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1. Introduction

Product Overview

Congratulations on your purchase of the single-port and multi-protocol print server. During the design process, we have given much thought to making this device as convenient to use as possible. The end result is a print server that can be positioned anywhere on your Ethernet network and supports **Novell's NetWare, Windows NT and Windows 95 peer-to-peer networks, and UNIX systems**. The print server not only gives network users greater flexibility, but also takes the load off the file server. This enhances both printing performance as well as overall network performance. In addition, by using our Windows based installation program, configuration can be completed in minutes.

Main Benefits of the Print Server

- ☐ **Easy to Install:** The print server offers "Plug and Play" installation. Users can network a printer in minutes.
- ☐ **Flexible:** The print server allows you to attach a printer anywhere on a network. You are no longer confined to placing the printer next to the file server.
- ☐ **Powerful:** A built-in CPU relieves the processor burden off your file server thereby enhancing network performance.

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- ☐ **Convenient:** The print server eliminates the need for a dedicated PC to serve as a print server. In addition, the network does not have to be taken down during installation.
- ☐ **Upgradable:** Built-in flash memory ensures that the print server will not become obsolete in the future.

About This Manual

The instructions in this book describe how to connect and configure the print server to a network and a printer. It was written for network administrators and experienced users and makes a few assumptions about the readers. If you want to install the print server on your network you should be familiar with:

- ☐ Microsoft Windows 3.1 or 95.
- ☐ Microsoft Windows NT.
- ☐ Novell NetWare (3.x or 4.x).
- ☐ Basic functions in NetWare's PCONSOLE program.
- ☐ TCP/IP and related issues.

The Print Server Packing List

The following items should be included in the print server package for installation:

- ☐ One print server unit.
- ☐ One power adapter.
- ☐ One BNC T connector.
- ☐ One Windows 95/98/ME/NT/2000/XP Setup CD.
- ☐ One User's Manual.

Network Software Requirements

The print server requires the one of the following types of software:

- ☐ Windows 3.1 or 95
- ☐ Windows NT
- ☐ Novell NetWare 3.x, 4.x
- ☐ UNIX

Network Hardware Requirements

The print server requires the one of the following types of network hardware:

- ☐ 10Base2, BNC cable and connector.
- ☐ 10BaseT, RJ-45 cable and 10BaseT hub.

Printer Requirements

The print server requires a printer with the following type of port:

- ☐ Standard 36-pin female Centronics parallel port.

Please note that the print server does not support printing with host-based printers, e.g. CAPT, GDI, PPA.

2. Hardware Installation

Overview

This chapter details the step-by-step procedure needed to properly install the print server hardware. Topics discussed in this chapter include connecting and disconnecting the print server to and from the printer, network, and power unit.

Preparation

The following items are needed in order to install the print server unit:

- ☐ One print server unit.
- ☐ One external AC power adapter.
- ☐ Coaxial cable with a BNC T-connector (if BNC is selected).
or
- ☐ UTP cable and 10BaseT Ethernet hub (if UTP is selected).

Connecting the Print Server to the Printer

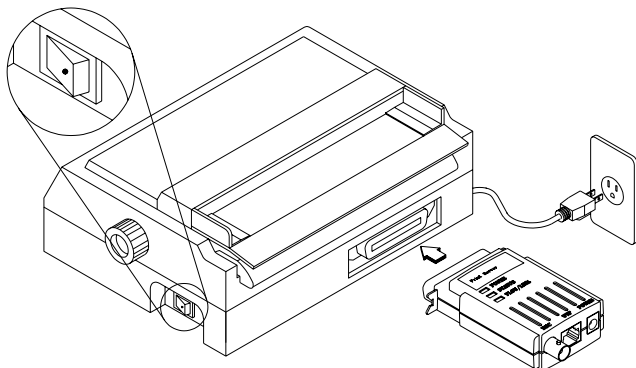


Figure 2-1

1. Turn off the printer's power.
2. Attach the print server directly to the printer's Centronics port as shown in Figure 2-1.
3. Double-check to see that the print server unit is properly fastened to the printer's Centronics port.
4. Done.

Connecting the Print Server to the Network for BNC

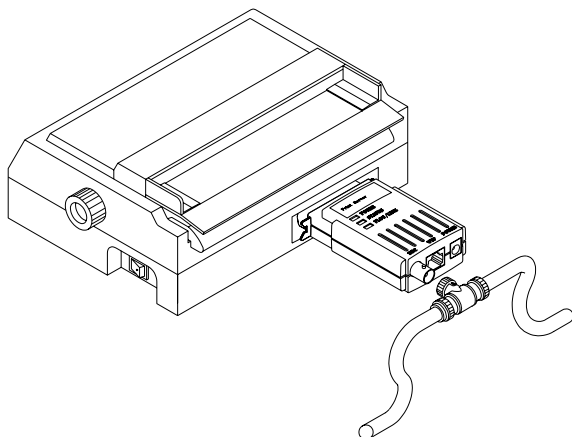


Figure 2-2

1. Connect the BNC T connector to the print server.
2. Connect the BNC T connector to the coaxial cabling.
3. Done.

Connecting the Print Server to the Network for UTP

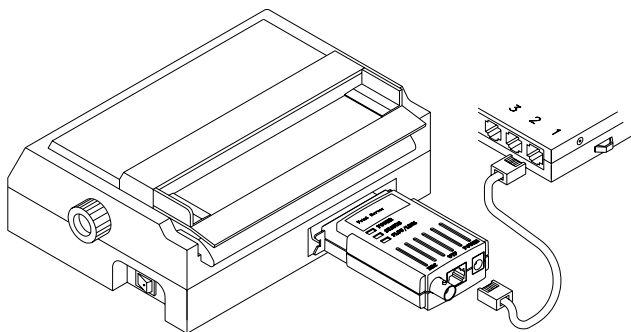


Figure 2-3

1. Connect one end of the UTP cabling to the print server.
2. Connect the other end of the UTP cabling to a 10BaseT hub as shown in Figure 2-3.
3. Done.

Note: The cable length from the print server to the hub must not exceed 300 feet (Approximately 100 meters).

Connecting the AC Power Adapter

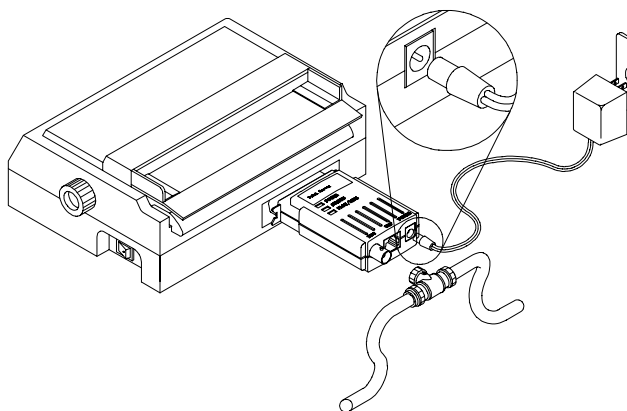


Figure 2-4

1. Connect the power adapter to the print server's AC power adapter jack as shown in Figure 2-4.
2. Plug the AC power adapter into a power outlet.
3. Turn the printer power on.
4. Done.

Note: DO NOT use other AC power adapter than the one shipped with the print server; using an incorrect AC power adapter may damage the print server.

Power On Self Test (POST)

The print server automatically performs a **Power On Self Test (POST)** when powered on. Successful powering up of the print

server is indicated by five flashes of the yellow LED marked **Status** on the topside of the print server. If the yellow LED does not flash five times, please contact your dealer for repair or replacement.

Disconnecting the Print Server

When disconnecting the print server from the printer and from the network, follow the procedure detailed below to prevent possible damage:

1. Turn off the printer.
2. Disconnect the power adapter from the print server and remove it from the power outlet.
3. Disconnect the print server from the network cable.
4. Loosen the lobes of the printer and disconnect the print server.
5. Done.

3. Print Server Installation Overview

Overview

To better meet users' network printing needs in today's heterogeneous and multiple protocol network environment, this print server supports industrial standard protocols, including TCP/IP and Novell's IPX/SPX. This means that this print server supports current network operating systems, such as Novell's NetWare, Microsoft's Windows NT, and over 20 UNIX systems, as well as Windows 95 peer-to-peer networks. As such, there might be several ways to employ the print server on your network.

We, therefore, recommend you read over this chapter through Chapter 7 so that you can then choose a best way to employ your print server on your network to meet your current network environment and printing requirements.

In addition, if you have problems when installing the print server, we recommend you read *Chapter 9 Troubleshooting* and you might find possible solutions to your problems.

Installing Print Server

Several possible installation methods are listed below:

- 1. Installing the print server through the PSMANAGER under NetWare.*
- 2. Installing the print server through the Network Print Port or TCP/IP Protocol under Windows NT*
- 3. Installing the print server through the Network Print Port on your Windows 95 computers.*

To illustrate the concepts above, we will provide you below three different examples to let you know more about the print server installation.

Example 1 - Installing a print server on a NetWare LAN, with Windows 95 client computers

Suppose you have a print server and a NetWare file server on your LAN. In addition, your client computers are Windows 95s.

Method A

1. Refer to Chapter 6 to install and configure your print server to connect to your NetWare file server.
2. From your Windows 95 computer, create a printer, which is then redirected to the print queue on your NetWare file server.
3. When you print jobs from your Windows based applications, the jobs will be sent to the print queue on your

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NetWare file server. Then, the print jobs will be serviced by the print server.

Method B

1. Refer to Chapter 4 to install and configure your print server on your (each) Windows 95 computer.
2. When you print jobs from your applications, the print jobs will be spooled on your local Windows 95 system, through the standard Windows printing system and the print server's printing control component, the Network Print Port.
3. Next, the print jobs will be despoiled from your Windows 95, then serviced by the print server.

Method C

1. Combine Method A and B. You have to create two same printers on each Windows 95 computer. One is connected (redirected) to the print queue on the NetWare file server, and the other is connected to the print server, through the Network Print Port, directly.
2. With this configuration, you can select to print to print server through NetWare or directly to the print server.
3. This method might be very useful while it is impossible to print your jobs through your NetWare, such as NetWare file server is down.
4. This method provides you certain degree of the fault tolerance to your network printing systems.

Example 2 – Installing a print server on a Windows NT LAN, with Windows 95 client computers

Assume you have a print server and a NT server on your LAN. In addition, your client computers are Windows 95s.

Method A

1. Refer to Chapter 5 or 7 to install and configure the print server, through the Network Print Port or TCP/IP protocol on your NT server.
2. Share this printer to your NT domain users (i.e. Windows 95 clients).
3. When you print jobs from your Windows based applications, your jobs will be redirected to the NT computer first. Next, the print jobs are despoiled from NT and serviced by the print server.

Method B

1. Refer to Chapter 4 to install and configure your print server on your (each) Windows 95 computer.
2. When you print jobs from your applications, the print jobs will be spooled on your local Windows 95 system, through the Network Print Port.
3. Next, the print jobs will be despoiled from your Windows 95, then serviced by the print server.

Method C

1. Combine Method A and B. You have to create two same printers on each Windows 95 computer. One is connected to the printer shared from NT, and the other is connected to the print server (through the Network Print Port) directly.
2. With this configuration, you can select to print to the print server through the NT or directly to the print server.
3. This method might be very useful while it is impossible to print your jobs through your NT, such as NT is down or not available.
4. This method might provide you certain degree of the fault tolerance to your network printing systems.

Example 3 – Installing a print server on a mixed network environment, with Windows 95 client computers

Assume you have a NT server and a NetWare file server on your LAN. Your client computers are Windows 95s.

Under this kind of heterogeneous network environment, you can integrate and apply the methods in the Example 1 and 2 to install and configure your print server to best meet users' printing requirements from different operating systems.

Additional Installation Issues

IPX Protocol Frame Type

1. When used through the Network Print Port under Windows NT or 95 systems, the print server supports only the frame type **Ethernet 802.2** of IPX protocol.
2. When used under NetWare, the print server supports frame type Ethernet 802.2, Ethernet 802.3, Ethernet II, and Ethernet SNAP and features an “*automatic frame type detection*” function.

4. Windows 95 Installation

Preparation

Please make sure that the following steps have been completed before proceeding with installation under Windows 95:

- ☐ The IPX/SPX-compatible Protocol is installed. For further information, please read *IPX/SPX-compatible Protocol Installation* in this chapter.
- ☐ Ethernet Frame Type 802.2 is installed. For further information, please read *Windows 95 Ethernet Frame Type 802.2 Installation* in this chapter.

IPX/SPX-compatible Protocol Installation

1. Click **Start**, and point to **Settings**.
2. Select **Control Panel**.
3. Double click the **Network** icon.
4. If the **IPX/SPX-compatible Protocol** is not already installed, click **Add**.
5. Select **Protocol** and click **Add**.
6. Select **Microsoft** from the Manufacturers list.
7. Select **IPX/SPX-compatible Protocol** from the Network Protocols list and follow the instructions on the screen.
8. Restart your computer for new settings to take effect.
9. Done.

Windows 95 Ethernet Frame Type 802.2 Installation

1. Select **Start**.
2. Select **Settings**.
3. Select **Control Panel**.
4. Double-click the **Network** icon.
5. Select the **IPX/SPX-compatible Protocol**.
6. Select **Properties**.
7. Click the **Advanced** tab.
8. Select **Frame Type** item in the Property list.
9. Select **Ethernet 802.2** in the Value list and click **OK**.
10. Click **OK** in the Network box.
11. **Restart your computer**.
12. Done.

Note: For more detailed information, please refer to your Microsoft Windows 95 manuals.

Windows 95 Installation Procedure

Please perform the steps as follows to ensure a smooth installation:

1. Run **Setup** from the print server's Setup CD.
2. The **Network Print Monitor Welcome screen for Windows 95** will then appear. Click **Next**.
3. A message reading, "*Setup is complete. You may add the Network Port by using the Print Manager*" will appear. Click **OK**.

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4. Click **Start** from the bottom left corner of the screen.
5. Select **Settings**.
6. Select **Printers**.
7. Double-click the **Add Printer** icon.
8. Select **Local Printer** and click **Next**.

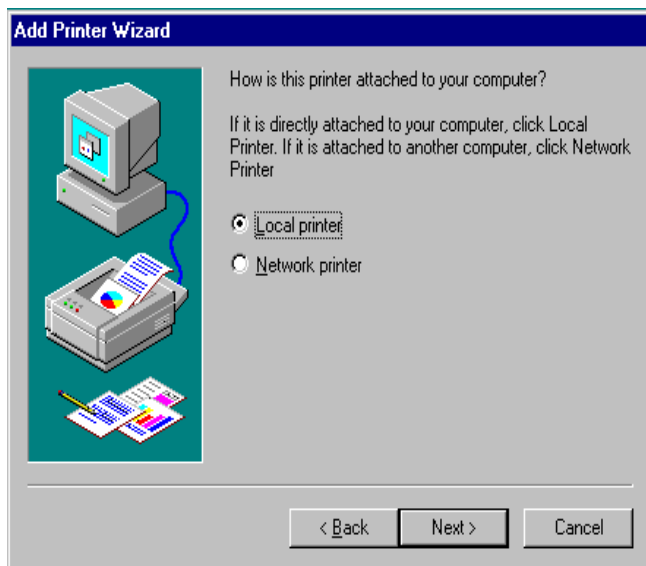


Figure 4-1

9. Select the appropriate printer manufacturer and printer type and click **Next**.

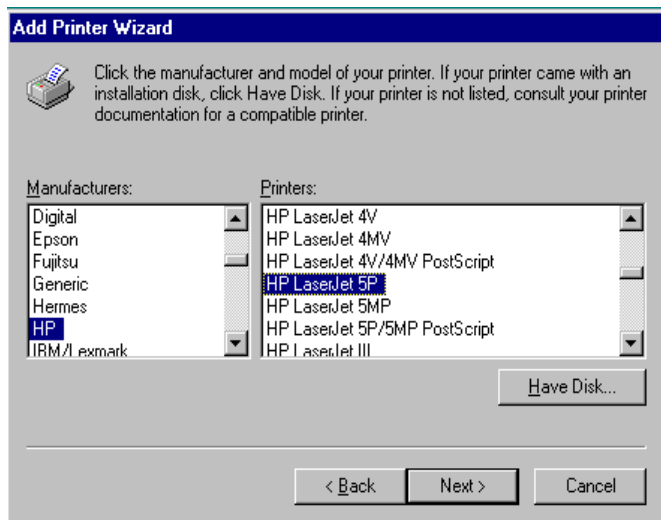


Figure 4-2

10. Select **LPT1** and click **Next**.

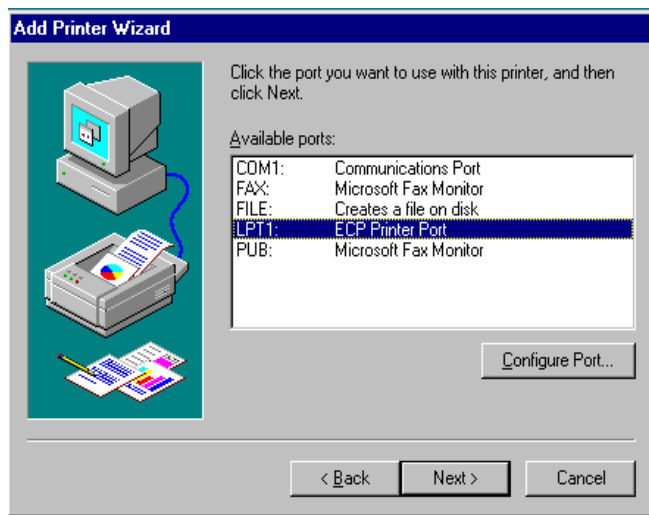


Figure 4-3

11. Type in the **Printer Name** and click **Next**.

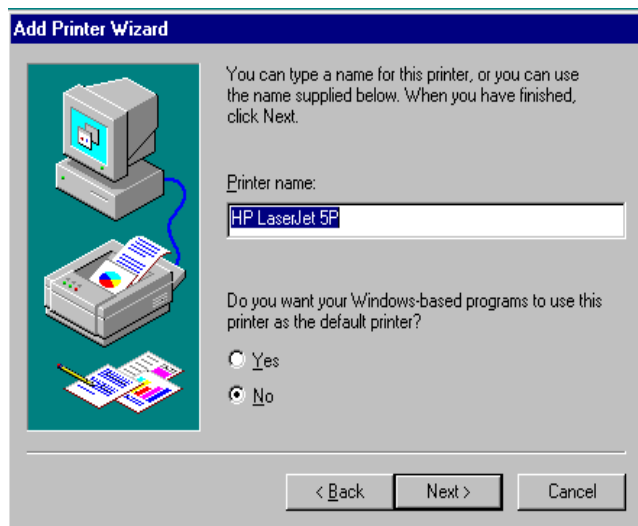


Figure 4-4

12. A message reading, “After your printer is installed, Windows can print a test page so you can confirm that the printer is set up properly.” will appear. Select **No** and click **Finish**.

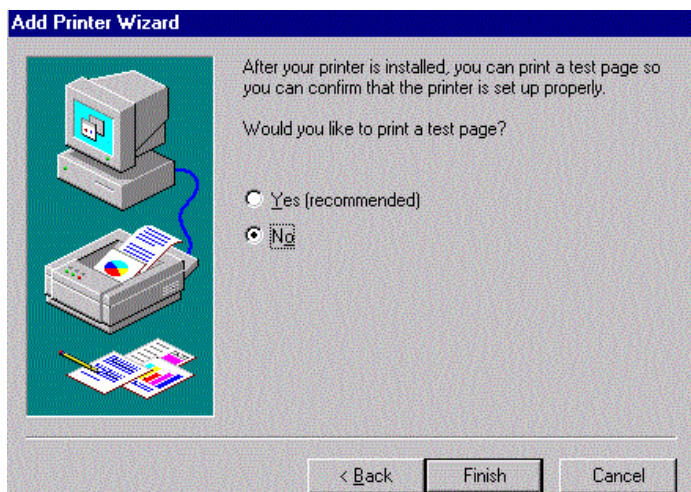


Figure 4-5

13. Double-click the newly created **Printer Name** icon.



Figure 4-6

14. Select **Printer** as shown in Figure 4-7.
15. Select **Properties** as shown in Figure 4-7.

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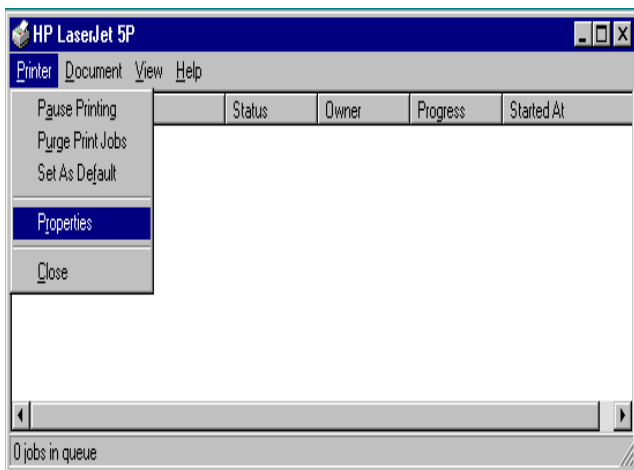


Figure 4-7

16. Click **Details** as shown in Figure 4-8.

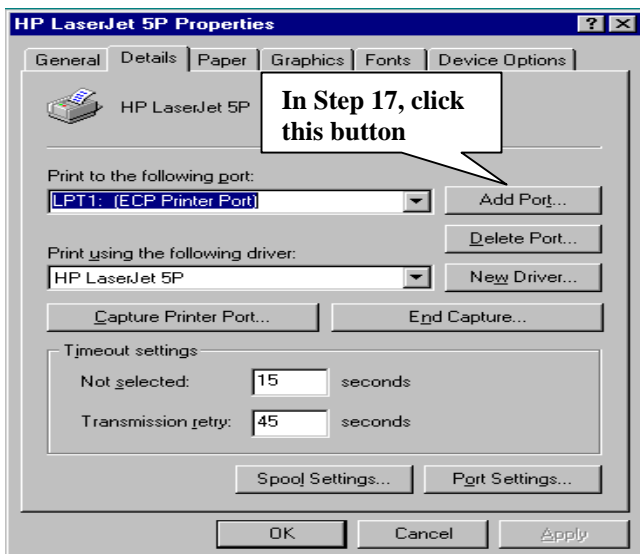


Figure 4-8

17. Select **Add Port**, as shown in Figure 4-8.
18. In the Add Port box, select **Other**.

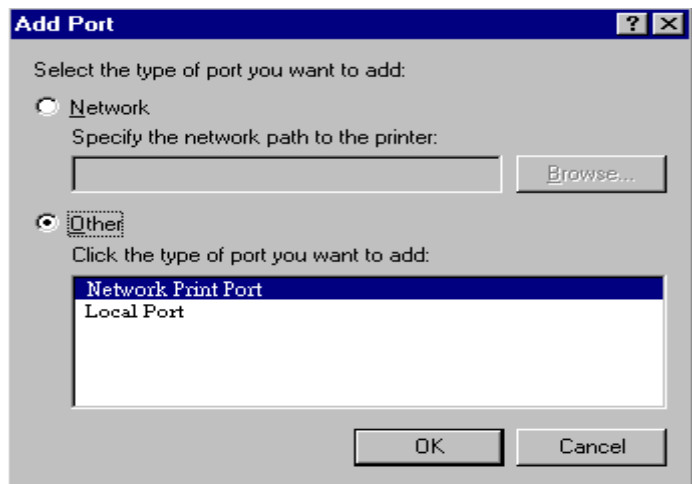


Figure 4-9

19. Select the **Network Print Port** and click **OK**.
20. The Add Port box will appear along with the print server's Node ID as shown in Figure 4-10 (*Last 6 characters located on the back of the print server unit*). Select a print server from the list.
21. Change the **Port Name** or leave it in default (**recommended**) and click **OK**.

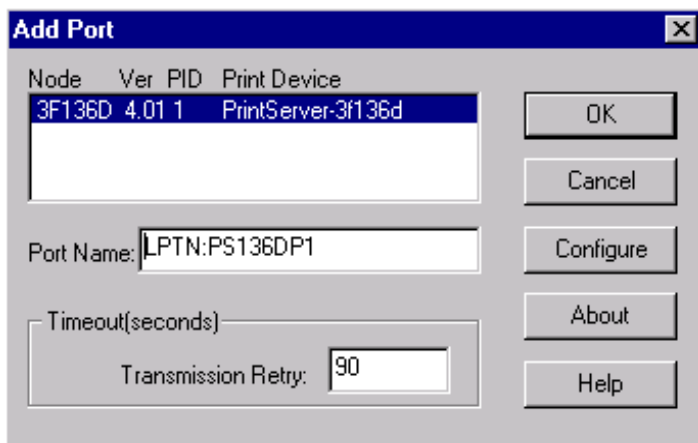


Figure 4-10

Note: *Don't change the default "Port Name" when using with an EPSON Stylus Color printer.* If you are using an EPSON Stylus Color series printer with the print server, please refer to page 96 for additional installation instructions.

22. Done.

Uninstalling Network Print Port on Windows 95

To provide users an easiest way to remove all of the Network Print Port components from their Windows 95s, the Network Print Port software comes with an uninstallation wizard program to help users remove the software components from their Windows 95 systems in minutes. Please follow the directions listed below to proceed with the uninstallation procedure.

After the Network Print Port is removed, the print server is no longer accessible via the Network Print Port. You have to re-install the Network Print Port on your system in order to access the print server again.

Procedure:

1. Click "**Star**", point to "**Settings**", and select "**Control Panel**".
2. Double click the "**Add/Remove Programs**" icon.
3. Select "**Network Print Monitor for Windows 95**" and click "**Add/Remove**" button.
4. The uninstallation wizard program will be launched.
5. Follow the directions on the screen to complete the uninstallation procedure.

Note: We recommend you *restart* your computer after the uninstallation is finished.

5. Windows NT Installation

Preparation

Please make sure that the following steps have been completed before proceeding with installation under Windows NT:

- ☐ The NWLink IPX/SPX Compatible Transport is installed. For further information, please read *NWLink IPX/SPX Compatible Transport Installation* in this chapter.
- ☐ Ethernet Frame Type 802.2 is installed. For further information, please read *Windows NT Ethernet Frame Type 802.2 Installation* in this chapter.

Note: If you are installing your print server in a multi-segmented network, please refer to “*Multi-segmented environment installation*” in Chapter 9 before proceeding.

NWLink IPX/SPX Compatible Transport Installation

1. Select **Start**.
2. Select **Settings**.
3. Select **Control Panel**.
4. Double click the **Network** icon.
5. Select **Protocols**.

6. If the **NWLink IPX/SPX Compatible Transport** protocol is not already installed, click **Add**.
7. Select the **NWLink IPX/SPX Compatible Transport** protocol and follow the instructions on the screen.
8. Ensure the **IPX Internal Network Number** is not 00000000 by selecting the **NWLink IPX/SPX Compatible Transport protocol** and clicking its **Properties** button. If this is the case, please type in an unique 8-digit hexadecimal number, for example, 12345ABC.
9. Restart your computer and done.

Windows NT Ethernet Frame Type 802.2 Installation

1. Select **Start**.
2. Select **Settings**.
3. Select **Control Panel**.
4. Double-click the **Network** icon.
5. Select **Protocols**.
6. Select the **NWLink IPX/SPX Compatible Transport**.
7. Select **Properties**.
8. Select your network interface card and select **Manual Frame Type Detection**.
9. Click **Add**.
10. In the **Frame Type** field, select **Ethernet 802.2**.
11. In the **Network Number** field, type in an unique 8-digit hexadecimal network number, for example, 12345ABC.
12. Select **Add** and click **OK**.
13. **Restart the computer**.
14. Done.

Note: For more detailed information, please refer to your Microsoft Windows NT manuals.

Windows NT Installation Procedure

Please perform the steps as follows to ensure a smooth installation:

1. Run **Setup** from the print server's Setup CD.
2. The **Network Print Monitor Welcome** screen for **Windows NT** will then appear. Click **Next**.
3. A message reading, "*Setup is complete. You may add the Network Port by using the Print Manager*" will appear. Click **OK**.
4. Click **Start** on the bottom left hand corner of the screen.
5. Select **Settings**.
6. Select **Printers**.
7. Double-click the **Add Printer** icon.
8. The Add Printer Wizard screen will appear as shown in Figure 5-1. Select **My Computer** and click **Next**.

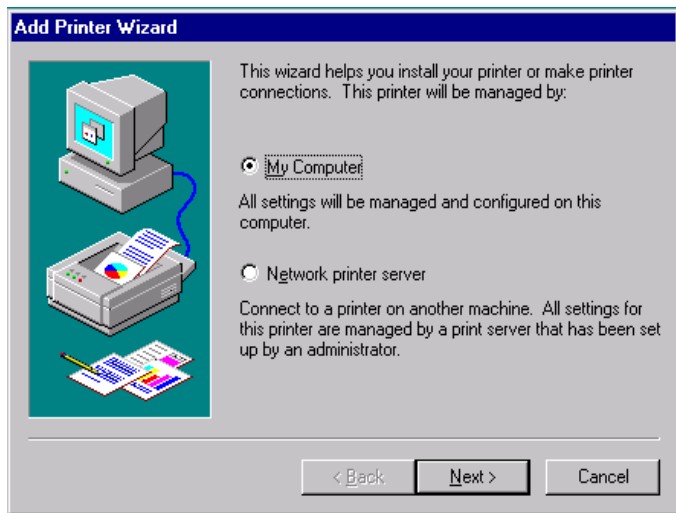


Figure 5-1

9. Click **Add Port**.

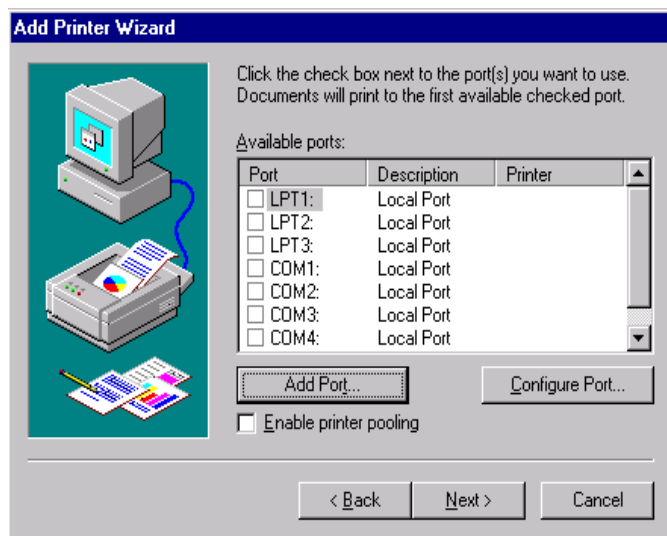


Figure 5-2

10. From the Printer Ports box as shown in Figure 5-3, select the **Network Print Port** and click **New Port**.

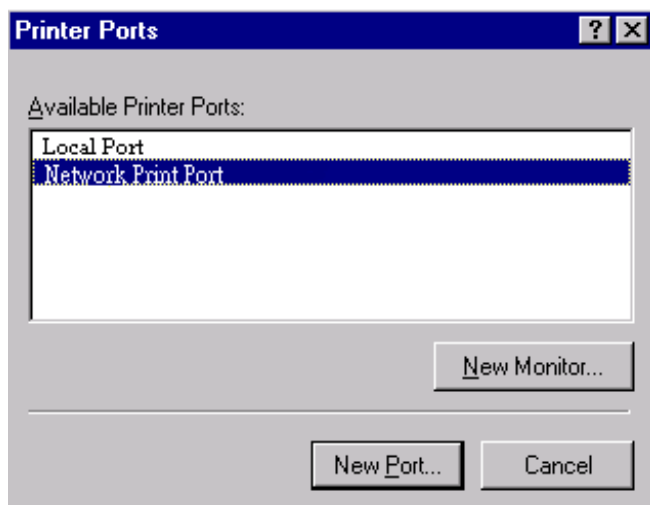


Figure 5-3

11. The Add Port box will then appear as shown in Figure 5-4, along with the print server's Node ID (*Last 6 characters, located on the back of the print server unit*). Select a print server from the list.
12. Change the **Port Name** or leave it in default (**recommended**) and click **OK**.

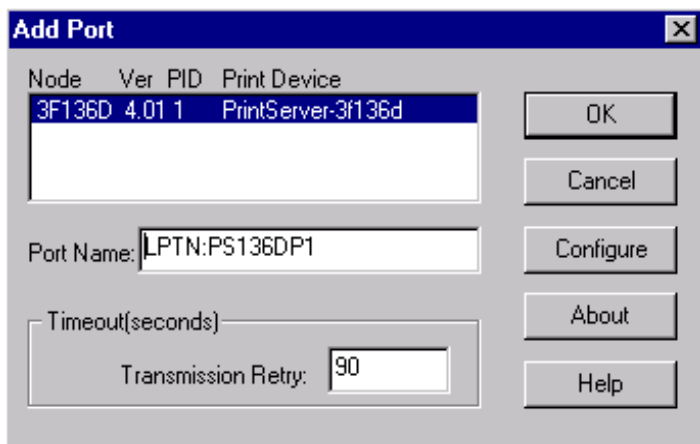


Figure 5-4

13. In the Printer Ports box, select **Close**.
14. Click **Next**.
15. Select the appropriate printer manufacturer and printer type and click **Next**.

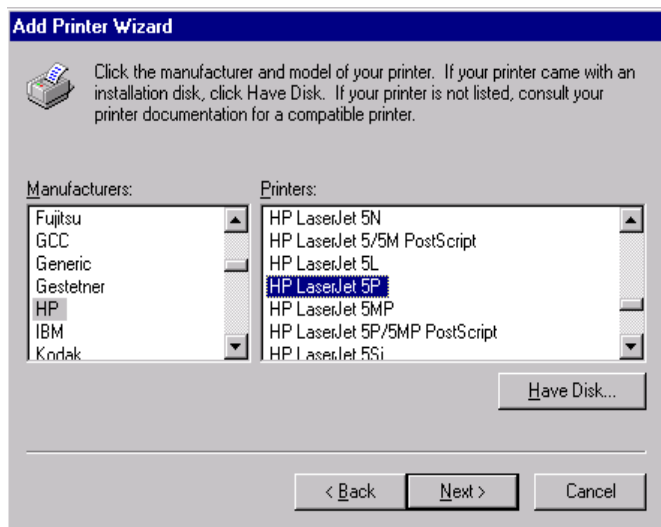


Figure 5-5

16. Select **Shared**. Type in a new **Share Name** or leave it in default and click **Next**.

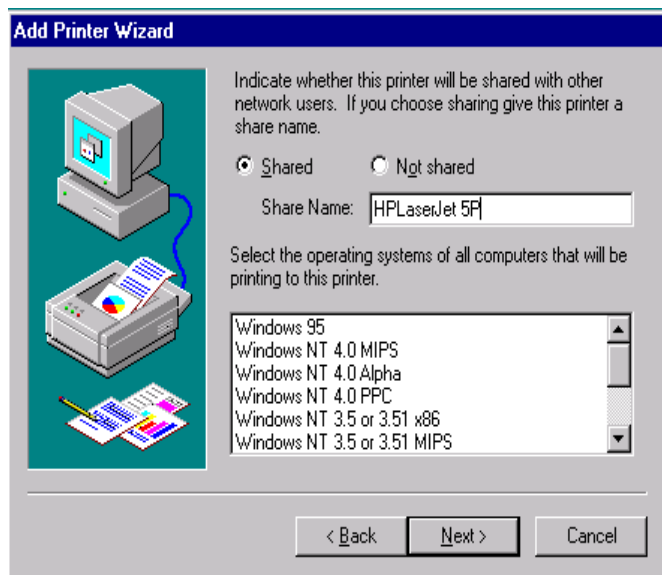


Figure 5-6

17. A message reading, “After your printer is installed, Windows can print a test page so you can confirm that the printer is set up properly.” will appear. Select **Yes (Recommended)** and click **Finish**.

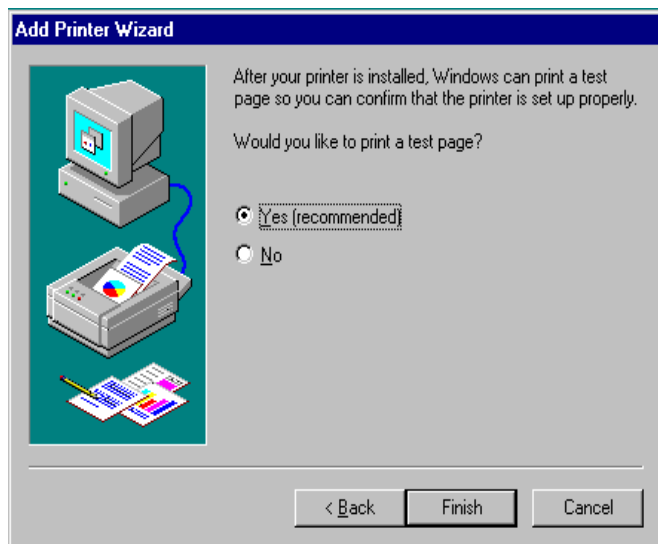


Figure 5-7

18. Done.

Uninstalling Network Print Port on Windows NT

To help users easily remove all of the Network Print Port installed software components from their Windows NTs, the Network Print Port software comes with an uninstallation wizard program that can automatically remove the software components from their Windows NT systems in minutes. Please follow the

directions listed below to proceed with the uninstallation procedure.

After the Network Print Port is removed, the print server is no longer accessible via the Network Print Port. You have to re-install the Network Print Port on your system in order to access the print server again.

Procedure:

1. Click "**Star**", point to "**Settings**", and select "**Control Panel**".
2. Double click the "**Add/Remove Programs**" icon.
3. Select "**Network Print Monitor for Windows NT**" and click "**Add/Remove**" button.
4. The uninstallation wizard program will be launched.
5. Follow the directions on the screen to complete the uninstallation procedure.

Note: We recommend you *restart* your computer after the uninstallation is finished.

6. NetWare Installation

PSMANAGER Overview

PSMANAGER is a proprietary Windows based management program that can assist you in configuring and managing your network print servers in NetWare environments. The program can be run from any Windows PC that has the IPX/SPX protocol installed.

Installation

To install PSMANAGER, first insert the Setup CD into your CD-ROM driver and run the **Setup** program from Window 3.1 or Windows 95. The program will automatically create the PSMANAGER group for you. The default install directory is C:\EPWIN.

Using PSMANAGER

After PSMANAGER is successfully installed, the program can be run by double-clicking the PSMANAGER icon. The screen will then appear as shown in Figure 6-1.

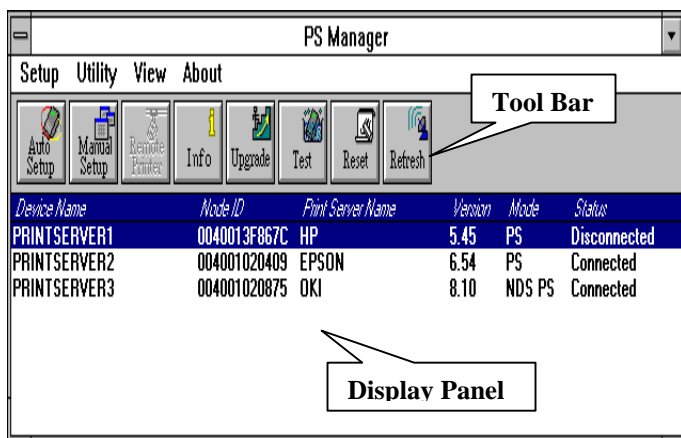


Figure 6-1

All print servers which feature the NetWare function on the LAN will be displayed along with their respective device name, node ID, print server name, firmware version, mode, and status. The terms are defined as follows:

Device Name: The name of the print server hardware used for identification purposes.

Node ID: The Ethernet address.

Print Server Name: The print server to which the device is attached.

Version: The firmware version of the print server.

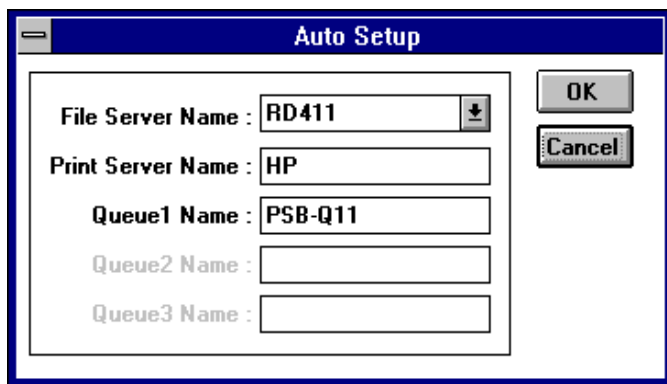
Mode: The print server mode which will be PS (Print Server), RP (Remote Printer), or NDS PS (NDS Print Server).

Status: The status of the print server unit. A “*connected*” print server unit is ready to service print jobs.

Auto Setup

Auto Setup is a configuration program that can assist you in setting up the necessary parameters for your print server device to function. To setup the print server by using Auto Setup follow the steps:

1. Log into your NetWare file server as a Supervisor (Admin.) or equivalent.
2. From your Windows 3.1 or 95, run PSMANAGER. Select the print server that you wish to configure by using your mouse.
3. Click the **Auto Setup** icon in the tool bar and the screen will appear as follows:



The screenshot shows a dialog box titled "Auto Setup" with a blue title bar. Inside the dialog, there are five text input fields arranged vertically, each preceded by a label. The first field, "File Server Name", contains the text "RD411" and has a small downward arrow icon to its right. The second field, "Print Server Name", contains the text "HP". The third field, "Queue1 Name", contains the text "PSB-Q11". The fourth field, "Queue2 Name", is empty. The fifth field, "Queue3 Name", is also empty. To the right of the input fields are two buttons: "OK" and "Cancel".

File Server Name :	RD411	↓
Print Server Name :	HP	
Queue1 Name :	PSB-Q11	
Queue2 Name :		
Queue3 Name :		

OK
Cancel

4. Select the NetWare File Server to which the print server device will be attached.
5. Type in a Print Server Name.
6. Type in a Queue Name.
7. Click OK.
8. Click Yes after the message reading, "Are you sure you want to save this configuration?"
9. Done.

Note: If you are installing the print server under NetWare 4.x, please refer to page 52 for additional installation instructions.

Manual Setup

Manual Setup is a configuration program designed for more experienced users of NetWare. To setup the print server by using Manual Setup follow the steps:

1. Log into your NetWare file server as a Supervisor (Admin.) or equivalent.
2. Run PCONSOLE in NetWare 3.x or NetWare 4.x and create the necessary parameters (Refer to your Novell NetWare Print Server/Services manual for details).

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Note: Under NetWare 4.x, you have to create a Bindery print server and a Bindery print queue and link these settings together. *Do not create a NDS print server and a NDS print queue.* Please refer to NetWare's Print Services manual for more detailed information.

3. Run PSMANAGER from your Windows 3.1 or 95.
4. Select the print server that you wish to configure.
5. Click **Manual Setup** in the tool bar and the following screen will appear:

The screenshot shows a dialog box titled "Manual Setup" with a blue title bar. Inside, there are two columns of fields. The left column contains: "Print Server" (a label), "Device Name:" with a text box containing "PRINTSERVER1", "Print Server Name:" with a text box containing "HP", "File Server Name:" with a list box containing "RD411", "Version:" with a text box containing "5.45", and "Status:" with a text box containing "Connected". The right column contains: "Node ID:" with a text box containing "00.40.01.3F.81.F7", "IP Address:" with a text box containing "0. 0. 0. 0", "Subnet Mask Address:" with a text box containing "0. 0. 0. 0", "Gateway Address:" with a text box containing "0. 0. 0. 0", "Polling Time:" with a spin box set to "15", and "Print Server Mode:" with a dropdown menu showing "Netware Only". To the right of the fields are two buttons: "OK" and "Cancel".

Figure 6-3

6. (Optional) Type in a Device Name for identification purposes.

7. Type in the Print Server Name that was created during PCONSOLE (Step1).
8. Select the File Server on which the Print Server Name was created.
9. Click OK.
10. Click Yes after the message reading, “Are you sure you want to save this configuration?”
11. Done.

Remote Printer

The Remote Printer feature is not available for the print server unit.

Detail

Info provides the user with the current configuration information about the print server device. The screen appears as shown in Figure 6-4 after selecting the **Detail** icon:

The screenshot shows a window titled "Detailed Device Information" with a blue header bar. Inside, there are two columns of configuration fields. The left column is labeled "Print Server" and contains fields for "Device Name" (PRINTSERVER1), "Print Server Name" (HP), "File Server Name" (RD411), "Version" (5.45), and "Status" (Connected). The right column contains fields for "Node ID" (00.40.01.3F.81.F7), "IP Address" (0. 0. 0. 0), "Subnet Mask Address" (0. 0. 0. 0), "Gateway Address" (0. 0. 0. 0), "Polling Time" (15), and "Print Server Mode" (Netware Only). An "OK" button is located in the top right corner of the window.

Print Server	
Device Name :	PRINTSERVER1
Print Server Name :	HP
File Server Name :	RD411
Version :	5.45
Status :	Connected
Node ID :	00.40.01.3F.81.F7
IP Address :	0. 0. 0. 0
Subnet Mask Address :	0. 0. 0. 0
Gateway Address :	0. 0. 0. 0
Polling Time :	15
Print Server Mode :	Netware Only

Figure 6-4

Device Name: The name of the print server hardware used for identification purposes.

Print Server Name: The print server to which the device is attached.

File Server Name: The file server to which the print server is attached.

Version: The firmware version of the print server.

Status: The status of the print server unit. A “*connected*” print server unit is ready to service print jobs.

Node ID: The Ethernet address.

Polling Time: The time interval, ranging from 2 seconds to 15 seconds, in which the print server unit polls the file server for servicing of print queues. **The default value is 2 seconds.**

Print Server Mode: This will specify the current mode setting of the print server. The print server must be set on **NetWare only** or **NetWare and UNIX** in order for the unit to service NetWare jobs.

Upgrade

Upgrade allows the user to upgrade the print server device. In order to upgrade the unit performs the steps as follows:

1. Log into your NetWare file server as a Supervisor (Admin.) or equivalent.
2. Make sure that the upgrade files are located in the same directory as PSMANAGER. The upgrade files are **mpsv1.bin** and **mpsv2.bin**.
3. Click the **Upgrade** icon. The following screen will appear:

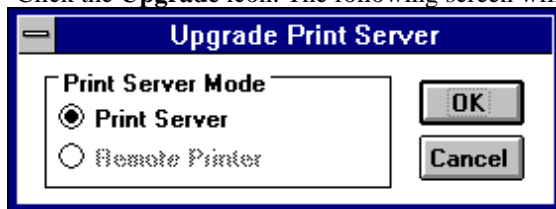


Figure 6-5

3. Select Print Server and click OK.
4. Done.

Note: To upgrade the print server from NT or UNIX systems through TCP/IP, please refer to *Chapter 8 “Upgrading Print Server”* for more detailed information.

Test

Test allows the user to test the print server device.

Reset

Reset allows the user to reset the print server device in order to establish a new connection or for new settings to take effect.

Refresh

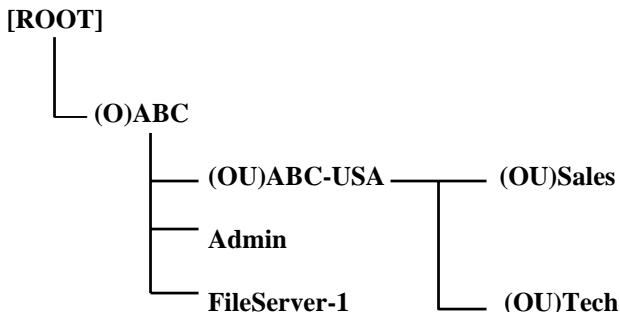
Refresh searches the network for all attached print servers.

Installing Print Server in NetWare 4.x (NDS)

Due to its architecture and functionality, the print server must work under NetWare 4.x NDS Bindery Emulation. When you install the NetWare file server for the first time, by default, the installation program will automatically set up the Bindery Emulation function for you by adding the “SET BINDERY CONTEXT =” command line in the AUTOEXEC.NCF file. By default, the bindery context will only be set on your organization (O) object.

If you have ever modified this line, or if you have ever added any organization units (OU) to your NDS tree after the NetWare system was installed, please read the following section before you install the print server.

For the purpose of illustration, we assume the NDS tree structure is as follows:



Installation Procedure

1. At your file server console, type “**load install**”.
2. Select “**NCF files options**”.
3. Select “**Edit AUTOEXEC.NCF file**”.
4. Add or modify “**SET BINDERY CONTEXT =**” line to include the NDS organization (O) and all organization unit (OU) objects, where your users are located. For example: SET BINDERY CONTEXT = O=ABC ; OU=SALES.O=ABC-USA.O=ABC;OU=TECH.OU=ABC-USA.O=ABC;...
5. When done, save the new AUTOEXEC.NCF file. Please restart your NetWare file server in order for new settings to take effect immediately.
6. Next, please refer to “**Auto Setup**” section in this chapter to finish installing your print server.

7. Log into your NetWare file server as a Supervisor (Admin.) or equivalent via a Bindery connection.
8. Run NetWare's PCONSOLE and add users to the "**Queue Users**" list.
9. From your NetWare client computer, such as Windows 95/98, create a printer that is connected (redirected) to the NetWare print queue associated with the print server.

Multiple Print Queues Configuration

To configure the print server to service multiple print queues, please follow the instructions listed below:

1. Log into your NetWare file server as a Supervisor (Admin.) or equivalent.
2. Run the PSMANAGER from your Windows 3.1 or 95.
3. Select the print server which is about to be configured.
4. Click the **Auto Setup** icon in the tool bar.
5. Type in a Print Server Name and a Print Queue Name (For more detailed information about **Auto Setup**, please refer to the "*Auto Setup*" section in this chapter).
6. Run the NetWare's PCONSOLE and create additional print queues. (For NetWare 4.x's PCONSOLE, please ensure you are in PCONSOLE's Bindery mode by pressing F4 key).
7. Select the print server name you specify in Step 5.
8. Select the "**Print Server Configuration**" option and select the "**Queue Serviced by Printer**" option (*For NetWare 4.x's PCONSOLE, please select "Printers" option and select "Printer 0" instead*).

9. Select the **“Printer 0”** and press the [Insert] key to add the print queues you create in Step 6 into the list (*For NetWare 4.x's PCONSOLE, please select “Print queues assigned” option instead*).
10. When Step 9 is done, quit from PCONSOLE.
11. Reset the print server by clicking the **“Reset”** icon from PSMANAGER.
12. Done.

Note: Please refer to NetWare's Print Server/Services manuals for detailed PCONSOLE commands.

Uninstalling the PSMANAGER on Windows 3.1 or 95

Installing the PSMANAGER on your Windows 3.1 or 95 computers will not modify any system settings, even the Registry in Windows 95 system. Therefore, the PSMANAGER can be easily and completely removed without executing any uninstallation program. Please follow the directions listed below to remove the PSMANAGER.

However, if you want to configure, manage, and upgrade the print server under a NetWare network again, you have to re-install the PSMANAGER.

Procedure:

1. From your Windows computer, close the PSMANAGER program first, if necessary.
2. Delete all the files in the **EPWIN** directory (This is PSMANAGER's default install directory. Please replace this directory name, if necessary).
3. Remove the EPWIN directory.

4. Remove the program group from your Windows 3.1 or 95 system.
5. Done.

7. TCP/IP Installation

Basic TCP/IP Installation Overview

When installing your print server in a TCP/IP environment, IP addresses are essential as a basic means of communications. It is therefore necessary to first assign an IP address to your print server unit. After assigning an IP address, the print server can be configured accordingly.

Assigning an IP Address

The first part of installing a print server in a TCP/IP network is to specify an IP address to your print server. Below is a list of the few steps involved for this part. Although the commands will vary slightly, depending upon which platform used, UNIX and NT, the functionality of the two variants is exactly the same.

For the purpose of explanation, please assume the print server's IP address is 192.72.214.103 and its Node ID is 00:40:01:05:01:8C (The Node ID can be found on the back of the print server unit).

1. Login root.
2. Type the following command to create a static ARP entry in the NT/UNIX host to associate the print server's IP address with its node address:

```
arp -s 192.72.214.103 00:40:01:05:01:8C
```

3. Ping the print server by typing the following command and the print server should response.

```
ping 192.72.214.103
```

4. Type `tftp 192.72.214.103`
5. The tftp prompt will then appear. Type the following:

```
tftp> get config.txt
```

6. Exit from tftp and then use your editor to modify the **“BoxIPAddress”** field from 0.0.0.0 to 192.72.214.103 (print server's IP address). *Leave other options in default. Do not change their values.*
7. Save the new *config.txt* configuration back into the print server by entering the tftp prompt and typing the following:

```
tftp> put config.txt
```

8. Reset the print server unit by typing the following:

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tftp> get reset

9. Quit tftp by typing the following:

tftp> quit

Windows NT 4.0 Installation under TCP/IP

For the purpose of explanation, please assume the print server's name IP address is 192.72.214.103 and its Node ID is 00:40:01:05:01:8C (The Node ID can be found on the back of the print server unit).

1. Double-check to see that the **TCP/IP protocol** and **Microsoft TCP/IP printing** components are pre-installed in NT 4.0. If necessary, install these components before proceeding.
2. At the DOS Prompt, type the following command to create a static ARP entry in the NT server to associate the print server's IP address with its node address:

arp -s 192.72.214.103 00-40-01-05-01-8C

3. Ping the print server by typing the following command and the print server should response.

ping 192.72.214.103

4. Type **tftp 192.72.214.103 get config.txt**

5. Use your editor to modify the **“BoxIPAddress”** field from 0.0.0.0 to 192.72.214.103 (print server's IP address). *Leave other options in default and do not change their values.*
6. Save the new *config.txt* file by typing the following:

```
tftp 192.72.214.103 put config.txt
```
7. Reset the print server unit by typing the following:

```
tftp 192.72.214.103 get reset
```
8. Run Add Printer (Located under Printers in Settings).
9. The Add Printer Wizard screen will appear as shown in Figure 7-1. Select **My Computer** and click **Next**.



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Figure 7-1

10. The following screen as shown in Figure 7-2 will then appear, click Add Port.

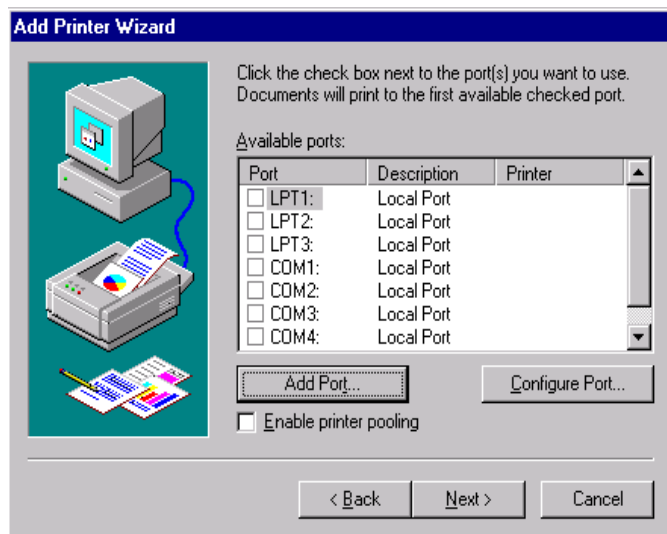


Figure 7-2

11. From the Printer Ports box as shown in Figure 7-3, select the **LPR Port**.

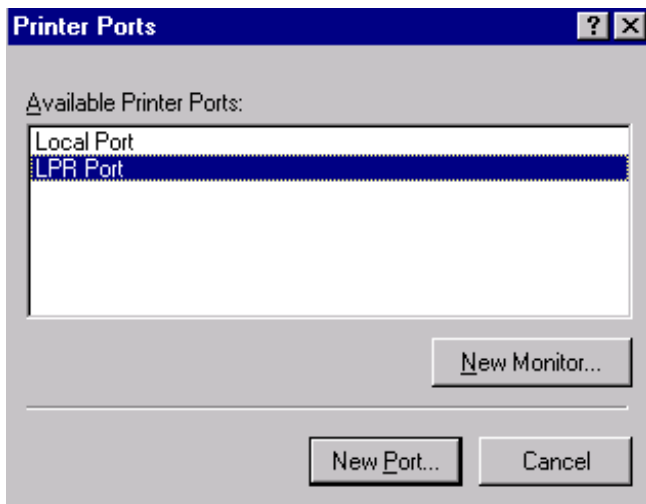


Figure 7-3

12. The Add LPR compatible printers box will then appear as shown in Figure 7-4. Type in the IP address assigned to the print server in the *Name or address of server providing lpd* box.

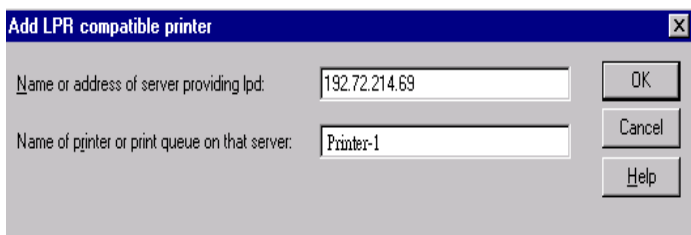


Figure 7-4

13. In the *Name of printer or print queue on that server* box as shown in Figure 7-4, type in a character string, for example, Printer-1.
14. In the Printer Ports box, select **Close**.
15. Click **Next**.
16. Select the appropriate printer manufacturer and printer type and click **Next**.

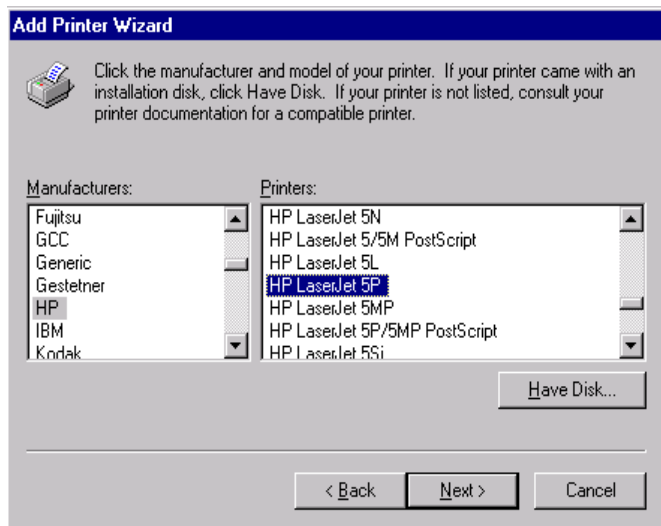


Figure 7-5

17. Select **Shared**. Type in a new **Share Name** or leave it in default and click **Next**.

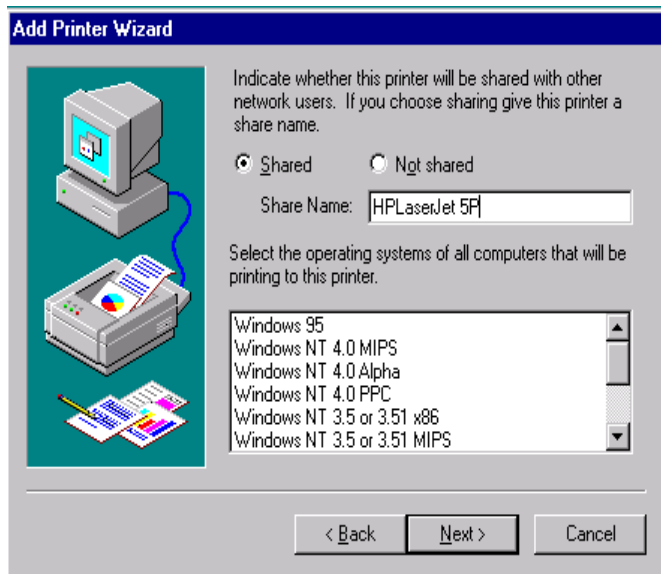


Figure 7-6

18. A message reading, "After your printer is installed, Windows can print a test page so you can confirm that the printer is set up properly." will appear. Select **Yes (Recommended)** and click **Finish**.

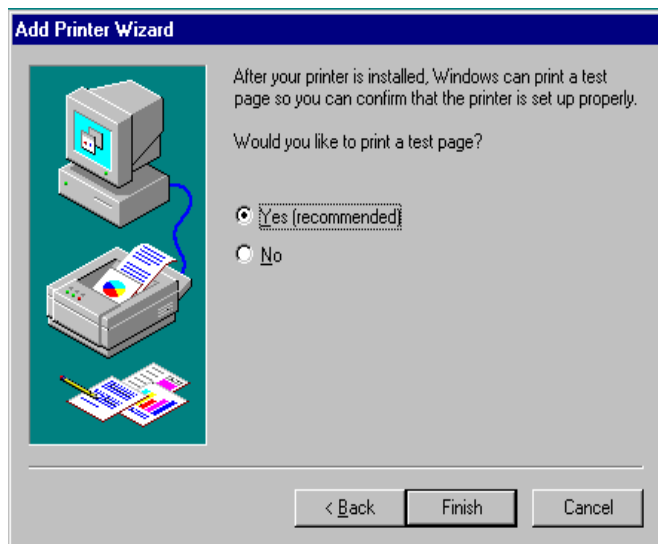


Figure 7-7

19. Done.

UNIX Installations

After the IP address is assigned, the print server is ready to be configured. For some popular UNIX systems, we include the detailed installation procedure as follows. If you can't find the installation procedure corresponding to your UNIX system, please refer to your UNIX manuals for further details about configuring your UNIX for the “**remote printing system**”.

SCO UNIX (OpenServer 5.0.x)

1. Login root

2. Type “arp -s <IP address> <printer server's node ID>”

The print server's node ID can be found from the white label on the backside of the print server.

For example:

```
arp -s 192.72.214.103 00:40:01:05:01:8c
```

3. Type “ping <print server's IP address>”

For example:

```
ping 192.72.214.103
```

(you should get the responses from the print server).

4. Type “tftp <print server's IP address>”

For example:

```
tftp 192.72.214.103
```

At the tftp prompt, type “**get config.txt**” to get the print server's configuration file.

For example: tftp > get config.txt

5. Quit from tftp, then use your editor to modify the “BoxIPAddress” field in the *config.txt* file from 0.0.0.0 to the IP address you specify in Step 2. When done, save the new *config.txt*.

6. Type “tftp <print server's IP address>”

At the tftp prompt, type “**put config.txt**” to save the new configuration file back to the print server.

For example:

```
tftp > put config.txt
```

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7. At tftp prompt, type “**get reset**” to reset the print server with new configuration. When done, quit from tftp.

8. Type “mkdev rlp”

After this step, the Remote Printer Configuration appears. Answer the questions as follows:

a. Do you want to install or remove printing (i/r/q) ? [q] :
----> i

b. Do you wish to change the printer description file /etc/printcap (y/n) [n] ? -----> y

c. Enter information for remote printers or local printers accepting remote printing requests
Please enter the printer name (q to quit) : --->any character string for identification purposes, for example, Printer1.

d. Is xxxx a remote printer or a local printer (r/l) -----> r

e. Please enter the name of the remote host that xxxx is attached to: -----> the print server's IP address you specified in Step 2, for example: 192.72.214.103

Note: You can add the host name associated with the IP address in the /etc/hosts file. If you have done this, please use the host name instead of the IP address.

f. Printer xxxx is connected to host 192.72.214.103
Is this correct ? (y/n) -----> y

g. After it shows some messages, it will ask a question.
If you're not sure, answer 'n' ? (y/n) [n] -----> n

h. Would you like this to be the system default printer ?
(y/n) [n] -----> answer this question if you like to make it
as a default printer.

i. Do you want to install or remove printing (i/r/q) ? [q] :
----->q

j. Do you want to star remote daemon now (y/n) ----->y

9. Installation complete.

10. Launch some print jobs by “lp” or “lpr” command.

For example:

lp -d Printer1 /etc/printcap

lpr -d Printer1 /etc/printcap

SUN Solaris 2.x

1. Login root

2. Type “arp -s <IP address> <printer server's node ID>”

The print server's node ID can be found from the white label on
the backside of the print server. For example:

arp -s 192.72.214.103 00:40:01:05:01:8c

3. Type “ping <print server's IP address>”

For example:

ping 192.72.214.103

(you should get the responses from the print server).

4. Type “tftp <print server's IP address>”

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For example:

```
tftp 192.72.214.103
```

At the tftp prompt, type “**get config.txt**” to get the print server’s configuration file.

For example:

```
tftp > get config.txt
```

5. Quit from tftp, then use your editor to modify the “BoxIPAddress” field in the *config.txt* file from 0.0.0.0 to the IP address you specify in Step 2. When done, save the new *config.txt*.

6. Type “tftp <print server’s IP address>”

At the tftp prompt, type “**put config.txt**” to save the new configuration file back to the print server.

For example: tftp > put config.txt

7. At tftp prompt, type “get reset” to reset the print server with the new configuration. When done, quit from tftp.

8. Type “lpsystem -tbsd <print server’s IP address>”

For example:

```
lpsystem -tbsd 192.72.214.103
```

Note: You can add the host name associated with the IP address in the /etc/hosts file. If you have done this, please use the host name instead of the IP address.

9. Type “lpadmin -p<xxxx> -s<print server’s IP address>”

xxxx means any character string for identification purposes.

For example:

```
lpadmin -pPrinter1 -s192.72.214.103
```

- 10. Type “accept xxxx “**, where xxxx is the string you specify in Step. 9.

For example:

accept Printer1

- 11. Type “enable xxxx”**, where xxxx is the string you specify in Step 9.

For example:

enable Printer1

- 12. Installation complete !**

- 13. Launch some print jobs by “lpr” command.**

For example:

lpr -PPrinter1 /etc/hosts

Disabling Print Server's NetWare Function

If you are using the print server on a complete TCP/IP network and there are no any printing needs from NetWare users, you can disable the print server's NetWare function in order for the print server to have a better performance and throughput. The procedures are listed as follows.

However, disabling print server's NetWare function will prevent it from servicing NetWare print jobs till it is enabled again.

Procedure:

1. At NT's DOS prompt, type “**tftp <print server's IP address> get config.txt**”.

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2. Run your editor and modify the “**Novell**” field in the *config.txt* file from “**Enable**” to “**Disable**”. When done, save the new file and quit to DOS's prompt.
3. Type “**tftp <print server's IP address> put config.txt**”.
4. Type “**tftp <print server's IP address> get reset**”.
5. Done !

Note: Please refer to the corresponding commands when under UNIX systems.

8. Upgrading Print Server

Overview

Upgrading print server will allow you to replace its firmware inside the print server while the newer software version of the print server is available from your local dealer. Depending on the different systems users might use, this chapter is divided into several sections, please refer to the following list for your systems.

1. *Upgrading the print server from NetWare*
2. *Upgrading the print server from Windows NT*
3. *Upgrading the print server from UNIX system*

Note: 1. Before you proceed to upgrade the print server, please ensure that the necessary binary files (mpsv1.bin and mpsv2.bin) are located in your current working directory.

2. Before upgrading the print server, please ensure the print server is not printing jobs. In case of printing, you have to wait till the current print job is finished before you can proceed.

Upgrading Print Server from NetWare

1. Log into your NetWare file server as a Supervisor (Admin.) or equivalent.

2. Ensure binary files, **mpsv1.bin** and **mpsv2.bin**, are located in the PSMANAGER directory.
3. Run **PSMANAGER** from your Windows 95 or 3.1
4. Click the Upgrade icon in tool bar and refer to the *Upgrade* instructions on page 52.

Upgrading Print Server from Windows NT (Through TCP/IP)

1. Ensure **mpsv1.bin** and **mpsv2.bin** are located in your current working directory.
2. Rename **mpsv2.bin** to **mps.bin**.
3. At NT's DOS prompt, type "**tftp <print server's IP address> get upgrade**".
4. Type "**tftp <print server's IP address> put mps.bin**".
5. Wait for the transfer successful message.
6. Done !

Upgrading Print Server from UNIX Systems (Through TCP/IP)

1. Log in as root
2. Ensure **mpsv1.bin** and **mpsv2.bin** are located in your current working directory.
3. Rename **mpsv2.bin** to **mps.bin**.
4. Type "**tftp <print server's IP address>**".
5. At tftp prompt, type "**get upgrade**".
6. At tftp prompt, type "**put mps.bin**".

7. Wait for the file transfer to complete.
8. Done. Quit from tftp.

9. Troubleshooting

General Troubleshooting Overview

The most common problems, which cause the print server to perform incorrectly, are covered in this chapter. If a problem still exists after reading this chapter, please contact your dealer for technical support.

LED Light Indicators

The print server is equipped with three LED lights to assist in diagnosing problems that are the result of the network and/or the print server hardware itself.

Power (Red)

When this light is on, the print server unit is properly connected to the power adapter.

Status (Yellow)

When the print server unit is powered on, the **Status** LED will flash five times as part of the unit's **Power On Self Test (POST)**. This indicates that the print server hardware is properly configured. After connection is successfully made to the NetWare system, the Yellow LED will remain ON. This LED, however, may flicker whenever LAN data is being transmitted and printed.

Note: Make sure that the Yellow LED flashes five times (**POST**) upon connecting the power. If the unit does not flash five times, contact your dealer for a replacement or repair.

Flow/Link (Blinking Green)

If the network cabling is Thin Ethernet Coaxial Cable and when this light blinks, data is being transmitted and printed.

Flow/Link (Solid Green)

If the network cabling is Twisted-Pair Cable, and when this light is ON, the Twisted-Pair cable connection is problem free.

Cable Related Problems

In most cases, the print server fails to send and receive network data due to incorrect use of the network cable and/or to connector problems. Thin Ethernet Coaxial Cable must be 0.2 inches in diameter and conform to RG-58 A/U 50-Ohm Thin Coaxial Cable specifications.

Note: Thin Coaxial Ethernet Cable is connected to the BNC connector on the back of the print server via a BNC T-Connector.

Twisted-Pair Cable is 10BaseT 8-wire Unshielded Twisted-Pair Cable. The pin assignments for the RJ-45 connector used for this cable must conform to the UTP cable specifications.

Power Related Problems

The print server requires an *external* AC power adapter in order for it to function. If you have a power problem, check to see whether the power cord or its connectors are damaged. More importantly, check to see that the AC power adapter included with the print server matches the AC voltage in your country or area. Using an incorrect AC voltage will damage your print server.

Print Port Related Problems

Printing data failure may be caused by a loose connection of the print server to the Centronics parallel port of the printer. Check to see if any of the pins on the 36-pin connector are damaged. In addition, check the cable connection. If the pins are damaged, contact your dealer for a replacement connector.

Windows 95/NT Troubleshooting

Multi-Segment LAN Environment Installation (through the Network Print Port)

If your print server and Windows 95/NT are located on two different segments, and your Windows NT server is used as the router/gateway you will need to implement the following procedures in order for your print server to function properly:

- ☐ Add the RIP for NWLink IPX/SPX compatible transport. See *RIP for NWLink IPX/SPX compatible transport Installation Procedure* in the following section.
- ☐ Add the frame type 802.2 for both Ethernet adapters. See *Multi-Segment Frame Type 802.2 Installation* in the following section.

RIP for NWLink IPX/SPX compatible transport Installation Procedure

1. From your Windows NT server that is used as a router, select **Start** from the bottom left hand corner of the screen.
2. Select **Settings**.
3. Select **Control Panel**.
4. Double-click the **Network** icon.
5. Select **Services**.
6. Select **Add**.
7. In the Select Network Service box, select the **RIP for NWLink IPX/SPX compatible transport**. Click **OK**.
8. Follows the directions on the screen.
9. Done.

Multi-Segment Frame Type 802.2 Installation

1. From your Windows NT server that is used as a router, select **Start** from the bottom left hand corner of the screen.
2. Select **Settings**.
3. Select **Control Panel**.
4. Double-click the **Network** icon.
5. Select **Protocols**.
6. Select the **NWLink IPX/SPX Compatible Transport**.
7. Select **Properties**.
8. Ensure the ***IPX Internal Network Number*** is not 00000000 by selecting the **NWLink IPX/SPX Compatible Transport protocol** and clicking its **Properties** button. If this is the case, please type in an unique 8-digit hexadecimal number, for example, 12345ABC.
9. Select your (first) network interface card and select **Manual Frame Type Detection**.
10. Click **Add**.
11. In the **Frame Type** field, select **Ethernet 802.2**.

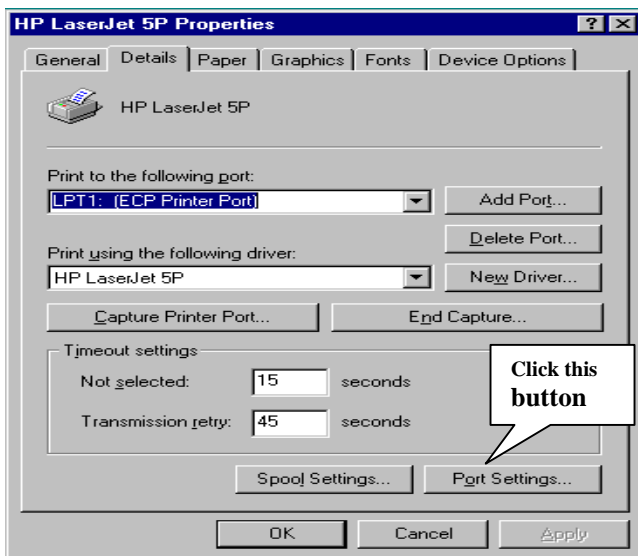
12. In the **Network Number** field, type in an unique 8-digit hexadecimal network number. For example: 12345ABC.
13. Select **Add**.
14. Repeat the Step 9-13 for the other Ethernet adapter.
15. **Restart the computer**.
16. Done.

Moving the Print Server to A New Segment

If the print server is moved from one network segment to another one after the initial installation, through the Network Print Port, the print server must be reconfigured on the original Windows NT server or on each Windows 95 computer in order for the print server's driver on each computer to re-establish a new connection.

Print Server Reconfiguration Procedure on Windows 95

1. Click **Start** on the bottom left hand corner of the screen.
2. Select **Settings** and select **Printers**.
3. Select your printer which is connected to the print server, and right-click the printer icon. Select **Properties**.
4. Click **Details** tab.
5. Click **Port Settings** as shown in the picture below. The print server will be displayed on the next print server configuration screen as shown in the following picture.



6. Find your original print server according to its Port Name or other distinguished name and click this print server.
7. Click **OK** and it returns to the printer's Properties page.
8. Click **OK**.
9. Done.

Print Server Reconfiguration Procedure on Windows NT

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1. Click **Start** on the bottom left hand corner of the screen.
2. Select **Settings** and select **Printers**.
3. Select your printer which is connected to the print server, and right-click the printer icon. Select **Properties**.
4. Click **Ports** tab.
5. Click **Configure Port**. The print server will be shown on the next screen.
6. Find your original print server according to its Port Name or other distinguished name and click this print server.
7. Click **OK** and it returns to the printer's Properties page.
8. Click **OK**.
9. Done !

Moving Your Computer to A New Segment

If you are using the print server through the Network Print Port on your NT or Windows 95 computer and your computer is moved onto another segment after the initial installation, you have to reconfigure the print server on your computer. However, this situation is like moving the print server to a new segment. Please refer to the “*Moving the print server to a new segment*” section for more detailed reconfiguration instructions.

Novell NetWare Troubleshooting

Many printing problems can be traced back to incorrect or incomplete print server installations. *It is always wise to check the installation configurations first.*

In some cases, if necessary, delete the print server, print queue(s) or other setting(s). Next recreate the necessary parameters or reconfigure the print server by running PSMANAGER.

TCP/IP Troubleshooting

When you are configuring a new print server on your NT/UNIX server through LPR Port printing under TCP/IP protocol, you might encounter the following problem in your initial installation steps:

"I can do the "arp" command. However, when I am going to ping or tftp the print server, it always shows Request timed out. I have checked the print server's power and it exactly passed the POST. Besides, the network cabling is OK. As such, I can't do tftp command to get and put the print server's configuration file and save its IP address permanently. I can't, therefore, continue installing the print server."

Regarding this problem, there are three possibilities:

- A. ***The print server's Node ID you specified in the "arp" command is not correct.***

If this is the case, please ensure Node ID field in the corresponding entry of the print server's IP address in NT's ARP cache table is correct by typing the following command at NT's DOS prompt.

"arp -a"

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If the Node ID shown on the screen doesn't match the print server's Node ID, please follow the instructions below to reset the entry.

1. At NT's DOS prompt, type "arp -d <print server's IP address>" to delete the current entry.
2. Type "arp -s <print server's IP> <print server's Node ID>" to specify a new ARP entry.
3. Refer to Chapter 7 for the detailed instructions to complete the installation.

B. The print server's IP address is duplicated or as same as another computer's IP address on the network.

If this is the case, please consult your network administrator to obtain an unused IP address for your print server.

C. The print server is on one segment and your NT server is on the other segment.

(This troubleshooting guide will also apply to a multiple-segmented network while installing the print server)

For example, suppose the print server is on Segment A, NT/UNIX server is on Segment B, and there is a gateway computer between Segment A and Segment B. The network might be a complete TCP/IP network, or a hybrid of TCP/IP and IPX/SPX network.

If this is the case, you have to adopt the following steps, depending on which platform the gateway computer is.

- a. If the gateway computer is a NT/UNIX server:

You have to do the same "arp" command to specify an entry on the NT/UNIX computer as a gateway in order for it to forward your subsequent "ping" or/and "tftp" commands to print server.

- b. If the gateway computer is a Novell NetWare file server:

1. Due to the presence of this NetWare file server, the IPX/SPX protocol might be used on your network. Therefore, we strongly suggest you run PSMANAGER from any client computer and select **Manual Setup** icon to specify print server's IP address (For more detailed information about **Manual Setup**, please refer to Chapter 6).
2. If the solution described above is not applicable, you have to follow the instructions below to set up print server's IP address.

For the purpose of explanation, we assume the NT server is on Segment A and its IP address is 192.72.214.66 (subnet mask: 255.255.255.224), the print server is going to be installed on Segment B, with IP address, for example, 192.72.214.100.

1. Find an unused IP address belonging to Segment A for temporary use in the following steps, for example, 192.72.214.68.

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2. Connect your print server to Segment A as a networked node.
3. On your NT server, type, for example, "arp -s 192.72.214.68 00-40-01-3F-02-AB". Please note, in this arp command you have to type 192.72.214.68 on purpose. Do not type this IP address as 192.72.214.100.
4. Type "tftp 192.72.214.68 get config.txt". The print server's configuration file will then be retrieved and transferred to your NT server.
5. Type "edit config.txt" to modify this configuration file.
6. In your editor, modify "**BoxIPAddress**" field from "0.0.0.0" to "192.72.214.100". *Leave other options in default and do not change their values.* When done, save this new file and quit from your editor. *Please note, in this step you must specify print server's an IP address which is valid on Segment B, such as 192.72.214.100 in this example, rather than 192.72.214.68.*
7. Type, for example, "tftp 192.72.214.68 put config.txt" to save this new configuration back to print server.
8. Move the print server back to the Segment B.
9. Done.

Frequently Asked Questions

Question A

While running PSMANAGER, the “Disconnected” message is displayed under Status.

Possible explanations

1. The print server is a new unit and has not yet been configured.
2. The file server is not powered on and therefore the print server cannot attach itself to it.
3. The Print Server Name of the print server has not yet been entered or specified in PCONSOLE. The print server cannot attach itself to the NetWare system.
4. The configuration saved in the print server is incorrect or does not match the PCONSOLE configuration.

Solutions

1. Run PSMANAGER and configure the print server.
2. Power on the NetWare file server and check the network cabling.
3. Check to see that the configuration in PCONSOLE is correct, especially check the password.
4. Check to see the configuration is correct and matches the configuration in PCONSOLE, especially check the password.

Question B

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Print jobs are sent to the print queue successfully, but fail to be sent to the printer.

Possible explanations

1. The Print Server/Print Queue configuration in PCONSOLE is incorrect.
2. The print server name specified and stored in the print server memory doesn't match the same one set in PCONSOLE.
3. The network cable or power adapter connected to the print server is loose or disconnected.
4. The printer is off-line, jammed or out of paper.

Solutions

1. Check all the information in PCONSOLE.
2. Check all the information of the print server by running PSMANAGER.
3. Check to see that the network cabling and power adapter are properly connected.
4. Recheck the print server connection by running PSMANAGER. It should read "Connected."

Question C

Print jobs start printing, but print very slowly or print unknown characters.

Possible explanation and solution

A printer driver is missing or is incompatible with that printer. Using a print driver that is not specific for the printer can cause printing errors. Install the proper printer driver. If these printer drivers are not available to you, please contact your printer manufacturer.

Question D

The upgrading process indication bar stops and does not seem to proceed again while upgrading the print server.

Possible Explanation

There might be a network problem. This causes the upgrading procedure to fail.

Solutions

1. Check the network cabling, especially from the workstation running PSMANAGER to the print server unit.
2. Run PSMANAGER and upgrade the print server again.

Question E

The yellow LED light keeps blinking after POST.

Possible explanation and solution

The last upgrade process was not completed. The print server must be upgraded again by using PSMANAGER. Please see Chapter 8 for details.

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Question F

PSMANAGER reports “Create Print Server Error”, “Create Printer Error”, or “Create Queue Error” while using Auto Setup.

Possible Explanation

The print server name, the printer name, or the queue name you specified in the **Auto Setup** dialogue box contains a space.

Solution

Check to see if there is a space in the print server name, the printer name, or the queue name. Type in a new name without a space between two characters or replace a space by a dash (-) or an underscore (_).

Question G

PSMANAGER reports “Print Server Already Exists”, “Printer Already Exists”, or “Print Queue Already Exists” after specifying the print server name, or the print queue name in Auto Setup.

Possible Explanation

A same print server name or queue names exists in the specific NetWare file server as the one you specified in the **Auto Setup** dialogue box.

Solution

Specify a new print server name or queue name in the **Auto Setup**.

Additional Installation Instructions

A. EPSON Stylus Color series (inkjet printers)

When using the print server with an EPSON Stylus Color series printer under Windows 95 system through the Network Print Port, you might encounter the problem as follows.

"I connected a print server to my EPSON Stylus Color printer and followed every steps in the Chapter 4. No any problem happens during the installation. Besides, I have completely installed the printer driver specific to my EPSON Stylus Color printer. When I printed the test page, there was nothing come out from my printer. Printing from any application had the same result. However, when I changed the EPSON Stylus Color printer to a HP LaserJet printer or a dot-matrix printer, there was no any problem happened. This situation confused me ! What should I do ? "

Explanation:

When installing the printer driver of any EPSON Stylus Color series printer, there is an EPSON proprietary Spool Manager will also be installed into your Windows 95 computer. When you print jobs to this printer, this Spool Manager will be automatically launched and intercept the standard Windows 95 printing control flow. As a result, this Spool Manager overrides

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the print server's underlying printing control component, which is implemented as a standard Windows Print Monitor, and prevents the print jobs from being serviced by the print server on the network. Therefore, this is a special problem caused by vendor's proprietary printer software.

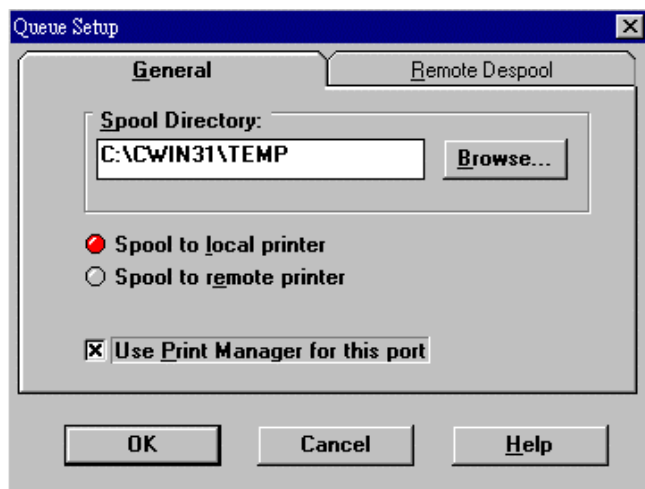
Solution:

According to our intensive test, this problem happens only while printing to an EPSON Stylus Color series printer through the Network Print Port under Windows 95 systems. File server based printing, namely printing through NetWare or NT (from Windows 95 computers) causes no such a problem.

If it is the case, please follow the instructions below to solve this problem.

Procedures:

1. Follow the instructions in Chapter 4 to complete the installation. ***Don't change the default "Port Name" when using with an EPSON Stylus Color printer.***
2. Select and run **"Spool Manager"** from the EPSON program group and double-click your EPSON Stylus Color printer.
3. Check the **"Use Printer Manager for This Port"** option, as shown in the following picture, and click **"OK"**.



4. Done.

B. Panasonic KX-P6100/6300/6500

If you are using a Panasonic KX-P6100/6300/6500 laser printer with the print server through the Network Print Port under Windows 95, please redirect the printer named "***Panasonic KX-P6100 PCL***" or "***Panasonic KX-P6300 PCL***", or "***Panasonic KX-P6500 PCL***" to the print server through the Network Print Port.

DO NOT redirect the printer named "Panasonic KX-P6100 GDI", "Panasonic KX-P6300 GDI", or "Panasonic KX-P6500 GDI" to the print server.