

## Media Station|PT Guide

Version 1.8.2 for Pro Tools|HD Systems on Windows and Macintosh

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## chapter 1

## Introduction

Avid Media Station|PT software is designed exclusively for audio-related post-production work in conjunction with Pro Tools and Avid Mojo or Digidesign AVoption|V10 (referred to here as Avid DNA video peripherals).

This guide assumes you have Pro Tools and Media Station|PT installed on the same computer.

## Media Station|PT Limitations

Media Station|PT has the same basic engines and components as the full line of Avid editing applications (such as Media Composer Adrenaline and Avid Xpress Pro). However, it has been tailored to the needs of the audio post-production workflows described in this guide and therefore has the following limitations when compared to other non-linear video editing applications:

- Editing is limited to inserting, overlaying, lifting, and cutting.
- Effects can be rendered, but not added or edited.
- High-definition (HD) video is not supported.


## Avid Terminology

This section provides a brief glossary of Avid terms and, where applicable, their Pro Tools counterparts.

Clip A Clip references one or more media files which play in synchronization, for instance a video file and its two audio tracks. Clips are stored in bins.

SubClip A SubClip in Media Station|PT is like a region in Pro Tools: It is a shorter version of the clip it was created from. Subclips are stored in bins.

Sequence A Sequence is equivalent to a Pro Tools session: It is a collection of clips and sub-clips organized in a Timeline. Sequences are stored in bins.

Bins Bins are like folders where you organize clips and sequences. Bins are stored in the individual project folders.

Projects Projects are where you organize a number of bins. Bins can also be shared between projects.

In one project, you could create a new bin to hold all of your video clips and a bin to hold your sound effects, and a bin for sequences. You could close that project, open a new project and
open the audio bin from the first project to use the same audio in a different sequence. Projects are stored in the Avid Projects folder in the Media Station|PT folder.

Source Monitor The Source Monitor is the Video window above the Timeline (on the left). Use the Source Monitor to select what will be added to the sequence in the Timeline

Record Monitor The Record Monitor is the Video window above the Timeline (on the right). Playback of the sequence in the Timeline is viewed in the Record Monitor.

Timeline The Media Station|PT Timeline shows the assorted audio and video elements arranged in a linear sequence, as in Pro Tools.

Client monitor The client monitor is the external video monitor connected to an analog video output of the Avid DNA video peripheral.

## Media Data (Media Files)

Media data represents raw audio or video material and is stored in individual media files. Every time you record a piece of video or audio material into an application, you are creating a media file containing media data. Audio media data is stored as samples (such as 44,100 or 48,000 samples per second of recording) while video media is typically stored as frames ( 24,25 , or 30 frames per second of recording).

The size of each media file depends on how much audio or video material it contains. For example, if you record ten minutes of continuous video material at a high resolution, you might end up with a video media file that is 1.8 GB in size, whereas a one minute recording at the same resolution might result in a 180 MB
file. Media files tend to be large, since high quality audio and video signals are data intensive. Video data generally requires considerably more storage than audio data.

Media files contain data representing raw audio or video material. Every time you record a piece of video or audio material into an application, you are creating a media file containing media data.

On the volumes you have designated, Media Station|PT stores all OMF and AAF media files in the OMFI MediaFiles folder, and all MXF media files in the Avid MediaFiles folder.

## Metadata

Metadata is used to describe:

- Information about each media file. This may include sample rate, bit depth, region names, the name of the videotape from which the media file was captured, and even time code values that specify where a file was used in a Pro Tools session.
- Information about Pro Tools sessions or other sequences, including what files are used, where they appear in a timeline, and automation.
- For AAF or OMF sequences, metadata also includes information about unrendered AudioSuite effects (such as real-time EQ) on Avid workstations. Pro Tools skips unrendered effects on import. Rendered effects are media files, that can be imported or skipped on import into Pro Tools.
- For AAF or OMF sequences, information about automation (clip-based gain or keyframe gain).


## AAF, OMF, and MXF Basics

AAF and OMF files are mechanisms for storing and retrieving media data and metadata so that projects can be freely exchanged between different applications and platforms.

Media data and metadata enable an application that receives AAF and OMF sequence files (such as Pro Tools) to automatically and quickly reassemble the composition. A simple metaphor for this approach is that media data files are the pieces of a puzzle and metadata is the set of instructions for assembling the puzzle.

In the simplest case, only an AAF or OMF sequence is exchanged. If this sequence points to existing media files, the size of the sequence file is relatively small and the export/import process is relatively fast.

AAF and OMF sequences can also have media data embedded in them. This creates a single, larger file that is slower to export and import, but which may be easier to manage than thousands of files stored on different volumes. Pro Tools does not support AAF sequences that contain embedded media, or OMF sequences that contain embedded video media.

## MXF

MXF is a media file format. There are MXF video files and MXF audio files, but there are no "MXF sequences." An AAF sequence may refer to or include MXF media files, but OMF sequences cannot refer to or include MXF files.

Pro Tools can import AAF sequences that include embedded OMF or MXF audio files, but not embedded video files.

Pro Tools can import and play back MXF audio and video files created in Media Station|PT or other applications. To export MXF audio files from Pro Tools, the DigiTranslator 2.0 option must be installed.

Video files digitized in Pro Tools are technically of the MXF format, but are intended only for use in Pro Tools and are not tested for compatibility with other applications.

Pro Tools does not export video files of any type.

## AAF

AAF sequences are the best way to exchange projects and maintain valuable metadata. An AAF sequences can refer to OMF and/or MXF media files, or have OMF and MXF media files embedded within them. There is no such thing as an AAF audio or video media file. DigiTranslator 2.0 option is required to import and export AAF sequences with Pro Tools.

Pro Tools can import and export AAF sequences that refer to external media files or contain embedded OMF or MXF audio files, but it will cannot import or export AAF sequences with embedded video files.

## OMF

OMF is both a media file and sequence format. OMF media files can be audio or video, and Pro Tools can import and play back OMF audio and video. Pro Tools can also export OMF audio, but not OMF video.

Pro Tools can import and play back OMF audio and video files created in Media Station|PT or other applications. To import OMF sequences, or to export OMF audio files and sequences from Pro Tools, DigiTranslator 2.0 option must be installed. Pro Tools does not export video files of any type.

An OMF sequence cannot reference or have MXF media embedded within it.

Pro Tools can import an OMF sequence with embedded audio, but not embedded video.

## Embedded Media

Exporting to OMF or AAF with embedded media results in one large OMF or AAF file containing both the metadata and all associated media files. However, it is important to note that OMF limits file size to 2 GB .
? Pro Tools supports OMF and AAF files that contain embedded audio, but not OMF or AAF files that contain embedded video.

## Pro Tools and Avid Counterparts

Pro Tools and Avid use different terms to describe the same items. For example, a Pro Tools session is equivalent to an Avid sequence. The following table lists common Pro Tools elements and their Avid equivalents.

Pro Tools and Avid terminology counterparts

| Pro Tools | Avid (OMF) |
| :--- | :--- |
| session | sequence |
| whole file region | master clip |
| region | subclip |
| plug-ins | real-time audio effects |
| automation | automation gain (clip-based <br> gain or key-frame gain) |
| Bounce to Disk | Video Mixdown |

Whole audio files in the Regions List normally appear in bold type. However, master clip audio files imported from AAF or OMF sequences into Pro Tools will not appear in bold type (indicating regions) in the Pro Tools Regions List even though they are audio files.

## Embedded Media and External Media

There are two ways to handle media files when exporting OMF files: Embedded Media and External File References.

Pro Tools with DigiTranslator does not support AAF files with embedded video files.

## Frame-Rate Accurate Video Editing and Sample-Rate Accurate Audio Editing

Media Station|PT edits with frame accuracy. This means that in a $30-\mathrm{fps}$ project, you can edit at 30 different locations for every one second of video. Pro Tools edits with sample rate accuracy. In a $48-\mathrm{kHz}$ session, there are potentially 48000 locations to edit for every second of audio.

When Pro Tools exports an AAF or OMF composition destined for an Avid application, it must ensure that the audio files line up on frame boundaries. To do this, it might have to split an existing audio region into three clips. For example, the following illustration shows a 5 -frame video clip and a corresponding audio region. In Pro Tools, the audio regions might not line up on video frame boundaries.

In order to export frame accurate audio regions, Pro Tools splits the audio media on frame boundaries and fills any gaps with silence. The following illustration shows the resulting audio regions that are exported to Media Station|PT.

When you use Export Selected Tracks as OMF/AFF to export tracks from Pro Tools with Enforce Avid Compatibility enabled, a number of additional media files labeled Sample Accurate Edit appear in the Avid bins. These are the additional media files that Pro Tools creates to ensure that Media Station|PT receives frame-accurate audio. You also see the sample-accurate edit media files if you zoom in on the imported audio in the Timeline.


The original audio region does not line up on video frame boundaries

Figure 1. Original audio region


Figure 2. Exported audio region

## chapter 2

## Installing Media Station|PT on Windows and Macintosh

This chapter describes installation procedures for Media Station|PT on Windows and Macintosh computers.

## Preserving Existing User Settings Before Upgrading to Media Station|PT

Media Station|PT handles user settings differently from Media Station|V10. For optimal performance, it is strongly recommended that you create a new user profile after upgrading to Media Station|PT.

If you have user settings in Media Station|V10 that you do not want to lose, you can preserve them before uninstalling Media Station|V10 and then copy them into your new user profile after installing Media Station|PT.

To preserve user profile settings before uninstalling Avid Media Station|V10:

1 Open the project in Media Station|V10.
2 In the Project window, click the Settings tab.


3 Choose Special > Site Setting. The Site Setting window opens.

4 Drag the settings you want to preserve from the Project window to the Site Settings window.

5 Quit Media Station|PT. The contents of the Site Settings window are automatically saved.

The settings you have added to this window will now be available to copy back to the Settings tab after Media Station|PT is installed.

See "Creating a New User After Upgrading from Media Station|V10" on page 17 for more information.

## Uninstalling AVoptionDNA, Pro Tools, Media Station|V10 or Media Station|PT

If you are upgrading your Pro Tools system with an Avid DNA video peripheral, you must first uninstall Pro Tools and specific Avid applications, based on your operating system.

## Uninstalling on Windows XP

It is advised that you uninstall software from Windows XP in the following order:

1 Uninstall the AVoptionDNA software.
2 Uninstall your previous version of Pro Tools.
3 Uninstall Media Station|V10 or Media Station|PT software.

To uninstall AVoptionDNA software:
1 Choose Start > Control Panel.
2 Launch Add or Remove Programs.
3 From the Currently Installed Programs list, choose AVoptionDNA.

4 Click the Change/Remove button.
5 Follow the on-screen instructions to remove AVoptionDNA software.

6 Restart your computer.

## To uninstall Pro Tools on Windows XP:

1 Choose Start > Control Panel.
2 Launch Add or Remove Programs.
3 From the Currently Installed Programs list, select Digidesign Pro Tools TDM.

4 Click the Change/Remove button.
5 Follow the on-screen instructions to remove Pro Tools.

6 Restart your computer.

## To uninstall Media Station|V10:

1 Insert the Avid Media Station|V10 Installer CD-ROM in your computer's CD-ROM drive.

2 Locate and launch the Media Station|V10 Launch.exe file.

3 Choose Change/Remove, and follow the instructions to remove the software.

4 Restart your computer.

## Uninstalling on Mac OS X

It is advised that you uninstall software from Mac OS X in the following order:

1 Uninstall Avid Xpress Pro or Media Station|PT software.

2 Uninstall your previous version of Pro Tools.

## To uninstall Avid Xpress Pro or Media Station|PT software:

1 Insert the Avid Xpress Pro or Media Station|PT software Installer CD-ROM into your computer's CD-ROM drive.

2 Locate and launch the Avid Xpress Pro or Media Station|PT software Installer.

3 Click Uninstall.

4 Follow the instructions to remove
Avid Xpress Pro or Media Station|PT software from your computer.

5 Restart your computer.

## To uninstall Pro Tools on Mac OS X:

1 Make sure you are logged in as an Administrator for the account where Pro Tools is installed. For details on Administrator privileges in Mac OS X, refer to your Apple OS X documentation.

2 Do one of the following:

- Insert the Pro Tools Installer CD-ROM in your CD-ROM drive. Double-click "Install Pro Tools TDM."
- or -
- Click on the downloaded installer file.

3 Enter your Administrator password and click OK to authenticate the installation.

4 In the Installer window, choose Uninstall from the pop-up menu, and click Uninstall.

5 Follow the on-screen instructions to remove Pro Tools.

6 When finished, click Quit to close the Installer window.

7 Restart your computer.

## Installing Media Station|PT and Pro Tools Software

To use Media Station|PT and Pro Tools on the same computer, you must:

- Log in using an account with Administrative privileges whenever you install or use either application.
- Log in as the same user for both applications.
- Install Pro Tools 7.1cs1 or higher.


## Installing Media Station|PT on Windows XP

A Before installing Media Station|PT software, install Pro Tools $\mid H D$ version 7.1. You must then install Pro Tools 7.1 cs1 or higher for compatibility with Media Station|PT. The installer for Pro Tools 7.1cs1 is available on the Media Station|PT installation CD. You can also visit www.digidesign.com to download the latest compatible cs release.

A Before installing Media Station|PT software, make sure to disconnect all Avid Application Keys (USB dongles) from your computer. Installing with an Avid Application Key connected to your computer may cause problems with installation.

## To install Media Station|PT software

1 Start your computer and log on to Windows with Administrator privileges.

2 If the Found New Hardware Wizard dialog appears (for any connected Pro Tools hardware), leave it open.

3 Insert the Avid Media Station|PT Installer CDROM in your computer's CD-ROM drive. The installer should automatically open and launch.


Avid Media Station|PT Main Installer window
'?่
If the installer does not automatically open and launch, locate the Launch.exe file on the Avid Media Station|PT Installer CDROM.

4 Click Install Products to display the next screen.


Avid Media Station|PT Install Products window
5 Click Install Avid Media Station|PT.
6 Click Next to begin installation.
7 When prompted, power off the Avid DNA peripheral.

8 Choose a country, then click Next.
9 If you agree with the license agreement, click Yes.

10 Select the install location. For maximum reliability, install Media Station|PT in the default location on your system drive ( $\mathrm{C}: \backslash$ Program Files $\backslash$ Avid $\backslash$ Avid Media Station PT). Click Next.

11 Click Next to accept the default location for AVX plug-ins.

12 Click Next to accept the default location for Application Data.

13 Select Typical for the Setup Type, then click Next to complete the installation.

14 When a dialog appears with a message about Windows Logo testing, click OK to accept. (If another message appears indicating the test did not pass, click Continue Anyway. It does not affect the installation.)


Avid Media Station|PT Setup Message
15 When the Windows Media Player 9 dialog appears, click OK.


See "Installing Windows Media Player 9 after Media Station|PT" on page 12 for information on installing Windows Media Player 9.

16 Click Finish to restart your computer.
17 When the computer powers back on, log in as Administrator.

18 Turn on the Avid DNA video peripheral.
The Found New Hardware Wizard appears.
A
If the Found New Hardware does not appear, ensure that the Avid DNA video peripheral is connected to your computer and turned on. For more information, see the Avid DNA Video Peripherals Guide.

19 If you see a message asking whether Windows can connect to Windows Update to search for software, select the "No, Not This Time" option, and click Next.

20 Click Next, and the Found New Hardware Wizard will automatically search for and locate the driver for the Avid DNA video peripheral.

A
If the Found New Hardware Wizard cannot find the driver for the Avid DNA video peripheral, manually locate the Flamethrower file at C: \Program Files $\backslash$ Digidesign $\backslash$ Drivers.

21 Click Finish to complete the installation.
Media Station|PT software will only run if:

- An Avid Media Station|PT or Media Station|V10 Application Key (dongle) is connected to a USB port on your computer
- A compatible version of Pro Tools is installed
- A Pro Tools|HD card is installed
- An Avid DNA video peripheral is installed
- Drive indexing for external audio and video drives is disabled
- The nVidia display driver is disabled


## Disabling Drive Indexing for External Audio and Video Drives

To use Media Station|PT with Avid video peripherals, drive indexing for external audio and video drives should be disabled.

## To disable drive indexing for external media drives:

1 Choose Start > My Computer
2 Control-click each external audio or video drive.

3 Right-click the selected external drives and choose Properties.

4 In the Properties dialog, deselect "Allow Indexing Service to index this disk for fast file searching."

## Disabling nVidia Display Driver Service

To use Media Station|PT with Avid video peripherals, the nVidia Display Driver Service should be disabled.

## To disable nVidia Display Driver Service:

1 Choose Start > My Computer > Manage.
2 Double-click Services \& Applications.
3 Double-click Services.
4 Right-click the nVidia service.
5 Choose Properties.
6 Set Startup Type to Disabled.
7 Click Apply.
8 Click OK.

## Installing Windows Media Player 9 after Media Station|PT

If Windows Media Player 9 is not installed on your computer, you can install it by launching Wmfdist.exe on the Media Station|PT Installer CD (located in the Installers/WindowsMediaInstall folder).

## Installing Optional Software on Windows XP

The Media Station|PT Installer CD-ROM contains installers for the following optional software:

- Avid EDL Manager
- Avid LogExchange
- Avid DNA Diagnostics

A
Some optional software (such as EDL Manager) is required for certain tasks described in this guide (for example, "Digitizing from an $E D L$ " on page 27).

## To install optional software on Windows XP:

1 Do one of the following:

- If the Avid Media Station|PT Installer CDROM is already in your computer's CDROM drive, locate and open the Launch.exe file.
- or -
- Insert the Avid Media Station|PT Installer CD-ROM in your computer's CD-ROM drive. The installer should automatically open and launch.

2 Click Install Products to display the next screen.

3 Click the name of the optional software you want to install.

4 Click Next to begin the installation.

5 Follow the instructions, and click Finish to restart and complete the installation.

A It is strongly recommended that you restart the computer after installing each individual application.

## Installing Media Station|PT on Macintosh

A Before installing Media Station|PT software, install Pro Tools|HD version 7.1. You must then install Pro Tools 7.1cs1 or higher for compatibility with Media Station|PT. The installer for Pro Tools 7.1cs1 is available on the Media Station|PT installation CD. You can also visit www.digidesign.com to download the latest compatible cs release.

A Before installing Media Station|PT software, make sure to disconnect all Avid Application Keys (USB dongles) from your computer. Installing with an Avid Application Key connected to your computer may cause problems with installation.

## To install Media Station|PT software on Mac OS X:

1 Make sure you are logged in as an Administrator for the account where you want to install Media Station|PT. For details on Administrator privileges in Mac OS X, refer to your Apple OS X documentation.

2 Insert the Media Station|PT Installer CD-ROM in your CD-ROM drive. Double-click "MediaStationPT Installer."

3 Enter your Administrator password and click Continue to authenticate the installation.

4 In the Installer window, make sure the Install Location is on your system drive.

5 In the Installer window, choose Full Install from the pop-up menu.

6 Click Install.
7 Choose your Country.
8 Click OK.
9 Follow the on-screen instructions to continue and accept installation.

10 Click Continue.
11 Indicate whether you have a Macintosh G4 or G5 by selecting the corresponding option.

12 Click Continue.
13 When installation is complete, click Restart.

## Installing Optional Software on Mac OS X

The Media Station|PT Installer CD-ROM contains installers for the following optional software:

- Avid EDL Manager
- Avid LogExchange
A. Some optional software (such as EDL Manager) is required for certain tasks described in this guide (for example, "Digitizing from an $E D L^{\prime \prime}$ on page 27).


## To install optional software on Mac OS X:

1 Make sure you are logged in as an Administrator for the account where you want to install Media Station|PT. For details on Administrator privileges in Mac OS X, refer to your Apple OS X documentation.

2 Insert the Media Station|PT Installer CD-ROM in your CD-ROM drive. Navigate to the Other Installers folder, and launch Avid Log Exchange Install or EDL Manager(TM) Install.

3 Enter your Administrator password and click Continue to authenticate the installation.

4 In the Installer window, make sure the Install Location is on your system drive.

5 In the Installer window, choose Full Install from the pop-up menu.

6 Click Install.
7 Choose your Country.
8 Click OK.
9 Follow the on-screen instructions to continue and accept installation.

10 Click Continue.
11 When installation is complete, click Restart.

## Authorizing Media Station|PT

Use the included Avid Application key (USB dongle) to authorize Avid Media Station|PT.

## To authorize Media Station|PT software:

- Before launching the application, insert the Avid Application Key (USB dongle) into an available USB port on your computer.

On Windows systems, a dialog displays a message indicating that the computer is identifying and recognizing the dongle.

## Launching Media Station|PT for the First Time

Before launching Media Station|PT for the first time, ensure you have installed Pro Tools. See your Getting Started guide or the Upgrading to Pro Tools guide for more information.

## Updating Firmware on Application Launch

On launch, Media Station|PT checks that the appropriate version of the firmware is installed on the Avid DNA video peripheral. If the correct version of the firmware is not installed, Media Station|PT automatically installs the correct version of the firmware. Once the update is complete, you will be prompted to quit Media Station|PT and power-cycle the Avid DNA video peripheral before the update will take effect.

If you are updating from an older AVoption $\mid$ V10 breakout box, you may be prompted twice to update the firmware. Ensure that you follow the steps to completely update the firmware.

## Avid Mojo with Apple PCle Computers

If your Avid Mojo is not recognized by an Apple PCIe computer, you must update the video peripheral's firmware on another computer. The firmware cannot be updated on the PCIe computer. (This will be true for all Avid Mojo interfaces manufactured before January 2006.)

## To update the firmware:

1 Connect the Mojo to a non-PCIe Macintosh or any Windows XP computer.

2 Install Pro Tools 7.1 or later software, or Media Station|PT 1.8.2 or later software.

3 Launch Pro Tools or Media Station|PT. This updates the firmware in the video peripheral.

4 Power off the video peripheral, then connect it to the PCIe computer.

A
Using an updated video peripheral with an earlier version of Pro Tools or Media Station software will downgrade the firmware.

## chapter 3

## Media Station|PT Workflows

Avid Media Station|PT software is designed exclusively for audio-related post-production work in conjunction with Pro Tools and Avid Mojo or AVoption|V10 (referred to here as Avid DNA video peripherals). This chapter describes workflows that let you:

- Start a new project and adjust any necessary settings.
- Capture NTSC or PAL video directly from tape.
- Open and re-digitize an existing sequence from an Avid editing system (such as Media Composer Adrenaline).
- Digitize audio and video from an EDL by creating an Avid sequence with Avid EDL Manager ${ }^{\mathrm{TM}}$.
- Import QuickTime and other non-OMFI media files.
- Assemble clips into a sequence.
- Export an AAF or OMF sequence for import to Pro Tools, including:
- Export templates
- Manual export, including effects rendering and transcoding Media Composer sequences for export to Pro Tools with Avid Mojo
- Video mixdown
- Import an AAF or OMF sequence into Pro Tools, and export it back to Media Station|PT as an AAF or OMF audio sequence.
- Synchronize imported audio with a clip or sequence.
- Lay back audio and video to tape.
- Export audio and video sequences as QuickTime or other format digital files.

A Media Station|PT software and Pro Tools cannot run simultaneously. Quit Pro Tools before launching Media Station|PT, and quit Media Station|PT before launching Pro Tools.

Media Station|PT provides the same digitizing and batch digitizing methods as all Avid video editing systems.

AMedia Station|PT software can output all frame rates of NTSC and PAL, but cannot output an NTSC master from a PAL source, or output a PAL master from an NTSC source.

## Getting More Information

For more information about specific features and functions of Media Station|PT, search the Media Composer Adrenaline online help.

## To launch online help:

- Choose Help > Online Help (Windows) or Media Station|PT > Help (Macintosh).

For more information about Avid media capture, layback, import, and export, see the Avid Media Composer Adrenaline Input and Output Guide available from the Avid Web site (www.avid.com).

## Starting a New Project with Media Station|PT

A
Before launching Media Station|PT software, ensure that Pro Tools is not running. Exit Pro Tools before launching Media Station|PT, and exit Media Station|PT before launching Pro Tools.

To prevent pops and clicks that may occur while Media Station $\mid P T$ is starting, it is recommended that the audio monitors be muted during launch.

## To start a new project, or select an existing project:

1 Launch the Avid Media Station|PT software.
2 You will be prompted to create a new project or select an existing project.


Select Project dialog

In the Select Project dialog, ensure the Folder selected is $\backslash$ Program Files $\backslash$ AvidMedia StationPT $\backslash$ Avid Projects. This is where your projects, bins, and sequences will be stored. Media files are stored separately.

3 Select a user profile by doing one of the following:

- Choose Create User Profile from the User Profile pop-up menu, and enter a new user name in the Create User Profile dialog.
- or -
- Choose an existing user profile from the User Profile pop-up menu.

If you have upgraded from Media Station|V10, user settings have changed. It is recommended that you create a new user and then copy any preserved settings from Media Station |V10 into your new user settings. See "Creating a New User After Upgrading from Media Station |V10" on page 17.

Each user can configure Media Station|PT to suit their needs without affecting other users' settings on the same workstation.

4 Do one of the following:

- To display projects that only the current user profile can access, select the Private option.
- or -
- To display projects which are accessible to any other users, select the Shared option.

5 Do one of the following:

- Select the project and click OK.
- or -
- To create a new project, click the New Project button. In the New Project dialog, name the project, select the format approprate for your video monitor and preferred frame rate, and click OK.

In Media Station|PT, 29.97fps is referred to as 30i. The "I" stands for interlaced, which is the standard format. " $P$ " stands for progressive scan.

The selected project will open with the Project window. The name of the project appears in the upper left-hand corner of the Project window.


Project and Bin windows
To the right of the Project window is the first bin for the Project.

## To view the bins in a Project:

- Click the bins tab in the Project window. Dou-ble-click any listed bin to view its contents.


## To view and edit Project Settings:

- Click the Settings tab to view the Project settings, including Audio and Export settings.


## Creating a New User After Upgrading from Media Station|V10

Because user settings have changed from the last version of Media Station|V10, it is strongly recommended that you create a new user setting to achieve optimal performance.

If you preserved certain user settings before upgrading, you can copy those settings back into your new user profile.

## To copy preserved user settings after installing Media Station|PT:

1 Launch Media Station|PT and create a new user. See "Starting a New Project with Media Station|PT" on page 16.

2 Click the Settings tab in the Project window.
3 Choose Special > Site Setting. The Site Setting window opens, displaying any user settings that you copied to it before uninstalling Media Station|V10.

4 Select all settings that you want to copy into your new user settings, and drag them to the Settings tab.

5 Click Replace to replace all existing settings.

## Configuring Audio Settings

## To configure the audio settings for a project:

1 Click the Settings tab in the Project window.
2 Double-click Audio Project in the Settings list.
3 Click the Main tab in the Audio Project Settings window.


Audio Project Settings dialog, Main tab

4 Set the Sample Rate, Audio File Format, and Sample Bit Depth. MXF and OMF WAVE (BWF) are the recommended audio file formats because they are widely supported and maintain the most metadata.

5 Verify other settings as required. For most projects, the default settings are recommended.

6 After configuring the Audio Project Settings, close the window.

Audio Project Settings are saved with the project. You will need to configure the Audio Project Settings for each new project.

## Configuring Video Settings

You can configure video settings that determine whether you capture MXF or OMF video.

## To configure the video settings for a project:

1 Click the Settings tab in the Project window.
2 Double-click Media Creation in the Settings list.

3 Click the Capture tab.


Avid Media Station|PT Media Creation dialog
4 Select the MXF (or OMF) option, depending on the file type of video you want to capture. (Both types are compatible with Pro Tools, but MXF is recommended because it is more widely supported.)

5 Choose a video resolution from the Video Resolution pop-up menu.

6 If you want to apply the file type and resolution settings you made to all tabs on this dialog, click Apply to All.

7 Click the Toggle Storage button so that two volumes are showing, and select the volumes where the audio and video media will be stored.

8 If you want to apply the audio and video media drive settings you made to all tabs on this dialog, click Apply to All.

9 Click OK to save your settings and close the window.

Media Creation settings are saved with the project. You will need to configure the Audio Project Settings for each new project.

To save time, you can re-use the same project for all of your audio and video capturing, and simply create new bins and sequences as needed.

## D-Control and D-Command Configuration Requirements

When using Media Station|PT with a Pro Tools D-Control or D-Command system, it is necessary to modify the Audio Project Settings in order to properly output audio.

## To change Media Station|PT Audio Project Settings for D-Control or D-Command:

1 Start Media Station|PT and open a new project as described in "Starting a New Project with Media Station|PT" on page 16.

2 In the Project window, click the Settings tab and double-click Audio Settings.

3 In the Audio Project Settings dialog, click the Output tab.


Media Station|PT Audio Project Settings dialog
4 Do one of the following:

- If the Stereo button is visible, click the Stereo button to reveal the Mono button, then click the Mono button to reveal the Direct Out and Timeline buttons.
- or -
- If the Mono button is already visible, click the Mono button to reveal the Direct Out and Timeline buttons.


Media Station|PT Audio Project Settings dialog

5 Click the Timeline button to reveal tracks A1 through A8 in stereo pairs with selected channels.


Media Station|PT Audio Project Settings dialog
6 Click the channel pop-up menus, and change all stereo pairs so that tracks alternate top to bottom between channel 1 (CH1) and channel 5 (CH5), as shown in the illustration above.

7 Click the Grp 1 button to display the second group of tracks.

8 Click the channel pop-up menus in the second group, and change all stereo pairs so that tracks alternate top to bottom between channel 1 (CH1) and channel 5 (CH5).

9 Click the Grp 2 button to display Grp 3 and repeat as above.

10 Close the Audio Project Settings dialog when you are finished.

## Saving D-Command or D-Control Audio Project Settings

Once you have modified Audio Project Settings for optimal usage with D-Command or D-Control, it is recommended you save these settings so that they can be retrieved at any time. Otherwise, you will have to configure these settings each time you create a new project.

## To save your D-Command or D-Control Audio Project configuration settings:

1 In the Project window, click the Settings tab.
2 Create and open a new settings file by choosing File > New Settings File. An "Untitled" settings file window opens.

3 Drag the Audio Project setting from the Project window to the untitled settings file window to copy it.

4 Choose File > Save Copy of File As.
5 In the Save As dialog, type a name for this settings file.

6 Navigate to a location where other users can easily locate this file. (The recommended location is the default Avid Users folder.)

7 Click Save.

## To open and import D-Command or D-Control Audio Project settings into a new project:

1 In the Project window, click the Settings tab.
2 Choose File > Open Setting File.
3 Navigate to the location of the setting file (.avs), and select it.

4 Click Open. A window with the title of the saved D-Control or D-Command settings opens in Media Station|PT.

5 Drag the name of the setting from the new window to the Settings tab in the Project window.

6 In the dialog that appears, click Replace to overwrite the Audio Project setting in the current project with the setting you just opened.

## Capturing Audio and Video

Media Station|PT lets you capture video and audio by:

- Manually capturing audio and video
- Re-digitizing an existing sequence
- Digitizing from an edit decision list (EDL)


## Manually Capturing Audio and Video

Before capturing audio and video from tape, ensure that the following connections are made:

- The video source must be connected to the appropriate inputs of the AVoption|V10 or Avid Mojo. See the Avid DNA Video Peripherals Guide for more information about the video connections on the AVoption|V10 or Avid Mojo.
- The audio source must be connected to the first eight analog or any digital inputs of your primary Pro Tools audio interface. See the Getting Started guide and the guide for your Pro Tools audio interface.


## Configuring the Capture Tool

When using the Capture Tool, you may hear a variety of clicks or pops when doing any of the following:

- Changing Video Resolutions
- Logging clips
- Selecting Tape
- Going in/out of Batch Capture
- Opening/closing the Capture Tool.

To configure the Capture Tool for manual capture:
1 Choose Tools > Capture to open the Capture Tool.


Avid Media Station|PT Capture Tool
2 Ensure that all the reveal triangles on the left side of the Capture Tool window are pointing down so that all of the controls are visible.

3 If necessary, click the Capture/Log Mode button to select Capture mode (CAP).


Avid Media Station|PT Capture Tool (Record controls)
4 If necessary, enable control of the tape deck by clicking the Toggle Source button so that it does not display a circle with a slash.

5 Below the Record button, click the record enable buttons as needed to record your video, audio, and time code inputs. (V is for video, A1-A8 are for audio, and TC is the time code channel).

A
The TC (time code) button should always be enabled, even though no time code is being sent.

6 Choose the video and audio input sources from the Video Input and Audio Input pop-up menus.

7 Select the bin where you wish the captured clips to appear.
?(T) This setting does not affect where the captured files are stored. All captured media files are stored in the OMFI Media Files folder (for OMF media) or Avid MediaFiles folder (for MXF media) on the volumes determined in the Media Creation dialog. A bin in Media Station|PT is analogous to the Audio or MIDI region lists in Pro Tools, except that a project in Media Station|PT may have an unlimited number of bins, and clips may be organized between the bins as best suits the user.

8 Choose the resolution of video you wish to capture from the Res pop-up menu. For example:

- $1: 1$ is uncompressed and has the best quality, but takes up the most storage space.
- 20:1 takes up the least amount of storage space, but has the lowest quality picture.
- DV25 has a good quality picture with a moderate level of compression.
- $10: 1 \mathrm{~m}$ and $4: 1 \mathrm{~m}$ are multi-cam resolutions and should not be used for Pro Tools.


Avid Media Station|PT Capture Tool (Storage controls)
A. When capturing from the AVoption|V10 DV input, resolution options for the capture are limited to: 1:1, 15:1s, DV25 420 and DV25 411. Resolution options for the Avid Mojo are limited to DV25 420 and DV25 411.

9 Click the Toggle Storage button so that two volumes are showing, and select the volumes where the audio and video media will be stored. The available recording time for each volume displays next to it.

A
Media Station|PT can play audio and video from the same volume, but Pro Tools requires audio and video to be stored on separate drives. Ensure that you choose different drives for audio and video.

On the video volumes you have selected, Media Station|PT stores captured video files in the Avid MediaFiles folder (for MXF video) or the OMFI MediaFiles folder (for OMF video).

10 If the VTR is not correctly identified in the Capture Tool's Transport controls, choose AutoConfigure from the source pop-up menu. (Click Yes to auto-configure the VTR with the Capture Tool and display its name.)


Avid Media Station|PT Capture Tool (Transport controls)
11 Ensure that Delay Audio is set to 0 Frames.

12 Insert the tape into the VTR.
Media Station|PT will present a list of tapes already associated with this project and ask you which tape you have inserted.


Select Tape dialog
13 Do one of the following:

- Select one of the displayed tape names and click OK.
- or -
- Click New to add a new tape to the list.

14 To check your inputs and levels, do the following:

- Click Play on the transport controls. Video should appear in the Record Monitor and your client monitor.

A
When digitizing DV25 video via the DV port, nothing will appear in the client monitor. However, the digitized clip will be captured correctly.

- Choose Tools > Audio Tool to meter audio input levels.
- Adjust the audio output levels of your VTR if necessary.

You are now ready to capture.

## Capturing Audio and Video

## To capture audio and video:

1 Ensure the Capture Tool has been configured for capturing. (See "Configuring the Capture Tool" on page 21.)

2 To record, do one of the following:

- Use the Transport Controls to queue the tape to the position at which you wish to start capturing, then click Record. The VTR will start playback, and Media Station|PT will begin capturing as soon as the tape comes up to speed.
- Use the Transport Controls to begin playback on the VTR, then click Record when you are ready.
- Use the Mark In and Mark Out controls to select a specific portion of video to capture and click Record. (See "Selecting a Portion of Video to Capture" on page 25.)


Avid Media Station|PT Capture Tool (Transport controls)

The flashing red light indicates recording is in progress.

A During recording, video will appear out of synchronization with audio. However, audio and video will be synchronized during playback.

A While capturing video from a VTR connected to the DV port, Media Station $\mid P T$ does not output audio, but the audio will be included in the digitized clip.

3 Click the Record button again (or press the ESC key) to stop.

4 Type a clip name and optional comments in the Name and Cmnts fields. These can be entered before recording is started, while recording, or by clicking on the clip's name or comment field in the bin after recording has completed.


Avid Media Station|PT Capture Tool (Name/Comments)
5 To view the captured clip, do one of the following:

- Double-click the captured clip in the bin to open it into a pop-up window.
- or -
- Drag the clip to the Source Monitor.

6 Preview the clip in any of the following ways:

- Click the Play button (or press the Spacebar) to play or pause.
- Click the Rewind button (or press the Home key) to return to the beginning.
- Drag the scrub cursor to move back and forth through the clip.


## Selecting a Portion of Video to Capture

The Mark In and Mark Out controls in the Capture Tool let you select a portion of video to capture.

## To select a portion of video to capture:

1 In the Capture Tool, use one of the following methods to mark the position where you want the capture to begin:

- Press the Spacebar (or click Play) to start playback on the VTR, and click Mark In at the desired position.
- Use the Transport controls to queue the tape to the position at which you wish to start capturing, and click Mark In.
- Type a time code value in the Mark In field.

2 Use one of the following methods to mark the position where you want the capture to end:

- If the VTR is playing back, click Mark Out at the desired position.
- Use the Transport controls to queue the tape to the position at which you wish to end capturing, and click Mark Out.
- Type a time code value in the Mark Out field.


3 The exact length of the clip to be captured appears in the Duration display.

4 You can also do the following:

- To automatically queue the tape to the Mark In point, click Go to In.
- To automatically queue the tape to the Mark Out point, click Go to Out.
- To automatically mark a specific frame (not to be reflected in the capture), click Mark Memory.
- To clear any of the Mark In, Mark Out, or Mark Memory points, click Clear Display next to the appropriate button.

5 You are now ready to begin capturing, as described in "Capturing Audio and Video" on page 24 . When you begin capturing, the VTR queues to the In point and begins capturing video, then stops automatically when it reaches the Out point.

## Working with Captured Video

Once you have captured audio and video clips into a bin, you can:

- Create a sequence of clips to send to Pro Tools.
- Add captured clips to an existing sequence, then send that sequence to Pro Tools.
- Export the clips as media files for importing into Pro Tools.

For more information, see "Assembling Clips in a Sequence" on page 29 or "Exporting Audio and Video from Media Station|PT" on page 32.

Mark In and Mark Out controls

## Re-Digitizing an Existing Sequence

Media Station|PT can open sequences created on other Avid editing systems (such as Media Composer Adrenaline). However, you may want to re-digitize some or all of the media files because they were the wrong resolution, missing, or corrupted.

## To re-digitize either a sequence or individual clips:

1 Choose Tools > Capture and configure or verify the settings as you would for manual capture (see "Configuring the Capture Tool" on page 21).

2 In the bin, select the sequence or clips to redigitize.

3 Select Clip > Batch Capture.


Batch Capture dialog

4 Select or deselect the Offline Media Only option as required. The result of the batch capture depends on a combination of this setting and the resolutions for audio and video chosen in the Audio Project Settings and Media Creation dialogs:

- If the Offline Media Only option is selected, only those files which are offline will be re-digitized using the settings selected in the Audio Project Settings and Media Creation dialogs.
- If the Offline Media Only option is not selected and the resolution settings in the capture tool are the same as the original files, the original files will be discarded and replaced by the new files.
- If the Offline Media Only option is not selected and the resolution is different from the original files, new media will be recorded at the new setting and the original files will be left intact. The new files will be substituted for the old files in the sequence.

5 Type a handle length in the Handle Length field. This extends the beginning and end of the captured file by the specified number of frames.

Setting an adequate handle length is useful if you need to trim an edit past the end of the original clip boundaries. Adding handles creates a new, longer clip in the bin, even if you are using the same resolution as the original clip being redigitized.

6 Click OK.
Media Station|PT prompts you to insert the required tapes as needed and notifies you when the capture is complete.

## Digitizing from an EDL

Media Station|PT includes Avid EDL Manager software, which lets you open an EDL from another editing application, create a Media Station|PT sequence from that EDL, then re-digitize the sequence.

For more information on installing EDL Manager, see "Installing Optional Software on Windows XP" on page 12 (Windows) or "Installing Optional Software on Mac OS X" on page 13 (Macintosh).

## To create a sequence from an EDL, and digitize the sequence:

1 While Media Station|PT is still running, launch EDL Manager from the Windows Start Menu (Start > All Programs > Avid > EDL Manager).

2 Open the EDL to be digitized:

- If the EDL resides on a standard disk, select File > Open in EDL Manager, and navigate to the EDL.
- If the EDL is saved on an RT-11 disk in a CMX, GVG, or high-density GVG (HDGVG) edit controller format, insert the RT-11 disk and select File > Read from RT11 Disk.

3 Click the left-pointing arrow in the EDL Manger window. Media Station|PT will become the active application.


4 Select the bin where you wish to store the new sequence, and click OK.

5 In Media Station|PT, choose Tools > Capture to open the Capture Tool.

6 Verify the settings (input, resolution, and drive settings) for the clips to be digitized. For more information, see "Configuring the Capture Tool" on page 21

7 Select the sequence in the bin.
8 Choose Clip > Batch Capture.
Media Station|PT will prompt you to insert the first tape for the batch capture.

For more information, select Help > EDL Manager Help. Also, see the Avid® EDL Manager User's Guide available from the Avid Web site (www.avid.com).

## Importing Non-OMFI Media Files

Media Station|PT can import many different types of graphics, audio and video files (such as QuickTime). On import, new OMFI media files are created and stored on the specified volumes. You can select the video resolution in the Import dialog. Audio resolution is determined by the Audio Settings for the current project (see "Configuring Audio Settings" on page 18).

## To import non-OMFI media files into Media Station|PT:

1 Open the bin where you want the imported file to be stored.

2 Select File > Import.


Select Files to Import dialog
3 In the Select files to Import dialog, locate and select one or more files to import.

The Select Files to Import dialog displays only graphics files by default. To sort the view by other file types, choose a different option from the Files of Tyре рор-ир тепи.

4 Select the video resolution for selected files.
When importing QuickTime DV25, you can save time by importing it as DV25. The process of converting Quicktime DV25 to Avid DV25 is optimized to be significantly faster than other conversions. Since both Media Station|PT and Pro Tools with Avid DNA video peripherals support mixed video resolutions in the Timeline, it does not matter if the other video clips in your project are different formats, as long as they are the same frame rate.

5 Select the Audio Import Options.
'ใิ' Unlike Pro Tools, Media Station|PT supports audio files of mixed sample rate and bit depth in the same sequence. Therefore, it is not necessary to convert all audio files to the same sample rate and bit depth on import into Media Station|PT. You will have the option to convert audio files to a single sample rate and bit depth when you export them from Media Station|PT, and again when you import them into Pro Tools.

6 Select the volumes to store the new media files. Pro Tools requires that audio and video media must be stored on physically separate drives. Click the button to the left of the volume selector until there are separate selectors for audio and video, then select the desired drives for each.


Separate drives for audio and video
7 Click Open.
The selected files are imported into the selected bin.

## Assembling Clips in a Sequence

Once you have used Media Station|PT to capture or import a clip, you can add it (or selected portions of it) into a new or existing sequence.

See "Exporting Audio and Video from Media Station|PT" on page 32 for information on exporting sequences from Media Station|PT.

You can export a captured clip directly from Media Station|PT without having to first add it to a new sequence. See "Exporting Audio and Video from Media Station|PT" on page 32.

## Adding Clips to a New Sequence

You can add an entire clip (or a selected portion of it) to a new sequence.

## To add clips to a new sequence:

1 Choose Clip > New Sequence to create a new sequence.

2 In the bin, name the sequence and drag it to the Record Monitor.

3 Drag the original clip to the Source Monitor.


Media Station|PT main window

4 Use the controls underneath the Source Monitor to locate the first frame of the portion of the clip that you want to edit into the sequence:

- To begin playing the clip, click Play (or press the Spacebar). (Click Play or press the Spacebar again to Pause.)
- To move to the beginning of the clip, click Rewind (or press the Home key).
- To move to the end of the clip, click FastForward (or press the End key).
- To nudge by frame, click Step Forward 1 Frame or Step Backward 1 Frame (or press the Left/Right Arrow keys).
- To scrub, click and drag the cursor beneath the Source Monitor. (Enable the Caps Lock to hear audio while scrubbing.)

Step Forward 1 Frame


## Source Monitor controls

5 Click Mark In to mark the In point (the first frame of the selected portion) at the current position of the cursor.

6 Using the same controls, locate the last frame of the portion of the clip that you want to edit into the sequence.

7 Click Mark Out to mark the Out point (the last frame of the selected portion) at the current position of the cursor.

> "̣"
> You can also select the entire clip by clicking Mark Clip.

The portion of the clip between the In point and the Out point is now selected for editing into the sequence.

Q
You can also click the Clear Both Marks button to clear the In and Out points.

8 Click the Record Monitor to select it, and press the Home key to move the cursor to the beginming of the new sequence.

9 Click the Overwrite button. The selected jortion of the clip in the Source Monitor is edited over the new sequence in the Record Monitor.


## Overwrite button

## Adding Clips to an Existing Sequence

You can add a clip (or a portion of clip) to an existing sequence.

## To add clips to an existing sequence:

1 Open the bin containing the existing sequince.

2 Drag the sequence from the bin to the Record Monitor. The sequence appears in the Timeline below the Source and Record Monitors. (If the Timeline does not appear, choose Tools > Timeline.)

3 Drag the desired clip from the bin to the Source Monitor.

4 Under the Source Monitor, use the controls to set the In and Out points marking the portion of the clip that you want to edit into the existing sequence. (See "Adding Clips to a New Sequince" on page 29 for detailed information on using the controls.)
"
If the In or Out points have not been marked, the sequence will include everything after the cursor.

5 In the Timeline, ensure that the Source Track Enable buttons are properly aligned with the Timeline Track Enable buttons.

If it is necessary to align the Source and Timeline tracks, click on the Source track button and drag to the Timeline track button.


Aligning the "V1" Source video track with the "V1" Timeline video track

A In order for a track in the clip to be edited into the linked track on the Timeline, both the Source Track Enable button and the Timeline Track Enable button must be enabled (purple).

6 In the existing sequence, choose any of the following methods to set the starting position at which the selection in the Source Monitor will be added:

- Drag the cursor in the Timeline to the desired position.
- In the Record Monitor, use the controls (similar to the Source Monitor controls) to queue to the desired position.
- In the Timeline or the Record Monitor, press the Home key to move to the beginning of the sequence, or press the End key to move to the end of the sequence.

7 Choose one of the following methods to add the selected portion of the clip at the location of the cursor:

- Click the Overwrite button to paste the selected clip over any existing material in the Timeline.
- or -
- Click the Splice-In button to paste the selected clip into the Timeline, and push all the clips which come after the insertion point later in the Timeline (analogous to a Shuffle edit in Pro Tools).


Splice-In
Overwrite

## Overwrite and Splice-In buttons

8 To add another clip to the sequence, repeat the preceding steps.

## Deleting Clips from a Sequence

When you delete a clip from a sequence, all selected (purple) audio and video track layers of the clip are removed from the sequence.

## To delete clips from a sequence:

1 In the Timeline, click the clip you want to delete so that the cursor appears between its boundaries.


## Cursor in clip boundaries in Timeline

2 Click the Track Enable buttons on the left side of the Timeline so that all audio and video tracks in the Timeline are selected (purple).


## Track Enable buttons

3 Above the Timeline, do one of the following:

- Click the Mark In and Mark Out buttons to set the In and Out points.
- or -
- Click the Mark Clip button to automatically highlight the entire clip.


[^0]4 Do one of the following:

- Click the Extract button (Scissors) to remove the clip and shuffle the following clips earlier to close the gap (analogous to a shuffle edit in Pro Tools).
- or -
- Click the Lift button to remove the clip and leave the following clips at their current time code location.


Extract and Lift buttons

Press Ctrl+Z or choose Edit > Undo to undo your last action. Media Station|PT has 32 levels of Undo.

## Exporting Audio and Video from Media Station|PT

There are three methods of exporting sequences from Media Station|PT for import into Pro Tools:

- Using the Send To templates to export an AAF or OMF sequence
- Manually exporting an AAF or OMF sequence
- Creating a video mixdown


## Using the Send To Templates to Export an AAF or OMF Sequence

The Send To Templates option lets you create one metadata AAF or OMF file that references audio and video files used in the sequence, and save it to the volume selected in your Avid Preferences.

## To use the Send To Digidesign Pro Tools templates:

1 Select a sequence in a bin.
A AAF exports ignore in and out marks, but QuickTime exports do not. The default templates that create QuickTime movies automatically deselect the "Use in and out marks" option.

2 Choose File > Send To > Digidesign Pro Tools, then choose one of the following options:

Link to Audio and Video Creates a sequence which links to existing audio and video wherever possible and only creates new media files for effects that have not been rendered. This is the fastest and most storage-efficient way to export a sequence.

Choose this option for a single-user scenario in which Pro Tools will link to the same media files as the current Media Station|PT sequence. Use this setting if the media files are currently stored on volumes that are suitable for Pro Tools media playback and recording.

Consolidate-Link Audio and Video Exports only the portion of the audio and video files that are actually used in the edited sequence. One sequence file is created, along with a new file for each clip in the timeline. This is similar to the Consolidate command in Pro Tools. New files are created in the formats specified in the Media Creation and Audio Project Settings dialogs.

Choose this option for a multi-user scenario in which the Pro Tools editor only needs access to the material in the sequence and is likely working on a different computer or volume.


Send To dialog (LInk to Audio and Video options shown)
3 If you want to view or change export settings, click the Options button, and then make any changes (such as switching from the default AAF to the OMF format). If you make any changes, you can use the Save As Template button to create a new template.

This workflow assumes that you use the default values. This means that you are exporting using the Project sample rate, audio file format, and sample bit depth.

4 Click Set.
5 Navigate to the location where you want the AAF or OMF files to reside.

6 Click OK.

7 Media Station|PT exports the files to the destination folder. If Media Station|PT has to transcode video files to a new resolution, render effects or perform audio file conversions, a new sequence appears in the bin with the name filename.Export.01, and a new audio master clip appears in the bin with the name filename.new.01.

## Manually Exporting an AAF Sequence

Manually exporting an AAF sequence from Media Station|PT involves more steps than using the Send To templates, but it provides more flexibility.

AYou will need to render all video effects before manually exporting the sequence.

## Rendering All Effects

Though it is not possible to add or edit video or audio effects in Media Station|PT, you may need to export a sequence with effects that were created on another Avid editing system. Before you can play or export the sequence, you must render all effects. Media Station|PT can only render those effects which are currently installed. Media Station|PT contains all of the standard Avid video effects. All third party effects must be rendered by the video editor before opening or importing into Media Station|PT.

For more information on rendering effects in Avid products, see the Avid Effects Guide included in your Avid application package.

## To render all effects in Media Station|PT:

1 Drag the sequence to the Record Monitor. All elements of the sequence can be viewed in the Timeline. Unrendered effects appear in the Timeline as small squares with blue or green dots. Rendered effects appear in the Timeline as a square with no colored dot.

2 If there are any audio effects to render, choose Tools > AudioSuite to open the AudioSuite dialog, which can be left open in the background while you work.

3 Click the Track Enable buttons on the left side of the Timeline so that all audio and video tracks in the Timeline are selected (purple).


Enabled tracks are colored purple
4 Click in the Timeline, and press the Home key to move the cursor to the beginning of the sequence.

5 Click the Mark In button to mark the In point at the beginning of the sequence.


## Mark In and Mark Out buttons

6 Press the End key to move the cursor to the end of the sequence.

7 Press the Mark Out button to mark the Out point at the end of the sequence.

8 Choose Clip > Render In/Out (if the command appears grayed out, click in the Timeline again).

9 In the Render Effects dialog, choose Effect Source Drive from the Drive pop-up menu. This will write the rendered effect to the same volume as the original files.


Render Effects dialog

A
This selection keeps audio files on audio drives and video files on video drives. If you select only one volume, both the rendered audio and video files will be stored on the selected volume, which could cause playback errors.

10 Click OK.
11 To play the sequence with the rendered effects, press the Home key to move the cursor to the beginning of the sequence, then click the Play button (or press the Spacebar) to play.

## Removing Third-Party Effects from a Sequence

If you open a sequence that has a third-party video or audio effect that you cannot render, you can remove the effect.

## To remove an effect from a sequence:

1 Click the effect in the Timeline so that the cursor is placed over the small effect box.

2 Click the Track Enable button to select the track that holds the effect.


3 Click the Remove Effect button.


Buttons on left of Timeline

## Exporting a Sequence

Once all effects have been rendered, export the sequence as an AAF sequence.

To manually export an AAF sequence:
1 Select the sequence in the bin.
2 Select File > Export.


Export As dialog
3 Type a name and select a location for the exported sequence.

4 Select Export to Pro Tools from the Export Settings menu at the bottom of the Export As dialog.

5 Click the Options button to open the Export to Pro Tools Settings dialog. Verify the settings:

- For Export As, select AAF.
- Select the Include All Video Tracks in Sequence option. When the sequence is imported into Pro Tools. All of the video tracks will be "flattened" so that the imported sequence shows only a single video stream.
- Deselect the Include All Audio Tracks in Sequence option if you do not want to export any audio.


Export Settings - Export To Pro Tools dialog, Video Details tab

6 In the Video Details tab, select one of the following from the Export Method pop-up menu:

Link to Current Media The Pro Tools session will link to the same video files as the current Media Station|PT sequence. Use this setting if the video files are currently stored on a volume suitable for Pro Tools video playback.

Copy Media and Link to Copied Media New complete video files will be created on the designated volume.

Consolidate and Link to Consolidated Media Similar to Copy Media, but only the parts of the video clips which are actually used in the Timeline are copied. Use this setting to copy the video files to a volume suitable for Pro Tools video playback.

ADo not use either Embed Media or Consolidate and Embed Media. Pro Tools does not support embedded media in AAF sequences.

The following settings may also appear under the Video Details tab, depending on the selected export method:

Destination Folder Choose where to store copied video files.

Target Drive for Consolidate Choose the target drive for consolidated video. New video files will be stored on that drive in the OMFI MediaFiles folder (for OMF) or the Avid MediaFiles folder (for MXF). You cannot save these export settings until you have highlighted a target volume. Striped drives appear in bold type.

Handle Length Extends the beginning and end of the consolidated file by the specified number of frames. This lets you trim edits later, though the sequence would need to be re-edited in Media Station|PT. (Pro Tools does not support trimming video regions, so you can save space and time by setting this to 0 .)

Render Video Effects Always select Render Video Effects. If you already manually rendered effects, selecting this option will not create new files. It is highly recommended that all effects be rendered manually before exporting the sequence. (See "Rendering All Effects" on page 33.)

Transcode Video To Use this only if you need to change the video resolution (such as in situations where you are using an Avid Mojo). Pro Tools supports most resolutions supported by Media Station|PT, and even supports mixed resolutions in the Pro Tools Timeline, so in most cases there is no need to spend extra time
transcoding the video. However, if you have video of a resolution which is not currently supported by Pro Tools, use this setting to transcode it to a supported resolution.

If your Pro Tools system is running on a slower computer, you may be able to reduce some of the CPU load in Pro Tools by transcoding the video to 1:1 on export. 1:1 video is uncompressed, and consequently it does not need to be decompressed before playing back. However, 1:1 video requires significant amounts of storage space.


Export Settings dialog, Audio Details tab
7 Click the Audio Details tab, and select one of the following from the Export Method pop-up menu:

Link to Current Media The Pro Tools session will link to the same audio files as the current Media Station|PT sequence. Use this setting if the audio files are currently stored on a volume suitable for Pro Tools audio playback.

Copy Media and Link to Copied Media New complete audio files will be created on the designated volume.

Consolidate and Link to Consolidated Media Similar to Copy Media, but only the parts of the audio files which are actually used in the Timeline are copied. Use this setting to copy the audio files to a volume suitable for Pro Tools playback.

> A Do not use either Embed Media or Consolidate and Embed Media. Pro Tools does not support embedded audio in AAF sequences.

The following settings may also appear under the Audio Details tab, depending on the selected export method:

Render All Audio Effects Select the Render All Audio Effects option so that all audio effects are rendered before export. If you already manually rendered effects, selecting this option will not create new files. It is highly recommended that all effects be rendered manually before exporting the sequence. (See "Rendering All Effects" on page 33.)

Include Rendered Audio Effects Select the Include Rendered Audio Effects option. Otherwise, the exported sequence will include the original audio files without any AudioSuite effects from the original sequence-even if those effects were previously rendered.

Convert Audio Sample Rate/Bit Depth/File Format Select Project for any of these, and the current Audio Project Setting will be used. (See "Configuring Audio Settings" on page 18.)

8 Click Save or Save As in the Export Settings dialog:

- Click Save to use the specified settings whenever Export to Pro Tools is selected from the Export Settings menu. These settings will also be used when choosing File > Send To > Digidesign Pro Tools.
- Click Save As to save these settings as a preset with a different name. These settings can then be recalled in the Export dialog. If you click Save As instead of Save, the Export to Pro Tools settings will not be changed.

9 Click Save in the Export As dialog. (The Export Settings cannot be saved until you have selected a target drive for both audio and video.)

When the export is complete, you are ready to import the file into Pro Tools.

For more information on opening and importing AAF sequences in Pro Tools, see "Importing Audio and Video into Pro Tools" on page 42. For more information on the Import Session dialog, see the Pro Tools Reference Guide.

## To export only part of a sequence:

1 Choose Clip > New Sequence to create a new sequence.

2 In the bin, name the sequence and drag it to the Record Monitor.


Media Station|PT main window

3 Drag your original sequence to the Source Monitor.

4 Use the controls underneath the Source Monitor to locate the first frame of the portion of the clip that you want to edit into the sequence:

- To begin playing the clip, click Play (or press the Spacebar). Click Play or press the Spacebar again to Pause.
- To move to the beginning of the clip, click Rewind (or press the Home key).
- To move to the end of the clip, click FastForward (or press the End key).
- To nudge by frame, click Step Forward 1 Frame or Step Backward 1 Frame (or press the Left/Right Arrow keys).
- To scrub, click and drag the cursor beneath the Source Monitor. (Enable the Caps Lock to hear audio while scrubbing.)



## Source Monitor controls

5 Click Mark In to mark the In point (the first frame of the selected portion of the clip) at the current position of the cursor.

6 Using the same controls, locate the last frame of the portion of the clip that you want to edit into the sequence.

7 Click Mark Out to mark the Out point (the last frame of the selected portion of the clip) at the current position of the cursor.


You can also select the entire clip by clicking Mark Clip.

8 Click the Record Monitor to select the empty sequence, then press the Home key to move the cursor to the beginning of the sequence.

9 Click the Overwrite or Splice-In button. The selected portion of old sequence is edited into the empty sequence in the Record Monitor.


Overwrite and Splice-In buttons
10 Follow the preceding steps for exporting the new sequence (see "Exporting a Sequence" on page 35).

## Transcoding Unsupported Resolutions to DV25 for Avid Mojo

Media Station|PT can only play back the following resolutions when using Avid Mojo:

- 1:1 interlaced JFIF or MXF
- DV50
- DV25
- 15:1s
- 14:1 progressive scan
- 28:1 progressive scan
- 35:1 progressive scan

However, Media Station|PT can open sequences with other resolutions, and transcode them to DV 25 for playback and export to Pro Tools.

To transcode unsupported resolutions to DV25:
1 Open the bin containing the sequence or files you want to transcode.

2 Select the sequence or files and choose Edit > Duplicate to duplicate it.

3 In the bin, type a new name for the duplicated sequence or clip.

4 Select the sequence or files and choose Clip > Consolidate/Transcode.


Consolidate/Transcode dialog
5 Select the Transcode option.
6 Choose the target volume for transcoded video. New video files will be stored on that volume in the OMFI MediaFiles folder (OMF). You cannot save these export settings until you have highlighted a target volume. Striped drives appear in bold type.

7 Type a handle length in the Handle Length field, which extends the beginning and end of the transcoded file by the specified number of frames. (Pro Tools does not support trimming video regions, so you can save space and time by setting this to 0 .)

Setting an adequate handle length is especially useful if you need to trim an edit past the end of the defined clip boundaries.

8 Select the Do Video Conversion option.
9 Select the OMF option, and choose a DV25 resolution from the Target Video Resolution menu.

10 Click Transcode.


Copying Media Files dialog
11 In the Copying Media Files dialog, select the "Master Clips Are Relinked to Media on Target Drive" option. This will re-link the sequence that you are transcoding to the transcoded DV25 media on the target volume.

## 12 Click OK.

The sequence or clip is transcoded with the specifications you indicated, and is now ready for importing into Pro Tools with Avid Mojo.

## Creating a Video Mixdown

Video mixdown combines a sequence (or portion of a sequence) into one video file that reflects all edits and effects processing.

You can mix down multiple video tracks or a single track. For mixdowns of multiple tracks, the selected track and all tracks under it are combined into one file that always reflects the topmost visible track.

Creating a video mixdown is analogous to bouncing to disk in Pro Tools, except that the video mixdown creates only video and no audio.


[^1]
## To create a video mixdown:

1 Open the bin containing the sequence you want to mix down.

2 Drag the sequence to the Record Monitor. The tracks comprising the sequence display in the Timeline.


Record and Source Monitors
3 Do one of the following:

- To combine multiple video tracks into the mixdown, select a video track, then click the Record Track Monitor button next to the track. Video tracks above the selected track will not be included in the mixdown.


Record Track monitor

- Or -
- To select only one video track for mixdown, Control-click (Windows) or Com-mand-click (Macintosh) the Record Track Monitor button. The button will turn green.


Record Track monitor
4 On the Timeline or in the Record Monitor, drag the cursor to the position in the sequence at which you wish the mixdown to start. (Press the Home key to move the cursor to the beginning of the Timeline.)

5 Under the Record Monitor, click the Mark In button to mark the In point at the beginning of the sequence.


## Record Monitor controls

6 Drag the cursor to the position at which you want the sequence to end. (Press the End key to move the cursor to the end of the sequence.)

7 Click Mark Out button to set the Out point.
The portion of the sequence you have selected will be mixed down.

8 Choose Special > Video Mixdown.

| Video Mixdown $x$ |  |  |
| :---: | :---: | :---: |
| Target Bin Jon's Project Bin * |  |  |
| Target Drive | ■ (C:) | - |
|  | 54866 MB available |  |
| Resolution | DV25411 OMF |  |
|  | About 62 MB required |  |
|  | OK |  |

Video Mixdown dialog
9 From the Target bin pop-up menu, choose the bin where you wish to store the master clip of the video mixdown.

10 From the Target Drive pop-up menu, choose the volume where you wish to save the video mixdown. On the volume you select, MXF files are stored in the Avid MediaFiles folder, and AAF or OMF files are stored in the OMFI MediaFiles folder.

11 Choose a file resolution for the video mixdown from the Resolution pop-up menu.

A
If exporting for Avid Mojo users, ensure you export to a resolution that is supported with Avid Mojo, such as DV25. See "Transcoding Unsupported Resolutions to DV25 for Avid Mojo" on page 39.

## 12 Click OK.

A progress bar displays as Media Station|PT saves the video mix to the location and resolutions you have specified.

## Importing Audio and Video into Pro Tools

This section explains the basic steps of importing AAF or OMF media into a Pro Tools session.

## Importing an AAF or OMF Sequence as a Pro Tools Session

The easiest way of using Pro Tools to edit a sequence exported from Media Station|PT is to open it as a new session.

## To open an AAF (or OMF) sequence as a Pro Tools session:

1 Launch Pro Tools.
2 Choose File > Open Session.
3 In the Open Session dialog, navigate to the AAF or OMF sequence you want to import.

4 Click Open.


Pro Tools New Session dialog
5 Name your session in the File Name field.

6 If you want to create session and audio files that can be used in either Windows or Macintosh versions of Pro Tools, select Enforce Mac/PC Compatibility.

7 Select the I/O Settings to use for the session. Several pre-configured I/O Settings are included with your system, or you can select a custom I/O Setting that you have created.

8 Click Save.
The Import Session Data dialog appears.


Import Session Data dialog

Pro Tools lets you open and import OMF or AAF sequences that reference audio files with mixed sample rates and/or bit depths. Audio files will be converted to the highest sample rate and bit depth of the files being imported (for new sessions) or to the current sample rate and/or bit depth (for existing sessions). The DigiTranslator 2.0 option is required.

9 Choose Link to Source Media (Where Possible) from the Audio Media Options pop-up menu.

10 Choose Link to Source Media from the Video Media Options pop-up menu.

11 Change other parameters as desired. For more information, see "Exporting Audio from Pro Tools for Media Station PT" on page 45.

12 Click OK.
Pro Tools will create a new Audio Files folder, a Fade Files folder, a Video Files folder, a cache.wfm file, and a session file at the designated locations. This session will match the audio file type, sample rate, and bit depth of the audio in the OMF or AAF you selected.

## Importing an AAF or OMF Sequence into an Existing Session

You can import an AAF or OMF sequence containing audio and video media into an existing Pro Tools session.

A Importing an AAF or OMF sequence containing video into an existing Pro Tools session will replace any other video already occupying the Movie track.

## To open and import audio and/or video tracks from an OMF or AAF sequence:

1 Open an existing Pro Tools session.
2 Choose File > Import > Session Data, and choose the AAF or OMF sequence that you wish to import.

APro Tools does not support AAF sequences with embedded media. Embedded AAFs will display unknown in the Type column in DigiBase browsers.

You can also open an AAF or OMF sequence by dragging it from any location on your computer or the DigiBase browser to the Pro Tools Timeline.

3 Choose Link to Source Media (Where Possible) from the Audio Media Options pop-up menu.

4 Choose Link to Source Media from the Video Media Options pop-up menu.

5 In the Import Session Data dialog, deselect any source tracks that you do not want to be imported. (If you are importing Session Data from AAF or OMF sequences, all tracks are selected by default. If you are importing tracks from a Pro Tools session, no tracks are selected by default.)


Import Session Data dialog

6 Click OK.
A. If there are any errors or region name truncations, a dialog will appear asking you if you want a detailed report of the changes. Click Yes and choose where you want to save the log.

7 If your audio or video source media is on a volume that is not suitable for playback (shown as a Transfer volume in the Workspace browser), Pro Tools displays a dialog that guides you to copy the media to a volume designated for Playback or Record. (Click Yes.)

Pro Tools imports the audio and video media to the Timeline. Audio tracks with mixed sample rates and/or bit depth are automatically converted to the same sample rate and bit depth as the session.

Now you are ready to edit the audio files in Pro Tools.

## Drive Selection When Importing Session Data

When using the Import Session Data dialog to import audio files with Copy or Consolidate Source selected in the Audio Media Options pop-up menu, all new audio files are stored on the volumes designated for their respective target tracks in the Disk Allocation dialog.

When importing video files (such as from a CD), the video files are copied by default to the same volume that holds the session file. To have the files copied to another volume, open the Workspace browser, and select T in the Video volume designation column for all volumes except the volume where you want the video to be stored. To ensure that the files are not copied to the
root level of the volume, create a folder with the session name on the desired drive, then create a folder within that session folder named Video Files.

## Importing an Avid Video Mixdown into Pro Tools

You can import an OMF or MXF video file into Pro Tools. You might do this, for example, to import a video mixdown created in Media Station|PT.

## To import Avid video into Pro Tools:

1 Create a new Pro Tools session or open an existing session.

2 Choose File > Import > Avid Video or QuickTime Movie.

3 In the Select Video File to Import dialog, locate the video file in the Avid MediaFiles folder (MXF) or OMFI MediaFiles folder (OMF) stored on your video drive.


Select Video Files to Import dialog
4 Click Open.
Pro Tools imports the video file into the Video track.

## Editing Audio in Pro Tools

Audio files created in Media Station|PT are either OMFI or MXF files, which Pro Tools cannot edit destructively.

When you use Pro Tools to perform a destructive edit (such as using AudioSuite processing to replace the original sound), it creates a new copy of the file and leaves the original untouched.

See the Pro Tools Reference Guide for detailed information on editing audio files in Pro Tools.

## Exporting Audio from Pro Tools for Media Station PT

In Pro Tools, you can export audio tracks for use in Media Station|PT using any of the following commands:

- Export Selected Tracks as OMF/AAF
- Bounce to Disk
- Export Selected Regions as Files

For other export methods, see the Pro Tools Reference Guide.

## Exporting Tracks as OMF/AAF Sequences

Use Export Selected Tracks as OMF/AAF to export individual tracks or an entire Pro Tools session in AAF or OMF format.

Tracks are exported in their entirety and time selections are ignored.

Volume and pan automation is not retained on export if Quantize Edits to Frame Boundaries is enabled (Avid Compatibility Mode).The Movie track cannot be exported to AAF or OMF from Pro Tools.

To export selected audio tracks from Pro Tools as an AAF (or OMF) sequence:

1 In Pro Tools, select the tracks you want to export in the Pro Tools session by Shift-clicking the names of each track.

2 Choose File > Export > Selected Tracks as OMF/AAF.

3 Under OMF/AAF Options, choose AAF (or OMF) from the Export As pop-up menu.

4 Select Enforce Avid Compatibility.

Enforce Avid Compatibility creates frame-accurate edits, wraps the files as OMFI (unless you choose MXF), and limits the sample rate options to 44.1 or 48 kHz . Dithering without noise shaping will be applied to files being exported from 24 -bit to 16 -bit.


Pro Tools Export to OMF/AAF dialog

An OMF sequence cannot reference MXF media files. In the Export Selected Tracks as OMF/AAF dialog, MXF is only available when AAF is selected in the Export As popир тепи

5 Ensure that the Target Project Time Code Format pop-up menu displays the correct frame rate for the Media Station|PT project.

6 Click OK.
7 In the Publishing Options dialog, type the Pro Tools Comment and Sequence Name.

| 20.Publishing Options | $\times$ |
| :---: | :---: |
| OMFligaf Oplions |  |
| Pro Tools Comment Paris Blike Race |  |
| Sequence Name: PaisRacd |  |
| Cancel 0 OK |  |

Pro Tools Publishing Options dialog

8 Click OK.
Pro Tools will create a sequence with the name you supply. (The Pro Tools comment appears in the Media Station|PT bin in a Pro Tools Comment column.)

9 In the Name the AAF/OMFI File to Export dialog, navigate to a folder where you can easily locate the Pro Tools composition when it is time to import it into Media Station|PT.


Pro Tools Name the AAF File to Export dialog (OMFI dialog not shown)

10 Click Save.

11 In the Please Choose a Folder for Converted Audio Files dialog, ensure that the audio files are being saved to the OMFI MediaFiles folder (OMF files) or the Avid MediaFiles folder (MXF files) on a suitable drive for use with Media Station|PT:


Navigating to the OMFI MediaFiles folder (OMF media) or Avid MediaFiles folder (AAF media)

12 Click Use Current Folder (Windows) or Choose (Macintosh).

Pro Tools exports the following files:

- The AAF or OMF sequence is saved to the folder you designated.
- Related media is saved to the appropriate volume and folder (OMFI MediaFiles or Avid MediaFiles) accessible to Media Station|PT.

13 If you are ready to import the files into Media Station|PT, exit Pro Tools.

## Exporting Audio Files Using Bounce to Disk

Use the Bounce to Disk command to create premixed files of the current Pro Tools session. This does not export all of the individual files on the Timeline, but it does guarantee that the mix you hear in Media Station|PT will be identical to the mix you hear in Pro Tools, including all panning, effects and automation.

## To export audio files using Bounce to Disk:

1 In Pro Tools, finalize the mix.
2 Select the time range of the session that you want to export. (All audible tracks in that time range will be included in the bounce, whether they are selected or not.)

3 Choose File > Bounce to > Disk.


Bounce to Disk dialog
4 Select the Enforce Avid Compatibility option.
Enforce Avid Compatibility creates frame-accurate edits, wraps the files as OMFI (unless you choose MXF), and limits the sample rate options to 44.1 or 48 kHz . Dithering without noise shaping will be applied to files being bounced from 24-bit to 16-bit.

5 Choose a file type from the File Type pop-up menu.

6 Click Bounce.
7 In the Publishing Options dialog, type the Pro Tools Comment and Clip Name.

If you selected more than one region for export, the Clip Name field will not be available and the names of the regions will be used for the exported files.


Publishing Options dialog
8 Choose the Target Project Time Code Format.
9 Click OK.
10 In the Save Bounce As dialog, navigate to the volume you will use for audio playback in Media Station|PT.

- For MXF audio files, ensure the file is saved to the Avid MediaFiles folder.
- For all other audio files, ensure the file is saved to the OMFI MediaFiles folder.

11 Click Save.
All audible audio in the selection will be exported to two multi-mono audio files.

## Exporting Selected Regions as Files

You can export regions as audio files with the Export Selected As Files command. Use this command if you intend to use a region in other sessions (or other audio applications) without using its parent source file.

This command also provides a way to convert regions to a different sample rate or bit depth.

## To export regions as new MXF files:

1 In the Regions List, select the regions you want to export.

2 From the Regions List pop-up menu, choose Export Regions As Files. The Export Selected dialog appears.


Export Selected dialog
3 In the Export Selected dialog, select the Enforce Avid Compatibility option.

Enforce Avid Compatibility creates frame-accurate edits, wraps the files as OMFI (unless you choose MXF), and limits the sample rate options to 44.1 or 48 kHz . Dithering without noise shaping will be applied to files being exported from 24-bit to 16 -bit.

4 Choose MXF from the File Type pop-up menu.

5 Set the bit resolution and sample rate. In addition, specify the Conversion Quality, and navigate to the volume you will use for audio playback in Media Station|PT.

- For MXF audio files, ensure the file is saved to the Avid MediaFiles folder.
- For all other audio files, ensure the file is saved to the OMFI MediaFiles folder.

6 Select an option for how Pro Tools should resolve duplicate file names.

Prompting for Each Duplicate Prompts you for a file name for any file that has the same name as a file in your destination directory.

Auto Renaming Automatically changes the name of any duplicate file by adding a number at the end of the file name (such as file_01).

Replacing with New Files Replaces files with the same name with the new files.

7 Once the Export Options are configured, click Export to export the new audio files.

When you Export Selected with a lower bit rate, Dither (and Noise Shaping) may be applied. See the following table:

Dither and Noise Shaping with Export Selected

| Bit Rate | Dither | Noise <br> Shaping |
| :--- | :--- | :--- |
| 24-bit to 24-bit | No | No |
| 16-bit to 24-bit | No | No |
| 24-bit to 16-bit | Yes | Yes |
| 16-bit to 16-bit | No | No |
| 24-bit to 8-bit | Yes | No |
| 16-bit to 8-bit | Yes | No |

Avid Media Station｜PT supports 24－bit au－ dio files．

For more information about using Dither，see the Pro Tools Reference Guide．

## Importing Audio into Media Station｜PT from Pro Tools

Once you have exported audio files or sequences from Pro Tools，you may import them into a bin in Media Station｜PT．

## Importing Audio Files into a Bin

To import audio files into Media Station｜V10：
1 Launch Media Station｜PT，and open the de－ sired project．

2 Open the bin into which you wish to import the audio files from Pro Tools．

3 Choose Tools＞Media Tool．


Media Tool Display

The Media Tool Display lets you scan all media files in both the OMFI MediaFiles and Avid Me－ diaFiles folders．

4 Select the Master Clips and the Media Clip op－ tions．

5 Under the Media Drives list，do one of the fol－ lowing：
－Select the drives that contain media files for your project．
－or－
－Click All Drives to select all applicable drives for scanning．

6 Under the Projects list，click All Projects to scan all available media files．

7 Click OK．
The Media Tool window appears，displaying the media you selected．

| 目 Media Tool |  | $\square \square$ |
| :---: | :---: | :---: |
| Brief | Text Frame Script |  |
| Name |  | Creation Date |
| 圜 | Car | 03／15／2005 10：05：23 |
|  | Paris Race Bin． 03 | 03／15／2005 21：10：55 |
|  | Untitled Sequence．02，Video Mixdown，1 | 03／15／2005 13：21：15 |
| \％ | Paris Race Bin． 02 | 03／15／2005 21：10：28 |
|  | George | 03／15／2005 10：04：43 |
| 睰 | Untitled Sequence．02，Video Mixdown，1 | 03／15／2005 15：41：41 |
| 圜 | George＇s Dad | 03／15／2005 10：04：18 |
|  | Jon＇s Project Bin． 02 | 03／11／2005 15：36：36 |
| 罝 | NoDongleProblerns Bin． 07 | 03／10／2005 16：16：54 |
|  | Untitled Sequence．01，Video Mixdown，1 | 03／15／2005 10：19：59 |
| 睘 | MoDonaloDroblame Bin OE | mamanon5 13：12．39 |
| － | Unstikled＊III | $\Rightarrow 11$ |

Media Tool
8 In the Media Tool window，select the Stereo （or multi－mono）master clip exported from Pro Tools．

9 Drag the master clip to the bin．
10 Close the Media Tool．
11 To preview the contents of the imported au－ dio clip，double－click the audio clip in the bin． The audio clip will open in a pop－up monitor．

## Importing an AAF Audio Sequence into a Bin

## To import an AAF sequence into Media Station|PT:

1 Launch Media Station|PT, and open the desired project.

2 Select the bin where you would like to import the sequence.

3 Choose File > Import.
4 In the Select Files to Import dialog, choose AAF Files in the Files of Type pop-up menu.

5 Navigate to the sequence you wish to import, and ensure the correct drive is selected for audion.

6 Click Open. The new audio sequence appears in the selected bin, along with all related audio clips.
"
AAF-referenced audio files that are not stored in either the Avid MediaFiles folder or the OMFI MediaFiles folder will be automatically copied to the appropriate folder.

7 To hear the contents of the imported audio sequince, double-click the audio sequence in the bin. The audio sequence will open in a pop-up monitor. (Press the Spacebar to Play.)

## Synchronizing Audio with a Media Station|PT Sequence

Once you have imported an audio file or sequince from Pro Tools into a bin in Media Station|PT, you can synchronize it with video. This is especially useful for verifying sync with the original video sequence, then laying audio and video back to tape or creating a digital movie with your final mix.

To synchronize an edited audio file or sequence with the original video sequence:

1 Ensure that the audio exported from Pro Tools is now residing in a bin within your current project.

2 Drag the original sequence to the Record Monitor to see all elements in the Timeline.


Record and Source Monitors
The original sequence displays in the Timeline.


Original sequence displays in Timeline

3 Drag the imported audio clip or sequence from the bin to the Source Monitor. New Source Track buttons for the source appear to the left of the Track buttons for the Timeline.


## New track buttons

4 Use the controls underneath the Source Monitor to locate the first frame of the portion of the audio that you want to edit into the sequence:

- To begin playing the clip or sequence (the source), click Play (or press the Spacebar). (Click Play or press the Spacebar again to Pause.)
- To move to the beginning of the source or sequence (the source), click Rewind (or press the Home key).
- To move to the end of the source, click FastForward (or press the End key).
- To nudge by frame, click Step Forward 1 Frame or Step Backward 1 Frame (or press the Left/Right Arrow keys).
- To scrub, click and drag the cursor beneath the Source Monitor.

A
Enable the Caps Lock to hear audio while scrubbing.


## Source Monitor controls

5 Click Mark In to mark the In point (the first frame of the selected portion) at the current position of the cursor.

6 Using the same controls, locate the last frame of the portion of the source that you want to edit into the sequence.

7 Click Mark Out to mark the Out point (the last frame of the selected portion) at the current position of the cursor.

You can also select the entire source clip or sequence by clicking Mark Clip.

The portion of the audio source between the In point and the Out point is now selected for editing into the sequence.

[^2]8 Choose Clip > New Audio Track to add audio tracks to the sequence. (This leaves any original audio tracks in place to compare synchronization.) Add a new track for each channel of audio you want to add.


## Audio tracks in the Timeline

9 If necessary, click on the Source track buttons and drag to the desired new Timeline track buttons so that the new media will be placed on the correct tracks in the Timeline.


Aligning Source audio tracks with Timeline audio tracks

10 If the original audio tracks still display yellow speaker icons, click the speaker icons in the Track Enable button to mute them. The speaker icons for the original tracks will disappear, and the speaker icons should appear yellow in the new tracks, indicating that they will be heard.


Clicking the speaker icons to disable Source tracks
11 If the video track and the original audio tracks are enabled (gray), disable them and enable the new audio tracks (purple), by clicking the correct audio track buttons (A1-A24). This will ensure that only the new tracks will be affected by any editing commands.


New audio tracks in Timeline
12 In the Timeline, place the cursor at the position where you want to lay the new audio into the Timeline. (Press Home to move to the beginning of the sequence.)


Timeline containing two empty audio tracks
Chapter 3: Media Station|PT Workflows

13 Under the Record Monitor, click the Clear Both Marks button to remove any In and Out points (if present).


Record Monitor controls
14 Click the Overwrite button to lay the audio into the Timeline.


## Overwrite and Splice-In buttons

The audio selected between the In and Out points in the Source Monitor is laid into the Timeline at the position of the cursor.


New audio tracks from Pro Tools

Timeline with new audio sequence

15 If you want to display audio waveforms in the Timeline, click the Fast Menu (located on the lower left hand corner of the Timeline), and choose Audio Data > Energy Plot. Ensure that the new audio tracks appear synchronized with the originals.


Fast menu
16 If necessary, make sure the video track's Monitor button is enabled (purple). This will allow you to view the video portion of the sequence in the Record Monitor (or client monitor).


Enabling the Video track
17 Press the Home key to move the cursor to the beginning of the sequence and press the Spacebar to play the sequence. The new audio should be synchronized with the video.

After verifying the new audio sequence is correctly synchronized, you can do either of the following:

- Lay audio and video back to tape using Digital Cut
- Export your sequence as a QuickTime, MPEG, or other format digital movie.


## Laying Back Audio and Video to Tape

Pro Tools video playback is intended for monitoring purposes only, and is not suitable for professional layback or broadcast, regardless of the resolution or frame rate of the video. However, video output from Media Station|PT is professional quality. Use Media Station|PT when you need to output both audio and video to tape. To avoid dropped frames, it is always recommended that all effects be rendered before performing a layback.

## To record audio and video to tape from Media Station|PT:

1 Insert a video tape into your VTR.
Media Station|PT will present a list of tapes already associated with this project and ask you which tape you have inserted.


## Select Tape dialog

2 Do one of the following:

- Select one of the displayed tape names and click OK.
- or -
- Click New to add a new tape to the list.

3 Drag the sequence from the bin to the Record Monitor.

4 Set the In and Out points in the Timeline as desired.

5 Select Output > Digital Cut. The Digital Cut Tool appears.


Digital Cut Tool
6 In the Source Track buttons on the far left, select the top video track. Only the selected tracks and the video tracks below it will be recorded.


Selected Source tracks
7 Select the audio tracks you want to include. Only the selected tracks will be included in the recording.

8 Use the Record Track buttons on the right to select which tracks to record on the tape (audio and video).

9 Do one of the following:

- Select the Entire Sequence option to record the entire sequence.
- or -
- Deselect the Entire Sequence option and set the In and Out points in the Timeline.

10 Select the Video Effect Safe Mode option. This will warn you if any effects remain un-rendered.

11 If you want to output a DV25-only sequence directly to a DV25 device without any loss due to compression and decompression, select the Digital Cut Native option.

12 Select the Stop on Dropped Frames option if you want Media Station|PT to automatically stop the tape if the audio and video does not record correctly.

13 Select the Add Black At Tail option.
14 Select one of the following from the Deck Control menu:

Local mode Manually initiates record. This is useful if you are recording to a tape which does not have time code.

Remote mode Records to a tape that already has time code. Media Station|PT will start the VTR and drop into record at the specified time code.

15 Specify the Sequence Time to start recording. For example, if the sequence starts at 1:00:00 in the Timeline, Media Station|PT will start recording when the tape reaches 1:00:00.

16 Specify the Record Deck Time to start recording wherever the VTR is currently parked.

17 Specify the Mark In Time to start recording at the address entered in the top window to the right of the transport controls.

18 Click the yellow Preview button to check that all of the tracks you selected are playing and that the insert points on the tape are correct.

19 To record using Local mode, press play on the VTR. When ready, click the Record button in the Digital Cut window.

- or -

To record using Remote mode, press Record in the Digital Cut window. Media Station|PT will queue the tape, play, then drop in at the appropriate location.
> ?' Be sure to record at least a few seconds of black to the tape before performing a digital cut. This will guarantee that the video tape is correctly formatted when your digital cut starts

## Exporting a Digital Movie

## To export a sequence as a digital movie:

1 Select the sequence you want to export in the bin and drag it to the Record Monitor.

2 Render all effects in the Timeline as described in "Rendering All Effects" on page 33.

3 Select the Track Enable buttons for the video and audio tracks to export.

4 Choose File > Export.
5 Type a name and select the destination.
6 Choose the type of file you want to export from the Export Setting pop-up menu.

7 Click Options, and configure the settings as desired.

8 Click Save or Save As.
9 In the Export As dialog, click Save.

## Deleting Clips, Sequences and Media

## To delete a clip, sequence, or media file from Media Station|PT:

1 Selecting the item to delete in the bin.
2 Press the Delete key.
Use the Select Unreferenced Clips command in the menu at the bottom of the bin to select all clips which are not referenced by any sequence.
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[^0]:    Record Monitor controls

[^1]:    Layered video tracks in a video mixdown

[^2]:    ?' You can also click the Clear Both Marks button to clear the In and Out points.

