

Chapter 2: Getting Started with Pro Tools

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Targeted Systems

- This presentation is going to cover Pro Tools 12.8
- We are going to use PT 8 and 10 in class. If something doesn't work it will be okay. This will work on PT First for the most part.

Pro Tools File Structure

Session vs. Project

- The standard name for a file setup is called a *session*.
 - In PT 12.5 and higher there is the ability to called *Projects*.
 - *Projects* are stored in the cloud. *Sessions* are hosted locally.

Session File Organization

- Pro Tools Session
 - Pro Tools Session (.ptf or .ptx file)
 - WaveCache.wfm
 - Audio Files Folder
 - Bounced Files (PT 11 or higher)
 - Clip/Region Groups Folder
 - Session File Backups Folder
 - Video Files Folder

- This is the standard way for all PT sessions

Session File and WaveCache

- Session Files - This is the map of all the edits and waveforms. This tells the computer where all the items it will need to find the information. Naming convention is .ptx or .ptf
- WaveCache: This is where all the waveforms are stored. It is not needed, but the program will load much slower if it is deleted.

Audio Files

- This folder is where all the audio files are stored. This includes the original recording and any edits that are made.
- This includes:
 - Normalizing
 - Gain leveling
 - Effects
 - Etc....

MIDI Files

- MIDI is data. MIDI is no more than data that is stored from 0-127. That is all.
- The numbers then trigger the following thing.
 - Velocity
 - Timbre
 - Pitch
- MIDI Files are stored in the MIDI Files folder. These are separate from the .ptf or .ptx file. These files can be exported to other DAWs.

Sibelius Files

- In Pro Tools 12 and higher, PT can export all the MIDI files to a Sibelius file. The notation can either be in PT or Sibelius.
- This is really nice.
- Sibelius can also be rewired.

Bounced Files

- This is where PT stores the final mixes.
- This is only in PT 11 or higher.
- You should make a Bounced Files folder in your own session.

Clip/Region Groups

- The Clip/Regions folder is the default directory that Pro Tools uses for any clip groups you export from you Pro Tools session. If you do not export any clip groups, this folder will remain empty and will be removed when you close the session.

Rendered Files

- This is where all files that are rendered. These are temporary files in an auto-created folder. This folder will not be there after a session shuts down. This will include elastic audio files.

Session File Backup Folder (This is Where Your Tail Will be Saved)

- PT will auto save. This needs to be setup in the
 - Setup>Preferences- Operations Tab.
- Here are your settings
 - 60 Backups
 - Back up every 1 minute.
- **YOUR SESSION WILL FAIL!!!!!! Do this!!! You wont cry as much.**

Video Files

- You are allowed one video file to work with. Here some highlights.
 - QuickTime videos are to be used. MXF is PT 12 and higher.
 - One video file can be used at a time.
- Video files need exported if they are going move this sessions.

Starting Pro Tools

How to Turn on Your Computer

- Start with Equipment Powered Off.
- Turn on any external hard drives that require external power and wait about 10 seconds for them to spin up to speed.
- Turn on any MIDI interfaces and MIDI devices that require external power (including and MIDI control surfaces) as well as any synchronization peripherals, if used.
- Turn on your audio interface (if not bus powered). Wait at least 15 seconds for the audio interface to initialize.
- Start your computer and launch PT.
- Turn on your audio monitoring system.

Side Note

- Many audio interfaces get their power from the computer (via a USB port or other connection); these interfaces do not be powered in advanced.

Using the PACE iLok KEY/Launching PT

- PT is installed on most machines in studios. An iLok keeps all your plug-ins and licenses in one place.
- Launching PT. Find the icon and click it.
 - Windows – Start Menu
 - Make a shortcut
 - Mac - Applications Menu
 - Put on the Dock
- Dashboard will come up on the screen. (Chapter 4)

Accessing Connected Audio Devices

- PT will generally access the currently connected audio interface or other available audio i/o device.
- If none is connected, then PT will run off the systems sound card. PT 9 or higher.
- Make sure all the proper drivers are installed. This may keep the interface from working properly. Consult the manufacturer's website.

Configuring and Optimizing the Audio Device

- Check the Playback Engine
 - Setup>Playback Engine
- Optimizing Host-Based Pro Tools Performance
 - Playback Engine is used to optimize the software for the system.
 - Native PT systems utilize the computer's processing capacity. This is called *Host-Based Processing*.
 - With HDX machines, processing happens on dedicated DSP chips for faster audio processing; however, they can also use host-based processing for Native plug-ins.

Hardware Buffer Size

- Two Types of Hardware Buffers
 - Lower Hardware Buffer Size – Controllable: This reduces monitor latency when you are recording or monitoring live input.
 - Higher Hardware Buffer Size – Uncontrollable: These settings provide more processing power for tracks that are recording or monitoring live input, at the cost of higher monitoring latency.
- Hardware Buffer should be set as LOW as possible with out artifacting.

Dynamic Plug-In Processing

- Option in in the Playback Engine dialog box maximizes plug-in counts by dynamically reallocating host based processing resources during playback and recording.
- Allows the plug-ins to go offline when not being used in the session.
- This should be enabled as a general rule.
- How to:
 - Setup>Playback Engine
 - Choose appropriate H/W buffer size
 - Next to Host Engine enable the box for Dynamic Plug-In Processing

Menu Structure (This is Huge)

- File Menu
 - Controls things like opening, closing, saving, importing, and exporting sessions.
- Edit Menu
 - Allows you to edit the media that you have presented. Copying, pasting, duplicating, cutting, healing, and rejoining data.
- View Menu
 - Allows you to manipulate anything that can be seen on the screen. Rulers, track size, window views, track comments, and others. Primarily Ebony and Ivory live here.

Menu Structure Cont.

- View Menu Side Note: The View Menu and Window Menu are commonly confused. The view menu has to deal with anything that affect parts of a window or change of the element with a window are displayed. In contrast, commands in the Window menu show or hide entire windows or arrange the windows on the screen.
- Track Menu: lets you set up and maintain tracks in a session.
- Clip Menu: (not sure if this menu exists in PT 8) Clips/regions are pointers to show the computer where audio and MIDI files segments. Includes looping, grouping, warping, and modifying clips.

Menus Continued

- Event Menu: Modifying time and tempo settings of PT sessions for working with MIDI and audio events and operations, and to adjusting various properties of MIDI recordings.
- Audio Suite Menu: Allows you to use all the plug-ins that are available. These are non-real time plug-ins. This will make a newly rendered file.
- Options Menu: The options menu let you toggle several editing, recording, monitoring, playback, and display options on/off. You can enable loop recording, turn on and off pre and post roll, engage Dynamic Transport mode, and other choices.

Options Menu Side Note

- Independent functions that turn on and off. The things that are will have a check mark besides items that are on.

Menus Cont.

Setup Menu: Anything that needs to be configured is in this menu. Audio interfaces, MIDI Controllers, etc.... All selections in the Setup menu will contain a dialog box.

Window Menu: Allow PT to display windows on the screen.

Marketplace Menu: Provides access to Avid Account, and allows you to buy stuff.

Help Menu: This is where one goes for help.

Main Pro Tools Windows

Three Primary Windows

- Edit Window
- Mix Window
- Transport Window

Edit Window

- Timeline display of audio, MIDI data, video, mixer automation for recording, editing and arranging tracks. This is what you will use to deal with directly with recorded materials.
- Edit Window Toolbar is at the top of the screen along the edit window.
 - This includes edit modes, edit tools, and the Main Counter.

4 Edit Modes (More in Chapter 3) Main Counter

- Slip
- Spot
- Shuffle
- Grid

7 Edit Tools

- Zoom
- Trim
- Selector
- Grabber
- Scrub
- Pencil
- Smart

Timeline Display (Rulers)

- Bars and Beats
- Mins and Sec.
- Timecode 1 and 2. Video and film editing
- Tempo
- Meter
- Markers

Edit Window Side Columns

- Tracks and Groups List
- Clips/Regions List

Configuring the Edit Window

- You can use the pop-up menu in the upper right hand corner of the window. This menu will hide or show everything in the tool bar.
- The Edit Window Toolbar menu include the following.
 - Zoom Controls
 - Transport
 - MIDI Controls
- Ctrl/Cmd Click to move a part of the tool bar to somewhere else.

Customizing Side Columns

- Click the arrow in the lower right corner of the edit window to hid or to show.
- Or double click on the border to show or hide. (Where the cursor turns into a double headed arrow.
- To adjust size position the arrow until it turns double headed, then click and drag.

Customizing the Toolbar

- To show or hide a control display, click on the Edit Window toolbar using the pop-up menu in the upper-right corner of the window.
 - Do Minimal and free up real estate.
- Some of the display elements of the toolbar include.
 - Zoom controls: When selected, the are displayed in the Edit window toolbar
 - Transport: When selected, the are displayed in the Edit window toolbar
 - MIDI: When selected, the are displayed in the Edit window toolbar
- Control/Cmd-Click-Drag will move items around in the toolbar.

Customizing the Side Columns

- Click the arrow icon located in the bottom corner by the column you want to show or hide.
- Double-Click on the double headed arrow to shrink or enlarge the column.
- Same for Column width and height.

Mix Window

Mix Window

- This looks like the standard mixer. Each instrument is a channel or mixer strip. It has the following information.
 - Inserts
 - Sends
 - Input and Output Assignments
 - Automation mode selection
 - Panning
 - Volume

Signal Routing Control

- Insert Selectors
 - Adding real-time effects.
- Send Selectors
 - Sending to Aux or VCA tracks.
 - Just to say this now.
 - Dynamics are pre-fader
 - Effects are post-fader

Input and Output Selectors

- Input Selectors
 - This is where one chooses what input in the interface is used.
- Output Selectors
 - Where the sound goes in the system. Here are some options.
 - Bus
 - Main Out
 - VCA

Record and Playback Controls

- Record
- Mute
- Solo
- Input Monitoring (PT12)
- Volume Fader – Volume fader DOES NOT affect the input gain (record level) of a signal being recorded. The signal level must be set appropriately at the source or adjusted using a preamp of gain-equipped audio interface.

Mix Window Side Columns

- See Edit Window Side Columns

Transport Window

Transport Window (Cntrl/Cmd NumKey 1)

- Third Primary Window
 - Playback
 - Counters
 - Main and Sub Counter
 - MIDI Controls
 - Triggering MIDI recording
 - Met track
 - Over Dubbing
 - Tempo Map
 - Setting Tempo and Meter

Additional Editor Windows

- MIDI Editor Window. (Also at the bottom of the Edit Window)
 - Allows for Piano Roll entry.
- Score Editor
 - Allows for Note Entry.
 - Looks remarkably like Sibelius, but is not. It is very difficult to use if not careful.