

You've locked picture. That's great, you're on your way. Now it is time for intensive sound editing and design. You need to get sound and picture out of Final Cut Pro X.

You will create two files out of Final Cut Pro X

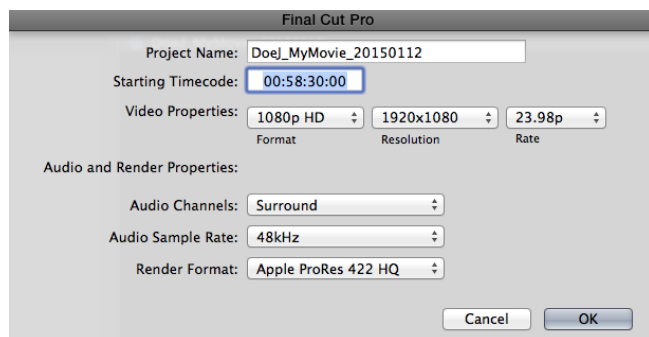
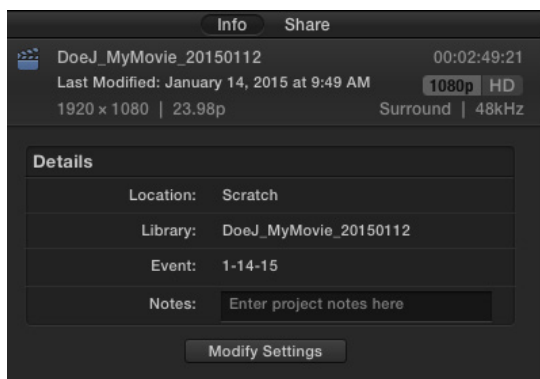
- **A Quicktime Movie optimized for working in Pro Tools**
- **An XML file to create an AAF using the program X2Pro Audio Convert**

An AAF, or Advanced Authoring Format, is a multi media file format that allows the interchange of media and editorial metadata between compliant applications such as Final Cut Pro X and Pro Tools.

For our purposes, we will be creating an AAF that contains your sound edit in addition to a copy of the source media. Unlike the OMF file format, an AAF does not have a maximum file size. You may export all audio and editorial work as a single file.

## Before You Begin

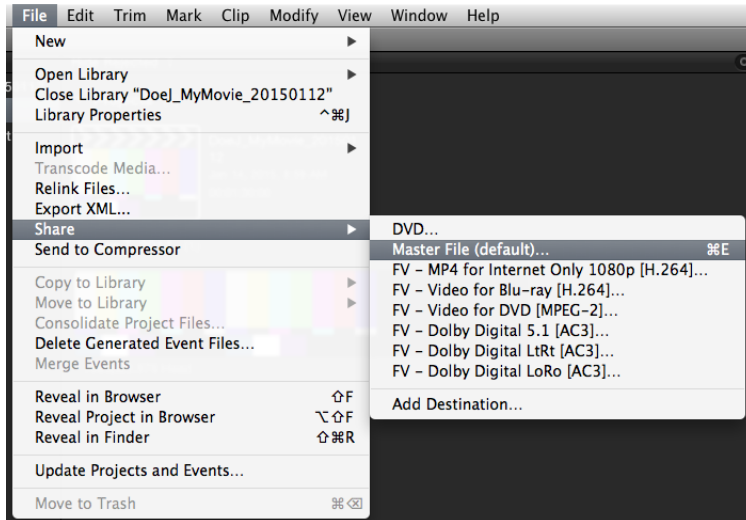
1. In order to maintain sync throughout this process, ensure that you are using the *CalArts Standard Leader* and that your project begins at **00:58:30:00**.
2. To check your start time, select your project in the Browser. Click on the Inspector button (🔍) in the toolbar above the timeline to open the Info Inspector. Under the Info tab, click **Modify Settings**. If your start time is not correct, adjust it here and hit **OK**.



☀ If you modified the starting timecode of your project, make sure your picture begins at **01:00:00:00**.

## Exporting Image

1. Select your project and go to **File > Share > Master File**.




2. Click on the **Settings** tab in the Master File dialogue box. Select **Video Only** under Format, **Apple ProRes 422 Proxy** as the Video Codec, uncheck Include Chapter Markers and **Do Nothing** under When Done and **QuickTime Movie** under Role As. Hit **Next**. Set the destination of your export and hit **Save**.

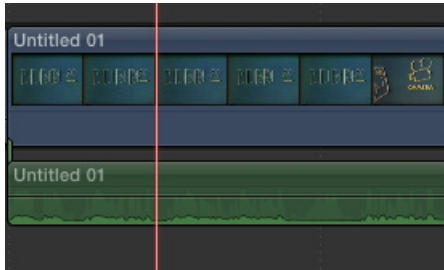
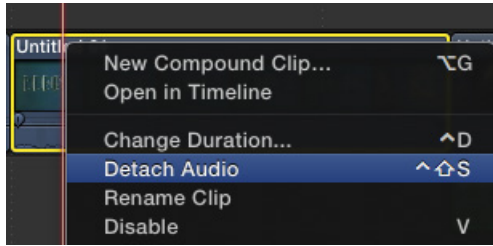


## Exporting Sound

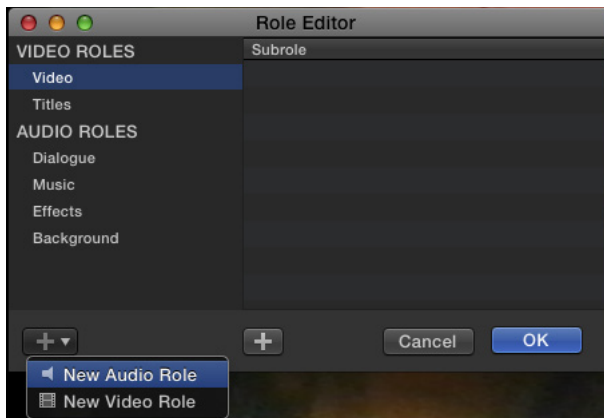
This is where it can get a little tricky. An XML file has to be exported from FCPX to then create an AAF file in another program, X2Pro Audio Convert. There are a few steps to make sure all audio will be included in the AAF.

 Audio effects will not carry over in the XML file to the AAF. Only cuts, fades, and volume changes will be included in the AAF. It is recommended to do sound editing and design in Pro Tools.

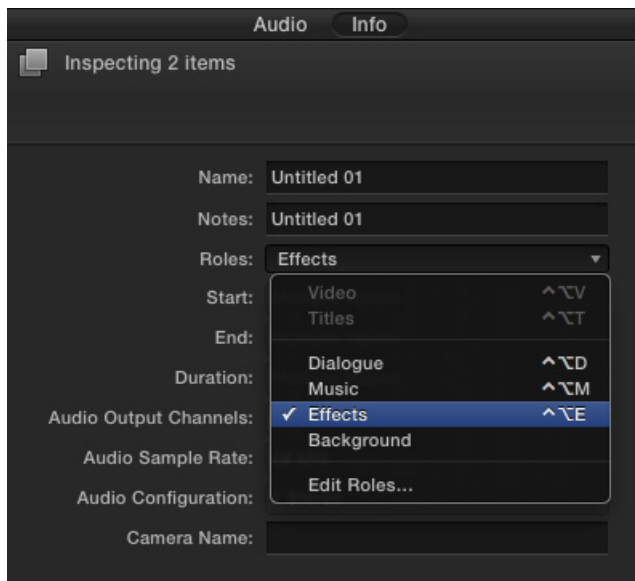
1. Audio should be detached from the video to ensure that all of the audio in the Final Cut Pro X project will be carried over in the XML. To detach the audio, right click on a video clip and select **Detach Audio**. This will create a green audio track connected to the video track. Repeat as necessary.



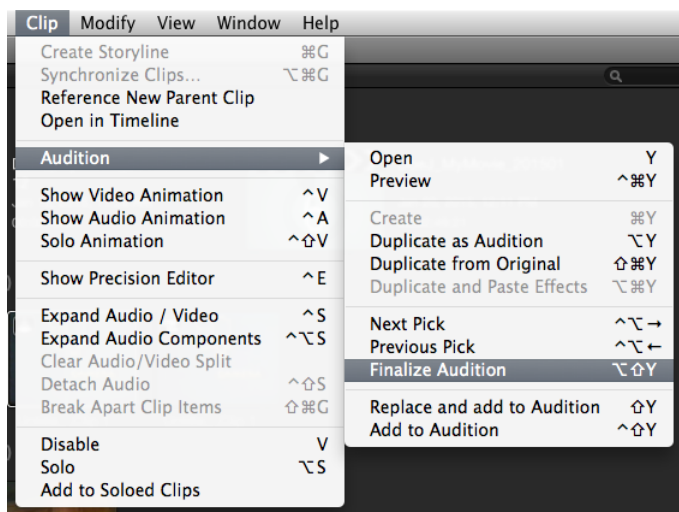
2. It is recommended to group audio using Roles in Final Cut Pro X. This will allow for easier organization during the transfer to Pro Tools. The default audio roles in FCPX are Dialogue, Music, and Effects. Additional roles can be made if needed (an example would be if your film has multiple characters with dialogue, you can make a role for each).
3. To make additional roles, go to **Modify > Edit Roles...** In the Role Editor dialogue box, click on the plus button in the bottom left hand corner and select **New Audio Role**. Name the new audio role and repeat if necessary. When done, click **OK**.




4. In the timeline, select all the audio clips that need to be assigned to a specific role. Click on the Info tab in the Info Inspector and choose a role to assign them to.

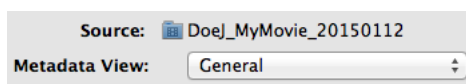


5. Make sure to finalize any auditioned clips. If clips are left in auditioned, they will not transfer correctly in the XML file. To finalize auditioned clips, select the audition in the timeline and go to **Clip > Audition > Finalize Audition**.



 The audio will not detach from an auditioned clip until it is finalized.

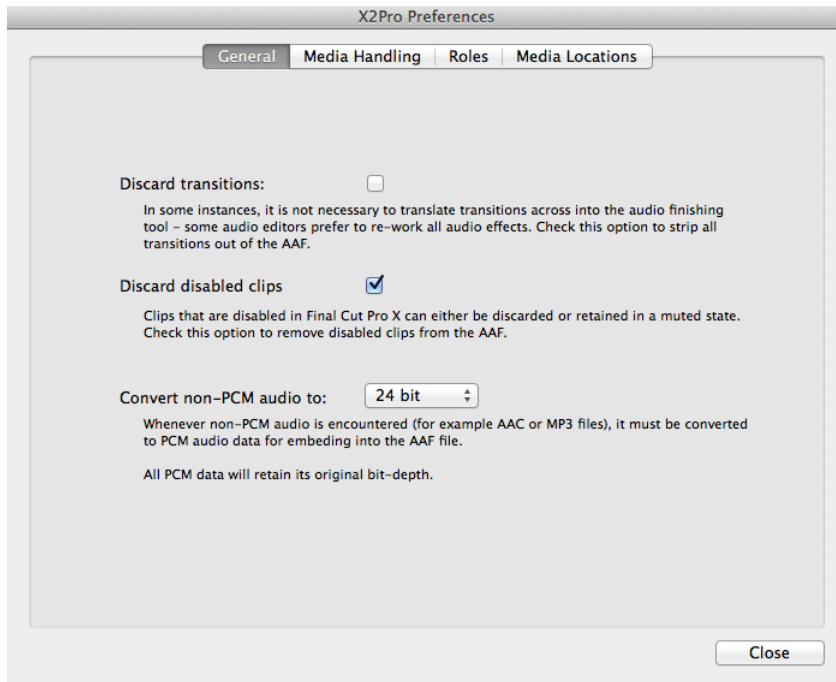
6. Now it is time to finally export the XML file. Select the project. Go to **File > Export to XML...** The Export XML dialogue box will open. Set the destination and choose the **General** option for Metadata view. Hit **Save**.



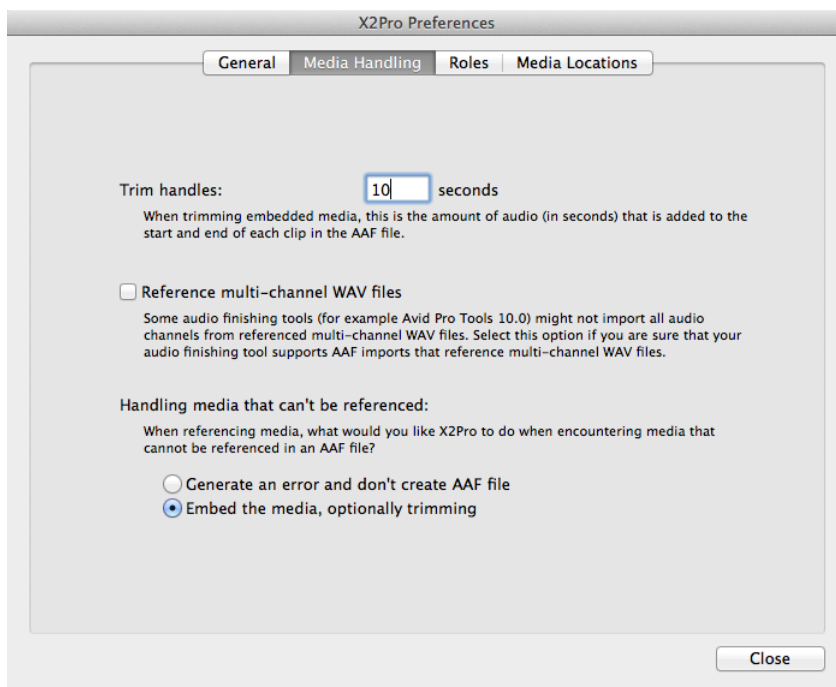
## Making an AAF in X2Pro Audio Convert

1. Launch X2Pro Audio Convert. Go to **X2Pro Audio Convert > Preferences**.

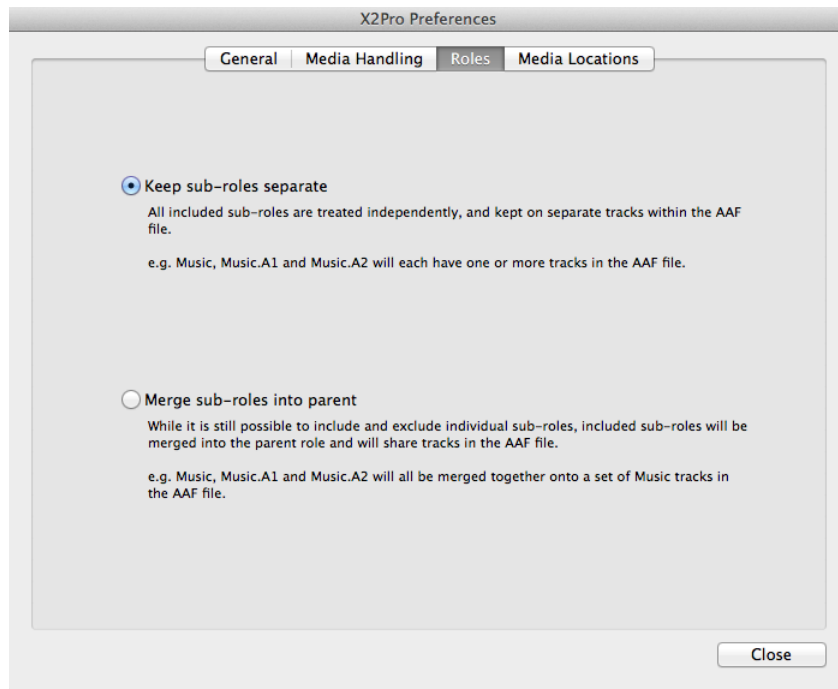
2. In the General Tab, make sure **Discard disabled clips** is checked and change the Convert non-PCM audio to **24 bit**.



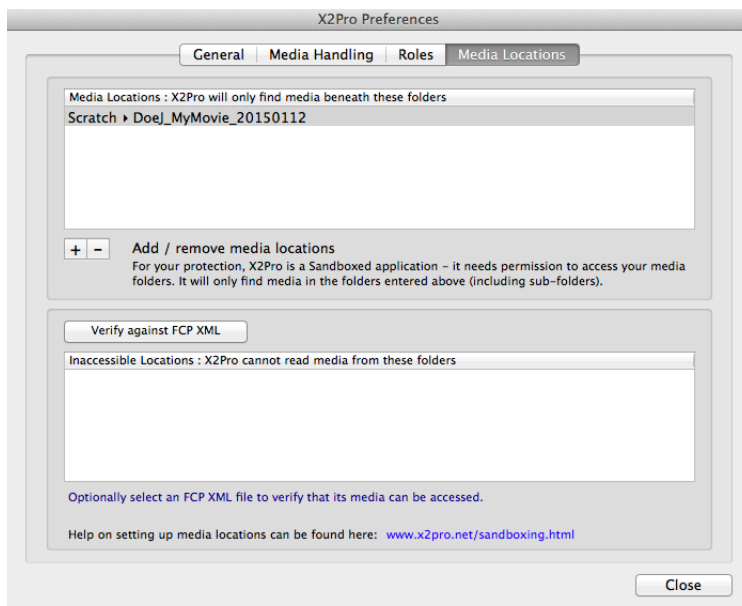
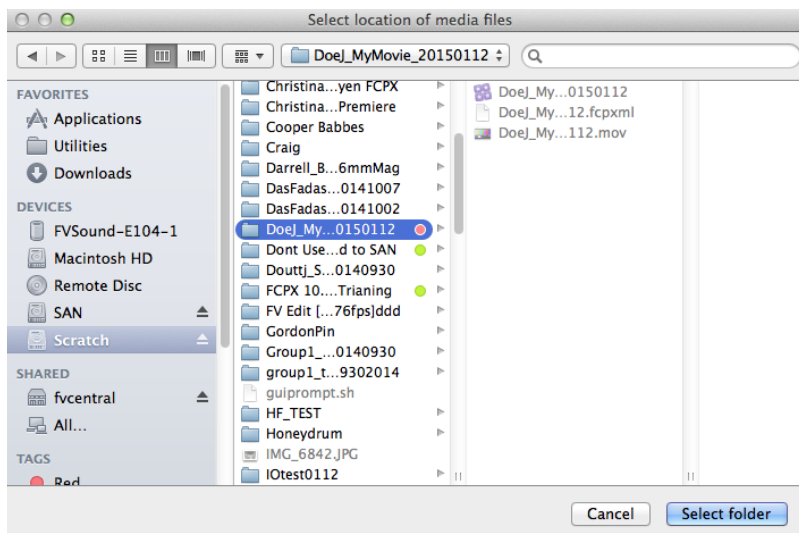
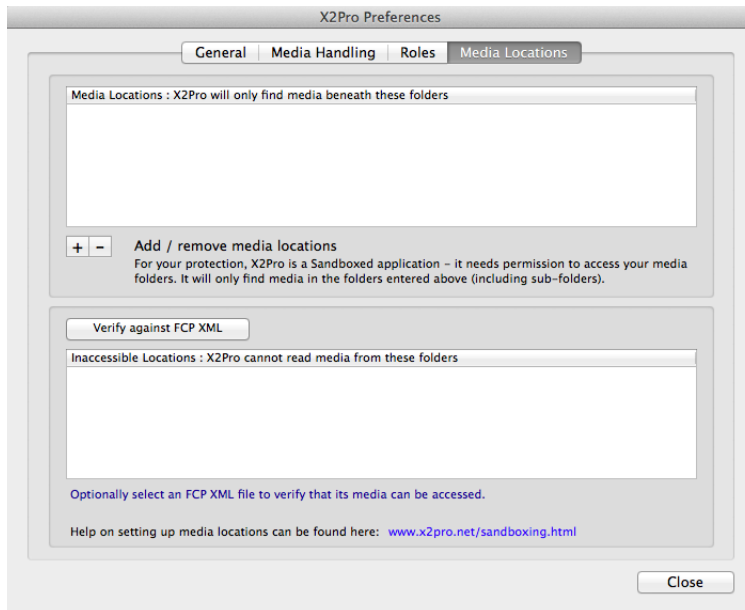
3. In the Media Handling tab, Change the trim handles to **10** seconds. Make sure Reference multi-channel WAV files is unchecked and **Embed media, optionally trimming** is selected under Handling media that can't be referenced.



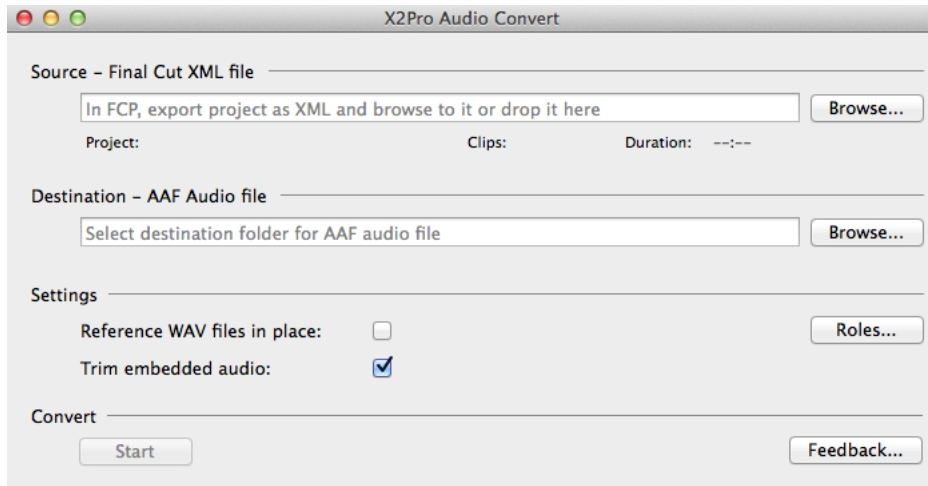
4. In the Roles tab, make sure **Keep sub-roles separate** is selected.



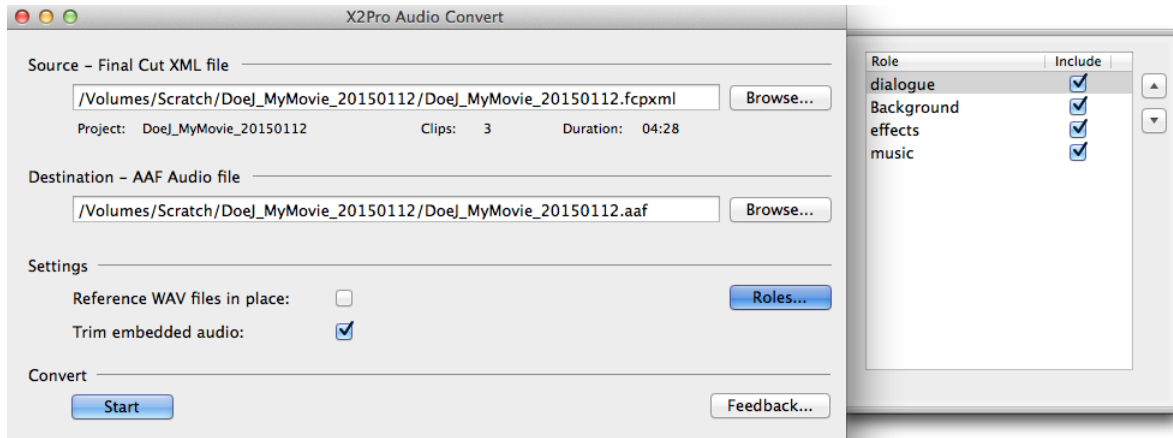
5. In the Media Locations tab, the media location has to be added. Click on the + button and find the folder with your FCPX library. Hit **Select Folder**. This will give X2Pro Audio Convert access to the audio files.



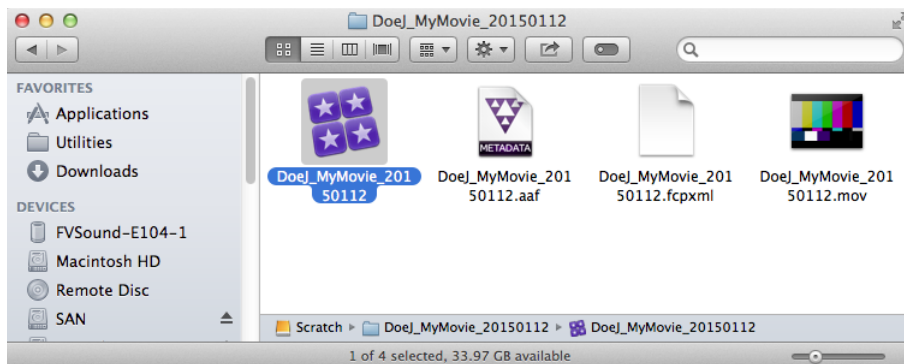
6. Close the preferences dialogue box.
7. In the X2Pro Audio Convert dialogue box, select the source by hitting **Browse**. Find the XML file and hit **Open**. Set a destination for the AAF. Under the settings, check Trim embedded audio.



8. To check what Roles are in the XML, click on **Roles**. A side menu will pop out with a list of the Roles that will be carried over to the AAF. To close this list, click on **Roles** again.



9. To convert the XML to AAF, click **Start**.
10. X2Pro will create an AAF in the folder destination.



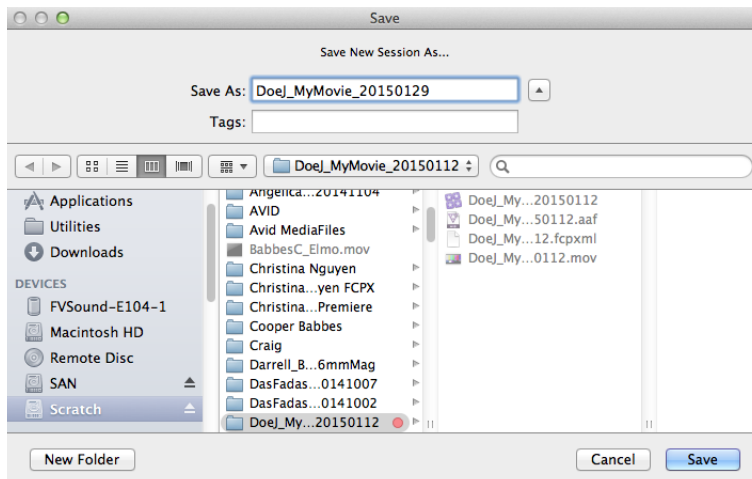


## Importing AAF File into Pro Tools 11

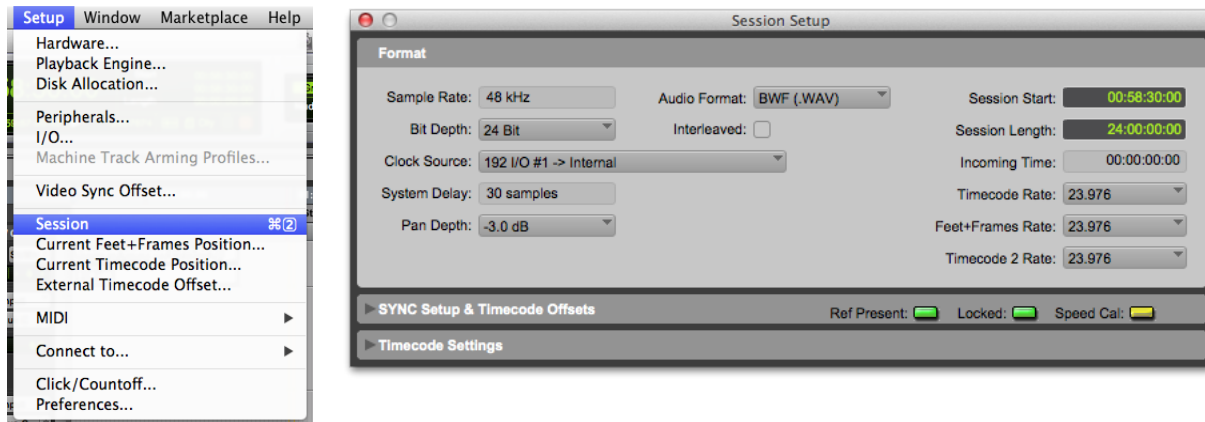
1. Launch Pro Tools 11. Select **Create Session from Template**. Choose a **FV Edit template** with your matching fps. Ensure that Audio File Type is set to **BWF (.WAV)**, Sample Rate is set to **48kHz**, and Bit Depth is set to **24 Bit**. Make sure Interleaved remains unchecked. Click **OK**.



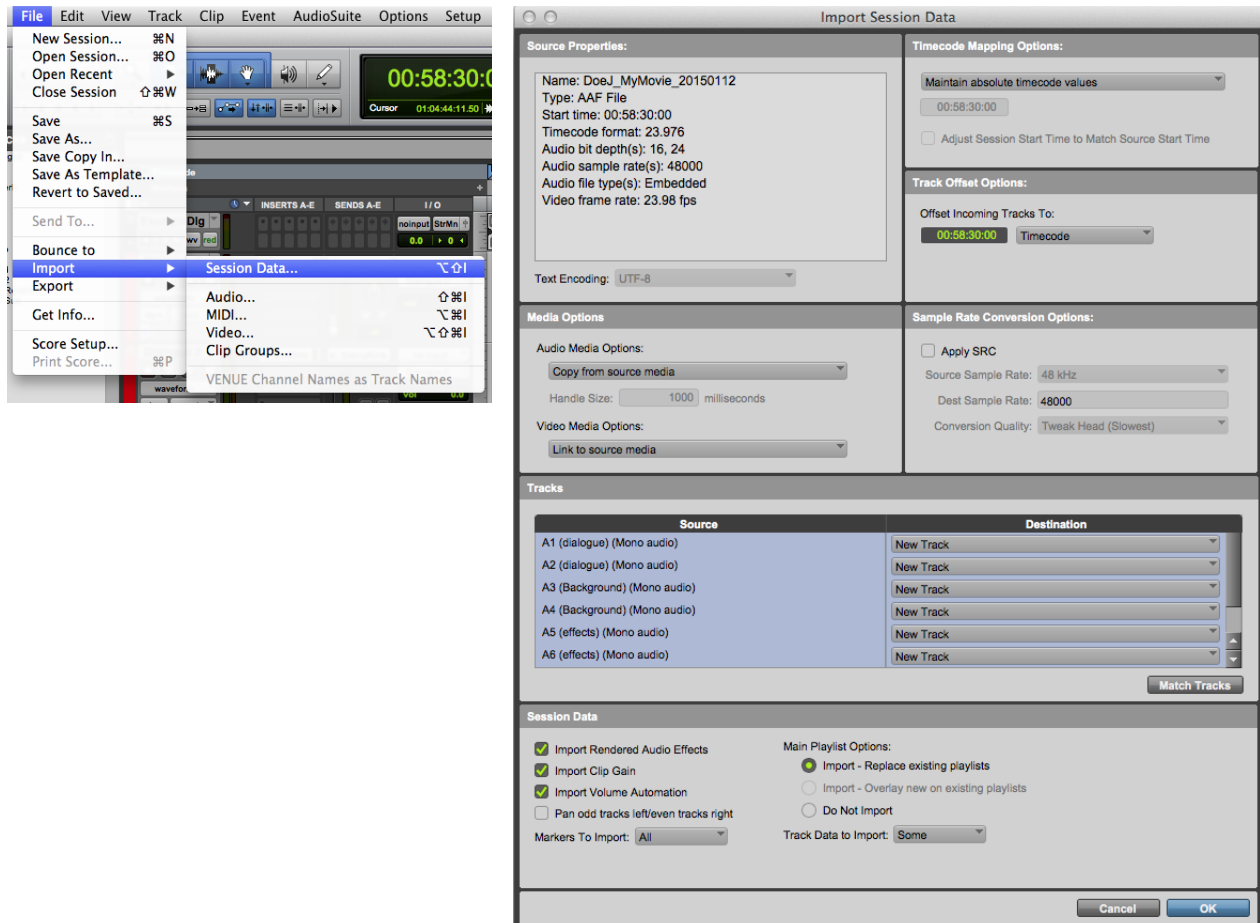
2. A Save window will open. Select a destination and name your ProTools Session. Remember: ProTools will create a folder for all necessary project materials. You do not need to make an additional folder for your session. Click **Save**.



- Go to **Setup > Session** and check that the Session Start reads **00:58:30:00** and the Timecode Rate matches your fps. Then close the Session Setup window by clicking the red circle in the top left corner.



- Go to **File > Import > Session Data**. Select the AAF file X2Pro Audio Convert generated and click **Open**. The Import Session Data window will open. Review Sources Properties. Then Set Timecode Mapping Option to **Maintain absolute timecode values**, and Set Audio Media Options to **Copy from source media**. Then check **Import Rendered Audio Effects, Import Clip Gain, and Import Volume Automation**. Click **OK**.

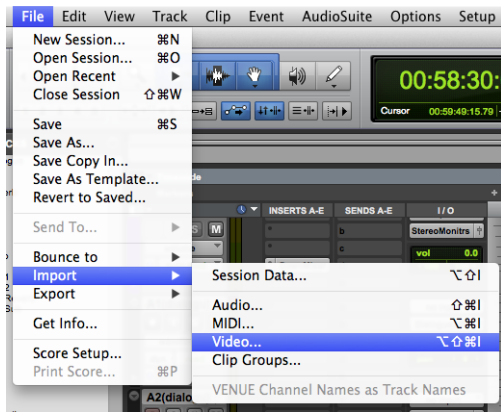


- A Session Notes window may open indicating that some effect were ignored. Not to worry, near as I can tell this is not actually the case. Do not save a detailed report. Click **No**.
- Your Protocols Session will now open.

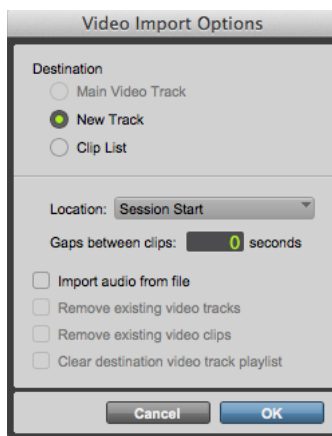
## Importing Video into Pro Tools 11

- Locate the video reference file that Final Cut X generated. **Copy** it into the Video Files folder in your Pro Tools session folder.

2. Go to **File > Import > Video** and select the video reference file that you just copied into the Video Files folder in your Pro Tools session folder.



3. The Video Import Option Window will open. Ensure that **New Track** is checked, and that Location is set to **Session Start**. Click **OK**.



4. Your video will appear in the Pro Tools Session Timeline. To ensure sync: zoom into **00:59:58:00**. If the if the 2 frame and the sync pop align you're in business. Have fun with sound!

