Kino Workshop

Swiss Army Knife

Kino is a small, easy-to-use video editing program for non-linear, digital editing that in addition, provides one or two really neat extras.

BY TIM SCHÜRMANN

Kino's closest relative is maybe the popular Windows program, VirtualDub, a tool that not only records movies from your digital camera, but allows you to edit them, add simple effects, re-organize your takes to create a new movie and export to various file formats, or even back to your camera in the process. As an extra goody, Kino even supports some USB jog-shuttle controllers.

Kino is available free of charge from *http://kino.schirmacher.de/*. It is also supplied with the SuSE Linux 8.2 distribution where you can use YaST 2 to install it. Compiling Kino from the sources is not as simple as it sounds, as you need to watch out for a number of dependencies; also a number of libraries must be available. The Kino homepage provides a README file with all the necessary additional information.

In the following workshop we will be capturing some raw vacation takes from a digital camcorder, editing the takes and finally adding a transition effect.

Go!

You can either use the Start menu to launch Kino, or simply enter *kino* in a terminal window. The main window is divided into three panels (see Figure 1). The so-called scene list is on the left; this is the area where you can re-arrange individual sequences to create a complete movie. The panel on the right provides a number of tabs that provide access to the major functions.

Recording functions are available in the *Capture* tab for example. The panel at the bottom of the screen contains control elements. You can use them just like a video recorder to start, stop or fast-forward the video you are editing.

Before you start capturing raw takes, you might like to check your preferences in *File/Preferences…*. Use the first tab from the top to select *PAL*, *48khz Stereo* and *4:3*. These are basic digital video settings which some effects will use later. You can then move on to the *Capture* tab where you can type the name of a file to store the captured video sequences.

The *Auto Split Files* option is also interesting. If you enable auto split, Kino will attempt to recognize changes of scene automatically.

Kino then stores the scene it has recognized in a new file, adding a serial number to the filename. Accept the default settings for all other values and click on *OK*.

You can now go on to capture your video takes. To do so, select the *Capture* tab in the main menu. Check the filename that you supplied in the Preferences area. Switch your camera to a mode in which it will recognize control signals – this is normally called play mode. You should be able to control the camera using the control elements on the right of the window. If this does not work, click the *AV/C* button. This enables the control protocol that most cameras use.

As soon as Kino and your camera get talking, Kino will show a preview of the video images you will be capturing. Now fast-forward (or reverse) to the position where you want to start capturing and click on *Capture* (this is the button with the red record symbol).

Kino will start to capture the video; you can stop this at any time by selecting *Stop*. Any video clips transferred in this way will appear in the scene list on the left of your screen.

Figure 1: Kino's welcome screen

THE AUTHOR

Tim Schürmann is a student of IT at the University of Dortmund and wonders why the Linux penguin does not have feathers, but a highly polished exterior?
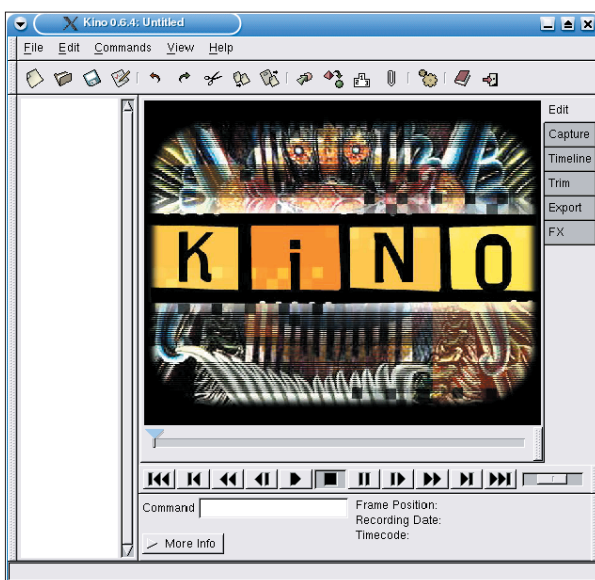
Get In Line!

The next step is to put the video clips you have captured into the right order. The easiest way to go, is to use drag & drop. Click on the *Edit* tab first. Then use the control elements at the bottom of the screen to navigate the current video takes.

The takes in the scene list will be played in sequence from top to bottom. To change the order, simply click on the take you want to move, hold down the mouse button and drag the mouse to the required position in the scene list. The clip will appear at this position when you release the mouse button.

You can split a clip into two individual scenes or merge two scenes to create a new one. To do so, first select the clip you want to split, or merge with the clip immediately below it, in the scene list. To merge two clips simply select the menu-entry *Commands / Join Scenes*.

If you are splitting a clip, you must first use the control panel to select the image where you would like to split the clip and then select *Commands / Split Scene* in the menu to create two scenes.
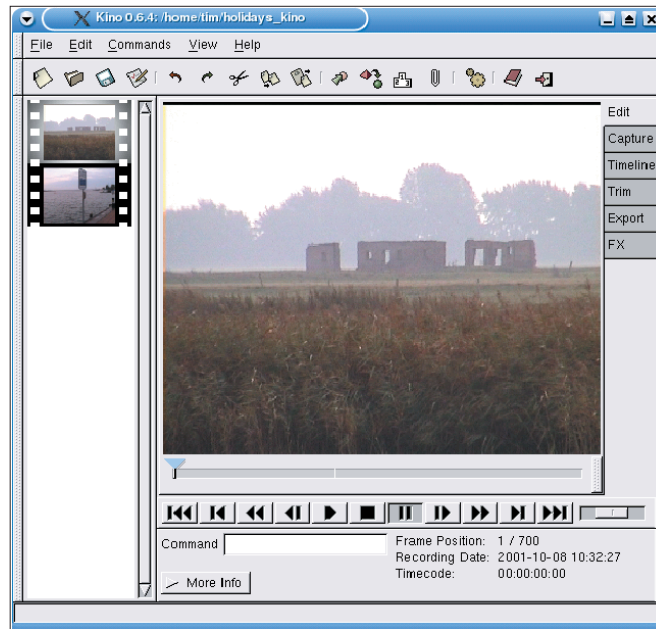

Figure 2: Kino's Edit mode. The scene selected in the list in the left panel is currently being displayed in the preview panel

Neither of these actions will have any effect on your original material.

If you have previously captured video sequences to disk, you can now insert them at the current preview position using the *Commands / Insert Movie…* command. *Commands / Append Movie…* will append them after the current image instead. The scene is automatically split, if required. While working in the *Edit* menu, make sure that you save your project regularly using *File / Save As SMIL…*,

as the program showed a tendency to crash sporadically in our lab environment.

In addition to scene manipulation facilities Kino also provides individual frame editing functions. These functions are grouped in the *Edit* tab. The *Cut*, *Copy* and *Paste* commands provide the functionality that their names suggest.

Just a Trim

It is often the case that a movie or scene you have captured does not start or finish exactly where you would like it to. This happens if you press the start button too early or two late when capturing a recording. Kino provides various functions grouped below the *Trim* tab to help you remedy this situation. This is where you can trim a scene to your liking, just like trimming your garden hedge.

First, select the scene you will be trimming in the scene list. Use the control buttons to navigate to the new starting position, using the single frame feature for more accuracy. You will notice that two text boxes and a few new buttons have appeared below the preview window. The boxes show the frame numbers
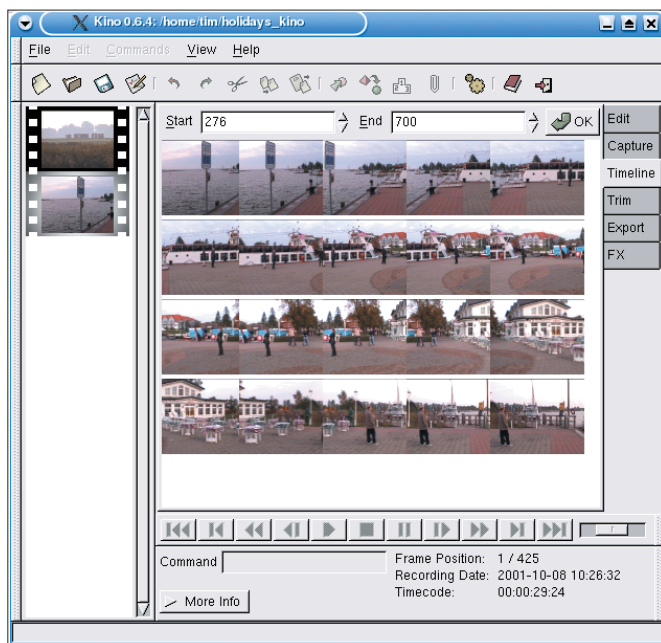

Figure 3: The Timeline register provides an overview of the individual frames in a scene

Figure 4: Trimming a movie with the Trim feature. Use the green triangle to mark the new ending
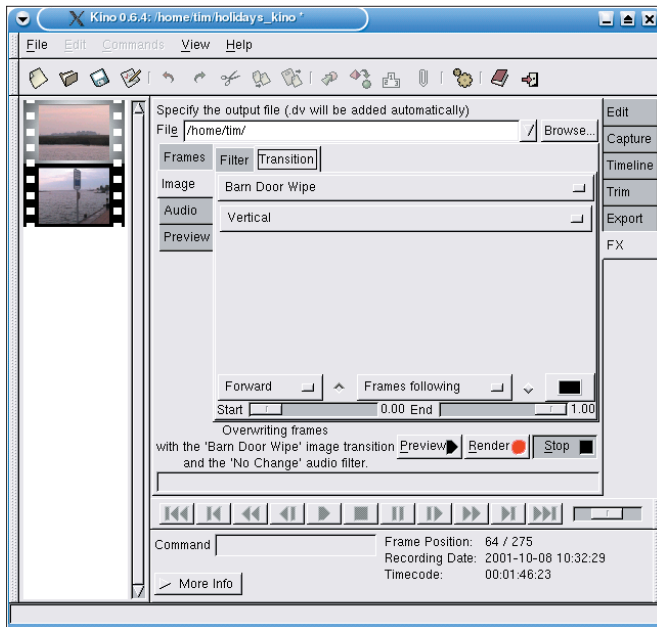
Figure 5: Assigning the "Barn Door Wipe" effect to two video clips in the scene list

for the start and end of the movie. These should be the first and last frames in the movie at the current stage. After specifying a new starting frame, you can click on the green down triangle to confirm. The text box will now reflect your selection. Additionally, the small blue triangle will move from the left of the timeline to the right. Incidentally, you can also use the mouse to drag the triangle.

The steps for trimming the end of the movie are similar. Select the new end position and click on the button with the green up triangle to confirm. Clicking on the button with the recycling arrow symbol will restore the original values.

The Barn Door

Finally, let's look at a transition as an example of Kino's effect feature. This assumes that there are at least two clips in the scene list. Select the *FX* tab and then the clip in the scene list where the transition effect will originate. Click on the *Images* tab and then on *Transitions*. Select an effect from the list at the top; we will be using *Barn Door Wipe* for this example.

You can then use the other elements in the window to specify additional preferences for this effect, and click on the *Preview* button to display a preview. Play around with these settings until you are satisfied with the preview and then click on *Render* to apply the effect. The results are stored in the file specified in the *File* text box at the top of the window.

In addition to transitions you can also apply multiple frame effects, (*Frames* tab) and sound effects (*Audio* tab).

In the Can

After putting the finishing touches to your vacation movie, you will want to output the results. The *Export* tab provides access to further tabs for multiple output formats:

- *IEEE1394* allows you to export the movie directly back on to your camera.
- *DV File* stores the finished movie in a new file in DV format.
- *Stills* stores the movie as a sequence of JPG images.
- *Audio* stores the sound for the finished movie in a separate file.
- *MPEG* exports the movie to MPEG or DivX format.

Note that some export features will mean installing additional tools on your system. But exporting to DV format should be sufficient to show the basic principle.

Click on the *Export* tab and type a filename for *File* leaving out the *.avi* extension. Disable the *Auto Split Files* option, as this would create multiple files. In the panel at the top, specify *All* as the current *Export Range* to export the whole movie from the scene list. Leave the default values for all other settings, and click on *Export* to generate the finished product. ∎
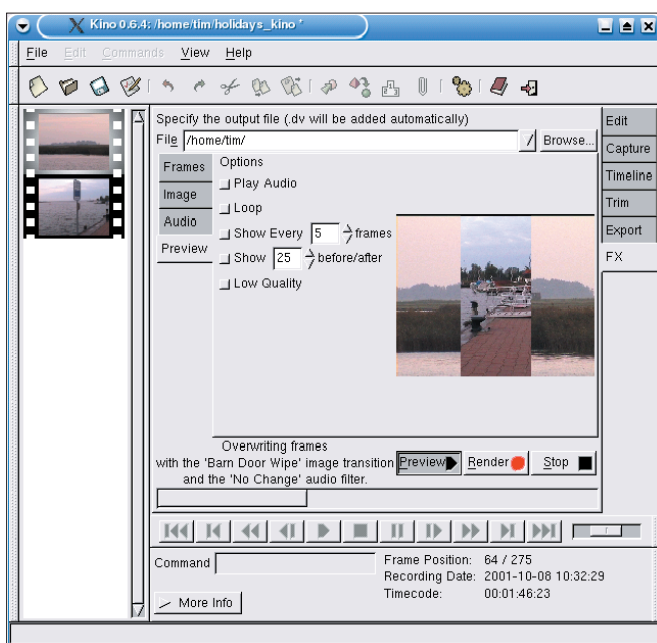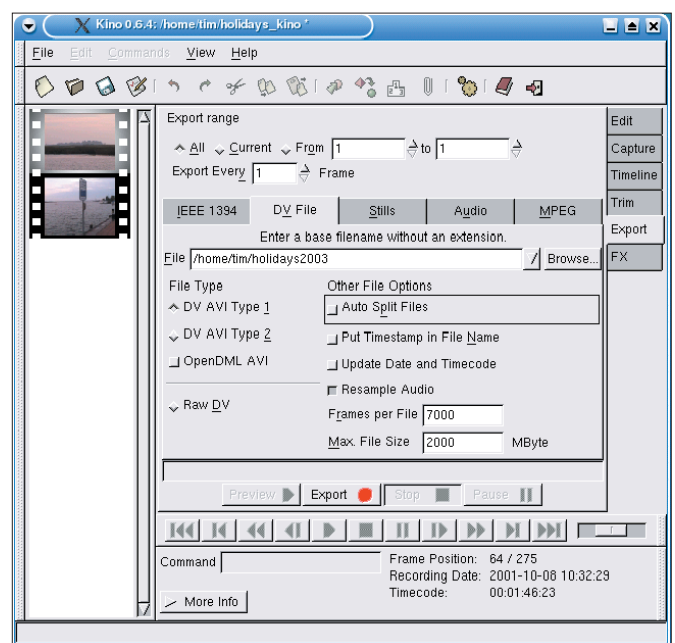

Figure 6: Preview of the selected effect

Figure 7: Exporting a DV format AVI file