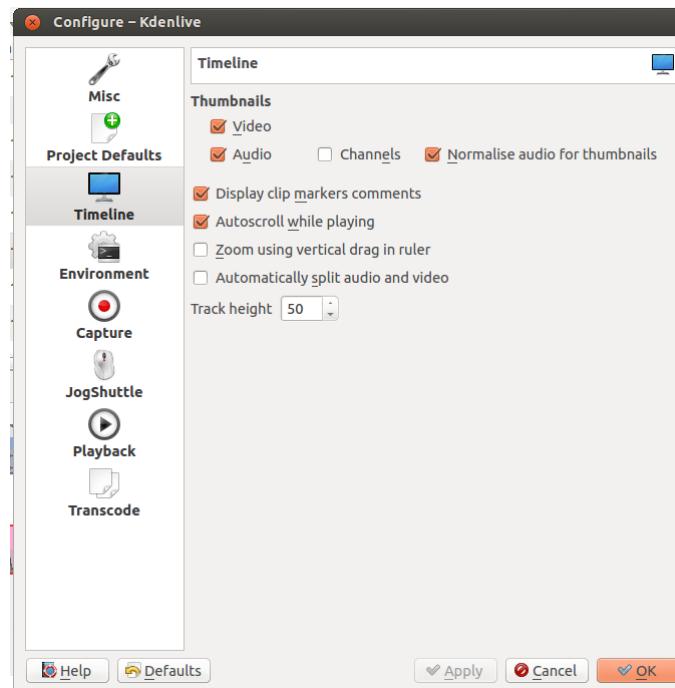
Configures what the project settings will look like by default when you choose File>New.

The Kdenlive Handbook



56.5.3 Timeline

Configure how the timeline appears in Kdenlive



Thumbnails - video - Turns on Show Video Thumbnails by default.

Thumbnails - Audio - Turns on Show Audio Thumbnails by default.

Normalize audio for thumbnails

Channels (ver 0.9.10) - if checked you will get a separate waveform in the audio thumbnail for each audio channel in the audio track. If unchecked you will get a single waveform as the audio thumbnail.

Display clip markers comments - Turns on [Show Marker Comments](#) by default.

Autoscroll while playing

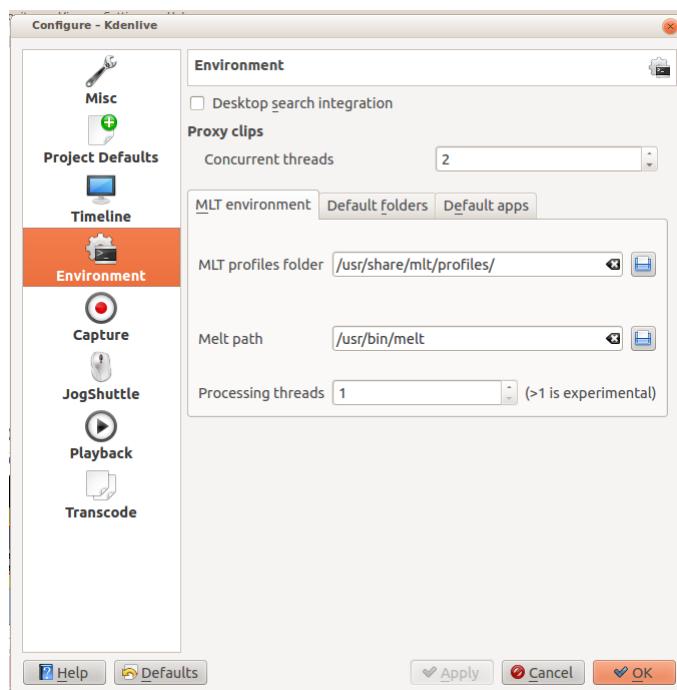
Zoom using vertical drag in ruler

Automatically split audio and video - tracks will automatically have the video and audio portions split into a video and audio track when they are dragged from the project tree to the timeline; i.e., this setting will cause Kdenlive to automatically do what the [Split Audio](#) function on the Clip Menu does.

Track Height - defines the default track height in pixels for the tracks on the timeline.

56.5.4 Environment

56.5.4.1 MLT Environment



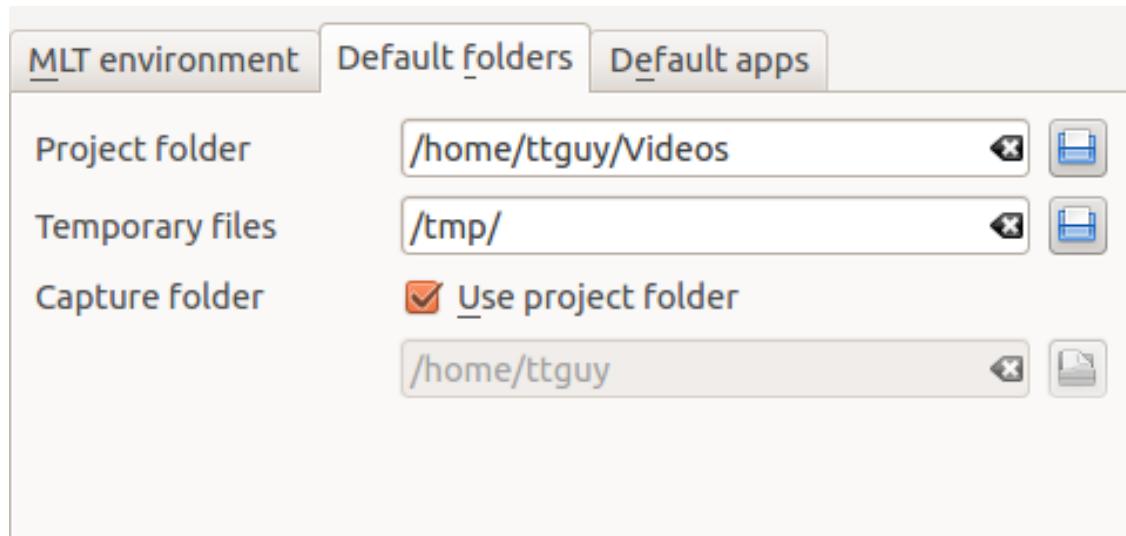
This setting tells Kdenlive where to find the MLT executables and profile files. Only advanced users would really need to changing these settings. Kdenlive is basically a front end to the MLT program and this setting tells Kdenlive where to find the engine that runs the whole application.

Proxy Clips - Concurrent Threads This will set the number of threads the program will attempt to use when calling ffmpeg to encode [proxy clips](#). This will be what kdenlive passes to the `ffmpeg -threads` parameter. Increasing this parameter may not have an effect if you have changed the proxy encoding settings using [Project Settings](#) to a codec that ffmpeg does not do multi-thread on. (Multi-threading is supported for MPEG-2, MPEG-4, H.264, and VP8)

Processing threads: This is experimental and was removed in ver 0.9.10. This number was passed to melts `real_time` consumer property. This parameter increases the number of threads the program uses for video decoding and processing (but not encoding which is controlled via [Render>Encoder threads](#)). See [mlt doco](#). Using this has potential side effects - see [this forum post](#) from the author of the Melt program.

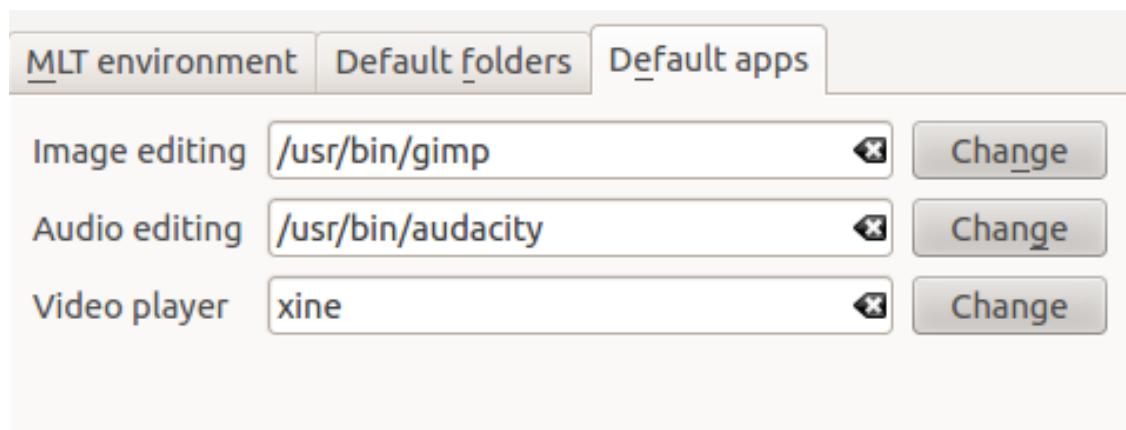
If you want to experiment with multi threading in versions higher than 0.9.10 you could add something like 'real_time=-4' to a custom render profile. And yes that is a minus 4 in the example - as per the [mlt doco](#) - numbers <0 implement threading without dropping frames.

56.5.4.2 Default Folders



This setting controls where Kdenlive expects project files to be by default. It also controls what folder Kdenlive will use as a temporary file storage location and it controls where files captured from an external source will be saved.

56.5.4.3 Default Apps



This setting controls what application opens when you choose [edit clip](#) for a clip in the project tree. Note there is no application for video editing - because Kdenlive is a video editor. Images and audio files are edited by the external applications defined here. The video player is used by the DVD wizard previewer.

56.5.5 Capture

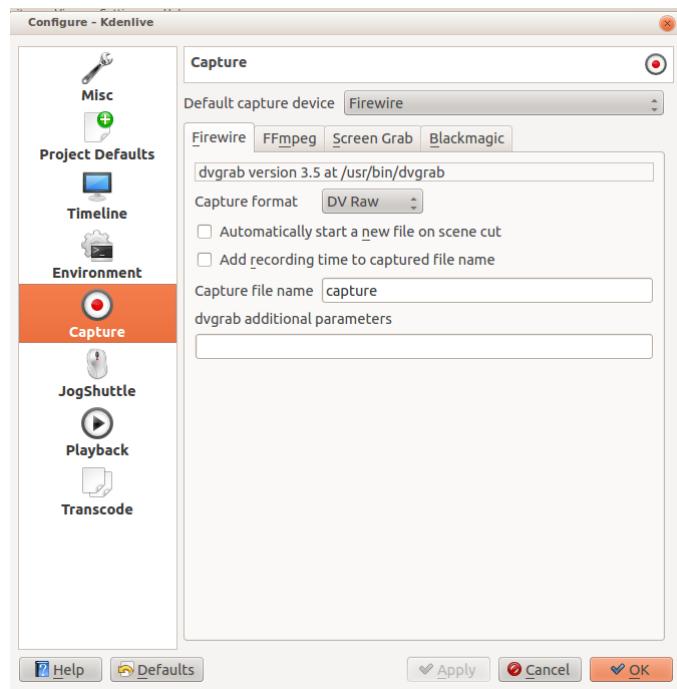
NOTE

At least Firewire capture was removed in porting to KDE 5 due to lack of manpower.

Configure the [capture](#) devices (Firewire, FFmpeg, Screen Grab, Blackmagic) from this section.

56.5.5.1 Configure Firewire Capture

The image shows the Configure Firewire capture tab which can be accessed from the **Settings → Configure Kdenlive** menu or from the spanner icon in the [Record Monitor -> Firewire](#)



The firewire capture functionality uses the [dvgrab](#) program.

The settings applied here define how dvgrab will be used to capture the video.

Capture Format options are

- DV RAW
- DV AVI Type 1
- DV AVI Type 2
- HDV

The first three are quality wise the same (exactly the same DV 25Mb/s standard definition codec), just packed differently into the file. Type 2 seems to be the most widely supported by other applications.

The raw format contains just the plain video frames (with audio interleaved) without any additional information . Raw is useful for some Linux® software. Files in this format can also be played with Windows QuickTime when renamed to file.dv .

AVI files may contain multiple streams. Typically, they include one video and one audio stream. The native DV stream format already includes the audio interleaved into its video stream. A type 1 DV AVI file only includes one DV video stream where the audio must be extracted from the

DV video stream. A type 2 DV AVI file includes a separate audio stream in addition to the audio data already interleaved in the DV video stream. Therefore, the type 2 DV AVI file is redundant and consumes more space.

HDV is a high-definition format used on tape-based HD camcorders.

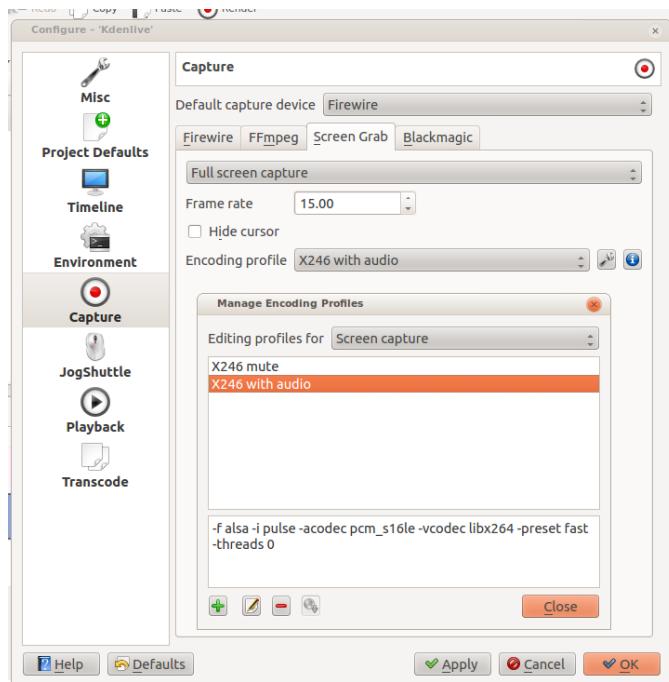
Add recording time to captured file name option: If this is unchecked then each captured file will get a sequential number post-pended to the file names listed in the Capture file name setting. With this checked, a date and timestamp (derived from when the footage was captured) is post-pended to the capture file name, e.g. `capture2012.07.15_11-38-37.dv`

Automatically start a new file on scene cut option: With this checked it tries to detect whenever a new recording starts, and store it into a separate file. This is the `-autosplit` parameter in `dvgrab` and it works by detecting timecode discontinuities from the source footage. Where a timecode discontinuity is anything backwards or greater than one second it will start a new capture file.

The **dvgrab additional parameters** edit box allows you to add extra dvgrab switches to the capture process that will run. See [dvgrab manual](#) for more info.

56.5.5.2 Configure Screen Grab Capture

This shows the configure tab for screen grab in ver 0.9.3 of Kdenlive. It will be different in ver. 0.9.2 because that version used Record My Desktop to do the screen capture.



56.5.6 Jog Shuttle

Configure a connected Jog-Shuttle device. Contour ShuttlePro and Contour ShuttleXpress are known to work.

Ensure that your Jog-Shuttle device is connected via USB and working. An udev rule is necessary to correct the access rights to the device file: Create a file `/etc/udev/rules.d/90-contour-shuttleXpress.rules` with the line:

```
SUBSYSTEMS=="usb", ATTRS{idVendor}=="0b33", ATTRS{idProduct}=="0020", MODE <-
= "0444"
```

The Kdenlive Handbook

for Contour ShuttleXpress or

```
SUBSYSTEMS=="usb", ATTRS{idVendor}=="0b33", ATTRS{idProduct}=="0030", MODE <-
= "0444"
```

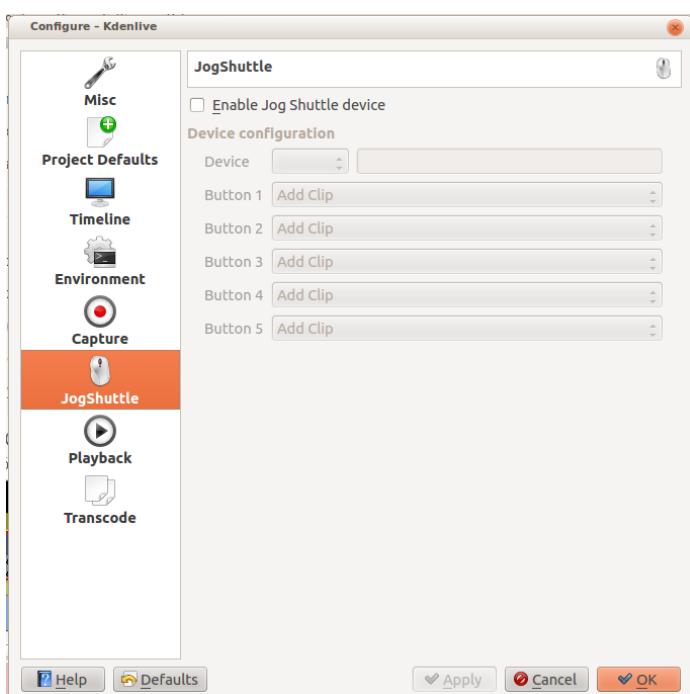
for Contour ShuttlePRO V2. Obtain the device file by a command

```
fgrep Contour -A4 /proc/bus/input/devices
```

The last line of the output says

```
H: Handlers=mouse0 event3
```

which should tell the device file to be entered into kdenlive's setting dialog: In the text field enter `/dev/input/event3` (use the last word on the line above to specify the device file in `/dev/input`), set the buttons and apply the changes.

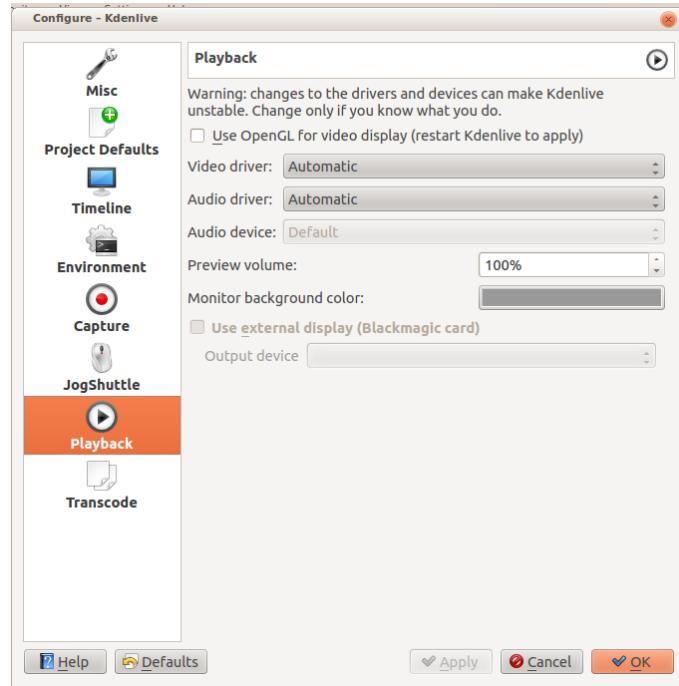


Enable Jog-Shuttle. For the Contour ShuttleXpress the buttons 5 - 9 are relevant, whereas Contour ShuttlePro uses all buttons. The actions for the jog- and the shuttle wheel are working as expected.

56.5.7 Playback

Configure the Video and Audio drivers and devices. For advanced users only.

The Kdenlive Handbook



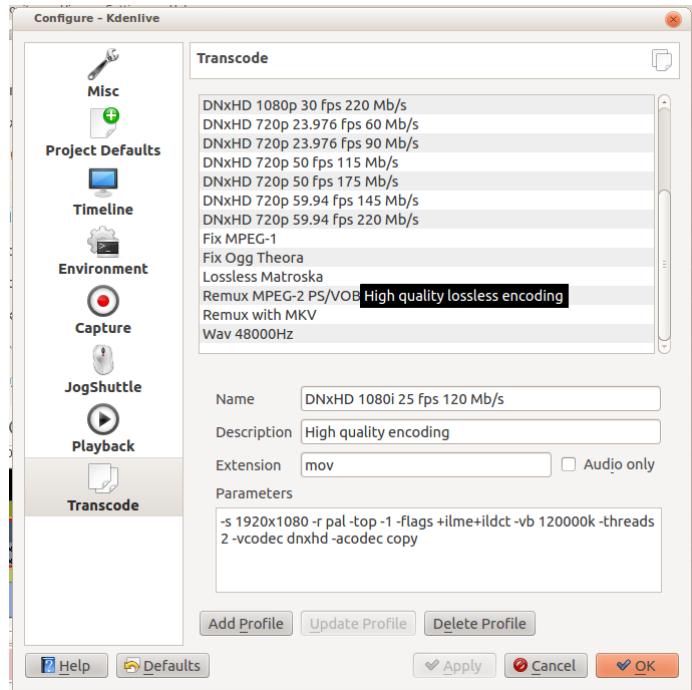
In version 0.9.4 of Kdenlive, checking the 'use OpenGL for video playback' checkbox turns on the ability to have audio scrubbing available for use in the clips. Audio scrubbing lets you hear the audio at the playhead position as you drag the playhead so you can quickly find a particular sound or event in the audio. This feature can be useful for placing the play head at the correct spot in clip relative to an important bit of audio.

In ver 15.04 or higher there is no 'use OpenGL for video playback' checkbox - OpenGL is used by default.

56.5.8 Transcode

This controls the [transcode](#) functionality. The parameters section are ffmpeg parameters. Find help on them by issuing `ffmpeg -h` at a command line.

The Kdenlive Handbook



56.5.8.1 Transcode Options

Option	Description	Parameters	Meanings of Parameters
Wav 48000Hz	Extract audio as WAV file	-vn -ar 48000	-vn=disable video, -ar 48000 = set audio sampling rate to 48kHz
Remux with MKV	-	-vcodec copy -acodec copy -sn	copy the video and the audio. -sn = disable subtitles
Remux MPEG-2 PS/VOB	Fix audio sync in MPEG-2 vob files	-vcodec copy -acodec copy	copy the video and the audio

Chapter 57

Rendering Using Guides and Rendering Scripts

57.1 Purpose

When editing video, time means everything. Especially how long it takes you to edit the clips, project, or footage you are working on. If you ever need to export sequences of your timeline separately, Kdenlive offers a great way to do this. You can set guides in your project that establish zones. You then can generate rendering scripts that will export these zones at a later date, during your sleep, or while you hunt and find food. Let's check out how to do this.

57.2 Picking Sections with Guides

Start by adding a clip into the timeline. I've added some retro footage about airplanes. Cool.

The Kdenlive Handbook

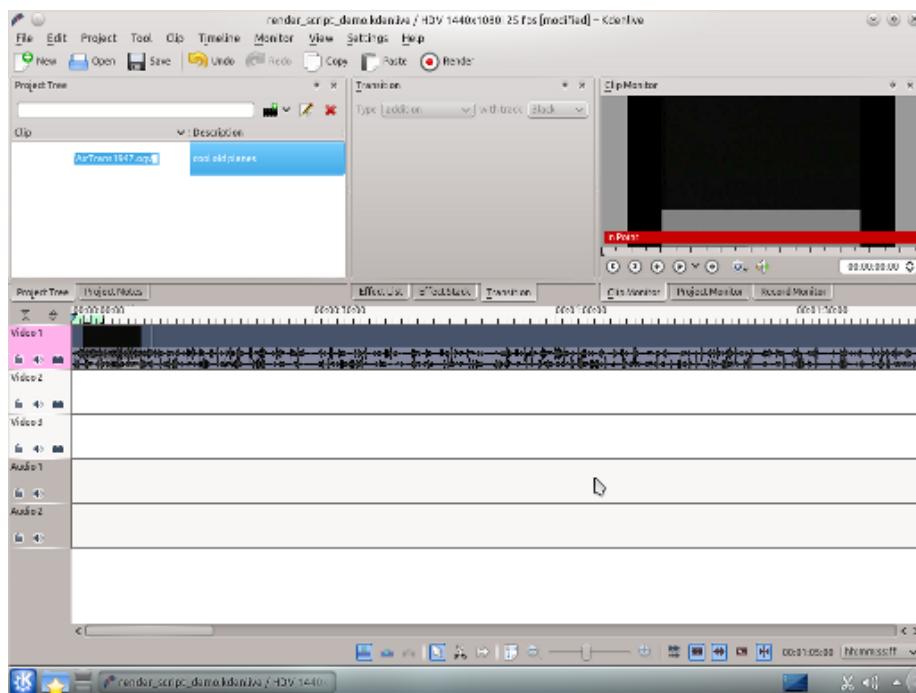


Figure 1

Next we want to add a guide for a specific section of the clip on the timeline. You can add a guide by selecting **Timeline** in the menu and then slide down to **Guides** and select **Add Guide** from the menu. Right clicking the top of the timeline also gives you the option **Add Guide**. If you want to, you can also edit the guides you have set by right clicking on the timeline.

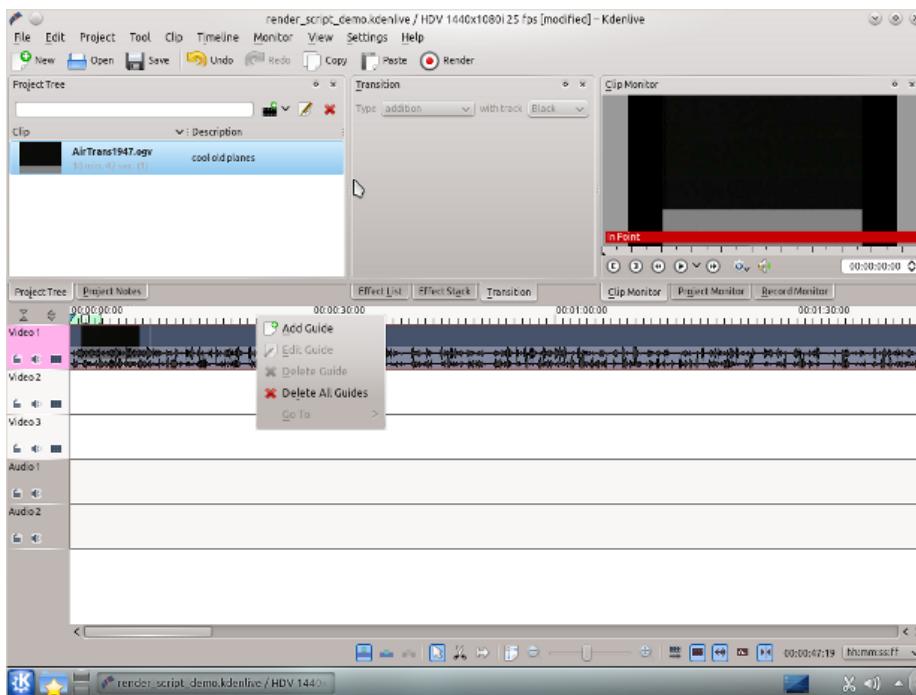


Figure 2

After selecting this option, a window appears giving you the *Position* of the guide and a field to add a comment. Labeling the guide won't hurt anyone, so I'll name my first guide the extraordi-

The Kdenlive Handbook

nary *Section 1*. A dark blue line appears vertically down through the tracks on your timeline.

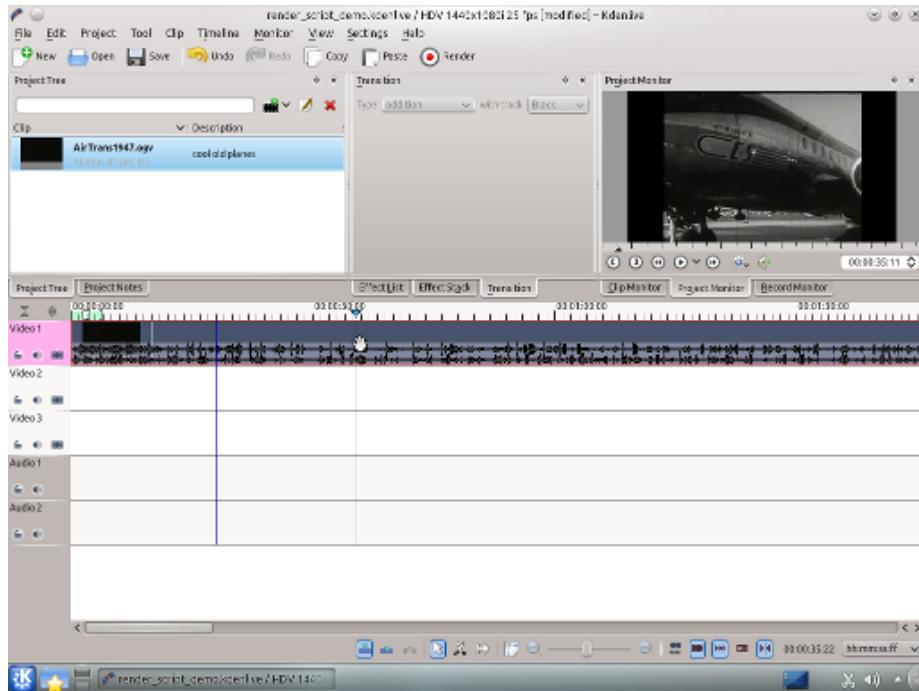


Figure 3

I'll add a few more guides and then we'll start rendering.

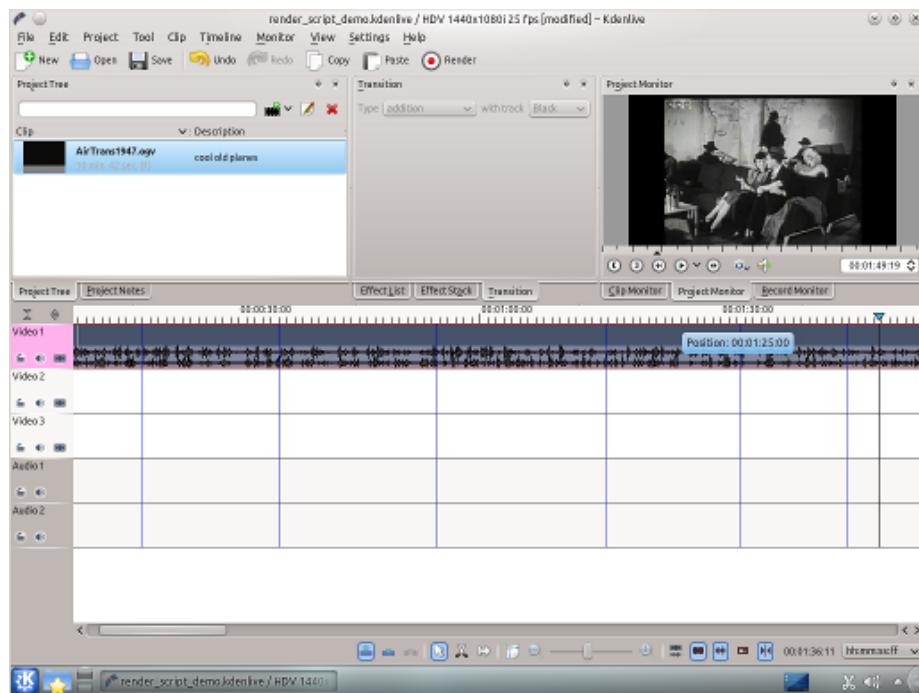


Figure 4

The screenshot shows the 6 guides I have put in my project. They chop up the existing clip as I want for my project (that hopefully will become the first hit retro-experimental film...). Now we can export scripts that, when executed, will render these guide zones.

57.3 Generating Rendering Scripts

Start by clicking on the **Render** button in your toolbar, the one with the red circle surrounded by a white and black ring. You can also select this by going to the **Project → Render** menu (**Ctrl-Return**).

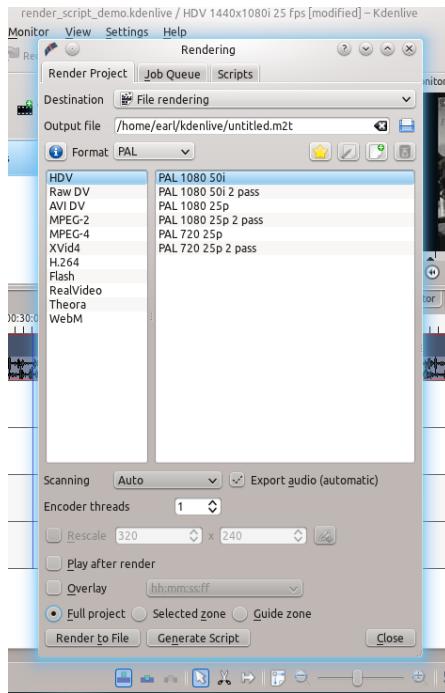


Figure 5

The new window gives us many choices about how to render our video. Look at the bottom of the window. We need to select the **Guide Zone** option. Selecting this will allow us to render our project using the guides we made earlier. Be sure and name the output file to a unique name for each script we will create. Otherwise the scripts will overwrite the different guide zones and not do what you wanted.

The Kdenlive Handbook

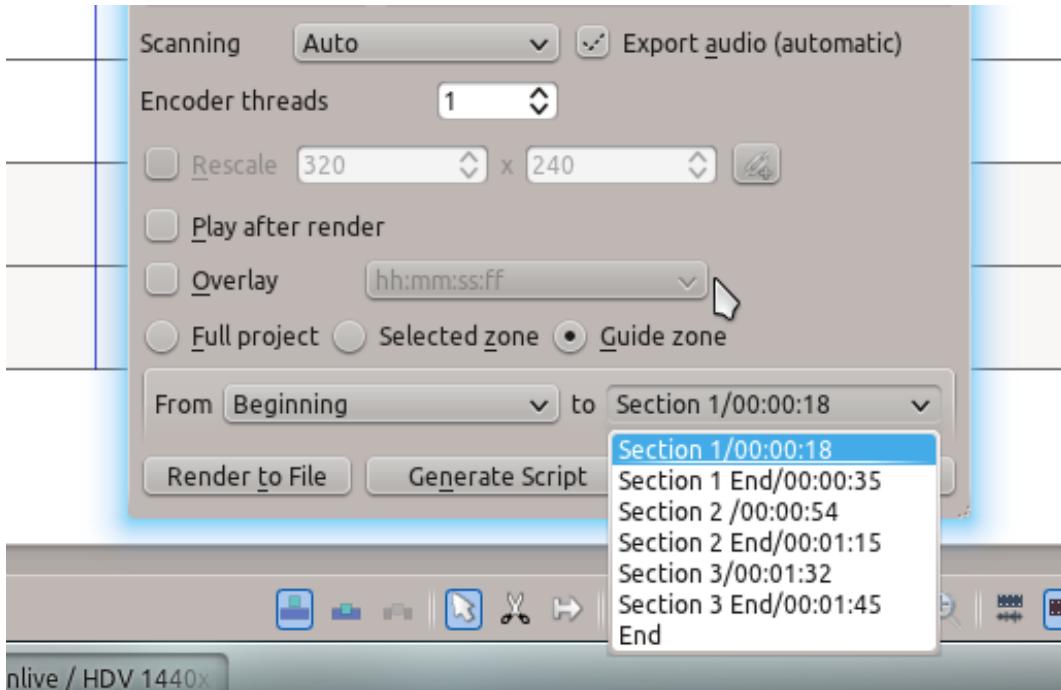


Figure 6

We now can choose which guides will establish the regions of video we want to export using the pull down menus next to *From* and *to*. I'll cut out the *Beginning* and instead use *section 1* to *Section 1 End*, the guide names I defined earlier.

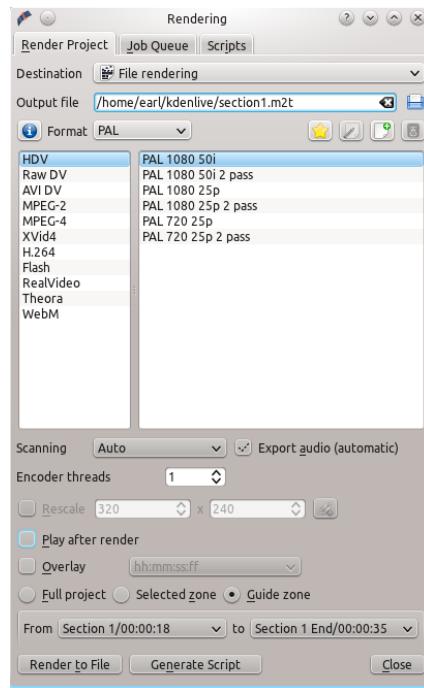


Figure 7

Now I can render this to a file or generate a script that will render this guide zone to a file. Click **Generate Script** and a dialog appears asking you to name the script. Kdenlive stores the clips in /yourhomedirectory/kdenlive/scripts

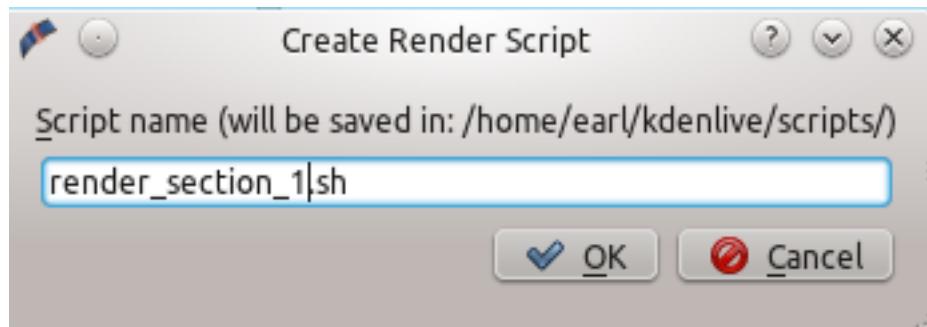


Figure 8

After saving the script, the top tab in the window switches to **Scripts**. This lists all the scripts you have generated for the current project.

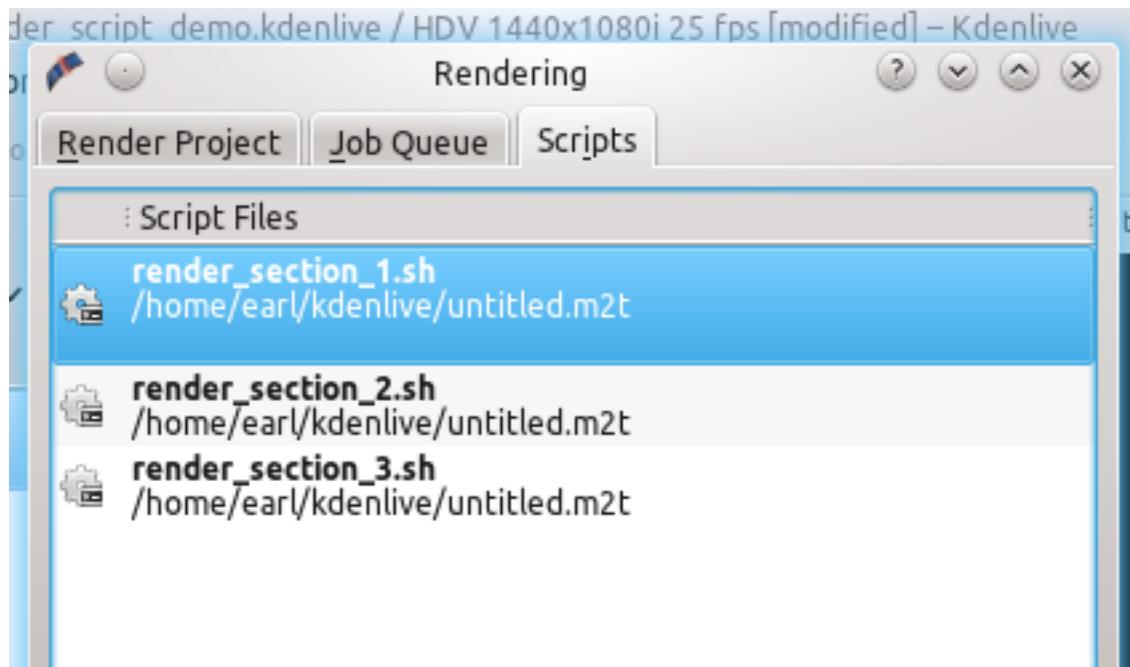


Figure 9

I went ahead and generated 3 scripts based on the guide zones I set up in my timeline. Be sure and keep the .sh extension otherwise the rendering script will not be generated.

57.4 Starting Your Rendering Scripts

Once each script is generated, you need to start each one. You should be in the script tab and see your scripts listed. Start the process by selecting the script and clicking the **Start Script** button. Do this for each script.

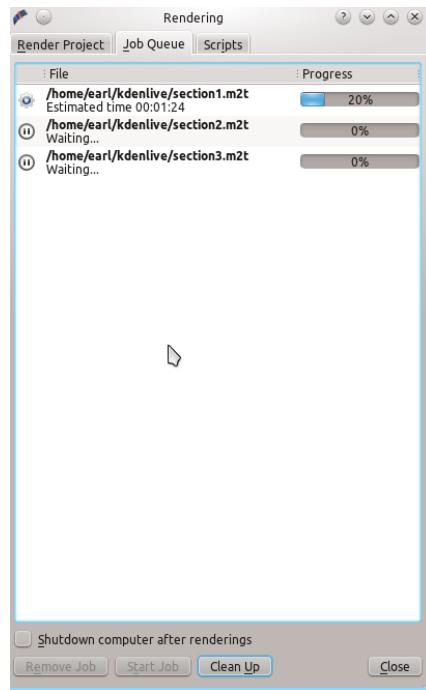


Figure 10

After clicking each script, you are switched to the *Job Queue* tab. Here you will see what script is being run and how many more are waiting to be run. If you have a large queue, you can take advantage of the nifty checkbox in the bottom left: **Shutdown computer after renderings**.

57.5 Starting Your Rendering Scripts in a Command Line Terminal

For troubleshooting purposes there could be times that you want to run the render script in a terminal prompt. Rendering in the terminal can produce error logging information that can assist in debugging rendering issues.

To render the video in the terminal ...

- Note the location where Kdenlive has saved the .sh script (see Figure 8)
- Open a terminal and change directories to the location of the .sh script
- execute the .sh script

```
$ cd /home/earl/kdenlive/scripts $ sh render_section_1.sh
or
$ ./render_section_1.sh
```

57.6 Summary

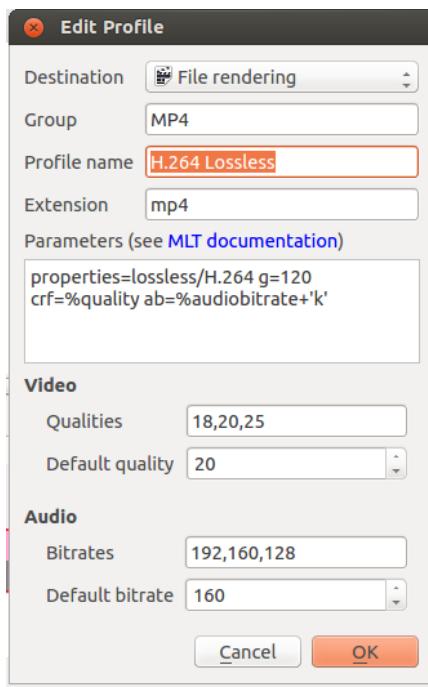
Creating guides can help organize your project while you work on it and when you share it with the world. You can use guides to keep track of areas or to generate rendering scripts that will do the mundane task for you. This feature makes exporting sections of your project quite easy. There are also other ways to take advantage of rendering sections and guide zones using guides. Have fun. Explore!

Chapter 58

Render Profile Parameters - How to read them

58.1 Render Profile Parameters - How to read them - ver 0.9.10

In version 0.9.10 the render profile parameters changed significantly.



Kdenlive now makes use of 'property presets' delivered by the *melt* project (see [melt doco](#)). These presets are referenced by the *properties=* syntax. In the example illustrated, the render profile is referencing *lossless/H.264*. This refers to a property preset found in file H.264 found on the system at `/usr/share/mlt/presets/consumer/avformat/lossless`.

All the *<presets>* referenced in the render settings in 'Kdenlive will be referring to presets found at `/usr/share/mlt/presets/consumer/avformat/` (on a default install). Note that you reference presets found in subdirectories of this folder using a `<dirname>/<profile>` syntax as shown in the example above.

```
properties=lossless/H.264
```

```
g=120
crf=%quality
ab=%audiobitrate+'k'
```

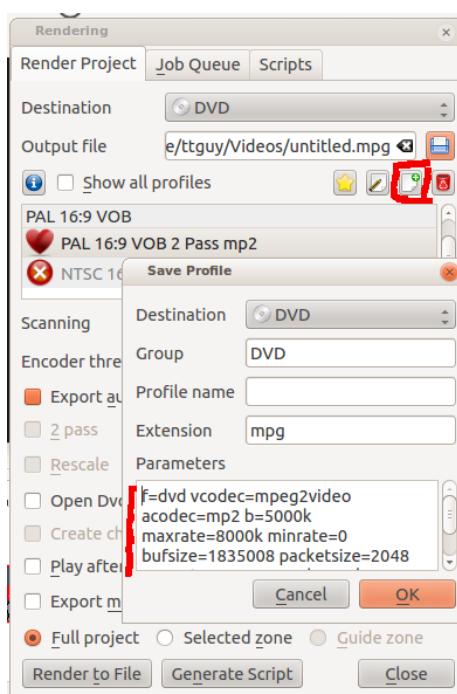
The preset files found at `/usr/share/mlt/presets/consumer/avformat/` are simple text files that contain the `melt` parameters that define the rendering. An example is shown below. These are the same parameters that were used in earlier versions of Kdenlive — see next section for how to read those.

Contents of lossless/H.264:

```
f=mp4
acodec=aac
ab=384k
vcodec=libx264
intra=1
vb=0
g=0
bf=0
preset=medium
qscale=1
qp=0
coder=ac

<!--T:28-->
meta.preset.extension=mp4
meta.preset.note=Intra-frame only, lossless compressed MPEG-4 AVC with AAC ←
audio
```

58.2 Render Profile Parameters - How to read them - earlier versions of Kdenlive



The Kdenlive Handbook

The parameters that go into a render profile derive from the **ffmpeg** program.

This is a worked example to show how you can understand what these parameters mean using the **ffmpeg** documentation.

In the example above the parameters are:

```
f=dvd
vcodec=mpeg2video
acodec=mp2
b=5000k
maxrate=8000k
minrate=0
bufsize=1835008
mux_packet_s=2048
mux_rate=10080000
ab=192k
ar=48000
s=720x576
g=15
me_range=63
trellis=1
profile=dv_pal_wide
pass=2
```

Looking up the **ffmpeg help** translates these parameters as shown below.

Main option is:

```
-f fmt          force format
```

Video options are:

```
-vcodec codec      force video codec ('copy' to copy stream)
-pass n            select the pass number (1 or 2)
-b bitrate         set bitrate (in bits/s)
-vb bitrate        set bitrate (in bits/s)
-s size            set frame size (WxH or abbreviation)
-me_range <int>    E.V.. limit motion vectors range (1023 for DivX ←
                    player)
-trellis <int>     E.VA. rate-distortion optimal quantization
```

Audio options are:

```
-acodec codec      force audio codec ('copy' to copy stream)
-ab bitrate        set bitrate (in bits/s)
-ar rate           set audio sampling rate (in Hz)
```

The AVCodecContext AVOptions include:

```
-b <int>          E.V.. set bitrate (in bits/s)
-maxrate <int>    E.V.. set max video bitrate tolerance (in bits/s)
-minrate <int>    E.V.. set min video bitrate tolerance (in bits/s)
-g <int>          E.V.. set the group of picture size
```

So all the render profile options are documented here in the **ffmpeg** documentation.

See also [MLT doco on ConsumerAvFormat](#).

See also [HOWTO Produce 4k and 2K videos, YouTube compatible](#)

Chapter 59

Capturing

NOTE

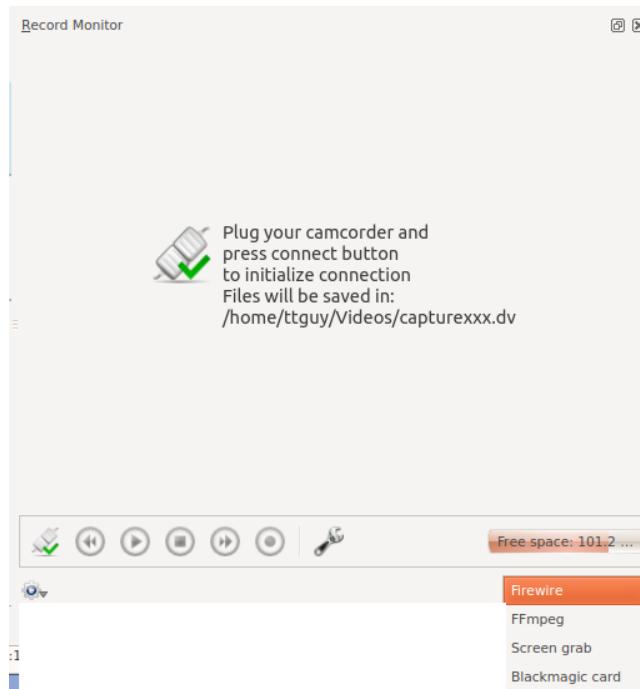
At least Firewire capture was removed in porting to KDE 5 due to lack of manpower.

Kdenlive provides functionality for capturing video from external devices; e.g., Firewire, FFmpeg, Screen Grab and Blackmagic.

You configure video capturing from **Settings → Configure Kdenlive → Capture** (more on this [here](#)).

You define the destination location for your captures by using **Settings → Configure Kdenlive → Environment → Default Folders** (more on this [here](#)).

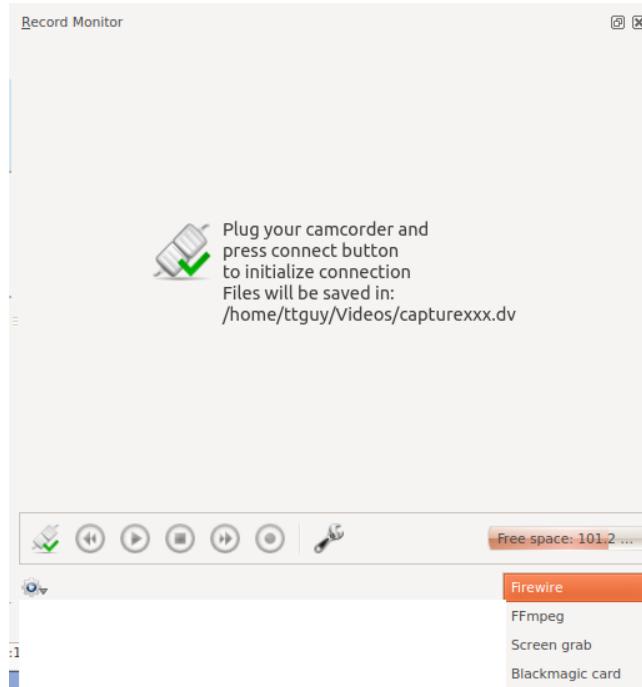
To execute a video capture, select the **Record Monitor** and choose the capture device from the dropdown in the bottom right.



59.1 Firewire

This option is not available in recent versions of Kdenlive. Use dvgrab directly in a terminal to capture video from firewire.

This captures video from sources connected via a firewire (also known as - IEEE 1394 High Speed Serial Bus) card and cable. This functionality uses the [dvgrab](#) program and the settings for this can be customized by clicking the spanner icon or choosing **Settings>Configure Kdenlive**. See

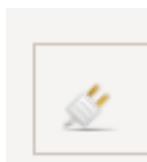


To perform a capture:

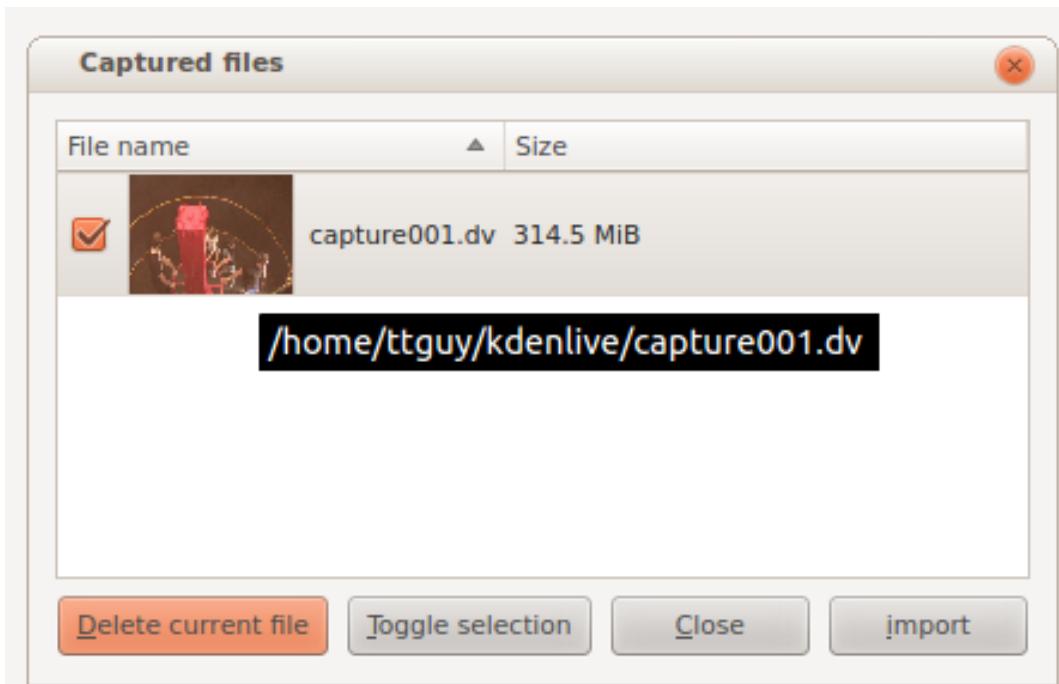
- Plug in your device to the firewire card and turn it on to play mode
- Click the *Connect Button*



- Click the Record Button — note it toggles to grey while you are recording
- Click the Record button again to stop capture. Or click the stop button.
- Once capturing is finished, click the disconnect button



- In the *Captured Files* dialog, click the import button to have the captured files automatically imported into the project tree.



Note: If your device does not start playing the source device when you click the record button, you may have to start playback on your device manually and then click record.

59.2 FFmpeg

I believe this captures video from an installed Web Cam using *Video4Linux2*.

59.3 Screen Grab

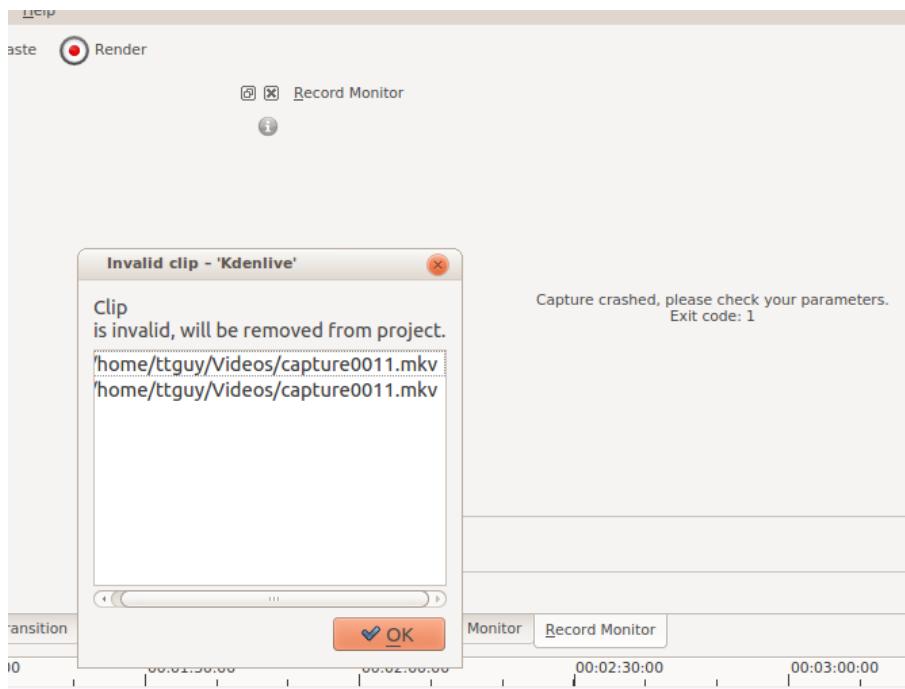
This captures video of the PC screen. In version 0.9.2 it uses *recordMyDesktop* to do the capture. There is an open defect with this functionality in ver 0.9.2 — See bug tracker ID [2643](#).

In version 0.9.3, the screen grab is done by the *ffmpeg* functionality instead. For screen capture to work in ver 0.9.3, the version of *ffmpeg* installed needs to have been compiled with the `--enable-x11grab` option. Ubuntu comes with an *ffmpeg* version compiled with this option.

To check on your linux distro, type `ffmpeg -version` in a terminal and look for `--enable-x11grab` in the reported configuration info.¹

If you are capturing the screen and using the X246 with audio settings and you get a crash as shown in the screen shot ...

¹ There are now two branches of *ffmpeg*: a *Libav* branch and an *ffmpeg.org* branch. The *ffmpeg* version from the latter branch reports the configuration when you run with `ffmpeg -version`. The *Libav* version does not. So this method to check for the `--enable-x11grab` does not work if you have the *Libav* version of *ffmpeg*.



... then consider creating a profile for audio capture where `-acodec pcm_s16le` is replaced by `-acodec libvorbis -b 320k`. See [Configure Kdenlive](#).

59.4 Blackmagic

This is for capturing from Blackmagics [decklink](#) video capture cards (AFAIK). Not sure how stable this code is at the moment. See defect [2130](#).

Chapter 60

Capturing Audio (dubbing)

You can use Kdenlive to capture audio from a microphone while you play your project in the **Project Monitor**. In this way you can dub in a voiceover.

Under the **Record Monitor**, choose *FFmpeg* capture and enable *Audio* only and hit the **Record** button. Then move back to the **Project Monitor** and hit **Play**. You can now record audio only while the clip is playing. (This feature has had some issues in the past. It has worked in ver 0.9.4 - see bug [#2910](#))

60.1 Version 19.04

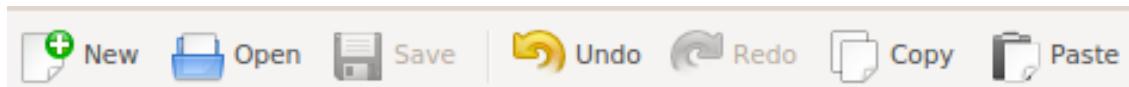
An option in track headers allows you to have audio record controls. This enables you to play your project while recording a voice over comment. Very handy for making tutorials.

Chapter 61

Toolbars

61.1 Main and Extra Toolbars

Kdenlive has a *Main Toolbar*,



an *Extra Toolbar*, which by default contains the **Render** button,



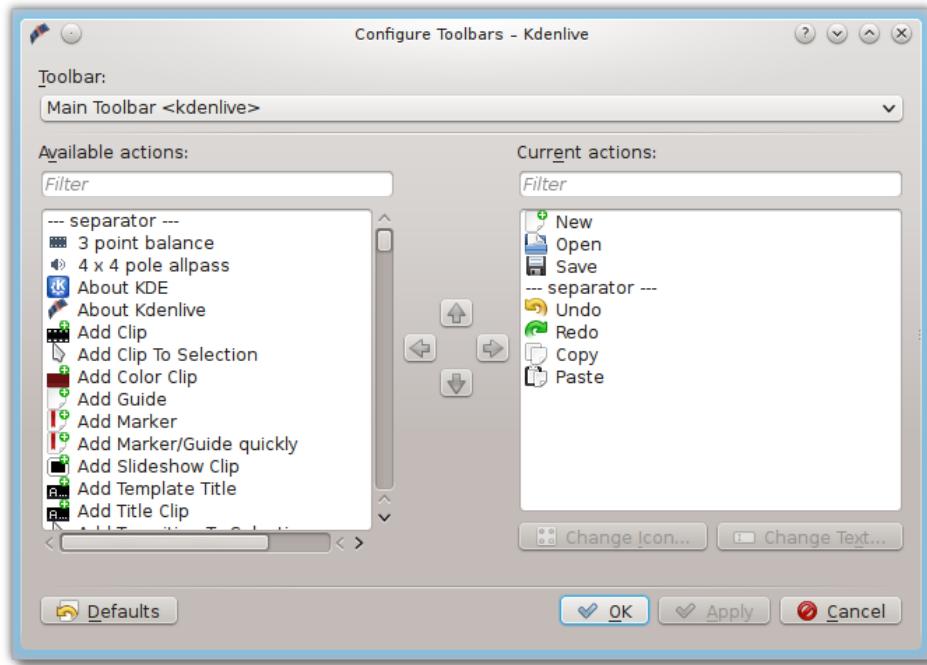
and a bottom toolbar.



For more info on the Bottom Toolbar see [Editing](#).

61.2 Configuring the Toolbars

The tools that are available on these are defined in **Settings → Configure Toolbars**.



61.3 Hiding and Showing the Toolbars

You can toggle the hiding and showing of the toolbars from the [View menu](#) using the **Main Toolbar** and **Extra Toolbar** menu items. You can also control this from the [Toolbars Shown](#) menu item in the [Settings](#) menu.

Chapter 62

Shooting Hints

62.1 Using P2 footage from the Panasonic HVX200 on GNU/Linux (tested on Ubuntu)

Using footage from P2 cards is easy when you know how! The MXF files on P2 cards cannot be read until you convert them with **mxfsplit**, a part of **FreeMXF**. The conversion is lossless and the resulting files contain both video and audio and can be edited in real time with Kdenlive (or **Blender 2.5+**) on most computers made within the last five years or so. Also, **FFMPEG** can read these files. This process is very fast because there is no transcoding and so can be done in the field while shooting just as fast as simply transferring the original P2 files.

62.1.1 Step One: FreeMXF

Get the source code for **MFXlib** from [here](#).

Then configure, compile, and install it by running the following code in the directory where you saved the source files:

```
./configure  
make  
sudo make install
```

This will get **mxfsplit** (part of **mfxlib**) working.

62.1.2 Step Two: Using mxfsplit

Here is a simple script that can be run in the terminal. It will convert all MXF files in a chosen directory into usable files. Do a search and replace for **/source/directory** and **/destination/directory**

```
# /source/directory  
# /destination/directory  
#  
# change to destination directory  
cd /destination/directory  
#find all *.MXF files in a specific directory and loop through them using ←  
# the variable 'i'  
for i in /source/directory/*.MXF  
do
```

```
# use mxfsplit to convert files
STREAM='mxfsplit -m $i | grep &#8220;File=&#8221; | cut -c 31-52'
# rename the files so they make sense, appending the word 'converted' to ↪
# the end of the basename
mv *.Stream ''basename $i .MXF`converted.MXF"
#end loop
done
```

62.1.3 Conclusion

Now you have a script that can easily prepare footage for editing (e.g. with Kdenlive or **Blender**) and for transcoding. **FFMPEG** can be used to transcode the resulting .MXF files to whatever format is preferred. For example, the following code would get the files ready for **Youtube**, **Vimeo**, etc.:

```
cd ""
for i in *.*
do
ffmpeg -threads 2 -i $i -acodec libmp3lame -aq 192 -vcodec libx264 -vpre ↪
    slow converted$i.mp4
done
```

Chapter 63

Troubleshooting and Common Problems

1. You have installed the codecs after **Kdenlive's** installation. To force Kdenlive to check available codecs on your system, run the configuration wizard: **Settings → Run Config Wizard**. Complete the wizard and restart Kdenlive to be sure that codecs have been detected.
2. The codecs are not available on your system. Kdenlive uses the codecs from your **FFmpeg** or **Libav** library. Due to licensing issues, some distributions do not provide all codecs by default and you might need to install an extra package. On Ubuntu/Mint for example, you must install a package called libavcodec-extra-xx. After that, check the codecs again as explained in the first step.
3. Last possibility is that your **FFmpeg** or **Libav** version is buggy and does not report all supported codecs. Kdenlive releases after 0.9.2 have an option to try using codecs even if they seem unsupported: **Settings → Configure Kdenlive** and check the **Bypass codec verification** option.

Kdenlive warns me about missing codecs, I cannot render in some formats.



Unsupported audio codec: libmp3lame

There are several possible reasons for this:

Kdenlive is too large on my screen. I cannot make it smaller.

This usually happens when too many widgets are open. Each widget label takes a minimum amount of space in width. Close some (e.g. via the **View** button) and consider using layouts (**View → Save Layout As**).

I want to trim videos without re-encoding them. How can I do this?

You cannot do this with Kdenlive. (Please try [Avidemux](#) instead.) The reason is that, for splitting, files need to be treated in a very different manner (the file itself needs to be edited, whereas Kdenlive renders frames into a new file). See also: <https://forum.kde.org/viewtopic.php?f=272&t=116144&p=286144&hlit=clips+without+render+again#p286144>.

I want to apply an effect, for example a watermark, to the whole project. What is the best way to do this?

Create a new project with the same project profile and import the project on which you want to apply the effect as a clip (**Project → Add Clip**). See also: [How to: Add a Watermark in Kdenlive](#) on Vimeo.

My monitor plays distorted images, or generally something it really should not.

Please check your **Settings → Configure Kdenlive → Playback** settings. Try to disable OpenGL if it is enabled, or use a different driver. Kdenlive may need to be restarted.

I want to back out to a previous release.

See Notes at [Installing from Sunab's PPA](#).

Chapter 64

Kdenlive On Other Platforms

1. [Non-KDE Desktops](#)
2. [Kdenlive on OS X](#)

64.1 Non-KDE Desktops

Kdenlive can be installed on non-KDE Desktops without any issues.

64.2 Kdenlive on OS X

Kdenlive and **MLT** can compile and run under Mac[®] OS X. Packages are available from the [MacPorts](#) project.

MacPorts is a source-based system — there is not a binary app bundle for Kdenlive. Therefore, Kdenlive and all of its numerous dependencies, including multimedia libraries, KDE, and Qt, must be compiled. This can take a long time and much disk space! Furthermore, it is not unusual for something not to build correctly; it is definitely not something for the novice, impatient, or ‘faint of heart.’

For more details see [this](#).

Chapter 65

Useful Information

1. [FAQ](#)
2. [Version History](#)
3. [Shortcuts](#)
4. [Surround Sound](#)
5. [Tips & Tricks](#)
6. [Useful Resources](#)
7. [HOWTO Produce 4k and 2K videos, YouTube compatible](#)

65.1 What components does Kdenlive use?

In effect, Kdenlive is a front end to [melt](#) - which uses the MLT video framework. The MLT video framework relies on the FFMPEG project. Kdenlive writes sh.mlt XML files that code the edit points and transitions and it then calls /usr/bin/kdenlive_render and /usr/bin/melt to render the video.

65.2 How do I fix Audio Sync Issues?

Often this is caused by having mixtures of different audio sources in the project. Audio encoded with VBR (be it pure audio like MP3 or video with audio) can be problematic.

To fix ...

If your audio source is from a video file try extracting the audio from you video sources and transcoding the audio to WAV format. If you use the [Extract Audio](#) feature of Kdenlive to do this it will write a .wav file for you.

If you have a pure audio source try transcoding that to WAV.

```
lame --decode file.mp3 file.wav
```

65.3 Keyboard Shortcuts

65.3.1 Editing

Action	Shortcut
Make a cut (make sure track is selected first)	Shift-R
Play	Space
Play zone	Ctrl-Space
Render	Ctrl-Return
Switch Monitor	T
Forward	L
Rewind	J
Forward 1 frame	Right
Rewind 1 frame	Left
Forward 1 second	Shift-Right
Rewind 1 second	Shift-Left
Toggle Full Screen Mode on and off	Ctrl-Shift-F
Go to Clip End	End
Go to Clip Start	Home
Go to Next Snap Point	Alt-Right
Go to Previous Snap Point	Alt-Left
Go to Project End	Ctrl-End
Go to Project Start	Ctrl-Home
Go to Zone End	Shift-O
Go to Zone Start	Shift-I
Group Clips	Ctrl-G
Set Zone In	I
Ungroup Clips	Ctrl-Shift-G
Set Zone Out	O
Extract Audio	
 Ctrl-X¹	

65.4 Editing Surround Sound with Kdenlive

At the time of writing, Kdenlive only supports rendering a project to a video containing stereo audio. It is not possible to render to more audio channels or to explicitly map audio tracks to channels in the rendered audio. In order to edit and create surround sound, some manual steps, including external tools, are required.

This guide is using a 6 channel 5.1 surround sound as example.

65.4.1 External Tools Used Here

- [Audacity](#) - Free Audio Editor and Recorder
- [avconv](#) - A Video and Audio Converter

NOTE

Kdenlive uses ffmpeg, while on (k)ubuntu, ffmpeg is deprecated and avconv is used instead. So these (and possibly other) distributions already have avconv installed.

¹available in bleeding edge versions > 0.9.10 (Jan2015)

65.4.2 Creating New Surround Sound

This guide describes one possible workaround using **Audacity** to create and render a 5.1 surround sound audio track that can be added to the video rendered by Kdenlive.

NOTE

More advanced features such as surround panning (i.e. let a sound move from rear to front) are beyond the capabilities of Audacity - but it is possible to create similar effects manually.

65.4.2.1 Create and Edit Surround Sound with Audacity

The following example of a simple 5.1 surround sound is used in this guide:

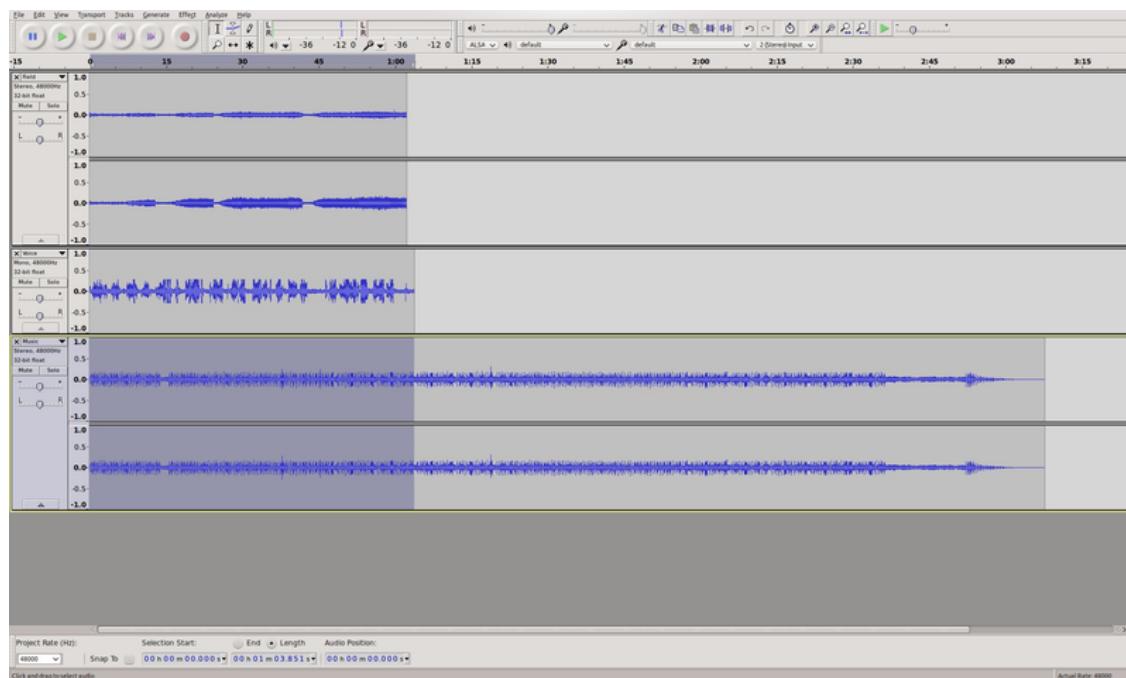
- Some original field recording from the front (stereo)
- Some voice from the (front) center (mono)
- Some music from the rear (stereo)

If, like in this example, some original field recording from a video clip is supposed to be used to create the surround sound audio track, it can be easily extracted using Kdenlive with **Extract Audio → Wav 48000Hz** from the context menu of the clip. This creates a WAV audio file in the same folder where the video clip is located.

The audio clips to be used in this example are:

- Field.wav (stereo) for Front L+R
- Voice.wav (mono) for Center
- Music.mp3 (stereo) for Surround L+R (rear)

In a new Audacity project, they can be imported in the above order with **File → Import → Audio...**, the project should now look something like this:



The channel mapping for 5.1 surround sound is:

- 1 - Front Left
- 2 - Front Right
- 3 - Center
- 4 - LFE
- 5 - Surround Left
- 6 - Surround Right

NOTE

LFE (Low Frequency Effects) is often referred to as 'subwoofer channel', which is not quite correct. A surround sound speaker setup is perfectly valid without subwoofer. In this case the surround sound system will redirect the LFE channel to 'large' speakers, usually the front speakers.

The stereo track 'Field' can now be mapped to Front L+R, 'Voice' to Center and 'Music' to Surround L+R. There is just one problem: the Surround (rear) speakers of a surround speaker system are usually 'small' and not able to reproduce low frequencies. So it would be necessary to map the low frequency range of the 'Music' track to the LFE channel, otherwise the music might sound a little 'thin'.

To do this, the 'Music' track can simply be duplicated with **Edit → Duplicate** after selecting it, and then **Split Stereo to Mono** from the context menu of the third track. Then one of the two mono tracks can be deleted; the other one can be renamed to 'LFE'.

Now the 'Equalization...' effect could be used to cut off frequencies above around 100Hz from the 'LFE' track, and reverse, cut off frequencies below around 100Hz from the 'Music' track.

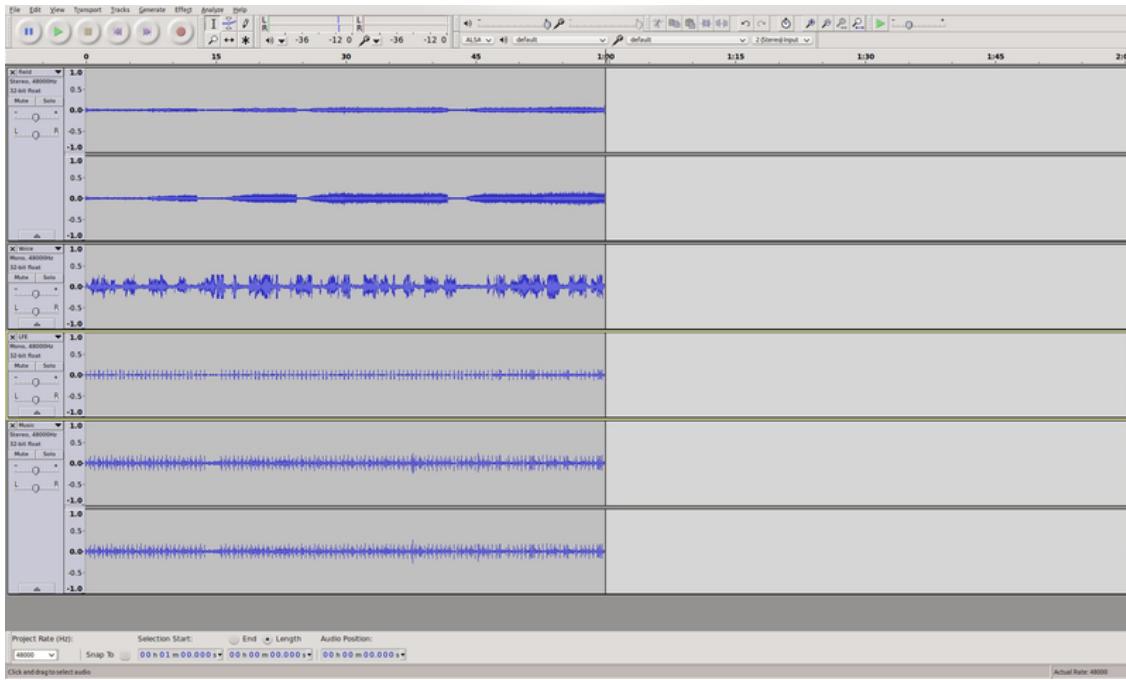
NOTE

Creating technically perfect surround sound is a science all its own and thus beyond the scope of this guide - please refer to respective resources on the web for details.

What remains for now is to make sure that the surround sound track has the same length as the video track it should be added to. The video track used in this example has a length of 1:00 minute, so the lengths of the audio tracks in Audacity are adjusted accordingly:

The Audacity project should now look something like this:

The Kdenlive Handbook



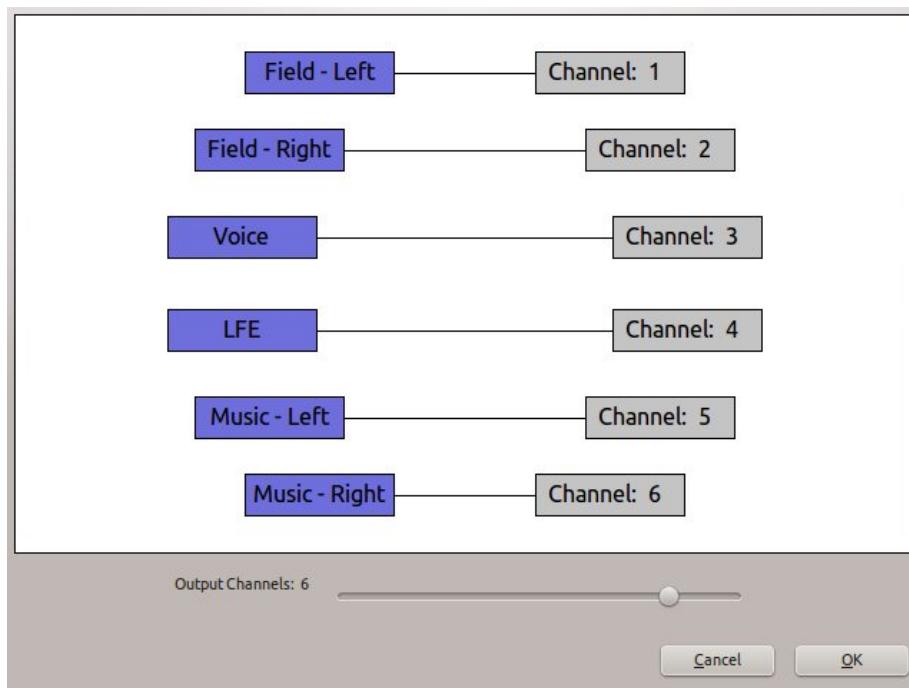
The next thing to do is to export the project to a multichannel 5.1 surround sound audio file. The format used here is AC-3 (Dolby Digital).

Before exporting, Audacity needs to be configured to allow exporting to a multichannel audio file: In **Edit → Preferences**, under **Import/Export**, select 'Use custom mix (for example to export a 5.1 multichannel file)'.

The project can now be exported into a 5.1 surround sound audio file:

- Select **File → Export...**
- Provide a name for 'Name' and select 'AC3 Files (FFmpeg)'
- Click 'Options...' and choose '512 kbps' as 'Bit Rate'

The 'Advanced Mixing Options' dialog should show up. The number of 'Output Channels' should be 6 and the channel mapping should already be correct:



The result of the export should be an *.ac3 file which is playable with e.g. **VLC** or **Dragon Player**.

65.4.2.2 Muxing Video and Audio Together

The final step is to add the surround sound audio track to the video track, assuming the video was rendered without audio.

NOTE

When muxing audio and video files into one file, the actual streams are just copied, and not transcoded. So there is no quality loss to either the audio or the video streams. Also, because the streams are just copied, muxing is very fast.

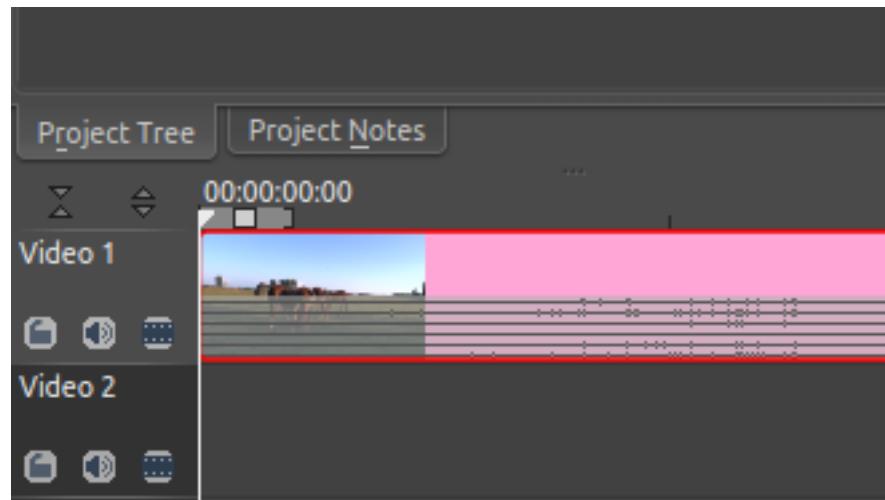
Assuming the video track was rendered to 'Video.mkv' and the surround sound was exported to '5.1.ac3' the command to mux both to 'Video-5.1.mkv' with **avconv** would be:

```
avconv -i Video.mkv -i 5.1.ac3 -c copy -map 0:0 -map 1:0 Video-5.1.mkv
```

The result should be an MKV video containing a Dolby Digital 5.1 surround sound audio track.

65.4.3 Editing Existing Surround Sound

When adding a clip with more than two channels to a project, Kdenlive creates an audio thumbnail that correctly shows all audio channels:



The clip can be edited and (audio) effects applied to it, and all appears to work just fine - but once rendering the project, it turns out that the audio track in the resulting video file is 2 channels (stereo) only.

The following steps provide a manual workaround for this issue.

65.4.3.1 Extract and Split the Audio Track

The first step is to extract the audio track from the video clip. This can be done in Kdenlive with **Extract Audio → Wav 48000Hz** from the context menu of the clip. This creates a WAV audio file in the same folder as where the video clip is located.

The extracted WAV audio file can then be opened in **Audacity**, it should show all 6 channels, these are:

- 1 - Front Left
- 2 - Front Right
- 3 - Center
- 4 - LFE
- 5 - Surround Left
- 6 - Surround Right

NOTE

LFE (Low Frequency Effects) is often referred to as 'subwoofer channel', which is not quite correct. A surround sound speaker setup is perfectly valid without subwoofer. In this case the surround sound system will redirect the LFE channel to 'large' speakers, usually the front speakers.

The idea now is to split the surround sound into four separate (stereo/mono) audio files that Kdenlive can handle:

- Front (stereo)
- Center (mono)
- LFE (mono)

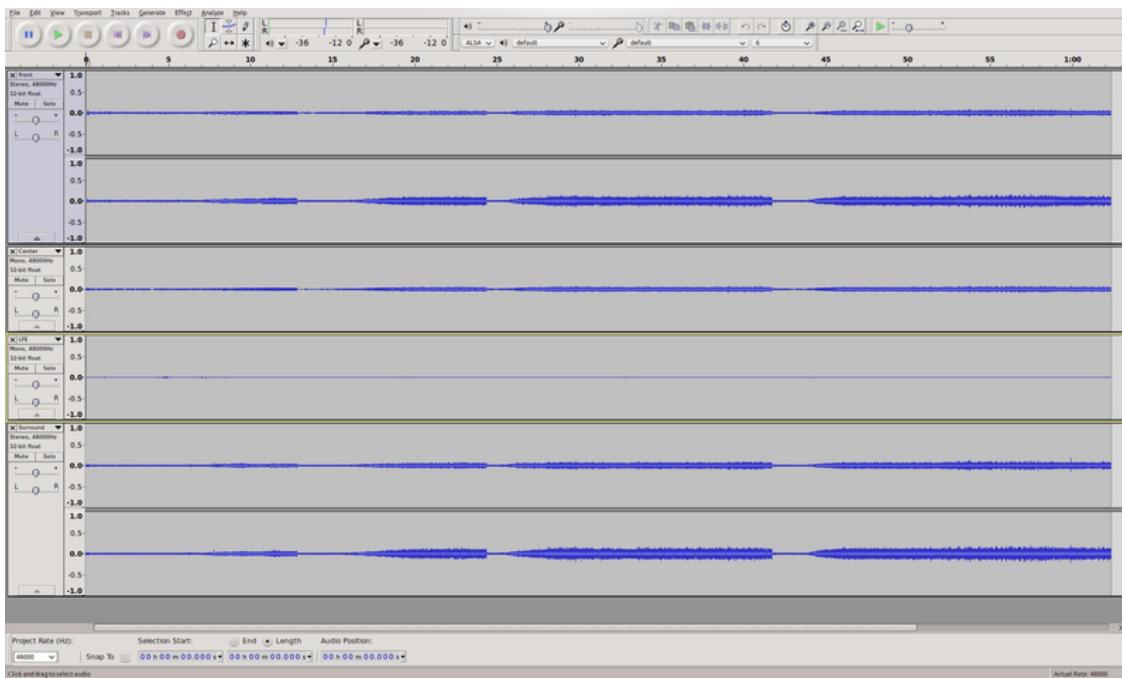
- Surround (stereo)

First, Audacity needs to be configured to not always export to stereo audio files: In **Edit → Preferences**, under **Import/Export**, select 'Use custom mix (for example to export a 5.1 multi-channel file)'.

Now, tracks 1+2 and 5+6 should be turned into stereo tracks by choosing **Make Stereo Track** from the context menu of the 1st and the 5th track, respectively. This should result in 4 tracks, two stereo and two mono.

Next, the 4 tracks should be renamed to 'Front', 'Center', 'LFE' and 'Surround' starting from the top, using **Name...** from the context menu of each track.

The tracks now look like this:



After all this hard work, exporting the four tracks to four separate audio files is easy with **File → Export Multiple....**. Use 'WAV' as 'Export format', the rest of the settings should already be okay: 'Split files based on: Tracks' and 'Name files: Using Label/Track name'.

The 'Edit metadata' dialog might pop up for each track. It is fine to just say 'OK'. At the end there should be a confirmation dialog and four audio files should have been exported: 'Front.wav', 'Center.wav', 'LFE.wav' and 'Surround.wav'.

65.4.3.2 Import Audio Tracks into Kdenlive

The previously created audio files can now be added to the Kdenlive project using **Project → Add Clip**.

Since there are only two audio tracks in a project by default, it is necessary to add two more using **Project → Tracks → Insert Track** before adding the four audio tracks to the timeline.

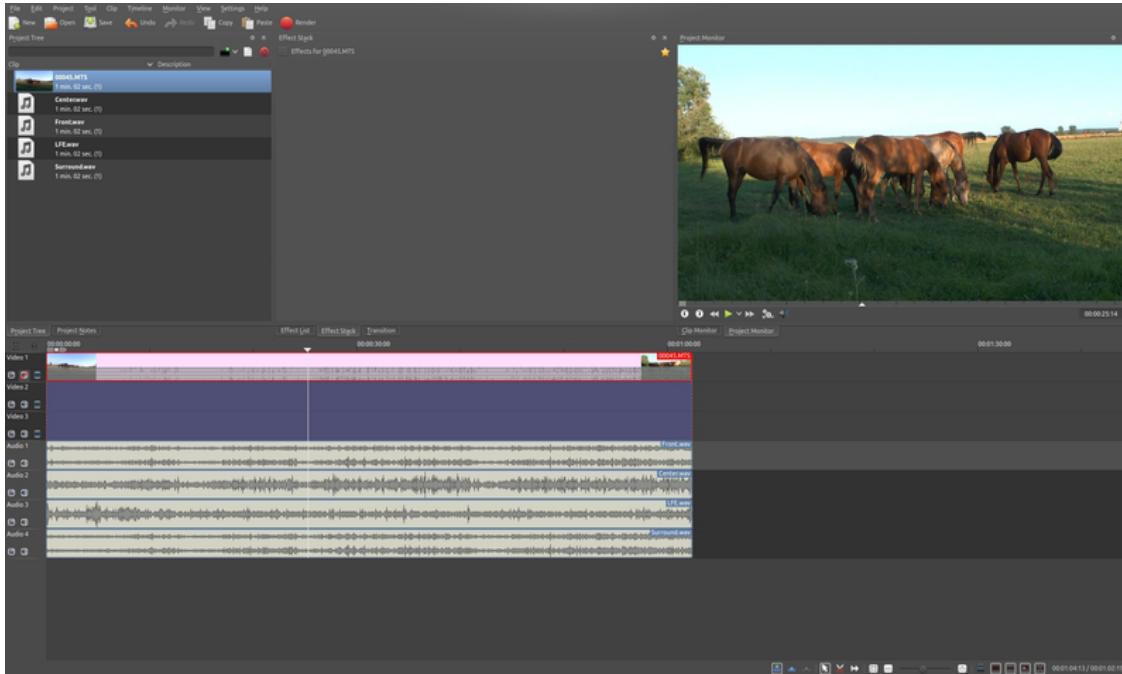
The next thing to do is to group the four audio tracks with the video clip by selecting all of them and then choosing **Timeline → Group Clips**.

NOTE

Don't forget to mute the original audio track in the video clip if necessary!

The Kdenlive Handbook

The Kdenlive project should now be ready for the usual editing, like cutting clips and adding effects, and should look something like this:



65.4.3.3 Rendering the Project

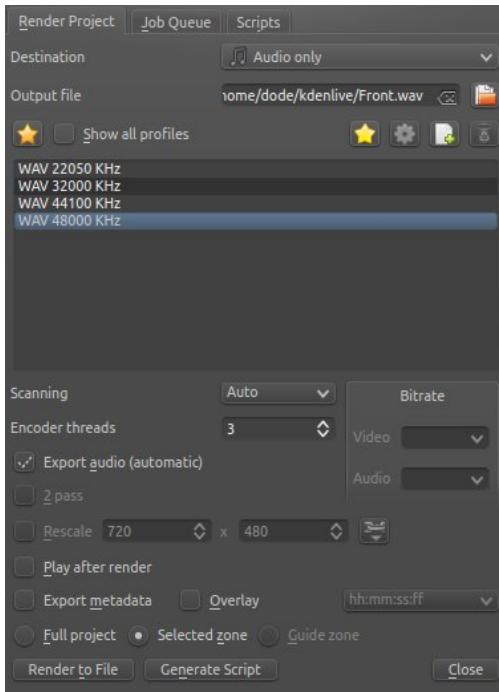
Since it is not possible to render the project with a surround sound audio track, some manual steps are necessary to work around this.

First, the video track needs to be rendered without audio. This is simply done by rendering the project as it would normally be done, but without audio, by deselecting the 'Export audio' checkbox.

Then, each of the four surround sound audio tracks 'Front.wav', 'Center.wav', 'LFE.wav' and 'Surround.wav' needs to be rendered into a separate audio file. For each of them, do the following:

- Mute all other audio tracks
- Enter a respective file name for 'Output file'
- Select 'Audio only' as 'Destination'
- Select profile 'WAV 48000 KHz'
- Make sure 'Export audio' is checked

The Kdenlive Handbook



NOTE

Unfortunately, the mono tracks 'Center.wav' and 'LFE.wav' are rendered as stereo tracks, and there seems to be no way to avoid this. But this can be handled later in Audacity.

65.4.3.4 Compose a Surround Sound Audio File

Now the separate audio tracks rendered by Kdenlive need to be 'merged' into a single multi-channel 5.1 surround sound audio file. This is again done in Audacity:

- Import 'Front.wav', 'Center.wav', 'LFE.wav' and 'Surround.wav' (in this order!) using **File → Import → Audio...**

'Center' and 'LFE' are now stereo, which is not what is needed. This can be fixed by selecting **Split Stereo to Mono** from the context menu of each track, and deleting one of the two resulting mono tracks.

Eventually, there should be four tracks in the Audacity project:

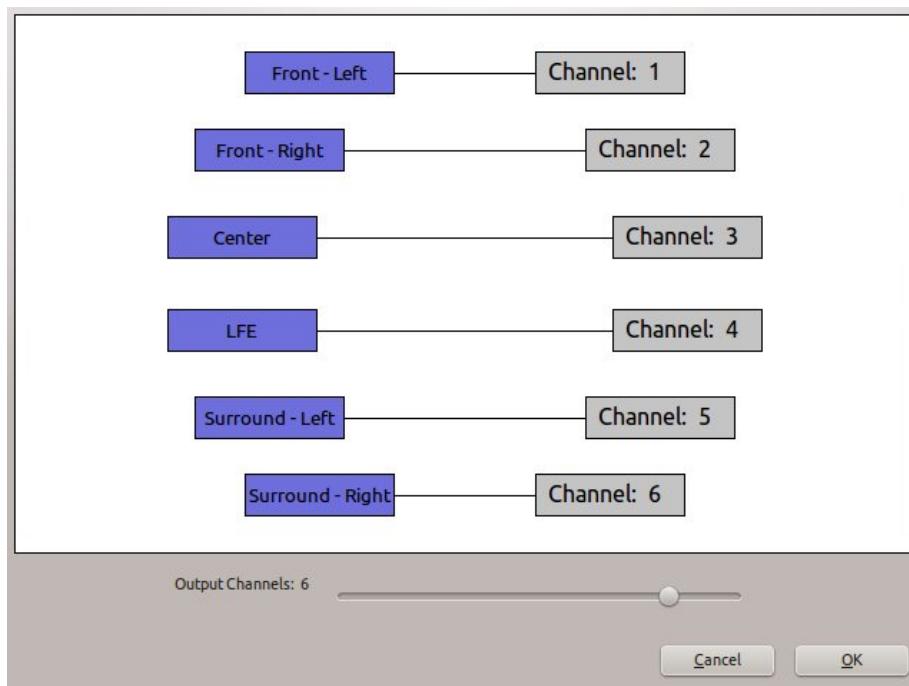
- Front (stereo)
- Center (mono)
- LFE (mono)
- Surround (stereo)

The project can now be exported into a 5.1 surround sound audio file:

- Select **File → Export...**
- Provide a name for 'Name' and select 'AC3 Files (FFmpeg)'

- Click **Options...** and choose ‘512 kbps’ as ‘Bit Rate’

The **Advanced Mixing Options** dialog should show up. The number of **Output Channels** should be 6 and the channel mapping should already be correct:



The result of the export should be an *.ac3 file which is playable with i.e. **VLC** or **Dragon Player**.

65.4.3.5 Muxing Video and Audio Together

Since video and audio was rendered separately, both need to be multiplexed into a single file containing both the video and audio stream.

NOTE

When muxing audio and video files into one file, the actual streams are just copied, and not transcoded. So there is no quality loss to either the audio or the video streams. Also, because the streams are just copied, muxing is very fast.

Assuming the video track was rendered to ‘Video.mkv’ and the surround sound was exported to ‘5.1.ac3’, the command to mux both to ‘Video-5.1.mkv’ with **avconv** would be:

```
avconv -i Video.mkv -i 5.1.ac3 -c copy -map 0:0 -map 1:0 Video-5.1.mkv
```

The result should be an MKV video containing a Dolby Digital 5.1 surround sound audio track.

65.5 Tips & Tricks

- You can advance and retard the clip in the project monitor by rotating the mouse wheel when the pointer is over the **timeline ruler** or over the **Project Monitor**

- You can advance and retard the clip in the [Clip Monitor](#) by rotating the mouse wheel when the pointer is over the [Clip Monitor](#)
- You can zoom the timeline by vertical drag on the ruler (if enabled in [Settings -> Configure Kdenlive -> Timeline](#))
- What's this [Full Luma Range](#)

65.6 Useful Resources

- Another Kdenlive manual: [flossmanuals](#)
- [Cutting and Splicing Video in KDEnlive](#) by Linuceum
- [opensource.com tutorial](#)
- [Kdenlive Forum](#)
- [Kdenlive Developer Wiki](#)

Chapter 66

Version History

This version history has been compiled from old <https://kdenlive.org/> blog posts

- [0.9.10](#) October 2014
- [0.9.8](#) May 2014
- [0.9.6](#) April 2013
- [0.9.4](#) January 2013
- [0.9.2](#) May 2012
- [0.9.0](#) May 2012
- [0.8.2](#) Dec 2011

Chapter 67

Bug reports

Bug reports are handled by the [KDE Bugtracking System](#) (the old [Mantis bug tracker](#) is in archive mode).

If you have a crash at Kdenlive startup or when trying to play a video file, please follow these steps (and read the rest of the page too).

If you compiled Kdenlive / **MLT** yourself, make sure you followed all steps described in instructions below

- Check that you don't have several versions of **MLT** installed
- Try playing your video file with FFmpeg's player. From a terminal: `ffplay myvideo.mpg`
- Try playing your video file with **MLT**'s player. From a terminal: `melt myvideo.mpg`
- Download this simple project file (containing color clips): [test_file.kdenlive](#) and play it with **MLT**'s player:

`melt test_file.kdenlive`

Include the results of the 4 above steps in your bug report, and always indicate which Kdenlive and **MLT** version you have!

67.1 Step 1: Upgrade to Kdenlive latest release

Please upgrade to the latest released versions of Kdenlive and **MLT**. Developers will not answer bug reports for old Kdenlive versions (unless they are still reproducible in latest version).

If your distribution does not offer packages of the latest Kdenlive and **MLT** versions, please check [installation](#) page for tips about upgrading.

67.2 Step 2: Query open issues

Query open issues on the [KDE bug tracker](#).

Reading the bug page:

Bug report can have the following statuses:

- UNCONFIRMED

- CONFIRMED
- ASSIGNED
- REOPENED
- RESOLVED
- NEEDSINFO
- VERIFIED
- CLOSED

Bug report can have the following resolutions:

- FIXED
- INVALID
- WONTFIX
- LATER
- REMIND
- DUPLICATE
- WORKSFORME
- MOVED
- UPSTREAM
- DOWNSTREAM
- WAITINGFORINFO
- BACKTRACE
- UNMAINTAINED

67.3 Step 3: Report a bug

Before reporting bugs, read the user manual and search the forums for answers. Do not report bugs on the Kdenlive forum.

If you are not running the latest development release, check recently solved issues, as your problem might already be fixed in the development version.

To report a bug [create an account](#) on the Kde bug tracker. Log in and [submit](#) an issue.

For the bug report to be useful, please try to provide the following information:

- Precise steps to reproduce the bug.
- If the bug crashes Kdenlive, provide a backtrace.

67.3.1 How to get useful crash information (backtrace)

Please install the following packages: `gdb`, `kdenlive-dbg`, `libmlt-dbg` (package names may slightly change depending on your distro).

When Kdenlive crashes, if the KDE crash handler dialog pops up, you can copy the data it provides.

Otherwise, from a terminal, type:

```
gdb kdenlive run
```

Kdenlive will start, then you can trigger the bug. When Kdenlive crashes, go to your terminal window and type:

```
thread apply all bt
```

Then press `Enter` until you see the full data. Copy the log to a file and attach it to the bug report.

67.4 Step 4: Upload some sample RAW footage

For any Mpeg2/Mpeg4 and H.264 files it is important that you upload RAW footage (coming directly from the camcorder) somewhere on Internet. This will allow users to benchmark their computer using this file and also help us understand some bugs. Five seconds of footage is enough. Do not upload files larger than 20 MB.

As regards audio synchronization, video rendering and other issues, developers will not answer support requests unless a minimum amount of footage is available somewhere to reproduce bugs.

67.5 MLT bug reports

Bugs in the MLT part of the system can be reported [here](#) (Kdenlive is a front end to the Media Loving Toolkit (MLT)).

Chapter 68

Credits and License

68.1 Program copyright

Copyright 2007-2013 Kdenlive authors.

68.2 Documentation copyright

NOTE

Please add your name here if you contribute to the handbook. Please respect alphabetical order

- Bushuev A.
- Simon A. Eugster ([Granjow](#))
- Jean-Baptiste Mardelle
- Roger Morton (ttguy)
- Vincent Pinon

68.3 Licenses

This documentation is licensed under the terms of the [GNU Free Documentation License](#).

This program is licensed under the terms of the [GNU General Public License](#).

This documentation is licensed under the terms of the [GNU Free Documentation License](#).