

Avid Unity™ MediaNetwork

PortServer Setup Guide

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Using This Guide

Congratulations on your purchase of an Avid Unity™ PortServer or PortServer Pro system. Your PortServer system allows workstations on your Ethernet network to copy or transfer files to and from MediaNetwork workspaces. These workstations can be Macintosh®, Windows®, or SGI® systems.

Your PortServer Pro system allows Avid® editing workstations (connected as Ethernet clients) to edit, digitize or record, and play media files from MediaNetwork workspaces. These workstations can be any of the following:

Macintosh systems – Media Composer®, Film Composer®, Avid Xpress®, or Avid Xpress DV

Windows 2000 systems – Avid Symphony™, Media Composer, Film Composer, Media Station XL, Avid Xpress, Avid Xpress DV, NewsCutter®, or NewsCutter XP



Your PortServer or PortServer Pro system might not contain all of the components or features described in this documentation. Avid documentation describes all components and features regardless of which configuration you purchased.

Who Should Use This Guide

This guide is intended for anyone who is installing, configuring, or maintaining a PortServer or PortServer Pro workgroup. It provides installation and configuration information specific to the standard PortServer and PortServer Pro hardware and software.

About This Guide

This guide introduces the PortServer and PortServer Pro systems, and describes the differences between them. This guide also contains complete, task-oriented procedures for setting up both the PortServer and PortServer Pro systems, and is organized as follows:

[Chapter 1, “PortServer Overview,”](#) describes the PortServer and PortServer Pro systems, and explains their differences.

[Chapter 2, “Setting Up a PortServer Workgroup,”](#) describes how to install and configure a PortServer system.

[Chapter 3, “Setting Up a PortServer Pro Workgroup,”](#) describes how to convert a PortServer system to a PortServer Pro system.

[Appendix A, “Avid Performance Meter,”](#) describes the performance meter utility and how to use it to test connections between PortServer clients and a PortServer or PortServer Pro system.




[Appendix B, “Troubleshooting,”](#) describes basic troubleshooting techniques for a PortServer or PortServer Pro system.

[Appendix C, “Using the Product Recovery CD-ROM,”](#) describes how to reinstall the Windows 2000 Server operating system using the recovery CD-ROM.

[Appendix D, “Regulatory and Safety Notices,”](#) lists the regulatory and safety notices for the MediaNetwork hardware.

Symbols and Conventions

Avid documentation uses the following symbols and conventions:

| Symbol or Convention | Meaning or Action |
|---|--|
|  | A note provides important related information, reminders, recommendations, and strong suggestions. |
|  | A caution means that a specific action you take could cause harm to your computer or cause you to lose data. |
|  | A warning describes an action that could cause you physical harm. Follow the guidelines in this document or on the unit itself when handling electrical equipment. |
| > | This symbol indicates menu commands (and subcommands) in the order you select them. For example, File > Import means to open the File menu and then select the Import command. |
| ▶ | This symbol indicates a single-step procedure. Multiple arrows in a list indicate that you perform one of the actions listed. |
| ⌘ | This symbol represents the Apple or Command key. Press and hold the Command key and another key to perform a keyboard shortcut. |
| Margin tips | In the margin, you will find tips that help you perform tasks more easily and efficiently. |
| <i>Italic font</i> | Italic font is used to emphasize certain words and to indicate variables. |
| Courier Bold font | Courier Bold font identifies text that you type. |
| Click | Quickly press and release the left mouse button (Windows) or the mouse button (Macintosh). |

| Symbol or Convention | Meaning or Action |
|------------------------------------|--|
| Double-click | Click the left mouse button (Windows) or the mouse button (Macintosh) twice rapidly. |
| Right-click | Quickly press and release the right mouse button (Windows only). |
| Drag | Press and hold the left mouse button (Windows) or the mouse button (Macintosh) while you move the mouse. |
| Ctrl+ <i>key</i> ⌘ + <i>key</i> | Press and hold the first key while you press the second key. |

If You Need Help

If you are having trouble setting up your PortServer or PortServer Pro workgroup:

1. Retry the action, carefully following the instructions given for that task in this guide. It is especially important to check each step of your workflow.
2. Check the release notes supplied with your Avid application for the latest information that might have become available *after* the hardcopy documentation was printed.
3. Check the documentation that came with your Avid application or your hardware for maintenance or hardware-related issues.
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Related Information

The following documents provide more information about the PortServer and PortServer Pro workgroups, and your MediaNetwork environment:

- *Avid Unity MediaNetwork Site Preparation Guide*
- *Avid Unity MediaNetwork File Manager Setup Guide*
- *Avid Unity MediaNetwork File Manager Failover Installation Notes*
- *Avid Unity MediaNetwork Upgrade Notes*
- *Avid Unity MediaNetwork Media Server Setup Guide*
- *Avid Unity MediaNetwork Supported Configurations*
- *Avid Unity MediaNetwork System Overview*
- *Avid Unity MediaNetwork Management Guide*
- *Avid Unity MediaNetwork Troubleshooting Guide*
- *Avid Unity MediaNetwork Macintosh Fibre Channel Client Setup Guide*
- *MediaNetwork Macintosh Fibre Channel Client Quick Start Card*
- *Avid Unity MediaNetwork Windows Fibre Channel Client Setup Guide*
- *MediaNetwork Windows Fibre Channel Client Quick Start Card*
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- *Avid Unity MediaNetwork Release Notes*
- *Avid Unity LANserver EX Setup Guide*
- *Avid Unity LANserver Upgrade Notes*
- *Avid Unity LANserver Release Notes*



You should be familiar with the basic MediaNetwork concepts before proceeding with this guide.

Chapter 1

PortServer Overview

This chapter introduces the PortServer and PortServer Pro systems. Both of these systems enable you to expand the client capacity of your MediaNetwork workgroup by allowing Avid workstations to access MediaNetwork workspaces through an Ethernet connection.

Topics in this chapter include:

- [PortServer Workgroup](#)
- [PortServer Pro Workgroup](#)
- [PortServer and PortServer Pro Workgroup Differences](#)

PortServer Workgroup

The heart of a PortServer workgroup is the PortServer system. The PortServer system connects to the Fibre Channel network and mounts MediaNetwork workspaces in the same manner that other MediaNetwork clients mount workspaces. Unlike other MediaNetwork clients, however, the PortServer system allows you to share your MediaNetwork workspaces over an Ethernet network. This sharing feature provides access to MediaNetwork workspaces for Avid workstations that do not have a connection to the MediaNetwork Fibre Channel network (PortServer clients).

The PortServer system and its clients can be connected to each other by an Ethernet network, switch, or hub. PortServer clients include Windows, Macintosh, and SGI nonediting workstations.



Mac OS[®] 9 clients require third-party software, DAVE[®], to mount shared MediaNetwork workspaces. DAVE is included as part of the MediaNetwork Macintosh Ethernet client software.

SGI clients require freeware software, Samba, to mount shared MediaNetwork workspaces. Samba is not included as part of the PortServer workgroup software and you must obtain it from the manufacturer directly.

PortServer workgroups support file copying and file exchange only. They are not intended to be used for editing purposes. If you need to do low-resolution editing, set up a PortServer Pro workgroup instead (see “PortServer Pro Workgroup” on page 20 for more information).

Figure 1 shows a typical PortServer workgroup connected to a MediaNetwork workgroup.

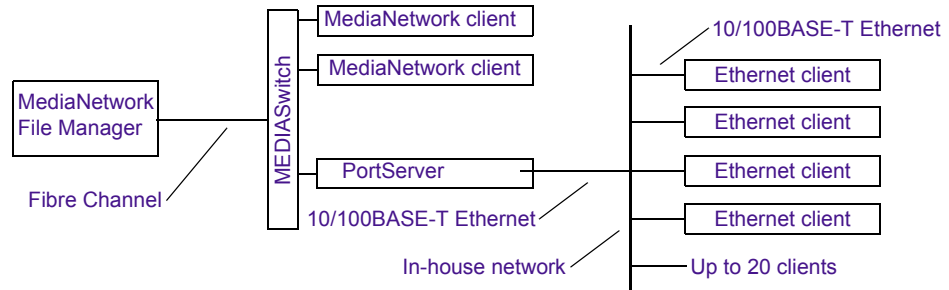


Figure 1 PortServer Workgroup

The PortServer system can mount and share up to 21 workspaces; this number is limited by the number of drive letters available in the Windows 2000 operating system. The workspaces that the PortServer system mounts are defined in a *mount file*. The mount file allows you to control which workspaces are mounted using which drive letter.

You can add several PortServer systems to your MediaNetwork workgroup, with each one accommodating several PortServer clients. Adding a PortServer system does not affect your MediaNetwork workgroup's ability to support existing MediaNetwork Fibre Channel clients.

Each PortServer system uses one MEDIASwitch port (reducing the total number of MediaNetwork Fibre Channel clients you can connect by one). It also uses one MediaNetwork Fibre Channel client license (reducing the total number of MediaNetwork Fibre Channel client licenses that are available by one).



A PortServer Pro system does not use a MediaNetwork Fibre Channel client license.

PortServer Pro Workgroup

A PortServer Pro workgroup provides the same features as a PortServer workgroup, with the added benefit of enabling you to edit, digitize or record, and play media files on Avid editing workstations. You can perform these operations from any Avid editing workstation that is using the Avid Ethernet client software. You can also perform file copy and file transfer activities from many Windows, Macintosh, and SGI nonediting clients.

The additional PortServer Pro functionality uses a high-performance networking protocol optimized by Avid for real-time media transfer. A PortServer Pro workgroup also includes a dedicated Ethernet switch that facilitates the real-time media transfer between the PortServer system and its clients. The Ethernet switch connects to the PortServer system through a Gigabit Ethernet connection and to the MediaNetwork clients by a 100BASE-T or 1000BASE-T Ethernet connection.



Real-time media reads and writes are not possible unless the connected Ethernet clients are running qualified Avid editing software and have the Ethernet client software installed.

Figure 2 shows a typical PortServer Pro workgroup connected to a MediaNetwork workgroup.

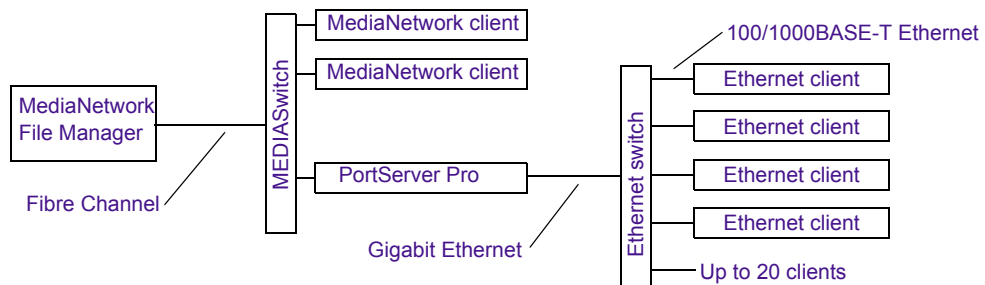


Figure 2 PortServer Pro Workgroup



If a client is configured in the Connection Manager to connect as both a Fibre Channel client and an Ethernet client, it is limited to a maximum video resolution of 2:1.

PortServer systems in a PortServer Pro workgroup have the same shared workspace limitation of 21 workspaces. However, in a PortServer Pro workgroup, a workspace is not mounted unless a client requests it. This helps to conserve the 21 available drive letters for workspaces that are actually being used.

Each PortServer Pro workgroup requires an application key (also known as a *dongle*) that you attach to the PortServer system. This application key eliminates the need for the PortServer Pro system to use a MediaNetwork Fibre Channel client license. PortServer Pro clients do not require MediaNetwork application keys.

Each PortServer Pro workgroup uses one MEDIASwitch port (reducing the total number of MediaNetwork Fibre Channel clients you can connect by one).

PortServer and PortServer Pro Workgroup Differences

[Table 1](#) describes the differences between the PortServer and PortServer Pro workgroups.

Table 1 PortServer and PortServer Pro Workgroup Differences

| Features | PortServer | PortServer Pro |
|--------------------------------|---|--|
| Copying and transferring files | Can copy and transfer files from Windows, Macintosh, and SGI nonediting workstations. | Can copy and transfer files from: <ul style="list-style-type: none"> Windows 2000 and Macintosh editing workstations. Windows, Macintosh, and SGI nonediting workstations. |

Table 1 PortServer and PortServer Pro Workgroup Differences (Continued)

| Features | PortServer | PortServer Pro |
|---|---|--|
| Playing, copying, and editing media files | Cannot edit, copy, or play media files. | Can edit, copy, or play media files on Windows 2000 and Macintosh editing workstations. |
| Ethernet connection | PortServer system can be connected to its clients by any component of the Ethernet network you select (switch, hub, and so forth). | PortServer system <i>must</i> be connected to Windows 2000 and Macintosh editing clients by the dedicated Ethernet switch. PortServer system can be connected to Windows 2000 and Macintosh editing workstations (using the dedicated Ethernet switch) and to nonediting PortServer clients (using your local area network) at the same time. |
| Licensing | Requires a MediaNetwork Fibre Channel client license for the PortServer system. Does not require an Ethernet client license for each attached Ethernet client. | Does not require a MediaNetwork Fibre Channel client license for the PortServer system. Requires an Ethernet client license for each attached Ethernet client. |
| Application key | Does not require an application key. | Requires an application key on the PortServer system. |
| Workspace mounting | Limited to 21 workspaces. Mounts workspaces using a mount file. | Limited to 21 workspaces. Mounts workspaces upon client request. |

Chapter 2

Setting Up a PortServer Workgroup

This chapter describes how to add a PortServer workgroup to an existing MediaNetwork workgroup.

Topics in this chapter include:

- [Before You Begin](#)
- [Installation Prerequisites](#)
- [Installing the PortServer Hardware](#)
- [Configuring the PortServer System](#)
- [Installing the PortServer Software](#)
- [Sharing MediaNetwork Workspaces](#)
- [Working with PortServer Clients](#)



If you intend to set up a PortServer Pro workgroup, you must follow the instructions in this chapter to install a basic PortServer workgroup, and then continue with [Chapter 3](#) to complete the installation.

Before You Begin

Keep the shipping box that came with your PortServer kit. You might need to repackage and ship the PortServer system in the future.

Before you begin to install the PortServer hardware, do the following:

- Unpack the PortServer kit.
- Check the contents of the kit against the packing sticker on the outside of the shipping box to confirm you have received all the components.

Installation Prerequisites

To set up a PortServer workgroup, you must have:

- An existing MediaNetwork workgroup with one unused MEDIASwitch port to accommodate the PortServer system, and an available client seat on the MediaNetwork application key.
- A PortServer system running the Windows 2000 Server operating system with Service Pack 2 and the necessary hotfixes.
- A 100BASE-T Ethernet network interface that connects the PortServer system to an Ethernet network or switch.
- The MediaNetwork CD-ROM with the PortServer software.

Installing the PortServer Hardware

Your PortServer system ships with a Fibre Channel adapter board and a Gigabit Ethernet network board installed. The PortServer system also has an autosensing power supply that sets the voltage correctly for either 120 volts or 220 volts.

Installing the PortServer Rack-Mount Brackets

Follow the instructions supplied with the PortServer system to install the rack-mount rear brackets ensuring that:

- The brackets do not interfere with the power strips, power cords, or other cables at the back of the rack.
- The brackets allow the PortServer system to slide completely into the rack.
- The bottom of the PortServer system is at the bottom of a U-alignment space.

Mounting the PortServer System

As you are setting up the PortServer system to mount into a rack, you should continue to refer to the rack-mount instructions supplied with the system.

To mount a PortServer system on the rack-mount brackets:

1. Attach the left and right front brackets to the PortServer system.
2. Attach the rear support washers to the last mounting location on each side of the PortServer system.
3. Slide the PortServer system into the rack.
4. Set the support washers onto the brackets.
5. Attach the front bracket to the rack rails.

Connecting the PortServer System Power Cord

To connect the PortServer system power cord:

- ▶ If your PortServer system *does not* include a second power supply, attach the power cord to the top power connector on the back of the File Manager. Plug the power cord into a power strip in the back of the rack.
- ▶ If your PortServer system *does* include a second power supply, attach a power cord to each of the power connectors on the back of the File Manager. Plug one power cord into the power strip on the right side in the back of the rack. Plug the other power cord into the power strip on the left side in the back of the rack.

Connecting the PortServer System Cables

You need to connect the PortServer system to:

- A standard keyboard, monitor, and mouse, or the optional keyboard, video, mouse (KVM) switch (if your MediaNetwork workgroup includes one)
- A MEDIASwitch

Connecting the PortServer System to a Standard Keyboard, Monitor, and Mouse



If your MediaNetwork workgroup includes a KVM switch, skip this section and proceed to “Connecting the PortServer System to the Optional KVM” on page 27.

To connect a PortServer system to a standard keyboard, monitor, and mouse:

1. Locate the keyboard and mouse in the PortServer kit.
2. Locate the keyboard/mouse Y-cable in the PortServer kit.
3. Attach the Y-cable to the keyboard/mouse connector on the back of the PortServer system.
4. Attach the keyboard cable connector to the connector on the right branch of the Y-cable.

5. Attach the mouse cable connector to the connector on the left branch of the Y-cable.
6. Attach the 15-pin connector on the monitor cable to the monitor connector on the back of the PortServer system.

Connecting the PortServer System to the Optional KVM

To connect a PortServer system to a KVM:

1. Locate a KVM cable.
2. Attach the cable connector to a free port on the back of the KVM. Secure the connector with the thumbscrews in the connector.
3. Attach the 15-pin connector to the video port on the back of the PortServer system. Secure the connector with the thumbscrews in the connector.
4. Attach the keyboard cable connector to the connector on the right branch of the Y-cable.
5. Attach the mouse cable connector to the connector on the left branch of the Y-cable.

Connecting the PortServer System to the MEDIASwitch

To connect the PortServer system to the MEDIASwitch:

1. Locate the optical cable. Look for a cable with a dual plug on both ends (see [Figure 3](#)).
2. Make sure the optical cable has an LC (small) optical cable connector on one end to match the connector on the Fibre Channel adapter board.
3. Remove the protective covers from the optical cable connector on the optical cable.
4. Remove the protective cover from the Fibre Channel adapter board connector on the PortServer system.

5. Plug the optical cable connector into the Fibre Channel adapter board connector. The optical cable connector and the Fibre Channel adapter board connector are keyed and fit together on the PortServer system only *one way*. You should hear a click when the optical cable is properly seated (see [Figure 3](#)).



Do not force the optical cable connector into the Fibre Channel adapter board connector. There should be no resistance as you put them together. If the optical cable connector does not fit into the Fibre Channel adapter board connector, turn the optical cable connector 180 degrees and try to insert it again.

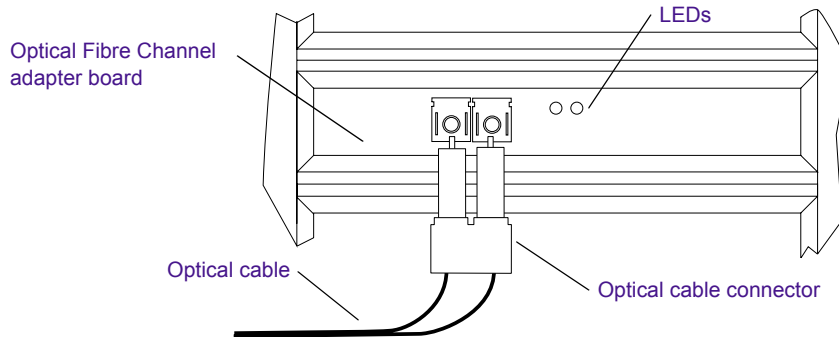


Figure 3 Attaching an Optical Cable to the Fibre Channel Adapter Board

6. Attach the other end of the optical cable to the MEDIASwitch as described in [“Connecting Cables to the MEDIASwitch”](#) on page 28.

Connecting Cables to the MEDIASwitch

The MEDIASwitch connects the PortServer system to the MediaNetwork workgroup. Avid supports two types of MEDIASwitches: 1-Gb MEDIASwitches and 2-Gb MEDIASwitches. The 1-Gb MEDIASwitch uses gigabit interface converter (GBIC) connectors to connect the cables to the switch. The 2-Gb MEDIASwitch uses small form-factor pluggable (SFP) connectors to connect the cables to the switch.

Connecting to a 1-Gb MEDIASwitch

The following procedure describes how to connect the optical GBIC and optical cable to a 1-Gb MEDIASwitch.

To connect an optical cable to the 1-Gb MEDIASwitch:

1. Locate the optical GBIC in the PortServer kit.
2. Route the optical cable from the PortServer system to the MEDIASwitch.
3. Position the optical GBIC in front of a MEDIASwitch port (see [Figure 4](#)). Make sure the optical cable connector is facing *away* from the MEDIASwitch.

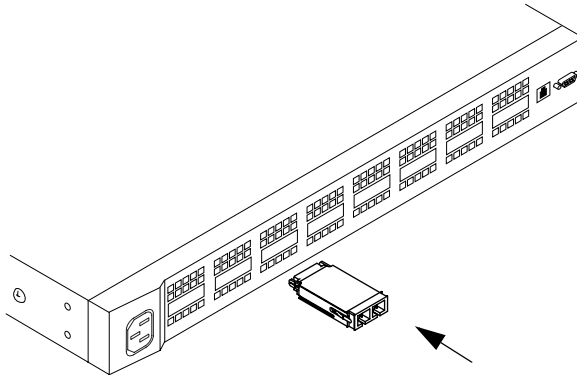


Figure 4 Installing a GBIC Connector



You can install the GBIC while the MEDIASwitch is turned on.

4. Slide the optical GBIC into the MEDIASwitch port. You should hear the retainer clips click when the optical GBIC is seated in the port.
5. Remove the protective covers from the optical cable connector on the optical cable.
6. Remove the protective cover from the optical GBIC in the MEDIASwitch.

7. Attach the connector on the optical cable into the optical GBIC for the client (see Figure 5). Firmly push the plug on the optical cable into the connectors on the optical GBIC.
8. Label the optical cable with the name of the PortServer system to which it connects.

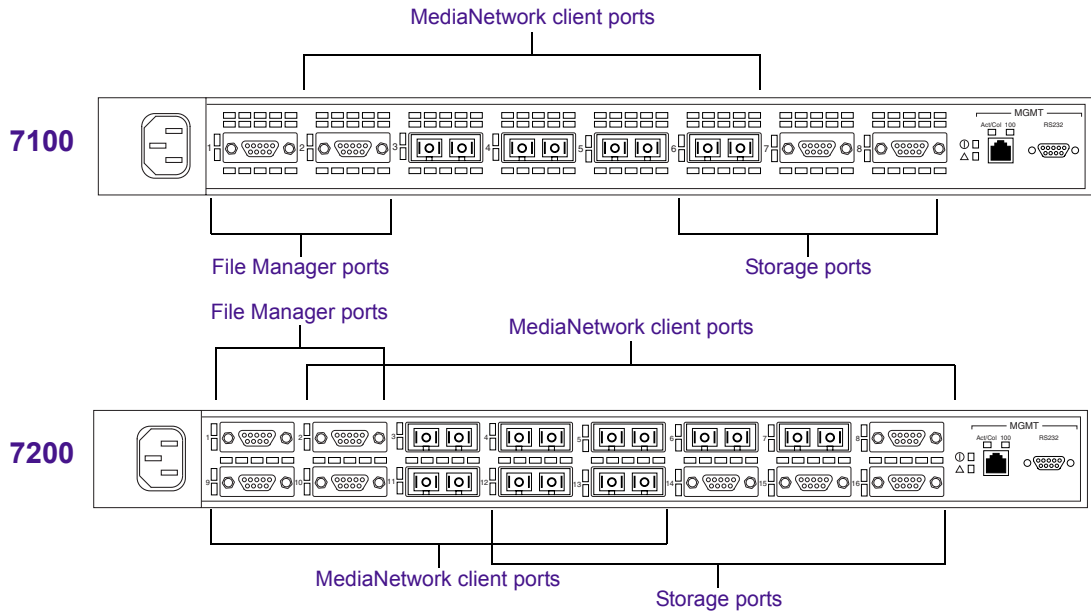


Figure 5 Port Layout for 1-Gb MEDIASwitches

Connecting to a 2-Gb MEDIASwitch

The following procedure describes how to connect the optical SFP and optical cable to a 2-Gb MEDIASwitch.

To connect an optical cable to the 2-Gb MEDIASwitch:

1. Locate the optical SFP in the PortServer kit.
2. Route the optical cable from the PortServer system to the MEDIASwitch.

3. Position the optical SFP in front of a MEDIASwitch port (see [Figure 6](#)). Make sure the optical cable connector is facing *away* from the MEDIASwitch.

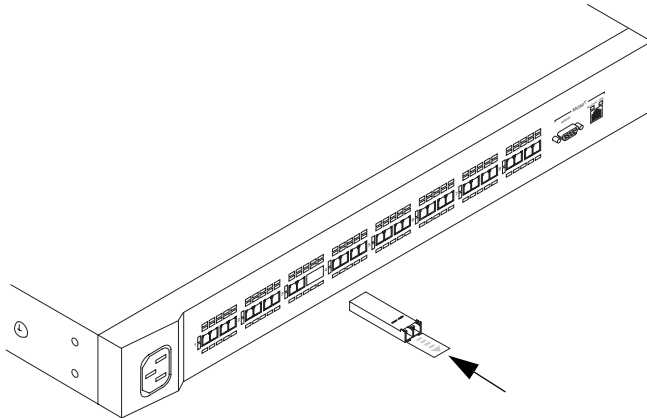


Figure 6 Installing an SFP Connector



You can install the SFP while the MEDIASwitch is turned on.

4. Slide the optical SFP into the MEDIASwitch port. You should hear a click when the optical SFP is seated in the port.
5. Remove the protective covers from the optical cable connector on the optical cable.
6. Remove the protective cover from the optical SFP in the MEDIASwitch.
7. Attach the connector on the optical cable into the optical SFP for the client (see [Figure 7](#)). Firmly push the plug on the optical cable into the connectors on the optical SFP.
8. Label the optical cable with the name of the PortServer system to which it connects.

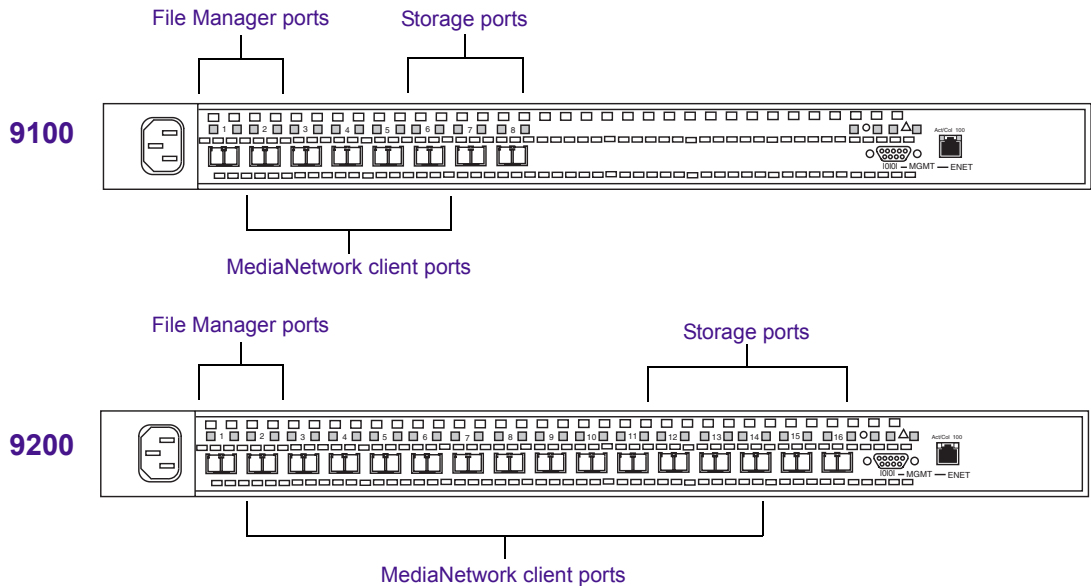


Figure 7 Port Layout for 2-Gb MEDIASwitches

Connecting the PortServer System to Your Network



Skip this section if you intend to set up a PortServer Pro workgroup. As part of the PortServer Pro setup, you must install and configure the Ethernet switch, which provides Ethernet connectivity.

You can connect the PortServer system to its clients using any component of the Ethernet network you choose (switch, hub, and so forth). Consult your network administrator to determine how you need to connect the PortServer system to your network.

Configuring the PortServer System

After you install the PortServer hardware, configure the PortServer system in preparation for installing the PortServer software. The PortServer system ships from Avid with the Windows 2000 Server operating system, service pack, hotfixes, and necessary drivers already installed.

To properly configure the PortServer system:

1. Check the date, time, and time zone.
2. Specify a unique computer name by which all PortServer clients can identify the PortServer system.

Checking the Date, Time, and Time Zone

You need to make sure the date, time, time zone, and Daylight Saving Time options are set correctly on each PortServer system. The current time is dictated to the PortServer systems by the MediaNetwork File Manager. If the time setting is incorrect, you will need to reset it on the File Manager.

To check the date, time, time zone, and Daylight Saving Time options on a PortServer system:

1. Double-click the time in the taskbar. The Date/Time Properties dialog box opens.
2. Check the date and time on the Date & Time tab.
3. Click the Time Zone tab and check the following:
 - The correct time zone is selected.
 - The “Automatically adjust clock for daylight saving changes” option is selected.
4. Click Cancel to close the Date/Time Properties dialog box without making any changes.
5. If the time setting on the PortServer system is incorrect, you will need to reset it on the File Manager and it will propagate to the PortServer system.

Specifying a Computer Name for the PortServer System

To specify a unique computer name by which clients can identify the PortServer system:

1. Right-click the My Computer icon on the desktop, and select Properties. The System Properties dialog box opens.
2. Click the Network Identification tab.

3. Click the Properties button. The Identification Changes dialog box opens.
4. Type the PortServer system name in the Computer name text box.
5. Click OK.
6. Close all open dialog boxes.

Installing the PortServer Software

The PortServer software is supplied on the MediaNetwork CD-ROM in the MediaNetwork installation kit. During the following installation, you install the standard MediaNetwork client software, along with the PortServer software.

To install the PortServer software on the PortServer system:

1. Locate the MediaNetwork CD-ROM.
2. Insert the CD-ROM into the PortServer system's CD-ROM drive. The CD-ROM is set to start automatically and open the Avid Unity Installation window. This takes approximately 30 seconds.

If the CD-ROM does not start automatically, then start the installation manually as follows:

- a. Double-click the My Computer icon on the desktop. The My Computer window opens.
- b. Right-click the CD-ROM icon, and select AutoPlay. The Avid Unity Installation window opens.
3. Click Product Installers. The screen lists the available products.
4. Click MediaNetwork Components. The screen lists the available MediaNetwork installers.
5. Click Install PortServer. The InstallShield Wizard opens to the Welcome screen.

6. Accept the default values presented by the InstallShield Wizard. When the Setup Status screen appears, it shows the installation progress indicator while the software is being installed. The Avid Unity PortServer Service Configuration dialog box opens (see [Figure 8](#)) after the installation is complete and the Setup Status screen closes.

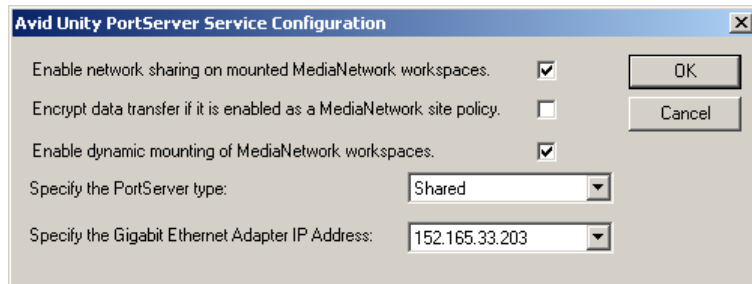


Figure 8 Avid Unity PortServer Service Configuration Dialog Box

7. Select the “Enable network sharing on mounted MediaNetwork workspaces” option to mount and share workspaces on the PortServer system.
8. If this is a PortServer Pro system, select the “Encrypt data transfer if it is enabled as a MediaNetwork site policy” option if you have purchased the encryption option and will be connecting *only* nonediting clients to this PortServer system. Avid Player is an example of a current nonediting client.

The encryption option allows you to securely view data on Avid Players.

- ▶ If you have encryption functionality on your File Manager application key and you select encryption on your PortServer system, you will enable Avid Players to view data in an encrypted format. This configuration will allow *only* Avid Players to view data from this PortServer system. Editing clients are not enabled with encryption at this time.
- ▶ If you do not select encryption on your PortServer system connected to a File Manager with encryption functionality, *only* editing clients are enabled (see [Table 2](#)).



This function is only available if the File Manager application key allows encryption. Your File Manager application key will only allow encryption if you selected it as an option at the time of purchase.

Table 2 PortServer Encryption Options

| PortServer Encryption | File Manager: Encryption Available | File Manager: Encryption Not Available |
|------------------------------|---|---|
| Selected | Avid Players only | Nonencrypted Avid Players and editing clients |
| Not selected | Editing clients only | Nonencrypted Avid Players and editing clients |

9. Select the “Enable dynamic mounting of MediaNetwork workspaces” option if you are connecting editing clients to the PortServer Pro workgroup. If you are connecting other clients such as Xdeck™, Avid Players, or TransferManager, deselect this option.
10. Click the “Specify the PortServer type” pop-up menu, and select Shared or Dedicated. This feature also allows clients to use the License Pool Server to generate and become a member of a list of commonly accessible, or shared, PortServer systems.



Each PortServer system can be either Shared or Dedicated. When a PortServer system is Shared, clients can obtain the IP address of the PortServer system by requesting a PortServer system list from the License Pool Server. When a PortServer system is Dedicated, clients must explicitly specify the Gigabit Ethernet adapter IP address of the desired PortServer system.

11. Click the “Specify the Gigabit Ethernet Adapter IP Address” pop-up menu, and select the Gigabit Ethernet adapter IP address.
12. Click OK. The InstallShield Wizard Complete screen appears.
13. Select the “Yes, I want to restart my computer now” option.
14. Click Finish to complete the PortServer software installation and reboot the PortServer system.

15. After the PortServer system reboots, log in to the PortServer system as Administrator.
16. Verify that the PortServer software is correctly installed:
 - a. Click the Start button, and select Settings > Control Panel. The Control Panel window opens.
 - b. Double-click the Administrative Tools icon. The Administrative Tools window opens.
 - c. Double-click Services. The Services window opens.

The Avid Unity PortServer service should show its status as Started and its Startup Type as Automatic.
17. Close all open windows.

Sharing MediaNetwork Workspaces

The PortServer software includes the Avid Unity PortServer service that automatically mounts and shares MediaNetwork workspaces. In a PortServer workgroup, the Avid Unity PortServer service automatically mounts the first 21 workspaces it finds in the Administration Tool's workspace list. If a workspace that you need to mount is not listed as one of the 21 workspaces, you can rename it by adding a hyphen (-) or a number (01, 02, ...21) to the beginning of the workspace name. You can also use the AISPortServer.ini file to designate workspaces that mount at specific drive letters (see [“Mounting Workspaces Using Fixed Drive Letters” on page 38](#)).

The Avid Unity PortServer service starts automatically when you boot the PortServer system. On startup (and every 60 seconds thereafter), the service reads MediaNetwork configuration information from the File Manager to obtain workspace, user, and access privilege information. It then uses this information to remount and reshare MediaNetwork workspaces to Ethernet clients with the correct access privileges.

Mounting Workspaces Using Fixed Drive Letters

On a PortServer or a PortServer Pro system, you can mount MediaNetwork workspaces at specific drive letters. This allows you to control how some or all of the workspaces are mounted on the PortServer system.

The Avid Unity PortServer service reads the AISPortServer.ini file to determine if any workspaces should be mounted at specific drive letters. If you want to mount a workspace at a specific drive letter, you must configure the AISPortServer.ini file to set the drive letter and workspace name.

To configure the AISPortServer.ini file:

1. Navigate to D:\Program Files\Avid Technology\AvidUnity\PortServerStartup.
2. Open the AISPortServer.ini file using a text editor, such as WordPad.
3. Add one line for each workspace you want to map to a specific drive letter. Each line should use the format *X: workspace*, where *X* is the drive letter and *workspace* is the name of the workspace to mount. Workspace names are case sensitive and can have no spaces in the names (see [Figure 9](#)).

```
# To mount a specific workspace using a fixed drive letter, add one line
# for each workspace in the following format:
#
#U: Workspace name
G: Workspace1
H: Workspace2
# The remaining available drive letters will be used to mount other workspaces,
# in alphabetical order, up to the maximum of 21 workspaces.
#
```

Figure 9 AISPortServer.ini File Entries

4. Save the AISPortServer.ini file.
5. Reboot the PortServer system to mount the workspaces typed into the AISPortServer.ini file.

Working with PortServer Clients



If you are installing a PortServer Pro workgroup, skip this section and proceed to [Chapter 3](#).

Your PortServer workgroup installation is now complete, and you can begin mounting workspaces with your PortServer clients.

Connecting to the PortServer System from a Windows Client

On Windows clients, you connect to a workspace shared from a PortServer system by mapping a network drive. This network drive mapping is identical to the mapping you do for any shared directory in a Windows environment.

Connecting to the PortServer System from a Macintosh Client

Mac OS 9 clients cannot connect to the PortServer system without additional software (DAVE) that allows them to see the Windows network. DAVE is included as part of the MediaNetwork Macintosh Ethernet client software. You must install the DAVE software on each Mac OS 9 client that will become a PortServer client. For more information, see the *Avid Unity MediaNetwork Macintosh Ethernet Client Setup Guide*.



At present, Mac OS 9 clients can use only DAVE v2.5.2. Each Macintosh client needs to have a separate DAVE license to use the DAVE software. If two clients use the same DAVE license, you will have conflicts between these clients when they try to connect to the PortServer system.



Shared workspaces with more than 11 characters in their names do not appear in the Chooser when you use the DAVE software. You must mount these workspaces using the MountManually feature in the DAVE software.

Connecting to the PortServer System from an SGI Client

SGI clients cannot connect to the PortServer system without additional software (Samba) that allows them to see the Windows network. Samba is freeware that you obtain from the manufacturer directly. You must install the Samba software on each SGI client that will become a PortServer client. For more information, see the Samba application note on the Avid Customer Support Knowledge Center.

Chapter 3

Setting Up a PortServer Pro Workgroup

This chapter describes how to convert an existing PortServer workgroup to a PortServer Pro workgroup.

Topics in this chapter include:

- [Additional Prerequisites for PortServer Pro Workgroups](#)
- [Connecting the PortServer Pro Application Key](#)
- [Installing the Ethernet Switch](#)
- [Connecting the Ethernet Switch to the PortServer Pro Workgroup](#)
- [Configuring the PortServer Pro System Network Properties](#)
- [IP Addressing Strategies for PortServer Pro Workgroups](#)
- [Sharing MediaNetwork Workspaces in a PortServer Pro Workgroup](#)
- [Preparing for Network Installation of the PortServer Pro Windows 2000 Client Software](#)
- [Connecting PortServer Pro Clients](#)
- [Mounting Workspaces and Testing the Installation](#)

Additional Prerequisites for PortServer Pro Workgroups

In addition to the installation prerequisites listed in [Chapter 2](#) for a basic PortServer workgroup, you need the following components to create a PortServer Pro workgroup:

- An Ethernet switch that connects the PortServer Pro system to the PortServer Pro clients
- Up to 20 PortServer Pro clients (Avid workstations running qualified versions of Avid Composer Products software)
- A PortServer Pro application key

Connecting the PortServer Pro Application Key

To install the application key:

1. Locate the application key in the PortServer Pro kit. This application key is configured with a PortServer Pro license that allows the PortServer Pro system to mount MediaNetwork workspaces without using a client license.
2. Attach the application key to the USB adapter board.



Do not attach the application key to the USB connectors on the front or the back of the PortServer Pro. The application key will not function correctly if you use these USB connectors.



Be careful not to lose the application key. Your PortServer Pro workgroup does not function without it. If you lose the application key, you must purchase another one from Avid to use your PortServer Pro software.

Installing the Ethernet Switch

The Ethernet switch allows you to connect multiple PortServer Pro clients to the PortServer Pro system and perform real-time media transfers.

Avid supports several different switches, the most common of which is a nonblocking Gigabit Ethernet to 10/100BASE-T Ethernet switch. This switch has 24 10/100BASE-T ports for connecting Ethernet clients. For information about other switches and their application in a PortServer Pro workgroup, contact your local Avid Sales Representative or your Avid Reseller.

Installing the Ethernet Switch Rack-Mount Bracket

Follow the instructions supplied with the Ethernet switch to rack mount the switch, ensuring that:

- The bottom of the Ethernet switch is at the bottom of a U-alignment space.
- There is adequate space to run and connect Ethernet cables to the front of the Ethernet switch.

Connecting the Ethernet Switch Power Cord

To connect the Ethernet switch power cord:

1. Plug one end of the power cord into the back of the Ethernet switch.
2. Plug the other end of the power cord into a power strip in the back of the rack.

Connecting the Ethernet Switch to the PortServer Pro Workgroup

The Ethernet switch must be connected to:

- The PortServer Pro system
- Your site's local area network
- The PortServer Pro clients

Avid supports the use of several Ethernet switches to connect Ethernet clients to a PortServer Pro workgroup: the Asanté® 3524, the Asanté 65120-2G, and the Asanté 65120-12G. The instructions in the following sections describe how to connect the Asanté 3524. If you are using the Asanté 65120-2G or the Asanté 65120-12G, see the *Avid Unity MediaNetwork Gigabit Ethernet Installation Notes*.

Connecting the Ethernet Switch to the PortServer Pro System

To connect the Ethernet switch to the PortServer Pro system:

1. Locate a Category 5 copper Ethernet cable.
2. Attach the connector on one end of the Ethernet cable to the Gigabit Ethernet adapter board on the back of the PortServer Pro system (see [Figure 10](#)). The board is located in slot 1, the bottom slot.

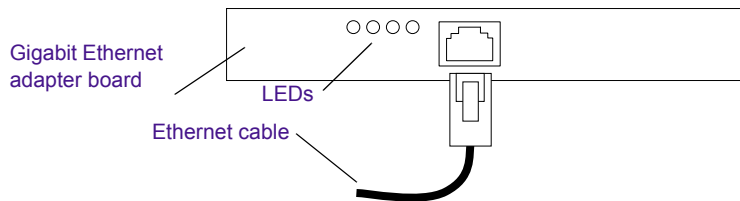


Figure 10 Attaching the Ethernet Cable to the Gigabit Ethernet Adapter Board

3. Attach the other end of the Ethernet cable to the Gigabit Ethernet module on the front of the Ethernet switch (see [Figure 11](#)).

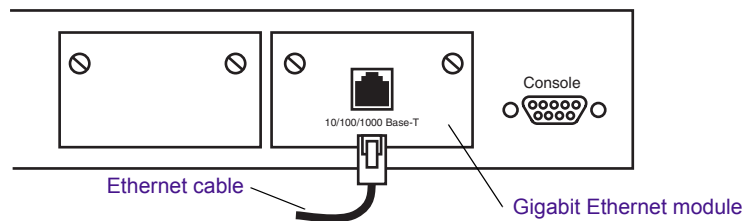


Figure 11 Attaching the Ethernet Cable to the Gigabit Ethernet Module

Connecting the Ethernet Switch to Your Site's Local Area Network

You must connect the Ethernet switch to your Ethernet local area network to enable the clients in your PortServer Pro workgroup to do the following:

- Obtain a license to use the PortServer Pro (the File Manager must also be connected to the local area network). For more information, see the *Avid Unity MediaNetwork File Manager Setup Guide*.
- Easily share project information with other MediaNetwork or PortServer Pro clients.
- Use other media services (such as MediaManager).

You can connect the Ethernet switch directly to your local area network or to an additional Ethernet switch you purchased from Avid (an Asanté GX5-208 or an Asanté 65120-2G) (see [Figure 12](#)). This additional switch allows you to connect the File Manager, all of the PortServer Pro systems, and the MEDIASwitches together to simplify network and MEDIASwitch management.

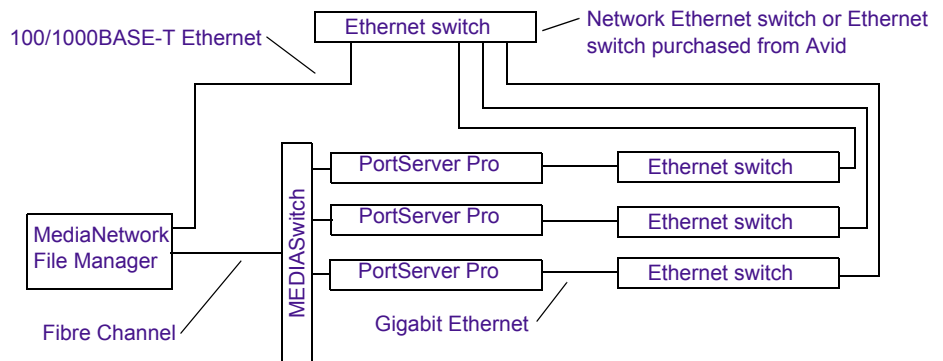


Figure 12 Connecting the PortServer Pro Systems to an Ethernet Network

If you have multiple PortServer Pro workgroups, you can connect each Ethernet switch directly to the local area network or cascade the Ethernet switches and connect only one of them to the local area network.



A connection to a local area network is required to allow access by PortServer Pro clients to MediaNetwork workspaces shared by the PortServer Pro system. Avid does not install, configure, or troubleshoot local area networks. If you are having trouble with your network, consult your Information Services department or your network vendor.

Connecting a Single Ethernet Switch

You connect the Ethernet switch to your local area network through port 24. The switch port has autosensing capabilities and will connect to your network at the correct speed.



If you have multiple PortServer Pro workgroups (and, therefore, multiple Ethernet switches), skip this section and proceed to “Cascading Multiple Ethernet Switches” on page 46.

To connect a single Ethernet switch to the local area network:

1. Locate a Category 5 copper Ethernet cable.
2. Connect one end of the Ethernet cable to port 24 on the front of the Ethernet switch (see [Figure 13](#)).
3. Connect the other end of the Ethernet cable to a local area network jack or to the additional Ethernet switch. The connection is active when the LED for port 24 turns on.

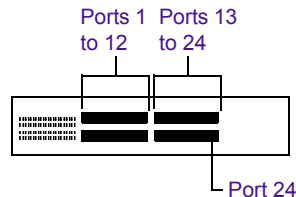


Figure 13 Connecting an Ethernet Switch to a Network

Cascading Multiple Ethernet Switches

If you have multiple PortServer Pro workgroups (and, therefore, multiple Ethernet switches), you can attach them to your local area network using a single local area network port by cascading the Ethernet switches.

To cascade Ethernet switches:

1. Locate a Category 5 copper Ethernet cable.
2. Connect one end of the Ethernet cable to port 24 on the front of the *first* Ethernet switch (see [Figure 14](#)).
3. Connect the other end of the Ethernet cable to port 23 on the *next* uncascaded Ethernet switch. The connection is active when the LEDs for the ports on both Ethernet switches turn on.
4. Locate another Category 5 copper Ethernet cable.

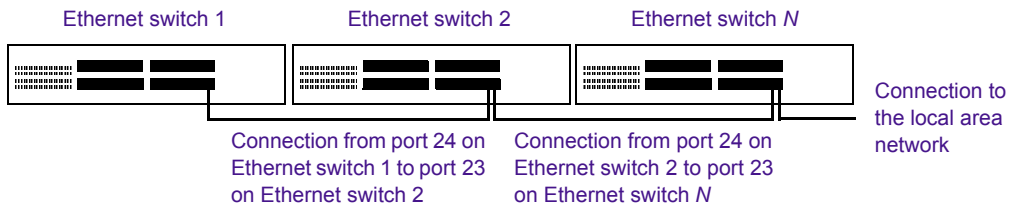


Figure 14 Cascading Ethernet Switches

5. Connect one end of the Ethernet cable to port 24 on the front of the Ethernet switch you just cascaded, and then determine whether there are more Ethernet switches to cascade. Do one of the following:
 - ▶ If there are more Ethernet switches to cascade, repeat steps 3 to 5.
 - ▶ If there are no more Ethernet switches to cascade, proceed to step 6.
6. Connect the other end of the Ethernet cable to a local area network jack or to the additional Ethernet switch. The connection is active when the LED for port 24 turns on.

Connecting the Ethernet Switch to the PortServer Pro Clients

You connect a PortServer Pro client to the PortServer Pro workgroup by connecting the client's Ethernet 10/100BASE-T port to a port on the Ethernet switch. The instructions in this section are appropriate for all PortServer Pro clients: Windows and Macintosh.



For PortServer Pro workgroups, the Ethernet path between the PortServer Pro system and PortServer Pro clients must be a direct, full-duplex connection using the supplied Ethernet switch. Adding single-duplex devices between the PortServer Pro system and its clients, or attempting to connect clients using other switches or hubs, is not supported.

To connect the Ethernet switch to the PortServer Pro client's Ethernet port:

1. Locate a Category 5 copper Ethernet cable.
2. Connect one end of the Ethernet cable to the Ethernet port on the rear of the client (see [Figure 15](#)).

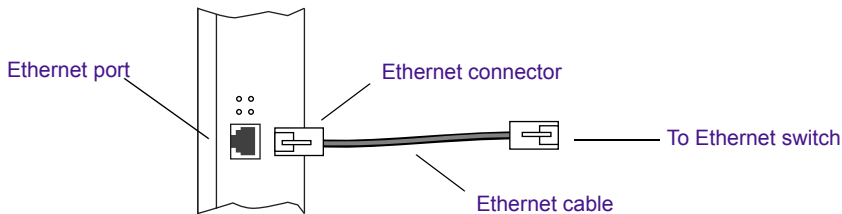


Figure 15 Connecting to the PortServer Pro Client Ethernet Port

3. Connect the other end of the Ethernet cable to an empty port between port 1 and port 20 on the Ethernet switch (see [Figure 16](#)).

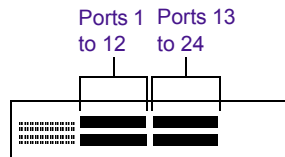


Figure 16 Connecting to the Ethernet Switch 10/100BASE-T Ports

Configuring the PortServer Pro System Network Properties

You need to configure each PortServer Pro system's network properties so the PortServer Pro system can communicate with the network. Each PortServer Pro system has three network connections: a Gigabit Ethernet adapter and two built-in 10/100BASE-T Ethernet adapters. You need to provide a static IP address and subnet mask for the Gigabit Ethernet adapter.



By default, the Gigabit Ethernet adapter is enabled and the built-in Ethernet adapters are disabled.

To configure the network properties for the Gigabit Ethernet adapter:

1. Right-click the My Network Places icon on the desktop, and select Properties. The Network and Dial-up Connections window opens.
2. Double-click the Local Area Connection icon. The Local Area Connection Status dialog box opens.
3. Click the Properties button. The Local Area Connection Properties dialog box opens.
4. Select the Internet Protocol (TCP/IP) option.
5. Click the Properties button. The Internet Protocol (TCP/IP) Properties dialog box opens.
6. Select the "Use the following IP address" option. The text boxes in this section of the dialog box change from gray to white.
7. Type an appropriate, unique IP address in the IP address text box and press Enter on the keyboard (see ["IP Addressing Strategies for PortServer Pro Workgroups"](#) on page 50). The PortServer Pro system should fill in the subnet mask automatically. If not, type the subnet mask in the Subnet mask text box.
8. If necessary, type a gateway IP address in the Default gateway text box.
9. Click OK to set the changes.
10. Close all open windows and dialog boxes.

11. Navigate to D:\Program Files\Avid Technology\AvidUnity\PortServerStartup.
12. Double-click the PortServerConfiguration icon or the PortServerConfiguration.exe icon. The Avid Unity PortServer Service Configuration dialog box opens. The IP address for the PortServer Pro system Gigabit Ethernet adapter board should appear in the “Specify the Gigabit Ethernet Adapter IP Address” text box.
13. Click OK to close the Avid Unity PortServer Service Configuration dialog box.
14. Reboot the PortServer Pro system.

IP Addressing Strategies for PortServer Pro Workgroups

If your PortServer Pro system and PortServer Pro clients are connected to your local area network, the PortServer Pro system and each PortServer Pro client must be properly configured with a unique, valid IP address and subnet mask.

Your local area network administrator should determine how to allocate IP addresses for the systems on your network, bearing in mind the following:

- Assign a static IP address to the Gigabit Ethernet adapter in the PortServer Pro system — the PortServer Pro clients are configured to address the PortServer Pro system using this address.
- Assign static IP addresses to the PortServer Pro clients or use Dynamic Host Configuration Protocol (DHCP) to obtain them dynamically if you have a DHCP server on the network.
- However you assign the PortServer Pro client IP addresses, the PortServer Pro system and all clients must have addresses in the same subnet.

Sharing MediaNetwork Workspaces in a PortServer Pro Workgroup

Mounting and sharing workspaces in a PortServer Pro workgroup is different than in a basic PortServer workgroup.

As with a basic PortServer workgroup, the Avid Unity PortServer service starts automatically when you boot the PortServer Pro system. On startup (and every 60 seconds thereafter), the service reads MediaNetwork configuration information from the File Manager to obtain workspace, user, and access privilege information.

In a PortServer Pro workgroup, workspaces are mounted using one of the following methods:

- By the PortServer Pro system receiving requests from Ethernet clients. Mounting workspaces only when a request is received helps to conserve the 21 available drive letters for workspaces that are actually needed.
- By configuring the AISPortServer.ini file to mount workspaces at specific drive letters. This allows you to have some workspaces, that might be common to all users, always mounted at the same location. The remainder of the workspaces are mounted as the PortServer Pro system receives requests from Ethernet clients.
- By deselecting the “Enable dynamic mounting of MediaNetwork workspaces” option on the Avid Unity PortServer Service Configuration dialog box. This mounts the first 21 workspaces found on the MediaNetwork storage like the basic PortServer system.
- By configuring the AISPortServer.ini file to mount workspaces at specific drive letters and by deselecting the “Enable dynamic mounting of MediaNetwork workspaces” option on the Avid Unity PortServer Service Configuration dialog box. This allows you to have some workspaces, that might be common to all users, always mounted at the same location. The remainder of the workspaces are mounted automatically from the first 21 workspaces found on the MediaNetwork storage like the basic PortServer system.



PortServer Pro clients make requests for shared workspaces using the Connection Manager application. For more information on using the Connection Manager, see the MediaNetwork Windows Ethernet Client Quick Start Card or the MediaNetwork Macintosh Ethernet Client Quick Start Card.

Preparing for Network Installation of the PortServer Pro Windows 2000 Client Software

The PortServer Pro Windows 2000 client software installer is included as part of the PortServer installation (in D:\Program Files\Avid Technology\AvidUnity\Ethernet Setup Client if you accepted the defaults during installation). If you share the Ethernet Setup Client folder, you (or other users with appropriate access permissions) can install the client software on any connected Windows 2000 system over the network without using the MediaNetwork CD-ROM.

To share the Ethernet Setup Client folder, allowing network installation of the PortServer Pro Windows 2000 client software:

1. On the PortServer Pro system, open Windows Explorer.
2. Navigate to D:\Program Files\Avid Technology\AvidUnity.
3. Right-click the Ethernet Setup Client folder, and select Sharing. The Ethernet Setup Client Properties dialog box opens.
4. Select the “Share this folder” option. The text boxes in this section of the dialog box change from gray to white.
5. Click the New Share button. The New Share dialog box opens.
6. Type a name for the folder in the Share Name text box.
7. Click the Permissions button. The “Permissions for” dialog box opens.
8. Set the folder permissions by clicking the Add button and adding users or groups to the list in the Add dialog box.
9. Click OK to close the Add dialog box.
10. Click each user or group in the Share Permissions tab and set the permissions as needed in the “Permissions for” dialog box.

11. Click OK to close the “Permissions for” dialog box.
12. Set the User Limits as needed in the New Share dialog box.
13. Click OK to close the New Share dialog box.
14. Click OK to close the Ethernet Setup Client Properties dialog box. For more information about sharing policies, consult the Windows 2000 Server Help.

Connecting PortServer Pro Clients

You are now ready to connect PortServer Pro clients. To connect the clients and install the Ethernet client software, see the *Avid Unity MediaNetwork Windows Ethernet Client Setup Guide* or the *Avid Unity MediaNetwork Macintosh Ethernet Client Setup Guide*.

Mounting Workspaces and Testing the Installation

You have completed the installation of your PortServer Pro workgroup. After installing the MediaNetwork software on your Ethernet clients, you will want to mount a workspace on each client. For details on mounting workspaces and other client activities, see the *MediaNetwork Windows Ethernet Client Quick Start Card* or the *MediaNetwork Macintosh Ethernet Client Quick Start Card*.

In addition, Avid recommends you run a throughput test on each Windows 2000 and Macintosh client using the Avid Performance Meter utility. This throughput test checks that the client connection is properly established and that the workgroup is functioning correctly. For more information on the Avid Performance Meter utility, see Appendix A.

Appendix A

Avid Performance Meter

Avid Performance Meter is a utility that allows you to validate your PortServer Pro system. It can quantify the throughput your Windows or Macintosh editing applications can achieve while accessing MediaNetwork workspaces shared through an Ethernet switch. The Avid Performance Meter can also test the throughput from local disks and any other shared storage to which a client has access.

Topics in this appendix include:

- [Starting the Avid Performance Meter](#)
- [User Interface Overview](#)
- [Setting Up Your Test](#)
- [Starting and Stopping a Test](#)
- [Interpreting the Test Results](#)

Starting the Avid Performance Meter

To start the Avid Performance Meter on a Windows Ethernet client:

- ▶ Click the Start button, and select Programs > AvidUnity > Avid Unity Performance Meter. The Avid Performance Meter application window opens.

To start the Avid Performance Meter on a Macintosh Ethernet client:

1. Navigate to the install directory (Macintosh HD:Avid Unity, by default).
2. Double-click IOTester. The Avid Performance Meter application window opens.

User Interface Overview

The primary user interface of Avid Performance Meter is a single window from which you can select the test to be performed, start and stop the selected test, and view the test results as the test is in progress (see [Figure 17](#)). You access auxiliary controls through dialog boxes.

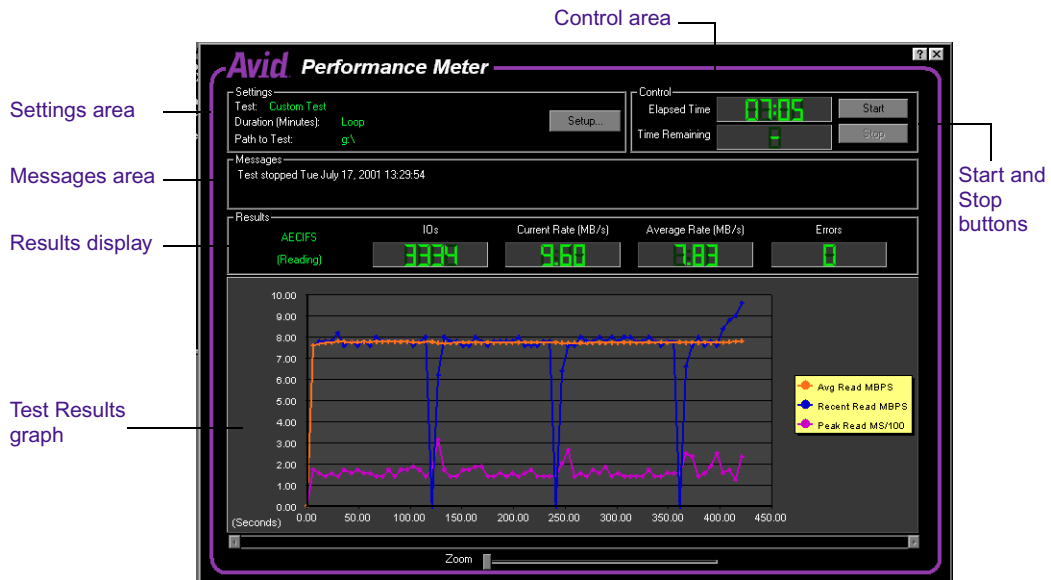


Figure 17 Avid Performance Meter Window

Settings Area

The Settings area displays the name of the currently selected test, the test duration, and the path to the storage that will be tested.

The Setup button allows you to change the currently selected test settings. For more information, see [“Setting Up Your Test” on page 59](#).

Messages Area

The Messages area provides test progress and diagnostic information about the operation of the utility. If you need to troubleshoot, the detailed text information in these messages might be helpful.

Control Area

The Control area has Start and Stop buttons along with test timing information. For more information, see [“Starting and Stopping a Test” on page 65](#).

Results Area

The Results area provides the following numerical test results:

| | |
|----------------------------|--|
| IOs | Displays the current number of I/O operations that have been completed so far during the test. |
| Current Rate (MB/s) | Displays the calculated throughput or bandwidth (in megabytes per second [MB/s]) for recent I/O operations that have been completed. |
| Average Rate (MB/s) | Displays the average throughput or bandwidth (in MB/s) for the duration of the test. |

- Errors** Displays the number of errors encountered during testing. This is the total number of errors generated for both read and write operations and can include errors related to the following:
- Opening or closing of data files
 - Validity of the specified file system path
 - User access privileges
 - Read or write operation

Text indicators on the left of the Results area show the file access protocol used and the operation performed in the current phase of testing.

The File Access Protocol indicator shows one of the following:

- Win32 File API** Indicates the Win32 file access API is being used. This indicator is displayed for local disks, MediaNetwork storage that has been mounted, and network file shares.
- AECIFS** Indicates the performance monitor has detected that AECIFS is present and the storage specified by the Path to Test setting is supported by AECIFS. AECIFS is a high-speed protocol for transferring data to and from the MediaNetwork storage.

The I/O Operation indicator shows one of the following:

- (Reading)** The current mode of testing is Read operations.
- (Writing)** The current mode of testing is Write operations.

Test Results Graph

The Test Results graph plots results measured over time. It is particularly useful when you want to observe trends or patterns in performance.

For example, if another process is running that creates a periodic high demand on the storage subsystem being tested, you might see this as a periodic drop in observed throughput in the Test Results graph.

The Test Results graph shows the following:

| | |
|-----------------------------------|--|
| Average throughput | The average throughput or bandwidth (in MB/s), plotted over time. |
| Recent throughput | The calculated throughput or bandwidth (in MB/s) for recent I/O operations, plotted over time. |
| Peak Read or Peak Write MS | <p>The peak latency for individual I/O operations (either reads or writes) that have been completed over a short period of time. A high measurement indicates a longer period of time was needed for the operation to complete.</p> <p>Because only the highest (peak) measurement over a short period of time is displayed, a single high peak could be accompanied by many low-latency operations that do not appear in the graph.</p> |

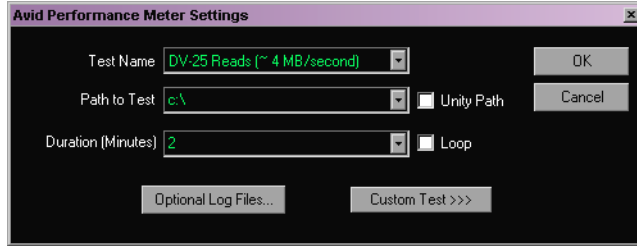
Setting Up Your Test

The Settings area of the Avid Performance Meter window displays the currently specified test parameters. Before running the test, you *must* mount at least one MediaNetwork workspace or local drive.

Setting Up a Standard Test

To change the default test settings:

1. Click the Setup button. The Avid Performance Meter Settings dialog box opens.



2. Adjust the test parameters, as required:

Test Name Select which one of the four standard, predefined tests you want to run:

- ▶ DV 25 Reads
- ▶ DV 25 Writes
- ▶ DV 50 Reads
- ▶ DV 50 Writes


These selections perform either read or write testing at a bandwidth similar to that required for DV 25 or DV 50 operation.

Path to Test Select the path to the workspace you want to test, or type it in the text box.

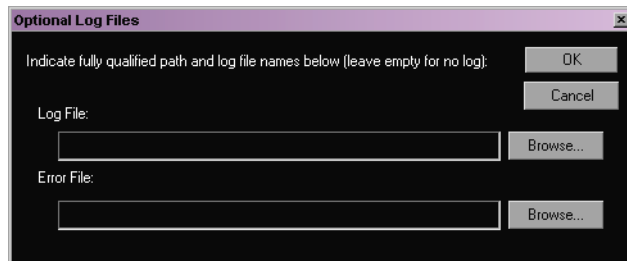
This is a UNC path (for example, `\\myMachine\myShareFolder\subfolder`). If you selected the Unity Path option, use a MediaNetwork path supported by a PortServer Pro system.

Unity Path Select the Unity Path option to have the Avid Performance Meter convert the specified MediaNetwork path to a standard path.

- Duration** Select the test duration (in minutes), or type it in the text box. The minimum test duration is 1 minute.
- Loop** Select the Loop option to repeat the test indefinitely. When you select this option, the test runs until you click the Stop button in the main utility window.

 *The Loop option causes true loop behavior — at the end of the specified duration, the test stops, removes intermediate test files that were created, and then restarts the test using new intermediate test files.*

3. If necessary, specify paths and file names for optional test and error log files as follows:
 - a. Click the Optional Log Files button. The Optional Log Files dialog box opens.



- b. If you want to log information about the test and its results, type a path name and a file name in the Log File text box, or click the Browse button to search for a path name and file name.
 - c. If you want to log error information, type a path name and a file name in the Error File text box, or click the Browse button to search for a path name and file name.



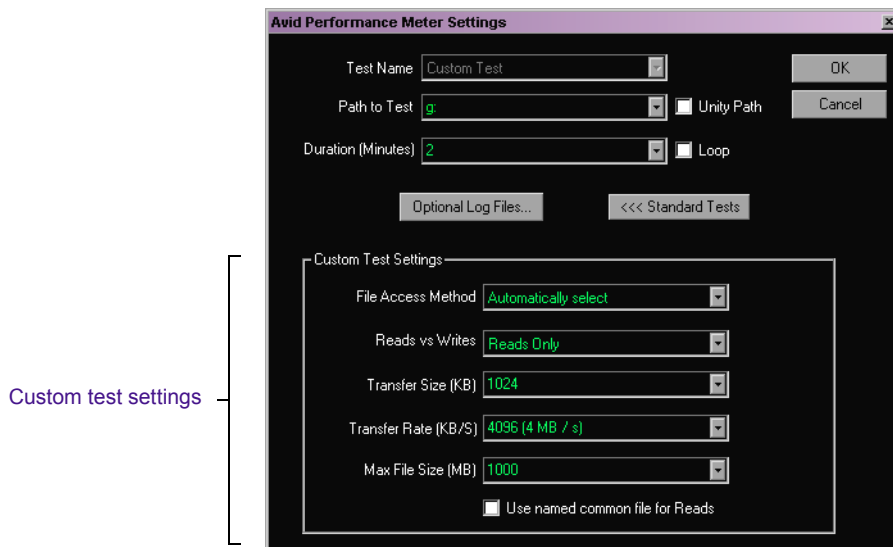
If you do not want a log file, leave the Log File, Error File, or both text boxes blank.

Setting Up a Custom Test

In addition to the standard, predefined tests, the Avid Performance Meter allows you to configure custom tests.

To access the custom test settings options:

1. Click the Custom Test button in the Avid Performance Meter Settings dialog box. The dialog box expands to display the Custom Test Settings area.



2. Adjust the custom test parameters, as required:

File Access Method

The Avid Performance Meter can support more than one interface or protocol for accessing data. This option allows you to control which interface is used. Select one of the available settings:

- ▶ **Automatically select** — Automatically select a protocol for testing the selected path. Generally, the utility selects AECIFS if it is supported, or Win32 File API if AECIFS is not supported for the specified path.
- ▶ **Win32 File API** — Use the Win32 File API for data file access, even if AECIFS is supported.
- ▶ **AECIFS** — Use the AECIFS interface for data file access. If AECIFS is not supported, the utility does not automatically perform file I/O using the Win32 File API. Instead, the test shows one or more errors in the Errors section of the Results area.

Reads vs Writes

The Avid Performance Meter supports testing that focuses on Reads, Writes, or that alternates between Reads and Writes. Select one of the test modes:

- ▶ **Writes Only** — The utility Writes test data files and measures the throughput obtained during Write operations.
- ▶ **Reads Only** — The utility Reads test data files and measures the throughput obtained during Read operations.



One or more test data files are written as sample data for testing; however, the Writes required to set up the test are not included in the throughput measurements.

- ▶ **Reads and Writes** — The utility alternates between Read and Write tests. Approximately half of the test duration is allocated to reading, and the other half is allocated to writing.

Transfer Size

This option controls the amount of data the test utility attempts to Read or Write during a single I/O.

Transfer Rate The utility can attempt to perform I/O at a variety of fixed transfer rates. This is useful for simulating the behavior of utilities that have a known data rate.

A special Unlimited transfer rate setting is also available. When you select the Unlimited transfer rate, the Avid Performance Meter performs I/O operations as fast as possible while being affected by all aspects of the total system being exercised.

Max File Size This option controls the maximum size of test data files created for Reads or Writes. This option might affect throughput measurements. For example, at any given data rate, a smaller file is opened and closed more often than a larger file, creating more overhead.

Use named common file for Reads This option changes the way that the Path to Test parameter is used and is intended for *advanced users only*. When you select this option, the Path to Test parameter must specify a full path, *including a file name*. The test utility uses the named file for its Read tests.

The Avid Performance Meter creates the file if it does not exist and deletes it at the end of testing. For this reason, *the named file should not already exist unless you want it to be deleted when the test is completed*. With this option selected, you can run the Avid Performance Meter on multiple clients simultaneously and supply the *same* file name.

This allows the Avid Performance Meter, running on multiple clients, to read a common file. (The file is created as needed, and the last Avid Performance Meter to stop deletes the file.)



To view the selection of standard tests, click the Standard Tests button in the Avid Performance Meter Settings dialog box.

Starting and Stopping a Test

You start and stop the currently configured test using the Start and Stop buttons.

To start the currently configured test:

- ▶ Click the Start button in the Control area of the Avid Performance Meter window.

The test runs for the specified duration and then stops automatically. The elapsed time a test has been running and the remaining time are displayed in the Control area. If you selected the Loop option in the Avid Performance Meter Settings dialog box, the test runs indefinitely. In this case, the word LOOP appears in the Time Remaining display in the main window.

To stop the currently running test:

- ▶ Click the Stop button in the Control area of the Avid Performance Meter window.

Interpreting the Test Results

This section contains information to help you interpret your test results displayed in the Avid Performance Meter window.

Average Rate Calculation

The average data rate is calculated over the duration of the test. This calculation includes the time the utility requires to open and close the test files, so the test file size (which you can configure for custom tests) might affect the overall measured throughput.

Also, if the throughput is slow as the test is starting, this might be reflected in the average rate. For example, if the target bandwidth is 4.0 MB/s, the actual average rate calculated at the conclusion of the test might be 3.98 or 3.99 MB/s.

Performance Graph

The graph of results over time can help experienced users obtain information about system performance.

Items to look for include:

- **Trends** — Does the system perform at a consistent rate over time? Is there an upward or downward trend in performance measured over time? If you do notice a trend, it might be helpful to perform testing over a longer period of time to determine if the trend continues over longer durations or if a recurring pattern emerges.
- **Patterns** — Is there a momentary drop in performance that occurs at consistent or varied intervals? Patterns can emerge as a result of implementation details and the configuration of a particular system (for example, caching strategies or physical memory), or they might indicate a load on a system that is occurring periodically.
- **Changes in performance as load varies** — What occurs when a subsystem is placed under a load by other users (or the Avid Performance Meter is running on another client)? It might be easier to observe these interactions by inspecting the plot of performance results over time.

Measurement Strategy

Throughput measurements are plotted periodically (every n seconds) and represent a snapshot of performance at the time of the plot. This is done to limit the amount of data that is plotted, which otherwise could include a very large number of data points. As a result, the performance graph could miss a momentary drop, increase, or a peak in performance that occurs between plot points. The average rate calculation reflects the impact of such a dip or spike.

Appendix B

Troubleshooting

This appendix provides information on troubleshooting your PortServer and PortServer Pro workgroups.

Topics in this appendix include:

- [Using the ping and tracert Commands](#)
- [Troubleshooting the PortServer Workgroup](#)

Using the ping and tracert Commands

Ethernet networking is the backbone for the PortServer and PortServer Pro workgroups. If your Ethernet network is not performing properly, it will affect your workgroup. The following sections describe how to use two commands, ping and tracert, to troubleshoot your network.

ping

You can use the ping command to confirm that the physical and logical aspects of your network are configured correctly. *Physical* aspects include network interface card, cables, and Ethernet switches. *Logical* aspects include IP addresses, subnet masks, and routing.

ping works by sending a packet over the network from an originating host to a destination host. The destination host receives the packet and sends a response packet over the network to the originating host. If the originating host receives the response packet, it is a good indication that the network is configured correctly.

You can use many options with ping. This section discusses two types of ping syntax:

```
ping [System Name]
```

where [System Name] is the network name of the remote system to which you are testing connectivity

or

```
ping [IP Address]
```

where [IP Address] is the IP address of the remote system to which you are testing connectivity.

To run the ping command:

1. Open an MS-DOS[®] command prompt window.
2. At the command line, type the ping command (for example, **ping 192.168.10.5**).

The ping result should resemble the following:

```
Reply from 192.168.10.5: bytes=32 time<10ms TTL=255
Reply from 192.168.10.5: bytes=32 time<10ms TTL=255
Reply from 192.168.10.5: bytes=32 time<10ms TTL=255
Reply from 192.168.10.5: bytes=32 time<10ms TTL=255
```

Four responses of "Reply from..." indicate the network is configured correctly and the originating and destination hosts can see each other on the network.

If any one of the responses in the ping result says:

```
Request timed out.
```

or

```
Destination host unreachable.
```

it indicates the network is not configured correctly or there are other network problems. Some items that can cause network problems are:

- Bad, loose, or incorrectly connected cables
- An incorrectly configured IP address or subnet mask on a local or remote system
- Excessive network traffic

tracert

While ping can test for connectivity between two network hosts, tracert (short for "trace route") can verify the network path that the data uses to travel between the two hosts.

Because Avid Composer Products applications are data intensive, it is important that large amounts of data be transferred between the PortServer system and its clients in a timely fashion. An incorrectly configured network might get the data to its destination, but be too slow for your application to work effectively.

You can use the `tracert` command to confirm that the data is traveling along an optimal path. In a PortServer Pro workgroup, the PortServer system and its clients should send traffic directly to each other. Routers should not be used to direct traffic between them.

It is possible for network traffic to take one path going to a system and a different path coming back. Therefore, it is important to run `tracert` from both the PortServer system and its clients to test the data path in both directions.

As with `ping`, you can use many options with `tracert`. This section discusses two types of `tracert` syntax:

```
tracert [System Name]
```

where [System Name] is the network name of the remote system to which you are testing connectivity

or

```
tracert [IP Address]
```

where [IP Address] is the IP address of the remote system to which you are testing connectivity

To run the `tracert` command:

1. Open an MS-DOS command prompt window.
2. At the command line, type the `tracert` command (for example, **`tracert 192.168.10.5`**).

The `tracert` result should resemble the following:

```
Tracing route to [remote system name or IP  
address] over a maximum of 30 hops:  
1 10 ms <10 ms <10 ms [remote system name or IP  
address]  
Trace complete.
```

One entry indicates an optimal route. —

If your network is configured correctly, the tracert result will show only one entry and then indicate that the trace is complete. More than one entry indicates that the traffic is going through a router, which significantly affects performance.

If your tracert result shows more than one entry, most likely there is an incorrect IP address or subnet mask configuration on the local host.

Troubleshooting the PortServer Workgroup

The following section describes how to troubleshoot some common PortServer issues.

Avid Composer Products Software Has Performance Issues

Problem: The Avid Composer Products application you are running is either performing slowly or is not running at all.

Possible Cause: The PortServer system and the client with the performance problems are not on the same subnet mask, forcing the data to go through additional routing while being transferred between the two systems. If the data transfer is slow enough, it can cause the Avid Composer Products application to perform poorly or to stop functioning.

Data transfer between the PortServer system and its clients must occur directly. You can use the tracert command to verify whether or not the data transfer uses a direct, optimal path. For more information, see [“tracert” on page 69](#).

Workspaces Are Not Available to a PortServer Client

Problem: No workspaces are available for mounting on a PortServer client.

Possible Cause: The user account from which the user logged in to the PortServer client does not exist either in the MediaNetwork Administration Tool or the PortServer's Windows domain. For more information on properly setting up user accounts, see the *Avid Unity MediaNetwork Management Guide*.

Macintosh Client Cannot Mount Shared Workspaces

Problem: A Macintosh PortServer client cannot mount workspaces shared by the PortServer system.

Possible Cause: Mac OS 9 clients cannot connect to the PortServer system without additional software (DAVE) that allows them to see the Windows network. DAVE is included as part of the MediaNetwork Macintosh Ethernet client software. For more information, see the *Avid Unity MediaNetwork Macintosh Ethernet Client Setup Guide*.



Each Mac OS 9 client needs to have a separate DAVE license to use the DAVE software. If two clients use the same DAVE license, you will have conflicts between these clients when they try to connect to the PortServer system.

SGI Client Cannot Mount Shared Workspaces

Problem: An SGI PortServer client cannot mount workspaces shared by the PortServer system.

Possible Cause: SGI clients cannot connect to the PortServer system without additional software (Samba) that allows them to see the Windows network. Samba is not included with the MediaNetwork software. Samba is freeware that you obtain from the manufacturer directly. For more information, see the Samba application note on the Avid Customer Support Knowledge Center.

PortServer System Does Not Recover After a File Manager Failover

Infrequently, after a File Manager has failed over to its backup File Manager, the PortServer or PortServer Pro system will not recover. Should this occur, simply reboot the PortServer or PortServer Pro system to restore it to normal functionality.

Appendix C

Using the Product Recovery CD-ROM

You might need to reinstall the Windows 2000 operating system on your PortServer system if you are directed to do so by Avid Customer Support, or if you are initializing your PortServer system from scratch. The reinstallation offers you two options:

- ▶ Perform a Windows 2000 installation to the *entire* drive (C: and D:). This replaces all of the data from all the available partitions on your PortServer system. You can perform this operation if you are initializing your PortServer system.
- ▶ Perform a Windows 2000 installation to the *1st partition* (C:). This removes the data in the C: partition only; the D: partition is not changed. You can perform this operation to replace only the operating system on your PortServer system.



This procedure restores only the Windows 2000 operating system and the hardware drivers. It does not restore the MediaNetwork software. The MediaNetwork software must be reinstalled separately, after the operating system recovery is complete.

Topics in this appendix include:

- [Reinstalling the Windows 2000 Operating System](#)
- [Configuring the PortServer System Using Windows 2000 Setup](#)
- [Checking the Drivers](#)
- [Updating the ATTO Driver and Phantom Device](#)

- [Reinstalling the Alacritech Driver](#)
- [Reinstalling the MediaNetwork Software](#)

Reinstalling the Windows 2000 Operating System

To reinstall the Windows 2000 operating system from the Avid Product Recovery CD-ROM:

1. Make sure all clients unmount any workspaces they have mounted and stop the Connection Manager.
2. Stop the File Manager using the Monitor Tool.
3. Locate the Avid PortServer Product Recovery CD-ROM.
4. Insert the Avid PortServer Product Recovery CD-ROM into the PortServer CD-ROM drive.
5. Click the Start button, and select Shut Down. The Shut Down Windows dialog box opens.
6. Select the Shut down option, and click OK. The Windows 2000 operating system shuts down and turns off the PortServer system.
7. Disconnect all of the Ethernet network cables.
8. Press the Power button on the front of the PortServer system. The system starts to boot normally and then presents the Avid PortServer Product Recovery CD-ROM screen. This takes approximately 2 minutes.



If the PortServer system does not boot from the CD-ROM, you need to change the boot priority for the CD-ROM drive to place it before the hard drive. Reboot the PortServer system and use Setup at the beginning of the boot process (press the F2 key when prompted) to make the change, and then repeat step 7.

9. Select one of the available options:
 - ▶ 1. Perform a Windows 2000 installation to the 1st partition (C:).
 - ▶ 2. Perform a Windows 2000 installation to the entire drive (C: and D:).
 - ▶ 3. Exit from the process without doing a recovery.
10. Type the number of the operation you want to perform at the prompt.
 - ▶ If you type **1** or **2**, a warning screen appears informing you that you are about to recover the Windows 2000 operating system. Continue with step 11.
 - ▶ If you type **3**, the recovery quits and displays the DOS prompt A:.
11. A caution screen appears informing you again that you are about to recover the Windows 2000 operating system.
 - ▶ Press any key and continue with step 12.
 - ▶ Press Ctrl+C to quit the recovery.
12. A final caution screen appears informing you again that you are about to recover the Windows 2000 operating system.
 - ▶ Press Y to continue. The Norton Ghost[®] screen appears showing the progress of the operating system recovery. This takes approximately 10 minutes. Continue with step 13.
 - ▶ Press N to quit the recovery.
13. A screen appears informing you that the recovery is complete. It also shows the versions of the ATTO[™] driver and the Alacritech[®] driver that were installed.
14. Write down the versions of the ATTO driver and the Alacritech driver that appear in the message. You will need these version numbers later.
15. Remove the Avid PortServer Product Recovery CD-ROM from the PortServer CD-ROM drive.
16. Press Ctrl+Alt+Delete to reboot the PortServer system and start the new Windows 2000 operating system.

The Windows 2000 operating system recovery is complete. You need to configure the operating system as described in the following section.

Configuring the PortServer System Using Windows 2000 Setup

After you recover the Windows 2000 operating system, it runs the Windows 2000 Setup utility to set several Windows operating system parameters. You'll need to have the Windows software kit available when you run the utility. It contains the Windows license number you need to type in as part of the configuration.

To set up the Windows operating system:

1. After the PortServer system reboots, the Windows 2000 Setup utility starts and the Windows 2000 Server Setup dialog box opens showing the License Agreement screen.
2. Click the "I accept the agreement" radio button to accept the license.
3. Click Next. The Regional Settings screen appears.
 - ▶ If you are outside the United States, customize the system and locale settings, and the keyboard for your location.
 - ▶ If you are in the United States, continue.
4. Click Next. The Personalize Your Software screen appears.
5. Type the system administrator's name in the Name text box.
6. Type the company name in the Organization text box.
7. Click Next. The Your Product Key screen appears.
8. Type the Product Key from the Certificate of Authenticity in the Product key text box. The certificate might be on the back of the *Windows 2000 Server Getting Started Guide* in the Windows software kit, or it might be affixed to the PortServer system.

If the certificate is not already affixed to the PortServer system, remove it from the *Windows 2000 Server Getting Started Guide* and affix it now.

9. Click Next. The License Modes screen appears.

10. Click the Per Server radio button and set the number of concurrent connections to the number of Ethernet clients the application key allows. For example, if your application key is set for 12 Ethernet clients, set this value to 12.



Do not set the number of concurrent connections to more than 20. This is the maximum number of clients that the PortServer system can support. Setting this value to more than 20 will impact the PortServer system performance.

11. Click Next. The Computer Name and Administrator Password screen appears.
12. Type the name you want to use for the PortServer system in the Computer name text box.
13. Type the password you want to use for the administrator account in the Administrator Password text box.



Avid recommends you use an administrator password to prevent unauthorized use of the Administrator account.

14. Confirm the password by retyping the password in the Confirm Password text box.
15. Click Next. The Date and Time Settings screen appears. Set the correct date, time, and time zone for the PortServer system.
16. Click the “Automatically adjust clock for daylight saving changes” check box if your location observes daylight saving time.
17. Click Next. The Network Settings screen appears.
18. Click the Typical radio button. The network settings are site dependent and will be set later during the PortServer configuration.
19. Click Next. The Workgroup and Computer Domain screen appears.
20. Click No. The workgroup and domain settings are site dependent and will be set later during the PortServer configuration. The Performing Final Tasks screen appears, followed by the Complete the Windows 2000 Setup Wizard screen.
21. Click Finish. The Windows 2000 operating system is loaded.

22. Click the Start button, and select Shut Down. The Shut Down Windows dialog box opens.
23. Select the Shut down option, and click OK. The Windows 2000 operating system shuts down and turns off the PortServer system.
24. Reconnect all of the Ethernet network cables.
25. Boot the PortServer system.

Checking the Drivers

You need to check the versions of the ATTO and Alacritech drivers to make sure you have the correct drivers for the version of MediaNetwork software you are using.

To check the ATTO drivers:

1. Locate the ATTO driver version number you wrote down at the end of the operating system recovery procedure.
2. Locate the MediaNetwork CD-ROM for the version of MediaNetwork software you are going to reinstall.
3. Insert the MediaNetwork CD-ROM into the PortServer CD-ROM drive.
4. Navigate to Drivers_Firmware\HostBusAdapters\ATTO\Drivers\Win2k.
5. Right-click the EXPRESFC.SYS file, and select Properties. The EXPRESFC.SYS Properties dialog box opens.
6. Click the Version tab. The version information appears.

7. Compare the “File version” in the dialog box to the version you wrote down at the end of the operating system recovery procedure, and do one of the following:
 - ▶ If the version number in the dialog box is later than the version number you wrote down, you must reinstall the ATTO driver. Follow the ATTO driver installation instructions in [“Updating the ATTO Driver and Phantom Device” on page 82](#).
 - ▶ If the version number in the dialog box is the same or earlier than the version number you wrote down, you do not need to reinstall the ATTO driver.

To check the Alacritech drivers:

1. Locate the Alacritech driver version number you wrote down at the end of the operating system recovery procedure.
2. Locate the MediaNetwork CD-ROM for the version of MediaNetwork software you are going to reinstall.
3. Insert the MediaNetwork CD-ROM into the PortServer CD-ROM drive.
4. Navigate to Drivers_Firmware\NetworkAdapters\Alacritech\w2k.
5. Right-click the atcp.sys file, and select Properties. The atcp.sys Properties dialog box opens.
6. Click the Version tab. The version information appears.
7. Compare the “File version” in the dialog box to the version you wrote down at the end of the operating system recovery procedure, and do one of the following:
 - ▶ If the version number in the dialog box is later than the version number you wrote down, you must reinstall the Alacritech driver. Follow the Alacritech driver installation instructions in [“Reinstalling the Alacritech Driver” on page 85](#).
 - ▶ If the version number in the dialog box is the same or earlier than the version number you wrote down, you do not need to reinstall the Alacritech driver.

Updating the ATTO Driver and Phantom Device

When you reinstall the ATTO driver, you need to also reinstall the ATTO Phantom Device.

Upgrading the ATTO Phantom Device

The ATTO Phantom Device only installs when the ATTO Fibre Channel adapter board cannot find any devices. The ATTO Phantom Device appears in the Device Manager after you disconnect the Fibre Channel cable. Keep the cable disconnected until the firmware update is complete.

To install the ATTO Phantom Device driver on the PortServer system:

1. Insert the MediaNetwork CD-ROM into the PortServer CD-ROM drive. The MediaNetwork Installation window opens after approximately 1 minute.
2. Click Exit to close the MediaNetwork Installation window.
3. Disconnect the Fibre Channel cable from the ATTO Fibre Channel adapter board.
4. Right-click the My Computer icon on the desktop, and select Manage. The Computer Management window opens.
5. Click Device Manager in the left pane of the window. A list of devices appears in the right pane of the window.
6. Expand System Devices. A list of available system devices appears in the right pane of the window.
7. Right-click ATTO Phantom Device, and select Properties. The ATTO Phantom Device Properties dialog box opens.
8. Click the Driver tab.
9. Click the Update Driver button. The Upgrade Device Driver Wizard opens.
10. Click Next. The Install Hardware Device Drivers screen appears.
11. Click the “Display a list of known drivers” button.

12. Click Next. The Select a Device Driver screen appears with the ATTO Phantom Device selected.
13. Click the Have Disk button. The Install from Disk dialog box opens.
14. Click Browse. The Locate Files dialog box opens.
15. Navigate to Drivers_Firmware\HostBusAdapters\ATTO\Drivers\Win2K on the MediaNetwork CD-ROM.
16. Select the ATTOMTLN.inf file.
17. Click Open. The Locate Files dialog box closes.
18. Click OK on the Install from Disk dialog box.
19. Select the ATTO ExpressPCI-FC 3300 Fibre Channel Adapter in the Select a Device Driver screen.
20. Click Next. An Update Driver warning appears.
21. Click Yes. The Start Device Driver Installation screen appears.
22. Click Next. A Digital Signature Not Found dialog box opens.
23. Click Yes. The driver installs and the Completing the Upgrade Device Driver screen appears.
24. Click Finish.
25. Click Close in the ATTO Phantom Device Properties dialog box. The System Setting Change dialog box opens.
26. Click Yes to reboot the PortServer system.

Updating the ATTO Fibre Channel Driver

Use the following instructions to update the ATTO Fibre Channel driver on the PortServer system.

To install the ATTO Fibre Channel driver on the PortServer system:



You must be logged in as an Administrator to update drivers.

1. Insert the MediaNetwork CD-ROM into the PortServer CD-ROM drive. The MediaNetwork Installation window opens after approximately 1 minute.
2. Click Exit to close the MediaNetwork Installation window.
3. Right-click the My Computer icon on the desktop, and select Manage. The Computer Management window opens.
4. Click Device Manager in the left pane of the window. A list of devices appears in the right pane of the window.
5. Expand SCSI and RAID Controllers. A list of available controllers appears in the right pane of the window.
6. Right-click ATTO Adapter, and select Properties. The Fibre Channel Controller Properties dialog box opens.
7. Click the Driver tab.
8. Click the Update Driver button. The Upgrade Device Driver Wizard opens.
9. Click Next. The Install Hardware Device Drivers screen appears.
10. Click the “Display list of known drivers” button.
11. Click Next. The Select a Device Driver screen appears with the ATTO ExpressPCI Fibre Channel Adapter selected.
12. Click the Have Disk button. The Install from Disk dialog box opens.
13. Click Browse. The Locate Files dialog box opens.
14. Navigate to Drivers_Firmware\HostBusAdapters\ATTO\Drivers\Win2K on the MediaNetwork CD-ROM.
15. Select the EXPRESFC.INF file.
16. Click Open. The Locate Files dialog box closes.
17. Click OK on the Install from Disk dialog box. The Select a Device Driver screen shows ATTO ExpressPCI-FC 3300 Fibre Channel Adapter selected.
18. Click Next. An Update Driver warning appears.
19. Click Yes. The Start Device Driver Installation screen appears.
20. Click Next. A Digital Signature Not Found dialog box opens.

21. Click Yes. The Hardware Installation screen appears.
22. Click Next. It takes several minutes to install the driver. This time varies based on the PortServer system processor speed. When finished, the Completing the Upgrade Device Driver Wizard shows a finished installing the software message.
23. Click Finish.
24. Click Close in the Fibre Channel Controller Properties dialog box.
25. Reboot the PortServer system.

Reinstalling the Alacritech Driver

The Alacritech driver requires a special procedure to install the driver correctly for use in a MediaNetwork workgroup.



Do not use the New Hardware Wizard to install the driver. Use the following procedure instead.

To uninstall the existing Alacritech Ethernet adapter board driver:

1. Click the Start button, and select Settings > Control Panel. The Control Panel window opens.
2. Double-click the Add/Remove Hardware icon. The Add/Remove Hardware Wizard opens to the Welcome screen.
3. Click Next. The Choose a Hardware Task screen appears.
4. Click Uninstall/Unplug a device.
5. Click Next. The Choose a Removal Task screen appears.
6. Click Uninstall a device.
7. Click Next. The Installed Devices on Your Computer screen appears.
8. Select Alacritech Accelerator in the list.
9. Click Next. The Uninstall a Device screen appears.
10. Select the “Yes, I want to uninstall this device” option.

11. Click Next. The device uninstalls in approximately 30 seconds and the Add/Remove Hardware Wizard closes.
12. Reboot the PortServer system.

To install the Alacritech Ethernet adapter board driver:

1. Log in to the PortServer system. The Found New Hardware Wizard opens.
2. Click Cancel. The Found New Hardware Wizard closes.
3. Locate the MediaNetwork CD-ROM in the PortServer or PortServer Pro system kit.
4. Insert the MediaNetwork CD-ROM into the PortServer CD-ROM drive. The CD-ROM is set to auto-start and open the Avid Unity Installation window. This takes approximately 30 seconds.
5. Click Exit to close the Avid Unity Installation window.
6. Navigate to Drivers_Firmware\NetworkAdapters\Alacritech\w2k\ on the MediaNetwork CD-ROM.
7. Double-click the setup or setup.exe icon. The Alacritech Accelerator Setup window opens.
8. Make sure the Port Aggregation Driver option *is not* selected, and the TCP Fast-path driver option and the Slicuser Diagnostic Utility option *are* selected.
9. Click Continue. The Installing dialog box opens followed by the Reinstalling Driver dialog box informing you that the SLIC adapter *is not* currently configured.
10. Click Yes. The driver installs and the Setup Program dialog box opens instructing you to restart the PortServer system.
11. Click Yes. The PortServer system reboots.

Reinstalling the MediaNetwork Software

You are now ready to reinstall the MediaNetwork software. Continue with [Chapter 2](#) to configure the PortServer system and to install the PortServer software.

Appendix D

Regulatory and Safety Notices

FCC Notice

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Canadian ICES-003

This Class A digital apparatus meets all requirements of the Canadian Interference Causing Equipment Regulations.

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

European Union Notice



Declaration of Conformity (According to ISO/IEC Guide 22 and EN 45014)

Application of Council Directives: 73/23/EEC, 89/336/EEC.

Standards to which Conformity is Declared: EN60950:1992 + A1 + A2 + A3 + A4 + A11
CISPR 22:1997 / EN55022:1994 + A1:1995 +
A2:1997 Class A
EN55024:1998/EN61000 — 3-2, 4-2, 4-3, 4-4, 4-5,
4-6, 4-8, 4-11

Manufacturer's Name: Avid Technology, Inc.
1925 Andover Street
Tewksbury, MA 01876, USA

European Contact: Nearest Avid Sales and Service Office or
Avid Technology International B.V.
Sandyford Business Center
Unit 3,
Dublin 18, Ireland

Type of Equipment: Information Technology Equipment

Product Name: Products for the Windows NT, Windows 2000, or Windows XP Operating System: Avid Equinox Break-Out-Box, Avid|DS, Avid Xpress, Avid Xpress DV, Film Composer, Media Composer, MediaDock 2+, MediaDock LVD, MediaDrive, MediaRAID, MEDIArray, MEDIArray Drive, MEDIArray II, MEDIArray II Drive, Meridien I/O box, NewsCutter, NewsCutter DV, NewsCutter XP, Symphony

Products for the Mac OS X Operating System: Avid Xpress, Avid Xpress DV, Film Composer, Media Composer, MediaDock 2+, MediaDock LVD, MediaDrive, MediaRAID, MEDIArray, MEDIArray Drive, MEDIArray II, MEDIArray II Drive, Meridien I/O box, Symphony

Products for the UNIX Operating System: AirPlay, VideoSPACE

Products for MediaNetwork and Workgroups: Avid ProEncode, Avid Unity MediaManager, Avid Unity MediaNetwork, Avid Unity TransferManager, LANserver, LANserver EX, MEDIArray, MEDIArray Drive, MEDIArray II, MEDIArray II Drive, Nearchive, PortServer, Xdeck

Base Model Numbers: None

Product Options: All

Year of Manufacture: 2003

(1) Products for the Windows NT, Windows 2000, or Windows XP Operating System: products were tested in a typical Avid Equinox Break-Out-Box, Avid|DS, Avid Xpress, Avid Xpress DV, Film Composer, Media Composer, MediaDock 2+, MediaDock LVD, MediaDrive, MediaRAID, MEDIArray, MEDIArray Drive, MEDIArray II, MEDIArray II Drive, Meridien I/O box, NewsCutter, NewsCutter DV, NewsCutter XP, or Symphony configuration.

(2) Products for the Mac OS X Operating System: products were tested in a typical Avid Xpress, Avid Xpress DV, Film Composer, Media Composer, MediaDock 2+, MediaDock LVD, MediaDrive, MediaRAID, MEDIArray, MEDIArray Drive, MEDIArray II, MEDIArray II Drive, Meridien I/O box, or Symphony configuration.

(3) Products for the UNIX Operating System: products were tested in an AirPlay or VideoSPACE configuration.

(4) Products for MediaNetwork and Workgroups: products were tested in a typical Avid ProEncode, Avid Unity MediaManager, Avid Unity MediaNetwork, Avid Unity TransferManager, LANserver, LANserver EX, MEDIArray, MEDIArray Drive, MEDIArray II, MEDIArray II Drive, Nearchive, PortServer, or Xdeck configuration.

I, the undersigned, hereby declare that the equipment specified above conforms to the above Directives and Standards.

George R. Smith, Director of Hardware Engineering

Australia and New Zealand EMC Regulations



John Kells, Australian Operations Manager
Avid Technology (Australia)
Unit B
5 Skyline Place
French Forest NSW 2086
Australia
Phone: 61-2-8977-4800

Taiwan EMC Regulations

Taiwan EMC Regulations BSMI Class A EMC Warning

警告使用者：

這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

