

Chapter 23- Video Sequence Editor

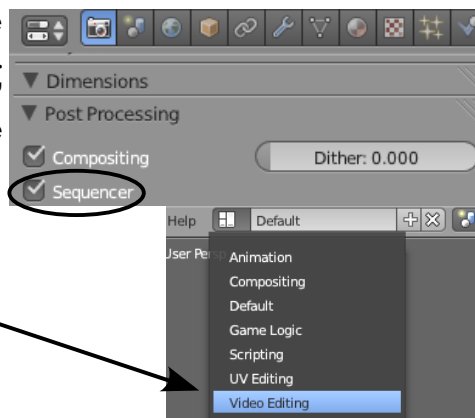
We've come to the last chapter and what better way to end this introduction to Blender than to compile all of your work into a final movie. Like other programs on the market (i.e. Adobe Premiere, Windows Movie Maker), Blender has its own movie editor. Combine the *Sequence Editor* with *Nodes* and you have everything you need to make a professionally edited movie with sound, right inside Blender.

Compiling Your Clips and Images

Think of all the work you've done in Blender. You probably have a lot of short movie clips and saved images. Let's put them into a movie. Most movies start with a black screen. To handle this, I typically insert a picture that has been saved as just a black filled image.

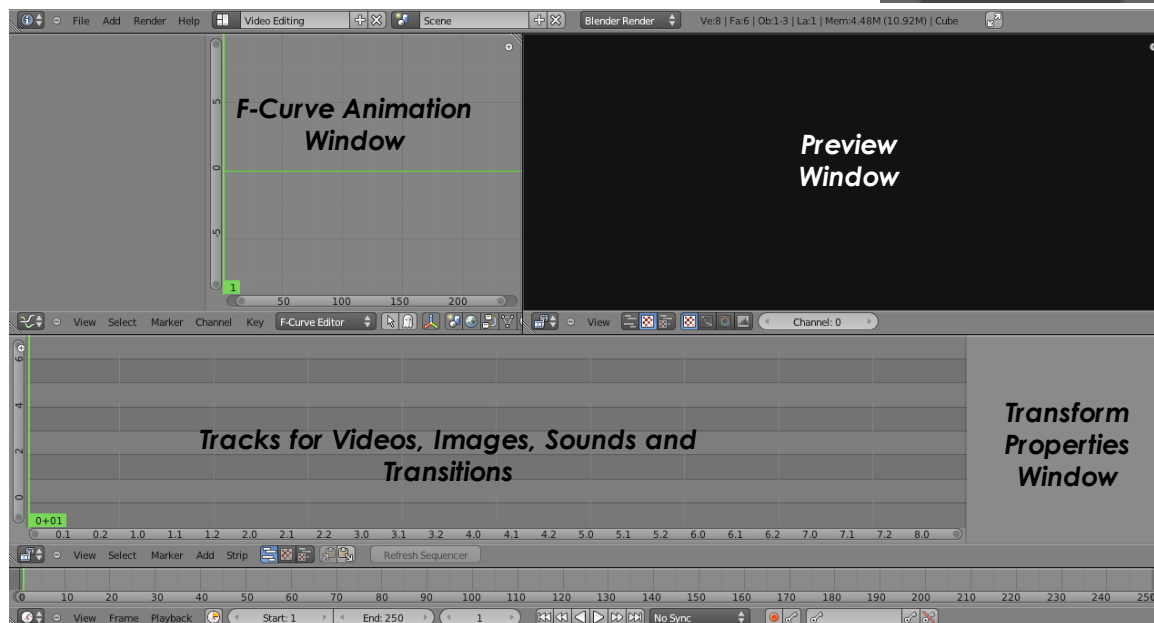
First thing, set up your scene for your final movie output. Blender can only compile sounds into an MPEG movie (*due to open source issues*). This is actually great because Mpeg2 movies output high quality and are DVD-ready. The settings are just a review of what we have done in previous chapters. *If you need a review, look at page 7-3.*

The only thing new is that you need to make sure the "*Sequencer*" box is checked in *Post Processing*. Without this being checked when you hit "Animate" Blender will only animate the 3D scene and not the sequence. *For best results, always animate at the same size and frame rate- mismatched sizes and rate could cause output problems.*



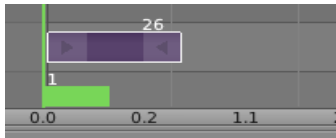
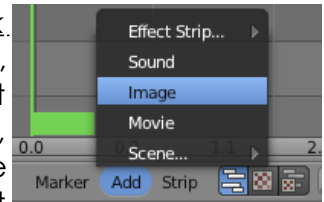
Now, switch the screen layout to "*Video Editing*".

Here is a look at the screen layout:



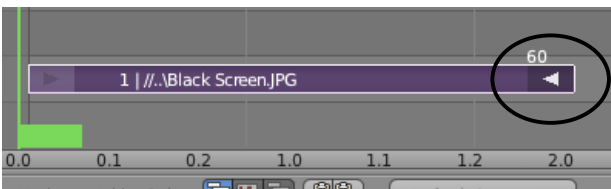
Chapter 23- Video Sequence Editor

Let's start by adding 2 images to our time line. We'll add a Black screen image and a saved image of our Lighthouse. To do this, click the "Add" button at the bottom of the window and select the "Image" option. You can add Effects, Sounds, Images, Movies and Scenes. Browse to your saved images. My 1st image will be a black screen. It doesn't matter which track you drop it



into, but I usually work with the bottom tracks for images and movies. Place the track to start at Frame 1. Items placed in the time line can be selected and moved using standard Blender commands (G key). You can also zoom and pan in the tracks.

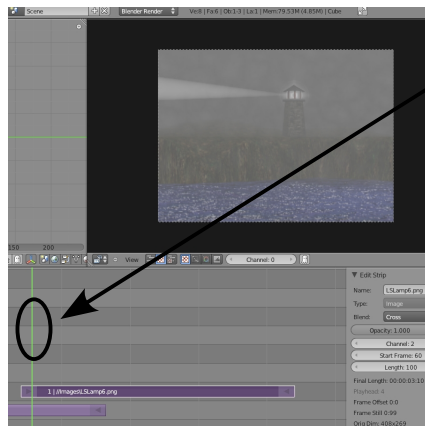
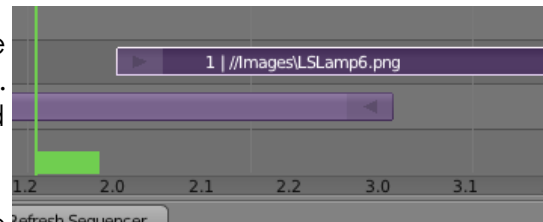
By default, my image came in only 25 frames long- not even a second. This is where you need to get a feel for how long an image should be displayed. I want my black screen to last for 2 seconds plus 1 second for the fade transition. *This would be a total of 3 seconds, or 90 frames.* To lengthen an image, **RMB** click on the end of the strip.



Only the end frame of the strip will highlight and you can stretch it with the "G" key. You will also notice that the numbers along the bottom of the window represent seconds.

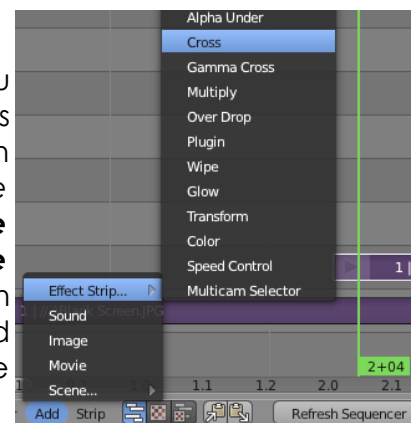
Only images can be stretched, videos cannot. They will give the appearance of being lengthened, but only the first or last frame will show longer.

It's now time to add the second image. Go to the "Add" button again and find the next Image. Place it on the track above the first one and overlap it about 1 second for the transition.



If you grab the green bar on the time line tracks (*represents current frame*) you can drag it with the **LMB** as you watch the Preview Window. You can scroll the mouse wheel in the Preview Window if you need to zoom in or out. You should notice a switch from black screen to the rendered lighthouse. Right now, it is an abrupt change. We want a smooth cross fade.

To add a Cross Fade, you need to select *Both* tracks that you wish to cross with the **LMB** while holding "Shift" (*standard Blender multiple selection command*) **It is important that you select the image that appears first in time (black image), then the second. Otherwise, the cross will work backwards.** With both selected, go to the "Add" menu, "Effect Strip" and choose "Cross". Place it in the track above the two. There are many options for different effects.



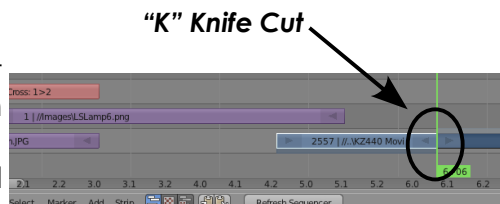
Chapter 23- Video Sequence Editor

Now when you scrub the time line with your mouse or press the play button (or "Alt-A"), you should see a smooth transition.

Now it's time to add a movie. Follow the same steps as before, but select "Movie" from the "Add" menu. When the movie come into your tracks, it will also contain an Audio track (even if your video contains no audio). You can delete this upper track if desired. Place the movie and add a transition as before.



If you need to shorten a movie track, you can select the end and shorten it, like we did to lengthen an image, or you can place the green "current frame" bar at the desired cut location, select the clip and hit "K" for knife cut. The movie is split at that point.

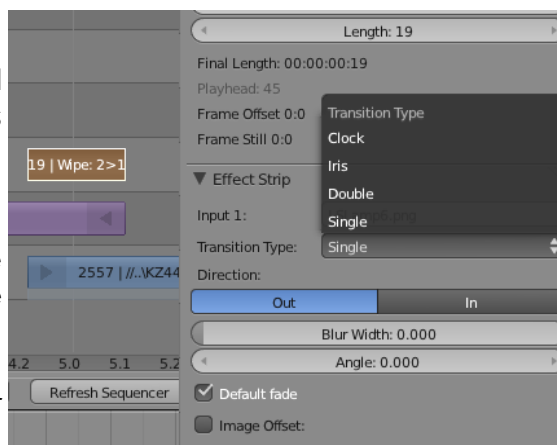


RoboDude Asks: When I press the "Play" button or press "Alt-A", why doesn't my movie play through? Check the End Frame of your movie- you probably need to adjust it.

More about Effect Strips:

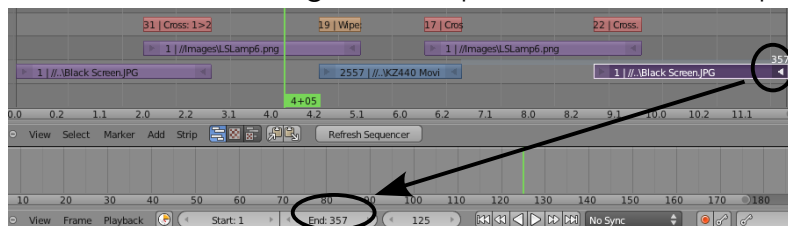
So far, we've used the most common type of effect- a Cross. Blender has several other useful effects.

Wipe: A wipe is another common effect and has been expanded to do other popular effects in 2.5. After adding the wipe across the 2 strips, look at the options in the right panel. You will see different types of wipe and a Blur option. Options include a Clock effect, Iris, Double (barn doors), and single. There is also an Angle option.



Alpha Over/Under: If you have an image or image strip that has a transparency channel, like a title overlay, you can use these effects to do composite work. Just place the image over the movie strip, select both tracks, then add an "Alpha Over or Under" effect to combine them.

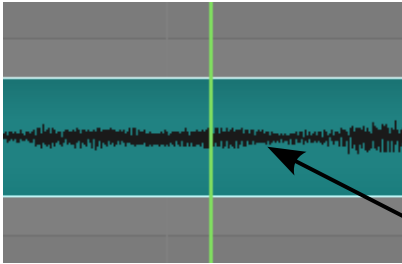
Continue to add images and clips to finish the video part of your project. Sticking to the bottom tracks keeps your project looking clean. I usually alternate between 2-3 tracks. Don't forget to match your End frame to the end of your movie.



Chapter 23- Video Sequence Editor

Adding an Audio Track

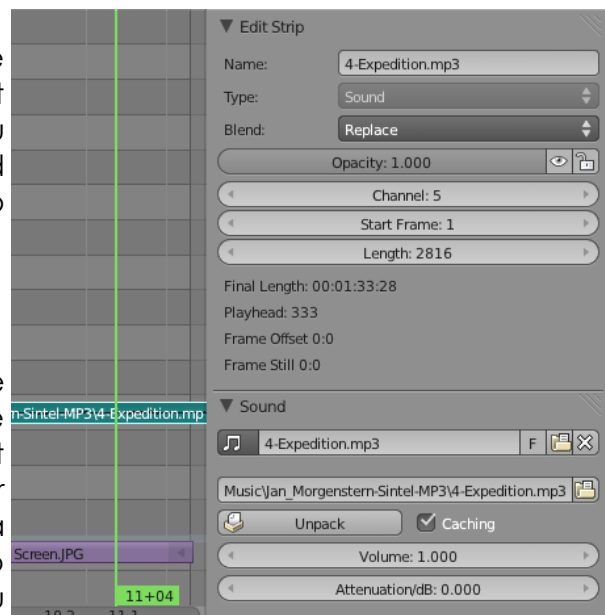
Adding an audio track isn't much different from adding images and movies. Many different audio track formats are accepted by Blender and the most common are WAV and MP3 files. Some files may need to be converted through an audio converter, many free on the internet. There have been some helpful upgrades to working with audio in the sequence editor. To add an audio file, go to the "Add" menu and select "Sound". Find your file and add it to an upper track. Trimming an audio track is accomplished the same way you cut or shorten a movie or image. (*grabbing the end or using the "K" knife tool*). To help you find a more exact point, you can zoom in on the audio track and see the waveform.



RoboDude Asks: When I press the "Play" button or press "Alt-A", why doesn't my movie play at a consistent speed? It is difficult to run everything properly on the screen. Transitions need to be calculated and audio added. You could try going into "User Preferences" and the "System" tab to try to increase sequencer memory. When you crunch the movie, it will play real-time.

With an audio track selected, look at the options to the right. The most important options are displayed at the bottom. You can "Pack" a sound into the Blender file and adjust its Volume and Attenuation if it is too loud or soft.

Need to fade a song in or out? Need to cross fade from one song to another? Remember that Blender 2.5 can animate any block. This means that you can animate the volume. Go to a frame where you want to start a fade out, place your cursor over the "Volume" block and hit "I" to insert a key, then move up in time, set the volume to zero and hit "I" again over the block. You now have a fade out.



The next exercise is our last exercise of the book. I hope that *Blender Basics* has been helpful in launching your experience with this sometimes difficult and powerful 3D modeling and animation suite. It has grown to something that can compete with the commercially developed packages.



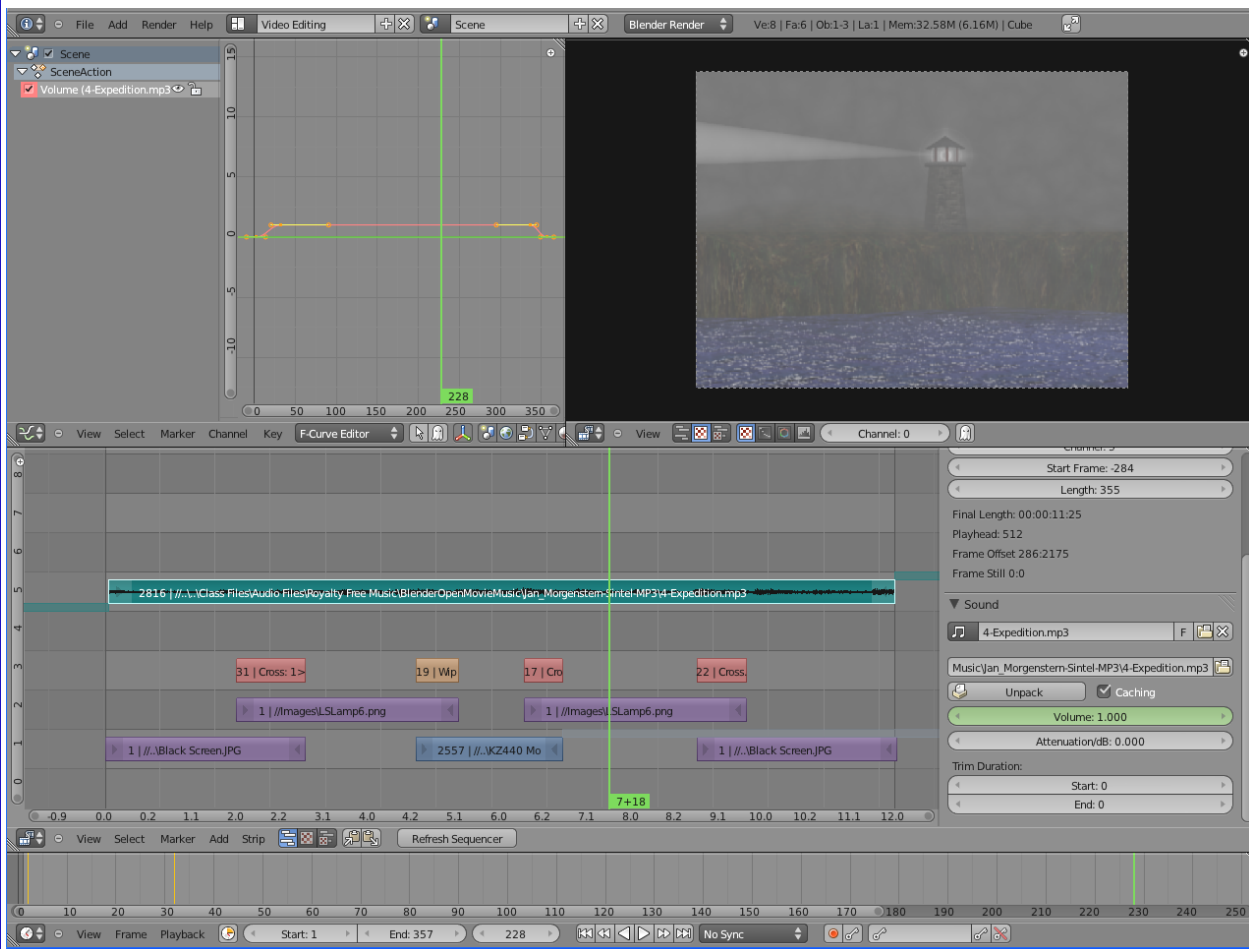
Where to go from here? We've only scratched the surface. The Blender foundation and community are always striving to make material available. All you need to do is search the internet. **Happy Blending!**

Movie Producer Practice Exercise

This is a great exercise to end the book with. Your job is to take all of the images and movies you have created through these exercises and produce a compiled movie. I recommend making a **Black JPEG image** to use for your **first** and **last** image (*start and end in black*). Images should be displayed for approx. 3-5 seconds with 1 second transitions. When finished, o back to the Default screen and hit "Animate".



RoboDude Says: *It is best to work with movie files that have all been rendered at the same size and frames-per-second. Problems may occur when Blender tries to convert files that are different from the output you have selected.*



**** Call the instructor when finished****