



Multi-Port Fast Ethernet Print Server

FPS-3300

User's Manual

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Revision

User's Manual for PLANET Multi-Port Fast Ethernet Print Server

Model: FPS-3300

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Part No. EM-FPS3300

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1. Introduction

Equipped with the Parallel printing interfaces, the FPS-3300 makes your printer sharing available in most popular network environments.

With the embedded web server, the FPS-3300 is configurable through your network PC's Web Browser. Moreover, PLANET also provides a management utility for Microsoft Windows systems. With various network printing methods including Windows Peer-to-Peer printing, NetWare and Windows server based queues printing, LPR printing, Internet Printing Protocol (IPP) and AppleTalk for Macintosh, FPS-3300 can be applied to any network easily.

With Auto-MDI/MDI-X function, users don't need to concern about the cable type while connecting to different LAN devices. It is capable of detecting the signal and changes its transfer/receive order on the cable automatically. Moreover, FPS-3300 LAN port can auto-sense and adjust the current network speed, thus eliminates the requirements for manually switching.

1.1 Product Overview

The external print servers enhance capability by letting you place your printers at convenient locations directly on the Ethernet network, and by increasing network printer performance and management. Please note that the print server does not support printing with host-based printers, e.g. CAPT, GDI, PPA.

1.2 Packet Content

- 1 x FPS-3300
- 1 x Quick Installation Guide
- 1 x Drivers and User's Manual CD
- 1 x Power Adapter

1.3 Product Features

Support for most popular NOS

Supports Windows 98/2000/Me/NT/XP/Server 2003, Linux, Unix, Novell and Mac OS

Auto-Sensing

Supports 10/100Mbps Auto-Nway, Automatically Negotiates optimal mode, 10/20Mbps, 100/200Mbps Ethernet 802.2, Ethernet 802.3, SNAP Auto-Detect

Auto-MDI/MDI-X

Auto detects the connected cable type while connecting to different LAN devices. It is capable of detecting the signal and changes its transfer/receive order on the cable automatically.

Compatible with popular network utility

Unix, TCP/IP: LPD, TFTP
Windows: LPR, PTP driver, IPP, SMB (NetBEUI)
Apple: Ether Talk Chooser
Novell: IPX/SPX, TCP/IP (5.x and later)

Easy Management

Intuitive management utility provided for Windows 98/2000/Me/NT/XP and Server 2003
Web-Base Management
HP Web JetAdmin

1.4 LED Indicators

LED	State	Indication
ACT	Blinking for POST (Green)	When power switched on, the Status indicator will flash five times, and then on.
Link	On (Green)	LAN Port has a valid network connection.
Power	On (Red)	Print server's power is on.

Before installation, you should prepare the following items:

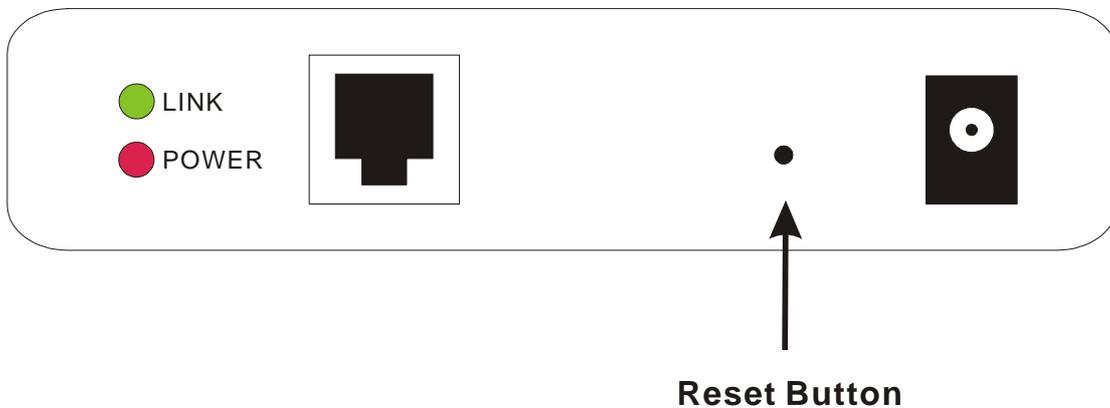
- One Windows-based computer with print server setup CD
- One printer
- One printer cable

1.5 Hardware Installation

1. Turn off the printer's power.
2. Connect the print server to your printer with printer cable.
3. Turn the printer's power on.
4. Plug the AC power adapter into the power connector on the print server.
5. Wait 10 seconds until all the LEDs have stopped flashing.

Note:

The **ACT** LED should be flash **five** times when POST. If not, please contact your local dealer for repair or replacement.



2. Print Server Installation

2.1 Preparation

To meet users' network printing needs in today's heterogeneous and multiple protocol networking environments, the print server supports industrial standard protocols, including TCP/IP, IPX/SPX, NetBEUI and AppleTalk. This means that the print server supports the most popular network operating systems today, including NetWare, Windows 95/98/Me/NT/2000/XP/2003, UNIX systems and Macintosh computer. As such, there might be several ways to deploy the print server on your network.

Supported Networks

Print server supports a variety of network protocols, including TCP/IP, IPX/SPX, NetBEUI and AppleTalk. In addition, we provide software for network configuration on the following networks:

- Novell NetWare 3.12, 4.x, 5.x (Bindery and NDS)
- Microsoft Windows 95/98/Me
- Microsoft Windows NT/2000/XP/2003
- Apple EtherTalk
- UNIX /Linux system
- Internet (via Internet Printer Connection software)

2.2 Configuration Solution Table

Setup Operating System	Function	Remarks
PSAdmin utility / Setup Wizard		
Windows 95/98/Me Windows NT/2000/XP/2003	Install a single network on a peer-to-peer or client-server network	Easy printer installation runs from print server setup CD
Embedded Web server		
Windows 95/98/Me Windows NT/2000/XP/2003 Mac OS, Linux...	Remote setup print server from private LAN	Follow standard browse, e.g. IE or Netscape
HP Web JetAdmin		
Windows NT/2000/XP/2003	Remote management of print server, include alert and consumables	Print server solution for continual management of multiple printers- anywhere on your LAN
Internet Printing Protocol		
Windows NT/2000/XP/2003	Printing via the internet to Internet Printing Protocol- enabled print server	Allows saving distribution of HQ hardcopy document over Internet, replacing fax, mail

Comment

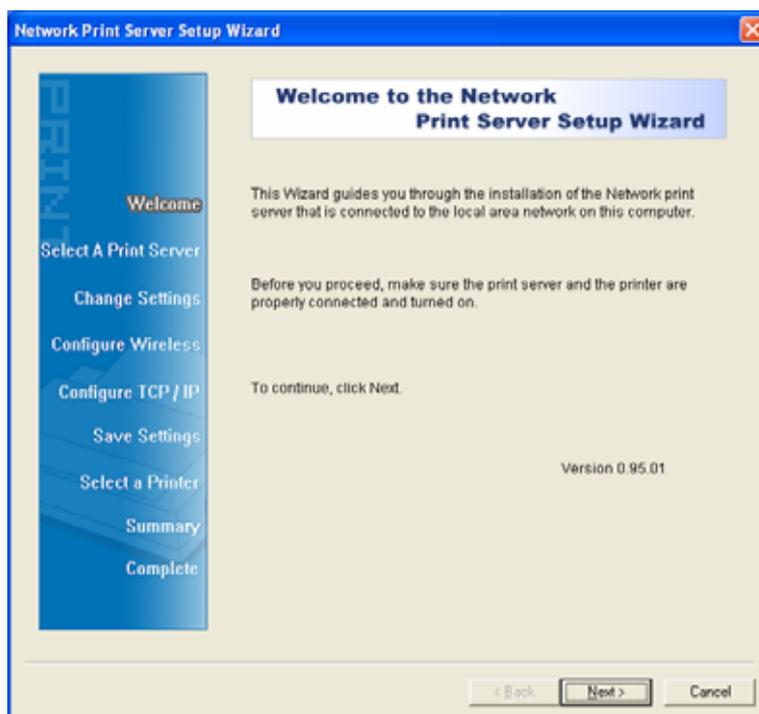
Configuration solution Table has many installations way to setup Windows 95/98/Me, Windows NT/2000/XP/2003, NetWare, UNIX / Linux system and Mac computer. Firstly, we introduce PSAdmin utility, HP Web JetAdmin program and Internet Printing Protocol solution. Then we will discuss Embedded Web Server Installation with print server.

3. Software Installation

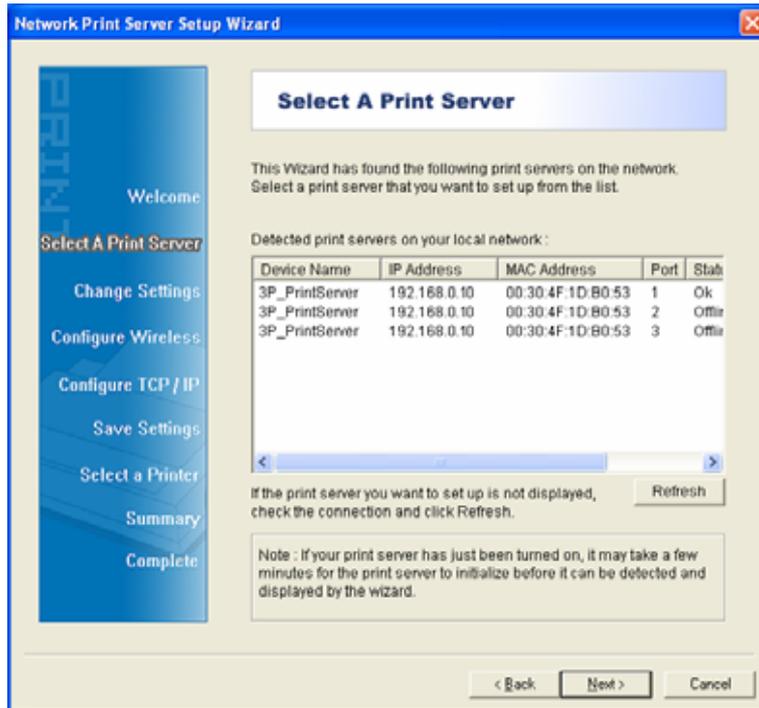
3.1 Quick Installation

For the client PCs, you can run this program to add the print server to client PCs with most convenient.

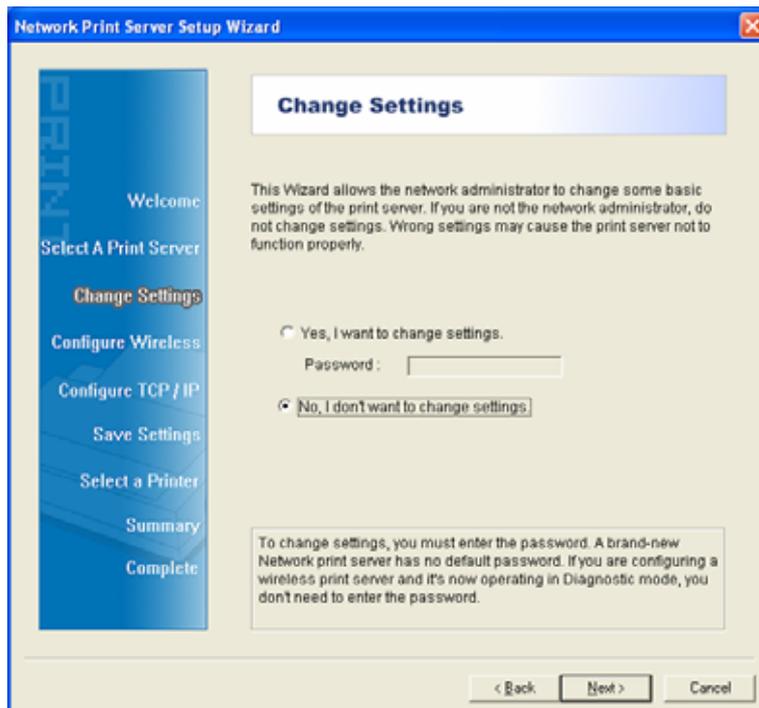
1. Insert Drivers and User's Manual CD into the CD-ROM drive to initiate the autorun program. Once completed a menu screen will appear.
2. Click on "Install Utility" hyper link to initiate the installation. Or you can click the "Start" button and choose "Run". (Suppose "E" is your CD-ROM drive). When the dialog box appears, enter "E:\Utility\Setup.exe" and press enter key. You will see the dialog box as below. Please click "Next" to continue.



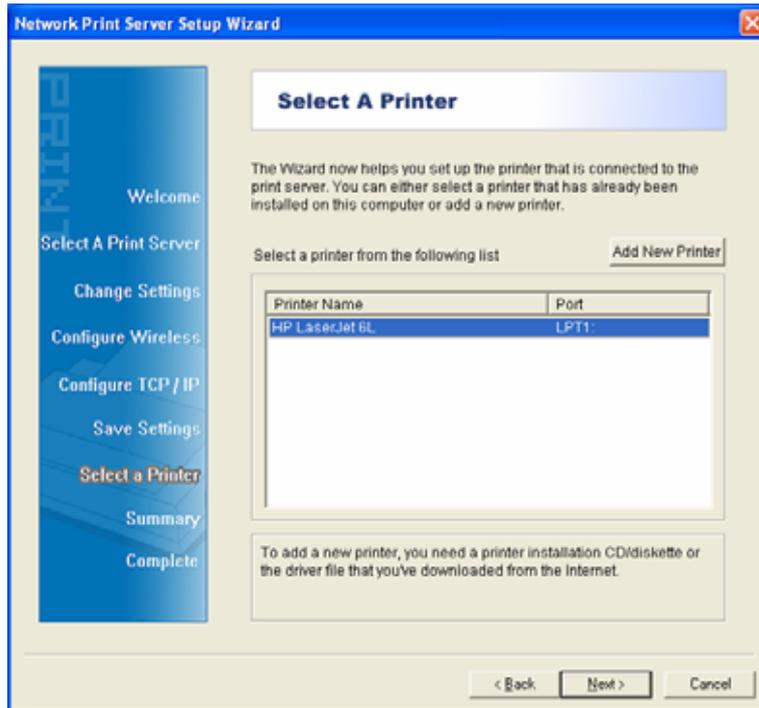
3. In Select A Print Server screen, please select the print server and its port number that your printer connected and click "Next". If you can not find your print server in the list, please press "Refresh" button to scan you network again.



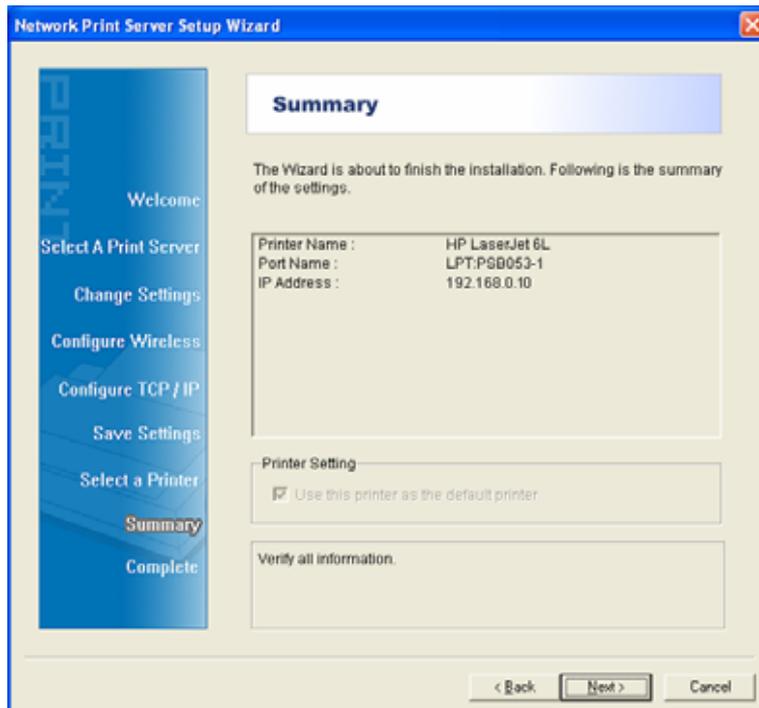
4. In Change Settings screen, please select “No, ” and press “Next” to continue.



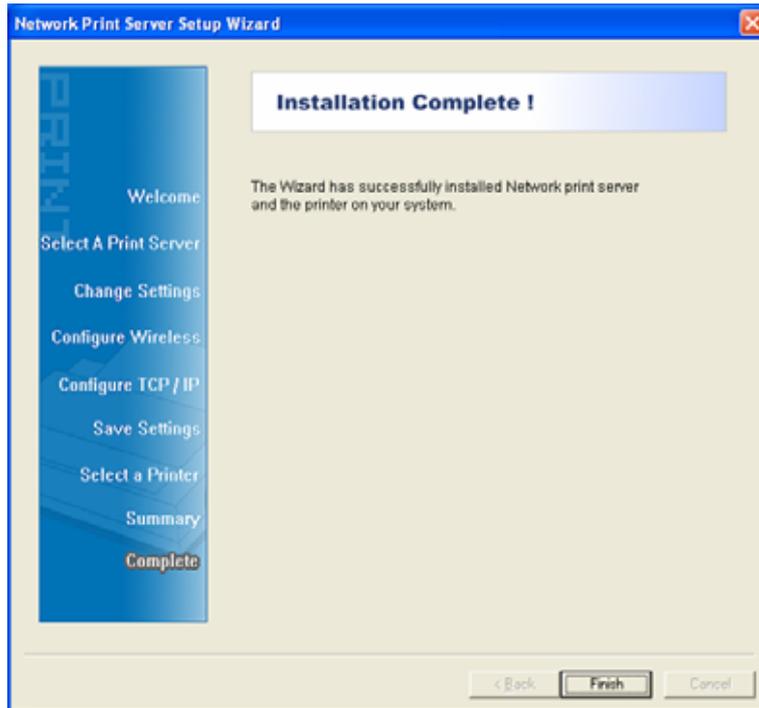
5. In the Select A Printer screen, please select the printer that is connected on the print server port which you selected in step 4 from the list, click “Next”.



6. Please check the information of Summary screen. click “Next” to continue.



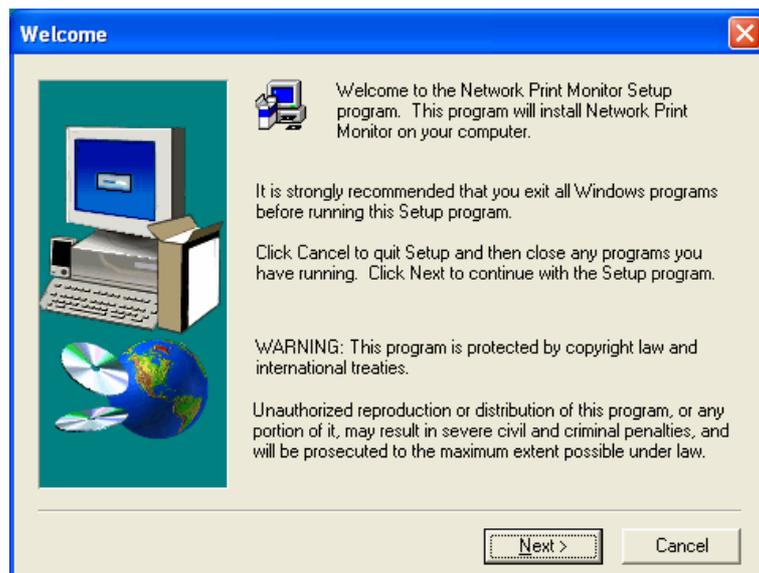
7. Please click “Finish” to complete the print server installation.



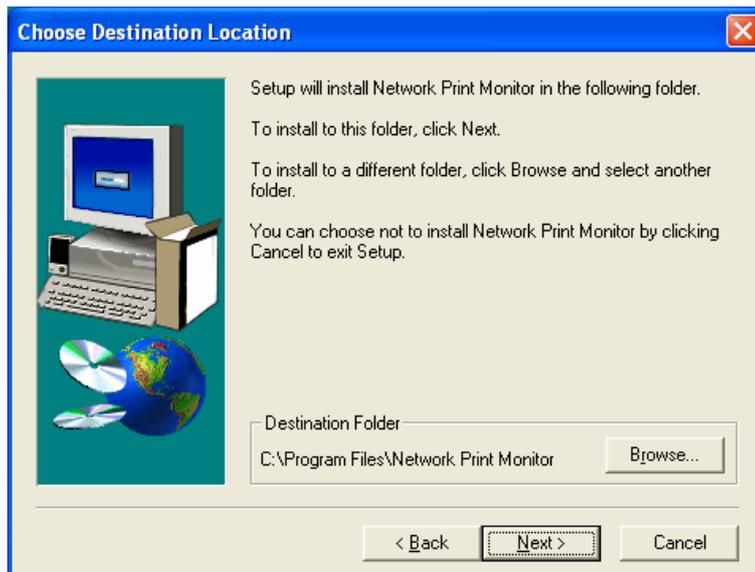
3.2 Configuration Utility Installation

For the client PCs, you can run this program to add the print server to client PCs with most convenient.

1. Insert Drivers and User's Manual CD into the CD-ROM drive to initiate the autorun program. Once completed a menu screen will appear.
2. Click on "Configuration Utility & Driver" hyper link to initiate the installation. Or you can click the "Start" button and choose "Run". (Suppose "E" is your CD-ROM drive). When the dialog box appears, enter "E:\PSAdmin\Setup.exe" and press enter key. You will see the dialog box as below. Please click "Next" to continue.



3. Specify the destination folder where the utility will be installed. Click "Next".



4. When installation complete, please click "Finish" to complete.



3.2 Uninstalling the PSAdmin on Windows PC

To help users easily remove all installed software components of the PSAdmin from their Windows PC, and the PSAdmin software comes with un-installation wizard program that can automatically remove the software components from their Windows PC systems in minutes. Please follow the directions listed below to proceed with the un-installation procedure.

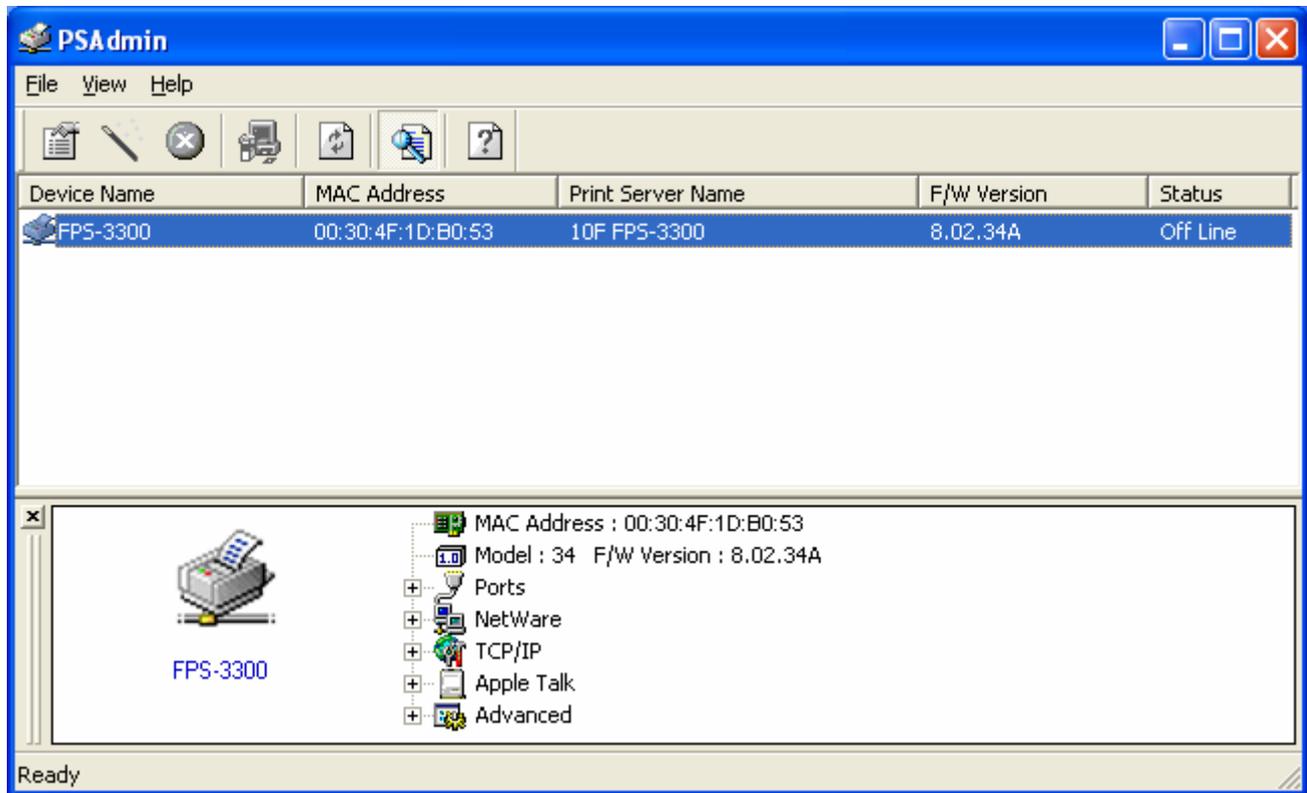
After the PSAdmin is removed, the print server is no longer accessible via the PSAdmin. You have to re-install the PSAdmin on your system in order to access the print server again.

Procedure:

1. Click **Start**, point to **Settings**, and select **Control Panel**.
2. Double click the **Add/Remove Programs** icon.
3. Click **Change or Remove Programs** tab.
4. Select **Network Print Monitor for Windows 2000/XP** and click **Change/Remove** button.
5. The un-installation wizard program will be launched.
6. Follow the directions on the screen to complete the un-installation procedure.

4. Configure with PSAdmin

FPS-3300 has provide a Windows base utility for user to configure. After the configuration utility is successfully installed, starts PSAdmin utility from your Windows Start menu: **Start -> All Programs -> PSAdmin**. The screen will then appear as follow picture.



All print server(s) feature Novell NetWare function on the LAN will be displayed along with their respective device name, MAC Address, print server name, firmware version, and status. The terms are defined as follows:

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

MAC Address: The Ethernet address of the print server.

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

Version: The firmware version of the print server.

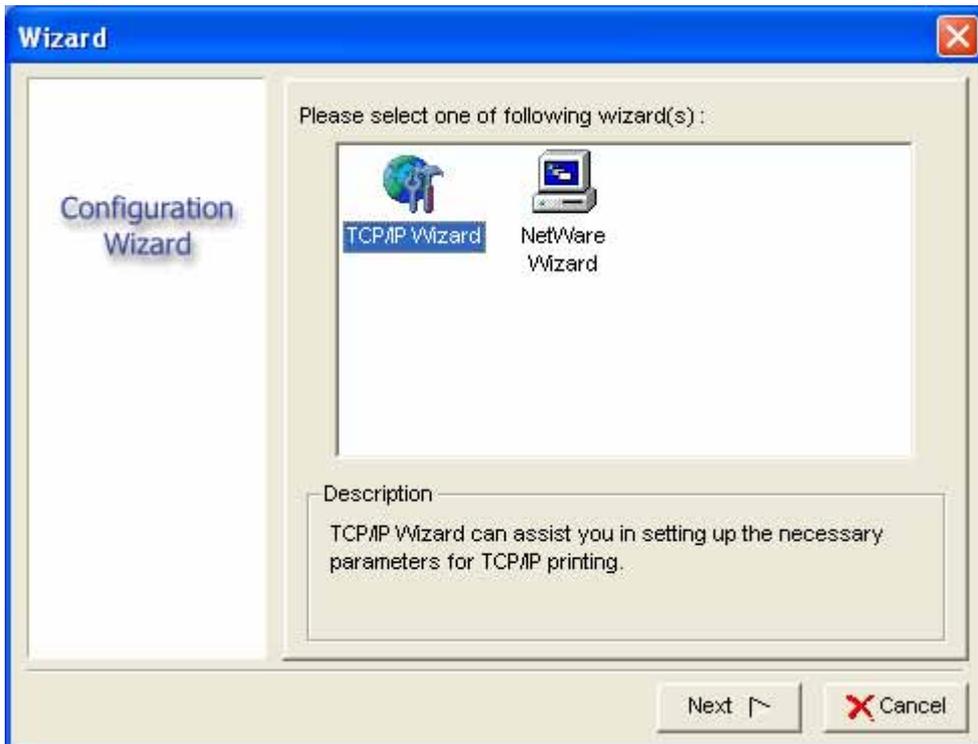
Status: To come up a Printer's status presently.

4.1 Wizard

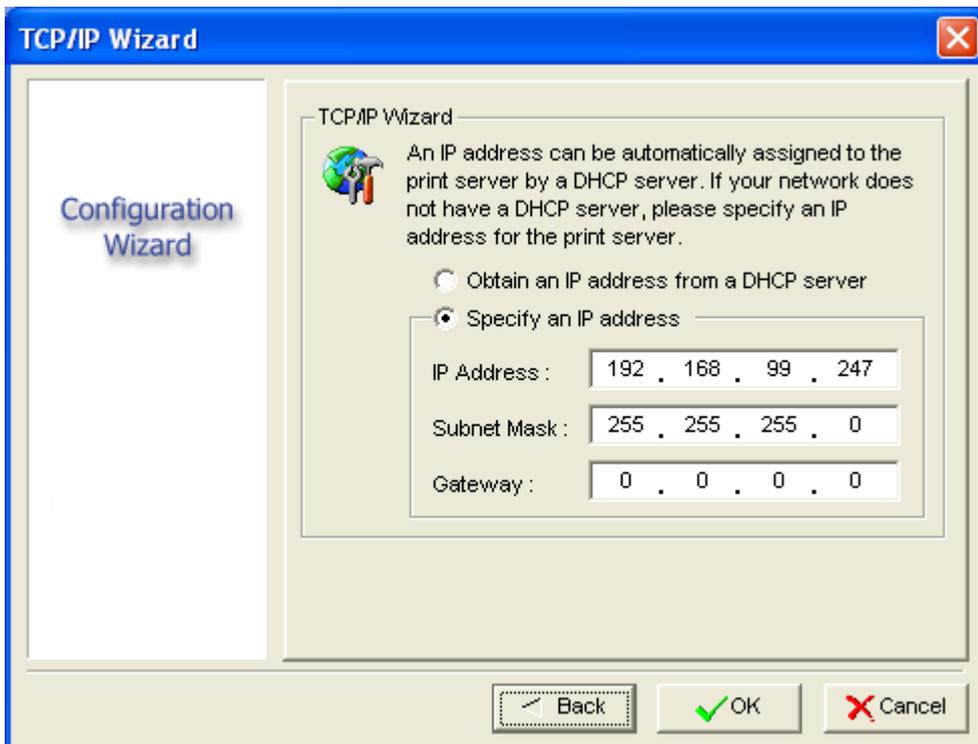
FPS-3300 has provided two wizards for user to configure the print server step by step. When click the icon , you will see Configuration Wizard screen.

4.1.1 TCP/IP Wizard

1. Select **TCP/IP Wizard** in **Configuration Wizard** screen and click “Next”.



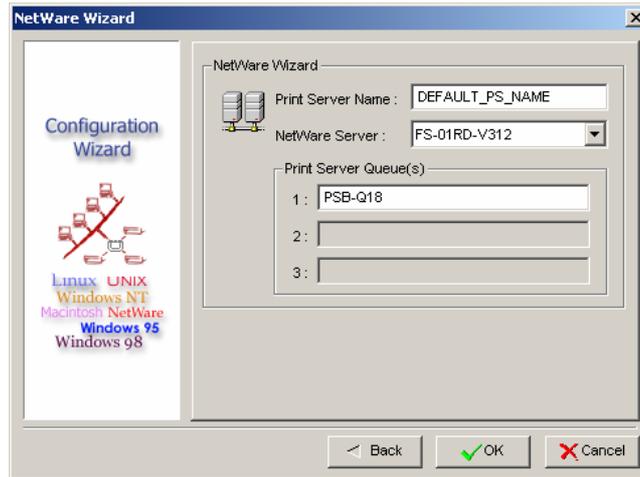
2. Select “**Obtain an IP address from DHCP server**”. If there is a DHCP server on your network. This option allows the print server to obtain IP-related settings automatically from your DHCP server. This setting, by default, is disabled. If you would like to manually specify an IP address to the device, please skip to the following step.
3. In the **IP Address** option, type an IP address for the print server. The IP address must meet the IP addressing requirements of the network segment.



4. In the **Subnet Mask** option, type the Subnet Mask your LAN or network segment is currently configured to use.
5. *(Optional)* In the **Gateway** field, type the IP address of gateway.
6. When done, click **OK** button. The program will save the above settings into the print server.

4.1.2 NetWare Wizard

1. Log into your NetWare file server as a Supervisor (Admin.) or equivalent.
2. Select **TCP/IP Wizard** in **Configuration Wizard** screen and click "Next".



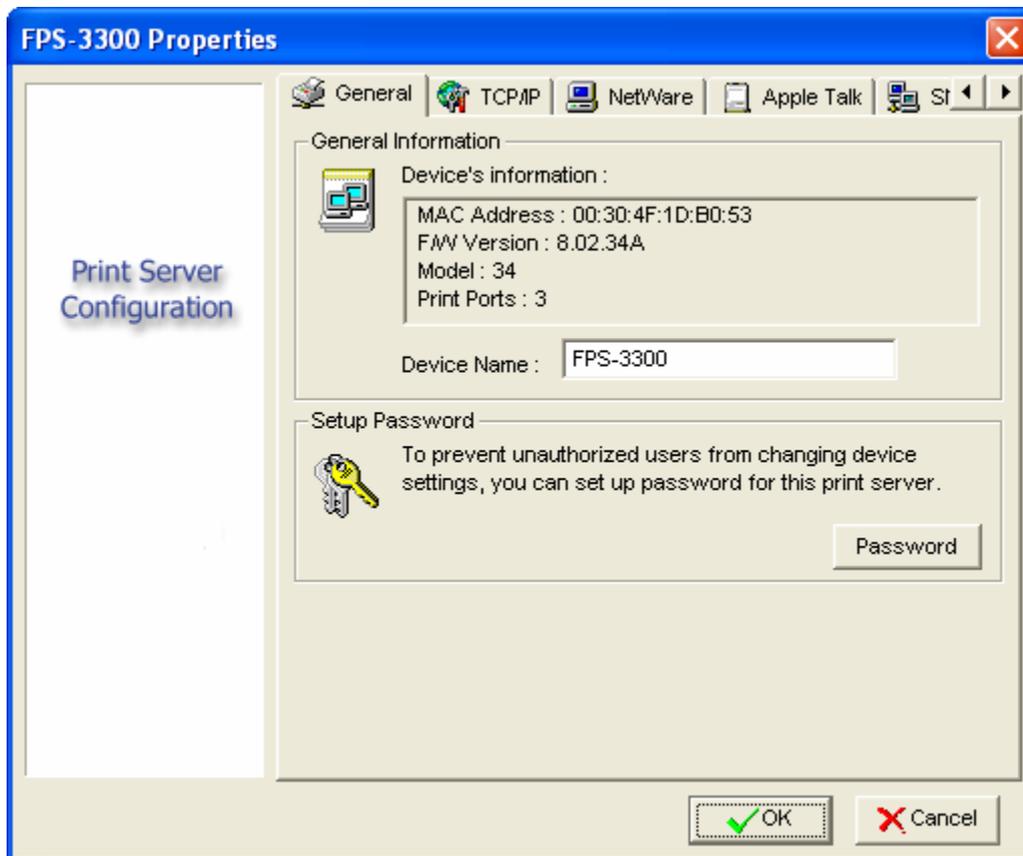
3. Select the NetWare File Server to which the print server device will be attached.
4. Type in a Print server.
5. Type in a Print Queue Names.

Note: Each print queue corresponds to each print port of the print server.

6. Click "**OK**".
7. From your NetWare client computer, such as Windows 95/98/Me, create a printer that is connected (redirected) to one of the NetWare print queues serviced by the print server.

4.2 Print Server Properties

4.2.1 General



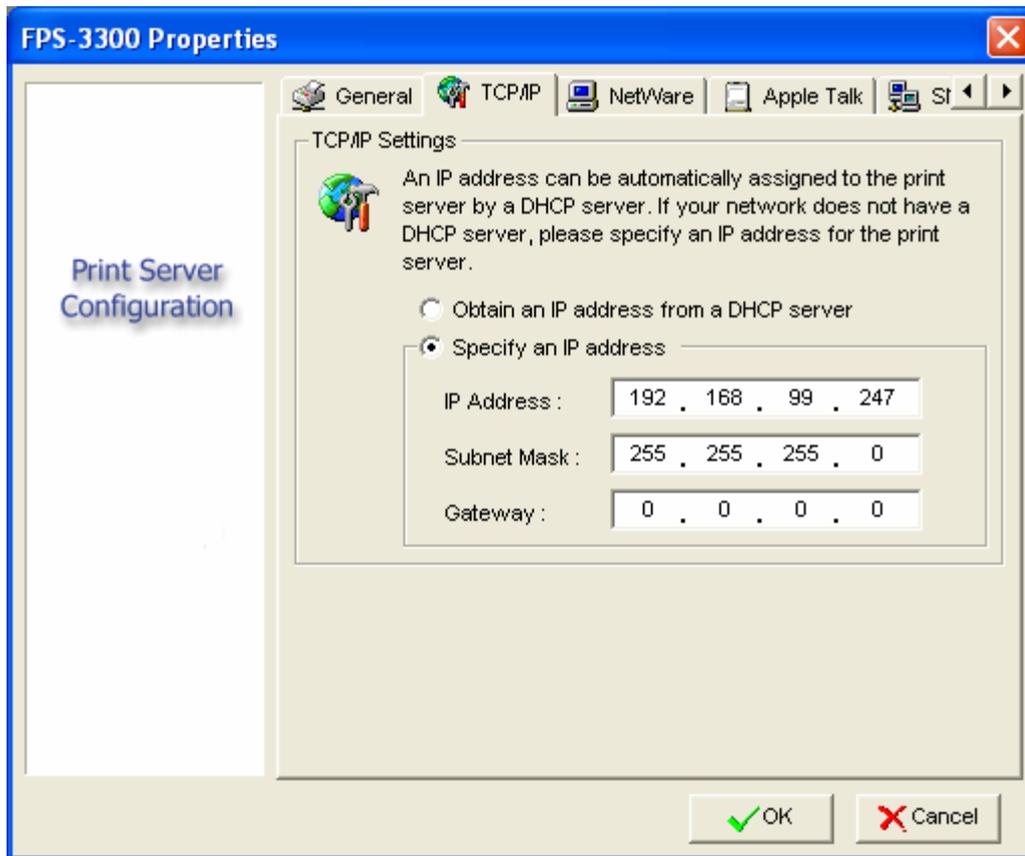
In this option, you can modify the Device Name and change the password as you want. When you press the Password button, you will see a dialog box as below for you to change password. After the password changed, please write down the password in a note. That can prevent the print server has to process the hardware default reset when you forget the password.



After Password assigned, FPS-3300 will start asking you to enter the password in next time you configure FPS-3300.



4.2.2 TCP/IP

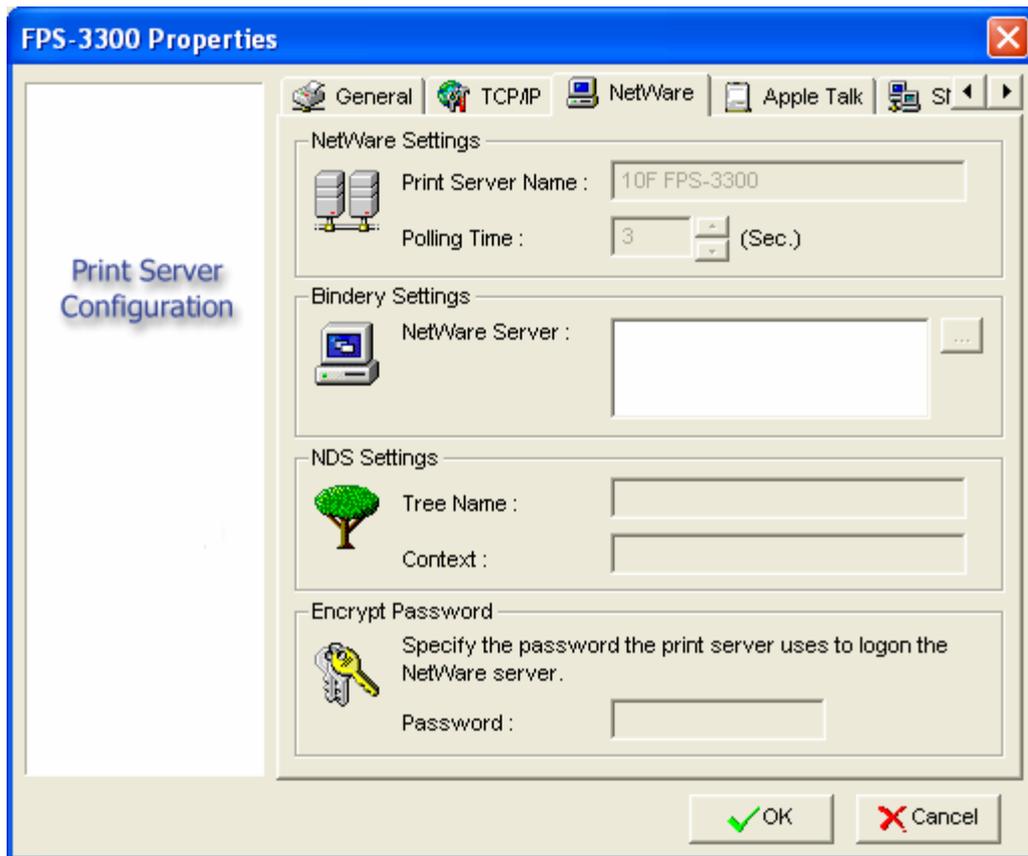


If there is a DHCP Server in your network, you may select “Obtain an IP address from a DHCP server” to let this FPS-3300 get the IP address from DHCP Server. If no, please select “Specify an IP address” and enter the **IP address**, **Subnet Mask** and **Gateway** settings.

4.2.3 Netware

Before Netware configuration begin. You may login to your Netware Server with below steps:

1. 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).
2. Log into your NetWare file server as a Supervisor (Admin.) or equivalent. From your Windows 95/98/Me, run PSAdmin.



Netware Settings: Please type in the Print server that created during PCONSOLE. And set the **Polling Time** interval of the print server for waiting printing jobs on the NetWare server. Default is 3 seconds.

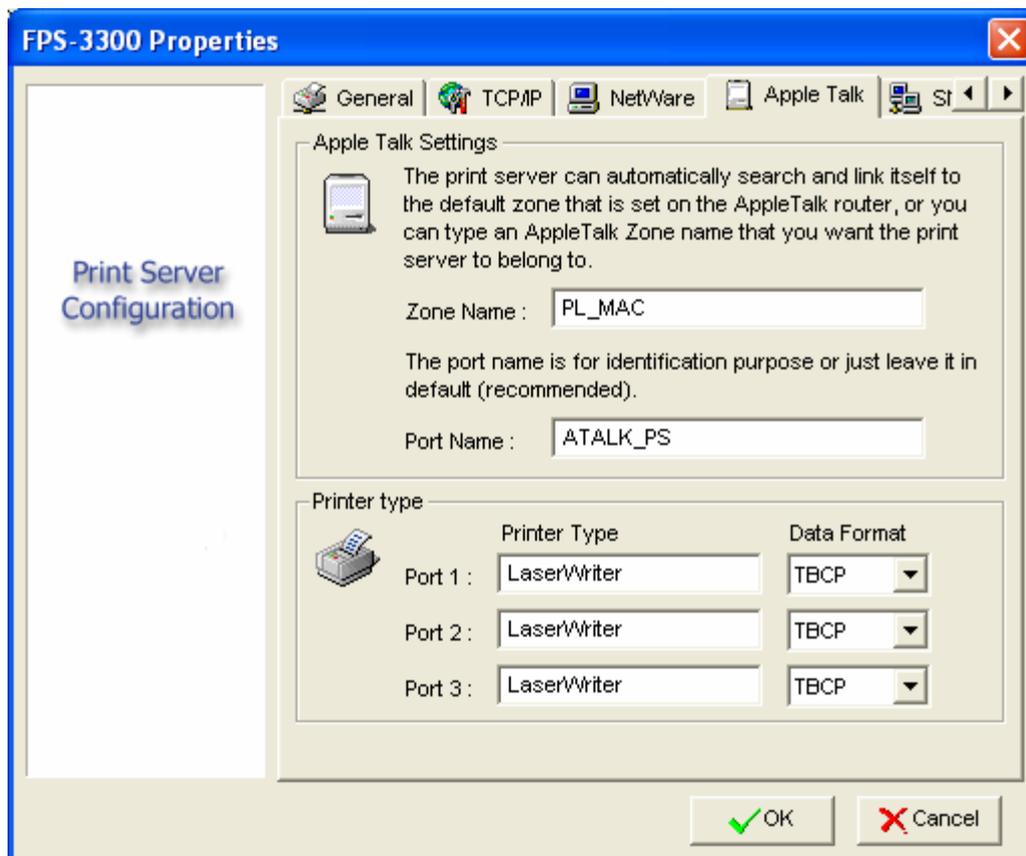
Bindery Settings: Select NetWare file server(s) that print server can do Bindery mode.

NDS Settings: Select NetWare file server(s), NetWare 4.x or later that print server can do NDS mode.

Encrypt Password: If you have set a password in Netware Server for user login. Please enter the password in this field.

Click **OK**. From your NetWare client computer, such as Windows 95/98/Me, create a printer that is connected (redirected) to one of the NetWare print queues serviced by the print server.

4.2.4 Apple Talk



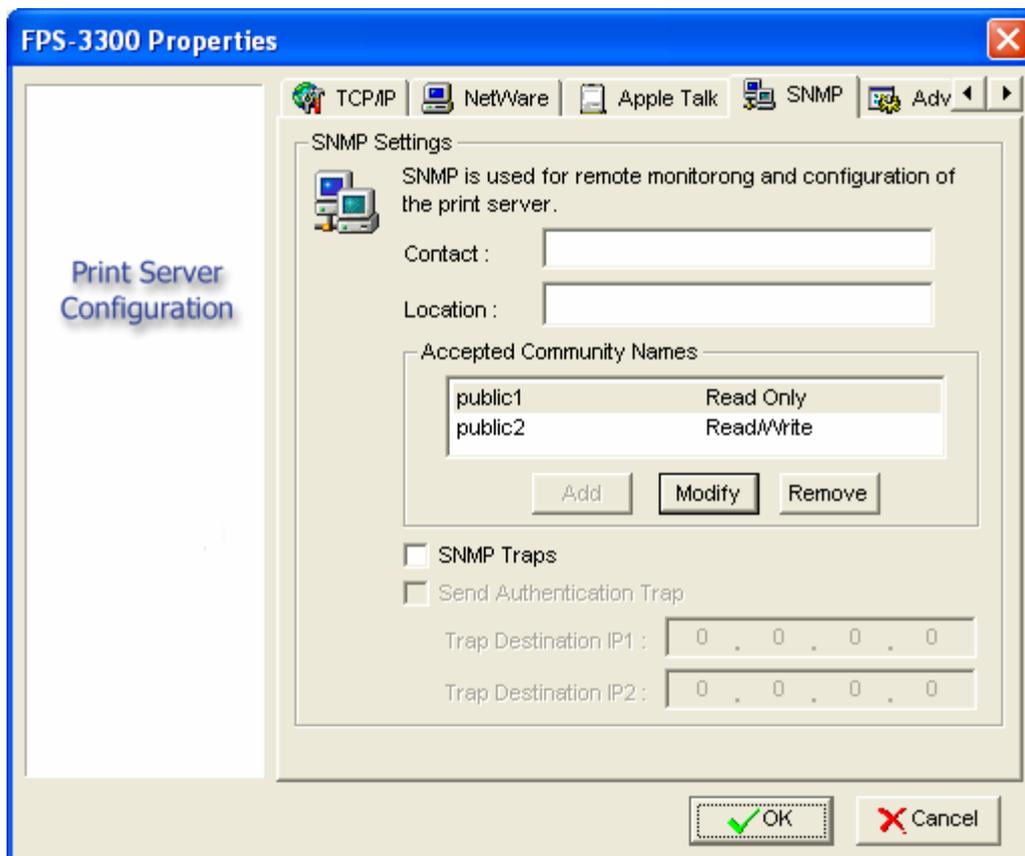
Select "Apple Talk" option and the AppleTalk configuration window will pop-up.

AppleTalk is a data communication protocol often used by Macintoshes. The print server can use these parameters to join the AppleTalk network and share the printer to other AppleTalk workstations. FPS-3300 will auto-search the AppleTalk network and join it.

Apple Talk Settings: Print server will join to the AppleTalk network automatically. Please make sure the **Zone Name** and **Port Name** which the print server gotten is correct.

Printer Type: The type of printer attached to each printer port. You can get the **Printer Type** and the **Data Format** from the manufacturer of the printer.

4.2.5 SNMP



This print server has support SNMP protocol for users user SNMP management tool to monitor from a remote site. You can Enable this protocol and set the SNMP System Contact and SNMP System Location in this page.

SNMP System Contact: Text Field - Name of the contact person.

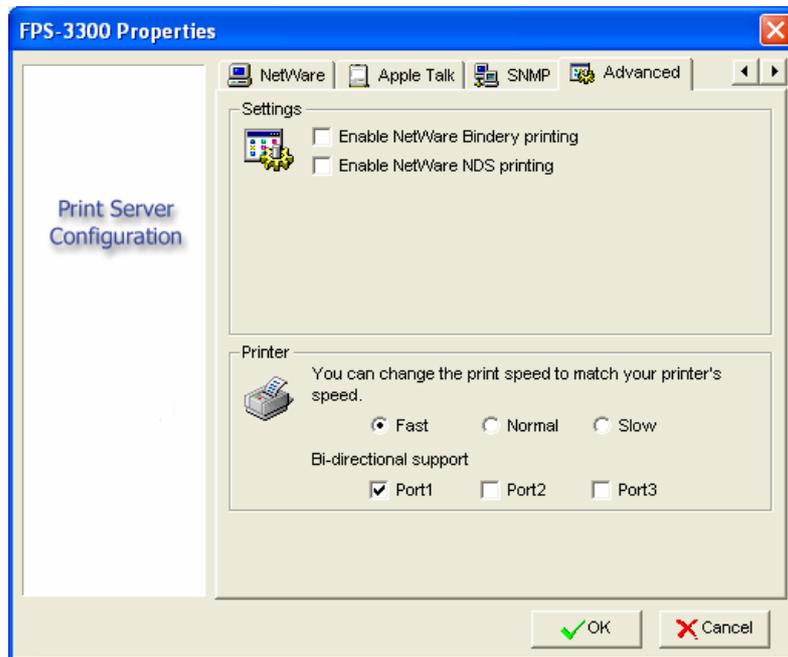
SNMP System Location: Text Field - Location of the contact person.

Accepted Community Names: You can Add/Modify/Remove the community in this option.

SNMP Traps: Enable/Disable this print server to send the SNMP Traps. Default is disable (unchecked).

Send Authentication Trap: When the SNMP Traps is enabled, you can define the destination of the traps.

4.2.6 Advanced



In this option, you can make some advance settings to your FPS-3300.

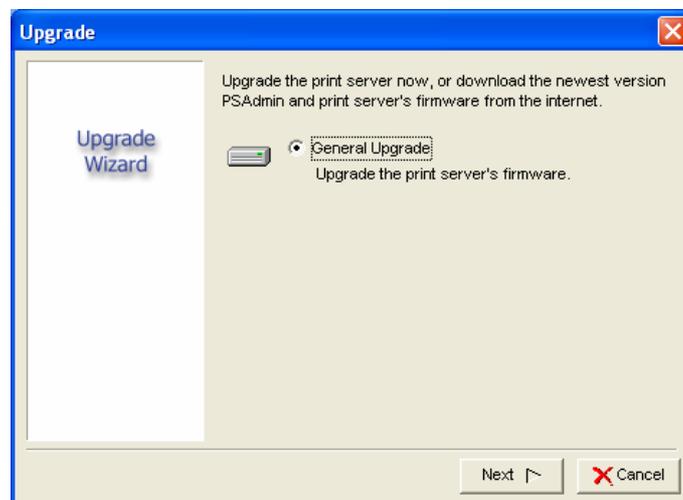
Settings: You can Enable/Disable the Netware Bindery and NDS printing. In default, the printing methods are disable.

Printer: Due to the printers are work with different data transfer speed. If you are work with a old printer (which is not support DMA mode), you may set the printer speed to Normal or Slow. When the printer can not work properly. , you can also try to disable the Bi-Directional support on each port.

4.3 Upgrade

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

1. Click Upgrade button just like a picture  , then you will see the upgrade screen.



2. Make sure that the firmware is located in the same directory as PSAdmin (C:\Program File\Network Print Monitor). Then click “Next” to upgrade.

4.4 Reset

1. Click **Reset** button <  > in PSAdmin.
2. Reset allows the user to reset the print server device in order to establish a new connection or for new settings to take effect.

4.5 Refresh

When you can not find the print server in device list of PSAdmin, please click **Refresh** button <  > to searches the network for all attached print server(s).

5. HP Web JetAdmin

5.1 HP Web JetAdmin Overview

HP Web JetAdmin allows you to use a Web browser to revise, view, manage and diagnose devices connected to the print server or any standard printer MIB devices.

For more information about a procedure or Windows in the HP Web JetAdmin software, see about HP's relation document.

5.2 System Requirements

HP Web JetAdmin software runs on Microsoft Windows NT, HP-UX, Solaris, Red Hat Linux and SuSE Linux system. For information on supported operating systems and browser versions, we recommend IE or Netscape version 4 or higher. Please access HP Customer Care Online at <http://www.hp.com/go/webjetadmin>.

Note: When installed on a supported host server, HP Web JetAdmin can be accessed from any client through a supported Web browser by browsing to the HP Web JetAdmin host.

5.3 Installing HP Web JetAdmin

Before installing the HP Web JetAdmin software, you must have domain administrator or root privileges:

Download the installation files from HP Customer Care Online at <http://www.hp.com/go/webjetadmin/>. Follow the instructions on the screen to install the HP Web JetAdmin software.

Note: Installation instructions are also contained in the HP Web JetAdmin install file.

5.4 Confirming Installation and Supply Access

- Confirming that the HP Web JetAdmin software is correctly installed by navigating to it with your browser as shown in the following. For example, [http:// server domain port/](http://server.domain:port/) where server domain is the host name of your web server and port is the port number assigned during installation.

Supply users access to HP Web JetAdmin software by adding a link to your web server's home page that is addressed to HP Web JetAdmin's URL. For example:

<http://server.domain:port/>

5.5 Configuring and Modifying a Device

Using your browser, navigate to HP Web JetAdmin's URL. For example: <http://server.domain:port/>

Follow the instructions on the appropriate home page to configure or modify your printer.

Note: You can also substitute the server domain with TCP/IP address.

5.6 Removing HP Web JetAdmin Utility

To remove HP Web JetAdmin software from your web server, use the uninstall program provided with the software package.

6. Configuration with Web Browser

The Print Server contains an embedded web server that can be accessed through a supported web browser on a LAN, for example, IE 4.0, Netscape 4.0 or above is recommended.

The embedded web server provides access to configuration and management pages for the print server and the connected peripheral device.

Before the configuration, please make sure your PC can ping the print server and receive a response.

Enter the print server's IP address in the Address field of your Web browser. Press Enter. Then the print server page will appear. From here you can configure all print server settings.

Please follow this information in the status menu of the print server:

6.1 Status

When you login to FPS-3300, you will see the status web page firstly. The are System. Printer and TCP/IP option in the default display. You may click the "More" button to expand the option bar.



The screenshot shows the web interface for the Planet Multi-Port Fast Ethernet Print Server. At the top, there is a header with the Planet logo and the product name. Below the header is a navigation menu with tabs for Status, Setup, Misc., and Restart. The Status tab is selected, and a sub-menu shows 'System' (highlighted in red), 'Printer', and 'TCP/IP', with a 'more' button to the right. A green arrow icon points to the text: 'This page displays the general system information of the print server.' Below this is a 'System Information' section with the following details:

Print Server Name:	FPS-3300
System Contact:	
System Location:	
System Up Time:	0:03:18
Firmware Version:	8.02.34A (2006/02/15 14:02:40)
MAC Address:	00-40-FF-1D-B0-53
E-Mail Alert:	Disabled

Below the system information is a 'Print Jobs' section with a table header:

Job	User	Elapsed Time	Protocol	Port	Status	Bytes Printed
-----	------	--------------	----------	------	--------	---------------

At the bottom right of the Print Jobs section, there is a link: [View Job Log](#)

6.1.1 System

PLANET Networking & Communication **Multi-Port Fast Ethernet Print Server**

[Status](#)
[Setup](#)
[Misc.](#)
[Restart](#)

[System](#)
[Printer](#)
[TCP/IP](#)
[more](#)

This page displays the general system information of the print server.

System Information

Print Server Name: FPS-3300
 System Contact:
 System Location:
 System Up Time: 0:03:18
 Firmware Version: 8.02.34A (2006/02/15 14:02:40)
 MAC Address: 00-40-FF-1D-B0-53
 E-Mail Alert: Disabled

Print Jobs

Job	User	Elapsed Time	Protocol	Port	Status	Bytes Printed
View Job Log						

Function	Description																																			
Print Server Name	This option allows you to view device name of the print server. To correct the print server's device name.																																			
System Contact	This option allows you to view contact name of the print server. To check the print server's contact name who in charge of this device.																																			
System Location	This option allows you to view Location name of the print server. To confirm the print server's location name where the print server is located in the office's LAN.																																			
System Up Time	This option allows you to view uptime of the print server. When you start the print server, it will compute the print server from start time to power off time.																																			
Firmware Version	This option allows you to view firmware version of the print server. To verify the print server's firmware version is newer in this time.																																			
MAC Address	This option allows you to view Node ID of the print server. The Node ID is unique from any print server.																																			
Email Alert	This option allows you to view the status of Email Alert feature.																																			
View Print Jobs	This option allows you to view all the print jobs sent by any network user. When you click the hyper link, you will see the dialog box as below. <div style="border: 1px solid gray; padding: 5px; margin-top: 10px;"> <p style="text-align: center;"><input type="button" value="Refresh"/></p> <table border="1"> <thead> <tr> <th colspan="7">Print Jobs</th> </tr> <tr> <th>Job</th> <th>User</th> <th>Elapsed Time</th> <th>Protocol</th> <th>Port</th> <th>Status</th> <th>Bytes Printed</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>EWHE-C</td> <td>0min 2sec</td> <td>IPX/NetBEUI</td> <td>1</td> <td>Completed</td> <td>17614</td> </tr> <tr> <td>2</td> <td>Administrator</td> <td>0min 0sec</td> <td>LPR</td> <td>1</td> <td>Completed</td> <td>118964</td> </tr> <tr> <td>1</td> <td>EWHE-C</td> <td>0min 2sec</td> <td>UDP</td> <td>1</td> <td>Completed</td> <td>18443</td> </tr> </tbody> </table> <p style="text-align: center;"><input type="button" value="Close"/></p> </div>	Print Jobs							Job	User	Elapsed Time	Protocol	Port	Status	Bytes Printed	3	EWHE-C	0min 2sec	IPX/NetBEUI	1	Completed	17614	2	Administrator	0min 0sec	LPR	1	Completed	118964	1	EWHE-C	0min 2sec	UDP	1	Completed	18443
Print Jobs																																				
Job	User	Elapsed Time	Protocol	Port	Status	Bytes Printed																														
3	EWHE-C	0min 2sec	IPX/NetBEUI	1	Completed	17614																														
2	Administrator	0min 0sec	LPR	1	Completed	118964																														
1	EWHE-C	0min 2sec	UDP	1	Completed	18443																														

6.1.2 Printer

PLANET Networking & Communication **Multi-Port Fast Ethernet Print Server**

System **Printer** TCP/IP NetWare AppleTalk SNMP SMB [back](#)

This page displays the information of the printer which is currently connected to the print server.
Note: If your printer does not support bi-directional function, some information may not be correctly displayed correctly.

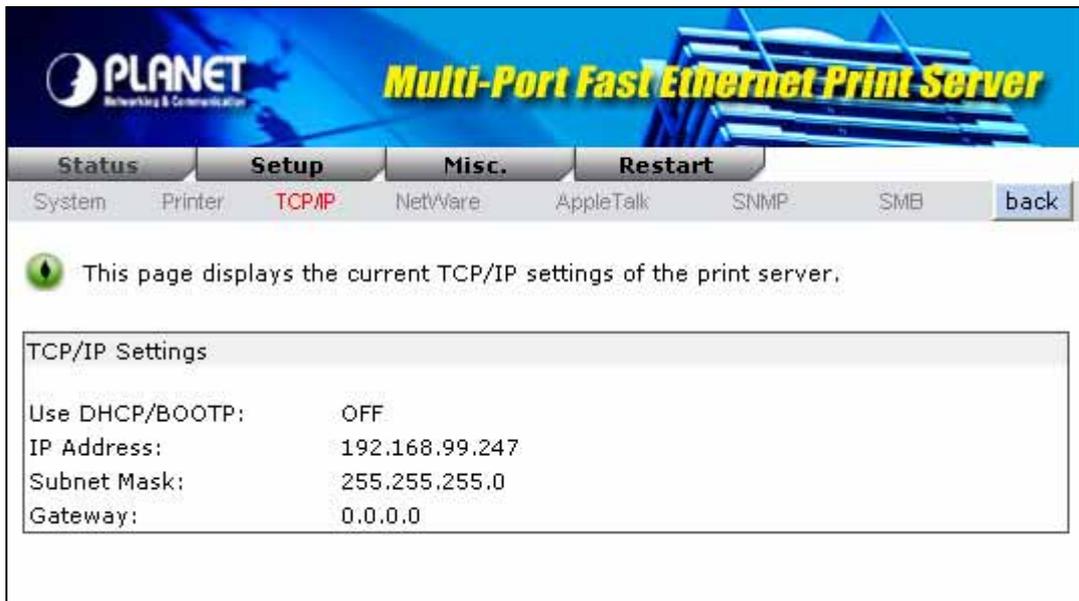
Printer 1 Information	
Manufacturer:	Hewlett-Packard
Model Number:	HP LaserJet 1200
Printing Language Supported:	PJL,MLC,PCL,PCLXL,POSTSCRIPT
Current Status:	Waiting for job

Printer 2 Information	
Manufacturer:	
Model Number:	
Printing Language Supported:	
Current Status:	Off Line

Printer 3 Information	
Manufacturer:	
Model Number:	
Printing Language Supported:	
Current Status:	Off Line

Function	Description
Manufacturer	This option allows you to view manufacturer of the printer. When the printer connected with the print server, it will be show in the manufacture box.
Model Number	This option allows you to view model of the printer. When the printer connected with the print server, it will be show in the model box.
Printing Language Supported	This option allows you to view command to set the printer. When the printer connected with the print server, it will be show in the command box.
Current Status	This option allows you to view status of the printer. When the printer connected with the print server, it will be show in the status box. For Example, Waiting for job. It is means the printer already to printing.

6.1.3 TCP/IP



Function	Description
Use DHCP/BOOTP	This option allows you to view DHCP/ BOOTP status. If there is a DHCP/BOOTP server on your network, this option allows the print server to obtain IP-related settings automatically from your DHCP server.
IP Address	This option allows you to view IP address from the print server. The IP address must meet the IP addressing requirements of the network segment. (default: 192.168.0.10).
Subnet Mask	This option allows you to view subnet mask from the print server.
Gateway's IP	This option allows you to view gateway from the print server.

6.1.4 Netware

The screenshot shows the web interface for a Planet Multi-Port Fast Ethernet Print Server. The interface has a blue header with the Planet logo and the product name. Below the header is a navigation menu with tabs for Status, Setup, Misc., and Restart. Under the Setup tab, there are sub-tabs for System, Printer, TCP/IP, NetWare (highlighted in red), AppleTalk, SNMP, and SMB. A 'back' button is also present. The main content area contains a green status icon and a message: 'This page displays the current NetWare settings of the print server.' Below this are three sections: General Settings, NetWare NDS Settings, and NetWare Bindery Settings, each with a list of configuration parameters and their current values.

General Settings	
Print Server Name:	10F FPS-3300
Polling Time:	3 seconds

NetWare NDS Settings	
Use NDS Mode:	Disable
Name of the NDS Tree:	
Name of the NDS Context:	
Current Status:	Disconnected

NetWare Bindery Settings	
Use Bindery Mode:	Disable
Name of the File Server:	DEFAULT_FS_NAME
Current Status:	Disconnected

Function	Description
General Settings	
Print Server Name	This option allows you to view print server's name would be configured by PSAdmin utility.
Polling Time	This option allows you to view polling time from the print server. This function is search for NetWare Server by per time.
NetWare NDS Setting	
Use NDS Mode	Shows the NDS mode is Enable or Disable .
Name of the NDS Tree	Shows the name of your NDS tree.
Name of the NDS Content	Shows the name of the NDS content.
Current Status	Show the status is Connect or Disconnect .
NetWare Bindery Setting	
Use Bindery Mode	Shows the Bindery mode is Enable or Disable .
Name of the File Server	Shows the name of the file server.
Current Status	Show the status is Connect or Disconnect .

6.1.5 AppleTalk

The screenshot shows the web interface for a Planet Multi-Port Fast Ethernet Print Server. The top navigation bar includes tabs for Status, Setup, Misc., and Restart. Under the Setup tab, there are sub-tabs for System, Printer, TCP/IP, NetWare, AppleTalk (highlighted in red), SNMP, and SMB, along with a 'back' button. A green status icon indicates that the page displays the current AppleTalk settings. The main content area is divided into three sections: AppleTalk Settings, Printer 1 Information, and Printer 2 Information (with Printer 3 Information partially visible). The AppleTalk Settings section shows 'AppleTalk:' followed by an asterisk (*). Each printer information section lists 'Port Name:', 'Printer Type:', and 'Data Format:'.

AppleTalk Settings	
AppleTalk:	*

Printer 1 Information	
Port Name:	ATALK_PS-1DB053-1
Printer Type:	LaserWriter
Data Format:	TBCP

Printer 2 Information	
Port Name:	ATALK_PS-1DB053-2
Printer Type:	LaserWriter
Data Format:	TBCP

Printer 3 Information	
Port Name:	ATALK_PS-1DB053-3
Printer Type:	LaserWriter
Data Format:	TBCP

Function	Description
AppleTalk Settings	If no any zone exists, the print server itself displays the zone name as an asterisk (*) in the current AppleTalk Status of the print server in the web browser.
Port Name	<ATALK_PS>-xxxxxx-1, where xxxxxx represents the last six digits of the print server's Node ID.
Printer Type	This option allows you to view printer type from the print server. If you are using a PostScript printer you can select the LaserWriter 8 icon from your Mac computer.
Data Format	This option allows you to view data format from the print server. If you are using a PostScript printer you can select ASCII , TBCP or BCP format from web configuration.

6.1.6 SNMP

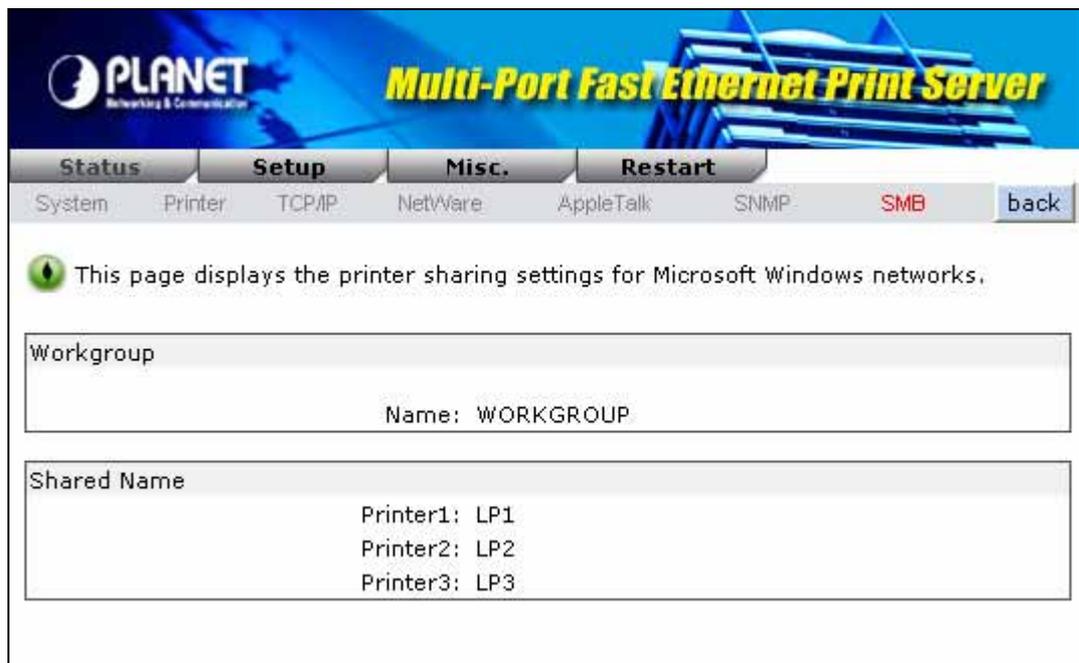
The screenshot shows the Planet Multi-Port Fast Ethernet Print Server web interface. At the top, there is a header with the Planet logo and the product name. Below the header is a navigation menu with tabs for Status, Setup, Misc., and Restart. Under the Setup tab, there are sub-tabs for System, Printer, TCP/IP, NetWare, AppleTalk, SNMP (highlighted in red), and SMB, along with a 'back' button. The main content area contains a green information icon and text stating: "This page displays the current SNMP settings of the print server." Below this, there are two sections: "SNMP Community Settings" and "SNMP Trap Settings".

SNMP Community Settings	
SNMP Community 1:	public , Read-Only
SNMP Community 2:	public , Read-Only

SNMP Trap Settings	
Send SNMP Traps:	Disable
Use Authentication Traps:	Disable
Trap Address 1:	0.0.0.0
Trap Address 2:	0.0.0.0

Function	Description
SNMP Communities	This option allows you to view SNMP communities from the print server. There are two communities that control message from the network management of the print server.
SNMP Traps	This option allows you to view SNMP traps from the print server.

6.1.7 SMB



Function	Description
Workgroup Name	This option allows you to view the SMB Workgroup Name from the print server. It must match the SMB workgroup name of your Windows-based computer.
Shared Name	This option allows you to view the Shared Name from the print server.

6.2 Setup

Meanwhile, you have finished the IP address configuration with print server. You should use web browser to configure the print server. The setup menu of the print server helps administrator to setup the print server's System, Printer, NetWare, TCP/IP, SNMP and AppleTalk.

Enter the IP address of the print server as the URL, default: **192.168.0.10**. Then the print server's home page will appear in content of the web browser.

Please follow this information in the setup menu of the print server:

6.2.1 System

PLANET Networking & Communication **Multi-Port Fast Ethernet Print Server**

Status **Setup** **Misc.** **Restart**

System Printer TCP/IP NetWare AppleTalk SNMP SMB [back](#)

This setup page allows you to configure general system settings of the print server.

E-Mail Alert Settings

E-Mail Alert:

SMTP Server IP Address:

Administrator E-mail Address:

System Settings

Print Server Name:

System Contact:

System Location:

Administrator's Password

Password:

Re-type Password:

Function	Description
Email Alert	This option allows you to Enable/Disable the Email Alert support.
SMTP Server IP Address	This option allows you to input the IP address of your Email SMTP server.
Administrator E-mail Address	This option allows you to input your Email address that you want to receive the notification by Email.
Print Server Name	This option allows you to input device name of the print server. To correct the print server's device name.
System Contact	This option allows you to input contact name of the print server. To check the print server's contact name who in charge of this device.
System Location	This option allows you to input Location name of the print server. To confirm the print server's location name where the print server is located in the office's LAN.
Password	This option allows you to input setup password of the print server.
Re-type Password	Please enter the password again.

If you have setup a password to FPS-3300, you will see this dialog box to ask you enter the user name and password. After enter correct value, you will return to the configure screen. After password assigned, FPS-3300 will asking user to enter user name and password when they access to FPS-3300 web configuration.



Function	Description
User Name	You must be input the default administration user name, admin as login user name.
Password	The default password is empty. After setup password is completed from the print server, you shouldn't forget this password.

6.2.2 Printer

PLANET Networking & Communication **Multi-Port Fast Ethernet Print Server**

Status **Setup** **Misc.** **Restart**

System **Printer** TCP/IP NetWare AppleTalk SNMP SMB [back](#)

This setup page allows you to enable or disable the bi-directional function of each printer port.

Parallel Port - Bi-directional Settings

Printer Port 1:

Printer Port 2:

Printer Port 3:

[Save & Restart](#)

Function	Description
Bi-directional Settings	This option allows you to select the bi-directional of the print server. There are two ways to select this option, includes Disable or Auto Detect .

6.2.3 TCP/IP

PLANET Networking & Communication **Multi-Port Fast Ethernet Print Server**

Status **Setup** **Misc.** **Restart**

System Printer **TCP/IP** NetWare AppleTalk SNMP SMB [back](#)

This setup page allows you to configure TCP/IP settings of the print server.

TCP/IP Settings

Obtain TCP/IP settings automatically (use DHCP/BOOTP)

Use the following TCP/IP settings

IP Address:

Subnet Mask:

Default Router:

[Save & Restart](#)

Function	Description
DHCP/BOOTP	This option allows you to select DHCP/ BOOTP option. If there is a DHCP/BOOTP server on your network. This option allows the print server to obtain IP-related settings automatically from your DHCP server.
IP Address	This option allows you to input IP address from the print server. The IP address must meet the IP addressing requirements of the network segment. Note: In the TCP/IP Setup screen, specify a fixed IP address is highly recommended.
Subnet Mask	This option allows you to input subnet mask from the print server. The IP address must meet the IP addressing requirements of the network segment.
Gateway	This option allows you to input gateway from the print server. This IP address of gateway must meet the router or gateway to go across of the network segment.

6.2.4 NetWare Setup

PLANET Networking & Communications **Multi-Port Fast Ethernet Print Server**

Status Setup Misc. Restart

System Printer TCP/IP **NetWare** AppleTalk SNMP SMB back

⬆ This setup page allows you to configure the NetWare function of the print server.

General Settings

Printer Server Name: 10F FPS-3300

Polling Time: 3 seconds (min: 3, max: 29 seconds)

Logon Password: []

NetWare NDS Settings

Use NDS Mode: Disable ▾

Name of the NDS Tree: [] ▾

Name of the NDS Context: []

NetWare Bindery Settings

Use Bindery Mode: Disable ▾

Name of the File Server: []

File Server not found !

Save & Restart

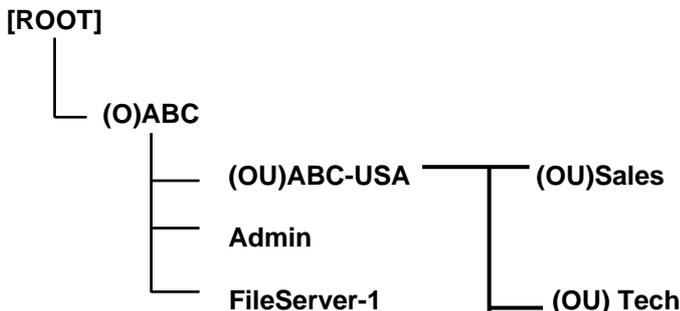
Function	Description
Print Server Name	This option allows you to input print server name which configured by PSAdmin utility or PCOMSOLE program.
Polling Time	The time interval in which the print server unit polls the file server for servicing of print queues.
Logon Password	This option allows you to input encrypted password from the print server. The print server login to NetWare server that administrator set password from selected print server.
Use NDS Mode	To Enable NDS Mode, if you want to setup NDS environment. To select Tree Name of NetWare then input context name in the Context box.
Bindery Mode	To Enable Bindery Mode, if you want to setup Bindery environment. To select File Server Name of NetWare.

6.2.4.1 Installing Print Server on NetWare 4.x/5.x

Due to its architecture and functionality, the print server must work under NetWare 4.x/5.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 "SET BINDERY CONTEXT =" 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:



6.4.2.2 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 the "SET BINDERY CONTEXT =" line to include the NDS organization (O) and all organization unit (OU) objects where users are located. For example: SET BINDERY CONTEXT = O=ABC; OU=SALES.OU=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/Me, create a printer that is connected (redirected) to the NetWare print queue serviced by the print server.

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

6.2.5 AppleTalk

The print server can print jobs submitted from Macintosh workstations connected to an Ethernet using AppleTalk protocol. The basic configuration is for the print server in an AppleTalk environment is performed simply by opening the **Chooser** window and selecting a printer that is connected to the print server.

The screenshot shows the configuration page for the Planet Multi-Port Fast Ethernet Print Server. The interface has a navigation bar with tabs for Status, Setup, Misc., and Restart. Under the Setup tab, there are sub-tabs for System, Printer, TCP/IP, NetWare, AppleTalk (selected), SNMP, and SMB, along with a back button. A green arrow icon indicates that this setup page allows configuring AppleTalk settings. The configuration is organized into sections: AppleTalk Settings, Printer 1 Configuration, Printer 2 Configuration, and Printer 3 Configuration. Each section contains input fields for Type and Binary Protocol. A Save & Restart button is located at the bottom right.

Section	Field	Value
AppleTalk Settings	AppleTalk Zone:	PL_MAC
	Port Name:	ATALK_PS
Printer 1 Configuration	Type:	LaserWriter
	Binary Protocol:	TBCP
Printer 2 Configuration	Type:	LaserWriter
	Binary Protocol:	TBCP
Printer 3 Configuration	Type:	LaserWriter
	Binary Protocol:	TBCP

Function	Description
AppleTalk Zone	In this option, type an AppleTalk Zone name that you want the print server to belong to or leave it in default (<i>This enables the print server automatically search and link itself to the default zone that is set on the AppleTalk router, if found</i>). We also assume that at least an AppleTalk Zone exists on the network. If no any zone exists, the print server itself displays the zone name as an asterisk (*) in the current AppleTalk Status of the print server in the web browser.
Port Name	In this option, type a name for identification purpose or just leave it in default (recommended). Note: The default print server's Chooser name is as shown as follows: <ATALK_PS>-xxxxxx-1, where xxxxxx represents the last six digits of the device's Node ID. For example: ATALK_PS-40EEED-1. You may also change the <ATALK_PS> to a name you like for identification purpose in this option. The print server will append the last six digits to the name you specify.
Printer Type	In this option, the LaserWriter of printer type by default (recommended).
Data Format	In this option, data format includes ASCII , TBCP and BCP .

6.2.5.1 Setting Up a Macintosh Computer

1. At a Macintosh computer, from the **Apple** menu, select **Chooser**.
2. The **Chooser** window then displays an Apple Zone list. Select the Zone name that you specified when configuring the PRINT SERVER.

Note: If you select a Zone that the PRINT SERVER doesn't belong to, as you specified in the previous section, no print server will be displayed in the Step 4.

3. If you are using a PostScript printer you can select the **LaserWriter 8** icon.
4. The **Chooser** window then displays PRINT SERVER (s) featuring the support for AppleTalk protocol, along with its default *Chooser Name* in the right-hand **Select A PostScript Printer** dialog box.

Note: 1. You may change the default Chooser name and Zone name of a PRINT SERVER by using your web browser before proceeding with this installation. Please see the previous section in this chapter for details.

2. If you use **Mac OS 8.x or 9.x**, please make sure your printer support **PostScript**.
-

5. Click **Setup...** button and choose the **PPD** file matching your printer, and click **OK**. If your printer does not appear in the PPD file list, please contact your printer vendor. You may also use the **Generic PPD** if you do not need any printer specific features.
6. Close the **Chooser** Windows.
7. Done.

6.2.6 SNMP Setup

TCP/IP networks use a standard management protocol called *Simple Network Management Protocol* (SNMP). SNMP is widely used in the industry as a solution for remote network management and monitoring of networking devices. SNMP actually includes a protocol, a database structure specification, and a set of database objects. The database objects are contained in a standard database called *Management Information Base* (MIB) that is stored on the networking device called *SNMP agent*. The print server's SNMP implementation runs in a TCP/IP environment.

A host on the network running Network Management System (NMS) software can access the print server device by reading and writing the MIB objects stored in the device. The Network Management Systems are available from many third-party vendors, such as Hewlett-Packard's OpenView.

When accessing (traversing) MIB objects in the print server using NMS software called *SNMP manager*, you need to provide a *community name* in each SNMP request for authentication purpose. The print server supports up to two community names. The default community name is *public* (case-sensitive), with *Read Only* access right in default.

When an unusual condition or activity occurs, the SNMP agent alerts the SNMP manager through *SNMP traps*. Following list summaries SNMP trap messages that the print server will send out.

Activities/SNMP Trap Messages	Description
-------------------------------	-------------

Link Up or Link Down	When the network interface on the print server fails, a link down trap message is generated; if the network interface comes back to life, a link up trap message is sent.
-----------------------------	---

Cold Start or Warm Start	When the print server restarts, the cold start or warm start trap message is generated.
---------------------------------	---

Authentication Failure	When the print server received a SNMP request with a community name that does not match the community name the print server is configured with (stored in the print server's memory), an authentication failure trap message is generated.
-------------------------------	--

In the print server's SNMP implementation, the following MIB objects are available for updating.

MIB Object Names	Description
system.sysContact	Indicates the network administrator's name.
system.sysName	Indicates the print server's name for identification.
system.sysLocation	Indicates the location of the print server.

snmp.snmpEnableAuthenTraps

Enables or disables the function of sending SNMP Authentication Failure trap message to the network administrator, if the community name within a SNMP request is not correct.

Users can set up print server's SNMP functions by using their browsers.



Function	Description
SNMP Community	The print server supports up to two community names. The default community name is <i>public</i> (case-sensitive), with <i>Read Only</i> access right in default.
Support HP WebJetAdmin	This option allows user determine to disable/enable the Support HP WebJetAdmin.
SNMP Traps	Enable the function of sending SNMP Authentication Failure trap message to the network administrator, if the community name within a SNMP request is not correct.

6.2.7 SMB

The print server supports the SMB (Server Message Block) protocol, user can send the print jobs through Network Neighborhood without installing print server's driver.

The screenshot shows the web interface for the PLANET Multi-Port Fast Ethernet Print Server. At the top, there is a navigation menu with tabs for Status, Setup, Misc., and Restart. Below this, there are sub-tabs for System, Printer, TCP/IP, NetWare, AppleTalk, SNMP, and SMB (which is currently selected), along with a 'back' button. A green information icon indicates that the page displays printer sharing settings for Microsoft Windows networks. The 'Workgroup' section has a text input field with the value 'WORKGROUP'. The 'Shared Name' section contains three printer entries: 'Printer 1: LP1', 'Printer 2: LP2', and 'Printer 3: LP3'. A 'Save & Restart' button is located at the bottom right of the form.

Function	Description
Workgroup Name	This option allows you to assign a workgroup name to print server on the Network Neighborhood. Windows uses it to identify the print server on the Network.
Shared Name	This option allows you to assign a name to print server's port.

7. Network Print Monitor

The print server supports **TCP/IP**, **IPX/SPX** and **NetBEUI** protocols under Windows 95/98/Me. Please make sure that the following steps have been completed before proceeding with installation under Windows PC.

Select A Desired Protocol

TCP/IP

The TCP/IP Protocol must be installed. For further information, please read “*TCP/IP Protocol Installation*” section in this chapter.

Note: If TCP/IP protocol is chosen, please refer to “Assigning an IP Address to the print server” section later in this chapter.

IPX/SPX

The IPX/SPX-compatible Protocol must be installed. For further information, please read “*IPX/SPX-compatible Protocol Installation*” section in this chapter.

NetBEUI

The NetBEUI protocol must be installed. For further information, please read “*NetBEUI Protocol Installation*” section in this chapter.

7.1 TCP/IP Protocol Installation

1. Click **Start**, point to **Settings** and select **Control Panel**.
2. Double click the **Network** icon.
3. If the **TCP/IP Protocol** is not already installed, click **Add**.
4. Select **Protocol** and click **Add**.
5. Select **Microsoft** from the Manufacturers list.
6. Select **TCP/IP Protocol** from the Network Protocols list.
7. Specify an IP address, Subnet Mask, and Gateway address or specific “Obtain IP address automatically”, if a DHCP server is available on the LAN.
8. **Restart the computer**.
9. Done.

Note: Using TCP/IP protocol to access the print server requires well-configured TCP/IP settings. If you are not familiar with these settings, please consult your network administrator for details or ask for help.

7.2 IPX/SPX-compatible Protocol Installation

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

7.3 NetBEUI Protocol Installation

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

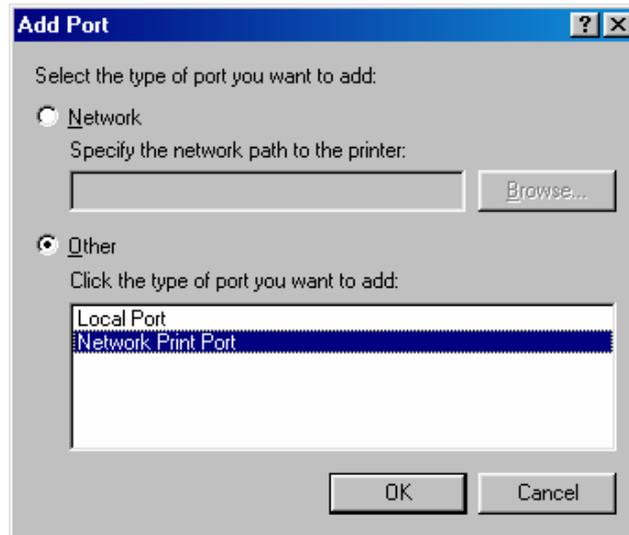
Note: For more detailed information, please refer to your Microsoft Windows 9X/ME/NT/2000/XP/2003 manuals.

7.4 Windows 95/98/Me/NT/2000/XP/2003 manual Installation

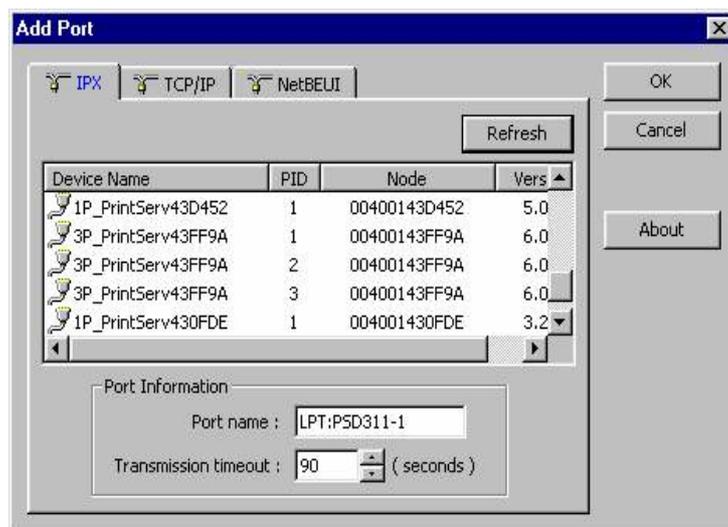
Please perform the steps as follows to ensure a smooth installation:

1. Run **Setup** from the print server's NetWare, Win 95/98/Me/NT/2000/XP/2003 Setup diskette
2. The **Network Print Monitor for Windows 95/98/Me Setup** will then appear. Click **Next**.
3. A message reading, "Setup is complete. You may add the Network Print Port by using the PSAdmin" will appear. Click **OK**.
4. Click **Start**, point to **Settings**, and select **Printers**.
5. Double-click the **Add Printer** icon.
6. Select **Local Printer** and click **Next**.
7. Select the appropriate printer manufacturer and printer type and click **Next**.

8. Select **LPT1** and click **Next**.
9. Type in the **Printer Name** and click **Next**.
10. 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." Select **No** and click **Finish**.
11. Double-click the newly created **Printer Name** icon.
12. Select **Printer** and **Properties**.
13. Click **Details** tab and select **Add Port**.
14. In the **Add Port** dialog box, select **Other**, as shown in the following picture.



15. Select the **Network Print Port** and click **OK**.
16. The Add Port box will then appear, along with the print server's Node ID (*The last 6 digits of the Node ID, located on the back of the print server unit*). Select one printer server port from the list, which is now connected to (one of) your printer(s), as shown in the following picture.



- By default, the computer will first search for the print server(s) on the network by using the IPX/SPX protocol.
- If the IPX/SPX protocol is installed, the print server will be displayed along with its Node ID, as shown in Node column. (*The last 6 digits of the Node ID, located on the back of the print server unit*). Select one of the print server's ports from the list.

- If the IPX/SPX protocol is *not* installed, no print server will be shown in the display box. Then please select TCP/IP or NetBEUI alternatively.
- It starts again to search for the print server on the network by using the protocol you specify in the step above. When finished, the print server will be displayed along with the its Node ID, as shown in the following picture. (*The last 6 digits of the Node ID, located on the back of the print server unit*). Select one of the print server's ports from the list.

8. LPR Printing Installation

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.

8.1 Assigning an IP Address

The first step to install a print server on a TCP/IP network is to assign the print server an IP address and other related TCP/IP settings before the print server can function. You can select the following two methods to specify an IP address the print server. Each method will be detailed in the following section.

1. Use the **Network Print Monitor** utility.
2. Manually specify (using DOS commands or UNIX text-mode commands. This applies to Windows NT/2000/XP/2003 and UNIX systems).

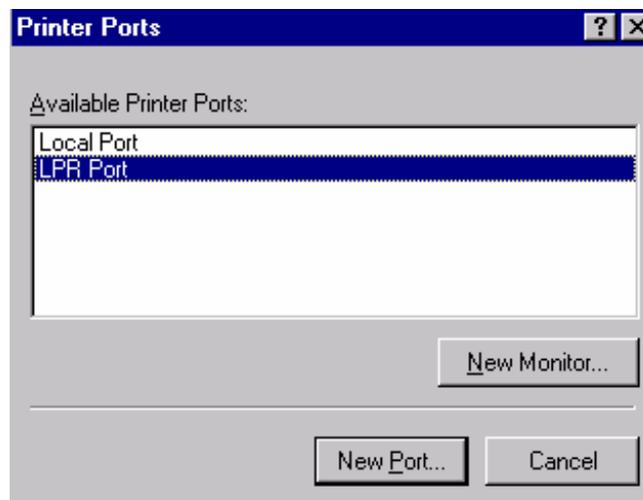
Note: The **Network Print Monitor** can only search for the print server(s) over the same network segment the Windows NT/2000/XP/2003/UNIX computer is located. You would like to install a print server on a different network segment.

DHCP

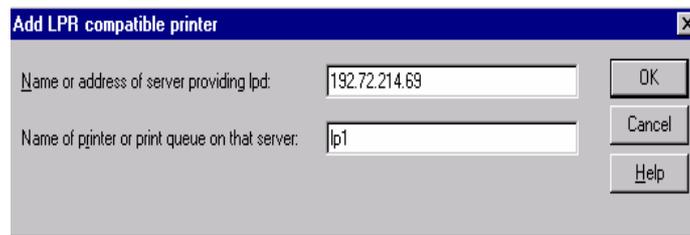
The print server supports DHCP client feature, allowing the print server to obtain an IP address and related TCP/IP settings automatically from a DHCP server. While the print server supports DHCP, we strongly recommend you manually specify a **fixed** IP address to the print server. By default, the print server's DHCP function is disabled.

8.2 Windows NT LPR Port Printing Installation

1. Click **Start**, point to **Settings**, and select **Printer**.
2. Run **Add Printer**.
3. The Add Printer Wizard screen will appear, Select **My Computer** and click **Next**.
4. Click **Add Port**.
5. From the Printer Ports box as shown in the following picture, select the **LPR Port**.



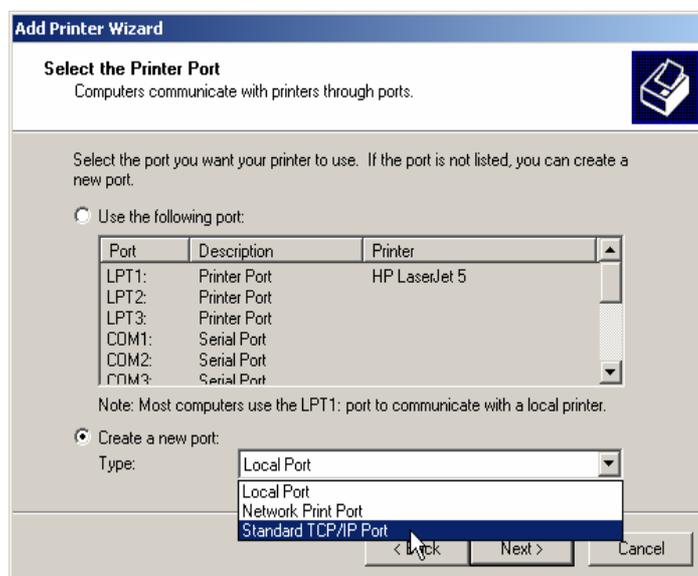
- The Add LPR compatible printers box will then appear as shown in the following picture. Type in the IP address assigned to the print server in the **Name or address of server providing lpd** box.



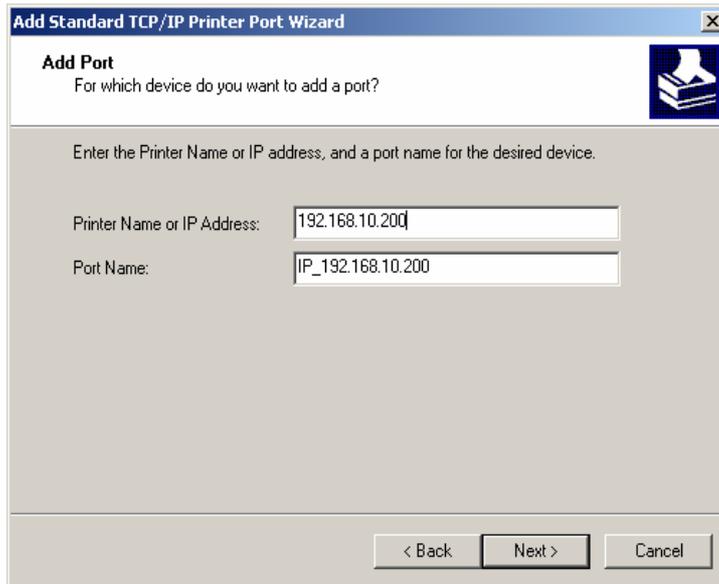
- In the **Name of printer or print queue on that server** box, type in a printer name, e.g. lp1 for port-1, lp2 for port-2 and lp3 for port-3 of print server. Click **OK**.
- In the Printer Ports box, select **Close**.
- Click **Next**.
- Select the appropriate printer manufacturer and printer type list and click **Next**.
- Select **Shared**. Type in a new **Share Name** or leave it in default and click **Next**.
- 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.", Select **Yes (Recommended)** and click **Finish**.

8.3 Windows 2000/XP/2003 Standard TCP/IP Port Printing Installation

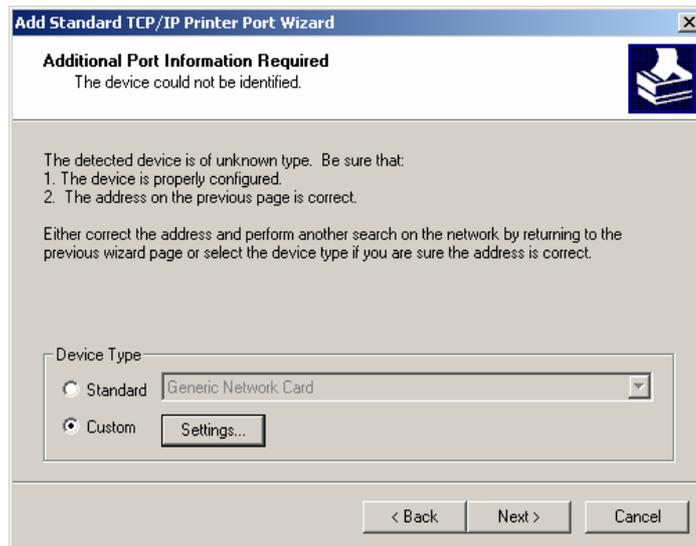
- Click **Start**, point to **Settings**, and select **Printer**.
- Run **Add Printer**, Click **Next**.
- The Add Printer Wizard screen will appear, Select **Local Printer** and click **Next**.
- From the type of **Create a new port** box as shown in the following picture, select the **Standard TCP/IP Port**, Click **Next**.



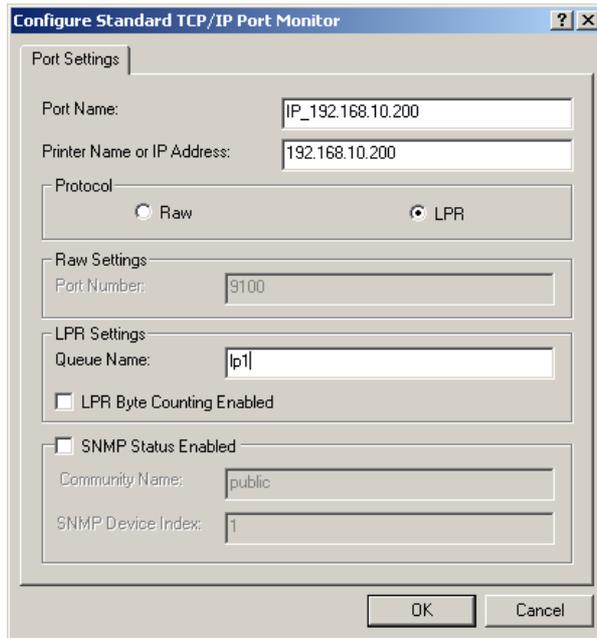
- The Add Standard TCP/IP Printer Port Wizard box will then appear as shown the picture as below, and type in the IP address assigned to the print server in the **Printer Name or IP Address** box, Click **Next**.



6. In the **Add Standard TCP/IP Printer Port Wizard** box as shown in the following picture, Select **Custom**, Click **Settings** button, and click **Next**.



7. In the **Configure Standard TCP/IP Port Monitor** box as shown in the following picture, select **LPR** form Protocol, type in a queue name, e.g. lp1 for port-1, lp2 for port-2 and lp3 for port-3 of print server.
8. Click **OK**.



Note: Please **DO NOT** type any other name than **lp1, lp2 and lp3** in this step.

9. Click **Finish**.
10. Select the appropriate printer manufacturer and printer type list and click **Next**.
11. Type in a new **Printer name** or leave it in default, and click **Next** button.
12. A message reading, "To confirm that the printer is installed properly, you can print a test page". Select **Yes (Recommended)** and click **Finish**.

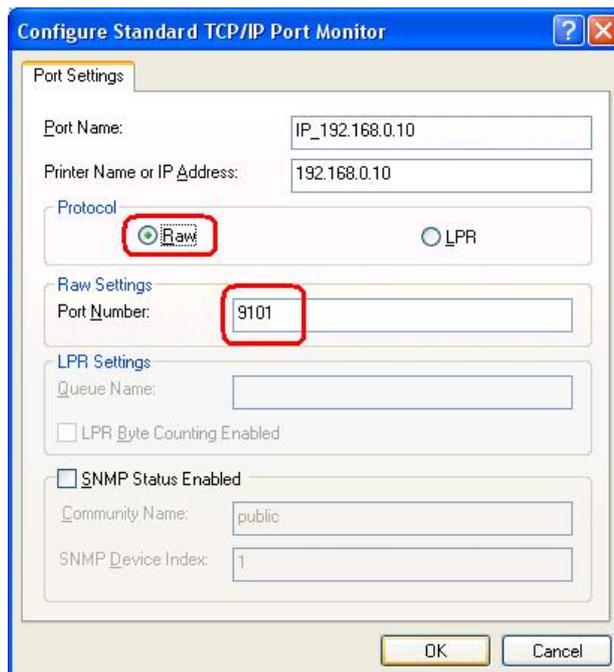
Note:

For Windows RAW protocol printing:

Port number 9101 for port-1

Port number 9102 for port-2

Port number 9103 for port-3



8.3 UNIX Installation

After the static IP address is assigned, the Print Server is ready to be configured. For some UNIX/Linux systems, we include the detailed installation procedures below. If you can't find the installation procedure corresponding to your UNIX system, please refer to your UNIX manuals for details about configuring your UNIX for the "remote printing system".

SCO UNIX 8.0.0 (Caldera Open Unix 8.0.0)

1. Select "SCO Admin".
2. Select "Printer Setup Manager".
3. Enter /Printer / Add TCP / IP Printer...
4. **Name:** Input a name you like. For example: Test.
Protocol Type: Choose "lpd (BSD)".
Make/Model: Select the printer model. For example: EPSON LQ570.
Printer Connection Type: Choose "On Remote Server".
Remote System: Input the IP address of the printer server. For example: 192.168.1.250.
Remote Printer: lp1 or lp2 or lp3. (fixed)
If the printer connected to the first print server port, please choose **lp1**.
If the printer connected to the second print server port, please choose **lp2**.
If the printer connected to the third print server port, please choose **lp3**.
5. Click "OK".
6. Enter /Printer / Make Default.

System V Release 4 Unix

1. For example: the print server has a static IP address: 192.168.1.100
2. Input "lpsystem -tbsd 192.168.1.100".
3. Input "lpadmin -pa1 -s 192.168.1.100!lp1". lp1 for the first print server port.
4. Input "accept a1".
5. Input "enable a1".

8.4 Redhat Linux 9

The Print Server can work under any Linux-based systems, including Slackware, RedHat, etc, without any problems.

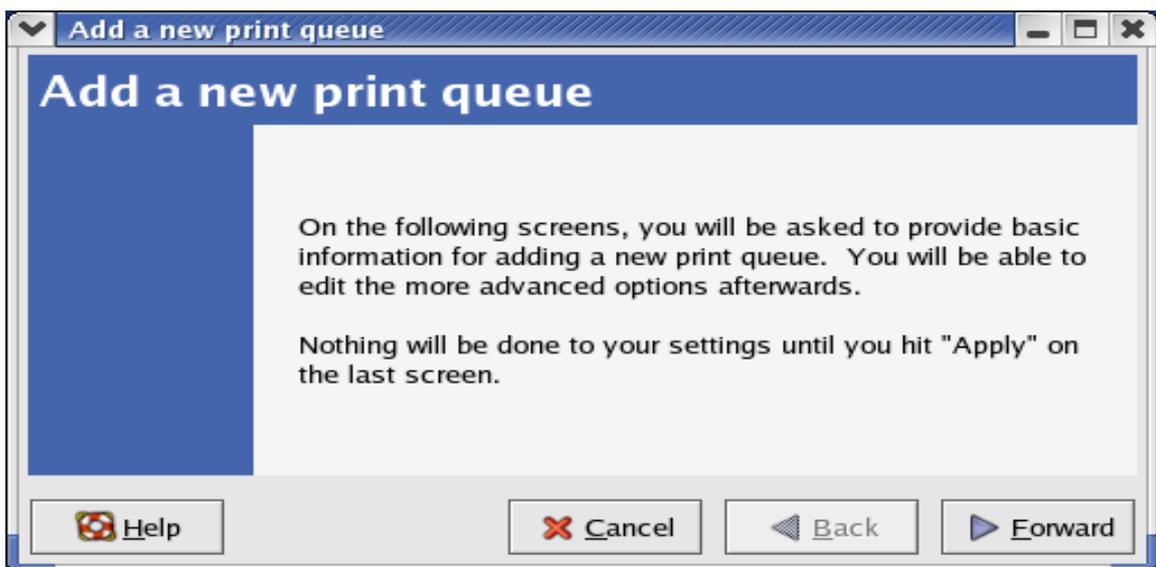
Basically, the Linux's printing system is based on BSD system. Although many commercial Linux systems are available in the market and their commands will vary slightly, depending upon which version is used, the functionality of the Linux-based variants is exactly the same.

Following are the outlined procedures (**recommended for all users**) on Red Hat Linux 7.2/7.3 or later with X-Window system installed.

1. Make sure that the TCP/IP is well configured on your RedHat system, including network interface card's driver and IP-related settings say, IP address, subnet mask, and gateway IP).
2. Log in **root**.
3. Assign Print Server an IP address. At shell mode:
 - c.1. arp -s <the IP address you want to assign to the Print Server> < Print Server 's Node ID>
 - c.2. Execute tftp < Print Server 's IP> get config.txt and quit tftp.
 - c.3. Edit the config.txt and modify the IP address, subnet mask, and gateway IP. When done, save the config.txt.
 - c.4. Execute tftp <Print Server 's IP> put config.txt and quit tftp.
4. Start X-windows by typing **startx** at the shell mode.
5. Open **Printer Configuration**.



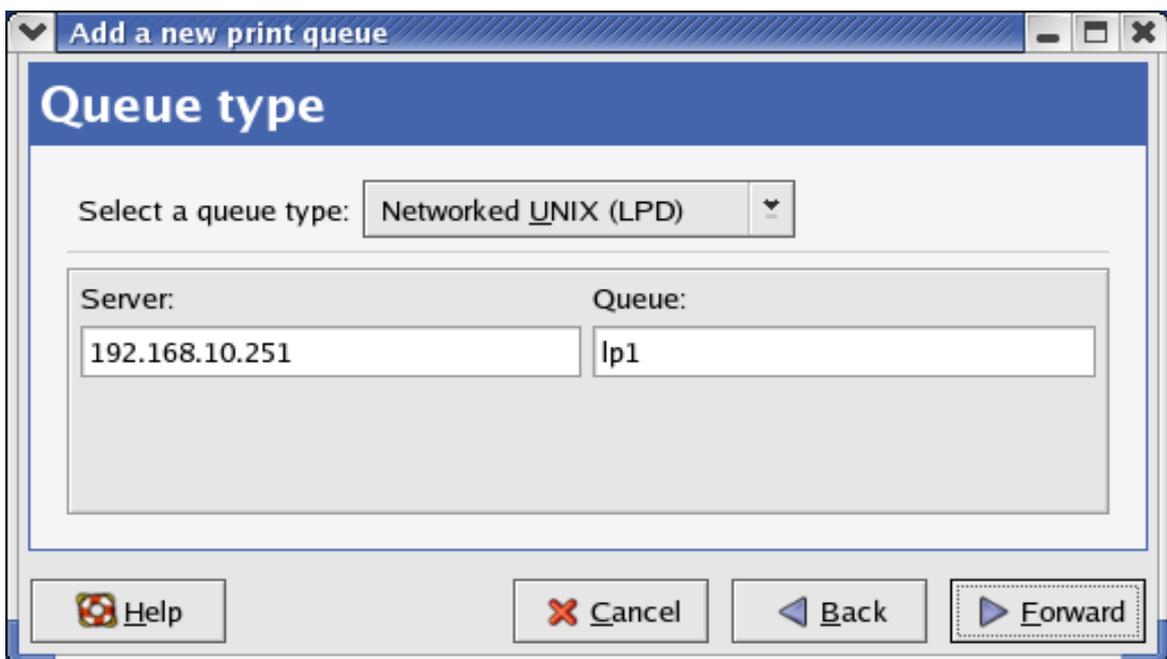
6. Click **New** button.



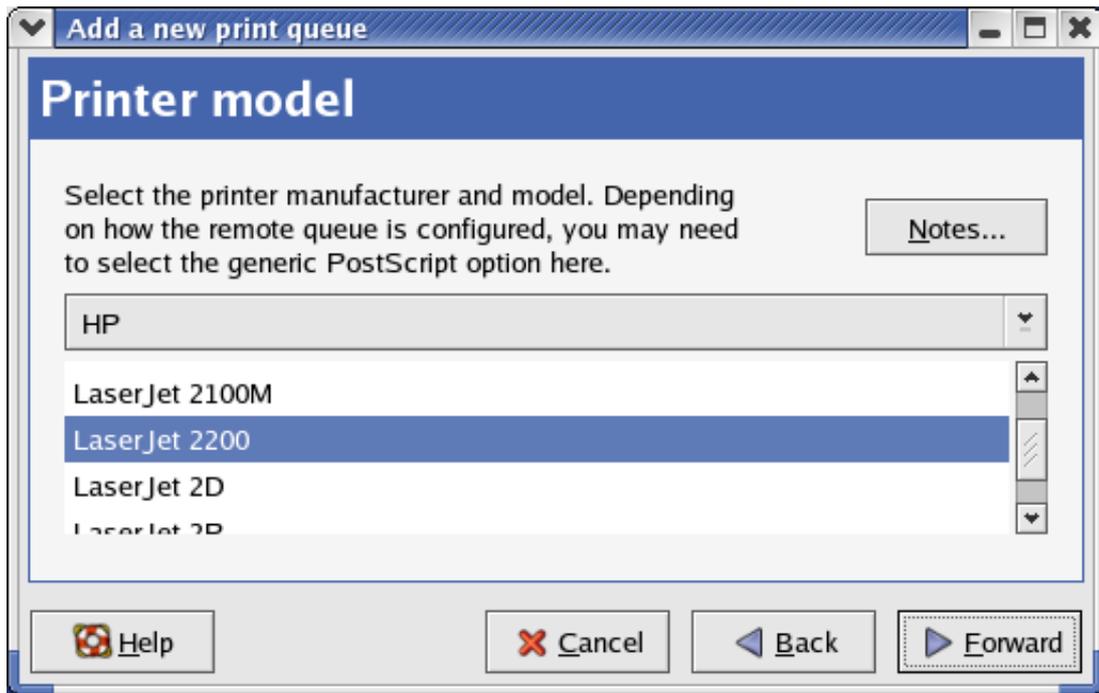
7. Click **Forward** button.



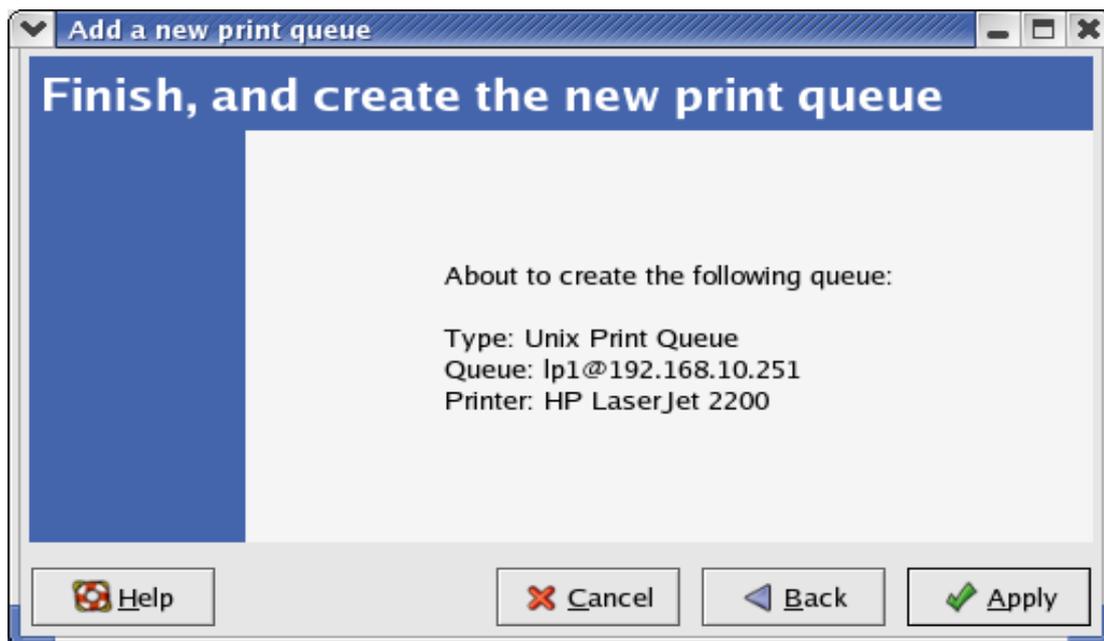
8. In the **Name** field, type a user-defined name, click **Forward**.



9. In the **Queue Type** field, choose **Networked UNIX**.
10. In the **Server** field, type the IP address of print server
11. In the **Queue** field, type a print server's port name, which connect to the printer. For example: lp1.
12. Click **Forward** button.
13. In the **Printer** field, choose **Postscript Printer**.



14. Choose the model of printer and click **Forward**.

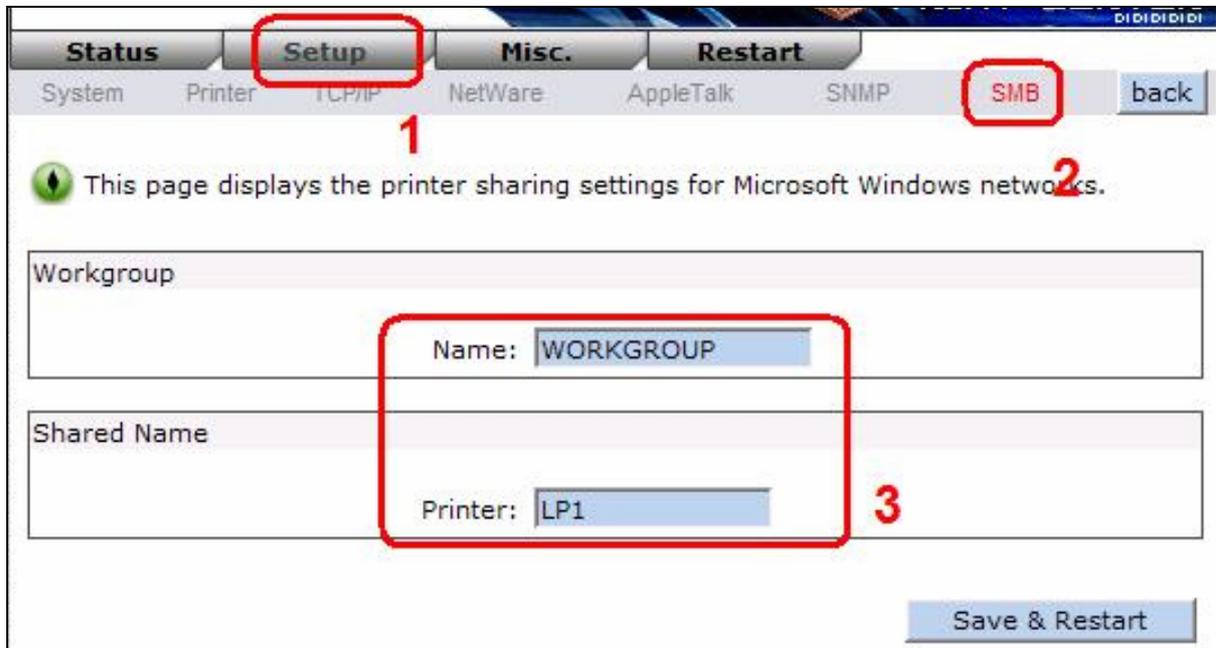


15. Done.

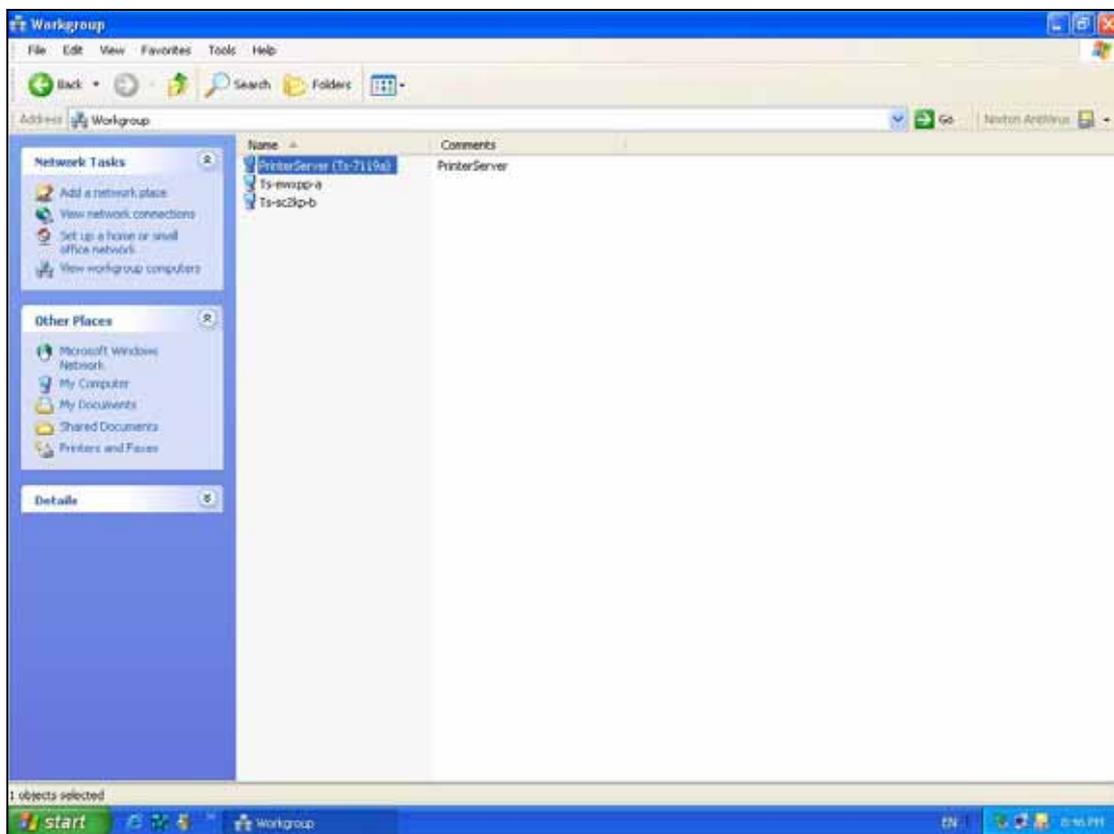
9. SMB Printing with Windows XP

1. Enable the SMB settings from the print server's WEB configuration. Assume your computers use the "WORKGROUP" as the SMB workgroup name in Windows.

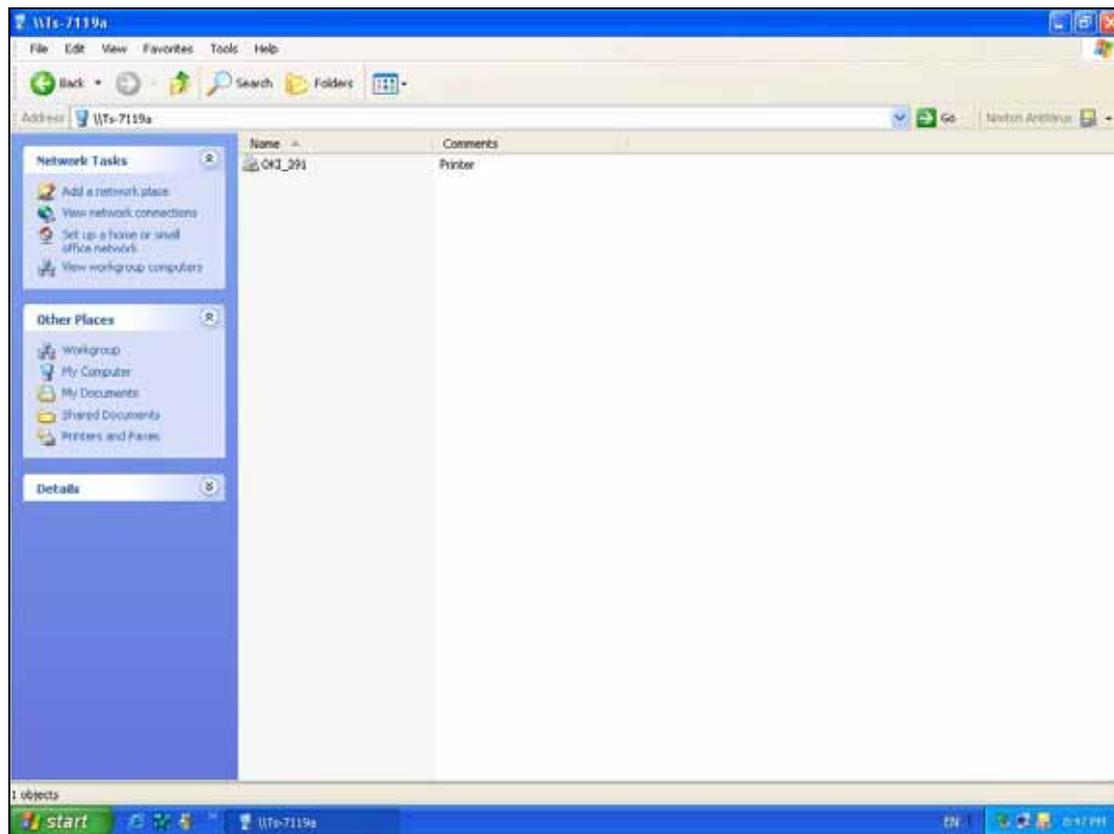
Please assign the same SMB name to your print server. If print server uses the different SMB name from computers', the SMB printing won't active.



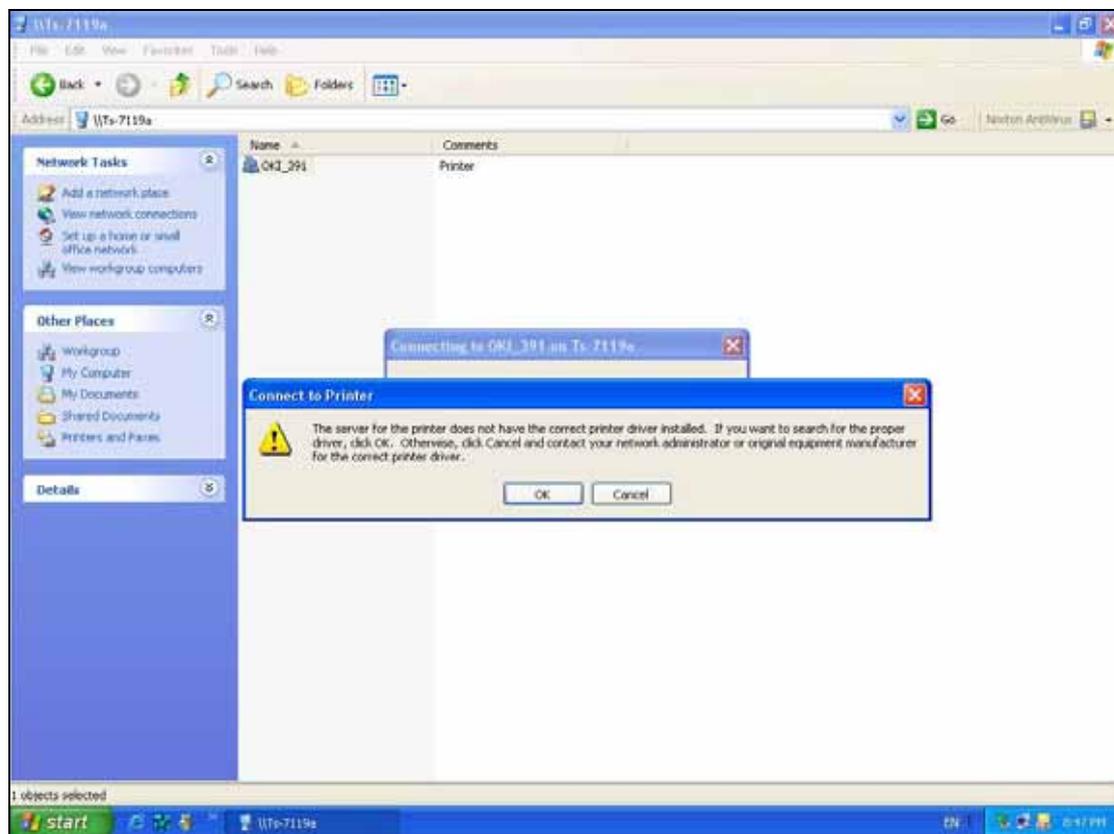
2. Now you can find the print server from the SMB workgroup of Windows. Then, double click it.



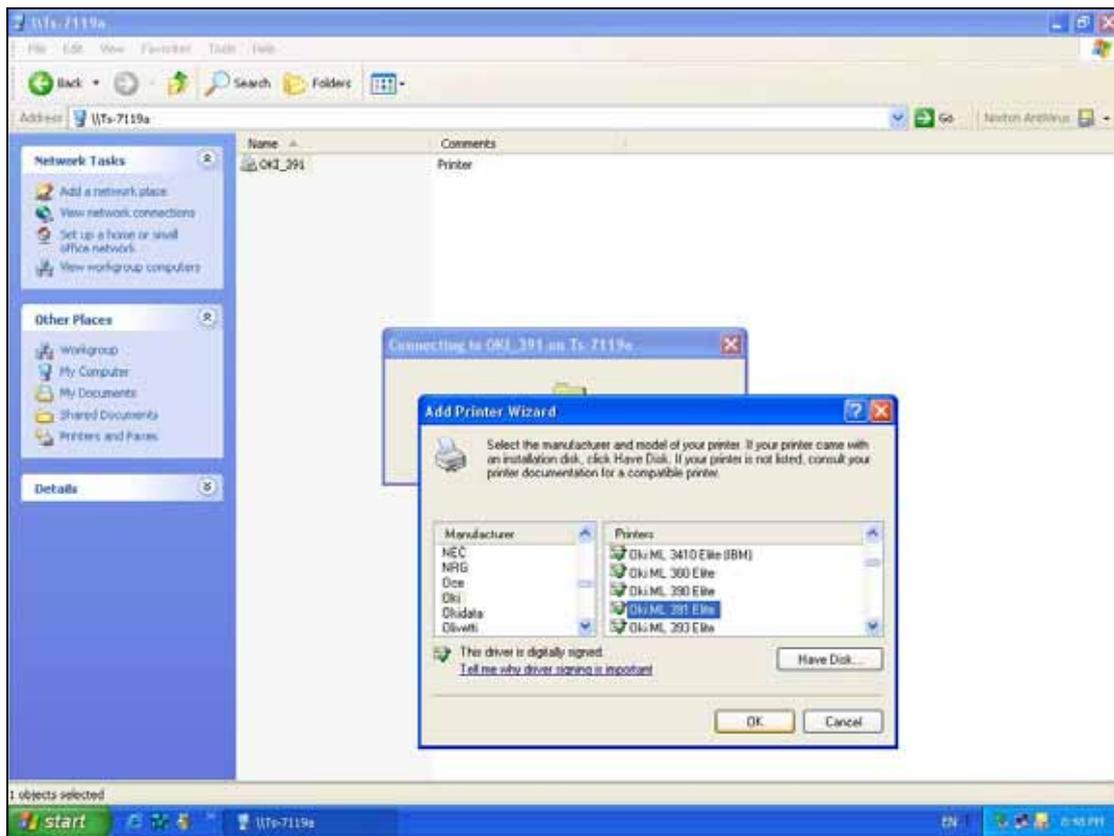
3. Double click it again.



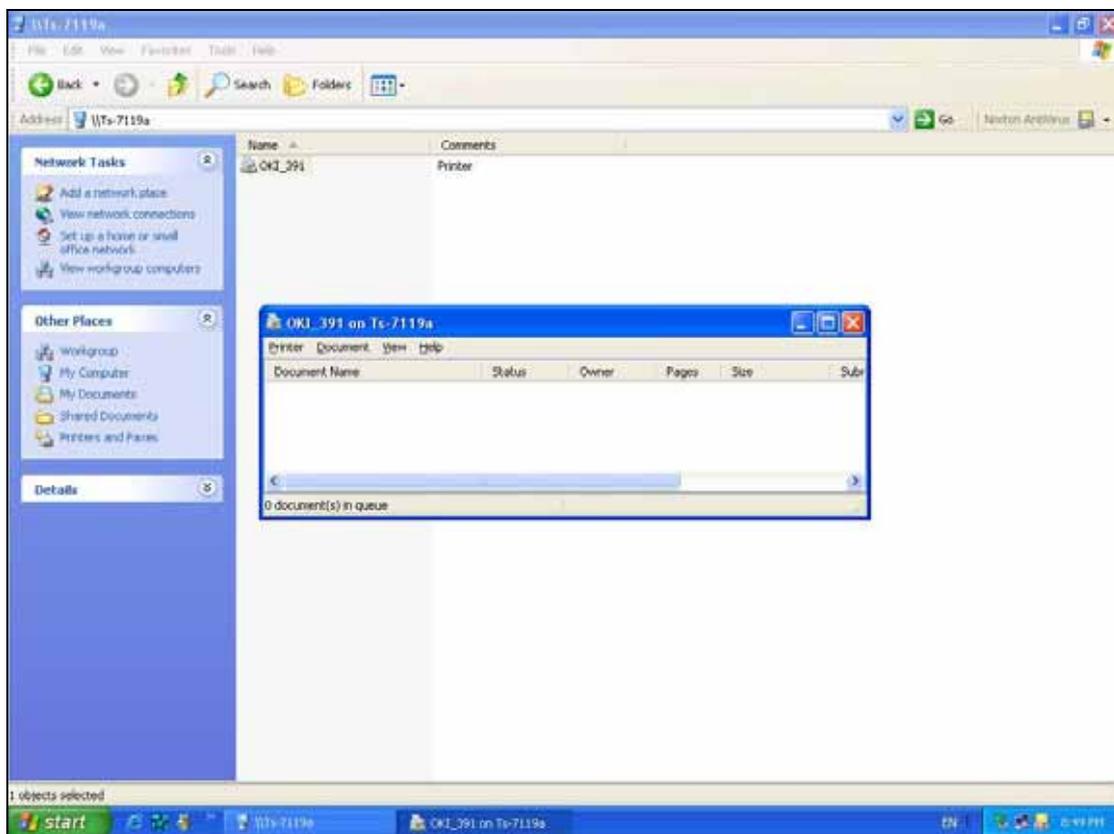
4. Now you have to install the printer's driver.



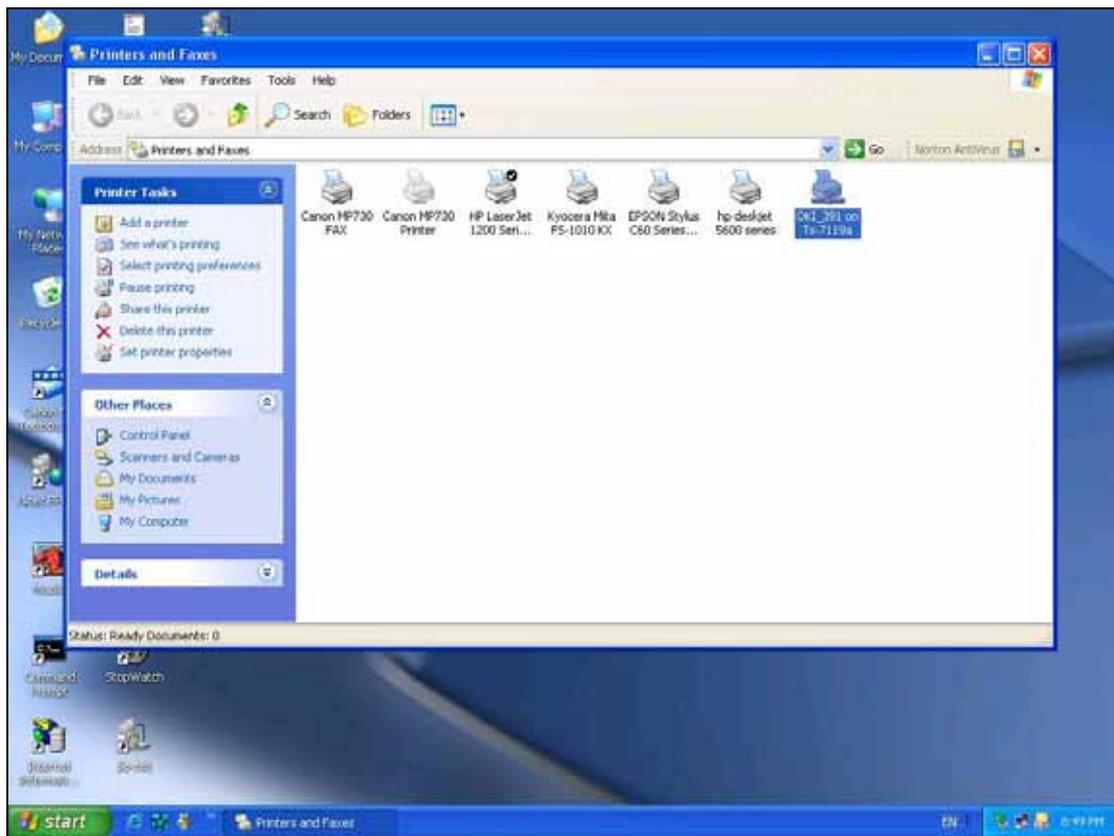
5. Choose it from the “Add Printer Wizard”.



6. Install printer successfully.



7. Now, you can find your printer's icon and you can use the SMB printing mode.



10. Upgrading Print Server

Upgrading print server will allow you to upgrade 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 lists for your systems.

- 1. Upgrading the print server from PSAdmin*
- 2. Upgrading the print server from Windows NT/2000/XP/2003*
- 3. Upgrading the print server from UNIX system*
- 4. Upgrading the print server from WEB browser*

Note: 1. Before you proceed to upgrade the print server, please ensure that the necessary binary file is located on your current working directory.

2. Before upgrading the print server, ensure that it is not printing jobs. You have to wait until the print job is finished before you can proceed.

3. Be careful not to interrupt the file transfer. If the transfer is interrupted, the print server may have to be re-initialized by your dealer.

10.1 Upgrading the print server from PSAdmin

1. Log into your NetWare file server as a Supervisor (Admin.) or equivalent.
2. Ensure binary file is located in the PSAdmin directory.
3. Run **PSAdmin** from your Windows PC.
4. Click the **Upgrade** icon on tool bar.

10.2 Upgrading the print server from Windows NT/2000/XP/2003

1. Ensure binary file is located in your current working directory.
2. At NT/2000/XP/2003's DOS prompt, and type "**tftp -i <print server's IP address> put mpsXX.bin**".
3. Wait for the transfer successful message.
4. Done.

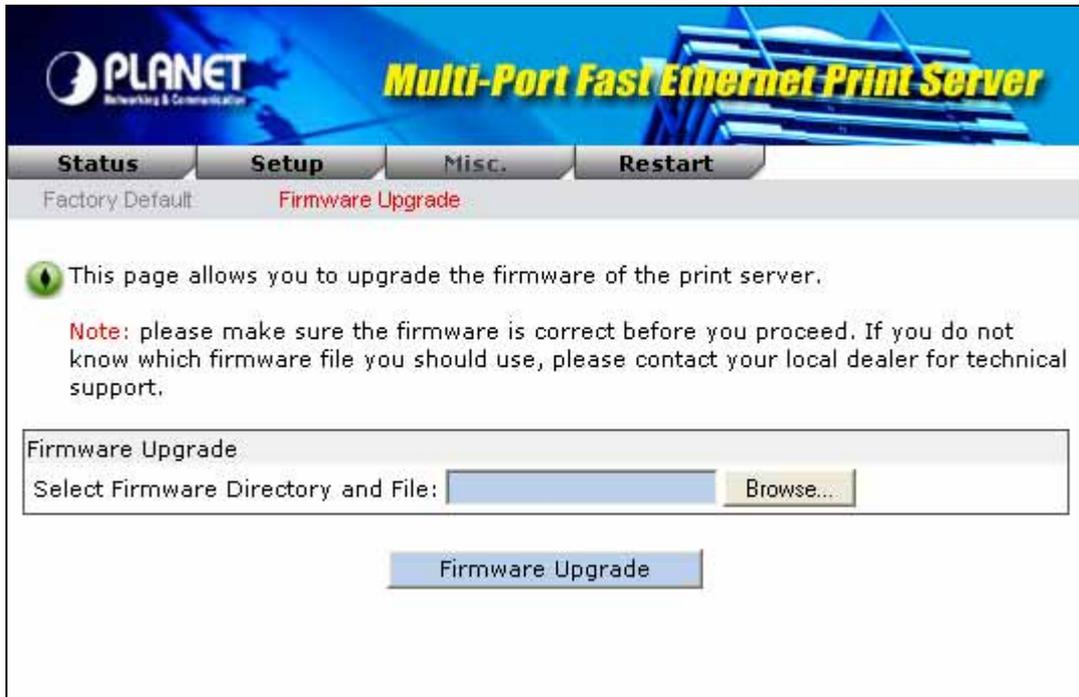
10.3 Upgrading the print server from UNIX

1. Log in as root
2. Ensure binary file is located in your current working directory.
3. Type "**tftp <print server's IP address>**".
4. At tftp prompt, type "**get upgrade**".
5. Change to binary mode.
6. At tftp prompt, type "**put mpsXX.bin**".
7. Wait for the file transfer to complete.
8. Quit from tftp.

9. Done.

10.4 Upgrading the print server from Browser

1. Ensure binary file is located in your current working directory.
2. Enter the IP address of the print server as the URL.
3. Click **Misc**, and then choose **Firmware Upgrade**, it then as shown in the following picture.

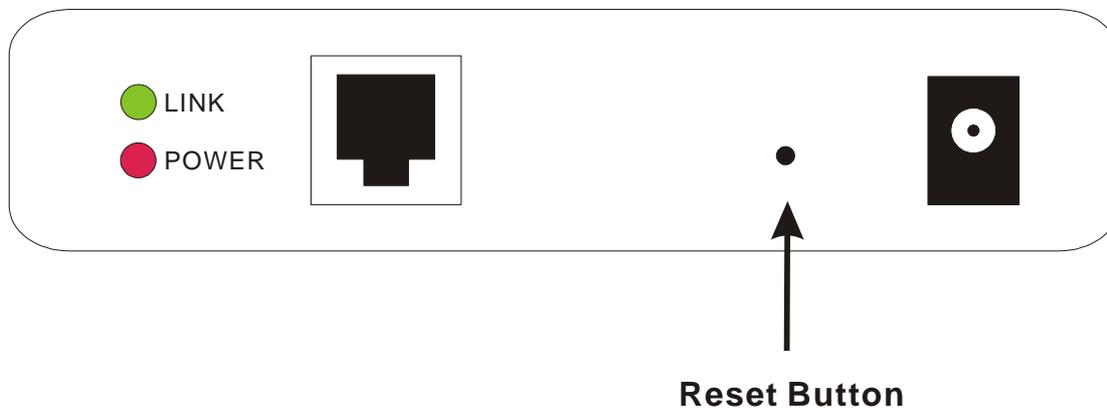


4. Click **Browse...** and select the firmware file.
5. Click **Upgrade**.

11. Reset to Default

11.1 Hardware

You may press the RESET button on the FPS-3300 over 5 seconds.



11.2 Software

Please login to FPS-3300 web configuration interface. You can find the **Factory Default** option in **Misc.** page. Please click "OK" to reset your print server.



12. Troubleshooting

General Troubleshooting Overview

The most common problems, which cause the print server to perform improperly, 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 LED lights to assist in diagnosing problems that are the result of the network and/or the print server hardware itself.

ACT (Green)

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.

Note: Make sure that the 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.

LINK (Green)

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

POWER (Red)

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. Twisted-Pair Cable is 10BaseT/100BaseT 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 adapter 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 parallel port of the printer. Check to see if any of the pins on the parallel port connector are damaged. In addition, check the cable connection. If the pins are damaged, contact your dealer for a replacement connector.

Windows 95/98/Me/NT/2000/XP/2003 Troubleshooting

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

If your print server and Windows 95/98/Me/NT/2000/XP/2003 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* later in this section.
- Add the frame type 802.2 for both Ethernet adapters. See *Multi-Segment Frame Type 802.2 Installation* later in this 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. Point to **Settings**, and select **Control Panel**.
3. Double-click the **Network** icon.
4. Select **Protocols**. Select the **NWLink IPX/SPX Compatible Transport**.
5. Select **Properties**.
6. Select your (first) network interface card and select **Manual Frame Type Detection**.
7. Click **Add**.
8. In the **Frame Type** field, select **Ethernet 802.2**.
9. In the **Network Number** field, type in a unique 8-digit hexadecimal network number. For example: 12345ABC.
10. Select **Add**.
11. Repeat the Steps 8-12 for the other Ethernet adapter.
12. **Restart the computer**.
13. Done.

Moving the print server to A New Segment

If the print server is moved from one network segment to another 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 95/98 computer using this print server in order for the print server's driver on each computer to re-establish a new connection.

Print Server Reconfiguration Procedure on Windows 95/98/Me

1. Click **Start** on the bottom left hand corner of the screen.
2. Select **Settings** and select **Printers**.
3. Select your printer 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's configuration screen.

Find your original print server according to its Port Name or other distinguished name and click this print server.

6. Click **OK** and it returns to the printer's Properties page.
7. Click **OK**.
8. Done.

Print server Reconfiguration Procedure on Windows NT

1. Click **Start** on the bottom left hand corner of the screen.
2. Select **Settings** and select **Printers**.
3. Select your printer 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 95/98/Me computer and your computer is going to be moved onto another segment, you have to reconfigure the print server on your computer to use your print server. 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 the PSAdmin.

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 possible causes:

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

If this is the case, please ensure the 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"

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 is 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 Windows 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, assuming the print server is on Segment A, NT 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 the 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 the **PSAdmin** from any client computer and select "**Manual Setup**" to specify the print server's IP address (For more detailed information about Manual Setup, please refer to Chapter 3).

2. If the solution described above is not applicable, you have to follow the instructions below to set up the 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 on Segment A for temporary use in the following steps, for example, 192.72.214.68.
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 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 as 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 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.

Reset Button

Reboot the Print server:

1. Verify the power of print server is turned on.
2. Press the reset button once, and then release it.

WARNING: This will restart the print server and stop all on-going and pending print jobs!

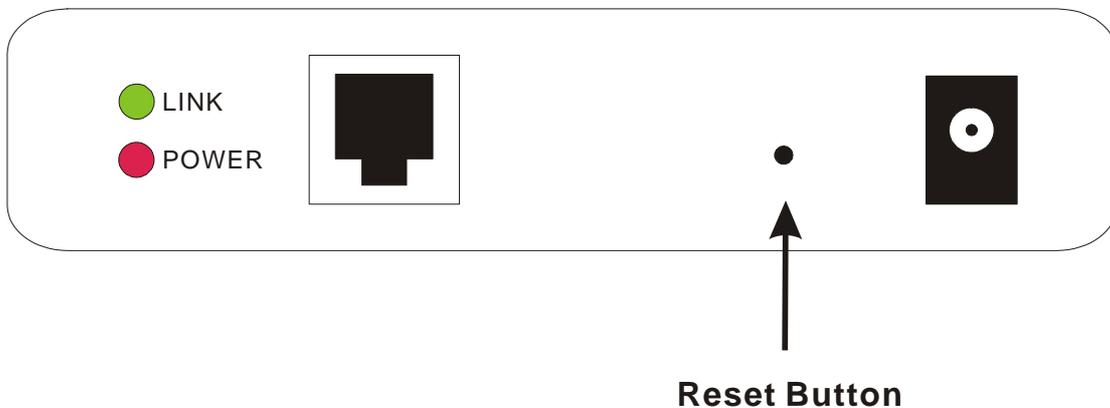
Perform a Factory Default

1. Disconnect the external power adapter.
2. Hold down the reset button.
3. Reconnect the external reset button. Wait about 5~6 seconds.
4. Release the reset button.
5. The print server will restart.

WARNING: This will erase all settings of print server to default and should be performed with caution!

After performing a factory default, the default settings will be:

- DHCP client: off
- IP address: 192.168.0.10
- Subnet Mask: 255.255.255.0



Specification

Model	FPS-3300
Media Interface	1-port RJ-45 UTP
Standards	IEEE802.3, 10Base-T; IEEE802.3u, 100Base-TX
Cabling	Category 5/5e or above, 2-pair
Printer Ports	3 x Parallel port
Protocols	TCP/IP, IPX/SPX, AppleTalk, Bi-Directional
NOS Support	Windows 95/98/Me/2000/NT/XP/Server 2003, Novell, Linux, Unix, and MAC OS
Printing methods	PTP (Peer-to-Peer), Windows LPR printing, SMB, IPP (Internet Printing Protocol), LaserWriter Chooser (AppleTalk)
Management Tools	PS-Admin (Windows Application), Web-based management (HTTP), HP Web JetAdmin
Dimension	214 x 131 x 42.7 mm
Weight	305g
Power Supply	5V DC, 2A
Emission	FCC / CE

Frequently Asked Questions

Question A

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

Possible explanations

1. The Print server Name/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 PSAdmin.
3. Check to see that if the network cabling and power adapter are properly connected.
4. Recheck the print server connection by running the PSAdmin. It should read "Connected."

Question B

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 C

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 the PSAdmin to the print server unit.
2. Run the PSAdmin and upgrade the print server again.

Question D

The Status 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 the PSAdmin. Please see Chapter 3 for details.

Question E

The PSAdmin reports "Create Print server Error", "Create Printer Error", or "Create Print Queue Error" while using Auto Setup.

Possible Explanation

The print server name, the printer name, or the print 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 F

The PSAdmin 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**.

Question G

The setup Wizard can't find print server.

Possible Explanation

The Personal Firewall installed in your computer blocks the connection.

Solution

Please disable the Personal Firewall or adjust the security level to lower.

Additional Installation Instructions

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 95/98, 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.

Please note that the print server doesn't support printing with host-based printers, e.g. CAPT, GDI, and PPA printers. Furthermore, the print server doesn't support any non-printing functions of MFP (Multiple Function Printer).