

OMF/AAF Import/Export with Avid Editing and ProTools

This document will help you with your OMF importing and exporting settings going to and coming from Avid Editing products as well as ProTools. We will cover all aspects of the procedure, including

- Exporting from Avid editing software to import on ProTools.
- Importing from Avid editing software from a ProTools export.

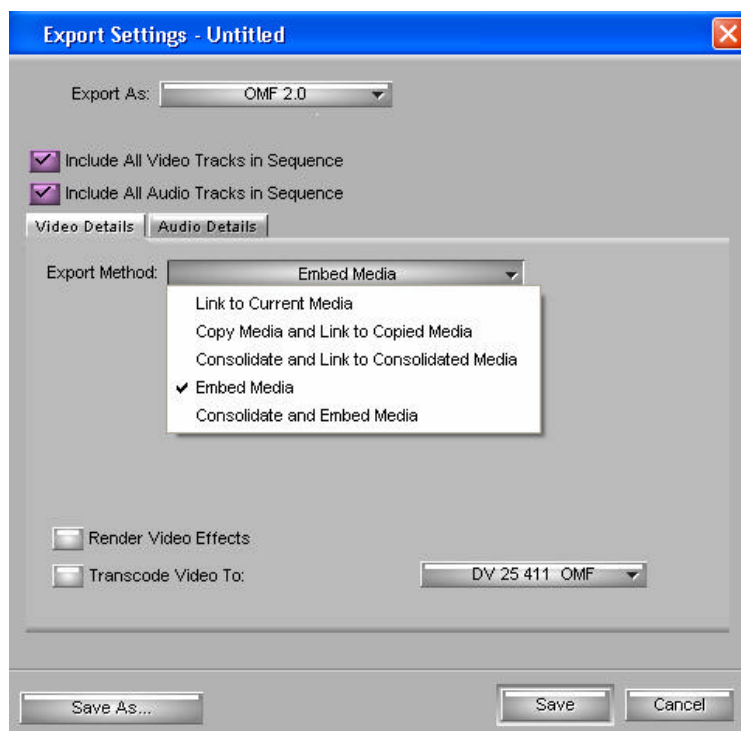
What is an AAF?

An AAF is a sequence format. AAF's can refer to OMF's or it can have them imbedded within them. ProTools will import and playback AAF's that refer to external media files. ProTools does not support imbedded AAF's. of any kind whether it is embedded audio or video

What is an OMF?

OMF is a MediaFile and a sequence format. OMF's can contain audio and video, ProTools will take in OMF's with audio and video, however it will not export OMF video. ProTools will only export OMF audio. ProTools can import a sequence with imbedded audio but not video. Often users try to import and will get an error message about the video. This is why. Also using an OMF 2.0 is more compatible across the board than an OMF 1.0, so whenever possible use the OMF 2.0.

Exporting from Avid



When exporting from Avid whether you use OMF or AAF, your export options won't change much, but there are some differences between the 2 formats that we will cover. Keep in mind that the software will have different tabs for the audio and the video, so you can export each one in a similar way or in a unique way. Lets look at the export options:

Link to Current Media

This will not copy anything and will not consolidate anything. All this setting will do is use the same references that were being used in your projects. If you have aspirations about moving your project to a different system or facility this may not be the setting for you. Also, keep in mind that this setting may be good for you if you are low on drive space, as none of the media will be canceled. You must bring the audio files with you to the ProTools system. It will not be saved within the OMF.

Copy Media and Link to Copied Media

This selection will copy the media where you choose to, and it will relink the media to the newly created copied media. This function will copy all media clips involved without consolidating. So for example, if you have an hour long clip that you captured and only use one minute of it, when you copy, it will copy the entire hour of media. Keep this in mind, for some situations this could be useful, other times it just uses up too much drive space on you. You must bring the audio files with you to the ProTools system. It will not be saved within the OMF.

Consolidate and Link to Consolidated Media

This selection will duplicate the media that you have used only and link to this newly created media. So the first thing you will notice is that your bin will create new clips of the media you just consolidated. When you consolidate, you will see a selection called "Handle Length". This setting will save the extra footage (in frames) at the edge of the clips that you do not necessarily see, but may later need in create dissolves or other effects.

So for example, if you have an hour long clip that you captured and only use one minute of it, the software will only copy the minute that you used plus the supplemental handle length that you specified in the export options. This setting is useful if you are trying to conserve drive space, yet want a copy of the media used in the project. You must bring the audio files with you to the ProTools system. It will not be saved within the OMF.

Embed Media

This setting will include the media within the OMF file itself. The file size of the OMF will be much larger than if you are just linking to the media. Also keep in mind that this is not a consolidated embed, so the same rules are there from "Copy Media and Link to Copied Media". If you have an hour-long clip it will duplicate the entire hour and not the minute that you used. Also keep in mind that it is a good idea to keep your OMFs under 2 Gigs in Size. This setting is useful if you want all of the media copied, regardless of what was used in the timeline. ProTools will not take in embedded OMF media. This is the only file where the audio files will live within the OMF.

Consolidate and Embed Media

This selection will duplicate the media that you have used only and link to this newly created media. So the first thing you will notice is that your bin will create new clips of the media you just consolidated. When you consolidate, you will see a selection called "Handle Length". This setting will save the extra footage (in frames) at the edge of the clips that you do not necessarily see, but may later need in create dissolves or other effects.

And remember from before, that the embed will include the media within the OMF file itself. The file size of the OMF will be much larger than if you are just linking to the media. Also keep in mind that this is not a consolidated embed, so the same rules are there from "Copy Media and Link to Copied Media". If you have an hour-long clip it will duplicate the entire hour and not the minute that you used. Also keep in mind that it is a good idea to keep your OMFs under 2 Gigs in Size. This setting is useful if you want all of the media copied, regardless of what was used in the timeline.

This setting is useful for situations where you may need the media to fit in a smaller storage capacity. But also keep in mind that ProTools will not import embedded video. You must bring the audio files with you to the ProTools system. It will not be saved within the OMF. This is also the most commonly used setting that editors use.

Importing into ProTools

When you are importing into ProTools lets remember a couple of things. First ProTools does not support AAF files with embedded media. If you select any other type of export option while using AAF (Consolidate and Link to Consolidated Media, Link to Current Media, etc) make sure you bring the audio files with you. Also, if you are importing an OMF, it cannot have an embedded video file of any kind. If you want to reference a video file, export it as a QuickTime file. Then you can open the movie from Movie/Import Movie if your audio editor needs a reference movie.

If you have OMF MediaFiles that are audio only, you can also import them with Import Audio, Import Audio to Track. These are not the OMF session files that we previously discussed; they are the OMF Files from your OMFI MediaFiles folder.

Import Session Data Dialog Box

Import Session Data

Source Properties
Name: HW_edit_audio
Start time: 00:00:12:00
Time code format: 25
Audio bit depth(s): 16
Audio sample rate(s): 48000
Audio file type(s): AIFC

Time Code Mapping Options
Maintain absolute time code values
0:00.000

Track Offset Options
Offset Incoming Tracks to:
0:00.000 Min:Secs

Audio Media Options
Copy from source media
Handle size 1000 milliseconds

Video Media Options
Link to source media

Sample Rate Conversion Options
 Apply SRC
Source sample rate: 44100
Destination sample rate: 44100
Conversion quality: Better

Source Tracks	Destination
V1 (video)	New Track
A1 (Mono audio)	New Track
A2 (Mono audio)	New Track
A3 (Mono audio)	New Track

Ignore rendered audio effects
Ignore clip-based gain
 Ignore keyframe gain
 Pan odd tracks left/even tracks right

Cancel OK

When you select Import Session Data you will see this box. We will discuss some of the things that you will see with it.

Audio Media Options

This is ProTools way of giving you let another opportunity to copy your audio media files. Your options will be "Copy from Source Media" or "Link to Source Media". Copy will copy the files to where you want, and link will link to the media that you just brought over to the ProTools system.

Video Media Options

This is ProTools way of giving you let another opportunity to copy your video media files. Your options will be "Copy from Source Media" or "Link to Source Media". Copy will copy the files to where you want, and link will link to the media that you just brought over to the ProTools system.

Source Track Options

This window is where ProTools will ask you what you want to do with each track that it sees in the OMF/AAF file. You can choose to Import as New Track or, Do Not import.

Ignore Rendered Audio Effects

This setting will bypass all the audio effects that were created in the Avid editing environment. This will give you the raw, unaffected audio to work with.

Clip Based Gain

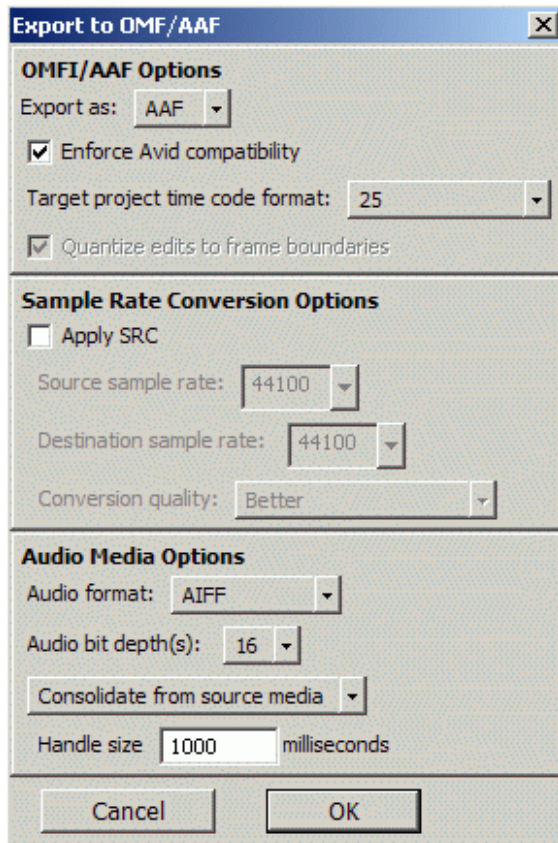
The Avid audio editing environment differs from the ProTools environment. Avid uses audio gain on a clip-by-clip basis. ProTools uses the entire track as an entirety. This setting will give you the opportunity to ignore the clip based gain or have ProTools automatically convert it to an automation curve. If you gain is higher than +6dB, then ProTools will ignore it be default to prevent clipping. For more on automation consult your ProTools manual.

Pan Odd Tracks Left and Even Tracks Right

Avid editing environments use a default of panning the odd tracks left and the even tracks right. Selecting this will maintain that panning as you enter the ProTools environment.

Exporting from ProTools back to Avid

This section will cover the procedures used to get your ProTools OMF/AAF back into the Avid editing environment. ProTools does not support video file export when using OMF/AAF. ProTools also will not retain plug-in parameters, plug-in automation, routing or grouping assignments. Be sure that you process and render all of your effects before exporting back to Avid. Your automation curves will be maintained, though.



In ProTools, select File/Export Selected Tracks as OMF/AAF. Keep in mind that you must have those tracks selected to have them export. If a track is not selected, it will not export, Once you select export you will get the Publishing Options box. This is where you can name your sequence and add any comments that you may need to relay to the Avid editor

Enforce Avid Compatibility

This selection will do the following. It will resample your sampling rate to 44.1k or 48k. Those are the sample rates that are compatible with Avid. ProTools uses sample based editing, while Avid is frame based. Having this selected will pad the exported regions so they can be changed so that they are frame accurate. If you select "Quantize Edits to the Frame Boundaries", this will maintain the sample accuracy. This is defaulted on when you select "Enforce Avid Compatibility". Now your sample based audio edits will be as accurate as if they were frame based and they will not fall out of sync.

Audio Media Options

This section will allow you to select the file format you want as well as the bit depth. Keep in mind that Avid-editing uses 16 bit audio. If you are using 24 bit audio you can dither with the Audiosuite dithering algorithm without noise shaping. You will also get the same export options (Refer to Source, etc.) that you got in the Avid exporting. Keep in mind that embedded will only come up if you exporting as an OMF, as imbedded AAF export isn't supported by ProTools

More Export Options

Bounce to Disk

You can also export as an OMF only using the ProTools "Bounce to Disk" functions. This will rewrite a whole new stereo (ProTools LE) or 5.1(ProTools TDM only) file of the media you are exporting. All the settings are previously discussed in this document. The only new one is the format. Multiple Mono will export the 2 files as separate entities. Stereo Interleaved will combine the 2 mono files to make up the stereo field. So if you were burning a CD, if you used Multiple Mono, your stereo tracks would burn as 2 separate tracks with track 1 as the left side and track 2 as the right side. If you used interleaved, they would combine as one.

Importing Into Avid

This section will cover bringing your OMF/AAF back into the Avid editing environment. You can import by either File/Import and selecting the OMF/AAF or simply dragging and dropping into a bin. If you embedded the audio, then you can ensure that it will all be there. If you selected any other setting, make sure that the audio files were copied with the session data. You will also notice that if you have embedded the audio, the clips and the sequence will show up automatically in the bin.

