

Pro Tools Client Avid Unity™ MediaNet Guide

Version 3.0 on Macintosh and Windows XP

Digidesign

2001 Junipero Serra Boulevard
Daly City, CA 94014-3886 USA
tel: 650-731-6300
fax: 650-731-6399

Technical Support (USA)

tel: 650-731-6100
fax: 650-731-6384

Product Information (USA)

tel: 650-731-6102
tel: 800-333-2137

International Offices

Visit the Digidesign Web site
for contact information

Web Site

www.digidesign.com



digidesign

Copyright

This guide is copyrighted ©2002 by Digidesign, a division of Avid Technology, Inc. (hereafter "Digidesign"), with all rights reserved. Under copyright laws, this guide may not be duplicated in whole or in part without the written consent of Digidesign.

Digidesign, Avid and Pro Tools are trademarks or registered trademarks of Digidesign and/or Avid Technology, Inc. All other trademarks herein are the property of their respective owners.

All features and specifications subject to change without notice.

PN 0130-05515-01 REV A 08/02

contents

Chapter 1. Overview	1
Avid Unity MediaNet for Pro Tools	1
About the Pro Tools Guides	1
System Compatibility	2
Chapter 2. Installation and Configuration	5
Installation Prerequisites	5
Installing Pro Tools and MediaNet Client Software and Hardware	6
Pro Tools Settings	13
Chapter 3. Using Pro Tools in a MediaNet Workgroup	17
Pro Tools Macintosh Client	17
Pro Tools Windows XP Client	18
Pro Tools Performance Guidelines	21
Avid Unity MediaManager	24
DigiTranslator 2.0	24
Sharing Files	24
Destructive Editing	25
Pro Tools Session Locker	25
Appendix A. Workflows	27
Composer Sequence to Pro Tools Session	27
Composer Sequence and Media to a Pro Tools Session	27
Pro Tools Rendered Mix to Composer Clip	28
Pro Tools Session to Composer Sequence	28

Appendix B. Pro Tools Client Slot Order 31

Index 35

chapter 1

Overview

Avid Unity MediaNet for Pro Tools

Designed specifically for dynamically storing and sharing high-bandwidth, high-resolution media, the Avid Unity™ MediaNet solution offers significant performance, setup, and administrative advantages over standard storage area networks (SANs). Built on Avid's custom-designed, highly optimized file system architecture, Avid Unity MediaNet delivers a full range of uncompressed and compressed media in real time, while enabling editing, finishing, audio, and graphics work to take place at the same time—using the same media files and projects—in a shared workspace.

Avid Unity MediaNet, with FileManager and MediaManager, supports Pro Tools clients. Pro Tool clients are capable of operating as part of Pro Tools-only MediaNet workgroups, or in mixed MediaNet workgroups with Avid Composer Product clients. Incorporating Pro Tools into a MediaNet workgroup facilitates shared media (audio and video files) between different Pro Tools and Avid workstations. This enables improved workflow efficiency through true simultaneous sharing of media assets, right down to the file level.

About the Pro Tools Guides

PDF versions of many Pro Tools guides are installed automatically with Pro Tools, several of which can be easily accessed from the Help menu in Pro Tools. Additional documentation, including important Read Me files, can be found in Digidesign/Pro Tools/Release Notes & Documentation. To read a document online, or print it, you must install *Acrobat Reader* (included on the Pro Tools Installer CD).

Conventions Used in This Guide

Digidesign guides use the following conventions to indicate menu choices and key commands:

Convention	Action
File > Save Session	Choose Save Session from the File menu
Control+N	While pressing the Control key, press the N key
Option-click	While pressing the Option key, click the mouse button
Right-click (Windows)	Click with the right mouse button

The following symbols are used to highlight important information:

 *User Tips are helpful hints for getting the most from your system.*

 *Important Notices include information that could affect your data or the performance of your system.*

 *Shortcuts show you useful keyboard or mouse shortcuts.*

 *Cross References point to related sections in this or other Digidesign guides.*

System Compatibility

Digidesign can only assure compatibility and provide support for hardware and software it has tested and approved.

 *This guide presents accurate information for users of MediaNet 3.0, Pro Tools TDM 5.1.3, and Pro Tools TDM 5.3.1. Because the technology is swiftly evolving, it is essential to use this guide in conjunction with the latest information posted in the Avid Unity MediaNet section of the Digidesign Web site. Where there are conflicts, the information posted on the Digidesign Web site supersedes the information in this guide.*

Supported Pro Tools Systems

 *For the most current compatibility information on supported Pro Tools systems and Avid Unity MediaNet, refer to the Digidesign Web site (www.digidesign.com).*

The following Pro Tools systems are compatible clients with Avid Unity MediaNet 3.0:

- Pro Tools|HD version 5.3.1 on Macintosh or Windows XP
 - ATTO 3300 2 Gb Fibre Channel or JNI FCE-3210 1 Gb Fibre Channel Host Bus Adapter (required)
 - Expansion Chassis (required for Macintosh only)
 - SYNC I/O (optional)
 - Digidesign 192 I/O, 192 Digital I/O, or 96 I/O
 - or –
 - Pro Tools|24 MIX version 5.1.3 on Macintosh
 - JNI FCE-3210 1 Gb Fibre Channel Host Bus Adapter (required)
 - Expansion Chassis (required)
 - Universal Slave Driver (optional)
 - Digidesign 888|24, 882|20, 1622, 888, 882, 24-bit ADAT Bridge I/O, or Original ADAT Bridge I/O
-  *The Pro Tools d24 card is not supported.*

Supported Pro Tools Options

The following Pro Tools options are supported on Avid Unity MediaNet:

- DigiTranslator 2.0

 *Pro Tools with DigiTranslator 2.0 supports OMFI version 2 files. OMFI version 1 files are not supported.*

- AVoption|XL

 *Pro Tools clients with AVoption|XL currently only support JFIF video resolutions. They do not support Avid's older AVR video resolutions.*

- FilmFrame
- MachineControl
- ProControl or Control|24 control surface
- Digidesign SCSI-64 or ATTO SCSI HBA (ATTO EPCI-CD, UL2D, and UL3D) for local storage

 *If you are using both local storage and MediaNet storage, you should keep all of the files for your session in one location or the other. Splitting sessions across both storage mediums is not supported.*

On Windows systems, it is recommended that you use the on-board SCSI bus for local storage.

Unsupported Pro Tools Options

The following Pro Tools options are not supported on Avid Unity MediaNet:

- AVoption
- PostConform



To launch PostConform on a Pro Tools MediaNet client, disable the UnityAsyncStreamsLib file in the Apple Extensions Manager and restart your Macintosh.

Installation and Configuration

Installation Prerequisites

Before you install or upgrade a Pro Tools client, make sure that you have a functioning MediaNet workgroup that is compatible with your Pro Tools system.

If you are installing a new MediaNet workgroup:

- Install the File Manager and storage hardware and software as described in the *Avid Unity MediaNet File Manager Setup Guide*.
- Install any non-Pro Tools Macintosh clients as described in the *Avid Unity MediaNet Macintosh Client Setup Guide*.
- Install any non-Pro Tools Windows clients as described in the *Avid Unity MediaNet Windows Client Setup Guide*.
- Install any Pro Tools clients (see “Installing Pro Tools and MediaNet Client Software and Hardware” on page 6).

If you are upgrading an existing MediaNet workgroup:

- Upgrade the File Manager and storage as described in the *Avid Unity MediaNet Upgrade Notes*.
- Upgrade any non-Pro Tools Macintosh clients as described in the *Avid Unity MediaNet Upgrade Notes*.
- Upgrade any non-Pro Tools Windows clients as described in the *Avid Unity MediaNet Upgrade Notes*.
- Upgrade any Pro Tools Macintosh clients (see “Installing Pro Tools and MediaNet Client Software and Hardware” on page 6).
- Upgrade any Pro Tools Windows clients (see “Installing Pro Tools and MediaNet Client Software and Hardware” on page 6).

Installing Pro Tools and MediaNet Client Software and Hardware

When you are installing new Pro Tools clients or upgrading existing Pro Tools clients, you need to make sure that you install the various software components in the correct order.

If you are installing a new MediaNet for Pro Tools client, install the hardware and software in the following order:

- 1 Install the MediaNet client hardware.
- 2 Install the MediaNet client software.
- 3 Install Pro Tools hardware and software.

If you are upgrading an existing Pro Tools client from an earlier version of MediaNet, you only need to install the new MediaNet client software (for Macintosh clients, see “Macintosh Client Software” on page 10; and for Windows clients, see “Windows XP Client Software” on page 11).

 *Make sure that you update the Fibre Channel HBA extension (Macintosh) or Fibre Channel HBA drivers and firmware (Windows), when you update the client software.*

Installing MediaNet Client Hardware

The Avid Unity MediaNet client hardware consists of a single ATTO 3300 2 Gb Fibre Channel HBA (Host Bus Adapter) and one optical SFP, or a single JNI FCE-3210 1 Gb Fibre Channel HBA and one GBIC (copper or optical). You will need to purchase optical cables separately.

 *Contact your optical cable installer to arrange the installation of 50- μ m (micrometer) or 62.5- μ m multimode cable to connect your Pro Tools workstation to the MediaNet workgroup. If the optical cable is being installed for use with a 2 Gb MEDIASwitch, the cable needs LC optical cable connectors at both ends. If the optical cable is being installed for use with a 1 Gb MEDIASwitch, the cable needs an SC optical cable connector at the switch end and an LC optical cable connector at the client end.*

 *Pro Tools|24 MIX requires the JNI FCE-3210 1 Gb Fibre Channel HBA.*

 *1 Gb Fibre Channel may use either optical or copper connections. Copper connections must be less than 30 meters and always have DB-9 connectors on both ends.*

 *If a Fibre Channel HBA has ever been installed on your Windows system, you must remove any unused ATTO or Emulex OEM .INF files before installing the ATTO Fibre Channel HBA. If you do not know how to do this, please contact your Windows system administrator.*

To install the MediaNet client hardware, first install the Fibre Channel HBA in your computer or expansion chassis (expansion chassis required on Macintosh), then connect the optical cable from the MEDIASwitch to the Fibre Channel HBA.

To install the Fibre Channel HBA in a Pro Tools client:

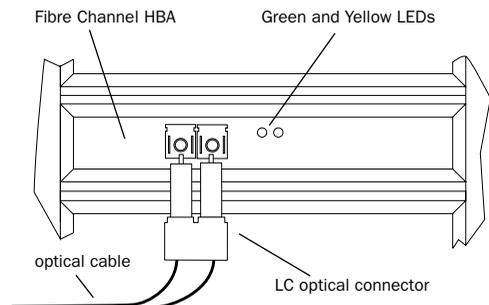
- 1 Shut down and power off your computer and expansion chassis (if one is present).
- 2 Open your computer or expansion chassis according to the instructions included with it.
- 3 Release any static electricity by touching the power supply, or another grounded item.
- 4 Remove the Fibre Channel HBA from the antistatic bag, being careful to handle it only by the edges.
- 5 Determine the correct PCI card slot order (see Appendix B, “Pro Tools Client Slot Order”).
- 6 Line up the Fibre Channel HBA with the installation slot, and slide the card into place gently so the PCI connector is aligned with the correct PCI slot.
- 7 Press down firmly on the card with even pressure. The connector should click into place in the PCI slot.
- 8 Fasten the card in place using the included screw to attach the card bracket to the computer mounting bracket.

⚠ *If you are installing the Fibre Channel HBA in a Windows client, be sure to follow the driver signing and software installation procedure. See “Windows XP Client Software” on page 11.*

To connect a Fibre Channel optical cable to the Fibre Channel HBA:

- 1 Locate the optical cable with the LC optical cable connector (dual plug) on the end.
- 2 Remove the protective covers from the LC optical connector on the optical cable.
- 3 Remove the protective cover from the Fibre Channel HBA in your computer.
- 4 Plug the optical cable connector into the Fibre Channel HBA. The connector and the Fibre Channel HBA are keyed and only fit together one way. You should hear a click when the cable is properly seated.

⚠ *Do not try to force the LC optical cable connector into the Fibre Channel HBA connector. There should be no resistance as you make the connection. If you feel that the optical cable connector does not fit into the Fibre Channel HBA connector, turn the optical cable connector 180 degrees and try to insert the optical cable connector into the Fibre Channel HBA connector again.*

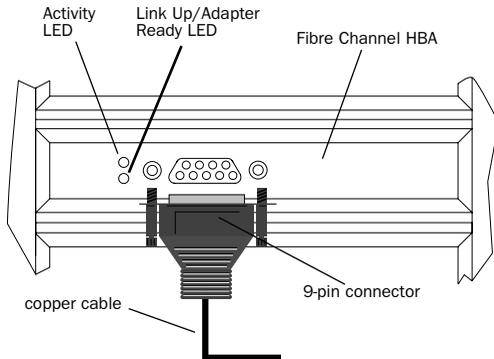


Connecting the optical cable to the Fibre Channel HBA

- 5 If the other end of the cable is not yet connected to the MEDIASwitch, do so now. For detailed instructions on connecting cables to the MEDIASwitch, see the *Avid Unity MediaNet Macintosh Client Setup Guide* or the *Avid Unity MediaNet Windows Client Setup Guide*.

To connect a Fibre Channel copper cable to the Fibre Channel HBA:

- 1 Locate the copper cable with a 9-pin connector on each end.
- 2 Attach the 9-pin connector on one end of the cable to the 9-pin connector on the Fibre Channel HBA. Secure the cable with the thumbscrews on the cable connector.



Connecting the optical cable to the Fibre Channel HBA

- 3 If the other end of the cable is not yet connected to the MEDIASwitch, do so now. For detailed instructions on connecting cables to the MEDIASwitch, see the *Avid Unity MediaNet Macintosh Client Setup Guide* or the *Avid Unity MediaNet Windows Client Setup Guide*.

Fibre Channel HBA LED States

The LEDs on the Fibre Channel HBA indicate whether or not the card is functioning correctly. See Table 1 on page 9 for the 2 Gb Fibre Channel HBA and Table 2 on page 9 for the 1 Gb Fibre Channel HBA.

Table 1. 2 Gb Fibre Channel HBA LED states

LED	LED State	Meaning	Required Action
Green	On	Normal—link up	No action required
Yellow	On	Link down	Check cable connection to MEDIASwitch and Fibre Channel HBA. If condition persists, contact Avid customer support.
Yellow	Flashing	Fault	Contact Avid customer support.
Green or Yellow	Off	Driver not loaded	Load driver. If condition persists, contact Avid customer support.

Table 2. 1 Gb Fibre Channel HBA LED states

LED Name	Board	LED State	Required Action
Signal Detect	Optical	Lit when cable is connected to MEDIASwitch and a signal is detected.	If LED is <i>not</i> lit, contact Avid customer support.
Power	Optical	Lit when power is on in the MediaNet client.	If LED is <i>not</i> lit, restart MediaNet client. If condition persists, contact Avid customer support.
Activity	Copper and optical	Flashes during data transmit activity.	Check cable connections if LED does <i>not</i> flash. If condition persists, contact Avid customer support.
Link Up/ Adapter Ready	Copper and optical	Lit when adapter is initialized.	If LED is <i>not</i> lit, contact Avid customer support.

Installing the MediaNet Client Software

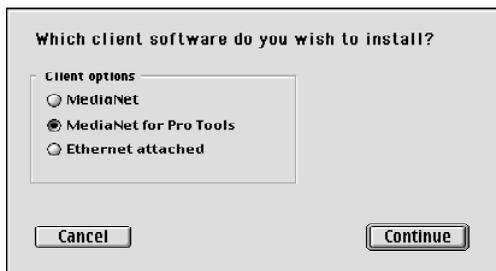
Macintosh Client Software

The Macintosh client software allows the Macintosh Fibre Channel client to log into the MediaNet File Manager and to mount accessible workspaces. The client software is supplied on the MediaNet Release CD-ROM in the Macintosh client kit.

! *You must have a supported version of Mac OS installed before you install the MediaNet client software.*

To install the MediaNet Macintosh client software:

- 1 Start up your Macintosh.
- 2 Insert the MediaNet Release software CD-ROM into the Macintosh CD-ROM drive.
- 3 Locate and launch the Avid Unity Installer application.
- 4 When the Avid Unity Install window opens, select the Easy Install option and click Install.
- 5 Click Continue.
- 6 Select MediaNet for Pro Tools, and then click Install.



Selecting MediaNet for Pro Tools

The MediaNet software is installed in the Avid Unity folder on the System drive.

7 If you are prompted to install the Macintosh Runtime Java Library, do so after the Macintosh client software installation is complete (see “Macintosh Java Runtime Library” on page 10).

8 When the Macintosh client software installation is complete, click OK and then Restart your computer.

! *The AvidFibreDriver and JNI PCI Compatibility system extensions are required for MIX systems, but are not installed by the MediaNet Client Software installer. You must drag and drop the AvidFibreDriver and JNI PCI Compatibility files from the MediaNet Release software CD-ROM to the Apple System Folder and restart your computer.*

After completing the installation, verify that your computer’s date and time settings are correct (see “Setting Date and Time” on page 11).

Macintosh Java Runtime Library

If you were prompted to install the Macintosh Runtime Java Library during the MediaNet Macintosh client software installation, proceed with the following steps. Otherwise, the Macintosh Runtime Java Library is already installed on your Macintosh and you do not need to continue.

To install the Macintosh Java Runtime Library:

- 1 If it is not already present, insert the MediaNet Release software CD-ROM into the Macintosh CD-ROM drive.
- 2 Locate the MRJ Installer in the Extras_Mac folder and launch it.
- 3 Read the license agreement and click Agree.
- 4 Click Install. The Macintosh Runtime Java Library is installed in the Extensions folder.

- 5 When the installation is complete, click OK.
- 6 Restart your computer.

Setting Date and Time

You need to correctly set the date, time, time zone, and daylight savings time on your Macintosh to be able to use the Synchronize Time with Server function for your MediaNet client.

To set the date and time on Macintosh:

- 1 Choose Apple menu > Control Panels > Date & Time.
- 2 Click Set Time Zone.
- 3 Select the correct City and Country, and click OK.
- 4 Set the Current Date and Current Time.
- 5 Make sure that Set Daylight Savings Time Automatically is selected.
- 6 Close the Date & Time Control Panel.

Windows XP Client Software

The Windows XP client software allows the Windows XP Fibre Channel client to log into the MediaNet File Manager and to map accessible workspaces. The client software is supplied on the MediaNet Release CD-ROM in the Windows client kit.

 *You must have a supported version of Windows XP installed before you install the MediaNet client software.*

The first time you start up Windows XP after installing the Fibre Channel HBA, the Found New Hardware Setup Wizard will prompt you to locate and install the driver for the Fibre Channel Controller.

 *If you are upgrading, use the new Avid Unity MediaNet Installer to uninstall your current version of the MediaNet client software before installing the new MediaNet client software.*

To install the Fibre Channel Controller driver:

- 1 Turn on your computer.
- 2 Start up Windows, logging in with Administrator privileges. If you do not have Administrator privileges or do not know how to set them up, see your Windows User's Guide.
- 3 Wait for the Found New Hardware Wizard dialog to appear and leave it open.
- 4 Insert the MediaNet Release software CD-ROM into your computer's CD-ROM drive. The Found New Hardware Wizard will locate and install the Fibre Channel Controller driver.
- 5 When the Found New Hardware Wizard prompts you for the ATTO Phantom Device, eject the MediaNet Release software CD-ROM.
- 6 Re-insert the MediaNet Release software CD-ROM and the Found New Hardware Wizard will locate and install the ATTO Phantom Device.
- 7 Click Finish to complete the installation and restart your computer.

After installing the Fibre Channel HBA driver and restarting your computer, proceed by installing the MediaNet Windows XP client software.

To install the MediaNet Windows XP client software:

- 1** Turn on your computer.
- 2** Start up Windows, logging in with Administrator privileges. If you do not have Administrator privileges, see your Windows administrator.
- 3** Insert the MediaNet Release software CD-ROM into your computer's CD-ROM drive.
- 4** The MediaNet Release software CD-ROM will autorun the Avid Unity Installation Main menu.
- 5** In the Avid Unity Installation Main menu, click Product Installers.
- 6** Click MediaNet Components.
- 7** Click Install Fibre Attached Client. The Install Wizard launches.
- 8** In the Install Wizard's Minimum Requirements dialog, click Next.
- 9** In the Welcome dialog, click Next.
- 10** Read the Avid License Agreement and click Next.
- 11** Read the Sun Microsystems License Agreement and click Next.
- 12** In the Choose Destination Location dialog, use the default location and click Next.
- 13** In the Select Program Folder, use the default folder and click Next.
- 14** In the Start Copying Files dialog, click Next.
- 15** When prompted on the InstallShield Wizard Complete screen, click "Yes, I want to restart my computer now."
- 16** Click Finish to complete the installation and restart your computer.

17 When Windows finishes starting up, the Found New Hardware Setup Wizard will prompt you for the AvidComm Fake Comm Disk SCSI Processor Device.

18 Insert the MediaNet Release software CD-ROM into your computer's CD-ROM drive.

19 Follow the on-screen instructions.

20 When prompted, click Finish to complete the installation.

After completing the installation, verify that your computer's date and time settings are correct.

Setting Date and Time

You need to correctly set the date, time, time zone, and daylight savings time on your computer to be able to use the Synchronize Time with Server function for your MediaNet client.

To set the date and time on Windows XP:

- 1** Choose Start menu > Control Panels, and launch the Date and Time Control Panel.
- 2** Click the Time Zone tab and select the correct time zone.
- 3** Make sure that "Automatically adjust clock for daylight savings changes" is selected.
- 4** Click the Date & Time tab and set the Current Date and Current Time.
- 5** Click OK to save your changes, then close the Date and Time Control Panel.

Installing Pro Tools Hardware and Software

Once you have installed the Avid Unity MediaNet client hardware and software, install your Pro Tools hardware and software. Follow the Pro Tools hardware and software installation instructions as described in your *Getting Started Guide*. Be sure to launch Pro Tools to verify that it is working correctly before proceeding.

Pro Tools Settings

Once you have installed Pro Tools hardware and software, and you have installed MediaNet client hardware and software, you should configure Pro Tools for MediaNet.

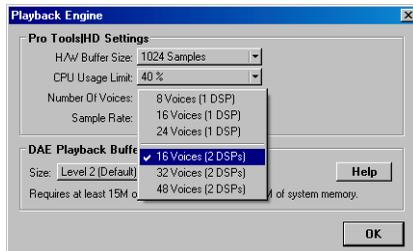
Playback Engine

Pro Tools|HD Playback Engine

Pro Tools|HD workstations have multiple playback modes at different sample rates. For optimum performance in a MediaNet workgroup, it is recommended that you use the least number of voices per DSP.

To configure the Playback Engine:

- 1 Launch Pro Tools.
- 2 Choose **Setup > Playback Engine**.



Playback Engine dialog for Pro Tools|HD

- 3 Select the lowest number of voices per DSP for the Playback Engine.

 You can use the other Playback Engine settings if your session is on local storage.

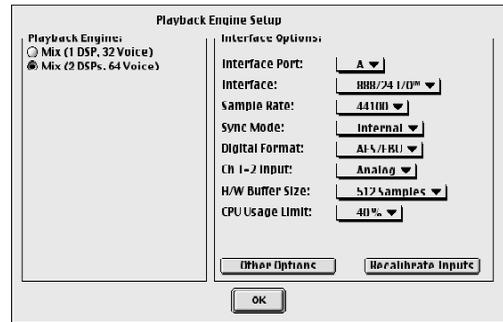
- 4 Click OK.

Pro Tools|24 MIX Playback Engine (Macintosh Only)

The Playback Engine for Pro Tools|24 MIX has two modes: 32-voice 1-DSP and 64-voice 2-DSPs. For optimum performance in a MediaNet workgroup, you should use the 64-voice 2-DSP Playback Engine.

To activate the 64-voice engine:

- 1 Launch Pro Tools.
- 2 Choose **Setup > Playback Engine**.



Playback Engine dialog for Pro Tools|24 MIX

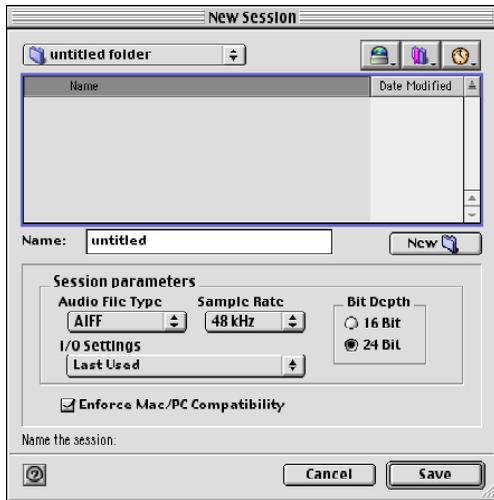
- 3 Select the 64-voice engine and click OK.

Pro Tools Session Settings

The following describes the recommended session settings for working with Pro Tools on Avid Unity MediaNet. These settings are configured when creating a new Pro Tools session.

To create a new Pro Tools session for Avid Unity MediaNet:

- 1 In Pro Tools, choose File > New Session.



New Session dialog

- 2 In the New Session dialog, select an Audio File Type for the session that is compatible across all workstations.
- 3 Select a Sample Rate for the session that is compatible across all workstations.
- 4 Select a Bit Depth for the session that is compatible across all workstations.
- 5 Enable Enforce Mac/PC compatibility.
- 6 Name the session and Save it to an Avid Unity MediaNet workspace.

Audio File Type

Pro Tools supports AIFF, BWF (.WAV), and Sound Designer II (Macintosh only) audio files natively. Table 3 on page 15 shows the MediaNet clients and the types of audio files that they typically use.

For the greatest media compatibility between Pro Tools workstations and Avid workstations, you should choose to work with BWF (.WAV) media files. Make sure the Audio File Type pop-up menu in the New Session dialog box is set to BWF (.WAV) when you are creating a new session.

Sample Rate

Pro Tools|HD supports sample rates up to 192 kHz, but other Pro Tools and Avid workstations only support lower sample rates. Therefore, when working in mixed workgroups, it is vital to use sample rates for shared media that are supported on all workstations.

It is preferable for all participants in the workgroup to agree on a standard, universal sample rate for the sake of compatibility and to avoid media conversion. Many facilities choose 48 kHz, which is the industry standard for post production and broadcast applications.

Bit Depth

Most Avid workstations currently support only 16-bit audio. Make sure you consider the following when you are starting a new audio session:

- For maximum compatibility when using a Pro Tools workstation to share audio files and sequences with Avid workstations in a MediaNet workgroup, set the bit depth to 16-bit in the New Session dialog box when you are creating new session files.
- When using a Pro Tools workstation to share audio files and sequences only with other Pro Tools workstations in a MediaNet workgroup, set the bit depth to either 16-bit or 24-bit (depending on your project requirements) in the New Session dialog box when you are creating new session files.

 *For the most current compatibility information on supported Pro Tools systems and Avid Unity MediaNet, refer to the Digidesign Web site (www.digidesign.com).*

Mac/PC Compatibility Mode

Whenever you are working with a Pro Tools client in a cross-platform MediaNet workgroup, be sure to enable Enforce Mac/PC Compatibility when you create a new session. Mac/PC Compatibility mode restricts the ASCII characters you can use to create object names within Pro Tools. Only a subset of characters that is valid for both the Macintosh and Windows operating systems is allowed.

Table 3. Currently supported audio file formats, sample rates, and bit-depths

Client and Operating System	AIFF	BWF (.WAV)	SD II	44.1/48 kHz	88.2/96 kHz	16-bit	24-bit
Pro Tools HD Mac OS	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pro Tools HD Windows XP	Yes	Yes	No	Yes	Yes	Yes	Yes
Pro Tools 24 MIX Mac OS	Yes	Yes	Yes	Yes	No	Yes	Yes
Avid Composer Mac OS	Yes	Yes	Yes	Yes	No	Yes	No
Avid Composer Windows	Yes	Yes	No	Yes	No	Yes	No

chapter 3

Using Pro Tools in a MediaNet Workgroup

Once you have configured your Pro Tools client, you can log in to MediaNet and begin using Pro Tools in a MediaNet workgroup.

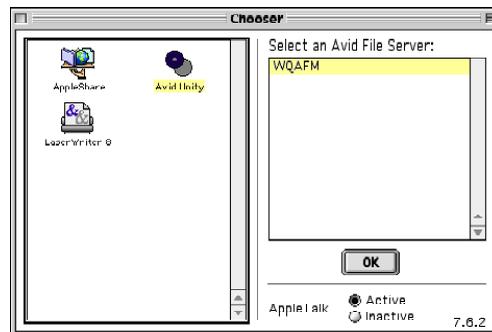
Pro Tools Macintosh Client

On a Pro Tools Macintosh client, use the Apple Chooser to log in to MediaNet. MediaNet workspaces appear on the desktop and function like normal network volumes. Your Avid Unity MediaNet administrator will assign the username and password for your account, as well as assign Read or Read/Write permissions for your account on each workspace.

Logging In To MediaNet

To log in to MediaNet:

- 1 Choose Apple menu > Chooser.
- 2 In the Chooser, select Avid Unity.
- 3 In the Select an Avid File Server list, select the desired MediaNet File Manager.



Selecting Avid Unity Apple Chooser

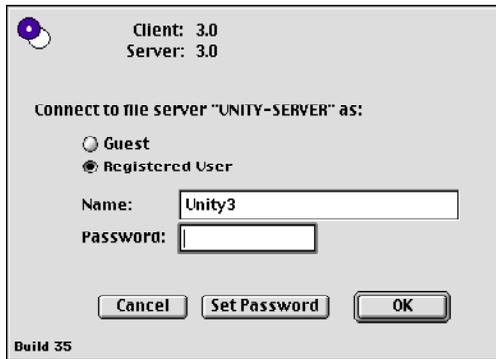
- 4 Click OK.
- 5 If you have an assigned user name and password, select Registered User.

– or –

If you do not have an assigned user name and password, select Guest and skip to step 7.

 *If you need to be assigned a MediaNet user name and password, contact your MediaNet administrator.*

6 Enter your user name and password.



User Name and Password dialog

7 Click OK.

8 In the resulting dialog, select the workspace you want to mount. If you want to mount more than one workspace, Shift-click additional contiguous workspaces or Command-click additional non-contiguous workspaces.



Selecting Avid Unity workspaces to mount

9 Select the Synchronize Time with Server option. This is necessary to help prevent time-related title creation and access problems by synchronizing the MediaNet client time to the MediaNet File Manager time.

10 Click OK.

The selected MediaNet workspaces will appear on your desktop. To unmount a MediaNet workspace, drag it to the Trash.

Logging Out of MediaNet

To log out of MediaNet:

- 1 If Pro Tools is running, quit Pro Tools.
- 2 Select all mounted MediaNet workspaces on the Desktop and drag them to the Trash.

Pro Tools Windows XP Client

On a Pro Tools Windows XP client, use the Avid Connection Manager to log in to MediaNet. MediaNet workspaces function like normal network volumes. Your Avid Unity MediaNet administrator will assign the username and password for your account, as well as assign Read or Read/Write permissions for your account on each workspace.

Your MediaNet username and password should be the same as your Windows username and password. If you are connected to a separate network (such as a local area network by ethernet), it is recommended that you use the same username and password for MediaNet and the other network.

Configuring the Avid Connection Manager

Before logging in to MediaNet, configure the Avid Connection Manager.

To configure the Avid Connection Manager:

- 1 In the Avid Connection Manager, choose Configure.



Configure Connection Manager dialog

- 2 In the Configure Connection Manager dialog, select the starting drive letter for MediaNet workspaces.

- 3 Select “Synchronize the system clock with the Server clock.” This is necessary to help prevent time-related title creation and access problems by synchronizing the MediaNet client time to the MediaNet File Manager time.

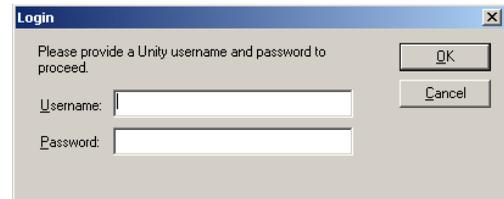
- 4 Click OK

Logging In To MediaNet

Once you log in to MediaNet on a Windows client, you remain logged in, so you really only need to log in once—the first time. To log off Windows and MediaNet, select Shut Down or Log Off from the Start menu. The next time you log in to Windows you will automatically be logged in to MediaNet as well.

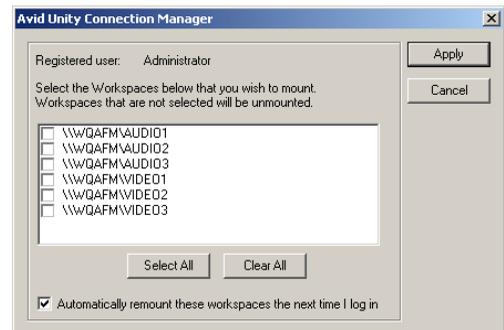
To log in to MediaNet:

- 1 Choose Start menu > Programs > Avid Unity > Avid Unity Connection Manager.
- 2 In the Login dialog, enter your username and password, and click OK.



Login dialog

- 3 In the Avid Unity Connection Manager dialog, select the workspaces you want to mount.



Avid Unity Connection Manager dialog

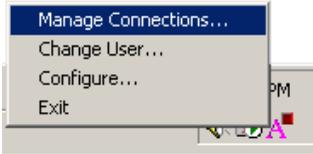
- 4 If you want to automatically remount the selected workspaces the next time you log in, select “Automatically remount these workspaces the next time I log in.”

- 5 Click Apply.

The selected MediaNet workspaces will be mounted.

Mounting and Unmounting MediaNet Workspaces

Use the Avid Unity Connection Manager to manage your MediaNet connection while you are logged in to MediaNet.



Avid Unity Connection Manager

To mount MediaNet workspaces:

1 In the Toolbar, choose Avid Unity Connection Manager > Manage Connections.

– or –

Choose Start menu > Programs > Avid Unity > Avid Unity Connection Manager.

The Avid Unity Connection Manager dialog opens.

2 In the Avid Unity Connection Manager dialog, select the MediaNet workspaces you want to mount.

3 Click Apply.

4 If you want to automatically remount the selected workspaces the next time you log in, select “Automatically remount these workspaces the next time I log in.”

⚠ *Mapping workspaces using the Map Network Drive command in Windows is not advised for Pro Tools clients.*

To unmount MediaNet workspaces:

1 In the Avid Connection Manager, choose Manage Connections to open the Avid Unity Connection Manager dialog.

2 In the Avid Unity Connection Manager dialog, deselect the MediaNet workspaces you want to unmount (click Clear All to unmount all MediaNet workspaces).

3 Click Apply.

Change User

Different users can use the same Pro Tools client to work on different projects with different MediaNet workspace permissions.

To log out and log in as a different user on MediaNet:

1 If Pro Tools is running, quit Pro Tools.

2 In the Avid Connection Manager, choose Change User.

3 Enter your user name and password.

4 Click OK.

The previous user will be logged out of MediaNet, and you will be logged in to MediaNet as a new user. Use Manage Connections to mount MediaNet workspaces (see “Mounting and Unmounting MediaNet Workspaces” on page 20).

Pro Tools Performance Guidelines

Maximum Number of Clients

At the time of this writing, the following configurations have been thoroughly tested by Avid and Digidesign, and are provided only as guidelines. Actual performance depends on specific configuration and program material. More configurations will be announced as they are tested. For the latest information of supported configurations, see the Avid Unity MediaNet compatibility pages on the Digidesign Web site (www.digidesign.com).

Pro Tools Only Workgroups

Pro Tools | HD (5.3.1)
1000 ms Audio Edit Density
10 Video and 10 Audio Drives

Clients	Tracks	Sample Rate/ Bit Depth	Video
1	32	48 kHz/24-bit	1:1
3	48	48 kHz/24-bit	3:1
3	24	96 kHz/24-bit	3:1

Pro Tools | 24 MIX (5.1.3)
1000 ms Audio Edit Density
10 Video and 10 Audio Drives
(30 Audio drives are required for 9 clients)

Clients	Tracks	Sample Rate/ Bit Depth	Video
1	24	48 kHz/24-bit	1:1
3	48	48 kHz/24-bit	3:1
9	32	48 kHz/24-bit	3:1

Mixed Workgroups

Mixed Workgroup A

Type	Clients	Video
Composer	4	1:1 Dual-Stream
Pro Tools	1	1:1 Single-Stream

Mixed Workgroup B

Type	Clients	Video
Composer	4	1:1 Dual-Stream
Pro Tools	3	3:1 Single-Stream

Mixed Workgroup C

Type	Clients	Video
Composer	9	3:1 Single-Stream
Pro Tools	3	3:1 Single-Stream

Mixed Workgroup D

Type	Clients	Video
Composer	2	10:1 Dual-Stream
Composer	6	3:1 Single-Stream
Pro Tools	3	3:1 Single-Stream

Drive Requirements

Table 4 on page 22 shows the number of dedicated drives required for the specified number of Pro Tools systems to play back 48 tracks of 48 kHz, 24-bit audio at the specified edit density. The number of disks are based on Pro Tools|24 MIX systems on Macintosh OS 9 with no video playback. 4, 5, and 9 system configurations are only supported with 2 Gb Fibre Channel switches and JBODs. These numbers are approximate, performance will vary depending on configuration and program material.

Table 4. Allocation Group Sizes

Pro Tools Clients	Edit Density: 1000 ms	Edit Density: 500 ms	Edit Density: 300 ms
1	4	4	8
2	6	8	16
3	8	10	24
4	28	28	28
5	28	28	n/a
9	30	n/a	n/a

Sharing Allocation Groups and Media

Audio and video files can be shared among several MediaNet clients. However, keep in mind the following restrictions when sharing Allocation Groups and files:

- Audio files for Pro Tools clients should be in a separate allocation group from the video files.
- Pro Tools clients cannot use files that are in a shared uncompressed allocation group.
- Each Composer Product (Media Composer or Symphony) client that is using dual-stream 1:1 video must have dedicated access to the single-user allocation group containing the video files. No other clients can share the video files while these clients are using them.
- Only one Pro Tools client can access a finishing allocation group containing 1:1 video files. The allocation group may not be used simultaneously by a video editing client, and the Pro Tools client can only play a single stream of video.
- Up to three Pro Tools clients and one video editing client can access an allocation group containing 3:1 or lower compressed video files.
- In an environment with at least one Avid Composer Product client running two streams at 1:1 video resolution, the maximum number of clients that can normally be supported is seven. However, if protection is enabled and the environment contains 18 GB HH or 50 GB HH drives, the maximum number of clients is six.
- Each finishing video allocation group must connect directly to a MEDIASwitch port.

 For additional information on MediaNet configuration requirements and restrictions, see the Avid Unity™ MediaNet Release 3.0 Supported Configurations.

Performance Characteristics

You should experience no appreciable difference between working with Pro Tools attached to a MediaNet workgroup or working with Pro Tools attached to local storage. However, due to the architectural differences between MediaNet and local storage, some differences may be noticeable.

User Interface and Graphics

The Pro Tools workstation is tasked in a completely different manner when Pro Tools is recording or playing from MediaNet storage. For this reason, the update speed of the display and the responsiveness of the Pro Tools user interface might differ somewhat when compared to using local storage.

When using MediaNet storage, the Pro Tools workstation might periodically be interrupted by bursts of communication with the File Manager. This can cause the display not to refresh smoothly. These periodic, brief interruptions in display updating are most prevalent during long recording sessions or while playing back large sessions. These interruptions do not necessarily indicate that a problem exists and do not affect audio playback. Except for these interruptions, display and user interface performance should be comparable to using local storage. For example:

- Counters, meters, scrolling, and other animated user interface elements are visually smooth in operation.
- Faders and panners move smoothly when automated.

- Mouse control of faders and panners is immediate and responsive. This includes TDM plug-ins. RTAS and AudioSuite plug-ins, because of their host-based implementation, might provide less-than-smooth operation under certain circumstances.
- Scrubbing and auditioning (in the Regions List and Import Audio dialog) is immediate when you press the mouse button.
- Editing during playback is smooth. Mouse control of editing tools is immediate and responsive.

Opening Files

Pro Tools periodically opens and closes files (for example, to buffer them for playback). When using MediaNet storage, the file open process is somewhat slower than with local storage. This is most noticeable when first opening an existing session. It can also result in sluggish Pro Tools performance with very large sessions.

Avid Unity MediaManager

Avid Unity MediaManager allows you to find, sort, and retrieve media quickly and easily while maintaining secure project-level access control. MediaManager also allows your production assistants and others who manage media to do their jobs outside of the edit suite, ensuring that creative work continues while administrative duties take place in parallel. Tightly integrated with Avid applications, Pro Tools, and other productivity tools, MediaManager enables management of assets from a central location outside of the edit suite.

Pro Tools with DigiTranslator 2.0 includes integrated support for MediaManager, including check-in of files, and drag and drop of files or sequences from the MediaManager Browser directly to the Pro Tools timeline. DigiTranslator is required for MediaManager support, but it is not required for Avid Unity MediaNet.

 *For the latest Web browser requirements for MediaManager, refer to the Digidesign Web site (www.digidesign.com) or Avid Web site (www.avid.com).*

DigiTranslator 2.0

Open Media Framework Interchange (OMFI) is an industry standard file format that facilitates the transfer of digital media between applications. Pro Tools with the DigiTranslator 2.0 option can import and export OMFI-files and sequences, enabling the exchange of audio and video files and sequences between OMFI-compatible applications (such as Avid Symphony or MediaComposer) and Pro Tools

 *For more information, see the DigiTranslator 2.0 Integrated Option Guide.*

Sharing Files

Sharing Session Files

To avoid conflicts among multiple users and avoid general performance problems, no two Pro Tools clients should open the same session at the same time. Only one Pro Tools client should have a particular session open at any given time.

Sharing Video Files

Pro Tools clients with AVOption|XL can share 3:1 or lower resolution video files in an allocation group with other MediaNet clients. It is currently only possible to share JFIF video files. Pro Tools cannot destructively modify video files.

Sharing Audio Files

Pro Tools clients can share audio files in an allocation group with other MediaNet clients. When working with shared audio files, it is recommended that you use the Duplicate command to make a copies before applying any destructive edits.

Destructive Editing

The following Pro Tools features can destructively modify audio files:

- Pencil Tool
- “Destructive” AudioSuite
- Destructive Record
- Compact Selected

When working with shared audio files, it is recommended that you use the Duplicate command to substitute copies before applying any destructive edits. This avoids the problem of modifying a file referenced by another session.

To substitute a copy of a shared file:

- 1 In Pro Tools, select the region you want to copy in the Edit window.
- 2 Choose Edit > Duplicate.

OMF Files

Pro Tools treats all OMF media as read only. Consequently, destructive editing tools cannot be used to modify OMF media files. However, you can delete or overwrite OMF files.

Because Pro Tools creates both OMF and non-OMF media files, these destructive editing tools can be used on non-OMF media created by Pro Tools. When you are working in a MediaNet workgroup, you should always create a copy of an audio file before applying a destructive change.



Use the Duplicate or Consolidate commands in Pro Tools to make non-OMF copies of audio files for destructive editing.

Pro Tools Session Locker

(Macintosh Only)

Though OMF files are treated as read only, the bulk of audio files created by Pro Tools are not OMF files. The non-OMF files can be modified by anyone with access to them. To prevent another user from modifying a file used in your session, use PTSessionLocker.

PTSessionLocker is a drag and drop application. It works only with Pro Tools 5.1 or later session files (earlier session formats can be saved in the newer 5.1 format from within Pro Tools). Any file other than a Pro Tools 5.1 session file displays an invalid session file alert and the application terminates. PTSessionLocker has only one function, to lock or unlock all of the audio files referenced by a Pro Tools 5.1 session file. Lock sessions with PTSessionLocker to prevent other users from destructively editing the session's files.

To lock or unlock all of the audio files referenced by a Pro Tools 5.1 session file:

- 1 Drag and drop the Pro Tools 5.1 session file that you are interested in locking or unlocking onto the PTSessionLocker icon.
- 2 When prompted, select Lock or Unlock to lock or unlock the session file.
- 3 Lock and Unlock process the files in the session, and progress is shown in the progress bar.
- 4 After all of the files are processed, the final status dialog box appears.
- 5 Click OK to close dialog box. PTSessionLocker quits.
- 6 If you reopen a session and add or record new files, you must repeat the process to protect the new files.

It is important to lock audio files in a Pro Tools session file that accesses a MediaNet workspace. If the session is not locked, its audio files can be destructively edited. When Pro Tools encounters files with the lock attribute set, it does not allow destructive modification to the audio file—the file is considered read only. PTSession-Locker only needs to be used when multiple editors are working with the same set of audio files and you want to make sure you don't accidentally edit another user's files.

appendix a

Workflows

The following workflows require Pro Tools with the DigiTranslator 2.0 option.

 For more information, see the *DigiTranslator 2.0 Integrated Option Guide*.

Composer Sequence to Pro Tools Session

In this workflow, a Pro Tools client and a Composer Product client are sharing a workspace and allocation group.

1 On the Composer Product client, export the video sequence as an OMF2 composition that refers to the existing media files.

 *When you export a video sequence for use with Pro Tools, make sure that you render all the effects and the transitions before exporting the sequence. If the sequence contains more than one stream of video, perform a video mixdown to reduce the video to one stream.*

2 In Pro Tools, select Open Session from the File menu and then select the OMF2 composition. This opens the OMF2 composition as a Pro Tools session and you can perform your audio editing work. You can play the video files while sharing them with the Composer Product client.

Caveats

- This workflow is only possible with video resolutions with a 2:1 or lower compression ratio. It is not possible for a Pro Tools client and a Composer Product client to share files in the same allocation group when using a 1:1 video resolution.

Composer Sequence and Media to a Pro Tools Session

This workflow is similar to the preceding workflow except that the Pro Tools client and the Composer Product client access separate allocation groups, which is necessary when using 1:1 video resolution.

1 On the Composer Product client, make sure that you render all the effects and the transitions before you export the video sequence for use with Pro Tools.

2 Reduce the video to a single stream.

3 Duplicate and consolidate the sequence to a workspace in a different allocation group that allows Pro Tools clients access to the files. This group may not be a shared uncompressed allocation group.

4 Export the sequence as an OMF2 composition that refers to the consolidated media files.

5 In Pro Tools, choose File > Open Session, then select the OMF2 composition and click Open. This opens the OMF2 composition as a Pro Tools session and you can perform your audio editing work.

Because the media has been copied to a separate allocation group, the Pro Tools client can work on 1:1 video without interference from the Avid workstation using the original allocation group.

Pro Tools Rendered Mix to Composer Clip

In this workflow, a flattened Pro Tools session is returned to the Composer Product client as an OMF media file, properly wrapped to include Master Clip metadata.

- 1** On the Pro Tools client, perform a Bounce To Disk in the following manner:
 - Select the area of the timeline that you want to bounce.
 - In Pro Tools, select File > Bounce To Disk.
 - In the Bounce To Disk dialog, enable Publish as OMFI and Enforce Avid Compatibility.
 - Select the file format, sample rate, bit-depth, and sample rate conversion settings appropriate for the Avid workstation that will open these files. For example, select BWF (.WAV), 48 kHz, 16-bit, and Best.
 - Click Bounce.
- 2** In the Publishing Options dialog box:
 - Enter a Tape Name (Pro Tools 5.1.3) or Pro Tools Comment (Pro Tools 5.3.1). This name is displayed in the Avid bin as Tape Name (Pro Tools 5.1.3) or Pro Tools Comment (Pro Tools 5.3.1).
 - Enter a Clip Name. This is the clip name that appears in the Avid bin.

- Select the timecode format of the Avid Session that will open this file. This is critical to ensure proper placement of the file in the Avid timeline.
- Click OK.
- Select the OMFI MediaFiles folder of the Composer Product client as the file destination.

3 On the Composer Product client, choose Refresh Media Directories from the File menu.

4 The new Master Clip should be available in the Media Tool and can be dragged into a Bin for use in a sequence.

Pro Tools Session to Composer Sequence

In this workflow, a Pro Tools session is exported as a composition (with external media files) for import as a sequence on the Composer Product client. You can use this workflow for performing audio prelay functions and voice-over recordings.

1 In Pro Tools, select the tracks you want to export to OMFI. To export an entire session, Option-click (Macintosh) or Alt-click (Windows) any Track Name. Tracks are exported in their entirety and time selections are ignored.

 *Tracks that are hidden in Pro Tools are not exported.*

2 Choose File > Export Selected Tracks as OMFI.

3 Enable the Publish as OMFI and Enforce Avid Compatibility options.

4 Make any other necessary settings and click Export to open the Publishing Options dialog.

5 In the Publishing Options dialog, enter the Sequence Name.

6 On the Composer Product client, import the sequence and play it back.

Caveats

- This workflow requires Composer Release 10.1 or later, Symphony Release 3.1 or later, or Avid Express Release 4.1 or later.
- This is an audio-only workflow because Digi-Translator does not export the video track in its OMF output.
- This is a composition and media only workflow because most types of Pro Tools metadata (such as mix automation and plug-ins) are not exported.

appendix b

Pro Tools Client Slot Order

G4 (AGP Graphics) with 13-Slot Expansion Chassis

Pro Tools Expansion Chassis (serial numbers higher than NB0600100C) or Magma PCI-13R

Slot	Card
CPU Slot 1	Chassis Host card
CPU Slot 2–3	Empty
CPU Slot 4	SCSI HBA for local audio (optional)
Backplane Chassis Slot	Chassis Controller card
Chassis Slot 1	HD Core or MIX or card
Chassis Slots 2–7	HD Process or MIX Farm cards (6 maximum)
Chassis Slots 8–10	Empty
Chassis Slot 11	SCSI HBA for local video (optional)
Chassis Slot 12	Avid Digital Video Media board (optional)
Chassis Slot 13	Fibre Channel HBA

 *Pro Tools|HD and Pro Tools|24 MIX cards are not compatible and cannot be used in the same system.*

 *Expansion chassis slots are numbered sequentially from **right to left** when looking from the front.*

IBM IntelliStation M Pro 6850 without Expansion Chassis

(Pro Tools|HD Systems Only)

Slot	Card
AGP Slot	Monitor card
CPU Slot 1	Avid Digital Video board (optional)
CPU Slot 2	Fibre Channel HBA
CPU Slot 3	SCSI HBA (optional)
CPU Slot 4 (64-bit)	HD Process card (if any)
CPU Slot 5 (64-bit)	HD Core card

Compaq Evo W8000 without Expansion Chassis

(Pro Tools|HD Systems Only)

Slot	Card
AGP Slot	Monitor card
CPU Slot 1	Avid Digital Video board (optional)
CPU Slot 2	Fibre Channel HBA
CPU Slot 3	SCSI HBA (optional)
CPU Slot 4	HD Process card (if any)
CPU Slot 5 (64-bit)	HD Process card (if any)
CPU Slot 6 (64-bit)	HD Core card

IBM M-Pro 6850 with 13-Slot Expansion Chassis

(Pro Tools|HD Systems Only)

SBS 13-Slot (serial numbers higher than 198487)

Slot	Card
AGP Slot	Monitor card
CPU Slot 1	Avid Digital Video Media board (optional)
CPU Slot 2	Fibre Channel HBA
CPU Slot 3	SCSI HBA (optional)
CPU Slot 4 (64-bit)	Empty
CPU Slot 5 (64-bit)	Chassis Host card
Backplane Chassis Slot	Chassis Controller card
Chassis Slot 1	HD Core card
Chassis Slots 2–7	HD Process cards (6 maximum)
Chassis Slot 8–13	Empty

 Expansion chassis slots are numbered sequentially from **left to right** when looking from the front.

 It is recommended that you only use an expansion chassis if you have a Pro Tools|HD 3 system or greater.

Compaq Evo W8000 with 13-Slot Expansion Chassis

(Pro Tools|HD Systems Only)

SBS 13-Slot (serial numbers higher than 198487)

Slot	Card
AGP Slot	Monitor card
CPU Slot 1	Avid Digital Video Media board (optional)
CPU Slot 2	Fibre Channel HBA
CPU Slot 3	SCSI HBA (optional)
CPU Slot 4	Empty
CPU Slot 5 (64-bit)	Empty
CPU Slot 6 (64-bit)	Chassis Host card
Backplane Chassis Slot	Chassis Controller card
Chassis Slot 1	HD Core card
Chassis Slots 2–7	HD Process cards (6 maximum)
Chassis Slot 8–13	Empty

 Expansion chassis slots are numbered sequentially from **left to right** when looking from the front.

 It is recommended that you only use an expansion chassis if you have a Pro Tools|HD 3 system or greater.

index

Numerics

- 16-bit audio 15
- 64-voice engine 13

A

- Allocation Group sizes 21
- Allocation Groups
 - sharing 22
- Audio File Type 14
- audio files
 - sharing 24
- Avid Connection Manager 19
- Avid Unity MediaNet 1
 - compatible Pro Tools systems 2

B

- Bit Depth 15

C

- Change User 20
- compatibility 2
- configuring Pro Tools for MediaNet 13
- copper cable
 - connecting to Fibre Channel HBA 8

D

- Date and Time
 - setting on a Macintosh client 11
 - setting on a Windows XP client 12
- destructive editing 25
- DigiTranslator 2.0 24
- drive requirements 21

F

- Fibre Channel Controller
 - installing driver on Windows XP 11

- Fibre Channel HBA 6
 - Installation
 - Fibre Channel HBA 7
 - LED states 8

I

- Installation
 - Fibre Channel Controller driver on Windows XP 11
- installation
 - Macintosh Java Runtime Library 10
 - MediaNet client hardware 7
 - MediaNet Macintosh client software 10
 - MediaNet Windows XP client software 12
 - prerequisites 5
 - Pro Tools client 6

L

- log in to MediaNet
 - Macintosh client 17
 - Windows XP client 19
- log out of MediaNet
 - Macintosh client 18

M

- Mac/PC Compatibility Mode 15
- Macintosh client 17
- Macintosh Java Runtime Library
 - installing 10
- Macintosh Runtime Java Library 10
- maximum number of clients 21
- MediaManager 24
- MediaNet 1
 - differences to local storage 23
 - Macintosh client
 - logging in 17
 - logging out 18
 - mounting workspaces 18

- Windows XP client
 - Avid Connection Manager 19
 - Change User 20
 - logging in 19
 - mount MediaNet workspaces 20
 - unmount MediaNet workspaces 20
- MediaNet client hardware
 - installing 7
- MediaNet Macintosh client software
 - installing 10
- MediaNet Windows XP client software
 - installing 12
- mixed workgroups 21
- mount MediaNet workspaces
 - Windows XP client 20
- mounting MediaNet workspaces
 - Macintosh client 18

O

- OMF media
 - editing 25
- Open Media Framework Interchange (OMFI) 24
- optical cable 6
 - connecting to Fibre Channel HBA 7

P

- Playback Engine
 - configuring Pro Tools|24 MIX 13
 - configuring Pro Tools|HD 13
- Pro Tools only workgroups 21
- Pro Tools
 - configuring for MediaNet 13
 - installing 13
- Pro Tools client
 - installing 6
- Pro Tools|24 MIX
 - configuring Playback Engine 13
- Pro Tools|HD
 - configuring Playback Engine 13
- PTSessionLocker 25

S

- Sample Rate 14
- Setting Date and Time
 - Macintosh client 11
 - Windows XP client 12
- Sharing Allocation Groups 22

- sharing audio files 24
- sharing media 22
- sharing video files 24
- supported audio file types 14
- supported bit-depths 15
- supported sample rates 14
- Synchronize Time with Server 18
- system requirements 2

U

- unmount MediaNet workspaces
 - Windows XP client 20

V

- video files
 - sharing 24

W

- Windows XP client 18
- workflows 27