

Creating video DVDs with Kmediafactory

DVD FACTORY

If your holiday videos and TV recordings are filling up your home computer, burn them onto a DVD with Kmediafactory.

BY MARCEL HILZINGER

You don't need to be an expert to put your holiday videos and TV recordings on a DVD. A simple DVD tool for Linux is KDE's Kmediafactory [1]. Kmediafactory, which was authored by Finnish developer Petri Damsten, lets you create a video DVD in just three simple steps.

Installation

Although it is quite simple to install Kmediafactory, you need to make sure that a number of multimedia dependencies are addressed (Xine, Dvdauthor, Mjpegtools, Libdvdread, Dvd-slideshow). It is a good idea to use an online repository as the installation source. After adding the repository as a YaST installation source, or adding the repository in Apt/Smart, you can install Kmediafactory along with the required multimedia packages.

Ubuntu users can give the `sudo apt-get install kmediafactory` command to drop the DVD authoring tool onto their hard disks. This command assumes you have enabled the Universe and Multiverse repositories. Fedora Core users will find the required multimedia packages in the Livna repository [2]; Kmediafactory itself is at [3]. The Kmediafactory Wiki [4] has a detailed installation guide for various Linux distributions. If you wish to use the plugin to burn DVB recordings onto video DVDs, you will also need the Java-based **Demux** tool, Projectx [5]. Refer to the box titled "Installing Projectx."

Getting Started

To launch Kmediafactory, press [Alt] + [F2] and enter `kmediafactory`. You can add a video processing script in *Tools*. As of this writing, the only exten-

sion that is available is a DVB import module for Kmediafactory. Users with version 0.5.1 of the program will note that the DVB import module is already integrated. For an up-to-date version, you can download the plugin via *Tools | Get new tools*.

Your First DVD

Depending on your setup, the *Media* menu contains the following items: *Add DVB*, *Add slideshow*, *Add DV*, and *Add video* (Figure 1). Select *Add DV* for movies imported directly from your camcorder and *Add DVB* for digital TV recordings. Click *Add Video* for all other video formats.

In theory, Kmediafactory should be able to handle any movie format that Ffmpeg can handle. In our lab, the program read a number of video files that it was unable to convert.



can also change the font size if necessary.

The last step is to select the required output format in *Output* and to press *Start*. For our first test, *DVD directory* is our best bet. You can then test the DVD with the integrated player, *Xine*, or *Kaffeine* before burning by selecting *Tools* | *DVD preview*. To burn a DVD, select *K3b Project*. Kmediafactory will then automatically launch the KDE burning tool after creating the DVD image. While it is working, Kmediafactory shows a separate progress indicator for each DVD, as well as a progress indicator for the whole project at the bottom of the page.

If KMediaFactory crashes while it is converting a video to DVD format, you might like to try converting the file with *Ffmpeg* at the command line. The command for converting the file through *Ffmpeg* is as follows:

```
ffmpeg -i problemdate1.avi -target pal-dvd ergebnis.mpg
```

The KDE program will only create the menus in this case. In our lab, this ap-

Clicking on one of the selections pops up the *Open - KMediaFactory* dialog. The *Multiple files create multiple titles* checkbox is important. If you check the box, Kmediafactory will create a title for each video file. This can bloat the DVD menu if you don't watch out. Depending on whether you checked the box or not, you will see one entry or multiple entries below *Selected Medium*.

The second step is to select a design below *Template* (Figure 2). Don't let the previews in *Preview 1*, *Preview 3*, and *Preview 6* scare you off – the finished product isn't half as bad as the previews might lead you to expect.

Clicking *Preview* lets you take a peek at the true DVD menu. Clicking on *Get more...* takes you to more downloadable themes on the Internet. Right click the template to specify the background image and music for the DVD menu. You

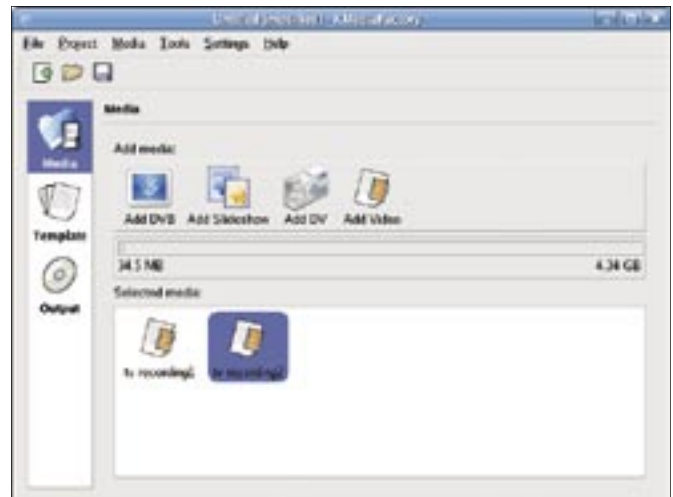


Figure 1: The main window in Kmediafactory includes four menu items for adding video files.

proach saved Kmediafactory from many a crash.

Another issue occurred with DV files. Kmediafactory kept trying to create subtitles from the timestamp information in the movie, but this only worked about once in ten attempts. The program kept on hanging at the *Adding subtitles...* or *Creating Menus* step. To resolve this issue, right click on the DV video you are adding below *Media*, and select *Properties* | *Remove* to remove the subtitles. This issue was common to all versions of Kmediafactory, no matter what distribution we used.

Useful Details

If you run Kmediafactory in "Three Step Mode," all your DVDs will look more or

Installing Projectx

To set up and use Projectx, you need a Java developer kit (JDK), along with a matching runtime environment (JRE). On Suse Linux, you will want to install the *java-1_5_0-sun* and *java-1_5_0-sun-devel* packages; Ubuntu users will discover *sun-java5* and *sun-java5-jdk* in the Multiverse repository.

Give the command *sudo apt-get install sun-java5-jdk* to install the Java packages, but don't forget to type the following command:

```
sudo update-alternatives --config java
```

This selects the newly installed Sun Java as your preferred Java program. Fedora Core has a more roundabout approach to installing Sun Java. You'll find a detailed How-to at [6].

Download the *ProjectX_Source_eng_0.90.4.oo.zip*, and *ProjectX_Language-Pack_0.90.4.oo.zip* files from the Projectx homepage. Unpack these two files in the same directory, *ProjectX_Source_eng_0.90.4.oo.zip*; then add the language files. The language files should be in the *ProjectX_Source_0.90.4/resources/* directory. Now give the command *sh build.sh* in the *ProjectX_Source_0.90.4* directory to build the sources and create the *ProjectX.jar* binary. You can then enter the following to launch the binary:

```
java -jar ProjectX.jar
```

To make sure that Kmediafactory finds the program, you need to specify the full path to the *.kde/share/apps/kmediafactory/tools/kmf_dvb_edit.sh* file below *JAR=""*.

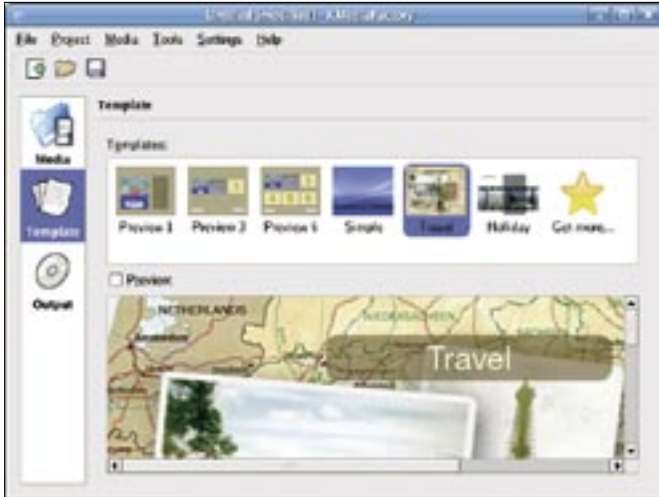


Figure 2: The Kmediafactory template collection could use some additions.

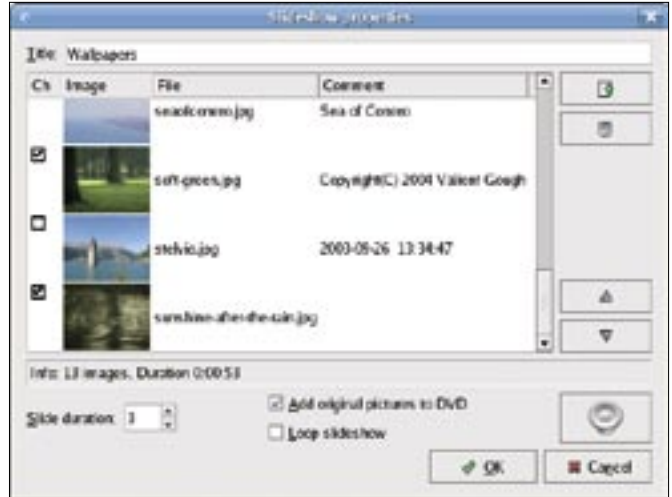


Figure 4: The Kmediafactory slideshow module includes some useful functions.

less the same. The program creates a menu with chapters for the first movie and lists the other entries below one another. To change the main title of the DVD menu, select *Project | Options*, and type an intuitive name in *Title*. For every DVD, you can specify a directory and format, Pal or NTSC. Kmediafactory will store the results.

Kmediafactory automatically splits DV videos and a number of other video formats into chapters. If you need to modify the chapter assignments, or create manual assignments, right click a medium you have added and select *Properties*. Click *Properties* again to launch the Kmediafactory editor (Figure 3). You can use the editor to define the chapters and specify the preview image. To do so, select *Add* and define the title and the starting time. Right clicking an existing chapter pops up a menu where you can specify automatic chapter lengths.

The Kmediafactory slideshow module is also useful (Figure 4). Although, in contrast to Mandvd [7], it does not give you a selection of transition modes and thus only exploits a tiny fraction of the *dvd-slideshow* back-end's potential, the slideshow module makes good use of the abilities it does have. For example, the program generates chapter selections for slideshows and parses the Exif information for the individual images as a short description. By default, the slideshow module also saves the original images. Thus, a DVD with holiday snaps is not only useful for showing to your friends and relatives; it also serves as a backup medium.

Conclusions

Although the Kmediafactory feature set cannot compete with commercial DVD authoring software on Windows or Mac OS X, the tool has a pleasingly intuitive

and simple interface. Given improved stability, and with some help from talented designers to create more templates, Kmediafactory has a strong chance of success. ■

Problems with Ubuntu

The Add DVB module failed to work on Ubuntu stating "No audio found." As a workaround, I first told Projectx to split the DVB recording into its video and audio components (just click on *Quick-Start* in Projectx to do this). I then entered the following command

```
mplex -o film.mpeg -f 8 2
video.m2v audio.mp2
```

This creates a DVD-compatible file titled *film.mpeg*. The program then converted the file via *Add Video* with no trouble at all.

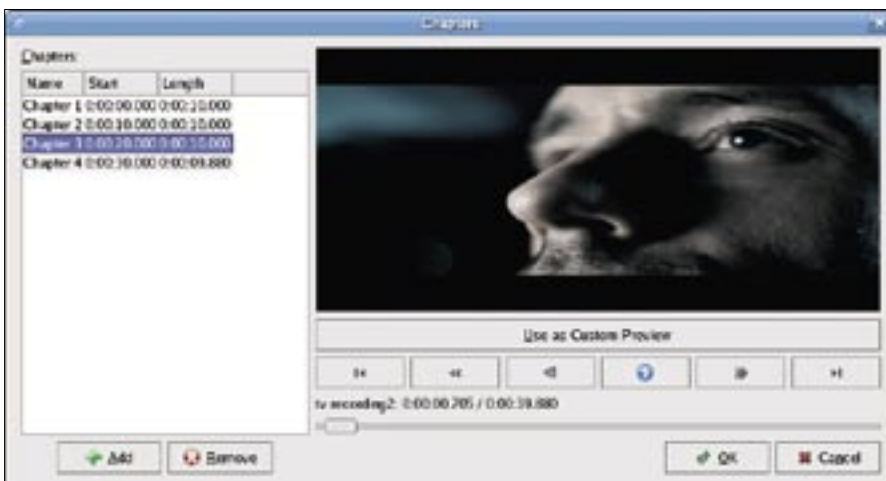


Figure 3: The Kmediafactory Chapter Editor is well hidden but very useful.

INFO

- [1] Homepage: <http://susku.pyhaselka.fi/damu/software/kmediafactory/>
- [2] Livna Repository: <http://rpm.livna.org/configuration.html>
- [3] Fedora packages: <http://www.deadbabylon.de/files/rpms/kmediafactory/>
- [4] Installation guide: <http://susku.pyhaselka.fi/damu/software/kmediafactory/documentation.html>
- [5] Projectx at Sourceforge: <http://sourceforge.net/projects/project-x>
- [6] Sun Java on Fedora: <http://www.fedorafaq.org/>
- [7] Mandvd: <http://www.kde-apps.org/content/show.php?content=38347>