

GUIDA LINUX: CREARE UN DVD DA UN FILMATO AVI

STRUMENTI:

- AVIDEMUX 2.1.2
- DVDSTYLER 1.5b4

PARTE 1 – AVIDEMUX, CONVERSIONE DEL FILMATO (DA AVI A MPEG)

- * 1 Creating a DVD
- * 2 The mostly automatic way
- * 3 Preparing the video
- * 4 Selecting the video codec
- * 5 Preparing the audio
- * 6 Selecting the output format, simple case
- * 7 Selecting the output format, elaborate case

Creating a DVD

Let's review a couple of facts before going into the juicy details.

* Avidemux will create the MPEG file for you.

* You will need an authoring program to convert that MPEG to the DVD file hierarchy. Most of them are using dvdauthor. For example you could use Varsha, KDvdAuthor or whatever.

The mostly automatic way

Use the Auto->DVD menu. It will setup most of it with sensible defaults. The only thing left to you will be to set the video codec to 2pass mode and enter the desired final size.

Preparing the video

To be DVD compliant, the resolution must be :

- * 352*480 or 720*480 or 704*480 for NTSC
- * 352*576 or 720*576 or 704*576 for PAL/SECAM

How do i know if it is PAL or NTSC?

Click the info button (File->Properties). If the "Frame Rate" field is 25, it is PAL or SECAM. If it is 23.976 or 29.97, it is NTSC.

If it is not exactly one of these values, you will have to use the Resample fps filter to convert to either PAL or NTSC.

Now that you have identified the type of video, you have to resize it to a proper width/height. The simpler way is to use the "DVD res" button in the Video Filters dialog that will do that automagically.

Warning: You cannot blindly resize to 720*480 or whatever. You must take into account the aspect ratio to do it properly. And the aspect ratio is not the same for PAL and for NTSC. The best is to let "DVD res" do it for you.

Selecting the video codec

You have two codec families that are suitable for DVD creation: "DVD (lavc)" which is using lavcodec, or "DVD" which is using libmpeg2enc. They both have their pros and cons:

- * DVD (lavc): Faster, good, USE ONLY IN 2 PASSES MODE FOR DVD.
- * DVD: Slower, good, can be safely used in CQ mode or in CBR mode.

For DVD the total bitrate must be below 9.8 Mb/s. So to put it simply a max bitrate around 9 Mb is okay. Assuming you will use 2 pass mode with DVD (lavc) you must enter the video only final size. So it is better to use the calculator first, that will compute the video size from the final size.

Preparing the audio

For DVD, audio must be 48 kHz and one of:

- * AC3 (FFm AC3)
- * MP2 (FFm MP2 or TwoLAME)
- * LPCM (WAV LPCM)

If the audio track from the source video is suitable, the best might be to use it and let the audio to Copy. Else select your favorite codec (for me it would be TwoLAME).

Don't forget to setup the audio filter. Setup downmixing if needed and don't forget that the audio must be 48 kHz. Use a resampling filter if needed.

So for example, you will set downmixing to Dolby Prologic 2, resampling to 48 kHz, TwoLAME codec at 160 kb/s.

Selecting the output format, simple case

For DVD, if you are happy with one audio track and no subtitle, the best would be to select "MPEG PS A+V" as output format using the format menu. The resulting MPEG file will be suitable to authoring. Just hit the Save button and you will get foo.mpeg which can be authored afterward with your favorite authoring program.

Selecting the output format, elaborate case

Doing a multi track audio is a bit different, but not complicated. First you will save the audio, using the Audio->Save menu (of course, all of the above concerning audio is needed). You will get foo_1.mp2 file for example.

Repeat for all tracks you want to convert, changing the audio track using Audio->Main Track. At the end you will have foo_1.mp2, foo_2.mp2 etc...

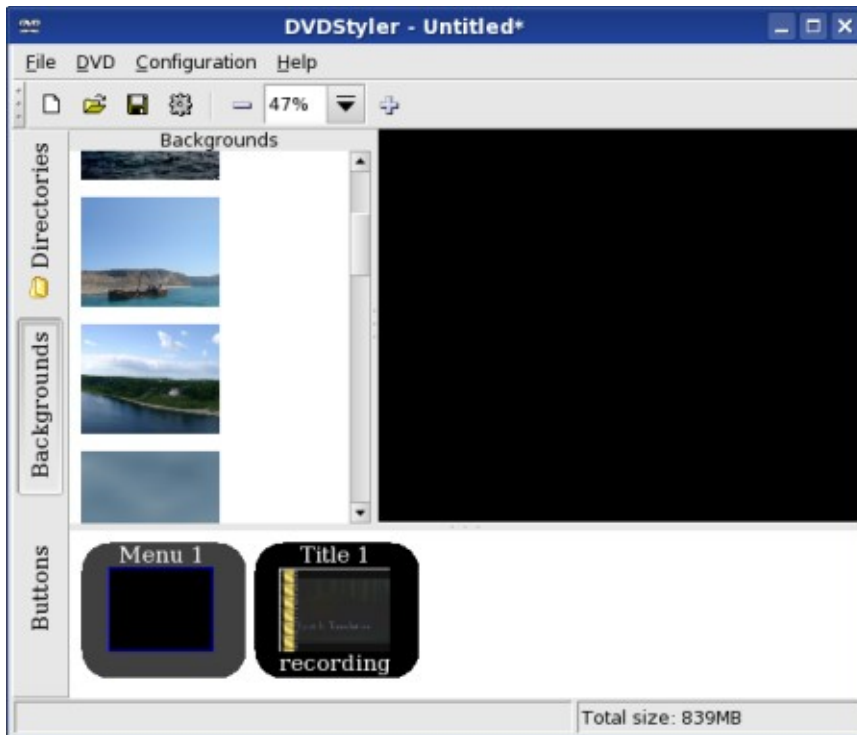
Now select "MPEG video" as output container and hit the Save button. You will save as foo.m2v for example.

Once you have all your files, time to fire up mplex to create the MPEG file. The syntax will be mplex -f 9 -i final.mpg foo.m2v foo_1.mp2 foo_2.mp2 etc...

final.mpg is then suitable for authoring.

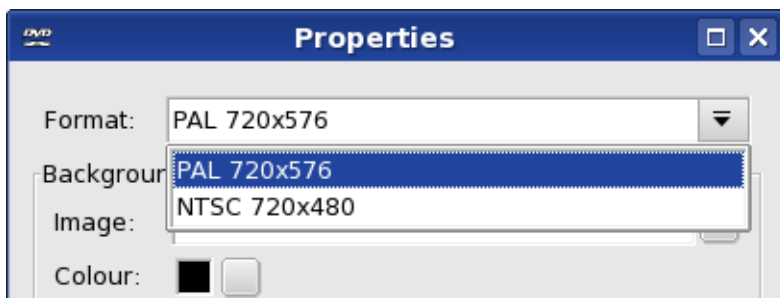
PARTE 2 – DVDSTYLER + K3B, CREAZIONE DEL VIDEO DVD (DA MPEG A ISO)

For this we'll use DVDStyler



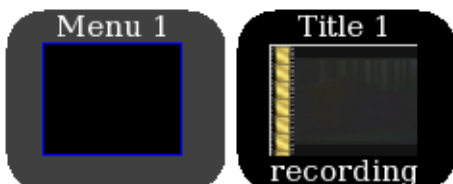
Set the correct DVD format

Do you want a PAL or NTSC DVD? Select which you want, by right-mouseclicking on the big black window you see in DVDStyler. This is the preview for the menu, actually. Right-click on it and select Properties. Now pick if you want PAL or NTSC.



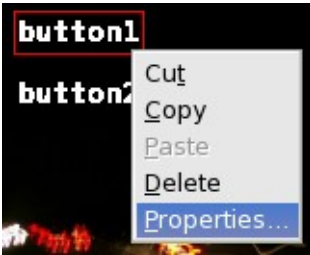
Add the mpeg files

Click the "Directories" button on the left, and locate your mpeg files as created with Avidemux before. Drag and drop them to the bottom of the window, to the right of the black "Menu 1" image.

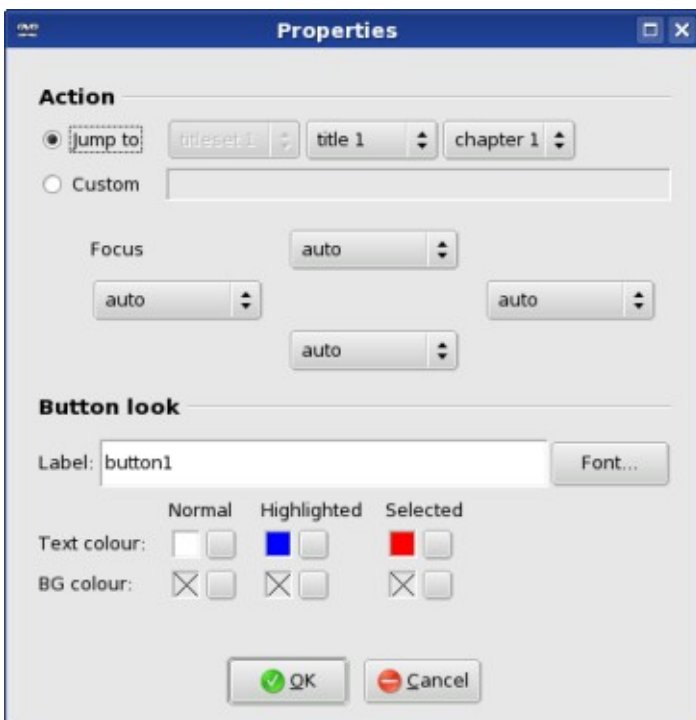


Create the menu

Click the "Buttons" button on the left. For each mpeg you've added, drag and drop a Button component to the big menu preview on the right. You can also select a nice background.



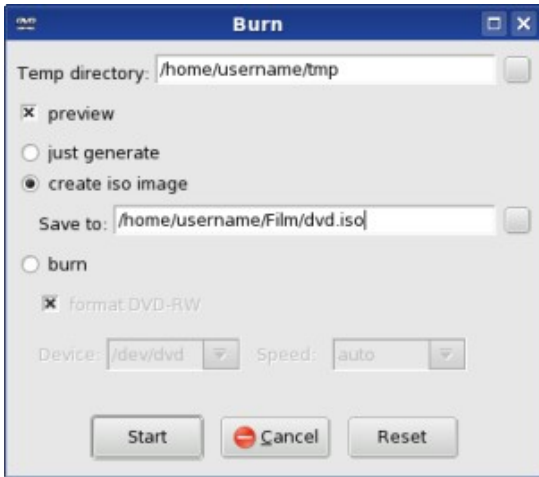
Right mouseclick on each button and select "Properties".



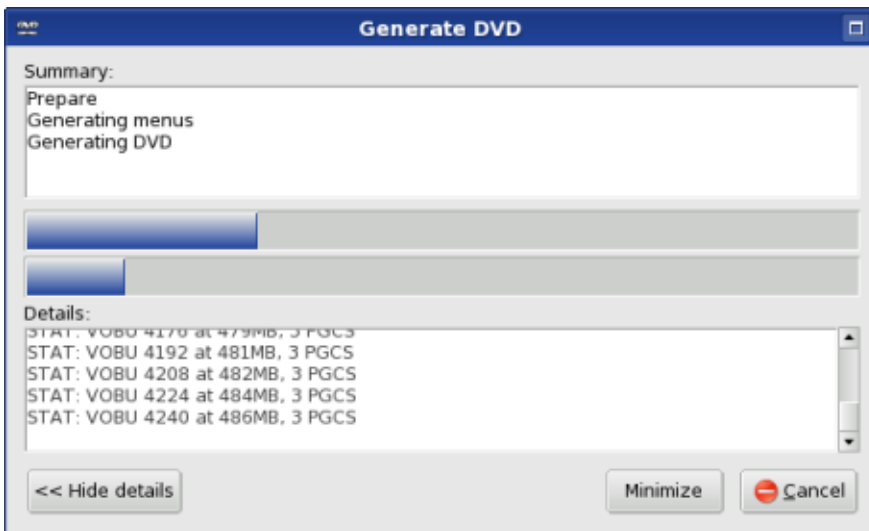
At the "Jump to" option, select which video (title) to show. At the Button-Look, type in a name in the Label field.

Creating the DVD

Done? Click: File -> Burn DVD...



In the Burn Window you'll see, set it up how you like. My experience is that in the past the DVD burning didn't go all that well. So select "create iso image". Click Start.



Go for a drink. When you come back you'll have an ISO image ready to be burned with K3B! You might want to use a DVD+/-RW to get started. That way when things don't work right, you don't have to throw away another coaster. If you ISO image is under 700mb (roughly 30 to 45 minutes of normal video quality) you can also just use a CD-R/CD-RW!

Just generate

You can also use the "just generate" option. This will only generate the DVD files in your tmp directory. You can then test it, to see if it works, with Kaffeine - our DVD player. This is only for testing though! Open Kaffeine using: Ctrl+F2. Type "kaffeine dvd://home/username/tmp". You can use the "just generate" option to create the actual DVD using K3B. It is easier to go with "create iso image" and then use K3B to burn the image.

If you like the "kaffeine dvd://home..." functionality, you might be interested in the Play DVD-Content from HD service menu. If you edit the file, and replace "xine" with "kaffeine", it'll work just fine with kaffeine.