

## Exporting in PT5 format from Pro Tools 5.1 till 10

For best results you should be prepared to “save as”, a version of your session best suited or tweaked for PT5 capabilities, though AATranslator can make a reasonable job of converting any pt5 file.  
(worst case the result will contain more from the original Session than going the OMF or AAF route)

### What you should do, to get a good pt5 export out from Pro tools

**Very Important;** Automation data on Stereo Tracks will be lost unless Track “split into mono” function is used. (this is applicable to greater than 2 channel tracks too, eg LCR, quad & 5.1, etc)

Right-click a track name or names in the Mix/Edit window, or the Track List.

Choose: Split Into Mono This will split any stereo or multi-channel track(s) into mono component tracks and place these below the original(s).

{If you don't 'split into mono'; Regions on Stereo or multichannel Tracks will have no Volume, Pan or Mute automation; but otherwise convert ok}.

Region Groups and Region Loops {Highlight all regions & use Unloop command in the Region menu and "flatten" regions}

**Elastic Audio** (thanks to Bill Blue for researching and writing this section and contributing to other sections too)

Any work you have done that changes track timing will be lost, but you will get the track as it was before Elastic Audio had been added.

To preserve timing changes achieved in PT, first transform them to the XForm mode (which is not real time like rhythmic, monophonic and polyphonic modes are), then after the transformation to XForm, commit the changes to the original track. If you were to commit from one of the real time modes, it will still work, but with varying degrees of artefacts from ok to bad depending on the track content. E.g., a bass track maybe ok in monophonic EA mode, rhythm instruments (except cymbals) do pretty well in rhythmic, vocals can do well in monophonic too. But guitars, especially acoustic, are pretty bad in any real time mode. The only problem with XForm is that it takes about 10 minutes to render a 3 minute track, and sometimes when you commit it, PT will render it again(!) So this step can be tedious but the results are good.

Hidden tracks and alternate Playlists (active or not) can become visible once translated.

If you don't want to have all this extra info transfer across to your destination format; there is an option in AATranslator called “Hide PT Unused Tracks”.

You could also delete alternate playlists, hidden and inactive tracks, then “save as” before doing a pt5 export.

To export MIDI data from PT, select Export Midi & save as a .mid file type 0. The PT session tempo is read by AATranslator and for many destination formats, Eg Reaper, the session tempo is set.

### Other consideration

**Filenames more than 31 characters (including .sd2 or .wav) will be truncated** (for some pt versions 33 char total). This is only of concern if you want to use the original audio files & not the files that PT makes with a 'Save Session Copy In' export.

### Saving a pt5 Export using Mac OSX:

Do one of the following:-

a) Save directly to a FAT32 formatted removable “disk”.

Fat16, or NTFS also acceptable to AATranslator, and HFS+ too if the PC running AATranslator can read HFS disks.

b) Make a zip file of the entire PT5 project.

Suggest you make a new folder to contain your pt5 export(s), then zip the whole folder straight to (Fat32, Fat16, NTFS) removable media or a PC connected via a Lan. This is the safest way to guarantee both the Mac, Data & Resource Fork information will be readable on a PC.

To zip on the Mac, Select folder > R click > “Compress “xxxx”.

The project in this zipped form can be copied / moved or accessed via a LAN, and all the files needed including those generally hidden in OSX, will be there. [unlike simple copying or LAN access]

For either Mac or PC

**To Export to pt5 format;** File > Save Session Copy in > Save as Type, choose PT5.

**Do not change “Session Parameters”** apart from adding Mac/PC compatibility & Audio File type = wav, if possible. Leave the “Limit Character Set” left as the default English (MacRoman) or English (WindowsANSI). Optional extra settings: Depending if you are exporting from a PC or a Mac different options will be greyed out (not available). No matter, these are mostly bloat reduction suggestions.

**Items to copy;** **Only Audio files & Movie/Video if used are needed**, un-tick all the rest. If exporting from a PC choose Wav files, on a Mac you have no choice, all audio will be converted to SD2 format but AATranslator understands SD2 files.

**File name;** the suggested name will be “Copy of *your orig filename*.PT5”, you are free to change this if you wish.

**Suggestion;** delete “Copy of ” it serves no good purpose. (the fact your original will have either a .ptf or less likely, a .pts file extension, will make it different & unique compared to a .pt5 file). And Avid /Digidesign make you adhere to the old 27 char limit of Mac OS9, so you may not want to waste 8 of the available characters.

### In the event you hit export problems

To be through, check your pt5 export is good by opening it in PT.

Open/load the pt5 via the file menu, (drag & drop or just clicking on a pt5 to launch PT is known not to work on some rare occasions, with pt5 files). If PT can't load it's own pt5, or the result is not what you expect, try closing then re-opening PT and try again.

Don't use “illegal” characters like / : \ in a filename. Note “/” to Mac OS, is just another character, like a-z, but to a PC, it has a very special meaning. AATranslator will change “illegal” characters to “\_” but just as with the OS9 31char limit this will mean the file names used in the converted session will differ from the original file names.

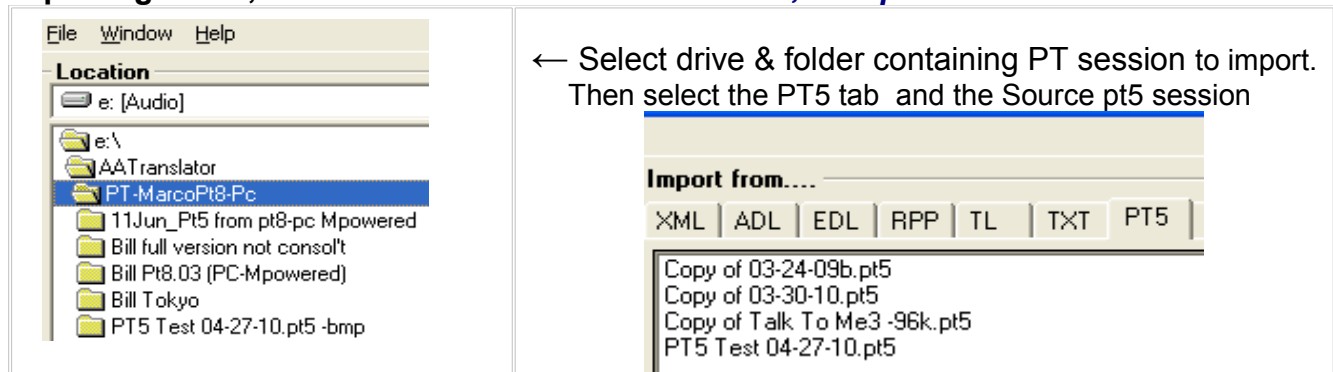
It is also recommended you avoid non-American characters like é ü î £ € etc.

If you plan to convert to Apple FCPro XML it is further recommended you avoid [ ] { } . , ( ) | < > ! \* ? ; “ ‘ & ^ #

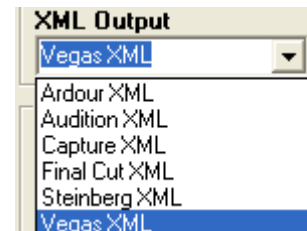
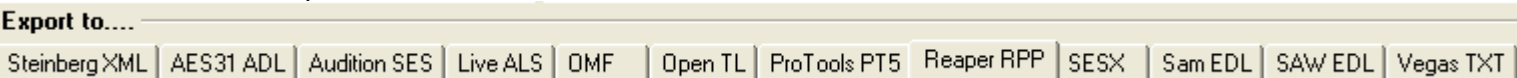
For ultra high compatible naming, which really should not be necessary, just use a-z 0-9 \_ don't use spaces, a mixture of upper & lower-case is fine and should improve readability.

As track names will be used to name audio files recorded, bounced or rendered in PT you should limit the tracks names too.

### Importing a PT5, into AATranslator *see later for Mac, exceptions*



Select one of these 'Export to....' tabs



There are 6 different, XML based output formats available via the 1<sup>st</sup> tab, select the one you want via this drop down.

And choose the location where you want the new session file & any copied media to be saved.

Send Output to ...

If you are converting to a Reaper RPP Project it is possible to use a template, to store aspects like Routing, plug-ins, custom skins in fact anything including tracks with media if you wish.

Where there is a conflict say you want to convert a 44.1kHz PT session & your RPP template is 48k the new project will be 44.1kHz. In the unlikely event your "Template" has audio in it, Reaper will just real-time sample rate convert the media to be the same as the PT source session.

Currently this template capability is only available if going to Reaper RPP format.

More info coming up about where you source the Audio & Video media from. The option shown above is the most common though.

## Import from ProTools using AATranslator Pro Tools (Pt5, Pts, Ptf) to an output format of your choice. Options you may need to set.

Options not relevant to PT and your chosen destination format will be "greyed out".

Note; all text box contents, numbers and options chosen will show previously used values. Which you can retain or change as required.

<b>FPS</b> 23.976 <input checked="" type="checkbox"/> Override [PT5]	If you <b>don't</b> tick the "Override (PT5)" box, the fps info embedded within a pt5 file will be used automatically. The fps box will show the last numbers you set, <b>Not</b> the rate in the pt5 session. But the pt5 format does not include the 23.976 fps frame rate, so any pt5 exports from later vers of PT that use this will be labelled as 24fps, the "override (PT5)" option gets round this limitation. Note this only affects the time "ruler" including offsets, not how the clips are positioned relative to each other.
<b>Sample Rate</b> 48000	The sample rate embedded in a PT5, PTS or PTF file is used, when ProTools is the source format. So the display will be greyed.
<b>Bit Depth</b> 24	Bit Depth info in a PT5 (or PTS /PTF) file is generally automatically used too, so the display will generally be greyed. The exception is when PT5 is the destination format too; this allows you to make a PT to PT conversion and correct for Bit Depth errors in the source file.
<b>Options</b> <input checked="" type="checkbox"/> Generate File Copies	<b>Suggestion; use this option as standard practice</b> unless you are confident the original media is suitable for your destination DAW. This option will be engaged automatically if you need to convert SD2 files to wav's. An additional benefit if the pt5 came from a Mac is that PC "illegal" characters will be replaced in the copied files. Also PT style .L&R mono files as stereo, will be combined to a single interleaved wav.
<input checked="" type="checkbox"/> Overwrite Existing Files	By default if you make any copies and the files already exist in the location selected, then AATranslator doesn't waste time overwriting what is already there. This option changes that and allows you replace the media files on disk with new copies.
<input type="checkbox"/> Show Empty/Hidden Tracks	Many Pt sessions contain a great deal of information you may not know or believe is there. Eg multiple "takes" to record the ideal performance. Being able to recover info that was thought gone can be good, we can for example extract data from PT5 sessions that theoretically the format has excluded. The aim of this option (and if converting from Pt5, the "Hide PT Unused Tracks" option) is to remove hidden &/or inactive tracks. Suggestion; try both a non filtered and a filtered conversion to check what suits your

needs.

**Reaper EDL Output** **to Sam-EDL only**; This option strips out timeline Pan & Volume information and deals with the reversed panning in Reaper compared to Samplitude. At present, Reaper doesn't support Pan or Volume envelopes/curves or level automation with an EDL import. They use this part of the EDL to give an overall track volume gain/loss and track panning.

**Samplitude v1.5 Output** **to Sam-EDL only**; Compatibility option for users of old software, eg EDL Convert v4. If this item is **unticked**, AATranslator outputs in v1.6 (it reads all Samplitude EDL's up to v1.7)

**Reverse PT Track Order** this is a "legacy" feature, so you probably won't need to use it, we have had problems with a very few PT5's in that original tracks 1-9 would display as 9-1 after an AATranslator conversion.

**PT5 Sample rate x2 Override** Takes the sample rate embedded in a PT5 session and sets the destination format to twice that rate. (see "How to use ..." notes below, for more details)

**Hide PT Unused Tracks** **PT5 Read only** Ignores alternate playlists, hidden & inactive tracks.

When ptf or pts files are being read this box changes name and function to:--

**Ignore PT Playlists** **PTS, PTF (PT5.1 & later) Read only**. Only main playlist is read when selected

**MAC OSX PT5 Output** **to PT5 only** will create a pair of files, one the same as a standard AATranslator PC compatible file & a 2<sup>nd</sup> file starting .\_ with Mac Resource Fork info. You will need both of these files for use with MAC OSX.

**Use Clip Env for PT Output** **PT5 Write only** when selected clip volume & pan info will be converted to PT timeline automation. If not selected the original sessions' timeline automation will be used

**Apply Session Offset to EDL** **to Sam-EDL only**; when selected blank space the length of the original session offset is inserted before the 1st event in a Samplitude edl.

**Convert SD2 to WAV** **PT5 & later, Read**. This option engaged automatically as is "Generate Files Copies" option. It can be deselected.

**Create Embedded OMF** If not ticked OMF's created will be the Referenced type

**Remove Timeline Offset** Embedded OMF's will contain AIF type files (converted from Wav's if required)

**Combine Split Mono wav files** Stereo Wav files conforming to the PT standard of xxx.L.Wav & xxx.R.Wav will be combined into a single interleaved file and placed in a folder called "Stereo".

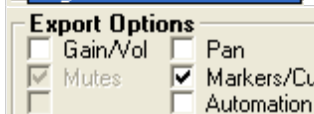
**Ignore Video**

**PT5 Write only** Removes blank space before the 1<sup>st</sup> event in a source and modifies the PT Session Offset to compensate. This can be useful to get round the fact PT unlike most Daw's does not have a 24hr timeline.



We have 6 XML based Export formats available, select which one you want here.

Your selection will become available as the 1<sup>st</sup> tab in the "Export to..." section



Depending on the destination format you convert to, differing options will be available. Text that is greyed is not selectable, a greyed "tick" means the option is always On.

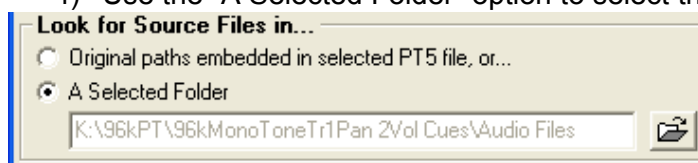
(Eg clip/region mutes)

**Automation** if **Not** ticked will ignore Volume, Pan & Mute timeline automation envelopes, from the source PT session.

## How to use the PT5 Sample Rate x2 Override option

(an example using a 96kHz PT session originated on a PC & using Wav files)

- 1) Export your 96k session in Pt5 format as a 48k session (the 96k files will be sample rate converted to 48k copies).
- 2) You will need access to the original 96k files later
- 3) Open the pt5 file in AATranslator and select **PT5 Sample Rate x2 Override**.
- 4) Use the "A Selected Folder" option to select the location of the 96k files



If the PT5 file were made on a Mac you will need to take account of the following:-

The audio files PT makes, will be (a) sample rate converted to 48k [same as from a PC], (b) they will be SD2 files and all references within the session will be to SD2 files. The original 96k files will be either Wav or possibly AIFF.

So follow steps 1-3 as above, then select “Original paths embedded in selected PT5 file” and get AATranslator to convert the SD2’s to Wav files and make a new 96k session that refers to these Wav files.

But as the files AATranslator converted are 48k, you will want to replace them with the 96k originals. For all destination formats, bar Open TL, Ardour and PT5, AATranslator places the media straight in the “Send To” location you have selected.

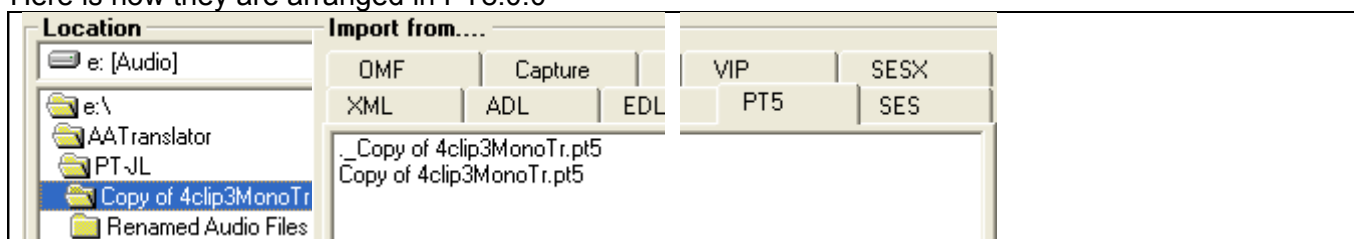
If you don’t want to keep the 48k down-converted files you can just overwrite them by copying your 96k files to their location. Or if you want to keep the 48k files, sort the files by extension and move the 48k wav’s to somewhere safe first.

### Importing a PT5 (Exported from a Mac)

There will be a pair of .pt5 files one will start with the characters .\_ this is the one required. (this assumes you saved to a FAT16/32 or NTFS formatted disk)

The way the various files and folders are organised varies a lot between different version of Pro Tools.

Here is how they are arranged in PT8.0.0



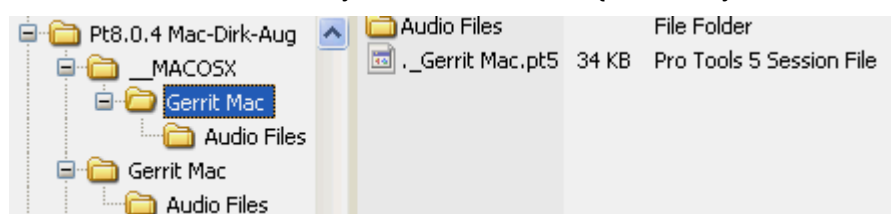
The file shown here called “Copy of 4clip3MonoTr.pt5” is zero bytes long, no matter because it is in the same folder as the wanted file, .\_xxxx.pt5, click on either file and AATranslator will run the file it needs.

The folder “Renamed Audio Files” contains SD2 format Audio files. Later you will need to “tell” AATranslator this is where the audio is located. There may also be a Fades folder, which is not required by AATranslator, and a Video folder, which potentially is.

But here is an example from Mac PT8.0.4 (versions 8.5 & 9 are similar)

The “**wanted**” pt5 file is accessed via the folder called \_\_MACOSX. But **nothing**

else in this folder is of any use at all to a PC {there maybe other sub-folders called “Fades”, “Video” etc, all of



them of no use to a PC}. Likewise the 2<sup>nd</sup> instance of “Gerrit Mac” is of no use to a PC, (it is zero Bytes in length). But the wanted SD2 Audio is to be found in it’s sub-folder. If there is a wanted Video file it would be there too, in a sub-folder.

There are a few variants of these 2 layouts; but to re-cap what AATranslator needs is

A .pt5 file starting with “.” {and this may well be accessed via a folder called \_\_MACOSX}

And a folder of .SD2 audio files (& possibly a Video file) that do NOT start with “.”

In any instance where there are a pair of .\_ & plain files, in the same folder you can click on either of these and AATranslator will know which one to use.

You could re arrange the files as they were in PT8.0.0

A Mac running Ver8.0.4 will be able to open the session just fine. Well you may have to re-link to the audio files.

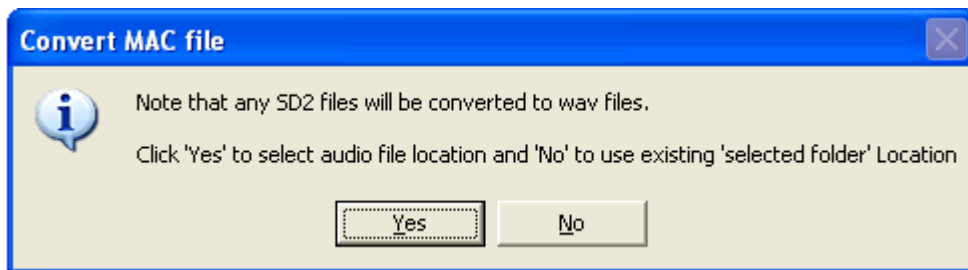
But if you have a pt5 “save” from a Mac that was NOT saved to a PC style disk you may have a xxx.bin or even xxx.rsrc or a xxxx.frk file. AATranslator can use these too.

- 1) if there is a xxx.pt5 file + a xxx.bin file pair, in the same folder, AATranslator will just open this pair.
- 2) If you re-name a single xxx.bin, xxx.rsrc or xxxx.frk file to be xxx.pt5, then AATranslator will be able to convert from these too.

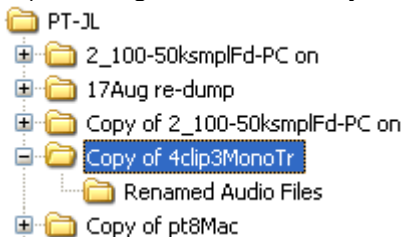
Having located the pt5 file.

click **Generate Output**, this box will appear





1) Clicking “Yes” will take you straight to the location of your PT5.



2) Select the audio folder which probably will be close by, in the case of Ex PT8.0.0 files it will be called “Renamed Audio Files”

2a) If you know the sd2 files are in same location (same folder) as the pt5, just hit “Return / Enter”.

2b) for Ex pt v8.04 and other PT versions the audio may well be in a sub folder of \_\_ MACOSX & probably in a folder called “Audio Files”.

3) The SD2 files will be converted to WAV,s and you will see this box.

If at stage (1) you had clicked “no” meaning use existing “Selected Folder” Location, you will go straight to this “Details” box.



**Tip:** If before doing a Mac PT5 to xxx conversion you found it convenient to specify where the sd2 audio files are, by clicking “Look for Source Files in.... A selected folder”, there will be no stage 1&2 as above.

This is what happens automatically for conversions from PTS or PTF format, either Mac or Pc origins, or any Pc, pt5 file.

## Export to PT5 format using AATranslator

### Important

ProTools has some simple but **VERY** Specific requirements, all files must be

- 1) **mono and straight linear PCM**, Wav is the preferred format (AATranslator will convert any stereo PCM wav – Aif - Mov files to split mono. MXF wrapped audio can also be converted. All other media types like MP3 etc are not acceptable to Pt or AATranslator. You must convert them to an uncompressed format like Wav, before doing a conversion.)

- 2) **either all 16bit or all 24bit** (AATranslator can inform you if the Bit Depth is not consistently one of these 2 “acceptable” rates)
- 3) **all the same Sample Rate** (AATranslator can inform you re Wav or Aif files)

### Bit Depth

PT has a Session Bit depth which must be the same as all the 'PCM' media. And Sessions can be either 16 or 24Bit. AATranslator can auto set the Session bit depth, If [a] you 'Generate File Copies' [b] all media is found [c] all media has same Bit depth.

If one or more of these is not true, you will have to set the Bit Depth box, see below.

### AATranslator Export; to PT5

Select source session, and “Export to... “Pro Tools PT5”.

Your best source of information is the Excel Spreadsheet 'Conversion Guide.xls'. Go to, Programs > Suite Spot Studios > AATranslator > Launch Conversion Guide.xls

The settings and options you may need to set are the ones shown below.

<b>FPS</b> <input type="text" value="25"/>	Film/Video Frames Per Second; <b>Used when this information is not in the Source file</b> IE Audition XML or SES, Cool-Edit SES, Steinberg Track Archive XML pre vers 4, Capture, Samplitude EDL, CMX-EDL, Vegas TXT, TripleDat, Ableton Live ALS or Ardour] A few OMF's don't carry fps data either, a pop-up info box will let you know when this happens.
<b>Sample Rate</b> <input type="text" value="44100"/>	<b>Warning: PT requires all audio files to be at a common sample rate.</b> And the Session rate must match all the media. Most Daw's/formats can use files at various sample rates. 'Conversion Guide.xls' can give more info about which source formats require you to set the Sample Rate via this box.
<b>Bit Depth</b> <input type="text" value="24"/> <input type="text" value="16"/> <input type="text" value="24"/> <input type="text" value="32"/>	<b>For conversions to PT5, AATranslator will auto set Bit Depth. If [a] you 'Generate File Copies' [b] all media is found [c] all media has same Bit depth.</b> Otherwise the setting in this Drop-down box will be used. <b>Warning: PT is unique in requiring all audio files to be at a common Bit Depth.</b> And this must be either 16 or 24Bit integer. All other DAW's can use audio files with mixed bit depths and where they do have a “Session Bit Depth”, it is merely what bit depth should be used for an Export, Mixdown or render/bounce. Most Daw's/formats don't have the concept of a session Bit Depth at all. See 'Conversion Guide.xls'. For more help.
<b>Options</b> <input checked="" type="checkbox"/> Generate File Copies	<b>This is a good option to use,</b> for a number of reasons. The Convert Stereo to Mono option is engaged automatically when you generate file copies. All “Linear PCM”, Aif/Wav stereo files will be split to 2 mono files. If you don't “copy”, any stereo files will remain as stereo, thus you will create an “illegal” PT5 file <u>that PT can't open!</u> All files in a PT session <u>Must, All be,</u> either 16bit or 24bit, and “Linear PCM”, a mixture of AIF's & Wav's is fine but no compressed Aif, Aifc or Wav files or MP3's, WMA, Apple lossless etc. <b>If you know all files fit the PT requirements, fine, however if there are files PT takes exception to, but the source app is happy with it is far better to have some copies to mess with, rather than modify your precious original files.</b> Eg most DAW's use 32bit float files, which are superior to what PT can handle. You would be very ill advised to downgrade your original files. <b>Important Digital nerd note;</b> one aspect of a “float” format is it allows volume values way above the max any Integer format can handle, with an integer format as PT uses, as soon as you try to go beyond 0dB full scale the audio clips (there are no more numbers available, unlike “float” which can just shift the “point/radix”) any integer format will have unrecoverable distorted audio as soon as the numbers run out. So a better option would be to have copies of these float files, then “normalize” them to 0dB or a bit less, say -0.1dB, then batch convert to 24bit integer. A great program to do this sort of job is Adobe Audition, though there are other programs that can do this too.
<input checked="" type="checkbox"/> Overwrite Existing Files	By default if you make any copies and the files already exist in the location selected, AATranslator doesn't waste time overwriting what is already there. This option changes that and allows you replace the media files on disk with new copies.
<input type="checkbox"/> MAC OSX PT5 Output	will create pair of files, (dual forked in Mac jargon). The dual fork idea is to be able to store or transport the information a Mac needs via disks that are not of the special HFS or HFS+ format that are native to Macs. Eg using FAT32, FAT16 or NTFS (NTFS can be read in OSX but not written to; unless you buy an extra app to do this). One of the 2 files AATranslator creates is the same as a standard AATranslator Pc compatible file & the 2 <sup>nd</sup> file starting ._ (contains “resource fork” info Macs need). You need both of these files for use on Mac OSX.

The recommended method is simply save straight to FAT32 formatted removable media you will use on the Mac. Or create a folder in your "Send Output to.." location and copy the whole folder. (this is assuming you are running AATranslator on a PC).

If you are running AATranslator on a Mac using say Parallels or VMWare this will work the same as if using a PC. The files will be saved to the Windows file system part of your Mac. When the double fork files are run in OSX [eg by opening them in P'tools] the files are automatically understood & the result can be saved on your Mac just as any other ProTools session.

Use Clip Env for PT Output **PT5 Write only** Many (well almost all) session formats such as Reaper & Steinberg Track Archive can have both clip (region) based and Timeline based automation envelopes. PT only has timeline (track) automation. If you Don't select this option the original timeline auto' will be converted to PT timeline automation.

If you select the option, then only clip/region based automation gets converted. (see 'Conversion Guide.xls', for details of what data is supported by various Daw's & session formats.)

Ignore Video For compatibility reason we don't include a video track for Pt5 exports. However if you have 'Generate File Copies' on the video file will be copied and placed in a folder called 'Video Files' as per PT norms.

Remove Timeline Offset This will remove any blank space before the 1<sup>st</sup> event on the timeline and modify the PT Session Offset to compensate. This can be useful to get round the fact PT unlike other Daw's does not have a 24hr timeline.

## Opening an AATranslator Pt5 on a Mac

This session is saved on a volume set to "Transfer" only.  
If permitted, set the volume(s) in question to "P" (Playback) or "R" (record) in the Workspace.

Otherwise, choose OK to save a copy of this session and its media to a valid playback volume. The session copy will automatically open from the chosen location.

Cancel

OK

When you access the .pt5 from a PC formatted disk, say a portable Hard Drive or USB stick. You will probably see this message.

Click 'OK'.

You will need to navigate to "a valid playback volume"; or "record" volume. The drive you normally use for saving PT sessions on your Mac maybe a good choice.

To see & possibly modify the volumes ProTools can access.

Go to Windows > Workspace.

Having chosen a suitable place to save the session. You will see a message about SD2 files.

## Do not be concerned.

ProTools can open pt5 sessions with Wav or Aif media with no problem and no need for any file conversion.

This session contains Sound Designer II (SD2) files, which are not supported. After the session opens, these files will automatically be converted in the background to the BWF (.wav) file format, and copied to the main Audio Files folder.

Cancel

OK

The truth is AATranslator pt5 sessions never contain SD2 media, though pt5's exported from Mac based ProTools always do.

So really the message is saying "this pt5 file is of a Mac type, so must be using SDII files. As modern versions of PT use BWF (.wav) files the files will be saved in that format to the "Audio Files" folder.

## Fades

ProTools session files (all types) contain "fades data". In ProTools there will also be a folder called "Fade Files" too. If the fades audio is missing PT will automatically build new fade files using the fade data embedded in the

session.

AATranslator does not make fade files, so when you open the pt5, PT will make the folder & fill it with fade files (taken from the fade data AATranslator has embedded). In the example above these will be BWF (.wav) files.



At that point it's wise to save your newly created .ptf & the media too. Just save it as you would any other session.

If you are running AATranslator via Wine for OSX, and you have created a single "X-fer folder" it's suggested you treat this folder as a temporary location. That is, having opened – converted to PTF, you save the session + media, then clean/trash the contents of the "Temp" folder.

Though attaching a script to a folder is not that hard, so Wine for OSX users could use way more than 1 destination folder if that better serves the workflow.

## Sorting out PT5 sessions that don't comply with the strict requirements of ProTools.

(an extreme example)

Refer to 'Media Files' tab for listing of media files and their locations

Session contains a mismatch between the project sample rate 48000 and one or more media files within the session.

Session may contain media files with different sample rates

Session contains a mismatch between the project bit depth 24 and one or more media files within the session.

And here is the 'Media Files' tab information for this conversion

E:\AATranslator\4.2.100\Audio Files\48MonoTone.wav 48000,24

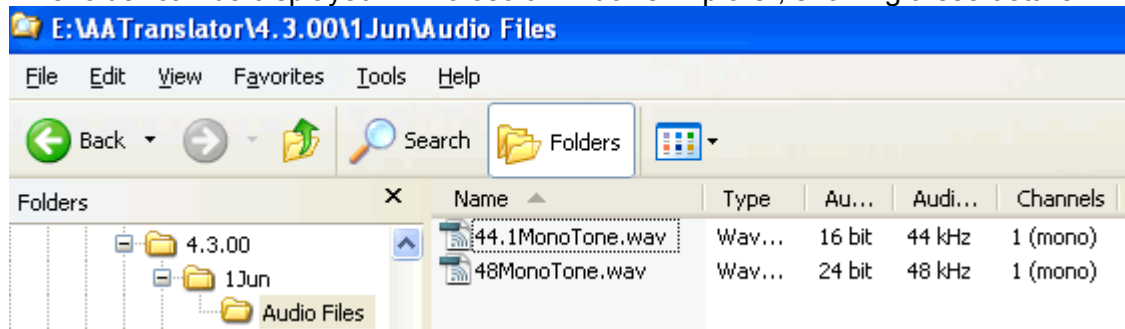
E:\AATranslator\4.2.100\Audio Files\44.1MonoTone.wav 44100,16

This shows, the 2 files have both different sample rate & bit depths.

The PT5 session is set to 48kHz & 24bit, one of the media files matches this so in this example it is best to leave the project as set & just modify the 44.1kHz/16bit file to match. IE, convert it "up" to 48kHz, 24bit. Note the session Sample rate is 48kHz so this means all timing operations are based on the idea there are 48,000 samples per second. What would have happened in the original Source session is that Real-Time sample rate conversion would have been done on the 44.1k file to up it's rate to 48k. As PT does not have this capability we need to sample rate convert any files that are not at the session sample rate.

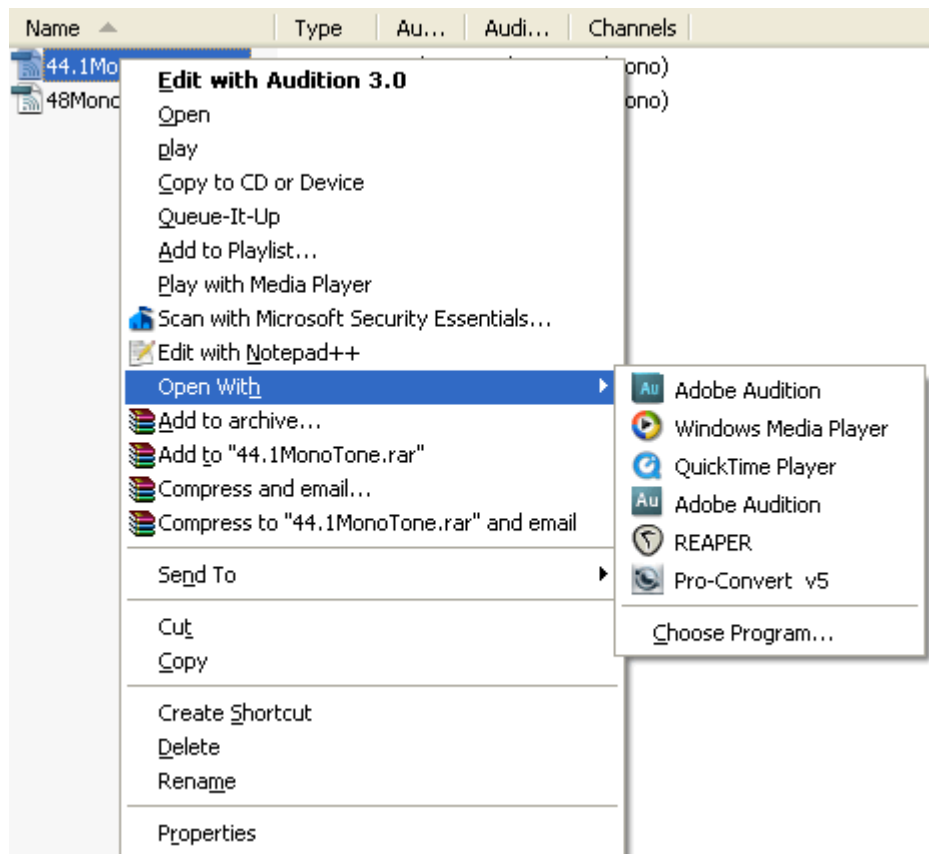
The audio, AATranslator extracted, has as per PT convention been copied to a subfolder of the pt5 session called "Audio Files".

This folder can be displayed in Microsoft Windows Explorer, showing these details.



(See later how to set-up MS Win Explorer to display details in this form)

If you Right-click on a file, Eg the 44.1kHz, 16 bit one. You will see something like this.



The 1<sup>st</sup> item in bold is the program “associated” with this file type. I have Adobe AA3 associated with Wav files. If I were to just double click on a Wav file it will open in AA3. As you can see; via R-click I can “Open With” other programs, actually any other program.

Adobe Audition 3 & before is very well suited to

- 1) Opening a wide range of file types, including MP3’s, etc
- 2) Having very good quality Sample rate and Bit depth conversion built in
- 3) Having excellent Batch conversion abilities. Eg you can select a wide range of source files, normalize (so say 32bit files with volume values greater than 0dB Full Scale don’t distort), Split stereo to 2 x mono and convert all these to a common standard.

But there are many programs that can do what is required in this example. Take a 44.1kHz/16bit mono file convert this to 48/24bit file, then save the result, overwriting what is in the “Audio Files” folder AATranslator made.

Note this folder contains copies so your original files will not be altered.

Having got all the files in the folder “Audio Files” to match what is specified in the PT5 session, the pt5 will now be “repaired”.

Example 2:-

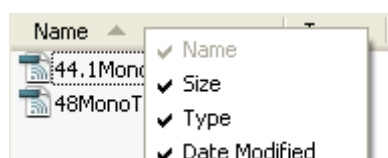
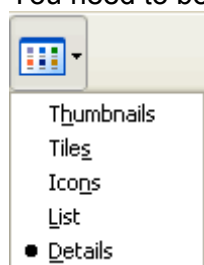
If say all the media files in an AATranslator conversion, were of the same Sample Rate & Bit Depth, but the session Bit Depth was different to the media. This would happen if AATranslator didn’t have access to the media & you set the wrong Bit depth. The cure is to do a PT5 to PT5 conversion, setting the output Bit Depth to match the files.

BTW, this AATranslator ability to do Pt5 to Pt5 conversions can be used to turn a PC type PT5 into one that a Mac can read.

## How to make MS Explorer display WAV & other media file details.

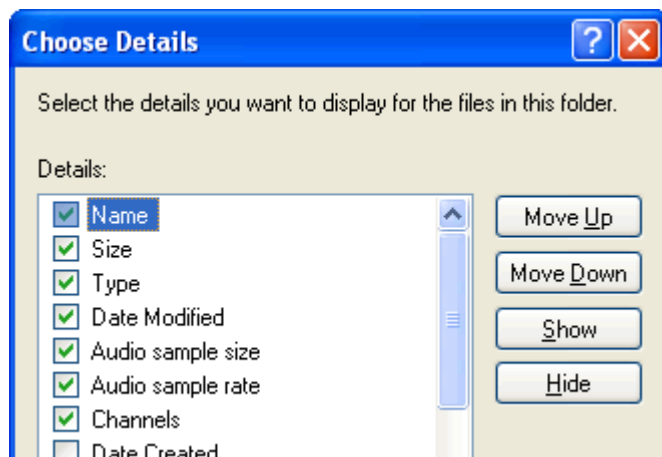
You need to be in “Details” view.

Eg via; View > Details. Or by clicking on the “dropdown” of this (meaningless looking) icon and then selecting Details.



Then Right click on the “Title Bar”.  
Name    Size    Type    Date Modified

It will show what is displayed as standard. "Name" as in the file name of course & optionally the file Size, Type of file and Date last Modified. At the bottom of this list is "more", click that and:-



A re-confirm of what is shown previously, plus what I suggest you select. Audio, sample size, rate & number of channels.

Note: If you apply the above settings at the "root" or highest level within a Disk, this is what "details view" will show for all files on that Disk. If you apply these setting further down a disks' path, then "details view" will apply from that point downward.

There are loads of other options too, in the "Choose Details" list. But understanding Apple Mac files like "Mov" files is "not on the list". So if you are using a PC & want to read & convert these, the free Quick time for Windows is required, plus the paid for but cheap "Quick time Pro"

option.

And yes Macs are equally oblivious to many PC originated formats.

## Using Wine for OSX to run AATranslator

You will need to run a "script" to glue the double fork pair into a form to save on a Mac native, HFS+ disk.

## How to install & use AppleDouble dot\_clean.scpt

When you install AATranslator, "AppleDouble dot\_clean.scpt" can be found in the same location as the AATranslator program or "EXE".

Browse your Mac hard drive for:-

*/yourHD/Library/Scripts/Folder Action Scripts* (or just search for the folder "Folder Action Scripts"). This folder will already have some scripts (.scpt files) in it. Simply add this new one to what is there.

Create a new folder, called say, AAT\_PT5Conversions.

Later save all of your AATranslator pt5 conversions to this folder.

In OSX, control click (or right click) on that folder and select [Enable Folder Actions](#).

Right Click on that same folder, select [Attach a Folder Action](#)

Select [AppleDouble dot\\_clean.scpt](#)

That's it, now any 2 file, double fork pairs generated by AATranslator will be combined into 1 as soon as they are written to that folder. Note the media files are not touched.

For more information see

<http://www.simplehelp.net/2007/01/30/folder-actions-for-os-x-explained-with-real-world-examples/>

For those used to writing Apple Script, the source code is at the end of this document.

A Microsoft DLL mfc42.dll is required in your Wine install, to run AATranslator.

If it is missing it can be downloaded free from Microsoft then dropped it into the same folder as AATranslator.

<http://support.microsoft.com/kb/259403>

Or "winetricks" <http://winetricks.org/> is recommended. It will install a library of support files in the right places and can be used to fix all kinds of wine problems, not just a missing mfc42.dll .

Winetricks is supported and recommended by winehq too

<http://wiki.winehq.org/winetricks>

## Video and PT5

A pt5 session can contain a single video file placed at any point on the timeline. The whole file will play there being no possibility to trim the start or end points.

When reading PT5 files AATranslator will look for the video file specified in the PT session, in a folder called "Video Files" in the location of your pt5 file.

Note; It is quite common that Pro Tools can't find the video files. So we now have , this is true for a PT5, made in PT as well as those made by AATranslator. You may have the "Ignore Video" option set for all PT5 exports. Video files will be extracted however and put in a folder called Video Files in the "Send Output to " location.

## Video Notes

Apple QuickTime is the native format for Apple Final Cut Pro (FCP) & very common for exports from Avid NLE systems and is the main technology used within Pro Tools and most video files exported from PT will be xx.Mov files.

Essentially a QT "Movie" is a wrapper for a wide range of data types and this includes data with PC origins like an AVI & for audio, a Wav or WMA.

Generally video formats will use some form of Data Compression such as DV, mpeg-4, H.264, and these will require a suitable Codec and if the data is wrapped in a MOV "wrapper" and you are using a PC the codecs will need to be specific QT codecs, IE none of the codecs available via the MS operating system will be usable in QT for Windows.

An AVI can in much the same way as a Mov use a wide variety of Codecs, many of these come with the Windows operating system, or get installed when a video aware program is installed on your PC and other Codecs can be downloaded for free & some more exotic types can be bought. So on a PC if you want to play an AVI, the Codec required is specified in the header of the AVI file and if it is on your system the file will play.

The same is true if an AVI is wrapped in a MOV wrapper, but now there will need to be a specific Apple QT codec available. Again many come with either the Mac OS or in Quick Time for Windows, a free download from Apple. Microsoft offer free downloads of QT codecs for WMA (Windows Media Audio) and WMV (Windows Media Video) but other more exotic types like "Apple Pro-Res" will have to be bought.

QT Mov support is clearly very important (Mac's may be only 2% of the computer market but are way more than 2% significant in Film/Video production). So realising this reality most of the latest versions of PC based DAW's do support QT. A slight downside is that QT for Windows performs significantly less well than QT on a Mac (which works rather well). Not all PC based DAW's use QT for Windows, they use other Libraries, or write their own.

But if you do experience poor video results running Mov's on a PC it may be worth translating the files to an AVI based format, that will likely run way better on a PC.

To do this one needs to buy the Apple QT Pro upgrade \$29.99 in the USA, rather more in the UK, but it enables the editing including export functions locked within the free QT player.

Then having exported as an AVI you can then use PC specific codecs.

There is a wonderful (and free) PC prog called Virtualdub, <http://www.virtualdub.org> that can convert & modify AVI files to the best format for a PC based DAW.

As to the "best format" the thing to bear in mind is for most users getting the data rate (IE bits/sec) down to a low value is really not that important.

Most computers can shift a fair amount of data with little problem. What you probably want to avoid however, is very "clever" formats that may very well be able to deliver quite viewable images using a bad Internet connection but are so complex they take a big CPU hit.

So for moving images with audio on a DAW, go for formats like DV that encode each frame completely, regardless of the fact that a lot of detail may not actually change from 1 frame to another (IE in a 24<sup>th</sup> to a 30<sup>th</sup> of a second).

"Clever" low bit rate but quite good looking compression systems like DivX say, work by fully encoding a "key-frame" then only using some more data to update what has changed between frames. Great if you hit play then watch, but rather bad if you want to "spot" or tie sounds to a particular frame.

Sorry but this is a complex subject and I suspect these notes are already too long for many to appreciate.

## Limitations, or why isn't a conversion from format "A" the same in format "B"?

- 1) Like all programs AATranslator is not perfect.

- 2) The way DAW's & NLE's handle essentially the same information varies so Massively, our priority is to preserve as much vital information as possible. The downside of this is there maybe duplicated or seemingly redundant tracks & clips in a conversion.

### **Eg. Track types**

ProTools uses only mono files and in versions later than v5, place these in highly specific track type "wrappers". Mono, Stereo, 3track LCR, 4 track LCRS, 4 track L&R front + L&R Rear, and it works well.

But no other Daw's do it this way.

Reaper has NO track types at all. Any data can go on a track, Mono, Stereo or multi-channel/poly audio up to 64 channels, MIDI or Video. You can mix data types on one track if you wish with any sample or bit rate, and use compressed formats like MP3, etc.

Audition v3 is almost as liberal as this. It can have a mixture of mono and stereo files on one track. And has four track types, Audio, Video, MIDI and Busses.

Sony Vegas has a very flexible way of dealing with mono/stereo file issues. And poly or multi-channel files too.

Two channel or stereo files stay as interleaved files and when imported into the timeline behave as a linked/grouped stereo pair, placed on a pair of tracks, so in many ways, appear very much like PT does with 2 mono "grouped" files.

But L&R can be un-linked and then treated just as though they are 2 separate (mono) files. This includes separate time positions, volume panning, the lot.

The way AATranslator deals with this, when converting to Pro Tools is the underlying stereo file will be converted to a PT style .L&R mono files pair as is essential, but these will both appear twice, IE what "looked" like 2 mono tracks in Vegas will become 4 mono tracks in PT. Sorry there seems no way out of this, but the Vegas 2 "virtual" mono tracks will be panned hard L&R, and/or have the correct Pan, Volume, mute etc automation applied to each half. IE it will play exactly as per the Vegas original in PT.

To repeat, Vegas allows different level, pan & fades on each (mono) half of a stereo file, and this will also be read & applied to an AATranslator conversion to PT.

Sorry, but when converting to some formats there may be duplicate tracks – please Mute/Delete what is not wanted. [We would far rather have unwanted duplication than any omissions].

PT vers 6.4 & later allow for a maximum of 12dB of gain with the volume automation and versions before v6.4, 6dB's. AATranslator passes on any gain adjustments in the original session unaltered. The way amounts of gain in excess of 6dB will be handled when a PT5 file is imported into various later versions of ProTools & other PT5 aware software is variable. You may need to trim the volume after you have imported the pt5. Or if the conversion is rejected by PT modify the source session to have no gain greater than 6dB.

### **Markers**

There is a bug in the PT5 format that prevents markers at certain positions displaying. Eg if you have a pt session in PTF format, save that ptf as a pt5 and reload it, a marker at 3700 samples on the timeline will not display.

The fix we have in AATranslator is:- we have worked out which markers from a source format wont display (depends on their position though more complex than that). Then adjust PT marker positions so they will display (no more than about 60 samples and in the above example 8 samples) and then append the original location (in samples) to the name so the user can move it if necessary.

### **Wine, AppleDouble dot\_clean.scpt, source code**

```
on adding folder items to this_folder
    do shell script ("dot_clean --keep=dotbar " & quoted form of POSIX path
of this_folder)
end adding folder items to
```



## The reason we have PT5 capabilities is because of it's ability as an interchange format !

It offers far more than OMF & AAF formats can do. Which is a \$500 - \$700 additional cost item for PT 8 & before. PT9/10 now includes OMF/AAF.

### Capability: PT OMF & PT5 export, AATranslator Import

codes used below
~ = not available with this format.
no = potentially available but not implemented
** = Fades become rendered clips. So no information to pass to another Daw

Interchange format used →	omf	PT5		
Feature	ProTools export using Digitranslator-2 export	AAT import	PT 5 till 9 export	AAT import
Track names	no	yes	yes	yes
Track Pan	~	~	yes	yes
Track solo	~	~	yes	yes
Track mute	~	~	yes	yes
Track Volume	~	~	yes	yes
Track Layers (playlists)	~	~	partial	partial
Bus & Aux Routing	~	~	yes	partial
TimeLine Pan Envelope	~	~	yes	yes
TimeLine Volume Envelope	~	~	yes	yes
TimeLine Mute Envelope On/off	~	~	yes	yes
Clip (Region) Mute	~	~	yes	yes
Clip (Region) Lock	~	~	yes	yes
Clip (Region) Fades	Render **	yes	yes	yes
Clip (Region) X Fade	Render **	yes	yes	yes
Clip (Region) Pan static or Env	no	yes	~	~
Clip (Region) pan envelope	no	yes	~	~
Clip (Region) gain, static value	no	yes	~	~
Clip (Region) vol envelope	yes, unless in Avid NLE compatible Frame edit mode	yes	~	~
Session markers (Cues)	no	no	A, B, R	A, B, R
Session mixed Sample rate	no	yes	~	~
Session video	read, only	yes	yes	yes
Session stereo files	no	yes	~	~
Session has Sample rate	yes but only 44.1 & 48kHz	yes	yes	yes
Session has fps	yes	yes	yes	yes
Session has bit depth	16 or 24	yes	yes	yes
Session has start Offset	yes	yes	yes	yes
omf only. Referenced, Embedded, Both	R, E pt7-9	B	~	~
Sample or Frame edits, or Either	E	E	S	S

Note: AATranslator supports both Clip & Timeline based automation, as do most DAW's Eg Reaper & Nuendo. OMF is clip based, PT timeline based. If converting OMF to PT either (but not both) types can be used by either Digi-translator or AATranslator.

After much testing we believe the above is true, if you have information to the contrary, please let us know.