

sequenceLiner for Final Cut Pro

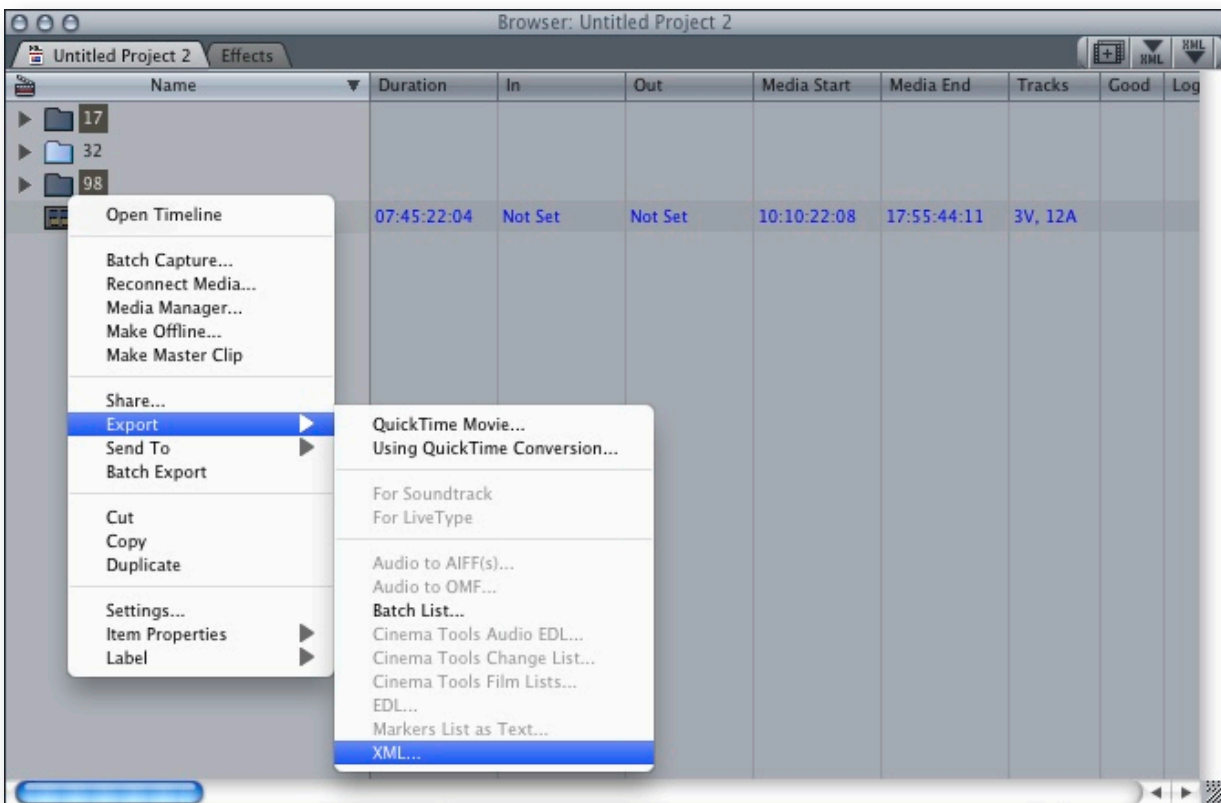
sequenceLiner is thought to work with professional timecode, where all recording devices record the same (TOD) timecode. With devices which don't record TOD or free run TC you may try [auxTC](#) which adds a virtual Aux TC to the clips based upon creation or modification date (only works with Final Cut Pro 7.x). You also may try the [lrcCheck app](#) which searches for LTC in the audio tracks and does apply TC the same way auxTC does - again for FCP 7.x only.

Here how it works:

The actual version of sequenceLiner is more restrictive than the previous versions when handling XMLs and it is up to the user to setup the Final Cut Pro items correctly before exporting an XML. Merged clips will give a warning and multiclips will be ignored when processing the XML.

Within your Final Cut Pro project create a bin for every video track. If you got external audio create bins for them as well. Then create a target sequence where the clips should go with the correct settings. Make sure you only have one sequence - sequenceLiner will always take the first sequence found in the XML. Sounds simple - but many things can happen.

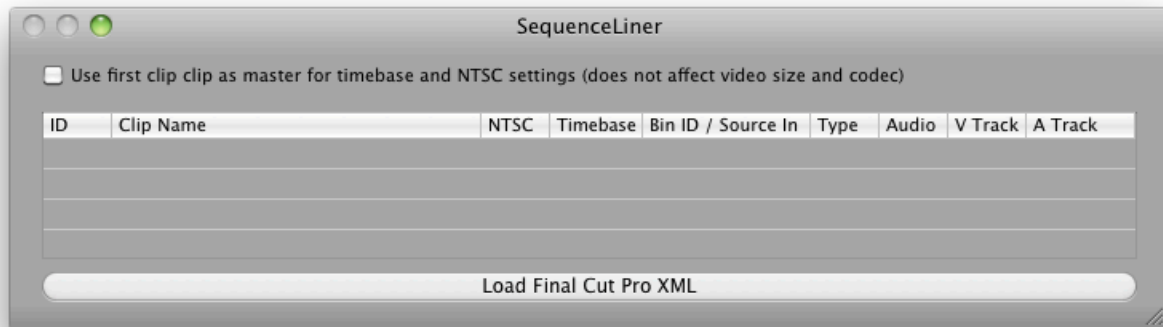
Select those bins which include the clips you want to line up and the target sequence in Final Cut Pro and export as XML as version 3 or above.



In case you only want to merge audio families from BWA files from bins you don't need a sequence, but be aware that these merged audio clips will give you a warning if you want to run sequenceLiner a second time.

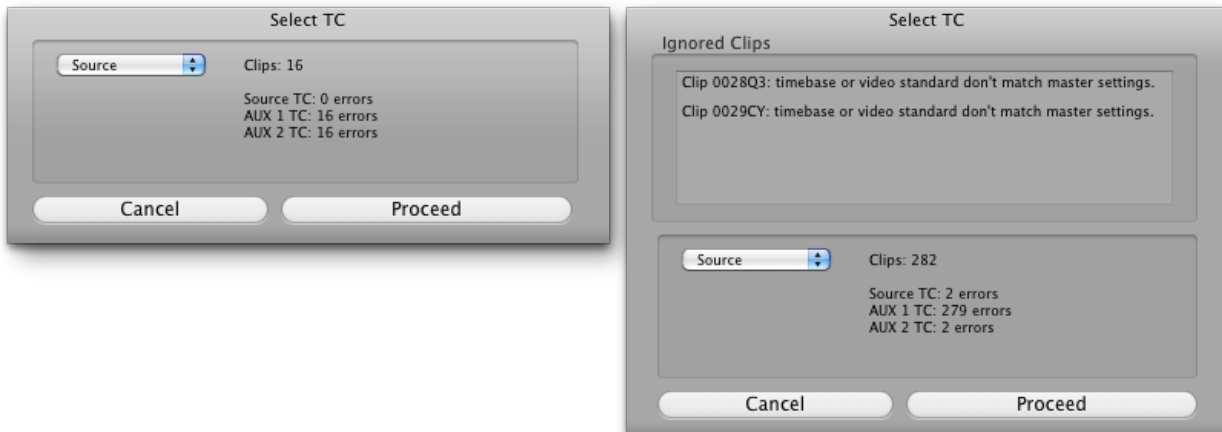
With **sequenceLiner** open this XML.

Before you import the XML you can decide how the 'master settings' for timebase and NTSC are handled. As default they come from the sequence you created for the XML export. But you can check the 'Use first clip clip as master for timebase and NTSC settings'. This is a bit similar to Final Cut Pro's behavior when dragging a clip to an empty sequence when 'Auto conform sequence' is set to 'Always'.



The application does check all the clips in the XML. Multiclips will be ignored, same as clips which don't match the sequence 'timebase' and 'ntsc' settings.

Then all available timecodes - per bin - will be checked and a resume of the found errors will be displayed in a new panel window.



Select the TC track which has no error or if not available that one which only has a few errors. Depending on the kind of errors you also may try to check/uncheck the 'Use first clip clip as master for timebase and NTSC settings' box.

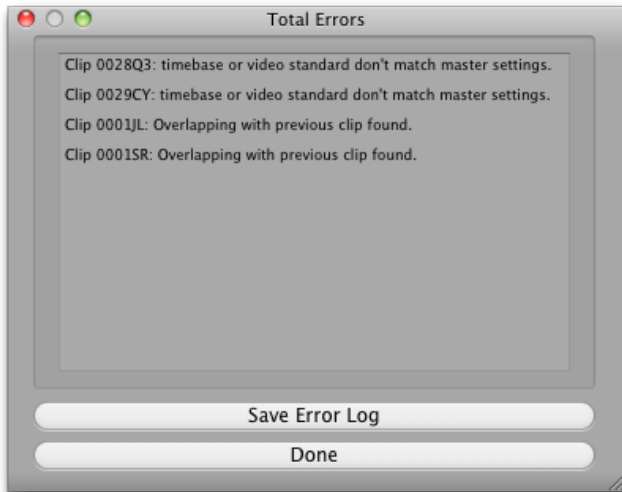
From there the app will analyze every clip. It will also search the clips to find out whether they belong to an 'audio family' from BWA files. In case they do a new merged clip will be created with the name of the 'audio family' at the same bin the audio clip resides in.

Then the app will distribute the clips to individual tracks in the target sequence. But the length of a sequence is limited with any of the available NLEs. With Final Cut Pro these limits are 12 hours for a sequence with audio sampling of 48 kHz (and below) and 6 hours for those with audio sampling above that value. Clips which are beyond this limit will be ignored. These clips will be logged in the error log file.

Even if you have selected a TC track with 0 or only a few TC errors there is still the chance that within a track the start of a clip is before the end of the previous clip. sequenceLiner does handle this issue a bit different compared to Final Cut Pro; the clip overlapping the previous clip will be shortened by setting a new in point

(which is 1 frame later in the timeline). These clips will be logged in the error log file as well, so you will know which clips are affected.

After the app's sorting work is done all bins will be updated and the target sequence start timecode is set to the lowest timecode available within the processed clips and the XML is saved. All errors happened during the conversion will be displayed. You can save the error log to disk for reference.



If you import the XML into the same project you used to create the XML all these parts which were included in the XML will be updated and maybe changed within your project. The so called IDs are kept, so you can match back from each clip item in the timeline to the original master clip in the browser.

In case the global sync of the tracks don't match you can easily fix that within Final Cut Pro:

Go to a clip where you know you have a clapper or a sync point which is common in all other tracks. Set a marker at the sync point. Repeat with all matching clips in the other tracks. Now switch the timeline's time display to frames.

From the 'highest' marker make a note of the sequence frame, then go to the one which is the closest 'down' and make a note of the sequence frame as well. Subtract this number from the 'high' number. Select all clips in this second track and hit the '+' key. Then type (or paste) the calculated offset in the little panel. All clips will be moved by this amount of frames. Continue with the other tracks the same way.

You also can drag all selected clips in a track until the markers match.

This won't work if you have a continuous timecode drift, but it will give you a good start.

About audio in general:

Formats like AIFF will have no timecode metadata, the TC will always start at 0, many other audio formats behave the same.

So these kind of formats won't make sense with this application.

BWAV and SDII do/can have timecode but only the BWAV timestamp will be acknowledged by Final Cut Pro versions after 5.1 - this doesn't mean this timecode is correct as it depends on the current project settings which may not match the BWAV file settings. QuickTime "audio only" may have a timecode or not.

The 'family handling' in sequenceLiner works this way: audio file names **must** have a name like *name_x.wav*, *name_x.bwf*, *name-x.wav* or *name-x.bwf*. The 'name' could be anything, the 'x' must be a number. If the 'x' is something like 'ls' or anything used with surround audio it will cause errors in ordering the channels.

As said above Final Cut Pro does have a limitation on the length of sequences which does depend on the audio sampling rate (currently 12 hours with audio sampling rates up to 48 kHz, 6 hours with audio sampling rates above 48 kHz). That means that you have to create the bins in First Final Cut Pro very carefully (all clip media starts and ends must be within this limit).

Some other notes:

Another nice feature for those who have installed the "[mx4mac](#)" component:

Those who got it do know that they just can drag the audio and video folders from a P2 card into the browser of Final Cut Pro. You then can rename the bins and within **sequenceLiner** you can re-arrange and link camera audio and external audio in the timeline. This only works because of the **mx4mac** unique way of handling audio.

Versions:

1.01b first release

1.02b Allows to shift "bins" in time during lay down, for too long sequences a warning is displayed, allows TC source selection.

1.07b Allows "bin dragging" for custom track order. New sequence creation options. Sequences can be inserted directly into a project.

1.09b Allows to map audio source file names to Final Cut Pro metadata. It also allows to distribute BWA files to their respective channel.

1.10b Allows to link audio channels - video still will be unlinked.

1.11b Some interface changes. Workaround for "bad" XML imports where the clip duration is < 0: those clips will be ignored.

1.5 Rewritten code. Clips with audio will be relinked in the timeline. BWA mono files will be automatically merged into a new clip and will the clip will be added to the matching bin.

Known issues:

If no audio or video track is available, the sequence will still have 1 empty track for each of those.

As always there might be other issues. If you are working with offline MXF files Final Cut Pro will give you a warning about MXF span information. You can ignore this warning in most cases, but make sure the 'Master Clip' relations are still working.

[Download sequenceLiner for OS 10.4 - 10.5](#) (version 1.01b)

[Download sequenceLiner for OS 10.5 - 10.6](#)

Even though the app is free you might think about donating a small amount of money.

System Requirements:

- Apple PPC/Intel (the faster the better).
- 1024 MB RAM (more = better), enough space for virtual memory
- MacOS X 10.x
- Final Cut Pro V 5.14 or higher (XML version 3 or higher)

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