Pro Tools® 11 IGNITE!

The Visual Guide for New Users

Andrew Hagerman

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Andrew Hagerman

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This book is dedicated to my beloved bride Junko, to our beautiful daughter Sachiko, and all who fight the good fight for art's sake.

Acknowledgments

Your humble scribe Andy Hagerman here. Mine is the name on the front cover of the book, and although you might infer from that that it's *my* book, you'd be wrong. Truth is, this book is was a team effort, and there are a lot of names besides mine that deserve to be on that cover. Unfortunately, that'd look cluttered and strange, so allow me to give them a shout out here!

First and foremost, the team at Cengage Learning deserves a hand. This is my 10th book with them, and this title finds some of my favorite Cengage folks helping to bring this to you. Leading the pack is Kate Shoup—trust me, her editing makes me sound a lot smarter than I actually am! Working beside her was tech editor Brent Heber, a former Avid colleague who's making his mark in the Australian audio post-production scene. Thanks Brent, for keeping me honest on the technical bits!

I'm honored to be able to work closely with Avid (the people who have over the years made Pro Tools the powerful tool that it is today). Although it's a small company in relation to its industry prominence, Avid is composed of a crack team whose dedication to excellence really shows. Special thanks to Vicky Moreno, AJ Steffenberg, Andy and Claudia Cook, and Tim Mynett, and all my colleagues in the Avid Training department. Also, thanks to the team at the Avid Japan office, especially Tsukasa Tokiwano and Kazumi Mihashi, and Daisuke Naito (who was always on the spot in answering some very silly questions!).

This book's exercises are derived from some projects I've worked on recently, and thanks go out to the dedicated musicians who have graciously allowed me to share their work.

- "Listen" was a song that I wrote for a trade show in Japan (and yes, that language you hear in the track is Japanese). Special thanks to Tsukasa Tokiwano (guitar), and to Kazumi Mihashi and Sachiko Hagerman for the help with the Japanese lyrics.
- "Shady Grove" is a traditional American Folk song performed by a group named Under the Radar. They are Paul McCaskill (vocals and guitar), Jason Thomas (fiddle), Lamont Goff (mandolin), and Jessica Goff (bass).
- "Maybe Meagan" is a song written by American composer William Brooks. Special thanks to William for sharing his vocals and guitars, and for allowing me to flesh out an arrangement using MIDI within Pro Tools.

Last, but certainly not least, my thanks goes to my family and friends, without whose faith I'd never have started writing in the first place. My wife Junko and our daughter Sachiko are the best writing partners a guy could ask for. In this book, Sachiko even helped with the writing of "Listen" and is even at eight years old showing a very sharp ear for music.

About the Author

Andrew Hagerman has been a professional musician and teacher for the majority of his nearly 50 (gasp!) years. Beginning his musical life at the early age of eight as an aspiring tubist, Andy continued his studies at the prestigious Northwestern University in Chicago. During his time there, MIDI and computer music were in their infancy, and Andy recognized the usefulness of music technology in aiding the creative process. Hagerman had the opportunity to learn these new technological tools of the trade as they were being invented and refined, and his quest for the best in audio and music technology ultimately spurred him to use and teach Avid's Pro Tools.

As a performer and arranger, Hagerman has worked with numerous ensembles of all types, including many years of playing at Disneyland, Walt Disney World, and Tokyo Disneyland. With a passion for teaching, Hagerman has also worked as the Associate Course Director of Advanced Audio Workstations at Full Sail Real World University in Winter Park, Florida, and has authored 10 books on the topics of audio production and Pro Tools. As a composer and producer, he's active in the U.S. and Japan, where he currently lives. Hagerman currently works with Avid's Asia-Pacific Training Partner Program, working with excellent educational institutions throughout the region to offer the highest level of audio and video training to the next generation of creative professionals.

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Introduction

First of all, congratulations on becoming a Pro Tools user, and welcome (or welcome *back*, if you're already using Pro Tools and upgrading to Pro Tools 11)! When Avid says its powerful digital audio workstation (DAW) is the industry standard, you can believe it. You'll find Pro Tools at all levels of the business, from modest software-only systems all the way up to high-end HD/HDX systems, hard at work in every facet of audio and musical production. It's a serious, professional product, and your decision to buy it (and learn it well) is a step in the right direction.

The Chinese philosopher Lao-Tsu once said, "A journey of a thousand miles begins with a single step." That's where this book comes in—it's that critical first step. Gaining a solid fundamental understanding of the basics of Pro Tools will help ensure that your journey starts off without a hitch and pointed in the right direction. In this book, you'll learn the basic techniques of composing, recording, editing, and mixing digital audio and MIDI (Musical Instrument Digital Interface). You'll learn how to harness the power of Pro Tools' impressive array of features, from software effects, to virtual instruments, to mixes that are automated and edited with some of the best tools you'll find anywhere.

This is my seventh book about Pro Tools. The first covered version 6 of the software, followed with titles on Pro Tools 7, 7.4, 8, 9, and 10. The book you're holding stands on the shoulders of those previous books and includes some of the same material as those earlier titles. It also covers exciting new features of Pro Tools 11. Even if you're a long-time Pro Tools user, I think you'll find that the new improvements—things like its 64-bit rebuild and offline bounce—represent a new level of flexibility and power. These new features, combined with the solid design of Pro Tools in general, make Pro Tools 11 a quite exciting release indeed!

If your aim is to create and produce audio, Pro Tools is an excellent choice. *Pro Tools 11 Ignite!* will be your companion during those critical first steps on the road of discovery!

Who Should Read This Book?

Essentially, this book is geared toward beginners, and assumes little or no experience in working with a DAW. You'll find that this book's highly visual and plainly worded style makes it easy to follow. Nearly every step in the processes discussed is accompanied by clear illustrations, so you won't have to spend your time hunting around the screen for tools and menus. (What fun is *that*?) Once you're finished with the chapters and exercises, this book will be a valuable reference later on as well.

Don't worry if you're not a formally trained musician or if you haven't really dealt with digital audio before. The beauty of Pro Tools—and computer music in general—is that even untrained (but creative) musicians can enjoy great success in this kind of environment. Of course, any general music or audio knowledge you bring to the table is an added advantage, but it is certainly not a *requirement* for this book.

With that being said, there's no denying that Pro Tools is a *deep* program. Even those of us who have been using it for years still find new tidbits now and then. For that reason, I can't dedicate any of the limited space I have in this book to covering basic computer operations. That means it's up to you to understand the most basic ins and outs of your particular platform (either Mac or PC). Don't worry too much, though—the general computer knowledge required to use Pro Tools is pretty basic. If you can locate, launch, and close programs, you're probably in fine shape.

How to Use This Book

At its heart, music (and audio) production is a progressive process. From creation to performance, it's the result of many small steps taken in order. A solid mastery of Pro Tools works much the same way. This book is laid out to mirror the creative process, from setup, through the recording process, editing, mixing, and putting on the final touches. The first sections of the book also include a bit of information about the nature of DAWs in general so you understand the basic building blocks of digital audio and can work most efficiently. If you're just beginning with DAWs, you'll find this information valuable in the long run.

Because this book is arranged sequentially according to the production process, you'll be able to follow along from the very start of a project through its completion. However, if you're interested in some areas more than others (which is pretty common with more experienced users), feel free to take the book out of order and just concentrate on those sections first; this book will work that way as well.

You'll find that most of this book is laid out in a tutorial-style format, with exercise files downloadable from the publisher's companion website, at www.cengageptr.com/downloads, that you can use side by side with the book's examples. Of course, you can also employ this book as a targeted training source, using the clear, illustrated style of this format to your advantage as you locate information on specific functions.

Last but not least, you'll note that peppered throughout this book are notes, tips, and sidebars. Take a look at these to find additional ways to increase your efficiency, additional information on key functions, and even warnings that point out common pitfalls and how to avoid them.

SPEAKING OF NOTES...

Speaking of notes, there's no time like the present to start! If you already have some experience with previous versions of Pro Tools, you might be primarily interested in checking out what's new in Pro Tools 11. You'll find sections (and notes) dedicated to features introduced in Pro Tools 11, with titles that call attention to these features.

Finally, a Little Background...

For nearly 30 years, Avid (formerly Digidesign) has been a leader in digital audio workstation technology, and the professional community has chosen Pro Tools as the clear industry standard. Over the years, many different configurations for Pro Tools have arisen, making choosing a Pro Tools system a bit complex. Never fear, though—these can all be broken down into a couple of simple groups. Let's start out with the software itself:

- **Pro Tools HD 11.** Short for Pro Tools *high definition*, this version of Pro Tools has all the bells and whistles that Pro Tools can offer. This includes advanced editing and mixing features, surround-sound support, and the ability to operate in either a DSP- or Native-based environment (I'll discuss that in just a moment).
- **Pro Tools 11.** This is your basic Pro Tools system, and although some features present in the HD version are missing in the basic version, it is still more than adequate for many professionals. It is on this version that this book will focus.

In addition to the software itself, there are two different modes in which Pro Tools can operate—either as a *hardware-based* or *host-based* DAW:

- **Hardware-based (or DSP) systems.** These Pro Tools systems rely on dedicated computer cards (called HDX cards) and audio interfaces specifically designed to work with Pro Tools. The HDX cards are responsible for Pro Tools 11's most important functions, including input-output management, mixing, and plug-in processing. The audio interfaces used by these hardware-based systems are designed to connect directly to the HDX cards. Only Pro Tools HD software can operate in a hardware-based mode.

  Hardware-based Pro Tools systems have specific advantages in the number of inputs and outputs (I/O) that the system can manage, the processing power of the system, and overall system stability. These systems are commonly found in high-end professional facilities that demand the highest standards of scalability and performance.
- **Host-based (or Native) systems.** When we refer to a DAW as being *host*-based, we mean that the system relies on the computer's CPU to accomplish all essential Pro Tools processes (things like signal management, mixing, plug-in processing, and more). Host-based systems generally cost less than their hardware-based alternatives, but with the ever-increasing power of computer CPUs, are finding a place in more and more professional facilities. Basic Pro Tools 11 software operates only as a host-based DAW, while Pro Tools HD software can operate as either a host-based or hardware-based DAW (depending on the hardware setup of the system).

  In terms of audio interfaces, host-based systems will operate with any audio interface that has an ASIO or Core Audio driver. Of course, the recommended combination is an Avid interface paired with Pro Tools 11, but it is no longer the only choice available to users.

PRO TOOLS|HD NATIVE

HD|native is a relatively new mid-range product that brings powerful aspects of both a hardware-based and host-based system together. With a single hardware card or thunderbolt device paired with HD interfaces, users operate Pro Tools as a host-based DAW, while at the same time getting the high fidelity of Avid's top-of-the-line audio interfaces.

The good news—and it's great news, really—is that regardless of your particular Pro Tools configuration, the software environment in which you work is nearly identical. That means you can take advantage of one of the most powerful and well-developed user interfaces on the market without breaking the bank. What's more, if you're a Pro Tools 11 user, when it comes time for you to step up to a Pro Tools HD or HD|Native system, you'll be ready to hit the ground running.

Adding to its already impressive arsenal of features, Pro Tools 11 is a highly anticipated release, bringing users some very important improvements. These include the following:

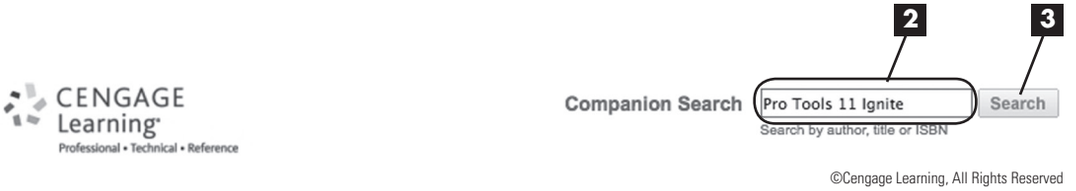
- **64-bit architecture.** Typically, when a version of software is updated, new features are added to existing computer code. That's not the case with Pro Tools 11. This is a complete 64-bit rebuild of the software. As a 64-bit application, Pro Tools 11 can utilize more system RAM than could previous 32-bit versions. (32-bit programs can access only up to 4 GB of system RAM.) This can radically improve the performance of your Pro Tools system.
- **Redesigned audio engine.** In line with the overall rebuild of Pro Tools, the previous audio engine (called the Digidesign Audio Engine, or DAE) has been replaced with the Avid Audio Engine (AAE). This new engine provides for more complex mixes and more plug-in power than has been possible in previous versions.
- **Offline (faster than real time) "bounce."** In previous versions of Pro Tools, mix-downs (commonly called "bounces") needed to be done in real time. In other words, the production of a three-minute song included budgeting three minutes in which to create a final mix. In Pro Tools 11, you now have the option of bouncing your final mix faster than real time (based on the processing power of your computer's CPU).

If a lot of this sounds like Greek right now, don't worry—we'll cover it in the chapters to come. Ready? Let's go!

Setting Up Your Sessions

Throughout *Pro Tools 11 Ignite!*, you'll have the option of using session files and other downloadable tutorial sessions and audio material so that you can follow along with the specific steps outlined in the chapters. These files will allow the tutorial sessions to play in their entirety. Generally speaking, you'll have no trouble downloading these materials to your hard drive.

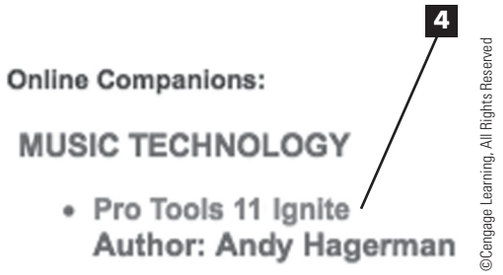
1 **Go to www.cengageptr.com/downloads.** The Cengage Learning online companion website will open.



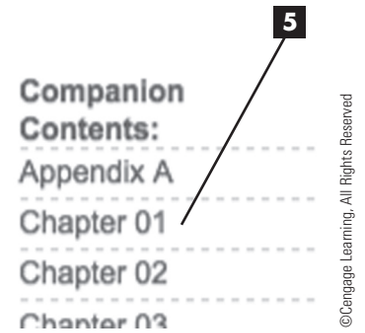
2 In the Companion Search field, **type Pro Tools 11 Ignite**, as shown here.

3 **Click** on the **Search button**. The search results will appear.

4 **Click** on the **book title link** (in this case, **Pro Tools 11 Ignite**). The companion site for the book will appear.



5 In the Companion Contents section, **click** on the **link** for the chapter whose material you want to download. You'll be directed to a page dedicated to the materials used in that chapter.

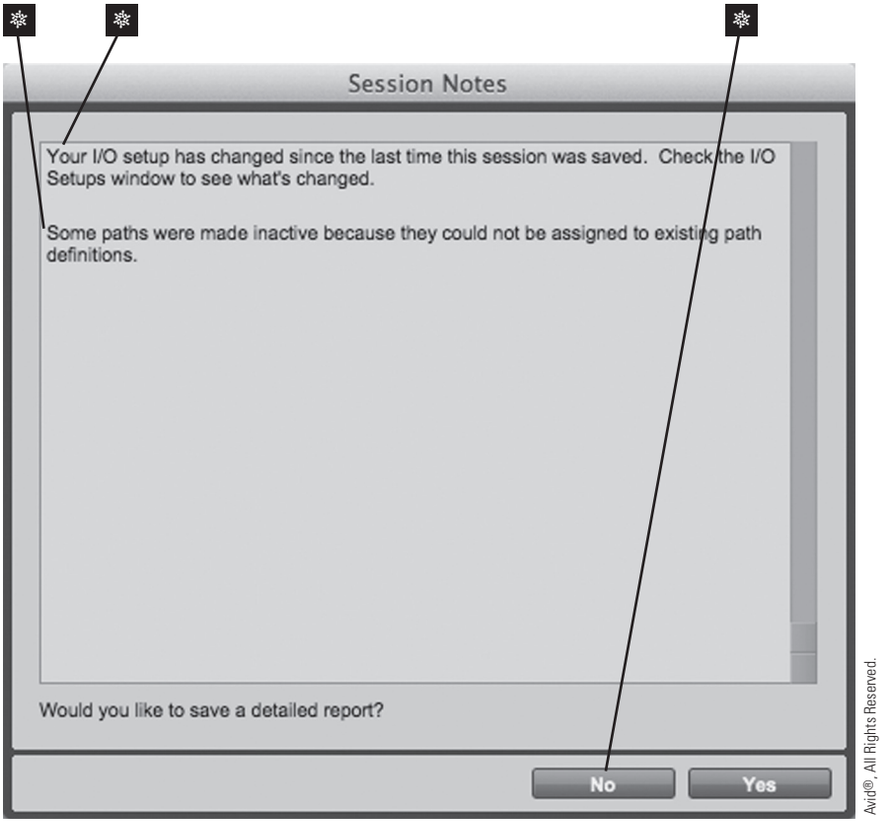


6 **Click** the **link** for the material you want to download. You'll be prompted to enter a destination for your downloaded file, which will vary based upon your platform (Mac or PC) and the browser software you are using.

7 The file that will be downloaded is a ZIP file. You'll need to **extract** the **contents** before you can use the session. Again, this can vary depending on your platform.

The folder that will be extracted contains the session and other material for the chapter. You're all set to launch the session! After launching, you may see a Session Notes window appear. This may contain a number of messages, including the following:

- **Your I/O setup has changed since the last time this session was saved. Check the I/O Setups window to see what's changed.** Fundamentally, all this message is saying is that this session was created on a different setup from yours.



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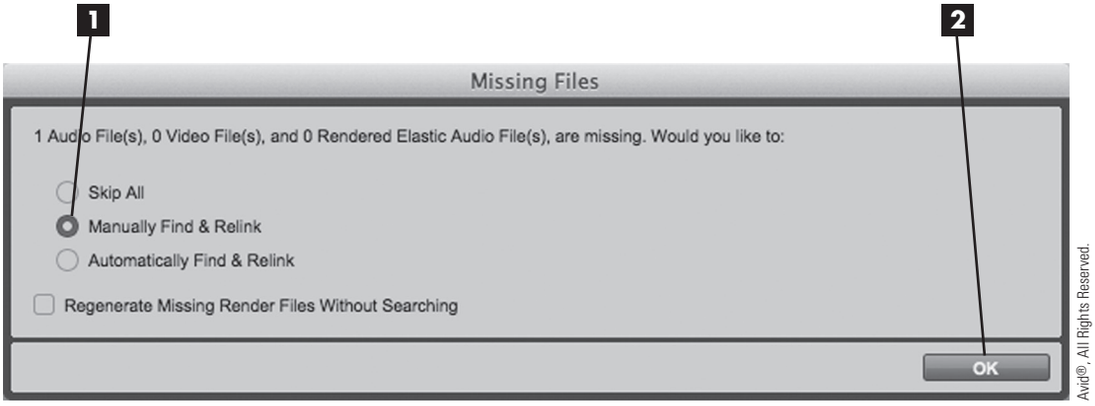
  - **Some paths were made inactive because they could not be assigned to existing path definitions.** This indicates that the inputs and outputs of the system upon which the session was created don't match the system with which the session is now being launched. Here again, if you can't hear everything you should, go to the I/O Setup window and adjust your input and output paths accordingly (covered in Chapter 3, "Getting Started with Audio").
- In any of these cases, you typically won't need to see a detailed report, so click on the No button.

Your session will continue loading, and in the vast majority of cases, you will be ready to go.

If you've already read Chapter 1, "Welcome to Pro Tools 11," you know that Pro Tools is a *pointer-based* application, which basically means that a session file—which is really the cornerstone of your project—refers to other files (such as audio files) to do its work. To do this, your session needs to know the location of the audio files it needs. In rare instances, however, you may see a dialog box that states that a number of audio and/or fade files cannot be found. No problem; you can tell the session where to look for these files.

1 **Click** on the **Manually Find & Relink option button**.

2 **Click** on the **OK button**. The Relink window will appear.



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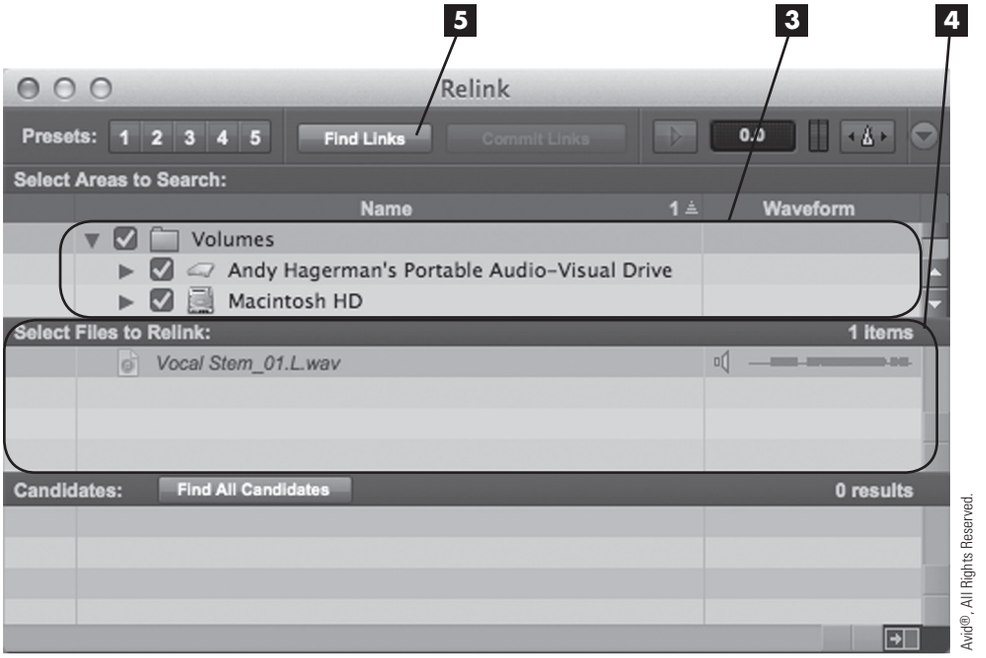
3 In the top section of the Relink window, **click** on the **hard drive** in which your session and audio files reside. Drives and folders that will be included in the search process will be indicated with a checkmark.

4 In the middle section of the Relink window, you'll see a list of filenames in italic print; these are your missing files. **Select them all.**

5 **Click** on the **Find Links button** at the top of the window. The Linking Options dialog box will appear.



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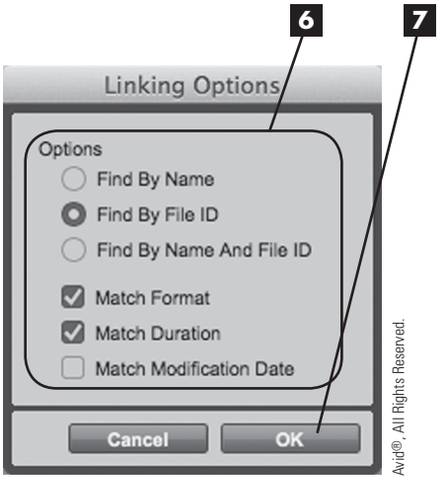
6 **Click** on the **Find By File ID option button** and the **Match Format** and **Match Duration checkboxes** to select them.

7 **Click** on the **OK button**. The search for your missing audio files will begin.



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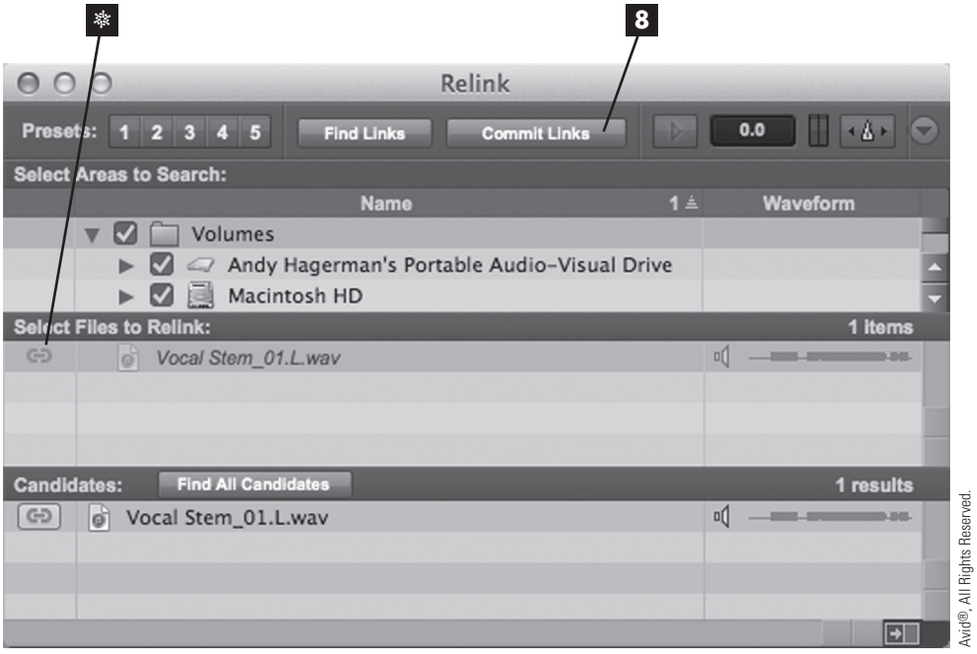
When a missing file is found, a small icon will appear next to the appropriate filenames, indicating that the file has been located by Pro Tools. When all files show these symbols, you're ready to proceed.



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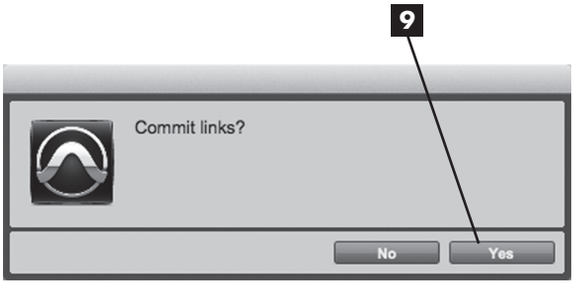
8 **Click** on the **Commit Links button** at the top of the Relink window.



9 A final dialog box will appear, asking you if you want to commit links. Click on the Yes button.

AUTOMATIC FIND AND RELINK

In the Missing Files dialog box, you'll see an Automatically Find & Relink option button. It does just what you'd guess: It searches your entire system for missing files. If you aren't sure where your audio files are, this might be a good route to take. But beware: Searching through all your attached hard drives might take a long time!

UNIQUE FILE IDS

Pro Tools assigns a unique file ID to every file it uses, which is its proprietary tag for that file. You'll note that you can choose to find files that match by name, file ID, or both. Although it's quite common to find matching names, those names (including the file extension) must match perfectly. Filenames and extensions can vary from platform to platform; for this reason, searching by file ID only (as described) is sometimes a good way to make sure your files are found in this case.

That's it! You can now close the Relink window and continue working. Remember to save your session when you're finished to avoid having to do this a second time!

1 Welcome to Pro Tools 11

Congratulations, and welcome to the world of Pro Tools! Throughout Digidesign's and Avid's nearly 30-year history, Pro Tools has established itself at the forefront of the digital audio workstation (DAW) community. Version 11 represents a major new release, particularly in terms of system performance and mixing workflows.

Pro Tools 11 can be found in virtually every facet of the audio industry, from music production for CDs to surround sound for movie soundtracks. Now, armed with Pro Tools' powerful array of functions and features, you'll be able to tap into this world of digital audio for yourself to realize your own creative vision. Welcome to the party!

The first step in the process is to set up your system and to master the essential functions of Pro Tools. In this chapter, you'll learn how to do the following:

- Identify the hardware and software components of your Pro Tools system and configure your audio engine.
- Organize sessions and data in Pro Tools.
- Use Pro Tools' most basic functions.
- Create, open, play, and close a session.

What Makes Up a Pro Tools System?

In the introduction, you learned that there are two different versions of Pro Tools software (Pro Tools 11 HD and Pro Tools 11), and two different hardware configurations in which Pro Tools can run (hardware-based or host-based).

For the purposes of this book, I'll limit this discussions to basic Pro Tools 11 systems (using Pro Tools 11 software and operating as a host-based DAW), but the skills you learn here can be applied to any level of Pro Tools system.

The Heart of Your DAW: The Computer

Your computer is the cornerstone of your Pro Tools system. The computer, particularly its central processing unit (CPU), will be called upon to do everything from mixing and automation to effects processing and more. That means the more power your CPU has, the more powerful your Pro Tools software will be. The host computer can be either a PC or a Mac.

In addition to CPU speed, your computer's random access memory (RAM) plays an important role in how your digital audio workstation will perform. It probably comes as no surprise to learn that the more RAM your computer has, the better. More RAM will enable your Pro Tools session to run more real-time processes and will make for an overall more powerful DAW. Avid recommends a minimum of 8 GB of RAM to run Pro Tools 11.

Ideally, your DAW computer should be dedicated solely to music- and audio-related tasks. Other applications running (or even installed) on your system can steal from your computer's overall efficiency when running Pro Tools. Recording and playing back digital audio can be demanding on your computer's CPU, and other programs interrupting the steady stream of data to and from your hard drive can cause major problems. Of course, having such a dedicated computer can be impractical for many users. If you're not able to devote your computer exclusively to Pro Tools, you should avoid running other programs during your Pro Tools sessions.

Audio Interface

All DAWs, regardless of brand, require some sort of audio interface to record and play back audio (also referred to as input/output, or I/O for short). Interfaces can vary from professional-quality devices used at large professional facilities (these facilities often use multiple interfaces together) down to the built-in microphone and headphone outputs of a laptop computer. Across this spectrum, different manufacturers have created a wide range of products featuring various numbers of channels and different levels of audio quality.

Your audio interface is the doorway for audio going to and coming from your computer. Generally speaking, your computer will connect directly to the audio interface, and your various audio devices (mixing boards, keyboards, and microphones) will connect to the interface's available audio inputs. To listen to

your work, you should connect the main audio outputs of your interface to an amplifier, and from there to monitor speakers. If you're using powered monitors (those that have built-in amplifiers), you can connect the outputs of your interface directly to the inputs of the speakers.

In past versions of Pro Tools, the Pro Tools software has been unbreakably linked to Avid audio interfaces. For example, to run Pro Tools 8 LE, you needed to have a connected Avid interface (such as an Mbox), or the Pro Tools software would not launch. Possibly the most significant change in Pro Tools 9 was the breaking of this dependence on Avid hardware. Pro Tools 11 continues to be independent of specific hardware requirements, and is compatible with any interface with ASIO (Windows) or Core Audio (Mac) drivers. That means you can use Avid interfaces, a third party's, or even the built-in I/O of your computer.

Hard Drive(s)

Just as traditional tape-based recording studios rely on magnetic tape as a storage medium, Pro Tools relies on hard drives for the recording and playback of its digital audio. The drives can be IDE/ATA, SATA, eSATA, FireWire, SSD, or USB 2.0.

It is important to remember two factors when choosing a hard drive for Pro Tools: size and speed. First, a larger-capacity drive will enable you to store more audio data. This will translate into more minutes of audio that you can store, higher-resolution digital audio, or both. A fast drive will allow for more efficient transfer of data (also called throughput) when you are recording and/or playing back audio. This can translate into higher track counts and more reliability when working with complex sessions.

Using a Dedicated Audio Hard Drive

Adding a second drive dedicated to the storage of your Pro Tools sessions and audio files will greatly increase your Pro Tools system's performance, whether your system is used solely for Pro Tools or is more of a general-purpose machine. You'll still want to install the Pro Tools application on your computer's system drive, but when you create your sessions (something I'll get into later in this chapter), you can put them on your second "audio" drive. That way, you'll have one hard drive occupied with the nominal tasks of your computer and another separate drive, with its own read/write head and throughput, dealing only with your Pro Tools session and audio.

> ❄ **PARTITIONING YOUR HARD DRIVE**
>
> If you're wondering whether partitioning your system hard drive will do the trick, the short answer is no. Partitioning a single hard drive may give the outward appearance of creating a second drive, but in reality, there is still only one physical hardware device and only one throughput path. Although partitioning can be a convenient way of organizing your data, partitioning doesn't add another physical drive with its own read/write head, so it won't give Pro Tools the same benefit with real-time tasks as a second physical drive would.

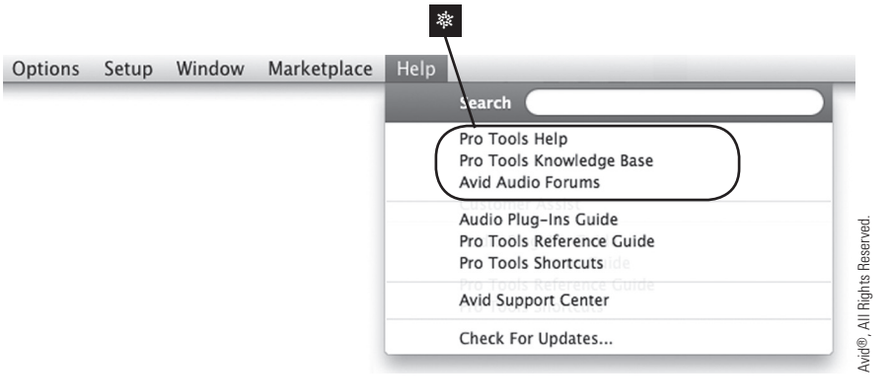
Great Resources: Avid's Compatibility Documents, Knowledge Base, and In-Application Help

You might have noticed that although I've talked about desirable qualities in a DAW system, I haven't mentioned many specific details about what kind of hardware you should be using (things such as minimum CPU speed and chip-set types). I apologize if I seem evasive on the subject, but the truth is that the landscape of computer-based products transforms and grows so rapidly that any specs I quote here might well be out of date by the time you read this. Don't despair, though! Avid has provided the help you need to build the Pro Tools system you want in the form of an up-to-date list of compatible hardware. You can find this list on Avid's website, at the following URL: http://avid.force.com/pkb/articles/faq/compatibility.

To view more technical information and alerts, you can also take a look at the Avid Knowledge Base. Although it takes a few steps to get there, it's well worth the trip. On the top of the Avid home page (www.avid.com), click on the Support and Services link. Then, on the Support and Services page, click on the Support Resources tab. On the Support Resources page, click the Find Answers link and choose Knowledge Base—Audio from the list that appears. Once you're in the Knowledge Base, you can search in a number of ways, including by product or keyword. Whether you're designing a Pro Tools system or troubleshooting one, the Knowledge Base is a trove of technical tidbits!

If that seems like too much work, don't fret. You don't even need to leave the application! Let's take a look at two more places you can go to get answers you need:

- The top section of the Help menu includes links to online support resources, including Pro Tools Help, the Knowledge Base, and online user forums.



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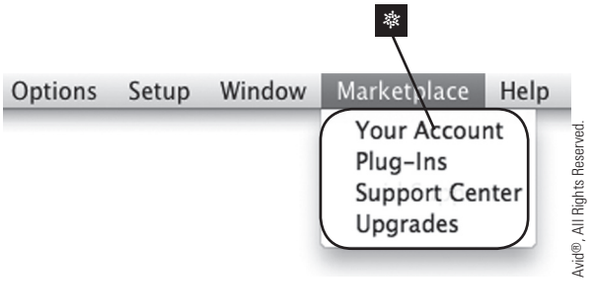
- The Marketplace drop-down menu allows you to quickly access your Avid account, go to a plug-in purchasing website, purchase support, or buy and upgrade.



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A Word About Installation

The installation process is basically broken down into two easy steps:

1. Install the Pro Tools software.
2. Install the appropriate drivers (ASIO or Core Audio) for the interface(s) that you will use with your system. Drivers for Avid interfaces are included with your Pro Tools 11 installation materials.

IMPORTANT OPERATING SYSTEM NOTE

Because Pro Tools 11 is a 64-bit application, it can only run on 64-bit operating systems (such as Windows 8 or Mac OS X 10.8.4). Pro Tools 11 will not launch on any 32-bit operating system.

CAN IT BE THIS EASY?!?

In previous versions of Pro Tools, the installation process was, if not onerous, certainly a bit time consuming. With Pro Tools 11 on a Mac computer, those headaches are a thing of the past. Pro Tools now sports a simple drag-and-drop installation method. Just drag the Pro Tools application into the Applications folder, and you're ready to launch Pro Tools!

PRO TOOLS 11 AND PRO TOOLS 10 CO-INSTALLATIONS

If you're a Pro Tools user already and aren't quite ready to let go of your 32-bit plug-ins, take heart! Pro Tools 11 and Pro Tools 10 (version 10.3.6 or later) can be installed on the same machine. It's worth mentioning, though, that only one version of Pro Tools can be launched at a time.

Finding Installation Information

The documentation you received with your Pro Tools software and hardware is the first place to look for information on installation. In the ever-changing world of computers, though, that documentation could quickly become out of date. Once again, the Avid website is an invaluable resource. Just go to the Pro Tools Updates page in the Avid Knowledge Base (http://avid.force.com/pkb/articles/en_US/download/en355241) to see a comprehensive list of all Pro Tools versions dating back to version 5!

The documentation that came with your Pro Tools product, combined with a little Net surfing (if needed), should enable you to successfully install and configure your Pro Tools system. Once that's finished, you're ready to move on.

Checking for Software Updates

Wouldn't it be great if there were a way for Pro Tools to help you out with software updates? Good news: Pro Tools 11 includes exactly that functionality. It can search for any updates, bug fixes, and so on that are relevant to your system. Better yet, Pro Tools 11 can also check to see whether there are any updates

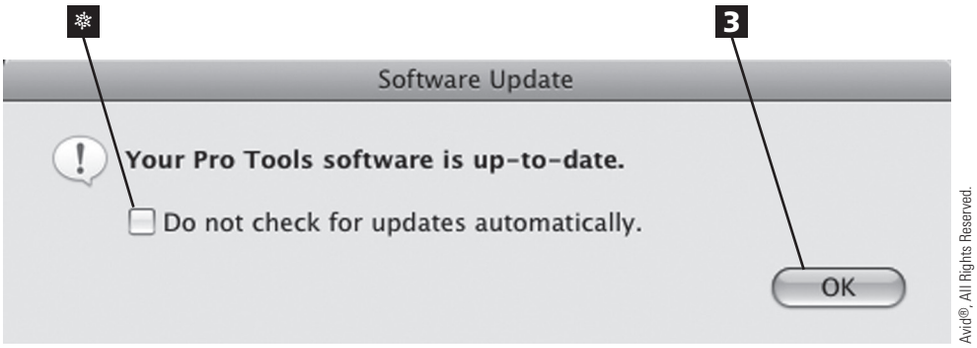
needed or available for your installed plug-ins. How cool is that? Pro Tools 11 even differentiates between paid and non-paid updates, so you can choose to make the larger version leaps at your discretion.

Using this new feature is very easy—so easy, in fact, that there's virtually nothing you need to do. By default, Pro Tools will quickly check for updates when you launch the program. All you need to do is make sure your computer is connected to the Internet, and this will happen automatically. (Don't worry. This check is very quick and doesn't add too much time to the Pro Tools launch.)

If you want to do an update check manually, you can do that as well. It's also a simple process:

1 Once Pro Tools is launched (something I'll go into later in this chapter), **click** on **Help**. The Help menu will appear.

2 **Choose Check for Updates.** The Software Update progress window will appear.



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3 If there are updates to be installed, you will be directed to a website with links for the appropriate download(s). If you are up to date, you'll see the dialog box shown here. **Click** on the **OK button** to finish the process.

- If you don't wish for Pro Tools to perform automatic update searches upon startup in the future, just click on the Do Not Check for Updates Automatically checkbox.

iLok Protection

Long-time Pro Tools users should be familiar with the iLok method of copyright protection. It's been widely used for plug-in authorizations by many manufacturers (including Avid). For those who are new to the term iLok, think of it as a key that unlocks your software and enables it to run. Starting with Pro Tools 9, all versions of Pro Tools now rely upon this method of protection.

A second-generation iLok (left), along with an original iLok (right). Pro Tools 11 requires a second-generation iLok to run.

Andy Hagerman, All Rights Reserved.

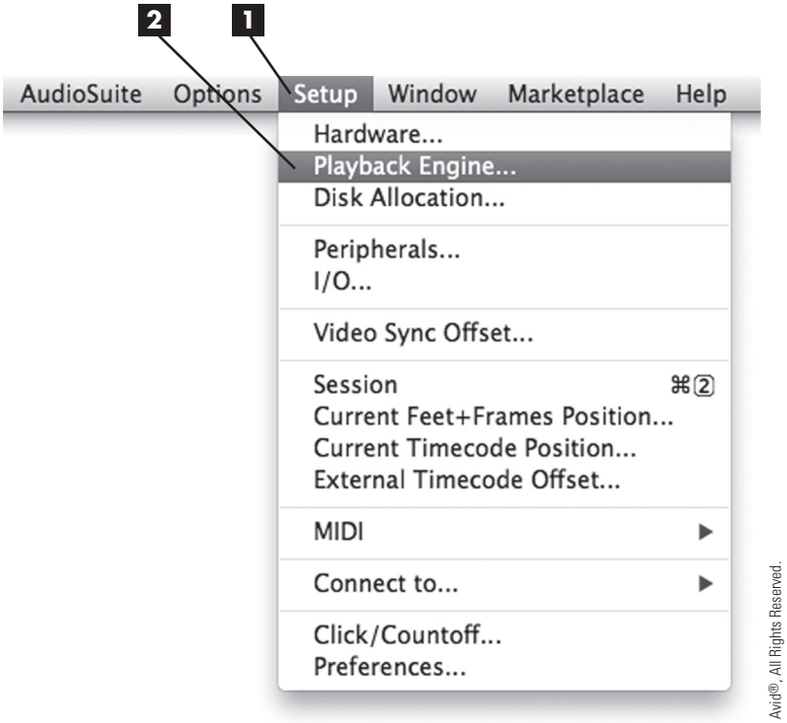
Pro Tools 11 requires a second-generation iLok—a hardware device that is roughly the size of a small USB flash drive. It can hold a large number of software licenses. In fact, this iLok can store more than 500 licenses. When you purchase Pro Tools 11, a second-generation iLok is included in the box. This iLok comes pre-loaded with the Pro Tools 11 license, so all you need to do is plug it into an available USB port or a USB hub attached to your computer, and you're ready to launch Pro Tools.

Your iLok hardware can be used for more than just your Pro Tools licenses, though. If you go to www.ilok.com, you can create an account into which you can deposit additional software licenses. With the convenience of the iLok copy-protection system, you can even have Pro Tools installed on multiple computers (though of course, you'll only be able to run Pro Tools when the iLok is physically attached)!

Choosing an Audio Engine

As discussed, the open design of Pro Tools 11 enables users to employ a wide variety of devices for audio I/O—in fact, any audio interface that includes an ASIO or Core Audio driver. To make the most of this new feature, though, you'll need to know how to choose the audio engine that works best in any given situation. To get this fundamental control over Pro Tools, you'll make use of Pro Tools' Playback Engine dialog box.

1. **Click** on Setup. The Setup menu opens.
2. **Choose Playback Engine.** The Playback Engine dialog box will appear.



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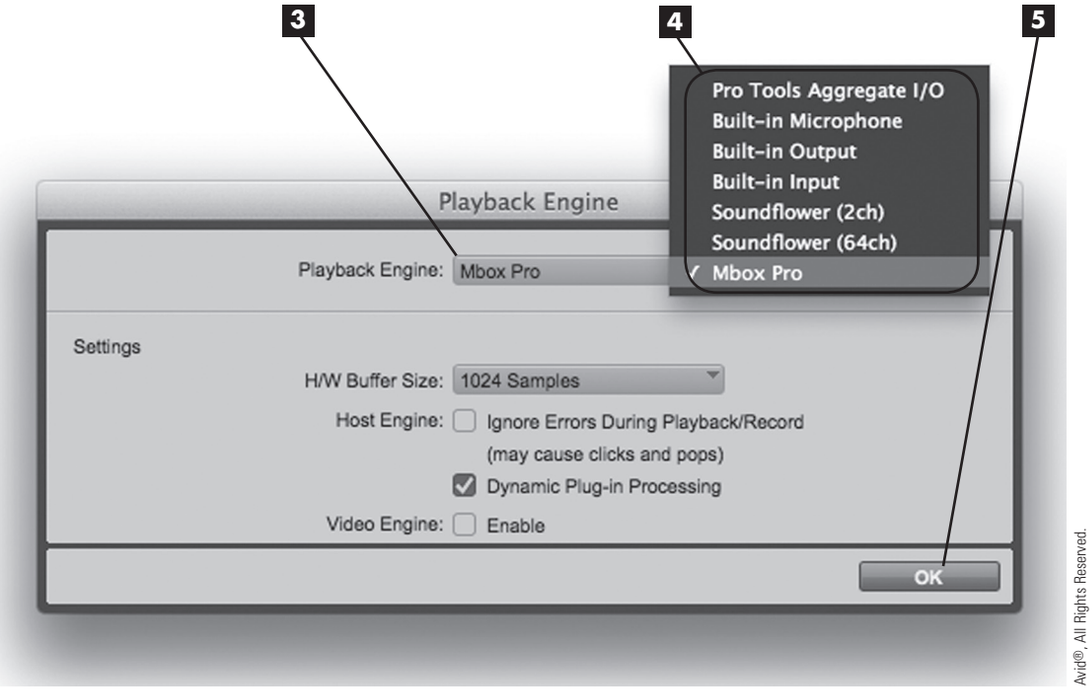
3. **Click** on the **Playback Engine** selector. A menu of available hardware options opens.
4. **Choose** the **interface** that you want Pro Tools to use for recording and playback of audio. In this image, I've chosen my trusty Mbox Pro.
5. **Click** on the **OK button**.



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Tips on Choosing an Audio Engine

If there's a downside to this new flexibility, it's that it's sometimes hard to make a choice! Of course, convenience is a factor. Here are some other things to keep in mind:

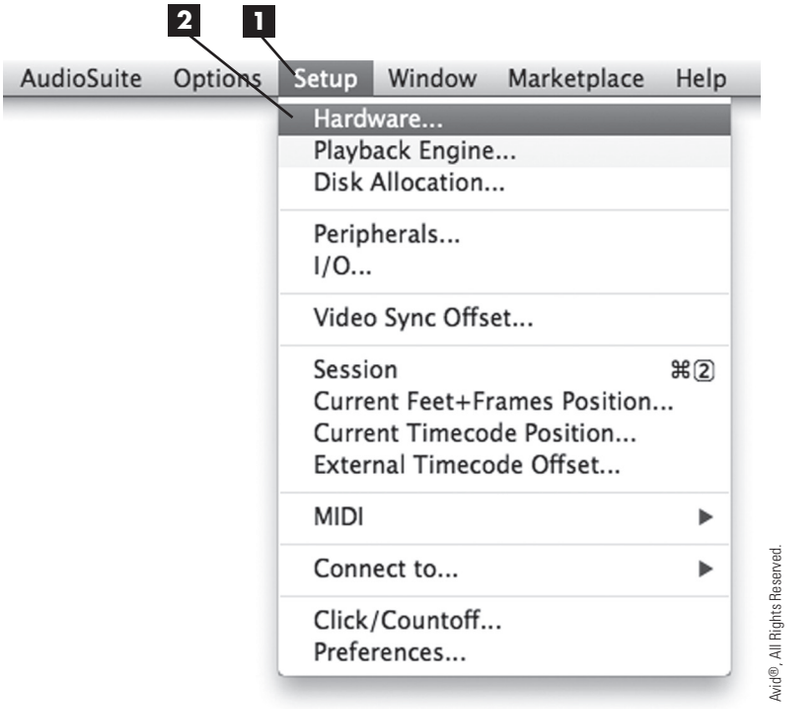
- When it comes to audio quality, one of the biggest factors in terms of clarity and stereo-imagery width is jitter—the lower the better. Jitter specs for audio gear are often printed on product documentation, and are readily available for professional interfaces on the Internet. Look for the interface with lowest jitter, and choose that one for your audio interface in the Playback Engine dialog box. If your audio interface's documentation doesn't include specific information about jitter, it's a safe bet that an external interface will have lower jitter than your computer's built-in I/O.
- If your computer has built-in sound capabilities (most do), you'll see some degree of built-in input or output options listed in the Playback Engine menu. Take care—they mean what they say! For example, if you choose Built-In Output, you'll have no input capabilities in your Pro Tools system. If you choose Built-In Input, you'll have no output! If you want to more fully use your Mac computer's built-in audio hardware, choose Pro Tools Aggregate I/O. (I'll talk more about that a little later in this chapter.)
- If you have a Pro Tools session open and you change your audio engine, Pro Tools will automatically save and close your session. Click on the OK button to relaunch the session with the new audio engine. If you don't want to overwrite your session file, choose the Save As option before making your audio engine changes. (I'll talk about the Save As option at the end of this chapter.)

Setting Up Your Hardware

After you've chosen an audio engine, you might want to tweak it a bit, configuring the various options that are included with your audio interface. That's where the Hardware Setup dialog box comes in. It's the second stage in the process of getting your audio hardware properly configured for use with Pro Tools.

1 **Click** on **Setup**. The Setup menu will appear.

2 **Choose Hardware.** The Hardware Setup dialog box will appear.



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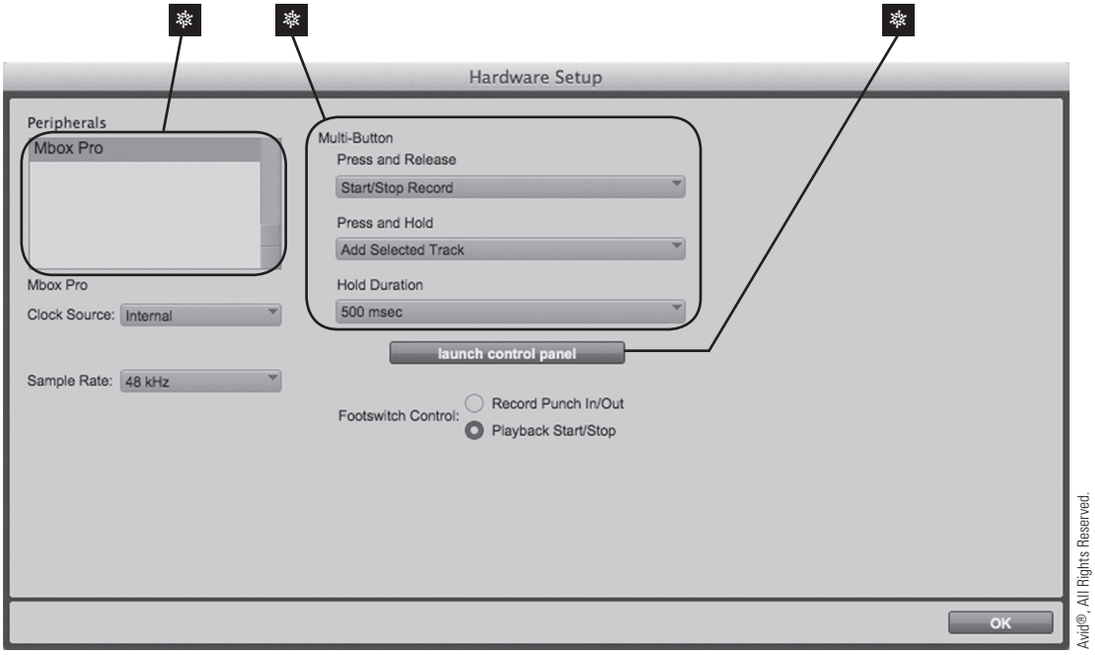
The Hardware Setup dialog box displays information related to the audio engine that you chose in the Playback Engine dialog box. If you change audio engines, the information displayed in the Hardware Setup dialog box will change accordingly. There are a few aspects that are commonly seen in this dialog box (this example shows the Hardware Setup dialog box that you would see with the Mbox Pro):

- On the lower-left side, you can choose a sample rate and clock source.
- Depending on the device, you'll see different options in the center of the Hardware Setup dialog box. In this case, you have the ability to configure the Mbox Pro's Multi-Button.
- Many interfaces allow further customization through a dedicated Control Panel. In this case, if you click on the Launch Control Panel button, you'll see the device's dedicated mixer.



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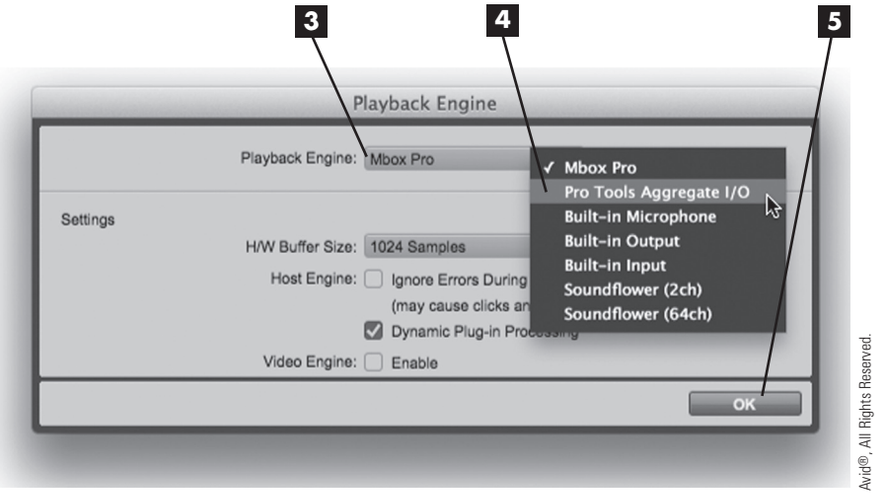
Although the appearance of the Control Panel will vary from device to device (shown here is the Mbox Pro Control Panel), it is here that you'll gain a deeper level of control over your audio interface.

The Pro Tools Aggregate I/O

For the most part, Pro Tools is identical whether you're using a PC or a Mac. However, there is an interesting feature that is currently available only on Mac computers: the Pro Tools Aggregate I/O. Using the Aggregate I/O, you can simultaneously use multiple interfaces. For example, you can use an external audio interface, plus your computer's built-in inputs and outputs. Let's take a look:

1. **Click** on **Setup**. The Setup menu will appear.
2. **Choose Playback Engine.** The Playback Engine dialog box will appear.



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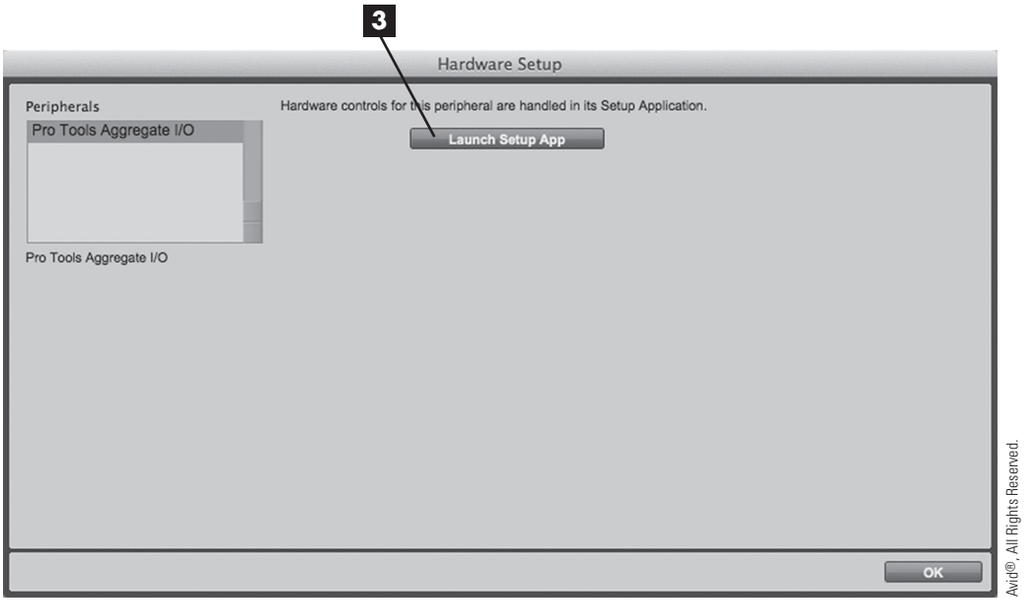
3. **Click** on **Playback Engine**. A menu of available hardware options will appear.
4. **Choose Pro Tools Aggregate I/O**.
5. **Click** on the **OK button** to close the Playback Engine dialog box.

Now, let's go back to the Hardware Setup dialog box:

1. **Click** on **Setup**. The Setup menu will appear.
2. **Choose Hardware.** The Hardware Setup dialog box will appear.



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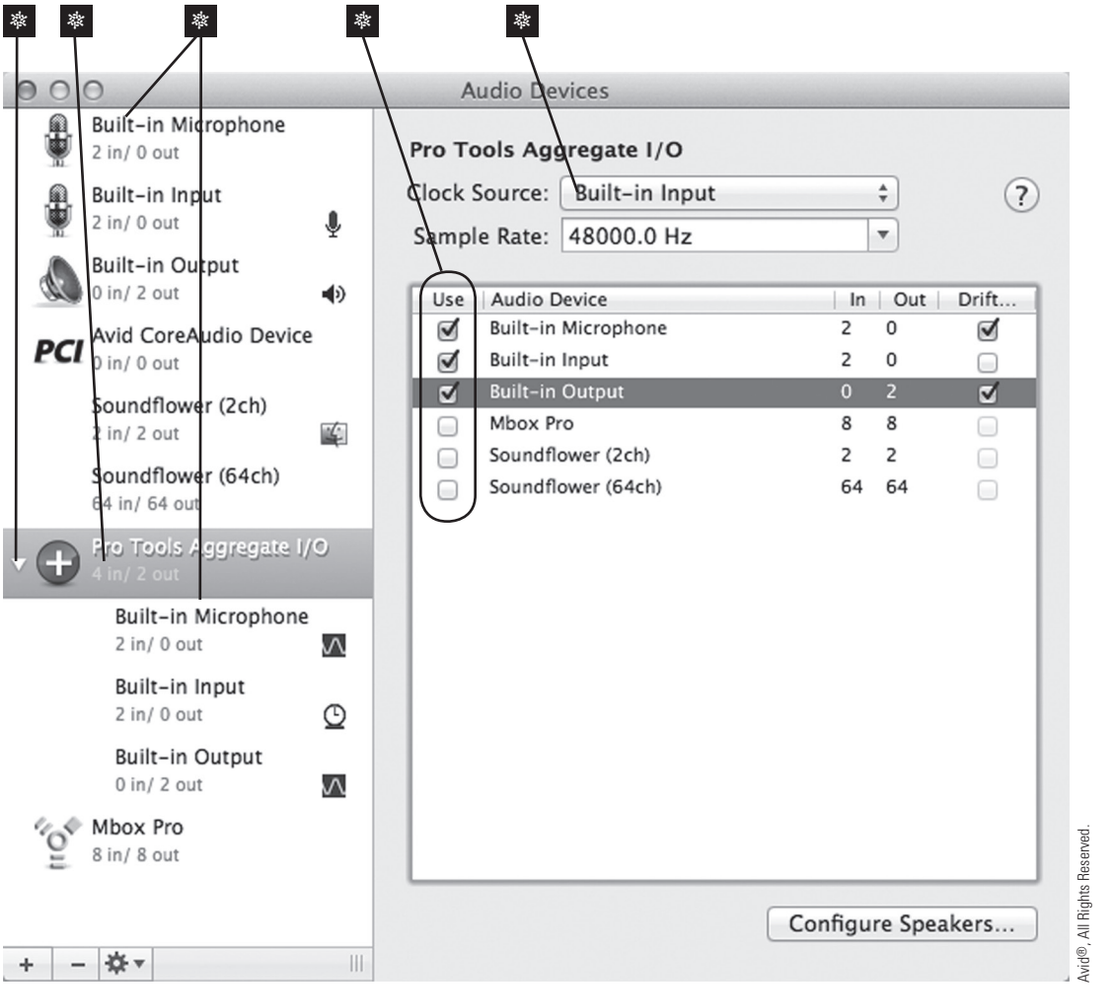
3. **Click** on the **Launch Setup App** button. The Audio Devices dialog box of the Mac Audio MIDI setup dialog box will appear.

The Audio Devices dialog box lists not only individual audio devices that are attached (or built in) to your computer, but also a collection (or aggregate) of devices that can be used collectively. There are a few essential elements of this dialog box that will help you get the most out of your system:

- To reveal a list of all the devices included in the Pro Tools Aggregate I/O, click on the triangle icon to the left of the Aggregate icon.
- Click on the Pro Tools Aggregate I/O menu item to manage the aggregate devices. (These devices appear in the right section of the Audio Devices dialog box, as shown here.)
- The first thing you'll want to do is to choose a clock source for your aggregate devices. Because the Pro Tools Aggregate is intended for use with your Mac's built-in I/O, Avid recommends using the default clock settings.



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- To add or remove devices from your aggregate, click on the checkboxes in the Use column. As you might expect, checked boxes indicate that the device is an active part of the aggregate. (Once again, please remember that the Pro Tools Aggregate I/O was designed with only your built-in I/O in mind.)
- Individual devices often include some level of configurability—things like volume control, audio source, and so on. Click on the device you want to tweak, and you'll see the setup options in the right section of the Audio Devices dialog box. (You can select a device either within the aggregate list or outside the aggregate.)

DISCLAIMER

The Aggregate I/O opens up a huge variety of configurations, and there isn't enough time or resources for Avid to test and qualify every possible permutation of devices. With that in mind, it's worth noting that Avid officially supports only the aggregation of a Mac's built-in I/O.

❄ MAXIMUM I/O

When dealing with multiple interfaces, you can really start adding up channels of I/O. But is there any limitation? Actually, yes. With Pro Tools 11 (the basic standalone software version), you'll have up to 32 channels of inputs and outputs. That's often just fine for smaller facilities, but if you need more, consider Pro Tools|HD Native, which supports up to 64 channels of I/O, or Pro Tools|HDX, which maxes out at a whopping 192 channels of I/O!

❄ DRIFT

The Drift checkbox allows you to enable individual members of the Pro Tools Aggregate I/O that aren't connected via word clock connections to resample their outputs as needed. As a general rule, click the checkbox for any non–word clock devices except the device chosen as a clock source.

Understanding Sessions and Files

Now you've gotten Pro Tools installed, and your system is set up (at least from a hardware perspective). Before you get any deeper into the world of Pro Tools, you should take a moment to understand the general principles behind this powerful digital audio workstation. An understanding of Pro Tools' overall architecture and how different elements work together is important fundamental knowledge as you continue to grow as a Pro Tools user.

Pro Tools Is a Pointer-Based Application

It's common to refer to a cursor as a pointer. But when discussing a pointer-based application like Pro Tools, we're referring to the way the program deals with digital audio data. In Pro Tools' case, this pointer-based structure can be broken down to three basic interdependent elements: session files, folders, and audio files. In this context, the term *pointer* refers to the way your Pro Tools session file will access (or point to) other files on your hard drive as your session plays.

A session folder is created when you create a new session. It contains the following items (as needed):

- **Session file.** The session file, which bears the project's name and has a file extension of .ptx, is at the top of the Pro Tools hierarchy. This is the file created by Pro Tools when you create a new session, and it's the file you open to return to a session you've already created. Although this file is relatively small, it is the master of all your session elements. Session files have a .ptx extension and contain the following session elements:
  - The names, types, and arrangement of all tracks in your session
  - All MIDI data
  - Essential settings, such as inputs and outputs
  - All edits, fades, and automation data

SESSIONS AND AUDIO

It might appear as if the only thing you need is a session file, but that's usually not the case. Although session files contain all the important aspects of a project, they don't actually contain any audio. Instead, a session file refers (or points) to audio files located in dedicated folders within your session folder.

- **Audio Files folder.** As soon as audio is recorded, it's stored in an Audio Files folder within the session folder. Different takes are stored in this folder as individual audio files. When you play a session, Pro Tools accesses, or points to, the audio files in this folder.

HOW DO AUDIO FILES GET THEIR NAMES?

When you record audio in Pro Tools, the name of the file you create follows the name of the track on which it was recorded. For example, if you record onto a mono (one-channel) Audio track named Bass, the files created by Pro Tools in the Audio Files folder will be named Bass_01, Bass_02, and so on as you record takes on this track. In the case of stereo Audio tracks, two mono files (one for the left side and one for the right) are usually created. For example, if you record onto a stereo Audio track named Drums, two files, named Drums_01.L and Drums_01.R, will typically be created.

There are additional folders that can be created by Pro Tools as needed:

- **Clip Groups folder.** Pro Tools enables you to select multiple clips (something I'll talk about later in this chapter) and link them together in a single clip group. Digital audio, MIDI, and video clips can be grouped together, making editing much faster and easier. You'll learn more about clip groups later; for now, just know that groups you create are stored in this folder. (If you don't create any clip groups in a given session, a folder won't be created.)
- **Rendered Files folder.** Pro Tools 7.4 introduced a great feature called Elastic Audio. This was a very cool addition indeed, and one you'll learn about in Chapter 10, "Moving to the Next Level: Tips and Tricks." For now, all you need to know is that when you work with Elastic Audio, you have the option of rendering your elasticized audio to an audio file—and when you do, it will be stored in this folder.
- **Session File Backups folder.** Depending on your preference settings, Pro Tools can automatically create backups of your sessions and store them in this folder. By default, a new session backup is created every five minutes, and the folder keeps the last 10 backup files. This is highly recommended, particularly for new Pro Tools users; it can help you recover quickly if you encounter technical trouble.
- **Plug-in Settings folder.** In Pro Tools, you have the option of using plug-ins, which are programs designed to work within the Pro Tools environment and function as virtual effects. (You'll learn more about plug-ins in Chapter 8, "Basic Mixing.") When you create specific plug-in presets, you have the option of saving them in this session subfolder.
- **Video Files folder.** When your session calls for a video track, you can save it in this session subfolder.

WHAT ABOUT THE WAVECACHE?

There's one more file you'll often find in your session folder that I haven't talked about yet. It's a small file named WaveCache.wfm, and it stores all the waveform overviews for any audio in your session. Waveform overview is a fancy way of describing the visual representation of audio waves that you might see on an Audio track. This small file is automatically created and updated, so there's nothing you need to worry about with it!

Clips Versus Files

Given the fact that Pro Tools records audio to individual files on your hard drive, how do you later access these files? Simply put, when audio is recorded to an Audio track (or even MIDI data to a MIDI track), Pro Tools creates an object called a clip in the Edit window. In the case of Audio tracks, these clips refer (or point) to files on your hard drive, triggering them to sound as your session plays.

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Here's a close-up of the Pro Tools Edit window. There are three Audio tracks in this session (Vocal 1, Vocal 2, and Vocal 3), and a single clip on the Vocal 2 track.

Working with clips has many advantages. One of the first you'll discover is that you have the ability to move them earlier or later on the session's timeline, enabling you to position the clips precisely in time. An environment like this, in which you have the ability to manipulate elements independently on the timeline, is commonly described as nonlinear. In addition to moving clips earlier or later in time, you have the option of moving them to other similar tracks. (In other words, you can move a clip on a mono Audio track to another mono Audio track, and so on.)

Nondestructive Editing

Another great advantage of pointer-based editing is that you can nondestructively trim or split the clip—meaning no audio data is lost, so you can always undo what you've done. This can be a tricky concept, so let's take a look.

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In this example, let's assume that the clip named Vocal Comp is playing an audio file of the same name in the Audio Files subfolder. What if you don't want to use the whole file in your session? No problem! You can just adjust the start or end point of that clip, effectively taking the unwanted bits of audio out of your session.

Does this mean you've changed the file on your hard drive? No! You've only changed the clip that is pointing to that file, so only a portion of that file will be heard in the session. Don't worry; because you haven't changed the audio file (only the clip that is pointing to it), you can always drag the clip boundaries back out if you change your mind later!

In addition to being able to trim data, there are other situations in which nondestructive editing can aid you in your production work, and you'll discover them as this book proceeds. The bottom line is that a nonlinear, pointer-based environment coupled with nondestructive recording and editing gives an educated Pro Tools user a huge amount of flexibility and power, and the ability to undo changes and operations when needed.

Basic Pro Tools Operation

It's the end of the beginning. You've set up your system efficiently, taken some time to understand the way Pro Tools works, and now, based on that understanding, you're ready to start working.

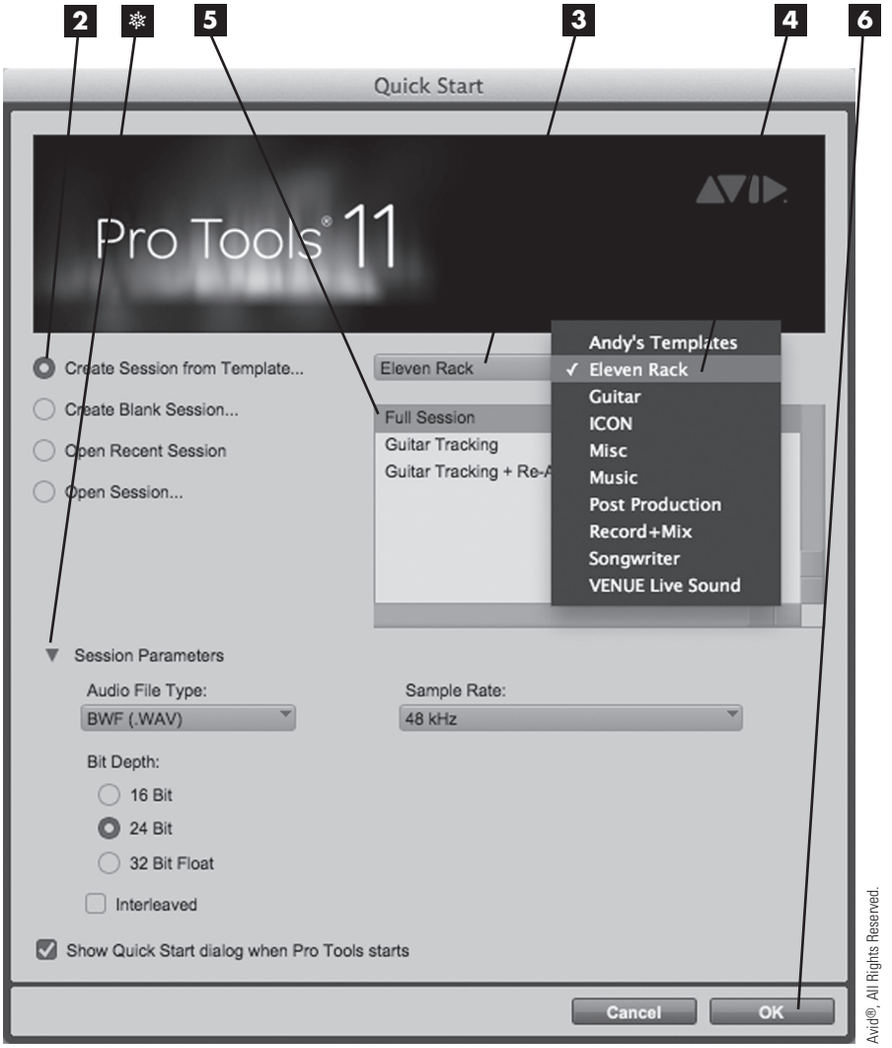
The Quick Start Dialog Box

The Quick Start dialog box will appear when you launch Pro Tools and will give you a number of useful options for creating or opening a session. Let's run through them one by one.

To create a session by choosing a template, follow these steps:

1 **Click** on the **Pro Tools program icon** to launch the Pro Tools application.

2 **Click** on the **Create Session from Template option button** in the Quick Start dialog box. A list of template categories and template files will appear to the right of the option button cluster.



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WHAT'S A TEMPLATE?

What's a template? I'll get into that later in this chapter and book. For now, just know that opening a template session will create a new session, complete with basic tracks, plug-ins, and so on, so that you can get straight to work.

3 **Click** on the **Template Category menu** to reveal a list of categories. (Note that you can organize your template list into different categories. You'll learn how later in this chapter.)

4 **Choose** a **category**. The list below the menu will be populated by the templates in that category.

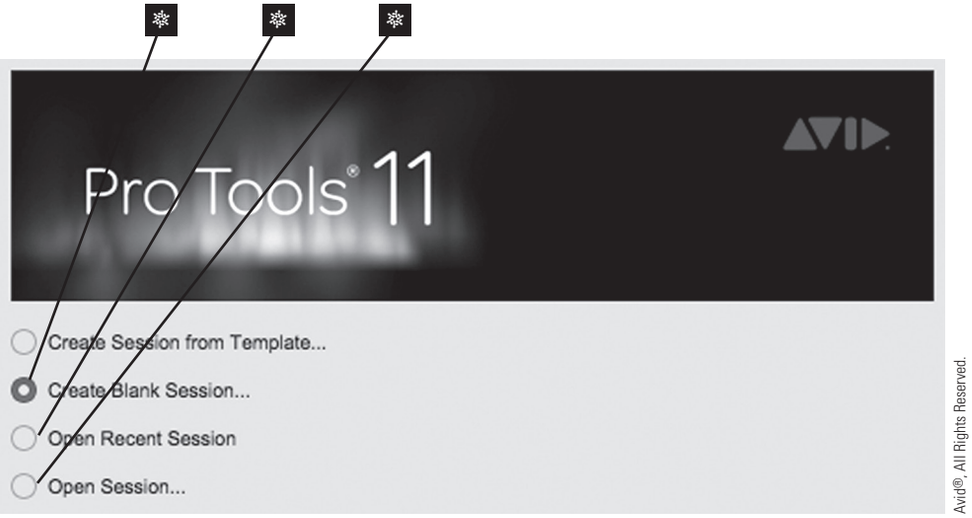
5 **Click** on the **template** you want to load.

- Click the Session Parameters triangle to reveal details about the session you're about to create. If you want to change any aspect of the session, such as the sample rate or bit depth (aspects I'll talk about later in this chapter), you can do it here.

6 **Click** on the **OK button** to create the session. (Clicking on the Cancel button will bypass the Quick Start dialog box.)

Alternatively, you can create or open a session by performing one of the following actions in the Quick Start dialog box:

- Click on the Create Blank Session option button to create a session from scratch. I'll go through the details of creating a new session later in this chapter. Then click on the OK button.
- Click on the Open Recent Session option button to choose from a list of your most recently opened sessions (the list will appear to the right of the option buttons). Then click on the OK button.



- Click on the Open Session option button, then click on the OK button to launch a standard File Open dialog box. This is the same dialog box you can access from the File menu in Pro Tools, which I'll go through in the next section.

BYPASSING THE QUICK START DIALOG BOX

If you don't want to see the Quick Start dialog box when you start Pro Tools (in which case you'd go directly to Pro Tools with no session loaded), just click on the Show Quick Start Dialog When Pro Tools Starts checkbox to remove the checkmark (this box is checked by default), then click on the OK button.

You can also prevent the Quick Start dialog box from being displayed when Pro Tools starts using the Preferences dialog box (which you'll learn quite a bit about as this book progresses). To do so, open the Pro Tools Setup menu and choose Preferences. The Preferences dialog box will open; click on the Show Quick Start Dialog When Pro Tools Starts checkbox in the lower-right corner of the Display tab to remove the checkmark. Then click on the OK button.

Opening a Session When Pro Tools Is Running

Suppose Pro Tools is already running, and you've already gone past the Quick Start dialog box. Here's how to open a session:

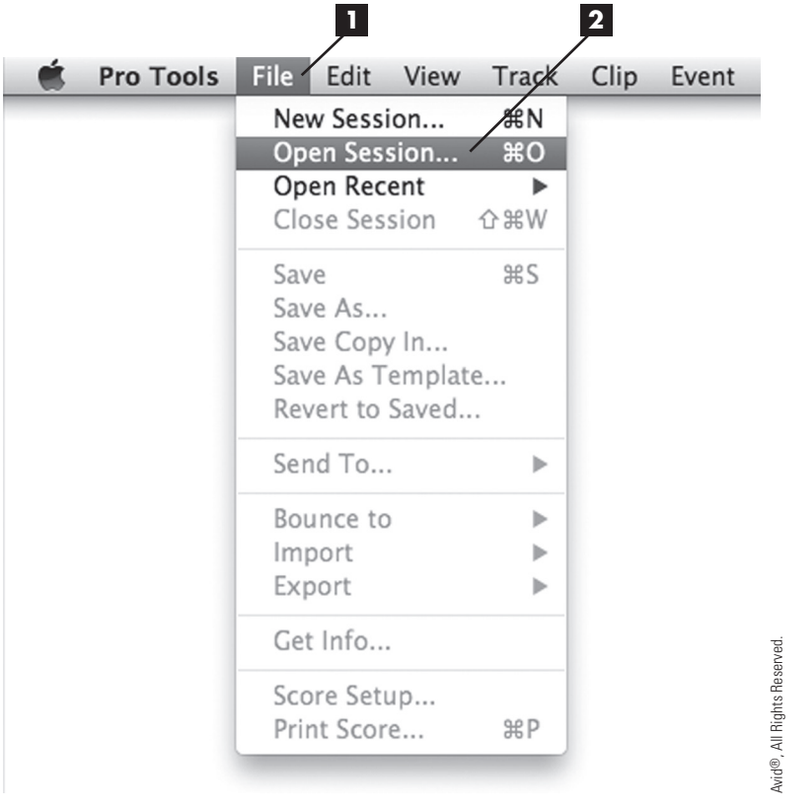
THE CHAPTER 1 EXERCISE SESSION

At this stage, you might not have a pre-existing Pro Tools session to work with. No problem. Included with the online support materials for this book is a number of exercise sessions for you to practice with. You can download these sessions from www.cengageptr.com/downloads. For information on downloading this book's exercise materials, please refer to the "Setting Up Your Session" section of the introduction.

The session that this chapter will use is a little piece called "Listen"—the exercise session is named "Chapter 01 Exercise Session (Listen)." I originally composed and produced this for an audio/video tradeshow in Japan, with the help of Avid Technology's own Tsukasa Tokiwano and Kazumi Mihashi. Also, special thanks go to my dear daughter, Sachiko Hagerman, for helping me with the Japanese! Note that the exercise materials are for educational use only, and not to be used for any commercial purposes.

1 **Click** on **File**. The File menu will appear.

2 **Click** on **Open Session**. A standard File Open dialog box will appear.



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❄ YOUR FIRST SHORTCUT

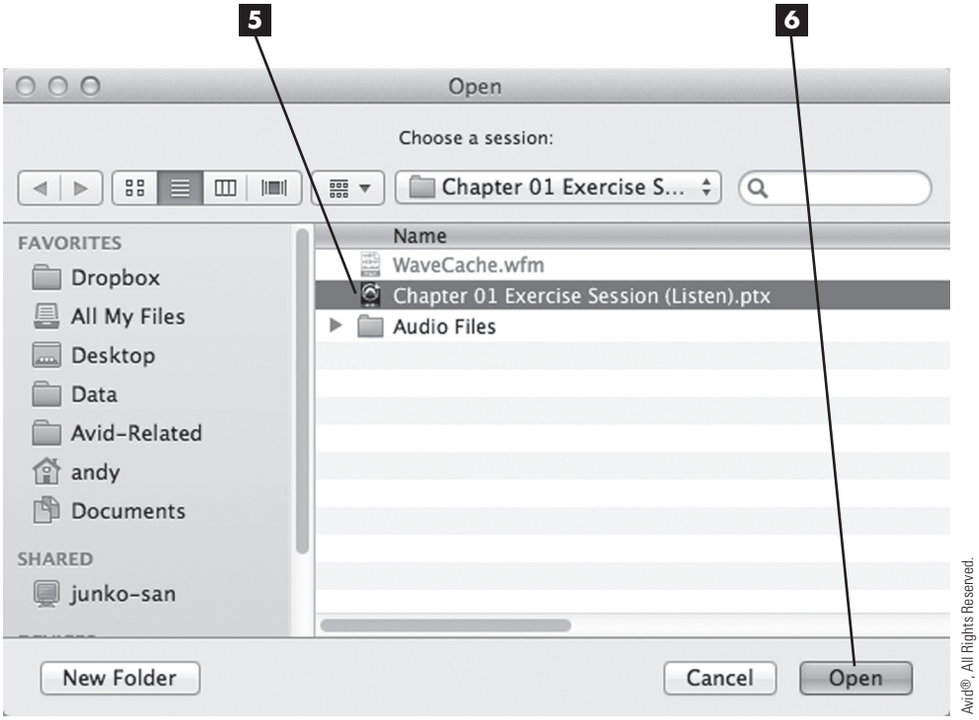
Pro Tools includes shortcut keys that enable you to work more efficiently. The shortcut for Open Session (Command+O on a Mac and Ctrl+O in Windows) is very useful—and easy to remember as well!

3 Using the navigation conventions of your computer's operating system, **select** the **drive**, **folder**, and **subfolder** (if necessary) in which your session folder resides. Remember that the session folder is named after the name of the session, so if you're using the tutorial material, the folder you're looking for is named "Chapter 01 Exercise Session (Listen)."

4 Once the session folder is created, open the folder to display its contents.

5 **Click** on the desired **session file**. The file will be selected.

6 **Click** on the **Open button**. The session will be loaded into Pro Tools.



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❄ OPEN RECENT SESSIONS

The ability to select a recently opened file from a list is fairly common in the software world, and most users will be familiar with this idea from other applications. You've already seen the Open Recent Session option in the Quick Start dialog box, but you also have this available in Pro Tools itself. The Open Recent command can be found immediately below the Open Session command in the File menu. Simply click on Open Recent, and you will see a list of up to 10 of your most recently opened sessions.

Opening a Session When Pro Tools Is Not Yet Launched

In this case, suppose Pro Tools is not yet launched. To open a session, follow these steps:

1 Using the navigation conventions of your computer's operating system, **select** the **drive**, **folder**, and **subfolder** (if necessary) in which your session folder resides. Remember that the session folder is named after the name of the session, so if you're using the tutorial material, the folder you're looking for is named "Chapter 01 Exercise Session (Listen)."

2 **Open** the **folder** that contains the session file. The contents of the folder will be displayed.

3 **Double-click** on the desired **session file**. Pro Tools will launch automatically, and the session will be loaded.

Creating a New Session

Now let's take a closer look at the important process of creating a blank new session. (Many of these topics also apply to opening template sessions.) Once you've gotten your system together and everything working, your next step may

be to create a new session (as opposed to opening a pre-existing session, as you did in the previous section of this chapter). The earlier discussion of how Pro Tools works will come in handy here.

Starting the Process

Earlier, you learned that you can create a blank new session from the Quick Start dialog box, but you can also create a new session from within Pro Tools itself.

1 With Pro Tools running, **click** on the **File menu**.

2 **Click** on **New Session**. The New Session dialog box will open. In a sense, it is a smaller version of the Quick Start dialog box.

MORE SHORTCUTS!

As you explore Pro Tools further, you'll notice that many functions have shortcut keys associated with them. These shortcut key combinations are often displayed to the right of their functions, such as the shortcut for creating a new session—Command +N (Mac) or Ctrl+N (PC). Although there are far too many shortcuts to learn them all at once, learning the combinations for popular functions, such as opening or creating a session, can help you work more efficiently.

3a **Click** on the **Create Session from Template option button** to gain access to your session templates, just as you did in the Quick Start dialog box.

OR

3b **Click** on the **Create Blank Session option button** to create a new session, just as you can do in the Quick Start dialog box. For now, select this button.

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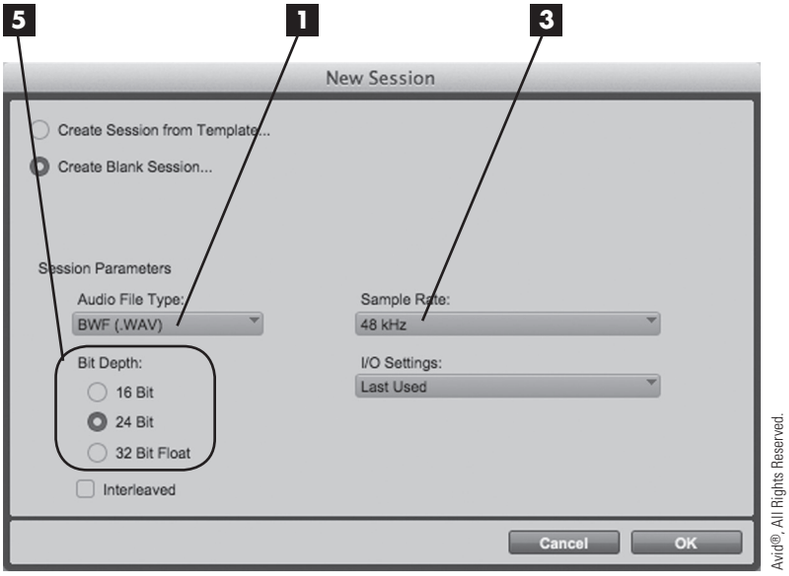
Choosing Session Parameters

Whether you're creating a new session from the Quick Start dialog box or from the File menu, your next task is to choose your session parameters.

1 **Click** on the **Audio File Type selector**. A menu will appear.

2 **Choose** a **file type** from the following options:



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- **BWF (.WAV).** A WAV file is a Windows standard file, and the Broadcast Wave Format (BWF) is a version of this file type that is particularly suited to television and film production. (The file extension is still .wav.) This is a good format choice for session files that will be used in both Mac and Windows systems.
- **AIFF.** This was originally the standard file format for Mac computers.

❄ CHOOSING A FILE FORMAT

Pro Tools' default file format is BWF (.WAV). This generally works well in most situations. If you are planning to share files between Mac and Windows systems, this is the preferred file format. There is no difference in audio quality between BWF (.WAV) and AIFF.

3 **Click** on the **Sample Rate selector**. A menu will appear, showing the sample rates supported by your audio interface.

4 **Select** a **sample rate** for your session.

5 **Select 16 Bit**, **24 Bit**, or **32 Bit Float** as the bit depth for your session.

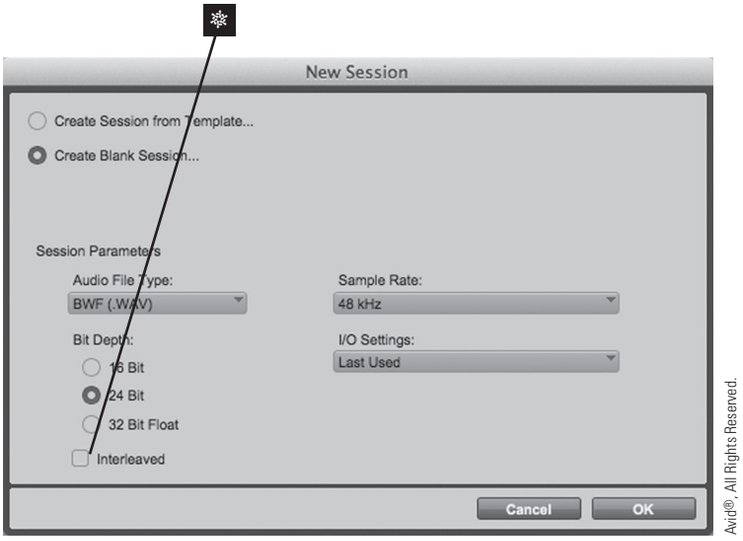
❄ 32 BIT FLOAT AUDIO

For some, the idea of 32-bit floating-point audio is something new, as it is virtually unused outside of DAW production environments. Very simply put, using 32-bit floating-point audio will give you a larger dynamic (volume) range, which can greatly simplify the mixing process (especially in complex sessions using plug-in effects). On the other hand, 32-bit audio will require more hard-disk storage space and processing power, and using 32-bit audio may result in lower track counts (especially if you're using a slow hard drive).

❄ SUPPORT FOR INTERLEAVED FILES

An interleaved audio file is a single file that has multiple channels (e.g., stereo) combined into a single file. A good example of this would be the tracks on an audio CD. If you look at the files, there's only one per track, although you'll hear a stereo output. That's because they're interleaved.

- To set up your session to use interleaved audio files, select the Interleaved checkbox.



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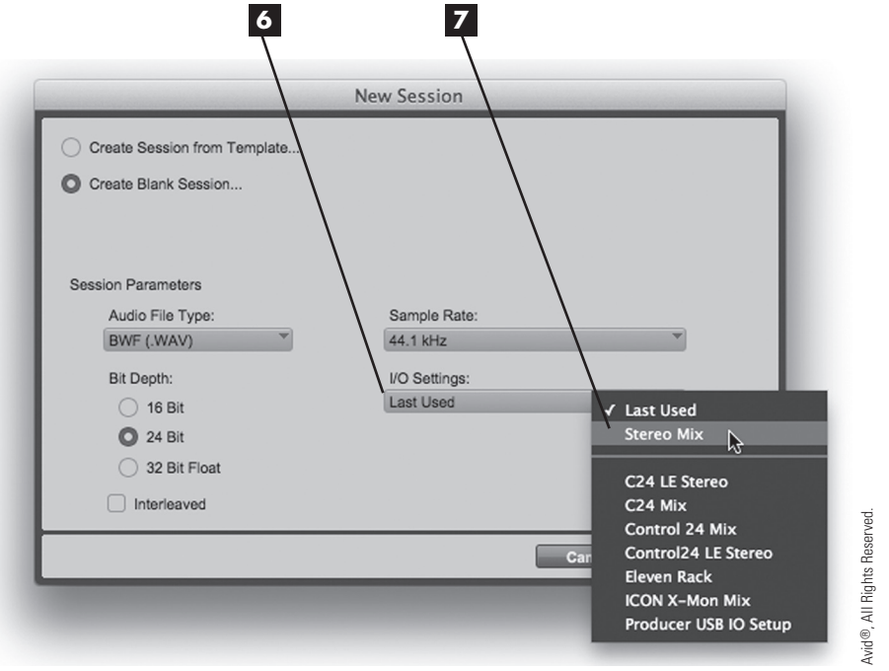
If you don't choose to use interleaved files, then any interleaved files that are imported (audio CD track files, for example) will be split into individual mono files. (In the case of an audio CD track, it would be split into a left channel file and a right channel file.)

6 **Click** on the **I/O Settings selector**. The I/O Settings menu will appear.

7 **Select** your **I/O (Input/Output) settings** for this session. For now, choose Stereo Mix. The option will be selected.



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WHERE CAN I LEARN MORE ABOUT I/O SETTINGS?

Your I/O settings determine the assignments and names of inputs, outputs, inserts, and buses. Don't worry if this doesn't make a lot of sense now; you'll learn more about how to make the most of your I/O settings in Chapter 3, "Getting Started with Audio."

8 You've made some very important choices. The next step is to choose a name and location for your session. **Click** on the **OK button** to proceed. The Save dialog box will appear, and you're ready to move on.

Choosing the Name and Place

Two of the most important skills you can learn as a DAW user are file management and documentation. Although these are fairly simple and straightforward tasks, you shouldn't underestimate their importance. The last thing you want is to misplace a session and waste valuable time trying to find it—or worse, inadvertently delete a session because it was in the wrong place!

1. If you followed the steps in the previous section, you should now be seeing a Save dialog box. The next thing you have to do is to choose the name of your session. **Type** a descriptive **name** in the Save As text box in the Save dialog box.
2. **Navigate** to the desired **drive**. If you have a hard drive devoted to digital audio, choose that drive. In some cases, you might also want to create a new folder in which to put your session folder—for example, when grouping sessions of a similar genre or artist. If you do, create a new folder according to the normal conventions of your operating system. Remember, Pro Tools will automatically create a session folder as well!
3. Once you've set your name and location, **click** on the **Save button**. Your session will be created and loaded into Pro Tools. Good job!

Playing a Session

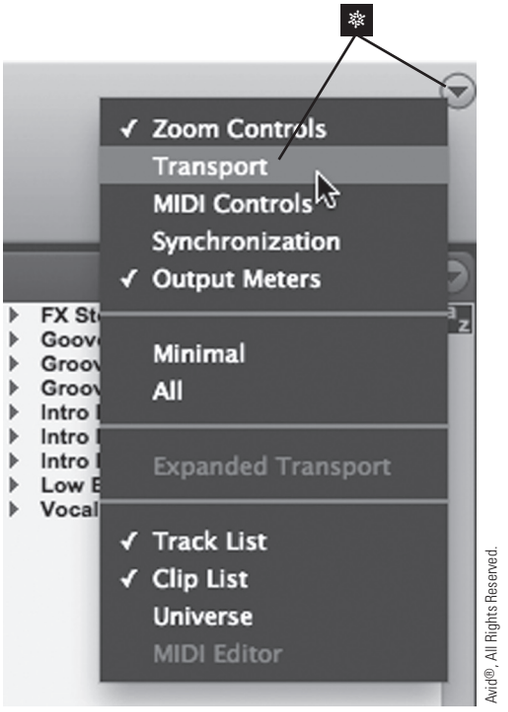
Let's assume you have Pro Tools running and you've opened a pre-existing session (for example, the Chapter 01 Exercise Session you may have opened earlier). Wondering how to play it? No problem—it's easy!

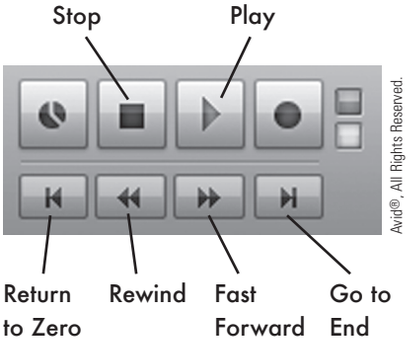
You'll find a transport section in the top area of the Edit window (which you'll learn more about in the next chapters). It will help you with basic play and record operations. It looks very much like the controls you would find on almost any media player. Let's take a look at the basic functions:

HOW TO GET TO THE EDIT WINDOW AND TRANSPORT CONTROLS

If you're not seeing any transport-style controls at the top of your Pro Tools window, you've probably opened your session into the other main window (called the Mix window, which looks very much like a mixing console). Getting to the Edit window is very easy: Just open the Window menu at the top of the Pro Tools window and choose Edit.

- If you are in the Edit window and you are still not seeing any transport controls, click on the small triangular button in the upper-right corner of the Edit window and choose Transport from the list that appears. (This is a section of the Edit window that I'll go into in greater detail in Chapter 2, "Getting Around in Pro Tools.")





- The Stop button—you guessed it—stops playback.
- The Play button plays back your session from the current position.
- The Return to Zero button takes you directly to the beginning of your session.
- Rewind quickly moves your playback point earlier in your session.
- Fast Forward quickly moves your playback point later in your session.
- The Go to End button takes you directly to the end of your session.

Saving Your Work

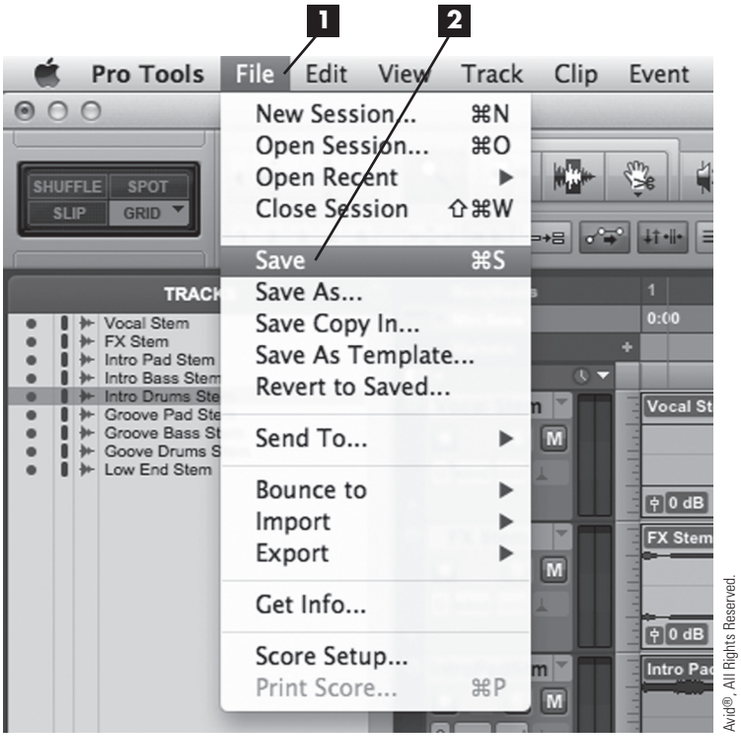
Now that you have the basics down, it's time to think about how to wind things up. This is a crucial stage, and it's important to do the job correctly. There are a number of ways to save your work, each with its own specific advantages.

Save and Save As

Saving a session is about as straightforward as they come:

1 **Click** on **File**. The File menu will appear.

2 **Click** on **Save**. Your work will be saved, and you can continue to work on the saved session.



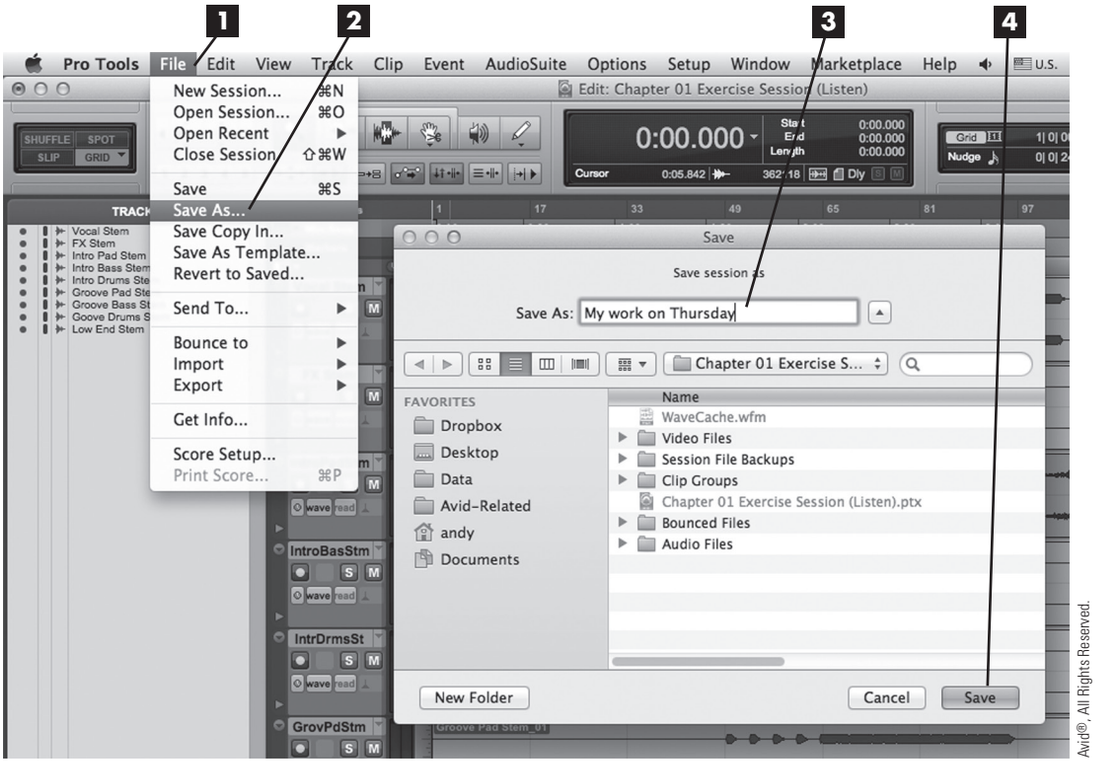
If you use the Save command, the previous version of the session will be overwritten with the one that you just saved. What if you *don't* want to overwrite the old session? That's where Save As comes into play.

1 **Click** on **File**. The File menu will appear.

2 **Click** on **Save As**. The Save Session As dialog box will open.

3 **Type** a **different name** for your session in the Save As text box to avoid overwriting the original session.

4 **Click** on **Save**. The new version of the session will be saved with the name you specified in step 3. You are all set at this point to continue work on the newly saved session.



WHERE DO I SAVE THE NEW SESSION FILE?

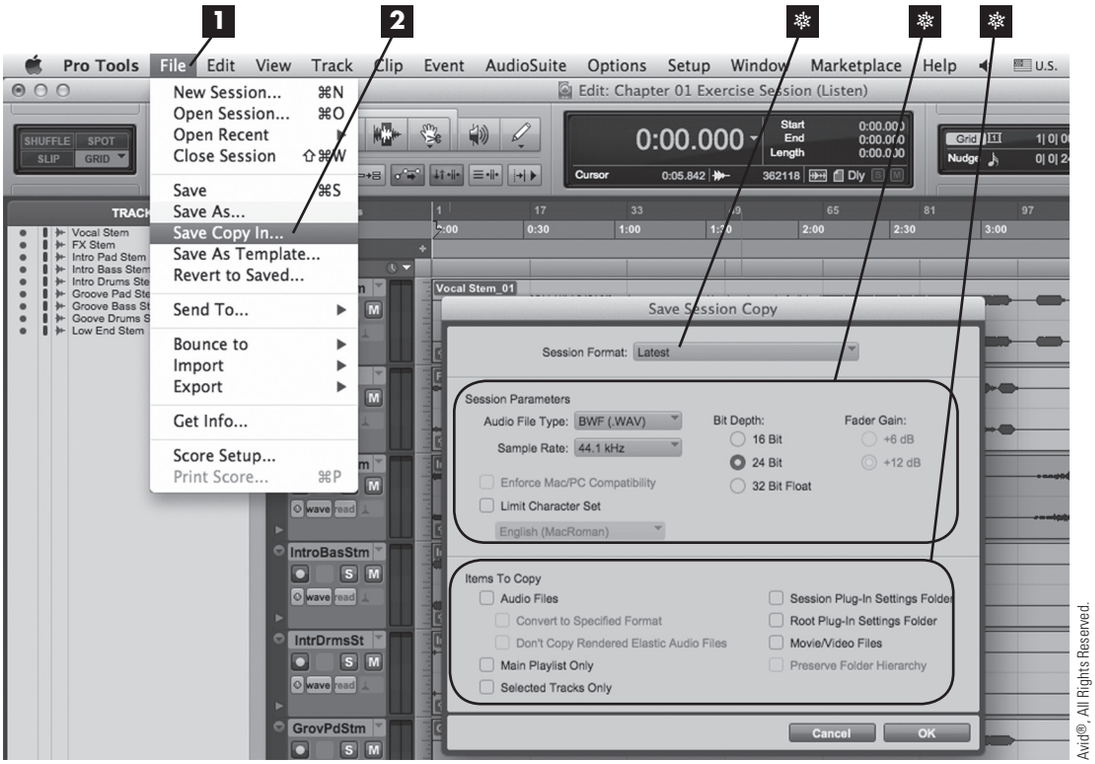
It's important to note that both the original session file and the new version of the file can reside in the same session folder and can access the same source audio files. You just need to make sure they don't have the same name.

Save Copy In

If you want to save your session with a different name and create a new folder, complete with all the dependent audio files, the *Save Copy In* feature is for you! This is commonly a part of the final archiving process when a project is complete (which you'll learn more about later).

1 **Click** on **File**. The File menu will appear.

2 **Click** on **Save Copy In**. The Save Session Copy dialog box will open. Save Copy In enables you to save elements of your session (audio files, fade files, and so on), which gives you a whole new dimension of flexibility. Here are some things you can specify:



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- **Session Format.** This menu contains options for previous versions of Pro Tools. Select one of these formats if you intend to open this session in an older version of Pro Tools.
- **Session Parameters.** These are the same options you saw when you created your session. You can select different file types, sample rates, and/or bit depths for your session. Pro Tools will automatically convert audio files as needed in your new session's Audio Files folder.
- **Items to Copy.** You can choose the elements of your original session that you want to copy over to your new session folder. Click on the appropriate checkboxes to copy aspects of your old session to your new session folder.

❄ THE IMPORTANCE OF BACKING UP YOUR WORK!

Backing up (or archiving) your work is a tremendously important part of production. It might not be terribly exciting, but you'll be glad you established good file-saving habits when something unexpected happens. The Save Copy In feature is particularly suited to archiving because it makes copies of your original session in a separate (and hopefully safe) place. Additionally, this process can intelligently gather all the elements your session needs (assuming you selected them in the Items to Copy section) and save them in one central location. Bottom line: When you're backing up your session, Save Copy In is a very smart way to go!

❄ PRESERVE FOLDER HIERARCHY

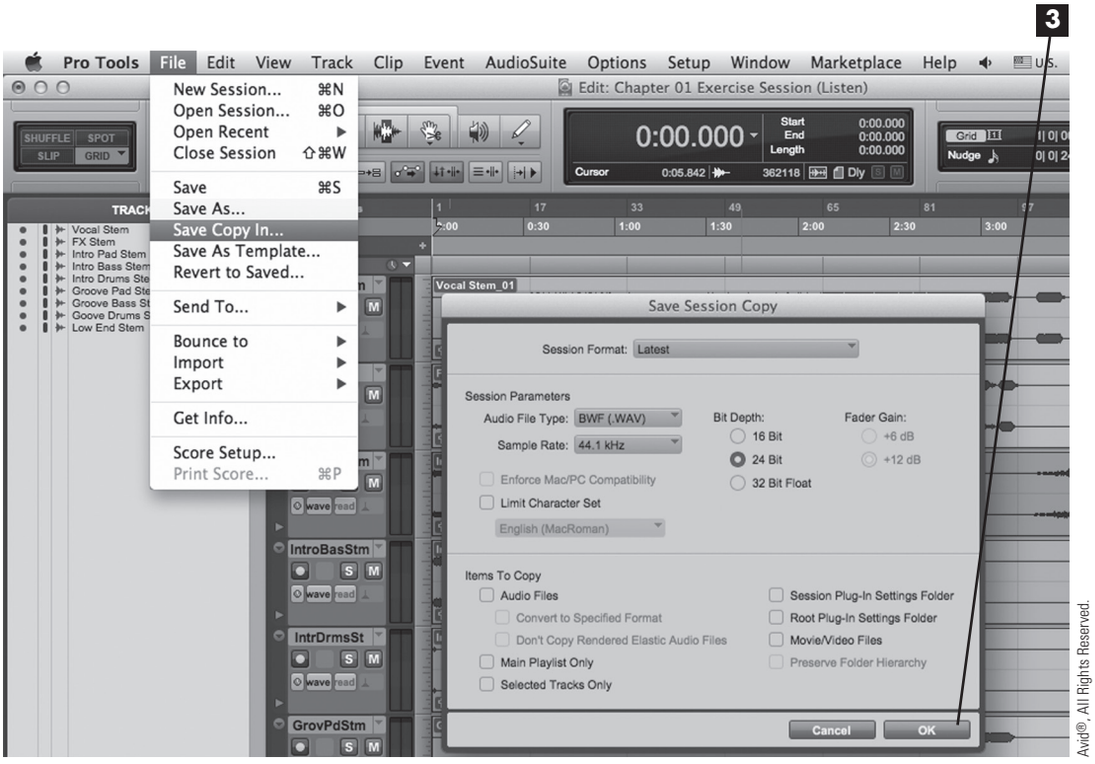
Sometimes, particularly in sessions with higher track counts, you'll need to utilize multiple audio hard drives for your session for reliable playback (something I'll discuss in Chapter 4, "Recording Audio," and in Chapter 10, "Moving to the Next Level: Tips and Tricks"). Checking the Preserve Folder Hierarchy checkbox will archive your session with individual audio file folders for each hard drive within your saved copy session folder. This makes it much easier to reconstruct large sessions spanning multiple drives!

3 When you've made the appropriate selections, **click** on the **OK button**. The Save dialog box will appear.

4 In the Save As text box, **type** a descriptive **session name** that is different from the original session name.

5 **Select** a **location** for your session. This section is identical to the related sections in the dialog boxes when you choose Save or Save As. This time, a new folder will be created for your new session, though.

6 **Click** on the **Save** button.



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Exporting Selected Tracks as a New Session

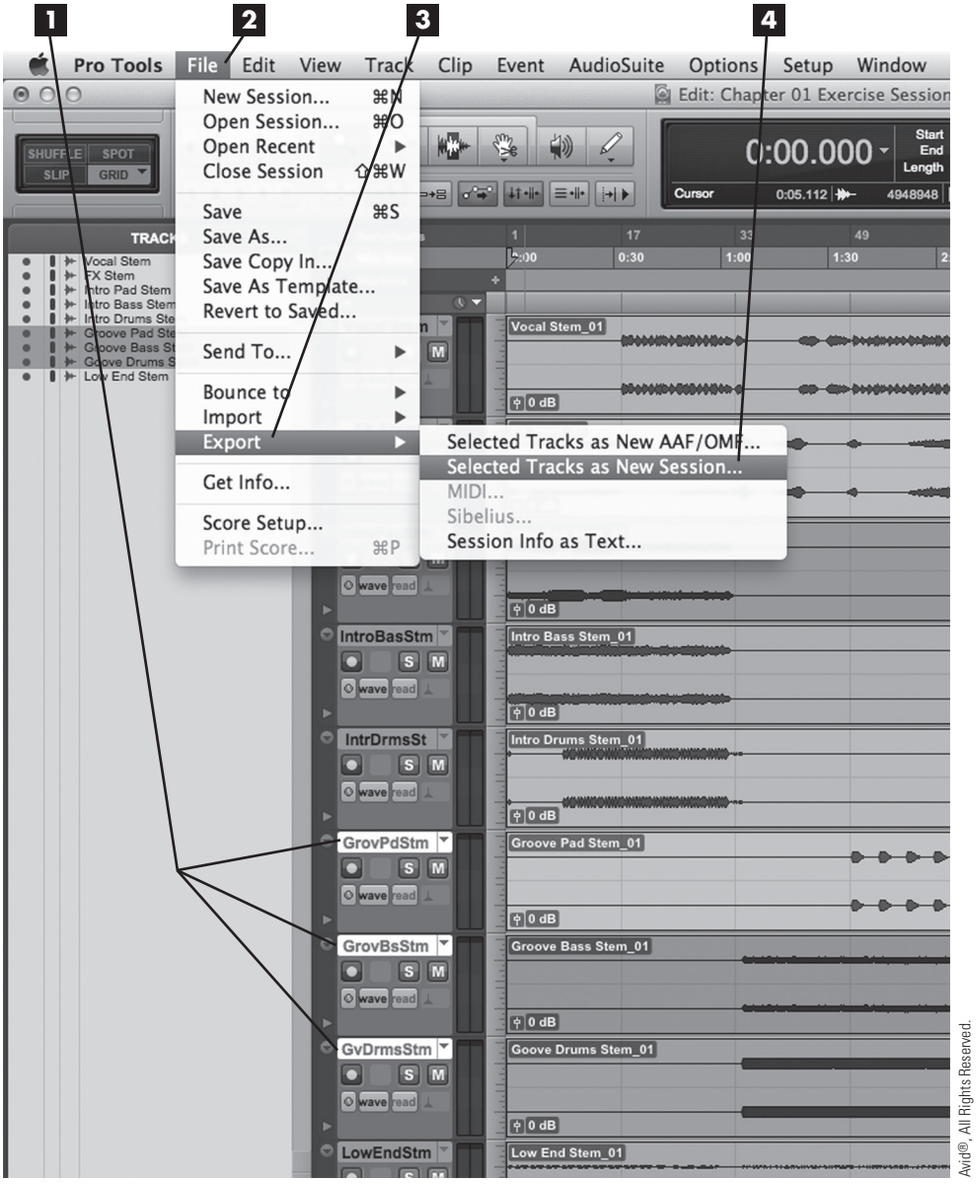
What if you want to create a new session, but you want that session to include only some of the tracks in your original session? Don't worry—Pro Tools has you covered! This is a variation on what you just learned about Save Copy In:

1 **Choose** the **tracks** in your session you want to export. The horizontal rows in the Edit window are called tracks (which you'll learn more about in later chapters). You can select the tracks that you want to export by clicking on the track name. To select a range of tracks, hold down the Shift key as you click on the first and then the last track in the range. To select multiple tracks that aren't part of a range, hold down the Command (Mac) or Ctrl (PC) key and click on each track you want to select. In this image, I've chosen the Groove Pad Stem, Groove Bass Stem, and Groove Drums Stem Audio tracks.

2 **Click** on **File**. The File menu will appear.

3 **Click** on **Export**. The Export submenu will appear.

4 **Click** on **Selected Tracks as New Session**.



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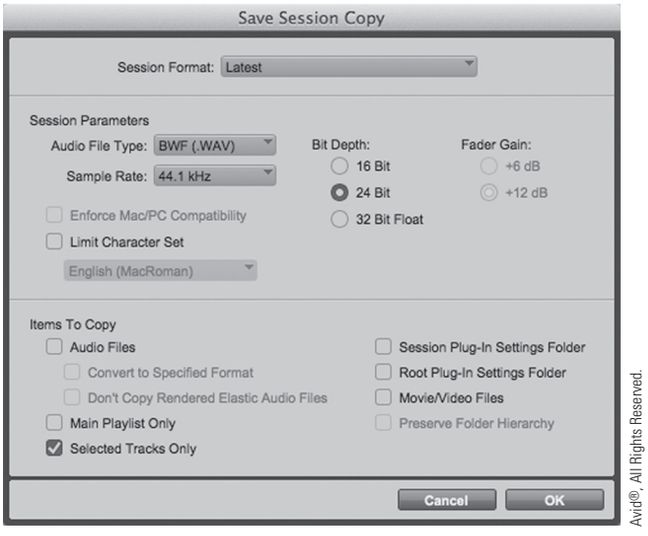

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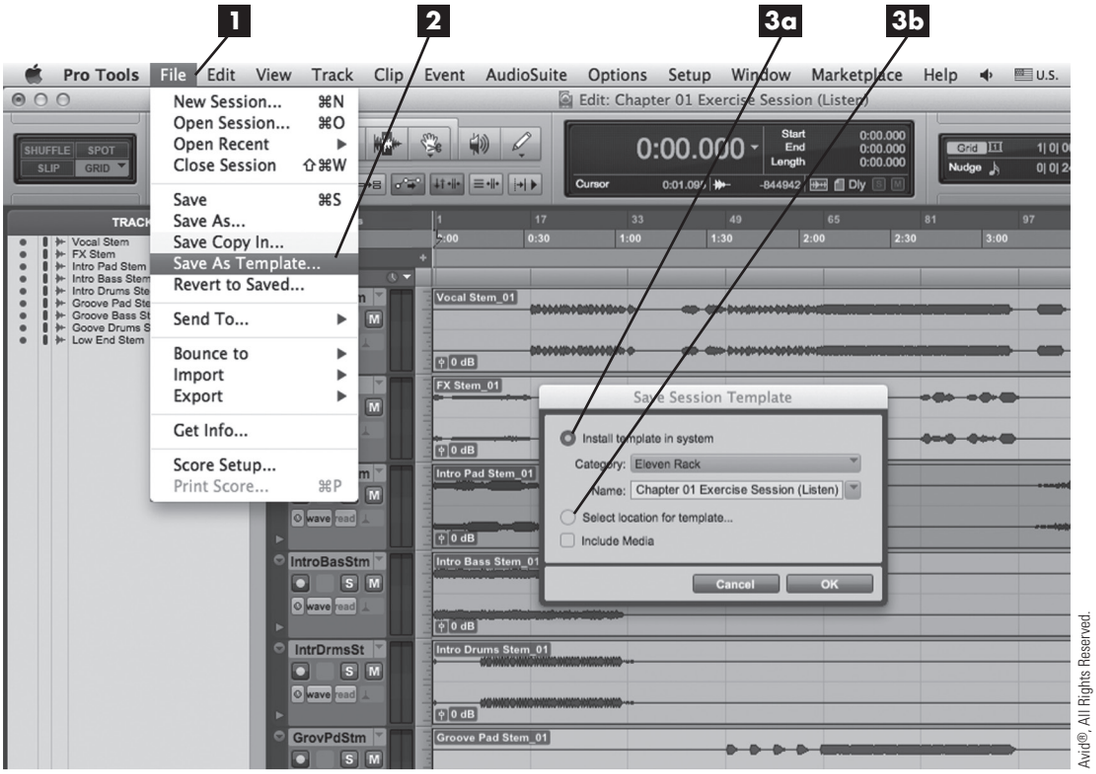
The Save Session Copy dialog box will open, which you already worked with earlier in this chapter. Note that the Selected Tracks Only box is checked (in the lower-left corner). Once you choose your Session Parameters and Items to Copy settings, a session copy will be created, but the copy will include only the tracks that you specified in step 1.

Session Templates

As you saw in the Quick Start dialog box, you already have a list of useful templates that are installed with Pro Tools, but you also have the ability to create templates of your own. It's easy!



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1 **Click** on **File**. The File menu will appear.

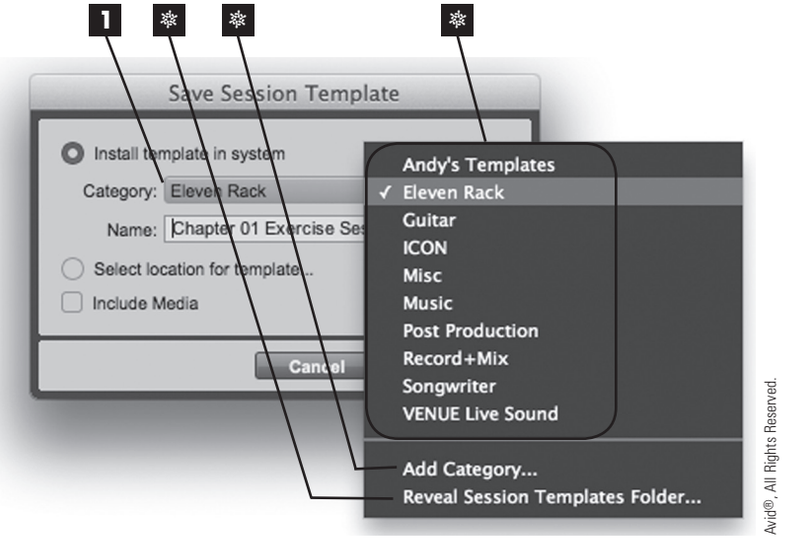
2 **Click** on **Save As Template**. The Save Session Template dialog box will open. You have two options as far as location is concerned:

3a **Choose** the **Install Template in System option button** to automatically create your template in the default system location. This will enable you to easily access the template from the Quick Start dialog box in the future.

3b **Choose** the **Select Location for Template option button** to be able to choose any name and location for your template file after you click on the OK button. This is particularly handy for Pro Tools users who work in multiple studios. (An inexpensive USB drive can hold many session templates, and you can carry it with you easily.)

Before clicking the OK button and creating a template, let's assume that you want to create this template on your system, and that you've chosen the Install Template in System option button. Let's take a look at the different options open to you:

1 **Click** on the **Category selector**. A list of category options will appear.



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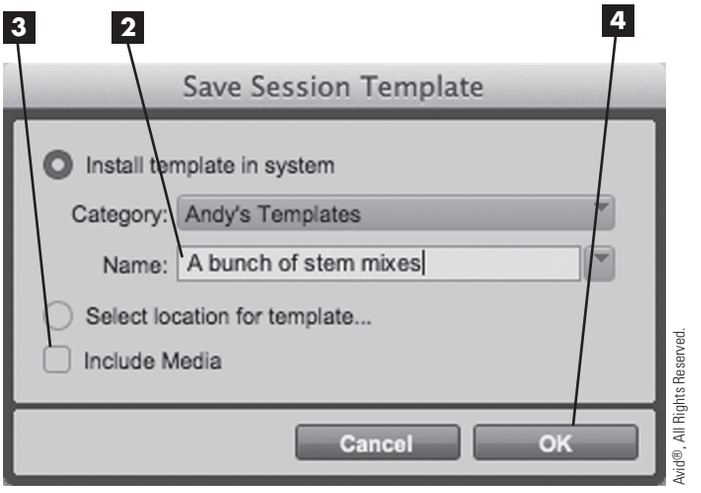
- The top section of the list shows you pre-existing categories, into which you can place your template. Just click on the desired category to choose it.
- The Add Category menu item enables you to create a new category and add it to the list shown in the top section. Click on this option, and you will be prompted to name your new category.
- The Reveal Session Templates Folder menu item will open the template folder using your computer's file browser (Finder or Windows Explorer, depending on your platform). This is useful for managing your template files (renaming, deleting, and so on). It's worth mentioning at this point that Pro Tools template files are not session files themselves, and that they have a .ptt file extension.

2 After you've chosen the appropriate category, **type** a **name** for your template in the Name text box. (Clicking on the arrow button to the right of the field will display a list of all the templates currently in that category.)

3 In most cases, you won't want your template to include any audio or video files. But if you do, **select** the **Include Media checkbox**.



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4 When you're finished, **click** on the **OK button** to create your template.

Closing Your Session and Finishing Up

The last basic procedure you have to master is to close down your session.

DO YOU WANT TO SAVE YOUR CHANGES?

Before your session closes completely, a message box might prompt you to save your changes. This message box appears when you make any changes to your session and then try to quit Pro Tools before saving those changes. You can choose Save or Don't Save and move on.

1. **Click** on **File**. The File menu will appear.
2. **Click** on **Close Session**. Pro Tools will shut down the current session and make itself ready for the next step (either quitting Pro Tools or opening another session).
3. Quitting the Pro Tools application follows the normal conventions of your computer for closing applications.

That's it—good job!