## EPSON

Color Laser Printer

## EPSON Aculaser $\mathbf{C 8 5 0 0}$

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## Introduction

Your printer has a built-in Ethernet interface. This manual contains information about the Internal Print Server of your printer and the configuration software, EpsonNet
WinAssist/MacAssist/WebAssist, that configures it for network printing. For information about the printer, see your Reference Guide.

The Internal Print Server can connect anywhere on your network using 10BASE-T or 100BASE-TX. The Internal Print Server automatically selects the correct standard when it connects to a network. In addition, it supports and automatically selects IEEE 802.2, IEEE 802.3, Ethernet II, and Ethernet SNAP network protocols.

Because the Internal Print Server supports multiple protocols and automatically detects protocols on your network, you can print from Microsoft ${ }^{\circledR}$ Windows ${ }^{\circledR}$, Apple ${ }^{\circledR}$ Macintosh ${ }^{\circledR}$, UNIX $^{\circledR}$, and IBM ${ }^{\circledR}$ OS/2 applications.

Use EpsonNet WinAssist or MacAssist, the configuration utilities provided with your printer, to quickly and easily configure the Internal Print Server to use protocols such as IPX/SPX ${ }^{\mathrm{TM}}, \mathrm{TCP} / \mathrm{IP}$, AppleTalk ${ }^{\circledR}$, and NetBEUI.

## Note:

The EpsonNet WinAssist/MacAssist utility configures the Internal Print Server to work only with protocols that exist on your network. This does not imply that you can use all of the above mentioned protocols in your network or operating system. The protocols that the Internal Print Server can use may vary depending on the operating systems used and network configuration.

## About This Guide

This guide contains information about using your printer on a network, including installing the printer software and making network settings.

Note:

- Microsoft Internet Explorer 4.0 or later, or Netscape Navigator 4.0 or later, must be installed in your computer to read the online guide.
- This manual is written for network administrators, and many of the steps included here require detailed network knowledge and administrator rights.
- The term network administrator refers to the person responsible for maintaining the network. "Administrator" is synonymous with "Supervisor" in this manual.
$\square$ Some screen shots in this manual list a printer name other than your printer. This difference is not alter the instructions.


## Cautions and notes

Cautions must be observed to avoid damage to your equipment.
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Notes contain important information and useful tips on the operation of your printer.

## About Software

- EpsonNet WinAssist

Utility for Windows that allows you to configure the Internal Print Server for TCP/IP, NetWare, NetBEUI, and AppleTalk.

- EpsonNet MacAssist

Utility for Macintosh that allows you to configure the Internal Print Server for TCP/IP and AppleTalk.

## - EpsonNet WebAssist

Web-based software that allows you to configure the Internal Print Server for TCP/IP, NetWare, NetBEUI, AppleTalk, IPP, and SNMP. You can also make many of the printer settings you can make with the printer's control panel.

- EpsonNet WebManager

Web-based software that allows network administrators to easily control network devices.

- EpsonNet Direct Print

Utility software that enables TCP/IP printing in Windows.

- EpsonNet Internet Print

Utility software that offers printing across the Internet using Internet Printing Protocol (IPP) for Windows 98/95/NT 4.0.

## - EpsonNet NDPS Gateway

Utility software that allows EPSON printers to be used in an NDPS environment and provides printing and status check functions.

- EPSON Status Monitor 3

Utility software that comes with your printer driver gives you information about your printer's current status.

- Printer Status Page

A set of customized web pages for Windows 2000 Internet Printing. It comes with your Windows 2000's printer driver.

## Supported Network Protocols and Features

The Internal Print Server supports the following network protocols and features. It cannot use protocols that are not available or are not installed in your operating system.

- Novell ${ }^{\circledR}$ NetWare ${ }^{\circledR}$ 3.1x/4.1x/5

Supports IPX/SPX protocols that are configured for NetWare
3.1x (Bindery mode), NetWare 4.1x/IntranetWare (both

Bindery emulation and NDS ${ }^{\text {TM }}$ mode), and NetWare $5^{\mathrm{TM}}$ (NDS mode, queue-based print system, and NDPS ${ }^{\circledR}$ )

- Windows 98/95

TCP/IP (Printing via EpsonNet Direct Print)
NetBEUI protocol
IPP

- Windows 2000/NT 4.0/NT 3.51

TCP/IP (LPR) protocol
NetBEUI protocol
IPP (except Windows NT 3.51)

- Macintosh

Mac OS 9, 8.x, 7.6.x
System 7.5.x, 7.1
AppleTalk protocol

- OS/2Warp 3 / 4 (OS/2Warp Connect and OS/2Warp Server) TCP/IP (lprportd)
NetBEUI protocol
- UNIX

Sun OS 4.1.4 or later: SPARC
SunSoft Solaris 2.4 or later: SPARC and x86
SCO UNIX 4.2 or later
HP/UX 9.05 or later
IBM AIX 3.2.5 or later and 4.1.3 or later
lpr, ftp: Filtering operation (TCP/IP)

## Terms and Concepts

The following terms and concepts are defined here to help you understand this guide.

A configuration is a prepared set of conditions for proper operation of a device. Configuring the Internal Print Server is to prepare it to work with protocols available on a network.

A file server stores data required for the Internal Print Server to operate as a print server.

A print queue is where a print job is stored as a file, until the print server sends the job to the assigned printer.

A print server moves jobs from print queues to printers.
A remote printer is a shared printer connected elsewhere on the network, but under the control of a NetWare print server.

EtherTalk is AppleTalk's communication protocol governing Ethernet transmissions.

A protocol is a rule that controls how data or information is exchanged through a network. There are many different layers of protocols for different aspects of hardware and software operation. Computers and software cannot communicate with each other using different protocols.

TCP/IP (Transmission Control Protocol/Internet Protocol) is a layer of protocols that provides communications between nodes on a network.
ftp is a TCP/IP application protocol for file transfer.
lpd is a TCP/IP remote printing protocol application.
Internet Printing Protocol (IPP) is a protocol used for the Internet Printing. Using Internet Printing Protocol (IPP), users can print directly to a URL over an intranet or the Internet.

## Chapter 1

## Installing Software

EpsonNet WinAssist, MacAssist, and WebAssist are software designed to configure the printer for use on a network.

EpsonNet WinAssist allows you to configure the Internal Print Server for TCP/IP, NetWare, AppleTalk, and NetBEUI in a Windows environment. The EpsonNet MacAssist allows you to configure the Internal Print Server for TCP/IP and AppleTalk in a Macintosh environment.

From EpsonNet WinAssist and MacAssist, you can start EpsonNet WebAssist, the web-based configuration utility that allows you to configure the Internal Print Server for TCP/IP, NetWare, AppleTalk, NetBEUI, IPP, and SNMP. You can also make many of the same settings you can make with the printer's control panel and obtain information about the printer status and consumables.

## System Requirements

## Windows

| System: | i486 (Pentium or better recommended) |
| :--- | :--- |
|  | Windows 98/95 |
|  | Windows 2000 Server \& Professional |
|  | Windows NT 4.0/3.51 Server \& Workstation |

Memory: $\quad 8 \mathrm{MB}$ (for Windows 98/95)
16MB (for Windows 2000/NT 4.0/NT 3.51)
Hard disk space: 8MB

## Macintosh

System: Macintosh with 68030 or better processor System 7.5.1 or later

Memory:
6MB
Hard disk space: 13MB

## Browser

- Microsoft Internet Explorer version 4.01 or later
- Netscape Navigator version 4.05 or later


## Note for Windows NT 4.0 users:

If you have not yet upgraded with Windows NT Service Pack 3, install the Windows NT Service Pack before installing Microsoft Internet Explorer.

## Installing EpsonNet WinAssist/MacAssist

Install the configuration utility software, EpsonNet WinAssist or EpsonNet MacAssist to configure the Internal Print Server for your network.

## Note:

Before installing EpsonNet WinAssist, be sure to install any necessary protocols and services such as TCP/IP or NetBEUI. EpsonNet WinAssist may not open if you add or delete the protocols after installing EpsonNet WinAssist. If this happens, uninstall EpsonNet WinAssist and then reinstall it. See "Uninstalling EpsonNet WinAssist" on page 1-4 for instructions.

## Windows

1. Insert the software CD-ROM in the CD-ROM drive.
2. The EPSON Installation Program screen opens automatically.

If the EPSON Installation Program screen does not appear automatically, click Start and Run (Windows 98/95/2000/NT 4.0); or choose Run from the File menu in the Program Manager (Windows NT 3.51). Then, enter D: \EPSETUP.EXE and click OK (substitute the appropriate drive letter if necessary).
3. Double-click Install EpsonNet WinAssist; or select Install EpsonNet WinAssist and then click the arrow at the top right.
4. Follow the on-screen instructions to complete installation.
5. To start EpsonNet WinAssist, click Start, point to Programs and EpsonNet WinAssist, then click EpsonNet WinAssist (Windows 98/95/2000/NT 4.0); or double-click the EpsonNet WinAssist icon in the EpsonNet WinAssist window (NT 3.51).

Note:

- To configure the Internal Print Server for NetWare using EpsonNet WinAssist, you must log in to the NetWare server.
- If you will not use the Internal Print Server in a NetWare environment, select Disable on the NetWare configuration page in the EpsonNet WebAssist; otherwise, you might be charged for the extra line connection when you use a dial-up connection.


## Macintosh

1. Insert the software CD-ROM in the CD-ROM drive.
2. The disk icon opens automatically. If the disk icon does not open automatically, double-click the disk icon. Then, doubleclick the EpsonNet MacAssist folder.
3. Drag the EpsonNet MacAssist icon to your hard disk.
4. To start EpsonNet MacAssist, double-click the EpsonNe† MacAssist icon on your hard disk.

## Uninstalling EpsonNet WinAssist

Follow the steps below to uninstall EpsonNet WinAssist.

## Windows 98/95/2000/NT 4.0

1. Click Start, point to Settings, and then click Control Panel.
2. Double-click the Add/Remove Programs icon.
3. Select EpsonNet WinAssist and click the Add/Remove button (Windows 98/95/NT 4.0) or the Change/Remove button (Windows 2000).
4. The message "Are you sure you want to completely remove the selected application and all of its components?" appears. Click Yes.

## Windows NT3.51

1. Double-click the Uninstall icon in the EpsonNet WinAssist window.
2. The message "Are you sure you want to completely remove the selected application and all of its components?" appears. Click Yes.
3. The message "Uninstall successfully completed" appears. Click OK.

## Chapter 2

## Connecting to the Network

This chapter explains how to connect the Internal Print Server to a network and set the IP address using the printer's control panel, EpsonNet WinAssist, MacAssist, WebAssist, or the arp/ping command.

## Ethernet Operation

## Lights

The indicator lights (1 green and 1 orange) can provide you with important information about the operation of the Internal Print Server.

The green light is a data transmission light which blinks when the host interface receives data.

The orange light indicates the connection status, whether 10BaseT or 100BaseTX is being used. The light is on when the Internal Print Server is connected at 100BaseTX, and the light is off when the Internal Print Server is connected at 10BaseT.

## Note:

See the Reference Guide for the location of the lights.

## Printing a status sheet

Before you start configuring the Internal Print Server, be sure to print a network status sheet. To print a network status sheet, press the Menu button on the printer's control panel once to enter SelecType mode. Press the Menu button again until Tet Menu appears. Then press the Item button untilHetwork Status Sheet. appears on the display, then press the Enter button. The status sheet contains important information such as current configuration and the MAC address of the Internal Print Server.

Note:
See the Reference Guide for more information about the printer's control panel.

## Initializing and resetting the Internal Print Server

You can initialize and reset the network settings of the Internal Print Server using EpsonNet WinAssist or EpsonNet WebAssist, the web-based configuration utility installed in your printer.

Note:
See the section "Changing the IP address using EpsonNet WebAssist" on page 2-12 to open EpsonNet WebAssist.

Initialization:
You can use either method described below to initialize the Internal Print server.

- Click the Return to default button in the Information menu of EpsonNet WinAssist. Any network settings you have made will be replaced by the default settings.
- In EpsonNet WebAssist, click Reset in the Optional menu, then click the RETURN TO DEFAULT button. Any network settings you have made will be replaced by the default settings.

Reset:
In EpsonNet WebAssist, click Reset in the Optional menu, then click the RESET button to simulate turning the power on and off. Resetting causes any changes you have made to take effect.

## Connecting the Internal Print Server to the Network

This printer has the following host interfaces: an Ethernet interface (Internal Print Server), a parallel interface, and an optional Type B interface. You can use these host interfaces to connect the printer to the network. See the Reference Guide for the location of the interfaces.

## Ethernet I/F connector (Internal Print Server)

The Internal Print Server automatically selects either 10BaseT or 100BaseTX when the printer is turned on. You must use a shielded twisted-pair cable (Category 5).

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## Caution:

- Be sure to use a shielded twisted-pair cable (Category 5) to connect the Internal Print Server to 100BaseTX and 10BaseT networks, otherwise the Internal Print Server may malfunction.
- The RJ-45 connector cannot be used with a standard phone line connection. Attempting to do so may damage your equipment.


## Parallel interface

The interface type is an IEEE 1284 bidirectional parallel interface. You can connect the printer directly to a computer, and any client can print through the computer.

## Optional Type B interface

The printer has an optional Type B interface slot. See the Reference Guide for what interface card models you can use with this printer and how install them in your printer. For instructions on using the interface card, see your interface card manual.

## Selecting Your Network Environment

The printer can be shared by users across multiple platforms and environments; Windows 98/95, Windows 2000/NT, Macintosh, OS/2, UNIX, and Novell NetWare.

To use the printer on the network, you need to configure the printer for your network environment. The configuration utility you should use depends on your operating system.

## - NetWare users

Use EpsonNet WinAssist.

## - Windows 98/95/2000/NT users

Use EpsonNet WinAssist or the printer's control panel.

- Macintosh users

Use EpsonNet MacAssist. Adobe PostScript 3 Kit is needed to print from a Macintosh.

- OS/2 or UNIX users

Use the printer's control panel or the arp/ping command to set the IP address. Then you can use EpsonNet WebAssist for configuration.

You must set an IP address for the Internal Print Server first, except in a NetWare environment, which uses the IPX protocol.

For Windows 98/95/2000/NT/Macintosh users, see "Setting the IP Address Using EpsonNet WinAssist/MacAssist" on page 2-7.

For OS/2 and UNIX users, see "Setting the IP Address on the Printer's Control Panel" on page 2-5 or "Setting the IP Address Using the arp/ping Command" on page 2-10.

## Note:

- For Windows 98/95/2000/NT/Macintosh users, you can also use the printer's control panel to set the IP address; however, it is easier to use EpsonNet WinAssist or MacAssist to set the IP address and to make other settings.
- The Internal Print Server is set to the default IP address "192.168.192.168". This private IP address may cause conflicts on your network. To prevent this, you must confirm that the same IP address does not already exist on the network before connecting the Internal Print Server to the network. If it does, turn off the device which has the same IP address, then change the default IP address of the Internal Print Server.


## Setting the IP Address on the Printer's Control Panel

After connecting the printer to the network, you need to set the IP address for the Internal Print Server.

To set the IP address, subnet mask, and default gateway from the control panel, follow the steps below.

1. Turn on the printer.
2. Press the SelecType button until Test Menu appears.
3. Press the Menu button until Hetwork Menu appears.
4. Press the Item button to enter Hetwork $\mathrm{IF}=$ On.
5. Press the Item button to enter Hetwork Conf is $=$ Ho. Then press the Value button to enter Hetwork Contis $=$ Yes. Press the Enter button.
6. Press the Item button to enter Get. IP Gddess = Fanel. The following methods of acquiring the IP address are supported.

Panel: Choose Panel to setting the IP address, subnet mask, and default gateway using the printer's control panel.

Auto: Choose Auto when obtaining the IP address from a DHCP server. The IP address is automatically obtained from the Internal Print Server whenever the printer is reset or turned on.

PING: Choose PING when setting the IP address using arp/ping commands. The Internal Print Server uses the IP address set by arp/ping commands. The settings become available when the printer is reset or turned off and on.

## Note:

- When using Auto, a DHCP server must be installed in your computer and must be correctly configured. See the online help of your operating system for detailed instructions.
- Choose PING only when setting the IP address using arp/ping commands.

7. Press the Item button until IF Eyte 1* appears.
8. Press the Value button until the desired value appears. Then press Enter to set the value.

## Note:

To decrease the value, hold the Value button while pressing the SelecType button.
9. Repeat steps 7 and 8 to set the IP address, subnet mask, and default gateway.
10. Restart the printer to make the settings take effect.
11. Print a network status sheet to confirm the new IP address.

Note:

- You must first set the IP address before using EpsonNet WebAssist.
- See the Reference Guide for more information about settings on the printer's control panel.


## Setting the IP Address Using EpsonNet WinAssist/MacAssist

After connecting the printer to the network, you need to set the IP address for the Internal Print Server.

To set the IP address, subnet mask, and default gateway using EpsonNet WinAssist/MacAssist, follow the steps below.

## Note:

The example screens are from the Windows 95 operating system using EpsonNet WinAssist. Other system displays may differ.

1. Confirm that the necessary protocols are installed in the computer.

If you are using Windows 98/95/2000/NT, TCP/IP must be installed. If you are using Macintosh, AppleTalk must be installed.
2. Turn on the printer.
3. Start EpsonNet WinAssist or MacAssist.

Windows 98/95/2000/NT 4.0: Click Start, point to Programs, EpsonNet WinAssist, then click EpsonNet WinAssist.

Windows NT 3.51: Double-click the EpsonNet WinAssist icon in the EpsonNet WinAssist group.

Macintosh: Double-click the EpsonNet MacAssist icon.
4. Select the printer, then click the Configuration button or double-click the printer.


## Note:

- If you have connected more than one printer with the same type of print server to the network, you can distinguish between the printers by the MAC address on a status sheet.
- You can search printers in other segments by setting the Search Options in the Tool menu in EpsonNet WinAssist. See "Optional settings" on page 9-4 for more information.
- The network administrator must confirm any changes made to the IP address settings.

5. Click the TCP/IP tab to display the TCP/IP menu.

6. Select the "Get IP address" method, either Auto or Manual. When you select Auto, DHCP becomes available. If you want to set the IP address manually, select Manual.

## Note:

- When using Auto, the DHCP server must be installed in your computer and must be correctly configured. See your operating system's online help for detailed instructions.
- If there are no DHCP servers on your system or on your network, the Internal Print Server uses "192.168.192.168" as the default IP address.
- Whenever the printer is turned on, you need to change the printer port setting if Auto is selected for Get IP address. For TCP/IP printing, we recommend you select Manual and set the IP address manually.

7. When you select Manual, assign the IP address, the subnet mask, and the default gateway. Be sure to give an IP address which does not conflict with any other device on the network.

Note:

- The default value for the IP address, subnet mask, and default gateway are 192.168.192.168, 255.255.255.0, and 255.255.255.255 respectively.
- If there is a server or a router which functions as a gateway, type the IP address of the server or router for the gateway address. If there is no gateway, leave the default values.
- The Set by PING check box is not available. If you want to set the IP address using arp/ping commands, use printer's control panel to select PING for Get IP Address in Network Menu.

8. After making the settings, click OK (for WinAssist) or Send (for MacAssist). The Password dialog box appears.
9. Type your password (up to 20 characters) and click OK to save settings. If you are entering a password for the first time, click Change and set the password. For more information about passwords, see "About passwords" on page 9-7 for EpsonNet WinAssist or "About passwords" on page 9-17 for EpsonNet MacAssist.

Follow the on-screen instructions. After updating is complete, refresh the configuration by selecting Refresh from the View menu (for WinAssist), or by quitting MacAssist and then restarting it (for MacAssist).

## Caution:

C Since it takes 2 or 3 minutes to send new settings to the Internal Print Server, you must wait until after the onscreen message appears to turn off your printer.
10. Be sure to print a network status sheet to confirm the new IP address.

## Setting the IP Address Using the arp/ping

## Command

If you are using UNIX or OS/2, you can use the arp command to set the IP address of the Internal Print Server, and the ping command to check that you have set it correctly. You can also use these commands in Windows 98/95/2000/NT, if you have correctly installed TCP/IP networking on these systems.

Before you start, you will need the following information:

- A valid IP address for the Internal Print Server. Ask your system administrator for an IP address which will not cause conflicts with any other device on the network. If you are the system administrator, choose an address within your subnet which will not conflict with any other device.
- The MAC address of the Internal Print Server. This is the hardware serial number of the interface, which cannot be changed. You can check the MAC address on a status sheet.


## Setting and checking the new IP address

To set the new IP address which you have obtained from your system administrator, use the ARP command, with the -s flag (create ARP entry).

## Note:

- Before you set the new IP address using the ARP command, you need to select PING for Get IPAddress in Network Menu of the printer's control panel.
- To set the IP address using arp and ping commands, the IP address of the Internal Print Server must be the default IP address (192.168.192.168) and the printer must be in the same segment as the host computer.
$\square$ In the following, we will assume that the MAC address of your Internal Print Server is 00:00:48:93:00:00 (hexadecimal); and the IP address which you will be assigning is 192.168.100.201 (decimal). Substitute your values for these addresses when you enter the commands.

1. From the command line, type the IP address of the Internal Print Server and its MAC address:
Example: arp -s 192.168.100.201 00-00-48-93-00-00
2. You can now check the new IP address, by "pinging" it: Example: ping 192.168.100.201
3. The Internal Print Server should now respond to the ping. If it does not, you may have entered the MAC address or the IP address in the ARP -s command incorrectly. Double-check and try again. If you are still unsuccessful, re-initialize the Internal Print Server and try again.
4. You can check whether the IP address has been set correctly on a network status sheet.

## Note:

- You cannot print a status sheet before you set a new IP address.
- You can only set the IP address using the arp and ping commands. To change the subnet mask or default gateway of the Internal Print Server, make settings on the printer's control panel or use the EpsonNet WinAssist/MacAssist/WebAssist to change these parameters.
- If the Internal Print Server or the computer is unreachable, you should check the following: the address is correct in the ping command, the Ethernet connection to the printer and to the host has been made correctly, and all hubs, routers, etc. are switched on.


## Changing the IP address using EpsonNet

## WebAssist

After you have configured the Internal Print Server for TCP/IP using printer's control panel, EpsonNet WinAssist, MacAssist, or the arp/ ping command, you can make changes to the IP address or other settings using EpsonNet WebAssist (a utility that runs on your browser).

## Note:

- A web browser must be installed in your computer.
- TCP/IP must be correctly set for the computer and Internal Print Server.
- Do not operate EpsonNet WinAssist/MacAssist and EpsonNet WebAssist at the same time.
- There are some restrictions on the characters you can use depending on your browser. For details, see your browser or OS documentation.

Follow the steps below to change the IP address using EpsonNet WebAssist.

1. Turn on the printer.
2. Run EpsonNet WebAssist by either of the following methods:

- Open EpsonNet WinAssist or EpsonNet MacAssist. Click the printer you want to configure from the list and click the Launch Browser button.
- Open your browser, and type in the IP address of the Internal Print Server directly. Do not run EpsonNet WinAssist or MacAssist.
http:/ / the IP address of the Internal Print Server/
Example: http:/ / 192.168.100.201/

3. Click TCP/IP under Network on the Configuration menu to view the TCP/IP setting screen.

Note:
The network administrator must confirm any changes made to the IP address settings.

4. Select the "Get IP address" method, either Panel or Auto. When you select Auto, DHCP becomes available. To change the IP address manually, select Panel.

Note:
When using Auto, the DHCP server must be installed in your computer and must be correctly configured. See the online help of your operating system for detailed instructions.
5. If you selected Panel, assign the IP address, the subnet mask, and the default gateway. Be sure to give an IP address which does not conflict with any other device on the network.

## Note:

- The default subnet mask is 255.255.255.0 and the default gateway is 255.255.255.255.
- If there is a server or a router which functions as a gateway, type the IP address of the server or router for the gateway address. If there is no gateway, leave the default values.

6. Click the SUBMIT button and type the password to update the settings. The same password is required for EpsonNet WinAssist, MacAssist, and WebAssist. See "Password" on page 9-44 for more information on setting the password.
7. When the message "Configuration change is complete!" appears on your screen, the update is complete. Do not exit the Web browser and do not send a job to the printer until this message appears. Then, follow the on-screen instructions to reset the printer.

## Note:

Since the new IP address becomes available after resetting the printer, you need to restart EpsonNet WebAssist by entering the new IP address.

## Chapter 3

## Settings for NetWare

## Introduction to NetWare Settings

This chapter explains how to configure the Internal Print Server for NetWare. First, you need to set up the printer in a NetWare environment, and then configure the Internal Print Server using EpsonNet WinAssist.

## Supported systems

- Server environment

NetWare 3.1/3.11/3.12 (Bindery)
NetWare 4.1/4.11 (NDS, Bindery emulation)
IntranetWare (NDS, Bindery emulation)
NetWare5 ${ }^{\mathrm{TM}}$ (NDS, Queue-based system, NDPS $^{\circledR}{ }^{\circledR}$ Gateway 2.0)

- Client environment

The client environment must be supported by NetWare.
Clients are able to use the printer driver mounted on the Internal Print Server.

## About modes

You can choose from Print Server, Remote Printer, or Standby mode. We recommend that you select the Print Server mode unless the number of users exceeds the limit.

Features of the modes are described below.

## Print Server mode (NDS/Bindery Print Server):

- High-speed printing with direct printing
- Use of the NetWare user account
- Ability to connect up to 8 file servers simultaneously
- Ability to register up to 32 print queues


## Remote Printer mode:

- A NetWare user account is not required.
- A print server is necessary to control the remote printer.
- Ability to attach up to 16 printers for NetWare 3.1x and up to 255 for NetWare 4.1x, IntranetWare, and NetWare 5.


## Note:

When you turn on the printer, the user account is temporarily accessed in Remote Printer mode. If there is no free space in the user account, turn on the printer before the client logs in to the file server.

## Standby mode (factory default mode):

The Standby mode is the default mode. With this mode, all NetWare related functions stop. Use Standby mode when you are not using the Internal Print Server in a NetWare environment.

## Instructions for using NetWare

## Printing a text file

When you print a text file using the NPRINT command of NetWare or DOS, redirection, misconversion or a gap in characters might occur depending on the client environment.

## PCONSOLE limitation

To use the Internal Print Server in Print Server mode, you cannot use the Print Server status display control with PCONSOLE.

## Bindery and NDS

- Bindery context path can be confirmed from the server console by the SET BINDERY CONTEXT command.
- If the bindery context path has not been set, or if you want to use the print environment of another context from a non-NDS client, it is necessary to specify the context for the bindery. Use the SET BINDERY CONTEXT command to set the context in the AUTOEXEC.NCF file.
- You cannot use the bindery print server mode with EpsonNet WinAssist if you are using Novell Client for Windows 95/98 version 3.00 or Novell Client for Windows NT version 4.50. To configure the Internal Print Server for bindery mode, use Novell IntranetWare Client or EpsonNet WebAssist.

See your NetWare 4.1x or NetWare 5 documentation for more information.

## IPX routing protocol "NLSP"

It is possible to select the IPX routing protocol "NLSP" from NetWare 4.1x or later; however, the Internal Print Server does not support NLSP. RIP/SAP controls the communication.

You can select the routing protocol from a) NLSP with RIP/SAP Compatibility or b) RIP/SAP Only. If you remove the bind of RIP or SAP when NLSP with RIP/SAP
Compatibility is specified, the Internal Print Server is not able to communicate with the file server and NDS. (See "Protocols" and "Bindings" in NetWare's INETCFG utility.)

## Time required to recognize the Internal Print Server

It takes up to two minutes for the NetWare server to recognize the Internal Print Server after turning on the printer. During this start-up time, a status sheet will not show the correct information.

## Frame type

The same frame type should be used for the NetWare server and IPX router on the same network. If more than one frame type is used on the same network, bind all frame types to the NetWare servers and IPX routers.

## For NetWare 5

The IPX protocol must be installed (bound) to the NetWare 5 server.

## Instructions for modes

If the mode you have logged in is different from the mode you set for the Internal Print Server, a message appears when you try to configure the Internal Print Server for NetWare. If you do not want to change the current settings, click Cancel and $\log$ in again with the same mode you have set for the Internal Print Server.

## Using Bindery Print Server (NetWare 3. 1x/4.1x)

This section contains instructions on using the Internal Print Server in Print Server mode under NetWare 3.1x and 4.1x with Bindery emulation.

## Configuring for NetWare using EpsonNet WinAssist

Configure the Internal Print Server using EpsonNet WinAssist.
Note:
Novell Client32 or Novell IntranetWare Client must be installed in your computer. Do not use Novell Client for Windows 95/98 version 3.00 or Novell Client for Windows NT version 4.50.

1. Turn on the printer.
2. From any NetWare client, log in to the target NetWare server with supervisor privileges. You must $\log$ in with bindery connection.
3. Run EpsonNet WinAssist from the Start menu.
4. Click IPX. Select the printer you want to configure from the list, then click Configuration.


## Note:

$\square$ If you have connected more than one printer with the same type of print server to the network, you can distinguish between the printers by the MAC address.

- If the IP address is set to the default IP address, the printer model may not appear.
- If printers do not appear in the IPX group, check that the printer is turned on. If it is on, check that the printer is in the same segment as the computer.
- You can search printers in other segments by setting the Search Options (IPX) in the Tool menu in EpsonNet WinAssist. See "Optional settings" on page 9-4 for more information.

5. Click the NetWare tab to make the settings.

Note:
If the current login environment is different from the current configuration for the Internal Print Server, a message appears. Follow the on-screen instructions to change your configuration.
6. Make the following settings for Printserver/Bindery mode.


Mode:
Select Printserver/Bindery.

## Frame type:

Select Auto. Do not select other frame types.

## Tree name:

Leave as is.

## Context:

Leave as is.

## Primary fileserver name:

Select the file server which the print server logs in.

## Printserver name:

Select the print server. You can also create a new print server by typing a name (up to 47 characters).

## Printserver password:

Type a password up to 20 characters long to be used when the Internal Print Server logs in to the NetWare print server. When you set or change the password, be sure to see the NetWare documentation for important information.

## Re-input password:

Type the password again.

## Polling interval:

Set the polling time from 5 to 90 seconds. When you set or change the polling interval, be sure to see the NetWare documentation for important information.

## Print Queue Configuration button:

Set the print queue. See the next step for more information. If you have already assigned the queue with PCONSOLE, NWADMIN, or EPSON Net! 2 (an older version of the configuration utility), you need to assign the queue again here.
7. Make the following settings for Print Queue Configuration.

You can select or create a print queue to assign to the Internal PrintServer. The following dialog box appears when you click Print Queue Configuration on the Printserver menu.


## Queue name:

Displays the queue name assigned to the Internal Print Server by browsing for the queue.

## Browse button:

Displays the hierarchy of the file server that you have logged in. You can select, create, or delete queues.

- Selecting a queue:

Click the queue and click OK to select the queue.

- Creating a queue:

Click the file server where you want to create a queue, and right-click it, and then select Create Queue. Type the queue name (up to 47 characters).

- Deleting a queue:

Select the print queue you want to delete, right-click it, and then select Delete Queue.

## Queue list box:

List of the queues that are assigned to the print server.

## Add button:

Adds a queue to the print server. Browse the queue and then click the Add button.

## Remove button:

Remove a queue from the queue list box.
8. After making the settings, click OK. The Password dialog box appears.
9. Type your password (up to 20 characters) and click OK to save settings. If you need to set a password, see "About passwords" on page 9-7.

Follow the on-screen instructions. After updating is complete, refresh the configuration by selecting Refresh from the View menu.

## Caution:

c
Since it takes 2 or 3 minutes to send new settings to the Internal Print Server, you must wait until the on-screen message appears before turning off your printer.

## Note:

Printer Objects (named PR0) are automatically created when you save the settings using EpsonNet WinAssist. Use PCONSOLE or NWADMIN to change the printer name.

## Using NDS Print Server (NetWare 4.1x/5)

This section contains instructions for using the Internal Print Server in Print Server mode under NetWare 4.1x, IntranetWare, or NetWare 5 with NDS mode.

## Configuring for NetWare using EpsonNet WinAssist

Configure the Internal Print Server using EpsonNet WinAssist.

## Note:

Be sure that the one of the following Clients is installed in your computer;
Novell Client 32, Novell IntranetWare Client, or Novell Client.

1. Turn on the printer.
2. From any NetWare client, log in to the target context of the NDS tree as ADMIN.
3. Run EpsonNet WinAssist from the Start menu.
4. Click IPX. Select the printer you want to configure from the list, then click Configuration.


## Note:

- If you have connected more than one printer with the same type of print server to the network, you can distinguish between the printers by the MAC address on a status sheet.
- If the IP address is set to the default IP address, the printer model may not appear.
- If printers do not appear in the IPX group, check that the printer is turned on. If it is on, check that the printer is in the same segment as the computer.
- You can search printers in other segments by setting the Search Options (IPX) in the Tool menu in EpsonNet WinAssist. See "Optional settings" on page 9-4 for more information.

5. Click the NetWare tab to make the settings.

## Note:

If the current login environment is different from the current configuration for the Internal Print Server, a message appears. Follow the on-screen instructions to change your configuration.
6. Make the following settings for Printserver/NDS mode.


## Mode:

Select Printserver/NDS.

## Frame type:

Select Auto. Do not select other frame types.

Note for NDS:

- Before you make settings for the Print Server in the right screen, you must complete the Tree name and Context.
- Novell Client service must be installed in the computer to make NDS settings.
- See the NetWare documentation for available characters and the number of characters you can set.


## Tree name:

Click the Browse button and select the NDS Tree.

## Context:

Click the Browse button and select the NDS context.

## Browse button:

Displays the NDS tree view. Select the NDS context. The selected context and its Tree name are input in the appropriate text box. Print server items on the right are dimmed until the Tree and Context are selected.

## Primary fileserver name:

Leave as is.

## Printserver name:

Print servers belonging to the Context you specified are listed. Select the print server. You can also create a new print server by typing a name (up to 47 characters).

## Printserver password:

Type a password up to 20 characters long to be used when the Internal Print Server logs in to the NetWare print server. When you set or change the password, be sure to see the NetWare documentation for important information.

## Re-input password:

Type the password again.

## Polling interval:

Set the polling time from 5 to 90 seconds. When you set or change the polling interval, be sure to see the NetWare documentation for important information.

## Print Queue Configuration button:

Set the print queue. See the next step for more information. If you have already assigned the queue with PCONSOLE, NWADMIN, or EPSON Net! 2 (an older version of the configuration utility), you need to assign the queue again here.
7. Make the following settings for Print Queue Configuration.

You can select or create a print queue to assign to the Internal Print Server. The following dialog appears when you click the Print Queue Configuration button.

## Note:

You can also make queue settings for a higher Context than the Context you specified in the NDS setting. You must have an ADMIN right for the Context in which you want to create the queue.


## Queue name:

Displays the queue name assigned to the Internal Print Server. Format: the print queue name.OU.O (OU stands for Organization Unit and O stands for Organization.)

## Browse button:

Displays the NDS tree view that you have specified in NDS setting. You can select, create, or delete queues.

- Selecting a queue:

Click a queue and click OK to select a queue.

- Creating a queue:

Select the context where you want to create a queue, rightclick it, and then select Create Queue. Type a queue name (up to 47 characters). Select a server where you create a queue for the Create queue server. The queue will be created under SYS volume of the file server. If you want to create a queue under other volumes, create a queue using PCONSOLE or NWADMIN.

- Deleting a queue:

Select the print queue you want to delete, right-click it, and then select Delete Queue.

## Queue list box:

List of the queues assigned to the print server.

## Add button:

Adds a queue to the print server. Browse for the desired queue and then click the Add button.

## Remove button:

Remove a queue from the queue list box.
8. After making the settings, click OK. The Password dialog box appears.
9. Type your password (up to 20 characters) and click OK to save settings. If you need to set a password, see "About passwords" on page 9-7.

Follow the on-screen instructions. After updating is complete, refresh the configuration by selecting Refresh from the View menu.

## Caution:

C Since it takes 2 or 3 minutes to send new settings to the Internal Print Server, you must wait until the on-screen message appears before turning off your printer.

Note:
The Printer Objects are automatically created with the following format when you save the settings using EpsonNet WinAssist. Format: Print server name_P0
Use PCONSOLE or NWADMIN to change the printer name.

## Using Remote Printer (NetWare 3.1x/4.1x/5)

This section contains instructions on using the Internal Print Server in Remote Printer mode under NetWare 3.1x, 4.1x, 5, or IntranetWare.

First, you need to make a printer environment using PCONSOLE or NWADMIN (NetWare Administrator tool). See the target section to make a printer environment.

## - NetWare 3.1x

"Making the printer environment with PCONSOLE" on page 3-16.

- NetWare 4.1x/IntranetWare
"Making the printer environment with Bindery mode" on page 3-20.
- NetWare 4.1x/IntranetWare/NetWare 5
"Making the printer environment with NDS mode" on page 3-23.

Note:
Be sure that the one of the following Clients is installed in your computer;
Novell Client 32 or Novell IntranetWare Client.

## Making the printer environment with PCONSOLE

For NetWare 3.1x users, follow the steps below to make the printer environment with PCONSOLE.

Creating print queues in a file server

1. From any NetWare client, log in to the network with supervisor privileges.
2. Run PCONSOLE. From the Available Options screen, select Print Queue Information and press Enter.

## Auailable Options

Ghange Gurwent File Sewuew Print Queue Information Print Seruer Information
3. Press the Insert key on your keyboard and type the print queue name. Press Enter.

Note:
Since your clients need the print queue name you set here when they use the printer, announce the print queue name to your clients.
4. From the Print Queue list, select the print queue name that you just specified and press Enter. From the Print Queue Information list, select Queue Users and press Enter. Next, select EVERYONE from the list. If EVERYONE is not in the list, press Insert and select EVERYONE from the queue user list.

## Creating a print server

1. From the Available Options screen, select Print Server Information and press Enter.

2. Press the Insert key on your keyboard and type the print server name. Press Enter. It is a good idea to write down the print server name for later use.
3. From the Print Server list, select the print server name that you just specified and press Enter.
Then, from the Print Server Information list, select Print Server Configuration and press Enter.

## Print Server Information

```
Change Password
Full Name
Print Seruer Configuration
Print Seruer ID
Print Seruer Operators
Print Seruer Users
```

4. Select Printer Configuration from the Print Server Configuration Menu and press Enter.

## Print Server Gonfiguration Menu

> File Servers To Be Serviced
> Notify List for Printer Printer Conf iguration
> Queues Serviced by Printer
5. From the Configured Printers list, select Not Installed (port number $=0$ ) and press Enter.

| Configured Printers |  |
| :--- | ---: |
| Not Installed |  |
| Not Installed | 1 |
| Not Installed | 2 |
| Not Installed | 3 |
| Not Installed | 4 |
| Not Installed | 6 |
| Not Installed | 7 |
| Not Installed | 8 |
| Not Installed | 9 |
| Not Installed | 10 |
| Not Installed | 11 |
| Not Installed | 12 |
| Not Installed | 13 |
| Not Installed | 14 |
| Not Installed | 15 |

6. From the Printer configuration screen, specify the printer name. Then, highlight Type and press Enter. Select Remote Parallel, LPT1 for Remote Printer mode.


## Note:

Be sure to select Remote Parallel, LPT1 for Remote Printer mode.
7. Press Esc; then press Enter to save changes.
8. Press Esc.
9. Select Queues Serviced by Printer from the Print Server Configuration menu and press Enter.

## Print Server Configuration Menu

|File Servers To Be Serviced
Notify List for Printer
Printer Configuration
Queues Serviced by Printer
10. Select the printer that you want to use from the Defined Printers list and press Enter.
11. Press the Insert key and assign a queue to the print server port from the Available Queues list.
12. Specify a priority level between 1 to 10 . One is top priority.

## 13. Press Esc to exit PCONSOLE.

Now go to the section "Configuring for NetWare using EpsonNet WinAssist" on page 3-28.

## Making the printer environment with Bindery mode

Follow the steps below to make the printer environment under NetWare 4.1x and IntranetWare with Bindery emulation.

## Note:

- Assign Trusteeships for users if necessary.
- Be sure to use PCONSOLE to set the print queue and print server instead of using NWADMIN.

1. Turn on the printer.
2. From any NetWare client, log in to the server as a SUPERVISOR. Make sure to log in with Bindery connection.

Note:
If the client using this setting has been logged in with NDS mode, press the F4 key while PCONSOLE is starting to switch to the bindery mode.
3. Run PCONSOLE. From the Available Options screen, select Print Queues and press Enter. Press Insert and type the print queue name. Then press Enter.

Note:
Since your clients need the print queue name you set here when they use the printer, announce the print queue name to your clients.
4. From the Print Queue list, select the print queue name that you just specified and press Enter. From the Print Queue Information list, select Queue Users and press Enter. Next, select EVERYONE from the list. If EVERYONE is not in the list, press Insert and select EVERYONE from the queue user list.
5. From the Available Options screen, select Print Servers and press Enter. Press Insert and type the print server name. Then press Enter.
6. Press Esc to exit PCONSOLE, and log out from the server.
7. Then, $\log$ in to the server as an ADMIN. Be sure to $\log$ in with NDS connection.
8. Start Nwadmin.
9. To create the Printer Object, click the container specified as the Bindery context and select Create from the Object menu, then Printer. Type the printer name and click Create.
10. To assign the print queue, double-click the Printer object icon (created in step 9). The Printer dialog box appears.
11. Click Assignments and then click Add. From the print queue list, select the queue (created in step 3) and click OK.
12. Click Configuration in the Printer dialog box, and select Parallel from the Printer type pull-down menu.
13. Click Communication. The Parallel Communication dialog box appears.
14. Select LPT1 for Port; select Polled for Interrupts; and select Manual load (Remote from Print Server) for Connection type. Then, click OK.
15. Click OK in the Printer dialog box.
16. To assign the printer, double-click the Print Server object icon (created in step 5). The Print Server dialog box appears.
17. Click Assignments and then click Add. From the printer object list, select the printer object (created in step 9) and click OK.
18. In the Print Server dialog box, select the assigned printer from the printer object list, and click the Printer Number button to set the printer number from 0 to 15 . Then click OK.
19. To confirm the objects you have assigned, double-click the Print Server object icon. Click Print Layout, and check that the print server, printer, and print queue are connected.

Now go to the section "Configuring for NetWare using EpsonNet WinAssist" on page 3-28.

## Making the printer environment with NDS mode

Follow the steps below to make the printer environment using NWADMIN under NetWare 4.1x, Intranet Ware, and NetWare 5 with NDS mode.

1. Turn on the printer.
2. From any NetWare client, log in to the target context of the NDS tree as an ADMIN.
3. Run the Administrator tool (Nwadmin).
4. Create a printer:

Click the directory context icon, and select Create from the Object menu, then Printer. Type the Printer name and click Create.

| Create Printer |  |
| :--- | :---: |
| Printer name: |  |
| EPL-C8200 | Create |
| Г Define additional properties |  |
|  | Cancel |
|  | Help |

5. Create a print server:

Click the directory context icon, and select Create from the Object menu, then Print Server. Type the Print Server name and click Create.

| Create Print Server | x |
| :---: | :---: |
| Print Server name: | Create |
| EPL-C8200-PS |  |
|  | Cancel |
| Define additional properties | Help |
| $\ulcorner$ Create another Print Server |  |

6. Create a print queue:

Click the directory context icon, and select Create from the Object menu, then Print Queue. Type the Print Queue name and select the Print Queue Volume. Then click Create. Then double-click the print queue object, and register the user.

## Note:

Since your clients need the print queue name you set here when they use the printer, announce the print queue name to your clients.

| Create Print Queue | $\times$ |
| :---: | :---: |
| C- Dijectory Service Queue | Create |
| $\bigcirc$ Reference a bindery queue | Cancel |
| Print Queue name: |  |
| EPL-C8200-Q | Help |
| Print Queue Volume: |  |
| MAXNW411_SYS.max.EPKOW/A |  |
| $\Gamma$ Define additional properties |  |
| Г Create another Print Queue |  |

7. Double-click the Printer Object icon in the NetWare Administrator screen.

8. The Printer dialog box appears. Click Assignments and then click Add.

9. From the print queue list, select the queue you created in step 6 and click OK.
10. Click Configuration, select Other/Unknown for the Printer type list box and click OK.

11. Double-click the Print Server Object icon in the NetWare Administrator screen.

12. In the Print Server dialog box that appears, click Assignments and then click Add.

13. From the printer object list, select the printer object you want to assign and click OK.
14. Go back to the screen in step 12, and click the Printer Number button to set the printer number from 0 to 254.

15. To confirm the objects you have assigned, double-click the Print Server object icon. Click Print Layout, and check that the print server, printer, and print queue are connected.

See your NetWare documentation for more detailed information.
Now go to the next section "Configuring for NetWare using EpsonNet WinAssist" on page 3-28.

## Configuring for NetWare using EpsonNet WinAssist

Configure the Internal Print Server using EpsonNet WinAssist.

1. Turn on the printer.
2. From any NetWare client, log in to the target NetWare server with supervisor privileges or ADMIN.
3. Load the print server from the file server's system console on which the print queue volume is set. >LOAD PSERVER print server name
4. Run EpsonNet WinAssist from the Start menu.
5. Click IPX. Select the printer you want to configure from the list, then click Configuration.


Note:
If you have connected more than one printer with the same type of print server to the network, you can distinguish between the printers by the MAC address.

- If the IP address is set to the default IP address, the printer model may not appear.
- If printers do not appear in the IPX group, check that the printer is turned on. If it is on, check that the printer is in the same segment as the computer.
- You can search printers in other segments by setting the Search Options (IPX) in the Tool menu in EpsonNet WinAssist. See "Optional settings" on page 9-4 for more information.

6. Click the NetWare tab to make the settings.

## Note:

If the current login environment is different from the current configuration for the Internal Print Server, a message appears. Follow the on-screen instructions to change your configuration.
7. Make the following settings for Remote printer mode.


## Mode:

Select Remote printer.

## Frame type:

Select Auto. Do not select other frame types.

## Tree name:

Leave as is.

## Context:

Leave as is.

## Primary printserver name:

Specify the print server name which you have created using PCONSOLE or NWADMIN.

## Printer port number:

Specify the same port number you assigned to the print server using PCONSOLE or NWADMIN.
8. After making the settings, click OK. The Password dialog box appears.
9. Type your password (up to 20 characters) and click OK to save the settings. If you need to set a password, see "About passwords" on page 9-7.

Follow the on-screen instructions. After updating is complete, refresh the configuration by selecting Refresh from the View menu.

## Caution:

C
Since it takes 2 or 3 minutes to send new settings to the Internal Print Server, you must wait until the on-screen message appears before turning off your printer.

## Using EpsonNet NDPS Gateway

This section contains instructions on printing using Novell Distributed Print Services ${ }^{\circledR}\left(\right.$ NDPS $\left.^{\circledR}\right)$ with Novell NetWare 5 and "NetWare Enterprise Print Services (NEPS)" for NetWare 4.11/4.2. Novell Distributed Print Services (NDPS) are new generation print services for NetWare.

## Note:

- NEPS is an optional package for NetWare offered by Novell.
- Banners cannot be printed with NDPS.
- The Status Monitor 3 utility cannot be used with NDPS.
- For detailed information about NDPS, see the Novell documentation.
- You can install the EpsonNet NDPS Gateway from the software CD-ROM. Open the NETUTIL folder, then ENGW, then double-click edps21 de.exe (this file name may be changed). For detailed information about EpsonNet NDPS Gateway, see the online guide in the software CD-ROM. Open the NETUTIL folder, then ENGW, then double-click index.htm.

Make sure of the following points before starting;

- When you install NetWare 5, install "IPX" ("IP" is installed by default).
- When you use the Internal Print Server with Bindery (either in Print Server mode or Remote Printer mode), you need PCONSOLE.EXE to create bindery objects such as Print Server and Print Queue object. Since PCONSOLE.EXE does not come with NetWare 5, you need to get the file from Novell.


## Outline of settings

The following are basic steps to following order to use the Internal Print Server with the NDPS printing system. Detailed procedures are described in the next sections.

1. Select the Connection Type and make the printer environment on the Server and Clients.
2. Create an NDPS Manager object in NetWare Administrator.
3. Create a Printer Agent in NetWare Administrator.
4. Configure the Internal Print Server using EpsonNet WinAssist.
5. Set the printer on the client workstations.

The environment, the settings you make, and tools you use will differ depending on the printer type and connection type you choose. You can create an NDPS Manager and Printer Agent in NetWare Administrator or partially via the Server Console. See the Novell online documentation for more details.

## Making printer environment

1. Select the Connection Type from the following: Remote (rprinter on IPX), Remote (LPR on IP), or Queue Based.
2. Install (bind) the following protocols on the server depending on the connection type you use.

- For Remote (rprinter on IPX) connection, install IPX
- For Remote (LPR on IP) connection, install TCP/IP
- For Queue Based connection, install IPX

3. Install the appropriate Client Software on client workstations. Make sure they install NDPS.
4. Install printer drivers on client workstations.

## Creating an NDPS Manager

1. Run NetWare Administrator (NWADMN32.EXE) on the client machine. The main browser window appears.
2. To create an NDPS Manager, click the Directory context icon, then select Create from the Object menu.
3. Select NDPS Manager from the list.
4. Type the NDPS Manager name in the NDPS Manager Name field.
5. Browse the Resident Server and select where you want the NDPS Manager assigned.
6. Browse the Database Volume and select where you want the NDPS Manager database assigned.
7. Click Create. The NDPS Manager appears in the main browser window.
8. Type LOAD NDPSM at the server console, and select the NDPS Manager you have created.

## Creating a Printer Agent

After creating an NDPS Manager, you can create Printer Agents, for both public access printers and controlled access printers. The way to create a Printer Agent differs depending on the printer type you choose. The following are the features of public access printers and controlled access printers.

- Public Access Printers:

NDPS printers that are available to all network users and are not associated with an NDS object. Users can select and print to any public access printer they can view from their workstations. However, these printers do not take full advantage of services such as security and job event notification.

- Controlled Access Printers:

NDPS printers that are added to the NDS tree by NetWare Administrator. They are only available to the workstation user through the NDS object list. These printers can take full advantage of the security and management features provided by NDS.

1. Select the printer type either public access printer or controlled access printer.
2. Create a public access printer. If you want to create a controlled access printer, go to step 3.

In NetWare Administrator, double-click the NDPS Manager you have created. Click Printer Agent List button, then click New. Type the Printer Agent name, and select EpsonNet NDPS Gateway Configuration for the Gateway Type. Click OK. Then go step 4.
3. Create a controlled access printer.

In NetWare Administrator, select the Directory context icon. Select Create from the Object menu, then select NDPS Printer. Type the Printer Agent name, select Create a new Printer Agent, then click Create. Select the NDPS Manager you have created, and select EpsonNet NDPS Gateway Configuration for the Gateway Type. Click OK.
4. Select the port handler type. For Remote printer, LPR printer, and Queue Based printer, select Remote (rprinter on IPX), Remote (LPR on IP), and Queue Based respectively. Then click Next.
5. Configure it as follows. It is a good idea to print a network status sheet of the Internal Print Server and configure the corresponding items.

- For Remote (rpinter on IPX) connection:

IPX Network Number: Enter the IPX network number of the Internal Print Server. The IPX network number is first 8 digits of the IPX Network Node on the network status sheet.
IPX Node Number: Enter the IPX node number of the Internal Print Server. The IPX node number is last 12 digits of the IPX Network Node on the network status sheet.
SAP Name: Enter the Primary Print Server Name. Do not use the following characters; ~! @ \# \$ \% ^ \& * ( ) +` = \{ \} []|\:;" < \gg ? /
Printer Number: Enter the printer number using numbers from 0 to 254 . Normally enter 0 .

- For Remote (LPR on IP) connection:

IP Address: Enter the IP address of the Internal Print Server. You can confirm the IP address on the network status sheet.

- For Queue Based connection:

NDS Context: Type the NDS context.
Print Server Name: Print server name which is already defined in NDS or Bindery. If the printer is in Remote Printer mode, enter the print server name that is used when PSERVER.NLM is loaded.
Printer Name: Printer name which is already defined in NDS or Bindery.
NDS Volume for Print Queue: The format is as follows; Format: The NDS Volume and the context
For example: NDPS_SERVER_SYS.EPSON
File Server for Print Queue: Enter the file server name for the print queue.
IPX Network Number: Enter the IPX network number of the Internal Print Server. The IPX network number is first 8 digits of the IPX Network Node on the network status sheet.

IPX Node Number: Enter the IPX node number of the Internal Print Server. The IPX node number is last 12 digits of the IPX Network Node on the network status sheet.
6. When you complete filling in the boxes, press Finish. Follow the on-screen instructions.
7. The Select Printer Drivers dialog box appears. Select appropriate printer driver for Windows 95/98 and Windows NT 4.0, and select (None) for Windows 3.1. Be sure to select the printer driver corresponding to your specific printer under both the Windows 95/98 and Windows NT 4.0 menus.
8. Click Continue.
9. Confirm the Printer Agent that you have just created.

In NetWare Administrator, double-click the NDPS Manager object and click the Printer Agent List button. Check that the status of the Printer Agent you have just created is "Idle".

For Remote (rpinter on IPX), go to the next section "Configuring for NetWare using EpsonNet WinAssist" on page 3-37.

For Remote (LPR on IP), go to "Setting the IP Address Using EpsonNet WinAssist/MacAssist" on page 2-7.

For Queue Based, go to "Using Bindery Print Server (NetWare 3.1x/4.1x)" on page 3-5 or "Using NDS Print Server (NetWare $4.1 \mathrm{x} / 5)^{\prime \prime}$ on page 3-9.

## Configuring for NetWare using EpsonNet WinAssist

Follow the steps below if the printer is a Remote (rprinter on IPX) connection.

Note:
Be sure that the one of the following Client is installed in your computer; Novell Client 32, Novell IntranetWare Client, or Novell Client.

1. Turn on the printer.
2. From any NetWare client, log in to the target NetWare server as ADMIN.
3. Run EpsonNet WinAssist from the Start menu.
4. Click IPX. Select the printer you want to configure from the list, then click Configuration.


## Note:

- If you have connected more than one printer with the same type of print server to the network, you can distinguish between the printers by the MAC address.
- If the IP address is set to the default IP address, the printer model may not appear.
- If printers do not appear in the IPX group, check that the printer is turned on. If it is on, check that the printer is in the same segment as the computer.
- You can search printers in other segments by setting the Search Options (IPX) in the Tool menu in EpsonNet WinAssist. See "Optional settings" on page 9-4 for more information.

5. Click the NetWare tab to make the following settings.

## Note:

If the current login environment is different from the current configuration for the Internal Print Server, a message appears. Follow the on-screen instructions to change your configuration.


## Mode:

Select Remote printer.

## Frame type:

Select Auto. Do not select other frame types.

## Tree name:

Leave as is.

## Context:

Leave as is.

## Primary printserver name:

Type the SAP name (up to 47 characters) you have created in step 5 on the section "Creating a Printer Agent" on page 3-33.

## Printer port number:

Specify the same port number (from 0 to 254 ) you set in step 5 on the section "Creating a Printer Agent" on page 3-33.
6. After making the settings, click OK. The Password dialog box appears.
7. Type your password (up to 20 characters) and click OK to save settings. If you need to set a password, see "About passwords" on page 9-7.

Follow the on-screen instructions. After updating is complete, refresh the configuration by selecting Refresh from the View menu.

## Caution:

C
Since it takes 2 or 3 minutes to send new settings to the Internal Print Server, you must wait until the on-screen message appears before turning off your printer.

## Setting the printer on client workstation

After configuring the print server, set up the printer on client workstations.

## Installing printers automatically

1. Run the Novell Printer Manager from Windows. If you are running Windows 98/95/NT, execute :
\PUBLIC \WIN32\NWPMW32.EXE
2. In the Novell Printer Manger dialog, select New from the Printer menu.
3. Click Add. A list of available printers appears.
4. Select the pritner you want and click Install.

The Novell Printers---Install dialog appears. You may modify the printer name that appears and select a pre-defined configuration.
5. Click OK. The printer driver for that printer model is installed automatically from the Resource Management Service.
6. Click Close. The printer appears in the main Printer Manager window and is available for print jobs.

## Installing printers manually

1. Install the printer driver.
2. Change the Ports on the printer's properties dialog box. Specify the following objects for the port.
$\square$ For Public Access Printers:
The Printer Agent you have created in "NDPS Public Access Printers" under Entire Network.

- For Controlled Access Printers:

The Printer Agent you have created in the NDS tree.
See the Novell online documentation for details.

## Configuring for NetWare Using EpsonNet WebAssist

You can configure the Internal Print Server for NetWare using EpsonNet WebAssist.

## Note:

- You cannot create a print server, print queue, or printer with EpsonNet WebAssist. You must have created these objects before using EpsonNet WebAssist.
- A web browser must be installed in your computer.
- TCP/IP must be correctly set for the computer and Internal Print Server.
- Do not operate EpsonNet WinAssist/MacAssist and EpsonNet WebAssist for the printer at the same time.
- There are some restrictions on the characters you can use depending on your browser. For details, see your browser or OS manual.

1. Turn on the printer.
2. Run EpsonNet WebAssist by either of the following methods:

- Run EpsonNet WinAssist or EpsonNet MacAssist. Click the printer you want to configure from the list and click the Launch Browser button.
- Open your browser, and type in the IP address of the Internal Print Server directly. Do not run EpsonNet WinAssist or MacAssist.
http:/ / the IP address of the Internal Print Server/

3. Click NetWare under Network on the Configuration menu to view the NetWare setting screen.

4. Choose Enable to use NetWare.

## Note:

If Disable is on, all NetWare related functions stop. Select Disable to prevent excess dial-up charges.
5. Select Auto for the frame type.
6. Select the Mode.

- Select NDS Print Server for NetWare 4.1x or NetWare 5 with NDS mode.
- Select Bindery Print Server for NetWare 3.1x and NetWare $4.1 x$ with Bindery mode.
- Select Remote Printer for Remote Printer under NetWare 3.1x, NetWare 4.1x, and NetWare 5.
$\square$ Select Standby when not using NetWare, or when problems arise from setting NetWare to Enable.

7. When using NDS mode, type the NDS Tree name (up to 31 characters) and the NDS Context without "." at the top (up to 255 characters). Leave these settings blank if using Remote Printer mode.
8. When you select NDS Print Server or Bindery Print Server for the Mode, make the Print Server settings.

## Primary File Server Name:

Set the file server which the print server logs in (up to 47 characters) if the mode is set to Bindery Print Server.

## Print Server Name:

Set the print server name (up to 47 characters).

## Polling Interval:

Set the polling time from 5 to 90 seconds. Usually you do not need to set.

## NetWare Password:

Set a password up to 20 characters to be used when the Internal Print Server logs in to the NetWare print server. Usually you do not need to set.
9. When you select Remote Printer for Mode, make the Remote Printer settings.

## Primary Print Server Name:

Set the print server name (up to 47 characters).

## Printer Port Number:

Set the remote printer's port number.
10. Click the SUBMIT button and type the password to update the settings. The same password is required for EpsonNet WinAssist, MacAssist, and WebAssist. See "Password" on page 9-44 for more information on setting the password.
11. If the message "Configuration change is complete!" appears on your screen, the update is complete. Do not exit the Web browser or send a job to the printer until this message appears. Then, follow the on-screen instructions to reset the printer.

## Instructions for Using a Dial-Up Networks

This chapter contains explanations about and instructions for using a dial-up network.

Note:
The primary server described in this manual indicates a primary time server which offers time to the workstations on the network.

## Using a dial-up network in each mode

## Print Server mode:

Because the Internal Print Server polls the primary server for jobs in Print Server mode, it is not recommended that the primary server be located on a dial-up connection. A permanent connection should be used instead.

## Remote Printer mode:

In Remote Printer mode, it is possible for the Internal Print Server to operate in this configuration if the router has a proxy reply function. However, unnecessary dial-ups are made when the primary server is down, so it is recommended that a dial-up exclusive connection line is used.

## When there is a primary server at dial-up destination

Possible problems below are examined for cases where the Internal Print Server has to operate in this environment.

Note:
A precondition is to use a router which has a NetWare proxy reply function.

## For local networks with file servers:



- At power-up

Since the local file server is accessed before the primary server, a dial-up is generated. There is no problem since this dial-up is generated only once when the power supply is turned on.

- When the Internal Print Server is not correctly configured Since the local file server is accessed before the primary server, a dial-up is generated. This dial-up is repeated at intervals of approximately 5 minutes. Configure the Internal Print Server correctly to avoid this phenomenon.
- During normal operation (standby)

A SPX Watchdog packet is sent according to the NetWare protocol rules. Use a router with a proxy response function to avoid dial-up.

- During normal operation (printing)

A dial-up is generated while the printing data is being transferred. This is not a problem because it is a dial-up specific to the dial-up network.

When the primary server is down during operation

A dial-up is generated because connection to the primary server is periodically attempted. Since this is attributable to the automatic re-connection function, turn the printer off and on once.

- When the local network file server is down

If the local network file server is unavailable, NetWare may not be able to be used on the local network. In this case, the Internal Print Server will stop print server or remote printer operation and no further dial-ups are generated.

## For local networks with no file server:



Depending on the router setting, the NetWare protocol can be used without a file server on the local network. This case also follows the first five described above.

## When there is a primary server in the local network

Even if a primary server is installed on the local network, an unnecessary dial-up may be generated depending on the configuration. The following phenomena are common in both the Print Server mode and the Remote Printer mode.


## - At power-up

Since access is made only to the primary server, no dial-up is generated.

- When the Internal Print Server is not correctly configured

Since access is made only to the primary server, no dial-up is generated. However, if an incorrect remote network file server or print server is set as the primary server, an unintended dial-up might be generated. Configure the Internal Print Server correctly to avoid this problem.

- During normal operation (standby/printing)

Since access is made only to the primary server, no dial-up is generated.

- When the primary server is down during operation Connection to the primary server is periodically attempted, but no dial-up is generated. However, if the router is set to pass SAP packets (Find Nearest Server), an unintended dialup might be generated. To avoid this, turn the printer off and on once, or do not allow the router to pass SAP packets (Find Nearest Server).


## Chapter 4

## Settings for Windows 98/95

## Introduction to Windows 98/95 Settings

This chapter explains TCP/IP (LPR) printing and NetBEUI printing under Window 98 and Windows 95.

## Supported systems

The supported systems are as follows:

- Printing via EpsonNet Direct Print (TCP/IP)
$\square$ Microsoft Windows Network (NetBEUI)
- Internet Printing Protocol (IPP). See Chapter 12, "EpsonNet Internet Print."


## Printing with TCP/IP via EpsonNet Direct Print

Since Windows 98/95 do not support LPR printing, standard TCP/IP printing cannot be used. However, you can print via TCP/IP using the EpsonNet Direct Print utility. For detailed information, see Chapter 10, "EpsonNet Direct Print."

## Printing with NetBEUI

Before configuring the Internal Print Server using EpsonNet WinAssist or WebAssist, make sure to install NetBEUI and Client for Microsoft Networks in your computer. If they are already installed, go to the next section "Configuring for NetBEUI using EpsonNet WinAssist" on page 4-3.

## Installing the NetBEUI protocol

1. To install Client for Microsoft Networks, double-click Network in Control Panels, and check that Client for Microsoft Networks is in the list of installed network components on the configuration menu.
2. If Client for Microsoft Networks is not in the list, click the Add button. Select Client and click Add.
3. Select Microsoft from the Manufacturers list and Client for Microsoft Networks from the Network Clients list and click OK.
4. Installing NetBEUI.

Double-click Network in Control Panels, and check if NetBEUI is in the list of installed network components on the configuration menu.
5. If NetBEUI is not on the list, click the Add button. Select Protocol and click Add.
6. In the Select Network Protocol dialog box, select Microsoft from the Manufacturers list, and then select NetBEUl from the Network Protocols list and click OK.

## Configuring for NetBEUI using EpsonNet WinAssist

You can use the Internal Print Server with the default value for NetBEUI. If you want to change the default value, use EpsonNet WinAssist or WebAssist. The default values for NetBEUI are as follows;

| Items | Default values |
| :--- | :--- |
| NetBIOS name | EPxxxxxx |
| Workgroup name | Workgroup |
| Device name | EPSON |

To configure the Internal Print Server for NetBEUI, follow the steps below.

## Note:

- TCP/IP or IPX must be installed on your computer.
- To configure for NetBEUI with EpsonNet WinAssist, the Internal Print Server must have a valid IP address or you must have logged in to the NetWare server or NDS context as an ADMIN.

1. Turn on the printer.
2. Run EpsonNet WinAssist from the Start menu.
3. Select the printer you want to configure from the list, then click Configuration or double-click the printer.


## Note:

If you have connected more than one printer with the same type of print server to the network, you can distinguish between the printers by the MAC address on the status sheet.

- If the IP address is set to the default IP address, the printer model may not appear.
- You can search printers in other segments by setting the Search Options in the Tool menи in EpsonNet WinAssist. See "Optional settings" on page 9-4 for more information.

4. Click the NetBEUI tab, and make the following settings.


## NetBIOS name:

The NetBIOS name is the computer's name on the network. Type a name (up to 15 characters). Be sure to give a unique name. The default name is "EPxxxxxx" (xxxxxx are last 6 digits of the serial number).

## Workgroup name:

Type the workgroup name or domain name (up to 15 characters) used for the Windows network environment.

## Device name:

Type the device name (up to 12 characters). LPT1, LPT2, or LPT3, or COM cannot be used.
5. After making the settings, click OK. The Password dialog box appears.
6. Type your password (up to 20 characters) and click OK to save settings. If you are entering a password for the first time, click Change and set the password. For more information about passwords, see "About passwords" on page 9-7.

Follow the on-screen instructions. After updating is complete, refresh the configuration by selecting Refresh from the View menu.

## Caution:

C
Since it takes 2 or 3 minutes to send new settings to the Internal Print Server, you must wait to turn off your printer after the on-screen message appears.

## Configuring for NetBEUI using EpsonNet WebAssist

To configure the Internal PrintServer using EpsonNet WebAssist, follow the steps below.

Note:

- A web browser must be installed in your computer.
- TCP/IP must be correctly set for the computer and Internal Print Server.
- Do not operate EpsonNet WinAssist and EpsonNet WebAssist at the same time.
- There are some restrictions on the characters you can use depending on your browser. For details, see your browser and OS documentation.

1. Turn on the printer.
2. Run EpsonNet WebAssist by either of the methods described below.

- Run EpsonNet WinAssist. Click the printer you want to configure from the list and click the Launch Browser button.
- Open your browser, and type in the IP address of the Internal Print Server directly. Do not run EpsonNet WinAssist.
http:/ / the IP address of the Internal Print Server/

3. Click NetBEUI under Network on the Configuration menu. The NetBEUI setting screen appears.


## NetBEUI:

Select Enable. If Disable is on, all NetBEUI related functions will stop.

## NetBIOS Name:

NetBIOS name is the computer's name on the network. Type a name (up to 15 characters). Be sure to use a name that is unique on the network. The default name is "EPxxxxxx" (xxxxxx are last 6 digits of the serial number).

## Workgroup Name:

Type the workgroup name or domain name (up to 15 characters) used for the Windows network environment.

## Device Name:

Type the device name (up to 12 characters). LPT1, LPT2, or LPT3, or COM cannot be used.
4. Click the SUBMIT button and type the password to update the settings. The same password is required for EpsonNet WinAssist, MacAssist, and WebAssist. See "Password" on page 9-44 for more information on setting the password.
5. When the message "Configuration change is complete!" appears on your screen, the update is complete. Do not exit the Web browser and do not send a job to the printer until this message appears. Follow the on-screen instructions to reset the printer.

## Setting up your printer

This section explains how to set up a printer.

1. Click Start, point to Settings, and then click Printers.
2. Double-click Add Printer.
3. Select the Network Printer radio button and click Next.
4. Click the Browse button, and select the network path from the list. If it is not possible to browse, type the following in the Network path or queue name box.
$\backslash \backslash$ the NetBIOS name of the Internal Print Server $\backslash$ the Device name of the Internal Print Server

5. The Add Printer Wizard appears. Follow the on-screen instructions to set up the printer.

Note:
If the Add Printer Wizard asks you to choose either Keep existing driver or Replace existing driver, be sure to click the Replace existing driver radio button.

## Chapter 5

## Settings for Windows 2000/NT

## Introduction to Windows 2000/NT Settings

This chapter explains TCP/IP printing, NetBEUI printing in Windows 2000, Windows NT 4.0, and Windows NT 3.51, and IPP printing in Windows 2000.

## Supported systems

The supported systems are as follows:

- Windows 2000 Server \& Professional
- Windows NT Server \& Workstation 4.0/3.51
- LPR port (TCP/IP)
- Microsoft Windows Network (NetBEUI)
- Internet Printing Protocol (except NT 3.51)

For Windows 2000, see "Printing with IPP (Windows 2000 Only)" on page 5-22.
For Windows NT 4.0, see Chapter 12, "EpsonNet Internet Print."

## Printing with TCP/IP

To use the printer on a TCP/IP network in Windows NT (LPR), follow the steps below.

## Configuring for TCP/IP using EpsonNet WinAssist

To use TCP/IP on the network, you need to set an IP address for the Internal Print Server.

See "Setting the IP Address Using EpsonNet
WinAssist/MacAssist" on page 2-7 to configure the Internal Print Server for TCP/IP.

Note:
Make sure you have installed TCP/IP in your operating system. For information on installing TCP/IP, see your operating system's online help.

## Printing via Standard TCP/IP Port Monitor in Windows 2000

When using the printer on a TCP/IP network in Windows 2000, follow the steps below to connect the network printer to your computer using Standard TCP/IP Port Monitor.

## Setting up the printer in Windows 2000

1. Make sure the printer is turned on.
2. Click Start, point to Settings, and then click Printers.
3. Double-click Add Printer to start the Add Printer wizard, and then click Next.
4. Click Local printer, clear the Automatically detect my printer check box, and then click Next.

## Note:

You must clear the Automatically detect my printer check box because the printer is attached directly to the network, not to a Windows 2000 computer.

5. Click the Create a new port radio button, and then select Standard TCP/IP Port from the list. Then click Next.

| Add Printer Wizard |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Select the Printer Port <br> Computers communicate with printers through ports. |  |  |  |  |
| Select the port you want your printer to use. If the port is not listed, you can create a new port. |  |  |  |  |
| $C$ Use the following port: |  |  |  |  |
| Port Description Printer - <br> LPT1: Printer Port EPSON EPL-N2750 Advance...  <br> LPT2: Printer Port   <br> LPT3: Printer Port   <br> COM1: Serial Port   <br> COM2: Serial Port   <br> COM3: Serial Port   |  |  |  |  |
|  |  |  |  |  |
| Note: Most computers use the LPT1: port to communicate with a local printer. <br> Create a new port: <br> Type: <br> Standard TCP/IP Port |  |  |  |  |
|  |  |  |  |  |
| <Back Next> Cancel |  |  |  |  |

6. Enter the IP address of the Internal Print Server and click Next.

| Add Standard TCP/IP Printer Port Wizard |  |  | $x$ |
| :---: | :---: | :---: | :---: |
| Add Port <br> For which device do you wa | o add a port? |  |  |
| Enter the Printer Name or IP address, and a port name for the desired device. |  |  |  |
| Printer Name or IP Address: |  |  |  |
| Port Name: | $\mathrm{xxxx}^{8 \times \mathrm{xx} . \mathrm{xxx} . \mathrm{xxx}}$ |  |  |

7. If an error occurs, the following dialog box appears. Click the Standard radio button and then select EPSON Network Printer.

8. Follow the on-screen instructions to finish setting up the printer.

## Printing via LPR software in Windows NT 4.0

## Installing LPR software in Windows NT 4.0

Follow the steps below to install the LPR software on Windows NT 4.0. If you have already installed Microsoft TCP/IP Printing, you can skip these steps.

1. Double-click the Network icon in the Control Panel and click Add on the Services menu.
2. Select Microsoft TCP/IP Printing and click OK.
3. Follow the instructions on the screen.

For more information, see your Windows NT 4.0 documentation.

## Setting up the printer in Windows NT 4.0

After configuring the Internal Print Server, you need to set up the network printer. Follow these steps to set up the printer in Windows NT 4.0.

1. Make sure the printer is turned on.
2. Click Start, point to Settings, and then click Printers.
3. Double-click the Add Printers icon, and click the My Computer radio button, then click Next.
4. Click Add Port in the Add Printer Wizard dialog box.
5. Select LPR Port from the Available Printer Port list, and click the New Port button.

6. The Add LPR Compatible Printer dialog box appears. Type the IP address of the Internal Print Server in the first text box and an appropriate printer name in the second text box, and click OK.

7. Follow the on-screen instructions to install the printer driver.

## Note:

When you share the printer, announce the printer name and the location to clients so they will be able to know which printer to use on the network.

## Printing via LPR software in Windows NT 3.51

## Installing LPR software in Windows NT 3.51

Follow the steps below to install LPR software in Windows NT 3.51. If you have already installed Microsoft TCP/IP Printing, you can skip these steps.

1. Double-click the Network icon in the Control Panel to open the Network Settings dialog box.
2. If Microsoft TCP/IP Printing is in the Installed Software list box, you can skip to the next section. Otherwise, click Add Software.
3. Select TCP/IP Protocol and related components and click Continue.
4. Select TCP/IP Network Printing Support. Then click Continue.
5. Follow the instructions on the screen.

For more information, see your Windows NT 3.51 documentation.

## Setting up the printer in Windows NT 3.51

After configuring the Internal Print Server, you need to set up the network printer. Follow these steps to set up the printer in Windows NT 3.51.

## Note:

Install the correct printer driver before starting these steps.

1. Click Print Manager in the Main program group.
2. Choose Create Printer from the Printer menu.

3. Type the printer name, and select the printer driver from the Driver pull-down menu.
4. To share the printer on a network, select the Share this printer on the network check box. Type the share name and the location.
5. Choose Other from the Print To pull-down menu. The Print Destinations dialog box appears.
6. Select LPR Port from the Available Print Monitors list and click OK. The Add LPR compatible printer dialog box appears.
7. Type the previously specified IP address of the Internal Print Server and the appropriate printer name. Then click OK.
8. Verify that all your settings and are correct in the Create Printer dialog box. Make changes if necessary.
9. Click OK to start installing the printer driver. Follow the onscreen instructions.

## Note:

When you share the printer, announce the printer name and the location to the clients so they will be able to know which printer to use on the network.

## Changing the type of access of the spool directory

You need to change the access rights of the spool directory when you create a shared printer on the Windows NT 3.51 Server (if you have set up your computer to use an NTFS file system, rather than a FAT file system).

1. Start the File Manager and point the cursor at \WINNT35\SYSTEM32\SPOOL\PRINTERS.
2. Choose Permissions from the Security menu.
3. Change the type of access of Everyone to ADD \& READ (RWX)(RX), and click OK.


## FTP Printing

You can print using FTP command from Windows. First, you need to set the IP address for the Internal Print Server.

See "Changing the IP address using EpsonNet WebAssist" on page 2-12 to configure the Internal Print Server for TCP/IP.

The following is an example of printing using the FTP command (Text after " $>$ " is user input).

C:Windows>ftp 22.33.44.55
Connected to 22.33.44.55
220 FTP server (EPSON FTPD version 1.01) ready.
User (22.33.44.55:(none)):
230 VUser (none) logged in.
ftp>put c: \testdata $\backslash$ aa.txt
200 PORT command successful.
150 Opening ASCII mode data connection for EPL-N2050.
226 Transfer complete.
ftp> bye
221 Goodbye.

## Printing with NetBEUI

To print with NetBEUI from Windows 2000, NetBEUI protocol and Client for Microsoft Networks must be installed; and to print with NetBEUI from Windows NT 4.0/3.51, NetBEUI protocol and Workstation must be installed on your computer.

If they are already installed, go to the next section "Configuring for NetBEUI using EpsonNet WinAssist" on page 5-14.

## Installing NetBEUI in Windows 2000

1. Click Start, point to Settings, and then click Network and Dial-up Connections. The Network and Dial-up Connections screen appears.
2. Right-click the network connection for which you want to install and enable NetBEUI, and then click Properties.
3. If NetBEUI Protocol is not in the list of installed components, click the Install button.

## Note:

Also check that Client for Microsoft Networks is installed.

4. Click Protocol, and then click the Add button.
5. In the Select Network Protocol dialog box, click NetBEUI Protocol, and then click OK.
6. Verify that the NetBEUI check box is selected, and then click OK.

## Installing NetBEUI in Windows NT 4.0

Note:
Be sure that Workstation is installed in the Services menu.

1. Double-click the Network icon in the Control Panel. Click the Protocols tab, and check if the NetBEUI Protocol is in the Network Protocols list.

2. If NetBEUI Protocol is not in the list, click Add.
3. Select Ne†BEUI Protocol and click OK.

## Installing NetBEUI in Windows NT 3.51

Note:
Be sure that Workstation is in the Installed Network Software list.

1. Double-click the Network icon in Control Panels to display the Network Settings dialog box. Make sure that the NetBEUI Protocol is in the Installed Network Software list.

2. If NetBEUI Protocol is not in the list, click the Add Software button. Select NetBEUI Protocol from the Network Software pull-down menu, and click Continue to add NetBEUI.

| $\square$ Add Network Software |  |  |
| :---: | :---: | :---: |
| Network Software: | NetBEUII Protocol | Continue |
| Select the software component you want to install; use <Other> if you have a disk from the vendor. |  | Cancel |
|  |  | Help |

## Configuring for NetBEUI using EpsonNet WinAssist

You can use the Internal Print Server with the default value for NetBEUI. If you want to change the default value, use EpsonNet WinAssist or WebAssist. The default values for NetBEUI are as follows;

| Items | Default values |
| :--- | :--- |
| NetBIOS name | EPxxxxxx |
| Workgroup name | Workgroup |
| Device name | EPSON |

To configure the Internal Print Server for NetBEUI, follow the steps below.

## Note:

$\square$ TCP/IP or IPX must be installed on your computer.

- To configure for NetBEUI with EpsonNet WinAssist, the Internal Print Server must have a valid IP address or you must have logged in to the NetWare server or NDS context as an ADMIN.

1. Turn on the printer.
2. Start EpsonNet WinAssist.

Windows 2000/NT 4.0: Click Start, point to Programs, EpsonNet WinAssist, then click EpsonNet WinAssist.

Windows NT 3.51: Double-click the EpsonNet WinAssisticon in the EpsonNet WinAssist group.
3. Select the printer you want to configure from the list, then click Configuration or double-click the printer.


## Note:

- If you have connected more than one printer with the same type of print server to the network, you can distinguish between the printers by the MAC address on the status sheet.
- If the IP address is set to the default IP address, the printer model may not appear.
- You can search printers in other segments by setting the Search Options in the Tool menи of EpsonNet WinAssist. See "Optional settings" on page 9-4 for more information.

4. Click the NetBEUI tab, and make the following settings.


## NetBIOS name:

NetBIOS name is the computer name on the network. Type the NetBIOS name (up to 15 characters). Be sure to use a name that is unique on the network. The default name is "EPxxxxxx" (xxxxxx are last 6 digits of the serial number).

## Workgroup name:

Type the workgroup name or domain name (up to 15 characters) used for the Windows network environment.

## Device name:

Type the device name (up to 12 characters). LPT1, LPT2, or LPT3, or COM cannot be used.
5. After making the settings, click OK. The Password dialog box appears.
6. Type your password (up to 20 characters) and click OK to save settings. If you need to set a password, see "About passwords" on page 9-7.

Follow the on-screen instructions. After updating is complete, refresh the configuration by selecting Refresh from the View menu.

## Caution:

C Since it takes 2 or 3 minutes to send new settings to the Internal Print Server, you must wait until after the message appears to turn off your printer.

## Configuring for NetBEUI using EpsonNet WebAssist

To configure the Internal Print Server using EpsonNet WebAssist, follow the steps below.

## Note:

- A web browser must be installed in your computer.
- TCP/IP must be correctly set for the computer and Internal Print Server.
- Do not operate EpsonNet WinAssist and EpsonNet WebAssist at the same time.
$\square$ There are some restrictions on the characters you can use depending on your browser. For details, see your browser and OS documentation.

1. Turn on the printer.
2. Open EpsonNet WebAssist by either of the following methods:

- Run EpsonNet WinAssist. Click the printer you want to configure from the list and click the Launch Browser button.
- Open your browser, and type in the IP address of the Internal Print Server directly. Do not run EpsonNet WinAssist.
http:// the IP address of the Internal Print Server/

3. Click NetBEUI under Network on the Configuration menu. The NetBEUI setting screen appears.

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## NetBEUI:

Select Enable. If Disable is on, all NetBEUI related functions stop.

## NetBIOS Name:

The NetBIOS name is the computer's name on the network.
Type a name (up to 15 characters). Be sure to give a name that is unique on the network. The default name is "EPxxxxxx" (xxxxxx are last 6 digits of the serial number).

## Workgroup Name:

Type the workgroup name or domain name (up to 15 characters) used for the Windows network environment.

## Device Name:

Type the device name (up to 12 characters). LPT1, LPT2, LPT3, and COM cannot be used.
4. Click the SUBMIT button and type the password to update the settings. The same password is required for EpsonNet WinAssist, MacAssist, and WebAssist. See "Password" on page 9-44 for information on setting the password.
5. If the message "Configuration change is complete!" appears on your screen, the update is complete. Do not exit the Web browser and do not send a job to the printer until this message appears. Then, follow the on-screen instruction to reset the printer.

## Setting up your printer

This section explains how to set up a printer.

## Windows 2000

1. Click Start, point to Settings, and then click Printers.
2. Double-click Add Printer to start the Add Printer wizard, and then click Next.
3. Select the Network printer radio button and click Next.
4. Select the Type the printer name, or click Next to browse for a printer radio button.

Enter the following in the Name box or click Next to browse for a printer.
$\backslash \backslash($ NetBIOS name of the Internal Print Server) $\backslash$
(Device name of the Internal Print Server)
5. Follow the on-screen instructions to set up the printer.

## Windows NT 4.0

1. Click Start, point to Settings, and then click Printers.
2. Double-click Add Printer.
3. Click the Network printer server radio button in the Add Printer Wizard dialog box. The Connect to Printer dialog box appears.
4. Select the printer you want to configure from the Shared Printers list.If you cannot select the printer, type the following in the Printer box:
$\backslash \backslash$ (NetBIOS name of the Internal Print Server) $\backslash$
(Device name of the Internal Print Server)
5. Follow the on-screen instructions to set up the printer.

## Windows NT 3.51

1. Double-click Print Manager from the Main dialog box, and select Connect to Printer from the Printer menu.
2. Select the target printer from the Shared Printers list and click OK. If you cannot select the printer, type directly in the Printer box as follows.
$\backslash \backslash$ (NetBIOS name of the Internal Print Server) <br>(Device name of the Internal Print Server)
3. Follow the on-screen instructions to set up the printer.

## Using the NET USE command to set up the printer

If you are using Windows NT server and using NetBIOS to connect with the Internal Print Server, we recommend that you use the NET USE command, as outlined below.

1. Check that the following services are installed.

## For Windows 2000:

Double-click Network and Dial-up Connections in Control Panels and right-click the Local Area Connections icon and select Properties. Check that Client for Microsoft Networks is in the Components list.

## For Windows NT 4.0:

Double-click Network in Control Panels and check that Server or Workstation is listed in the Services menu.

## For Windows NT 3.51:

Double-click Network in Control Panels and check that Server or Workstation is listed in the Installed Network Software list.
2. Open the Windows command prompt and type the following command.

NET USE (printer port): $\backslash \backslash($ NetBIOS name of the Internal Print Server) <br>(Device name of the Internal Print Server)
3. To use the printer, clients need to select the printer port that you set in step 2.

## Windows 98/95:

Open the target printer's properties, and select the port in the Details dialog box.

## Windows 2000/NT 4.0:

Open the target printer's properties, and select the port in the Ports dialog box.

## Windows NT 3.51:

Select the printer in the Print Manager, and select the properties from the Printer menu. From the Print to list box, select the target port.

## Printing with IPP (Windows 2000 Only)

This section explains about printing with Internet Printing Protocol (IPP) in Windows 2000. You can use the Internal Print Server with the IPP default value. If you want to change the IPP URL, change it with EpsonNet WebAssist, then set up the printer with the Add Printer Wizard.

## Configuring for IPP using EpsonNet WebAssist

You can configure the Internal Print Server for IPP using EpsonNet WebAssist.

## Note:

- A web browser must be installed in your computer.
- TCP/IP must be correctly set for the computer and Internal Print Server.
- Do not operate EpsonNet WinAssist and EpsonNet WebAssist for the printer at the same time.
- There are some restrictions on the characters you can use depending on your browser. For details, see your browser or OS manual.

1. Turn on the printer.
2. Run EpsonNet WebAssist by either of the methods described below.

- Run EpsonNet WinAssist. Click the printer you want to configure from the list and click the Launch Browser button.
- Open your browser, and type in the IP address of the Internal Print Server directly. Do not run EpsonNet WinAssist.
http:/ / the IP address of the Internal Print Server/

3. Click IPP under Network on the Configuration menu. The IPP setting screen appears.


## IPP URL:

Displays the IPP URL of the printer.
Format: http:/ / the IP address of the printer:631/the printer name

## Printer Name:

Enter the printer name to use with the IPP printing up to 127 characters.

## Location:

Enter the name of the location where the printer is physically located up to 64 characters.
4. Click the SUBMIT button and enter the password to update the settings. The same password is required for EpsonNet WinAssist, MacAssist, and WebAssist. See "Password" on page 9-44 for information on setting the password.
5. If the message "Configuration change is complete!" appears on your screen, the update is complete. Do not exit the Web browser and do not send a job to the printer until this message appears. Then, follow the on-screen instructions to reset the printer.

## Setting up your printer

1. Click Start, point to Settings, and then click Printers.
2. Double-click Add Printer to start the Add Printer wizard, and then click Next.
3. Click the Network printer radio button and click Next.
4. Select the Connect to a printer on the Internet or on your intranet radio button.
5. Enter the URL of the target printer using the format below. The URL should be same as the URL you set in the EpsonNet WebAssist's IPP configuration page.
http:/ / the IP address of the printer:631/the printer name Example: http:/ /192.168.100.201:631/EPSON_IPP_Printer
6. Follow the on-screen instructions to install the printer driver.

## Chapter 6

## Settings for Macintosh

## Introduction to Macintosh Settings

This chapter describes how to configure the Internal Print Server in a Macintosh environment using EpsonNet MacAssist. You can also configure the Internal Print Server for AppleTalk using EpsonNet WinAssist from Windows environment.

After setting the IP address for the printer, you can also use EpsonNet WebAssist to configure the Internal Print Server.

## Note:

- You can configure for the Internal Print Server using EpsonNet MacAssist; however, the Adobe PostScript 3 Kit is needed to print from a Macintosh.
- Do not use EPSON Namer with the Internal Print Server.
- The correct printer driver must be installed.


## Supported systems

- Macintosh OS:

Mac OS 9, 8.x, 7.6.x
System 7.5.x, 7.1
$\square$ Apple network driver:
EtherTalk Phase 2
OpenTransport 1.1.1, 1.1.2, 1.3

- Apple printer driver:

LaserWriter, LaserWriter 8
$\square$ EPSON printer driver

## Configuring for AppleTalk Using EpsonNet MacAssist

Use EpsonNet MacAssist to configure the Internal Print Server as described below.

1. Turn on the printer.
2. Double-click the EpsonNet MacAssist icon.
3. Highlight the printer you want to configure from the list and click Configuration.


## Note:

- If you have connected more than one printer with the same type of print server to the network, you can distinguish between the printers by the MAC address on the status sheet.
- You can search printers in other zones just like a computer by changing the Zone setting in the Option dialog box. See "EpsonNet MacAssist dialog box" on page 9-16 for more information.

4. The IP Address Configuration and AppleTalk Configuration dialog box appears.


## Note:

See "Setting the IP Address Using EpsonNet
WinAssist/MacAssist" on page 2-7 for more information about setting the IP address.
5. Set the following options in the AppleTalk Configuration box.

## Printer Name:

Type the printer name (up to 32 characters). The following characters cannot be used; @ : * = ~

## Entity Type:

Displays the printer's entity type.

## Zone Name:

Select the network zone in which you want the printer to appear.

## Network Number Set:

Select either Auto or Manual. Usually Auto is preferred.

Network Number for Manual Mode:
Enter a value between 0 and 65534 when Manual is selected for the Network Number Set.
6. After making settings, click Send. The Password dialog box appears.
7. Type your password (up to 20 characters) and click OK to save settings. If you need to set a password, see "About passwords" on page 9-17.

After updating is complete, refresh the configuration. To do this, quit EpsonNet MacAssist once, then start EpsonNet MacAssist again.

## Caution:

C
Since it takes 2 or 3 minutes to send new settings to the Internal Print Server, you must wait until after the onscreen message appears to turn off your printer.

## Configuring for AppleTalk Using EpsonNet WinAssist

Follow the steps to configure the Internal Print Server using EpsonNet WinAssist from Windows environment.

## Note:

To configure for AppleTalk with EpsonNet WinAssist, the Internal Print Server must have a valid IP address or you must have logged in to the NetWare server or NDS context as an ADMIN.

1. Turn on the printer.
2. Start EpsonNet WinAssist.

Windows 98/95/2000/NT 4.0: Click Start, point to Programs, EpsonNet WinAssist, then click EpsonNet WinAssist.

Windows NT 3.51: Double-click the EpsonNet WinAssist icon in the EpsonNet WinAssist group.
3. Select the printer you want to configure from the list, then click Configuration or double-click the printer.


## Note:

- If you have connected more than one printer with the same type of print server to the network, you can distinguish between the printers by the MAC address on the status sheet.
- If the IP address is set to the default, the printer model may not appear.
- You can search printers in other segments by changing the Search Options in the Tool menu. See "Optional settings" on page 9-4 for more information.

4. Click the AppleTalk tab, and make the following settings.


## Printer name:

Type the printer name (up to 32 characters). The following characters cannot be used; @ : * = ~

## Zone name:

Type the network zone (up to 32 characters) in which you want the printer to appear. The following characters cannot be used; @ : * = ~

## Entity type:

Displays the printer's entity type on an AppleTalk network.

## Entity configuration:

Do not need to make any settings.

## Network number set:

Select either Auto or Manual. Auto is usually preferred.

## Network number for manual mode:

Type a value between 0 and 65534 when Manual is selected for the Network number setting.
5. After making the settings, click OK. The Password dialog box appears.
6. Type your password (up to 20 characters) and click OK to save settings. If you need to set a password, see "About passwords" on page 9-7.

Follow the on-screen message. After updating is complete, refresh the configuration by selecting Refresh from the View menu.

## Caution:

c
Since it takes 2 or 3 minutes to send new settings to the Internal Print Server, you must wait to turn off your printer after the on-screen message appears.

## Configuring for AppleTalk Using EpsonNet WebAssist

To configure the Internal Print Server using EpsonNet WebAssist, follow the steps below.

## Note:

- A web browser must be installed in your computer.
- TCP/IP must be correctly set for the computer and Internal Print Server.
- Do not operate EpsonNet WinAssist/MacAssist and EpsonNet WebAssist at the same time.
- There are some restrictions on the characters you can use depending on your browser. For details, see your browser or OS manual.

1. Turn on the printer.
2. Run EpsonNet WebAssist by either of the following methods:

- Run EpsonNet WinAssist or EpsonNet MacAssist. Click the printer you want to configure from the list and click the Launch Browser button.
- Open your browser, and type the IP address of the Internal Print Server directly. Do not run EpsonNet WinAssist or MacAssist.
http:/ / the IP address of the Internal Print Server/

3. Click AppleTalk under Network on the Configuration menu to view the AppleTalk Settings screen.


## AppleTalk:

Select Enable.

## Printer Name:

Type the printer name (up to 32 characters). The following characters cannot be used; @ : * = ~

## Entity Type:

Displays the printer's entity type.

## Zone Name:

Type the network zone (up to 32 characters) in which you want the printer to appear. The following characters cannot be used; @: * = ~

## Network Number Set:

Select either Auto or Manual. Auto is usually preferred.

## Network Number for Manual Mode:

Type a value between 0 and 65534 when Manual is selected for the Network number setting.
4. Click the SUBMIT button and type the password to update the settings. The same password is required for EpsonNet WinAssist, MacAssist, and WebAssist. See "Password" on page 9-44 for more information on setting the password.
5. If the message "Configuration change is complete!" appears on your screen, the update is complete. Do not exit the Web browser and do not send the job to the printer until this message appears. Then, follow the on-screen instructions to reset the printer.

## Choosing the printer on a Macintosh

To print to a different printer, use the Chooser to select it.
Make sure EtherTalk is active before following the numbered steps below;
$\square$ For models without Open Transport:
Select EtherTalk in the Network Control Panel.

- For models with Open Transport:

Select Ethernet in the AppleTalk Control Panel.

1. Open the Chooser from the Apple menu.
2. Click the printer driver icon.
3. If there is a zone, click the AppleTalk zone that contains the printer.
4. Click the printer name.
5. Make sure AppleTalk is active.
6. Close the Chooser.

## Chapter 7

## Settings for OS/2

## Introduction to OS/2 Settings

This chapter describes how to configure and use the Internal Print Server with an IBM OS/2 System, which includes OS/2 Warp 3 and 4 (OS/2 Warp Connect and OS/2 Warp Server).

## Supported systems

- OS/2 Warp 3, OS/2 Warp 4
- lprportd (TCP/IP)
- NetBIOS over TCP/IP


## Printing with TCP/IP

This section explains TCP/IP printing using lprportd supported by standard OS/2. Follow the steps below to set up the printer.

## Setting up the printer

1. Double-click the OS/2 System folder, then the System Setup folder, and then double-click the TCP/IP Configuration icon.

2. Click the Printing tab. Type the IP address of the Internal Print Server in the Remote print server box and the name of the remote print server's printer in the second text box. Enter a value greater than or equal to 1 in the Maximum number of LPD ports box.

3. Click the Hostnames tab. Go to Page 2 by clicking the arrow.
4. Click Add. In the HOSTS Entry dialog box, type the IP address and hostname of your machine. Then click Add.
5. Click Add again. In the HOST Entry dialog box, type the IP address and hostname of the printer. Then click Add.
6. Click the Autostart tab. Select lprportd from the Services to autostart list. Check the Autostart service check box, and select the Detached radio button.

7. Save the settings you made in the TCP/IP Configuration dialog box, and restart your computer.
8. Double-click Template from the OS/2 System folder. Rightclick Printer and drag it to your desktop to create a printer.
9. Double-click the Printer icon to link lprportd to the printer.

## Note:

If you haven't set up the printer, see your OS/2 documentation for instructions.
10. Select Properties from the control menu, then click the Output Port tab.

11. From the Output Port list box, double-click a port from $\backslash$ PIPE $\backslash$ LPD0 to $\backslash$ PIPE $\backslash$ LPDn (where n is the maximum number of LPD ports).
12. Type the IP address of the Internal Print Server in the LPD server box. Type the printer name set in step 2 in the LPD printer box.

13. Close the Printer icon to exit printer configuration.

## Note:

To use the printer with TCP/IP, you need to configure the Internal Print
Server for TCP/IP using EpsonNet WinAssist/WebAssist through another client, such as Windows 98/95/2000/NT.

## Printing with NetBEUI

This section explains about NetBEUI printing. Follow the steps below to set up the printer for NetBEUI.

## Setting up the printer

1. Be sure that IBM OS/2 NetBIOS is installed on your computer.
2. To create a printer, right-click the target printer icon to open the Properties dialog box. Then click the Output Port tab.
3. Select the port.
4. Connect to the printer from the command line.

Example: Connect the printer to LPT1.
net use LPT1: $\backslash \backslash$ (NetBIOS name of the Internal Print Server) $\backslash$ (Device name of the Internal Print Server)

## Note:

To use the printer, you need to configure the Internal Print Server for NetBEUI using EpsonNet WinAssist/WebAssist through another client, such as Windows 98/95/2000/NT.

## Chapter 8

## Settings for UNIX

## Introduction to UNIX Settings

This chapter explains how to set up the printer for different UNIX systems using the lpr or lp command (depending on the system).

The Internal Print Server supports many standard UNIX commands and can be configured from a host computer.

The Internal Print Server is able to function as a remote printer on systems using TCP/IP Ethernet transfer with lpr remote printing protocol, or standard ftp (file transfer protocol).

## Note:

Because this Internal Print Server does not convert data into the printer control language, a printer driver and filter are necessary for each system.

## Setting Up Different UNIX Systems Using the Ipr Command

The following UNIX systems can print using the standard lpr command.

SunSoft Solaris 2.4 or higher
SunOS 4.1.4 or higher
IBM AIX 3.2.5 or higher
HP-UX 9.05 or higher
SCO UNIX 4.2 or higher

## Setting up with SunSoft Solaris 2.4 or higher

In the following steps, substitute the name by which the internal print server will be known for HOSTNAME, and the name by which you want the printer to be known for Rprinter.

1. Register the IP address and host name in the \etc $\backslash$ hosts file.

For example:
22.33.44.55 HOSTNAME
2. Register the host name as a print server.

For example:
Ipsystem -† bsd HOSTNAME
3. Create the printer.

For example:
lpadmin -p Rprinter -s HOSTNAME \aux-T unknown-1 any
4. Make the printer available for printing.

For example:
accept Rprinter
enable Rprinter
5. Print a file using the "lp" command.

For example:
Ip -d RPrinter Print-File-Name

## Setting up with SunOS 4.1.4 or higher

In the following steps, substitute the name that the internal print server will be known by for HOSTNAME, and the name by which you want the printer to be known for Rprinter.

1. Register the IP address and host name in the /etc/hosts file.

For example:
22.33.44.55 HOSTNAME
2. Create a spool directory.

For example:
mkdir/var/spool/Ipd/PRIFx
3. Add the printer entry to the /etc/printcap file.

For example:
RPrinter |
AL-C2000:lp=:rm=HOSTNAME:rp=aux:sd=/var/spool/ Ipd/PRIFx
4. Print a file using the "lpr" command.

For example:
Ipr -s -PRPrinter Print-File-Name
Note:
Files that exceed 1MB may not be printed unless the -s option is used.

## Setting up with IBM AIX 3.2.5 or higher

In the following steps, substitute the name that the internal print server will be known by for HOSTNAME, and the name by which you want the printer to be known for Rprinter.

1. Register the IP address and host name in the /etc/hosts file.

For example:
22.33.44.55 HOSTNAME
2. Start smit.

For example:
smit printer
3. Set the printer name (for example: Rprinter) in:
"Manage Remote Printer"
"Client Services"
"Remote Printer Queues"
"NAME of queue to add".
Set the host name (for example: HOSTNAME) in:
"DESTINATION HOST for remote jobs".
Set the port name (for example: aux) in:
"Name of QUEUE on remote printer".
4. Print a file using the "lpr" command.

For example:
Ipr -PRPrinter Print-File-Name

## Setting up with HP-UX 9.05 or higher

In the following steps, substitute the name that the internal print server will be known by for HOSTNAME, and the name by which you want the printer to be known for Rprinter.

1. Register the IP address and host name in the /etc/hosts file.

For example:
22.33.44.55 HOSTNAME
2. Terminate the printing service.

For example:
Ipshut
3. Create the printer.

For example:
Ipadmin -pRPrinter -v/dev/null -mrmodel-ormHOSTNAME orpaux
4. Restart the printing service.

For example:
Ipshed
5. Make the printer available for printing.

For example:
accept RPrinter
enable Rprinter
6. Print a file using the "lp" command.

For example:
Ip -DRPrinter Print-File-Name

## Setting up with SCO UNIX 4.2 or higher (Open Server)

In the following steps, substitute the name that the internal print server will be known by for HOSTNAME, and the name by which you want the printer to be known for Rprinter.

1. Register the IP address and host name in the /etc/hosts file.

For example:
22.33.44.55 HOSTNAME
2. Execute rlpconf to register the printer.

For example:
rlpconf
3. Type the name of the printer.

For example:
Please enter the printer name (q to quit):RPrinter
4. Specify the remote printer as the printer type.

For example:
Is Rprinter a remote printer or a local printer (r/l)? r
5. Type the host name of the remote printer.

For example:
Please enter the name of the remote host that Rprinter is attached to:
HOSTNAME
Printer RPrinter is connected to host HOSTNAME
6. Confirm that the entries are correct.

For example:
Is this correct? $(\mathrm{y} / \mathrm{n}) \mathrm{y}$
7. Specify that the RLP extended function (valid when the print server is SCO-UNIX) will not be used.

For example:
If HOSTNAME currently runs SCO OpenServer Release 5 or above, it can support the extended remote line printer protocol. Do you want to turn on the "extended RLP protocol" support flag?
If you are not sure, answer "n". (y/n)(n)n
8. Specify whether the created printer is to become the default printer.

For example:
Would you like this to be the system default printer? (y/n)y
9. Print a file using the "lpr" command.

For example:
Ipr -d RPrinter Print-File-Name

## Using the ftp command

ftp commands are common to all UNIX systems.
ftp programs use an interface that is common to all UNIX systems.
The following is an example of printing using the ftp command (Text after " $>$ " is user input).
ftp 22.33.44.55
Connected to 22.33.44.55
220 <hostname> FTP server (EPSON FTPD version 1.01) ready.

Name:
331 Password Required for No Name.
Password:
230 User logged in.
ftp>binary
200 Type set to I.
ftp>put <binary file>
200 PORT command successful.
150 Opening data connection for binary_file
226 Transfer complete
ftp> bye

## Chapter 9

## EpsonNet <br> WinAssist/MacAssist/WebAssist

EpsonNet WinAssist, MacAssist, and WebAssist are software designed to configure the printer for use on a network.

EpsonNet WinAssist is configuration utility software for administrators for Windows that allows you to configure the Internal Print Server for TCP/IP, NetWare, AppleTalk, and NetBEUI.

The EpsonNet MacAssist is configuration utility software for administrators for Macintosh that allows you to configure the Internal Print Server for TCP/IP and AppleTalk.

By typing the IP address of the Internal Print Server for the URL in your browser, you can start EpsonNet WebAssist, the webbased configuration utility that allows you to configure the Internal Print Server for TCP/IP, NetWare, AppleTalk, NetBEUI, IPP, SNMP, and Printer settings such as input, emulation, interface, etc.

## EpsonNet WinAssist Utility

## EpsonNet WinAssist dialog box

This section describes the elements and uses of the EpsonNet WinAssist dialog box.


## Tree View:

Three categories, ALL, IPX, and IP are available in Tree view. The default selection is ALL. When a category is selected, the print server information in that category is displayed in the List view. If the route "EPSON PrintServer" is selected, the category list is displayed in the List view.

## List View:

The information for the print server in the selected category is displayed in the List view. The printer model, MAC address, IP address, Network address, and print server name are displayed. When you click an item header, the list is sorted in ascending or descending order depending on the item you click.

Note:
The IPX category will be displayed only when IPX for NetWare (communication protocol) is used and you have logged in to the NetWare server or the NDS context as a supervisor.

## Configuration button:

Select the printer you want to configure from the List view, and click the Configuration button to configure the Internal Print Server.

## Launch Browser button:

Select the printer you want to configure from the List view, and then click the Launch Browser button. EpsonNet WebAssist will start to configure the Internal Print Server.

## Menu Bar

EpsonNet WinAssist has the following menus and sub menus.

## Device menu:

- Configuration

Configures the Internal Print Server you have selected.

- Launch Browser

Starts EpsonNet WebAssist which allows you to configure the Internal Print Server you have selected. EpsonNet WebAssist is a utility that runs on a browser.

- Close

Closes EpsonNet WinAssist.

## View menu:

- Refresh

Updates to the latest information by searching for available printers again.

## Tools menu:

- Timeout

Sets the time-out value. See the next section "Optional settings" on page 9-4 for more information.

- Search Options

Configures the options for a search with IP or IPX. See "Optional settings" on page 9-4 for more information.

## Help menu:

- Help Topic

Displays EpsonNet WinAssist help.

- About EpsonNet WinAssist

Displays the copyright and version information for EpsonNet WinAssist.

## Optional settings

This section explains the optional settings in the Tool menu. You can make Time-out and Search option settings. For settings to take effect, select Refresh from the View menu or restart EpsonNet WinAssist.

## Time-out:

Sets the length of time before a time-out occurs (between 2 and 120 seconds). A communication error occurs if this time is exceeded. The default value is 6 seconds.


## Search Options (IP):

To search for print servers in other segments, use Search Options (IP) in EpsonNet WinAssist.


| Item | Explanation |
| :--- | :--- |
| Search effectiveness of <br> the specific address | Search for a print server that is beyond the <br> router by enabling this function. |
| Text box | Specify the IP address (valid range 0 to 255) <br> of the Internal Print Server you want to find. <br> Enter the IP address as follows: <br> Class A: number.255.255.255 <br> Class B: number. number.255.255 <br> Class C: number. number.number.255 |
| List box | Displays the IP addresses that have been <br> registered. |
| Add button | Registers the IP address (up to 20 addresses). <br> Do not add the local address. |
| Delete button | Deletes an IP address from the List box. |
| OK | Saves the settings. |
| Cancel | Cancels any changes. |

## Search Options (IPX):

To search for print servers in other network segments, use Search Options (IPX) in EpsonNet WinAssist.

Note:

- To use this option, you need to $\log$ in to the NetWare server as a supervisor.
- When using a dial-up network, delete an unnecessary address from the Select Search Address list to prevent to be charged for extra accounts.


| Item | Explanation |
| :--- | :--- |
| Search effectiveness <br> of the specific <br> address | Display time can be reduced by selecting this <br> check box and choosing the target networks, <br> so that unnecessary or unwanted information <br> is not acquired. |
| All Network Address | Displays all current network addresses. |
| Select Search <br> Address | Displays the network address to be searched. |


| Add button | Select an address in All Network Address, then <br> click Add to add an address to Select Search <br> Address (up to 256 address). |
| :--- | :--- |
| Remove button | Removes an address from the Select Search <br> Address list. |
| OK | Saves the settings. |
| Cancel | Cancels any changes. |

## Setting menus

## About passwords

A password is required to configure the Internal Print Server. There is no default password. When you click OK in the setting dialog box or click the Return to default button, the Password dialog box appears.

1. To set a password or when you want to change the current password, click Change.

| Password |
| :--- |
| Login Printserver -  <br> Input the current administrator password.  <br> Password  <br>  Cancel <br> OK Change |

2. In the Administrator password dialog box, type a password (up to 20 characters) and click OK. Passwords are case sensitive.

Note:

- The same password is used for EpsonNet WinAssist, MacAssist, and WebAssist.
- Since a new password becomes effective after the data is sent to the Internal Print Server, use the old password immediately after changing the password.
- If you forget your password, initialize the printer. To do this, turn on the printer while pressing the Continue (Reset) button on the printer's control panel. Be aware that all the printer and network settings you have made will be cleared when you initialize.


## Information menu

The Information menu shows Internal Print Server parameters.


| Items | Explanations |
| :--- | :--- |
| MAC address | Displays the MAC address of the printer. |
| Hardware version | Displays the network hardware version. |
| Software version | Displays the software version. |
| Printer model | Displays the product name of the printer. |


| Return to default | Resets all network configuration settings of <br> the printer to the default settings. |
| :--- | :--- |
| OK | Updates the settings. |
| Cancel | Cancels any changes. |
| Help | Accesses help. |

## TCP/IP menu

You can configure the Internal Print Server for TCP/IP by making the necessary settings on the TCP/IP menu.


| Items | Explanations |
| :--- | :--- |
| Get IP address | Select the method for acquiring IP addresses, <br> either Auto or Manual. The default is Auto. |
| Set by PING | Not available. |
| IP address | Set the IP address for the printer. Be sure that <br> the IP address is unique and will not cause <br> conflicts with any other device on the <br> network. |


| Subnet mask | Set the subnet mask of the IP address. |
| :--- | :--- |
| Default gateway | Set the gateway address. |
| OK | Updates the settings. |
| Cancel | Cancels any changes. |
| Help | Accesses help. |

## NetWare - Print Server menu

You can configure the Internal Print Server for NetWare Print Server by making settings on the NetWare menu.


| Items | Explanations |
| :--- | :--- |
| Mode | Select the mode. |
| Frame type | Select the frame type. Do not select any <br> other frame type than Auto. |
| Tree name | Set the NDS tree name. |
| Context | Set the NDS context. |
| Primary file server name | Select the server where the print server logs <br> in if it is in bindery mode. |
| Print server name | Specify the print server name. |
| Print server password | Type the password to log in to the print <br> server. |
| Re-Input password | Type the password again. |
| Polling interval | Set the polling interval in seconds. |
| Print Queue <br> Configuration | Make print queue settings. |
| OK | Updates the settings. |
| Cancel | Cancels any changes. |
| Help | Accesses help. |

## Print Queue Configuration dialog box

The following dialog box appears when you click the Print Queue Configuration button in the Print server menu.


| Items | Explanations |
| :--- | :--- |
| Queue name | Displays the queue name that is assigned <br> to the print server by browsing the queue. |
| Browse | Click the Browse button to select a queue. <br> You can also create or delete a queue. |
| Queue list box | Lists the print queues. |
| Add | Adds the print queue. |
| Remove | Removes the print queue. |
| OK | Updates the settings. |
| Cancel | Cancels any changes. |

## NetWare - Remote Printer menu

The following menu appears when you select Remote printer as the mode.


| Items | Explanations |
| :--- | :--- |
| Mode | Select the mode. |
| Frame type | Select the frame type. Do not select any other <br> frame type than Auto. |
| Tree name | Leave as is. |
| Context | Leave as is. |
| Primary print server <br> name | Type the primary print server name. |
| Printer port number | Type the printer port number. |
| OK | Updates the settings. |
| Cancel | Cancels any changes. |
| Help | Accesses help. |

## NetBEUI menu

You can configure the Internal Print Server for NetBEUI by making settings in the NetBEUI menu.


| Items | Explanations |
| :--- | :--- |
| NetBIOS name | Type the printer's NetBIOS name (up to 15 <br> characters). Be sure to give a unique name <br> that will not cause conflicts with any other <br> device on the network. |
| Workgroup name | Type the workgroup name or domain <br> name used for the Windows network <br> environment (up to 15 characters). |
| Device name | Type the device name (up to 12 <br> characters). Do not use LPT1, LPT2, LPT3, or <br> COM. |
| OK | Updates the settings. |
| Cancel | Cancels any changes. |
| Help | Accesses help. |

## AppleTalk menu

You can configure the Internal Print Server for AppleTalk by making settings in the AppleTalk menu.


| Items | Explanations |
| :--- | :--- |
| Printer name | Type the name of the printer. |
| Zone name | Type the network zone name. |
| Entity type | Displays the entity type of the printer. |
| Entity configuration | Leave as is. |
| Network number set | Selects the method for acquiring the network <br> number. |
| Network number for <br> manual mode | Type the network number after selecting <br> Manual for the Network number set. |
| OK | Updates the settings. |
| Cancel | Cancels any changes. |
| Help | Accesses help. |

## EpsonNet MacAssist Utility

## EpsonNet MacAssist dialog box

This section describes the EpsonNet MacAssist dialog box.


## List box:

The print server information is displayed in the List box. The information consists of the printer model, the MAC address, the IP address, and the print server name.

## Option:

You can set the time-out used for communication by EpsonNet MacAssist to a value between 3 and 99 seconds. The default value is 5 seconds.

By clicking Select Zone, you can add a zone to search for print servers in a particular zone. The print servers which belong to the selected zone are displayed in the List box and you can change their settings. The zones acquired from the network environment are displayed in the Zone list. The zones to be searched are displayed in the Search list. The maximum number of zones that can be displayed in the Zone list and Search zone is 2000. You need to restart EpsonNet MacAssist for settings to take effect.

## Launch Browser button:

Select the printer you want to configure, and then click the Launch Browser button. EpsonNet WebAssist will start to configure the Internal Print Server. EpsonNet MacAssist automatically closes when the browser launches.

## Configuration button:

Select the printer you want to configure, and click this button to configure the Internal Print Server using EpsonNet MacAssist.

## Quit button:

> Exits EpsonNet MacAssist.

## Setting menus

## About passwords

The password is required to configure an Internal Print Server. There is no default password. When you click OK in the setting dialog box or click the Return to default button, the Password dialog box appears.

1. To set the password or when you want to change the current password, click Change.
2. After clicking Change, the following dialog box appears. Type a password (up to 20 characters) and click OK. Passwords are case sensitive.

Note:

- The password is used for EpsonNet WinAssist, MacAssist, and WebAssist.
- Since a new password becomes effective after the data is sent to the Internal Print Server, use the old password immediately after changing the password.
- If you forget your password, initialize the printer. To do this, turn on the printer while pressing the Continue (Reset) button on the printer's control panel. Be aware that all the printer and network settings you have made will be cleared when you initialize.


## EpsonNet MacAssist menu

You can make IP address settings and AppleTalk settings in the dialog box pictured below.


## IP Address Configuration:

| Items | Explanations |
| :--- | :--- |
| IP Address Setting | Select the method of acquiring an IP <br> address. |
| IP Address | Set the IP address for the printer. |
| Subnet Mask | Set the subnet mask of the IP address. |
| Default Gateway | Set the gateway. |

## AppleTalk Configuration:

| Items | Explanations |
| :--- | :--- |
| Printer Name | Type the name of the printer. |
| Entity Type | Displays the Entity type of the printer. |
| Zone Name | Select the Zone for AppleTalk. |
| Network Number Set | Specify the setting method for the <br> AppleTalk network number. |
| Network Number for <br> Manual Mode | Type the network number. <br> Return to DefaultResets all network configuration settings of <br> the printer to the default settings. |
| Send | Updates the settings. |
| Cancel | Cancels any changes. |

## EpsonNet WebAssist Utility

This section describes the functions of EpsonNet WebAssist.

## Note:

$\square$ When using Internet Explorer or Netscape Navigator with Macintosh or Netscape Navigator with UNIX, or when EpsonNet WebManager 1.00aE shipped with the EPSON interface card is installed in your computer, the Information-Printer and Configuration-Printer settings may not be available. Use the printer's control panel to make these settings.

- Some functions of EpsonNet WebAssist are not available depending on your printer.


## Opening screen

Any user can access the following screen by typing the IP address of the Internal Print Server for the URL in your browser.


Note:
The information displayed on the screen may change without notice.

## Index

| Home | Links to the opening screen. |
| :--- | :--- |
| Help | Links to Help. |
| About WebAssist | Links to the copyright and version <br> information for EpsonNet WebAssist. |
| Link to EPSON | Links to the EPSON Web site. |
| Favorite | Links to a web site previously defined by <br> the administrator. |
| EPSON logo | Links to the EPSON Web site. |

## Menu

| Information - Printer |  |
| :--- | :--- |
| Device | Displays the printer device information. |
| Consumable | Displays the consumable information. |
| Input | Displays the input information. |
| Print | Displays the print settings. |
| Emulation | Displays the emulation information. |
| Interface | Displays the printer interface information. |
| Information - Network |  |
| General | Displays the Internal Print Server |
| information. |  |
| NetWare | Displays information about NetWare. |
| TCP/IP | Displays information about TCP/IP. |
| AppleTalk | Displays information about AppleTalk. |
| NetBEUI | Displays information about NetBEUI. |
| IPP | Displays information about IPP. |
| SNMP | Displays information about SNMP. |
| Configuration - Printer |  |


| Input | Change the input settings. |
| :--- | :--- |
| Print | Change the print settings. |
| Emulation | Change the emulation settings. |
| Interface | Change the printer interface settings. <br> Configuration - Network <br> NetWare. |
| NetWare | Configure the desired settings/method for <br> TCP/IP. |
| TCP/IP | Configure the desired settings for <br> AppleTalk. |
| AppleTalk | Configure the desired settings for NetBEUI. |
| NetBEUI | Configure the desired settings for IPP. |
| IPP | Configure the desired settings for SNMP. |
| SNMP | Type the name of the administrator and a <br> link to a favorite Web site. |
| Configuration - Optional |  |
| Administrator | Resets the Internal Print Server and returns <br> to the default settings. |
| Reset | Set the password to protects settings. |
| Password |  |

## Information - Printer screen

This section explains about the Device and Consumable information screens. See "Configuration - Printer screens" on page 9-25 about Input, Print, Emulation, and Interface information.

## Device information

| Items | Explanations |
| :--- | :--- |
| Panel canvas | Displays the same information that is <br> displayed on the printer's control <br> panel. |
| Signal | A signal shows the status level. The <br> green light is on when the printer is idle <br> or printing. The yellow light is on when <br> the toner or oil roll is low. The red light <br> is on when the printer is out of paper <br> or toner, if paper is jammed, the cover <br> is open, or an error has occurred. |
| LEDs | The LEDs indicates the current <br> operating printer status when you first <br> turn on the printer, during normal <br> operation, and when errors occur. |
| Remote Control Panel <br> (OnLine, FormFeed, <br> Continue, Reset, and <br> WarmingUp buttons) | You can control the printer with this <br> Remote Control Panel functions. You <br> can get the same result when you <br> click these buttons as pressing the <br> buttons on your printer. |
| Printer image | Displays the printer image. |
| Error information box | Displays error/warning information for <br> the printer. |
| Printer Model Name | The model name of the printer. |
| IP Host Name | The IP host name of the printer. |
| IP Address | The IP address of the printer. |
| MAC Address | Displays the time which you set in the <br> Clock Menu. |
| Memory | The installed memory size of the <br> printer. |
| CapD adacity of the hard disk installed in |  |
| the printer. |  |


| Local Time Difference | Displays the time difference which <br> you set in the Clock Menu. |
| :--- | :--- |

## Consumable information

| Items | Explanations |
| :--- | :--- |
| Total Pages Printed | Total number of pages that have <br> been printed. |
| Color Pages Printed | Total number of color pages that <br> have been printed. |
| Monochrome Pages | Total number of monochrome pages <br> that have been printed. |
| Cyan/Magenta/Yellow/ <br> Black Toner | The amount of remaining cyan, <br> magenta, yellow, or black toner in <br> each imaging cartridge. |
| Photoconductor Unit | The amount of photoconductor <br> remaining. |
| Waste Toner | The amount of waste remaining. |
| Fuser Oil | The amount of fuser oil remaining. |
| Fuser Unit | The amount of fuser unit remaining. |
| Transfer Belt | The amount of the fuser transfer belt <br> remaining. |

## Information - Network screens

This section explains General and Printer Status information. See "Configuration - Network screens" on page 9-38 about NetWare, TCP/IP, AppleTalk, NetBEUI, IPP, and SNMP information.

## General information

| Items | Explanations |
| :--- | :--- |
| Administrator Name | The administrator of the printer. |
| Interface Card Model <br> Name | The type of the print server of the <br> printer. |
| MAC Address | The MAC Address of the printer. You <br> can distinguish the printer by its MAC <br> Address. |
| Hardware Version | The hardware version of the Internal <br> Print Server. |
| Software Version | The software version of the Internal <br> Print Server. |
| Model Name | The model name of the printer. |
| Status | A signal shows the status level. The <br> Green light is on when the printer is idle <br> or printing. The Yellow light is on when <br> the paper ortoner is low. The Red light <br> is on when the printer has no paper or <br> no toner, if paper is jammed, the <br> cover is open, or an error has <br> occurred. |
| Refresh button | Refreshes the printer status. |

## Note:

The printer status is not updated automatically. Press the Refresh button to display the latest printer information.

## Configuration - Printer screens

This section explains about printer information. With EpsonNet WebAssist, you can make some of the same printer settings that you can set using the printer's control panel. See the printer's reference guide for more information on each item.

## Note:

A password is required when you click items under Printer on the Configuration menu.

## Input information

| Items | Explanations |
| :--- | :--- |
| MP mode | Select the priority order of paper <br> feeding from MP Tray. |
| MP Tray Paper Size | Select the paper size for MP Tray. |
| LC1 Paper Size | Displays the currently loaded paper <br> size in the lower paper cassette. |
| LC2 and LC3 Paper Size | If the optional Large Capacity Paper <br> Unit is installed, the currently loaded <br> paper size in each cassette of Large <br> Capacity Paper Unit is displayed. |
| MP Tray Paper Type | Select the paper type for MP Tray. |
| LC1 Paper Type | Select the paper type for the lower <br> paper cassette. |
| LC2 and LC3 Paper Type | Select the paper type for each <br> cassette of Large Capacity Paper Unit <br> only if the optional Large Capacity <br> Paper Unit is installed. |
| Set button | Saves any changes. |
| Reload button | Clears any changes and reloads the <br> previous settings. |

## Print information

Setup Menu

| Items | Explanations |
| :--- | :--- |
| Menu Selection | Select Setup Menu. |
| Interface Time Out | Type the length of the printer waits <br> when it is on line and no new data is <br> received. When this time is up, the <br> printer searches for new print data on <br> other channels. |
| Standby | Select whether or not to save power <br> by reducing the power to the fixing <br> heater if the printer receives no data <br> for certain period of time. |
| Language | Select the displayed language. |
| Panel Lock | Select locking of the printer's control <br> panel. If you select on, the printer's <br> control panel is locked. |
| Toner Out | Select whether or not to continue <br> printing when the toner is out. |
| Set button | Saves any changes. |
| Reload button | Clears any changes and reloads the <br> previous settings. |

## Printing Menu

| Items | Explanations |
| :---: | :---: |
| Menu Selection | Select Printing Menu. |
| Paper Source | Select the paper source. |
| Paper Size | Select the paper size for printing. |
| Wide A4 | Select whether or not the printer accepts wide A4 paper for printing. |
| Orientation | Select whether the page is printed in portrait or landscape orientation. |
| Output Bin | Select the output tray for printout sheets. |
| Copies | Enter the number of copies to be printed. |
| Manual Feed | This item selects manual feed mode. |
| Resolution | Select the resolution. |
| Skip Blank Page | Select whether or not to skip a blank page. |
| Auto Eject Page | Select whether or not to eject pages automatically. |
| Duplex | Select whether or not to print on both sides of paper. This setting is available only when the Duplex Unit is installed. |
| Binding | Specify the binding direction of the printout. This setting is available only when the Duplex Unit is installed. |
| StartPage | Specify whether printing starts from the front or back side of the page. This setting is available only when the Duplex Unit installed. |
| Set button | Saves any changes. |
| Reload button | Clears any changes and reloads the previous settings. |

## Configuration Menu

$\left.$| Items | Explanations |
| :--- | :--- |
| Menu Selection | Select Configuration Menu. |
| RITech | Select whether or not to adjust the <br> RITech setting. RIT produces smoother <br> and crisper lines, text, and graphics. |
| Toner Save | Select whether or not to save toner. <br> When on, the printer consumes less <br> toner but print quality is reduced. |
| Top Offset | Type the value to adjust the printing <br> start position from the top on the <br> paper. |
| Left Offset | Type the value to adjust the printing <br> start position from the left on the <br> paper. |
| Paper Type | Type a value to adjust the vertical <br> printing position on the back side <br> when printing on both sides. Available <br> only when the Duplex Unit is installed. |
| Left Offset B | Type a value to adjust the horizontal <br> printing position on the back side <br> when printing on both sides. Available <br> only when the Duplex Unit is installed. |
| Page Ignore | Select the paper type. <br> Select whether or not a paper size <br> error is ignored. |
| Image Optimum | Select whether or not to permit the <br> printer to automatically continue <br> printing after a certain period of time <br> when one of the following error <br> occurs: paper set, print overrun, or <br> insufficient memory error. |
| be printed. |  |
| limit, thlowing complex documents to |  |
| beduc |  | | Select whether or not to allocate |
| :--- |
| additional printer memory for printing |
| data, as opposed to receiving it. | \right\rvert\,


| Set button | Saves any changes. |
| :--- | :--- |
| Reload button | Clears any changes and reloads the <br> previous settings. |

## Clock Menu

| Items | Explanations |
| :--- | :--- |
| Menu Selection | Select Clock Menu. |
| Date | Set the printer's internal date. |
| Time | Set the printer's internal time. |
| Local Time Difference | Set the time difference between your <br> local time and standard time. |
| Set button | Saves any changes. |
| Reload button | Clears any changes and reloads the <br> previous settings. |

## Emulation Information

## LJ4 emulation

$\left.\begin{array}{|l|l|}\hline \text { Items } & \text { Explanations } \\ \hline \text { Emulation } & \text { Select LJ4. } \\ \hline \text { Font Source } & \text { Select the default font source. } \\ \hline \text { Font Number } & \begin{array}{l}\text { Type the default font number from the } \\ \text { default font source. }\end{array} \\ \hline \text { Pitch } & \begin{array}{l}\text { Type the default font pitch if the font } \\ \text { is scalable and fixed-pitch. }\end{array} \\ \hline \text { Height } & \begin{array}{l}\text { Type the default font height if the font } \\ \text { is scalable and proportional. }\end{array} \\ \hline \text { Symbol Set } & \begin{array}{l}\text { Select the default symbol set. }\end{array} \\ \hline \text { Form } & \begin{array}{l}\text { Type the number of lines for the } \\ \text { selected paper size and orientation. }\end{array} \\ \hline \text { Source Symbol Set } & \begin{array}{l}\text { Available only when an optional font } \\ \text { ROM is installed. }\end{array} \\ \hline \text { Dest Symbol Set } & \begin{array}{l}\text { Available only when an optional font } \\ \text { ROM is installed. }\end{array} \\ \hline \text { CR Function } & \begin{array}{l}\text { Select CR (carriage-return) or CR+LF } \\ \text { (carriage-return/line-feed) operation } \\ \text { whenever the print position exceeds } \\ \text { the right margin. }\end{array} \\ \hline \text { Tray Assign } & \begin{array}{l}\text { Select LF (line-feed) or CR+LF } \\ \text { (carriage-return/line-feed) operation } \\ \text { to add a line feed to each carriage } \\ \text { return it receives. }\end{array} \\ \hline \text { Set button } & \begin{array}{l}\text { Clears any changes and reloads the } \\ \text { previous settings. }\end{array} \\ \hline \text { Select the tray assigning from 4, 4K, or } \\ 5 S . \text { When 4, 4K, and 5S are selected, } \\ \text { LaserJet 4 Compatible, LaserJet } \\ \text { 4000/5000/8000 Compatible, and } \\ \text { LaserJet5Si Compatible areavailable } \\ \text { respectively. }\end{array}\right\}$

## GL2 emulation

| Items | Explanations |
| :--- | :--- |
| Emulation | Select GL2. |
| GL-Mode | Select whether the emulation is similar <br> to the GL/2 or the HP LaserJet 4 <br> emulation of the GL/2. |
| Scale | Select whether the output from the <br> software is scaled, and if so, how the <br> scale factor is calculated: based on <br> the output paper size of the software <br> application. |
| Origin | Select whether the logical origin of the <br> "plotter" is from the corner or the <br> center of the paper. |
| Pen | Select the logical "pen" which "plots" <br> the drawing. |
| End | Select the way in which lines end. |
| Join | Select the way in which lines are <br> joined. |
| Pen (0 to 6) | Select the thickness of the seven <br> "pens" used to make the printout. |
| Set button | Saves any changes. |
| Reload button | Clears any changes and reloads the <br> previous settings. |

## ESCP2 and FX Emulation

| Items | Explanations |
| :--- | :--- |
| Emulation | Select ESCP2 or FX. |
| Font | Select a font which is used for printing. |
| Pitch | Select a character pitch. |
| Condensed | Use this option to change the <br> character spacing. |
| T. Margin | Use this option to specify the distance <br> from the top of the sheet to the <br> baseline of the first printable line. |
| Text | Use this option to set the page length <br> in lines. |
| CG Table | Use the character generator table <br> option to select the graphics <br> character table, or the italics table. |
| Auto CR | Use this option to select one of the <br> international symbol sets. |
| Set button | Use the automatic carriage return <br> option to perform a carriage-return <br> line-feed (CR-LF) operation whenever <br> the print position exceeds the right <br> margin. |
| Auto LF Image | Saves any changes. <br> When you set AutoLF to Off, the printer <br> does not send an automatic line feed <br> (LF) command with each carriage <br> return (CR). When on, the printer adds <br> a line feed to each carriage return it <br> receives. |
| Selashed zero or an unslashed zero. |  |
| slar | With Bit Image set to Dark or light, your <br> printer can correctly emulate the <br> graphics densities set with the printer <br> command. When you selectDark, the <br> bit image density is high. When you <br> select Light, the bit image density is <br> low. |
| Sale |  |


| Reload button | Clears any changes and reloads the <br> previous settings. |
| :--- | :--- | previous settings.

## 1239X Emulation

| Items | Explanations |
| :---: | :---: |
| Emulation | Select 1239X. |
| Font | Select a font. |
| Pitch | Select a character pitch. |
| Code Page | Selects the character tables. Character tables contain the characters and symbols used in different languages. |
| T. Margin | Use this option to specify the distance from the top of the sheet to the baseline of the first printable line. |
| Text | Use this option to set the page length in lines. |
| Auto CR | Use the automatic carriage return option to perform a carriage-return line-feed (CR-LF) operation whenever the print position exceeds the right margin. |
| Auto LF | When you set AutoLF to Off, the printer does not send an automatic line feed (LF) command with each carriage return (CR). When on, the printer adds a line feed to each carriage return it receives. |
| Alt. Graphic | Turns the Alternate Graphics option on or off. |
| Bit Image | With Bit Image set to Dark or Light, your printer can correctly emulate the graphics densities set with the printer command. When you selectDark, the bit image density is high. When you select Light, the bit image density is low. |
| Zero Char | Select whether the printer prints a slashed zero or an unslashed zero. |
| Character Set | Select character table. |
| Set button | Saves any changes. |


| Reload button | Clears any changes and reloads the <br> previous settings. |
| :--- | :--- |

## PS3 emulation

| Items | Explanations |
| :--- | :--- |
| Error Sheets | Select whether or not to print an error <br> sheet when any error occurs while the <br> printer is in PS3 emulation mode. |
| Coloration | Specify the printing methods from <br> Color, Mono, or True Color. |
| Image Protect | Select whether or not to compress <br> data when memory is low during <br> printing. |
| Set button | Saves any changes. |
| Reload button | Clears any changes and reloads the <br> previous settings. |

## Interface Information

## Parallel Interface

| Items | Explanations |
| :--- | :--- |
| Parallel I/F | Allows you to activate or deactivate <br> the parallel interface. |
| Speed | Select the transfer speed. |
| Bi-Directional | Enable or disable bidirectional <br> communication. |
| Buffer Size | Select the amount of memory to be <br> used for receiving and printing data. |

## Network Interface

| Items | Explanations |
| :--- | :--- |
| Network I/F | Network I/F (Internal Print Server) is <br> always on. |
| Buffer Size | Select the amount of memory to be <br> used for receiving and printing data. |

## AUX Interface

| Items | Explanations |
| :--- | :--- |
| AUX I/F | Not available unless an optional print <br> server is installed. |
| Buffer Size | Select the amount of memory to be <br> used for receiving and printing data. <br> Available only when an optional print <br> server is installed. |
| Set button | Saves any changes. |
| Reload button | Clears any changes and reloads the <br> previous settings. |

## Configuration - Network screens

## NetWare

## NetWare Basic Configuration

| Items | Explanations |
| :--- | :--- |
| NetWare | Enable or Disable NetWare. |
| Frame Type | Select Auto that is the only one you <br> can select for the frame type. |
| Mode | Select the appropriate NetWare <br> mode. |
| NDS Tree Name | Type the NDS tree name (up to 31 <br> characters). |
| NDS Context | Type the NDS context (up to 255 <br> characters). |

## Print Server Mode

| Items | Explanations |
| :--- | :--- |
| Primary File Server Name | Type the file server name (up to 47 <br> characters) which the print server logs <br> in. |
| Print Server Name | Type the print server name (up to 47 <br> characters). |
| Polling Interval | Type the polling interval in seconds. |
| NetWare Password | Type the password (up to 20 <br> characters) you use when you log in <br> to the print server. |

## Remote Printer Mode

| Items | Explanations |
| :--- | :--- |
| Primary Print Server <br> Name | Type the primary printserver name (up <br> to 47 characters). |
| Printer Port Number | Type the printer port number. |
| SUBMIT button | Update the changes. |

## TCP/IP

| Items | Explanations |
| :--- | :--- |
| Get IP Address | Select the method of acquiring the IP <br> address, either Auto or Panel. |
| IP Address | Type the IP address for the Internal <br> Print Server if set to Panel. |
| Subnet Mask | Set the subnet mask. |
| Default Gateway | Set the gateway address if needed. |
| SUBMIT button | Update the changes. |

## AppleTalk

| Items | Explanations |
| :--- | :--- |
| AppleTalk | Enable or Disable AppleTalk. |
| Printer Name | Type the name of the printer (up to 32 <br> characters). |
| Entity Type | Displays the Entity type of the printer. |
| Zone Name | Specify the AppleTalk zone. |
| Network Number Set | Select Auto or Manual. It should be set <br> to Auto for most systems. |
| Network Number for <br> Manual Mode | Specify the network number when <br> you select Manual for Network <br> Number Set. |
| SUBMIT button | Update the changes. |

## NetBEUI

| Items | Explanations |
| :--- | :--- |
| NetBEUI | Enable or Disable NetBEUI. |
| NetBIOS Name | Type the computer name (NetBIOS <br> name) up to 15 characters. |
| Workgroup Name | Type the workgroup name or domain <br> name (up to 15 characters). |
| Device Name | Type the device name (up to 12 <br> characters). |
| SUBMIT button | Update the changes. |

## IPP

You must make the following settings before setting up the printer for Internet Printing in Windows 2000 or using EpsonNet Internet Print in Windows 98/95/NT 4.0. See Chapter 12, "EpsonNet Internet Print," for more information about EpsonNet Internet Print.

| Items | Explanations |
| :--- | :--- |
| IPP URL | Displays the printer's URL for Internet <br> Printing. <br> Format: http:// the IP address of the <br> Internal Print Server:631/ the printer <br> name set below <br> Example: <br> http://192.168.100.201:631/EPSON_IP <br> P_Printer |
| Printer Name | Enter the printer name to use for <br> Internet Printing (up to 127 <br> characters). <br> Example: EPSON_IPP_Printer |
| Location | Enter the name of the printer's <br> physical location (up to 64 <br> characters). |


| SUBMIT button | Saves any changes. |
| :--- | :--- |

## SNMP

## Community

| Items | Explanations |
| :--- | :--- |
| Community | Displays the community name. |
| Read Only | The word "public" is displayed. |
| Read/Write | Specify the Read/Write community <br> name (up to 32 characters). |
| SUBMIT button | Update the changes. |

## IP Trap

| Items | Explanations |
| :--- | :--- |
| Trap | Enable or Disable the trap. |
| Address | Type the IP address of the server to <br> which the trap is transmitted. |
| Community Name | Type the community name (up to 32 <br> characters). |
| SUBMIT button | Update the changes. |

## IPX Trap

| Items | Explanations |
| :--- | :--- |
| Trap | Enable or Disable the trap. |
| Address | Type the Network Address and Node <br> Number of the serverto which the trap <br> is transmitted. <br> Format: Network Address: Node <br> Number <br> Assume that the Network Address is <br> A7EOOBBO (hexadecimal) and Node <br> Number is 000048930000 <br> (hexadecimal). In this case, the <br> address is A7EOOBBO:000048930000. |
| Community Name | Type the community name (up to 32 <br> characters). |
| SUBMIT button | Update the changes. |

## Optional screens

## Administrator

You can link to the web site specified in this screen when you click Favorite (the name is changeable) in the Index.

| Items | Explanations |
| :--- | :--- |
| Administrator Name | Type the name of the administrator. |
| Favorite Name | Type the link item name (up to 20 <br> characters) which will be displayed in <br> the Index menu. |
| Favorite URL | Type a URL (up to 64 characters). |
| Description | Input any comments concerning the <br> URL (up to 64 characters). |
| SUBMIT button | Update the changes. |

## Note:

Links to ftp are not supported.

## Reset

You can initialize or reset the Internal Print Server.

| Items | Explanations |
| :--- | :--- |
| RESET button | Functions like turning the power off <br> and on again. Click this button to <br> make the changes effective. |
| RETURN TO DEFAULT <br> button | Returns the internal Print Server to the <br> default settings. |

## Password

The password set here protects the settings. You will be asked for the password when you update or change the settings on each setting screen.

| Items | Explanations |
| :--- | :--- |
| Old Password | Input the old password. There is no <br> default password. |
| New Password | Input the new password (up to 20 <br> characters). |
| Re-input Password | Re-input the new password. |
| SUBMIT button | Update the changes. |

## Note:

- The same password can be used for EpsonNet WinAssist, MacAssist, and WebAssist.
- If you forget your password, initialize the printer. To do this, turn on the printer while pressing the Continue (Reset) button on the printer's control panel. Be aware that all the printer and network settings you have made will be cleared when you initialize.


## Chapter 10

## EpsonNet Direct Print

EpsonNet Direct Print is a utility program that provides you the TCP/IP (LPR) printing for Windows 98, Windows 95, Windows 2000, and Windows NT 4.0.

By using EpsonNet Direct Print, you can browse both a printer located in the same segment and one located beyond a router. You can select from LPR standard printing, LPR extension printing, or High-speed printing.

## Environment

System requirements

- IBM PC/AT or compatible computer that is running Windows 98, Windows 95, Windows 2000, or Windows NT 4.0
- Pentium 200 MHz (Pentium II or better recommended)
- 32MB or more of RAM
- 20MB or more available hard disk space


## Installing EpsonNet Direct Print

Follow the steps below to install EpsonNet Direct Print. Be sure to install EpsonNet Direct Print in a computer connected to the network.

## Note:

If EpsonNet Direct Print version 1 is installed in your computer, you need to uninstall it before installing EpsonNet Direct Print version 2 (the installation program will lead you through uninstalling the older version of EpsonNet Direct Print).

1. Insert the Software CD-ROM shipped with this package in the CD-ROM drive.
2. The EPSON Installation Program screen opens automatically.

If the install screen does not appear automatically, click Start and Run. Then enter D: \EPSETUP.EXE and click OK.
(Substitute the appropriate letter for your CD-ROM drive as necessary.)
3. Double-click Install EpsonNet Direct Print; or select Install EpsonNet Direct Print and then click the arrow at the top right.
4. Follow the on-screen instructions to complete installation.
5. Restart the computer after installation is complete.

Your computer is now set up to print with LPR via EpsonNet Direct Print. See the next section to set up your printer.

## Setting Up Your Printer

When setting up a printer to print with LPR, you can add both a printer located in the same segment and one located beyond a router.

## Note:

$\square$ Be sure that the computer is connected to the network and TCP/IP is correctly set.

- The valid IP address other than default value "192.168.192.168" must be set; otherwise the printer does not appear under the Epson_lpr group icon. See "Setting the IP Address Using EpsonNet WinAssist/MacAssist" on page 2-7 to set the IP address.
- The EPSON Status Monitor 2 utility shipped with the interface card models C82362*/C82363*/C82364* with software version 1.x and EPL-N2700/N4000 printers enables EPSON TCP/IP printers. These EPSON TCP/IP printers can coexist with lpr printers added by EpsonNet Direct Print.
- Job control functions, such as pause printing, cancel printing, and purge print job, can be accessed by double-clicking the printer icon in the Printers folder.


## Adding a printer located in the same segment

1. Windows $98 / 95 / \mathrm{NT} 4.0$ : Double-click the Network Neighborhood icon.

Windows 2000: Double-click the My Network Places icon. Double-click the Entire Network icon, click entire contents, and then double-click the EpsonPeripheralNetwork icon.
2. Right-click the Epson_lpr icon and select Properties. The Epson_lpr Properties dialog box appears.

3．Select the Local Segment check box and click OK．


4．Double－click the Epson＿lpr icon．All available printers in the same segment as your computer are displayed．

|  |  | －$\square$ a |
| :---: | :---: | :---: |
| File Edit View |  |  |
| 8 Entire Network | 或0cean01 |  |
| Emepsonılpr | －Ocean02 |  |
| －Holubec | 國 Robin |  |
| 或Ken01 | 或 Smith |  |
| 或Max01 |  |  |
| 或Max02 |  |  |
| 41 |  | $\stackrel{\rightharpoonup}{*}$ |
| 1 object（s）selected |  | lla |

5．Double－click the target printer．

| ［ Epson＿lpr | － |
| :---: | :---: |
| Eile Edit View Help |  |
| －$\times \times \times \times \times \times \times \times \times \times$［AL－C2000］ |  |
| － $3 \times x \times x . x$ ．xxx．xx（EPL－N1200） |  |
| 1 object（s） | 11 |

6. Follow the on-screen instructions to install the printer driver.

## Note:

If the Wizard asks you whether to select Keep existing driver or Replace existing driver, be sure to select the Replace existing driver radio button.

## Adding a printer beyond a router

1. Windows 98/95/NT 4.0: Double-click the Network Neighborhood icon.

Windows 2000: Double-click the My Network Places icon. Double-click the Entire Network icon, click entire contents, and then double-click the EpsonPeripheralNetwork icon.
2. Right-click the Epson_lpr icon and select Properties. The Epson_lpr Properties dialog box appears.
3. Select the Specific Network Segment check box and enter the IP address and subnet mask of the printer you want to search for. Click OK.

4. Double-click the Epson_lpr icon to view available printers.

5. Double-click the target printer.

| 믕 Epson_lpr | - $\square$, $\times$ |
| :---: | :---: |
| File Edit View Help |  |
|  |  |
| S $2 \times x \mathrm{xm} \times \mathrm{xmx} . \mathrm{xx}$ (EPL-N1200) |  |
| 1 object(s) | 11 |

6. Follow the on-screen instructions to install the printer driver.

## Note:

If the Wizard asks you whether to select Keep existing driver or Replace existing driver, be sure to select the Replace existing driver radio button.

## Adding a printer from Printers folder

1. Windows $98 / 95 / \mathrm{NT} 4.0$ : Double-click the Network Neighborhood icon.

Windows 2000: Double-click the My Network Places icon. Double-click the Entire Network icon, click entire contents, and then double-click the EpsonPeripheralNetwork icon.
2. Right-click the Epson_lpr icon and select Properties. The Epson_lpr Properties dialog box appears.
3. Select Local Segment to search a printer in the same segment, or select Specific Network Segment and enter the IP address and subnet mask of the printer to search a printer which is located beyond the router. Click OK.
4. Click Start, point to Settings, and then click Printers.
5. Double-click Add Printer in the Printers folder to start the Add Printer Wizard.
6. Select Network printer (Windows 98/95/2000) or Network print server (Windows NT 4.0) and click Next.
7. Click the Browse button, and then double-click Epson_lpr or EpsonPeripheralNetwork.
8. Select the target printer listed under Epson_lpr or EpsonPeripheralNetwork and click OK. Then click Next.

9. Follow the on-screen instructions to install the printer driver.

Note:
If the Wizard asks you whether to select Keep existing driver or Replace existing driver, be sure to select the Replace existing driver radio button.

## Setting the Printing Protocol

Follow the steps below to select the port for the printer. The printing speed will differ depending on the selection you make.

1. Click Start, point to Settings, and then click Printers.
2. Right-click the target printer and select Properties.
3. Windows 98/95: Select the Details tab and click the Port Settings button. The EPSON LPR Port dialog box appears.

Windows 2000/NT 4.0: Select the Ports tab and click the Configure Port button. The EPSON LPR Port dialog box appears.

4. Select the settings for the port you prefer;

## LPR standard printing:

Select the LPR Print check box and the Standard Print radio button. Print data is spooled into the computer before sending it to the target network printer.

## LPR extension printing:

Select the LPR Print check box and the Extension Print radio button. LPR extension printing sends print data to the target network printer without spooling all the print data. LPR extension printing prints faster than LPR standard printing.

## High-speed printing:

Select the High-Speed Print radio button. High-speed printing sends print data to the target network printer without spooling all the print data. This mode prints the fastest among the three modes. If the printer does not support this function, this check box is unavailable.

## Notifies in the print ending:

Select this check box to display a message on the screen when printing is complete.
5. Click OK.

## Uninstalling EpsonNet Direct Print

Follow these steps to uninstall EpsonNet Direct Print.

1. Click Start, point to Settings, and then click Control Panel.
2. Double-click the Add/Remove Programs icon.
3. Select EpsonNet Direct Print and click the Add/Remove button (Windows 98/95/NT 4.0) or the Change/Remove button (Windows 2000).
4. Click Yes to uninstall EpsonNet Direct Print.
5. After the uninstall is complete, restart the computer.

## Chapter 11

## EPSON Status Monitor 3 (Windows only)

EPSON Status Monitor 3 is a utility program that monitors your printer and gives you information about its current status, including the amount of remaining toner. If a print error occurs, the Status Monitor also provides you with a message describing the error. You can access EPSON Status Monitor 3 from your printer driver.

For more information on using the Status Monitor, open the online help included with this utility.

Before using Status Monitor 3, be sure to read the printer driver's README file. This file contains the latest information on the printer driver including Status Monitor 3.

## Note:

This guide explains about the supported operating environment for EPSON Status Monitor 3. See the Reference Guide for a description of the functions of EPSON Status Monitor 3.

## Environment for EPSON Status Monitor 3

Operating systems

- EPSON Status Monitor 3 does not support Windows 3.1, Windows 3.11 for Workgroups, or Windows NT 3.51.
$\square$ Supported operating systems differ depending on the printer model. See the Reference Guide for supported operating systems.


## Protocols

The protocols that must be installed to run EPSON Status Monitor 3 vary depending on your operating system and printer type. The following table divides printers into four categories: Local printers; LPR printers, which use TCP/IP (generally in a Windows NT network environment); NetWare printers, which use Novell's IPX/SPX protocol in a NetWare environment; and Windows shared printers.

Use this table to determine what protocols you need to install according to your operating system and printer type, then see the corresponding section for your operating system.

|  | Local <br> Printer | LPR Printer <br> (TCP/IP) | NetWare <br> Printer <br> (IPX/SPX) | Windows <br> Shared Printers |
| :--- | :--- | :--- | :--- | :--- |
| Windows 98 | LPT | EPSON LPR $^{1}$ | NetWare $^{3}$ | LPT |
| Windows 95 | LPT | EPSON LPR $^{1}$ | NetWare $^{3}$ | LPT |
| Windows <br> 2000/NT 4.0 | LPT | TCP/IP \& LPR ${ }^{2}$ | NetWare $^{3}$ | LPR $^{2}$ \& LPT |

EPSON LPR ${ }^{1}=$ EpsonNet Direct Print
LPR ${ }^{2}=$ Windows NT LPR protocol
NetWare ${ }^{3}=$ Necessary protocols already installed

Note:

- To set up the printer for use with TCP/IP, be sure that the TCP/IP protocols are installed in your computer and correctly set. See your operating systems online help to install the TCP/IP protocol. To set up the printer for use with NetWare, see your NetWare documentation.
- If you configure more than one printer for one NetWare print queue, Status Monitor cannot monitor the printer that is assigned to that qиеие.
- Novell NetWare Client32 for Windows 95 and IntranetWare Client for Windows NT are available.


## Windows shared printer

You can share a printer that is connected directly to a computer with others on a network. You need to set up the printer as a shared printer on the computer to which the printer is connected. See either "Windows $98 / 95$ " on page $11-4$ or "Windows 2000/NT $4.0^{\prime \prime}$ on page 11-7 as appropriate for your operating system.

(1): client machine
(2): server machine
(3): Windows shared printer

## Note:

To monitor a shared printer from a client through the server, select Allow monitoring of shared printer in the Monitoring Preference dialog box of the server.

- The environment must support normal printing from the shared printer.

The port used for monitoring will differ from system to system.

|  | LPT1 | TCP/IP-LPR |
| :--- | :--- | :--- |
| Windows 98/95 | supported | not supported |
| Windows 2000/NT 4.0 | supported | supported |

## Windows 98/95

You need to set up the printer as a shared printer on the computer to which the printer is connected. Then, you must specify the network path to the printer from each computer that will use it, and install the printer software on those computers.

Setting up your printer as a shared printer
Follow these steps to share a printer that is connected directly to a computer with others on a network.

1. Click Start, point to Settings, and then click Control Panel.
2. Double-click Network.
3. Click File and Print Sharing.

4. Select the I want to be able to allow others to print to my printer(s) check box and click OK. Restart the computer.

5. Click Start, point to Settings, and then click Printers.
6. Right-click the target printer icon and click Sharing.
7. Click the Shared As radio button and enter the share name. Click OK.


Accessing the printer through a network
To access the printer from another computer on the network, follow the steps below.

## Note:

Your printer must be set up as a shared resource on the computer to which it is directly connected before you can access it from another computer.

1. Click Start, point to Settings, and click Printers.
2. Double-click Add Printer. Click Next.
3. Click the Network printer radio button and click Next.
4. Click Browse and select the network path from the list. Follow the on-screen instructions to set up the printer.

## Windows 2000/NT 4.0

If you are using a shared printer in Windows NT 4.0, it is important that you follow the instructions below carefully, especially "Accessing the printer through a network," which describes how to install the printer driver on NT 4.0 clients. If you do not follow these instructions, you may not be able to properly install or use the printer driver.

First, you need to set up the printer as a shared printer on the computer to which the printer is connected. Then, you must specify the network path to the printer from each computer that will use it, and install the printer software on those computers.

## Setting up your printer as a shared printer

Follow these steps to share a printer that is connected directly to your computer with others on a network.

1. Click Start, point to Settings, and click Printers.
2. Select your printer, then select Sharing from the File menu.
3. Click Shared and enter the Share Name.


## 4. Click OK.

## Note:

Do not choose any drivers from the Alternate Drivers list.

## Accessing the printer through a network

To access your printer from another computer on the network, follow these steps.

## Note:

Your printer must be set up as a shared resource on the computer to which it is directly connected before you can access it from another computer.

1. Install the printer driver on the client computer from the software CD-ROM.
2. Open the Printer folder from the Control Panel, then open the Properties for your printer.
3. Click the Ports tab, then click Add Port.

4. The following dialog appears. Select Local Port, then click New Port.

5. The following dialog appears. In the text box, type the following information:
$\ \backslash$ name of computer that is connected to the printer $\backslash$ name of the shared printer

Then click OK.

6. In the Printer Ports dialog box, click Close to return to the Ports menu.
7. On the Ports menu, make sure that the new port is added and the check box is selected. Click OK to close the printer driver.


## Local printer

Connect the printer directly to the printer port of your computer.

(1): local printer
(2): Windows 98/95/2000/NT4.0
(3): local cable

| Windows 98/95/2000 | Windows NT 4.0 |
| :--- | :--- |
| Bi-directional <br> support is necessary. | Special settings not <br> needed. |

## For Windows 98/95/2000:

You need to set the bi-directional support in the printer's properties dialog box. For Windows 98/95, click the Details tab and click Spool Settings. Then click the Enable bi-directional support for this printer radio button. For Windows 2000, click the Ports tab and check the Enable bidirectional support check box.

Note:
When you monitor a local printer with Windows 98/95, use LPT1 for the printer port.

## LPR printer


(1): LPR printer
(2): Windows 2000 with Standard TCP/IP Monitor Windows NT4.0 with Windows NT LPR Windows 98/95 with EPSON LPR
(3): Ethernet network

LPR printers use LPR over TCP/IP as their communication protocol suite, and you must install both protocols to use the Status Monitor to monitor a LPR printer. See your operating system documentation for installing TCP/IP. To connect to a printer on the network and share the printer without using the server:

## In Windows 98/95:

You need to set the printer using EpsonNet Direct Print. See "Printing with TCP/IP via EpsonNet Direct Print" on page 4-1.

## In Windows NT 4.0:

You need to set up TCP/IP printing. See "Printing via LPR software in Windows NT 4.0" on page 5-5.

## In Windows 2000:

To set up TCP/IP printing, see "Printing via Standard TCP/IP Port Monitor in Windows 2000" on page 5-2.

## NetWare printer



You can use the network printer though the NetWare server. Be sure to do the following:

- Connect the printer to a Bindery queue or NDS queue in Windows 98, Windows 95, Windows NT 4.0.
- Use IntranetWare Client32 Ver1.12 or later if you are using Windows 98/95. Use IntranetWare Client if you are using Windows NT.
- You must set the port number to 0 when using Remote Printer mode.

If you use your printer in a NetWare environment, you need to connect to the print queue that is assigned to your printer.

1. Click Start, point to Settings, and click Printers.
2. Click Add Printer.
3. Select Network printer, and click Next.
4. Double-click the NetWare file server that services the print queue assigned to your printer.
5. All of the queues serviced by that file server appear in a list. Select the correct print queue, and click OK. (If the printer driver is not installed, a dialog box appears prompting you to select the printer driver.)
6. Make the default printer setting and click Next.
7. Click Finish.

## Selecting a Printer to Monitor

Before you can start monitoring a TCP/IP or LPR printer with EPSON Status Monitor 3, you need to select the printer in your operating system. Follow the steps for your operating system: Windows 98/95, "Setting Up Your Printer" on page 10-49; Windows 2000, "Setting up the printer in Windows 2000" on page 5-2; and NT 4.0, "Setting up the printer in Windows NT 4.0" on page 5-5.

## Note:

The IP address of the Internal Print Server must be set; otherwise the printer does not appear on the screen. For instructions on setting the IP address for the Internal Print Server, see "Setting the IP Address Using EpsonNet WinAssist/MacAssist" on page 2-7.

## Chapter 12

## EpsonNet Internet Print

EpsonNet Internet Print is a utility program that supports printing across the Internet using Internet Printing Protocol (IPP). Since the Internal Print Server supports IPP, Internet printing is possible using this utility. You can print or make printer settings from Windows 98, Windows 95, and Windows NT4.0 systems that can access the Internet. You can also print via a proxy server using this utility.

Before using the EpsonNet Internet Print utility, be sure to read the README file found in the EpsonNet Internet Print folder. This file contains the latest information on the EpsonNet Internet Print.

## Note:

- EPSON Status Monitor 3 is a utility program that monitors your printer and gives you information about its current status. Because this utility does not support IPP, printers connected to the Internet cannot be monitored with EPSON Status Monitor 3.
- If you use EpsonNet Internet Print on a computer which has EPSON Status Monitor 3 installed, a communication error message may appear when you view printer properties. To avoid this, click the Optional Settings tab in the target printer's properties dialog box and click the Update the Printer Option Info Manually radio button.


## Environment

Operating systems

- Windows 98, Windows 95, or Windows NT 4.0 Server and Workstation
- An Intel x86 series or compatible processor


## Supported products

$\square$ EPSON print servers that support IPP (EpsonNet Internet Print comes with printers, network adapters, and interface cards that support IPP)

## Installing EpsonNet Internet Print

Follow the steps below to install EpsonNet Internet Print.

1. Be sure that the TCP/IP protocol is installed in the computer and a valid IP address is set for the computer and printer.
2. Insert the Software CD-ROM included in the package in the CD-ROM drive.
3. The EPSON Installation Program screen opens automatically.

If the EPSON Installation Program screen does not appear automatically, click Start and Run. Type D:\EPSETUP and click OK. (Substitute the appropriate letter for your CD-ROM drive as necessary.)
4. Double-click Install EpsonNet Internet Print; or install by selecting Install EpsonNet Internet Print and then clicking the arrow at the top right.
5. Follow the on-screen instructions to complete the installation.
6. Restart the computer after installation is complete.

## Setting the Printer Using EpsonNet Internet Print

EpsonNet Internet Print supports printing across the Internet using Internet Printing Protocol. Follow the steps below to set up the printer.

## Note:

Before following the steps below, you must make the appropriate IPP settings in EpsonNet WebAssist. See "IPP" on page 9-41 for instructions on setting up IPP. In the steps below, you will be asked for the IPP URL you set in the IPP setting screen in EpsonNet WebAssist.

## Windows 98/95

1. Make sure that TCP/IP is correctly installed and setup in the computer and a valid IP address is set for the computer and printer.
2. Make sure that the IPP settings in EpsonNet WebAssist are correct. See "IPP" on page 9-41 for instructions on settings for IPP.
3. To start EpsonNet Internet Print, click Start, point to Programs and EpsonNet Internet Print, then click Add EpsonNet Internet Print Port.
4. The following screen appears. The address you set here becomes the port for Internet printing. Make the settings described below.


## Enter Printer URI:

Enter the target printer's URI up to 49 characters. The URI you set here must be same as the IPP URL you have set for the IPP setting screen in EpsonNet WebAssist. Do not use the following characters; | \ [ ] \{ \} < > \#" '
http:/ /the IP address of the printer:631/the printer name Example: http:/ /192.168.100.201:631/EPSON_IPP_Printer

## Use Proxy:

When using the proxy server, select this box and enter the Proxy Server Name and Port Number. All the communication is done via proxy server.

## Enter Proxy Server Name:

Enter the proxy server name or the IP address of the proxy server. You can enter up to 256 characters, but available characters are up to 127 characters. Do not use the following characters; | \ [ ] \{\}<>\#"'

## Port Number:

Enter the port number of the proxy server (from 0 to 65535).

## Get Printer Attributes:

When you select this box and click OK, EpsonNet Internet Print communicates with the printer and acquires information, so it may take a few minutes before a message appears. This setting is available only when creating a port.

## Get status every 20 sec.:

Select this box when you want to receive printer status updates at regular intervals (every 5 seconds during printing and every 20 seconds when idle). If you select this box, a message will appear if an error occurs during printing. You can also check the printer status by double-clicking the printer icon.

## OK button:

Saves the settings.

## Cancel button:

Cancels any changes.

## Note:

- The settings you make above can be changed after settings the printer. In the printer Properties dialog box, click the Details tab, and click the Port Settings button to change the settings.
- Be aware that when connecting to the Internet using a dial-up router and selecting the Get status every 20 sec check box, you may be charged for the extra line connection.
- When you check the Get Printer Attributes check box and click OK, an error message might appear. Be sure that the printer power is on, and the printer is correctly connected on the network.
- If the printer power is off or there is a problem in the network, the Get status every 20 sec check box is automatically cleared. If this happens, make sure that the printer power is on and the printer is correctly connected on the network, and then check the Get status every 20 sec check box again.


## 5. Click OK to save settings.

6. When a message appears saying the settings are correctly configured, click OK to start the Add Printer Wizard. Click Next.

Note:
If you click Cancel and then later want to add the printer, start the Add Printer Wizard and follow the steps below.
7. Click the Local printer radio button and click Next.
8. Select the printer driver and click Next.
9. If the following dialog box appears, select Replace existing drive and click Next.

10. Select the port added by EpsonNet Internet Print in the previous section. Click Next.

11. Follow the on-screen instructions to install the printer driver.

## Note:

- If you delete the port which you set above from the Details tab of the printer properties, you cannot reuse the deleted port name as a new port name (the printer URI) until you restart the computer.
- If you are using EPSON Status Monitor 3 and printing with EpsonNet Internet Print, the message " A communication error has occurred." appears. You can get rid of this message by clearing the Monitor the Printing Status check box in the Utility menu of the printer properties.


## Windows NT 4.0

1. Be sure that TCP/IP is correctly installed and setup in the computer and a valid IP address is set for the computer and printer.
2. Be sure that the IPP settings in EpsonNet WebAssist are correctly set. See "IPP" on page 9-41 for instructions on setting up IPP.
3. Click Start, point to Settings, and then click Printers.
4. Double-click the Add Printer icon and click Next.
5. Click the My Computer radio button and click Next.
6. Click the Add Port button, and select EPSON IPP Port from the list. Then click the New Port button.

7. The following screen appears. The address you set here becomes the port for Internet printing. Make the settings described below.


## Enter Printer URI:

Enter the target printer's URI (up to 127 characters). The URI you set here must be the same as the IPP URL you set for the IPP configuration in EpsonNet WebAssist. Do not use the following characters; | \[]\{\}<>\#"
http://the IP address of the printer:631/the printer name Example: http:/ /192.168.100.201:631/EPSON_IPP_Printer

## Use Proxy:

When using a proxy server, select this box and enter the Proxy Server Name and Port Number. All communication is done via the proxy server.

## Enter Proxy Server Name:

Enter the proxy server name or the IP address of the proxy server (up to 256 characters). Do not use the following characters; | \[]\{\}<>\#"'

## Port Number:

Enter the port number of the proxy server (from 0 to 65535).

## Get Printer Attributes:

When you select this box and click OK, EpsonNet Internet Print communicates with the printer and acquires information, so it may take a few minutes before a message appears. This setting is available only when creating a port.

## Get status every 20 sec.:

Select this box when you want to receive printer status updates at regular intervals (every 5 seconds during printing and every 20 seconds when idle). If you select this box, a message will appear if an error occurs during printing. You can also check the printer status by double-clicking the printer icon.

## OK button:

Saves the settings.

## Cancel button:

Cancels any changes.

## Note:

- The settings can be changed after setting up the printer. In the printer Properties dialog box, click the Ports tab, and click the Configure Port button to change the settings.
- Be aware that if you connect to the Internet using a dial-up router and select the Get status every 20 sec check box, you may be charged for the extra line connection.
- When you select the Get Printer Attributes check box and click OK, an error message may appear. Be sure that the printer power is on, and the printer is connected to the network.
- If the printer power is off or there is a problem in the network, the Get status every 20 sec check box is automatically cleared. If this happens, make sure that the printer power is on and the printer is correctly connected on the network. Then select the Get status every 20 sec check box again.

8. Click OK to save the settings.
9. Select the printer driver, and follow the on-screen instructions to install the printer driver.

## Note:

When you are using EPSON Status Monitor 3 and printing from EpsonNet Internet Print, the message "A communication error has occurred." appears. To clear this message, right-click the printer icon, select Document Defaults, and select the Utility tab. Then check off the Monitor the Printing Status check box.

## Status Alert Window

The EpsonNet Internet Print utility updates the status of the IPP printer if you have selected the Get status every 20 sec. check box in the EpsonNet Internet Print dialog box.

The status alert window appears when the printer is out of paper, toner, or ink, if paper is jammed, the cover is open, or when the printer is offline.

The EpsonNet Internet Print utility checks the printer status every 5 seconds during printing and every 20 seconds when idle. If you do not want to check the printer status, clear the Get status every 20 sec. check box in the EpsonNet Internet Print dialog box.

## Uninstalling EpsonNet Internet Print

Follow the steps below to uninstall EpsonNet Internet Print.

1. Click Start, point to Settings, and then click Control Panel.
2. Double-click the Add/Remove Programs icon.
3. Select EpsonNet Internet Print and click the Add/Remove button.
4. The message "Are you sure you want to completely remove 'EpsonNet Internet Print' and all of its components?" appears on the screen. Click Yes.

## Chapter 13

## Printer Status Page

This section explains about the Printer Status Page utility and Internet Printing that Windows 2000 offers. Printer Status Page is a set of customized web pages for Microsoft Windows 2000 Internet Printing. With this utility, you can monitor the printer status and network settings of the EPSON printer.

The Microsoft Internet Printing lets you print from Windows 2000 Server and Windows 2000 Professional clients to Windows 2000 print servers using a URL. You can search printers on your network, manage printers, and view the printer and print job status using a browser.

Printer Status Page is a utility that comes with your EPSON printer driver for Windows 2000. When you install the EPSON printer drivers for Windows 2000, Printer Status Page is also installed. The appearance of the screen will differ depending on the printer you are monitoring.

## Note:

Using the Printer Status Page utility requires the use of network privileges and detailed network knowledge. If you need assistance, contact your network administrator.

## Environment

## Server

- Windows 2000 Server and Windows 2000 Professional with Internet Information Service (IIS) Version 5.0 or higher

Client

- Windows 2000 Server and Windows 2000 Professional
- Internet Explorer version 4.01 or higher with Service Pack 2
- 256 color display or better


## Interface cards

- C82362*, C82363*, and C82364* with software version 2.0 or higher


## Network adapter

- C82378* parallel network adapter


## Printers

$\square$ See the printer manual whether your printer supports Printer Status Page.

## Setting Up Printer

This section explains the environmental requirements for Printer Status Page and how to set up the printer. The standard port monitor that comes with Windows 2000 connects a Windows 2000 print server to network-interface printers that use the TCP/IP protocol. You must install the Internet Protocol (TCP/IP) on the server and set the printer for TCP/IP. See the Windows 2000 online help to install Internet Protocol (TCP/IP).

The environmental requirements for Printer Status Page are;

Server and client

- Internet Information Service (IIS) is installed in Windows 2000. To check whether IIS is installed, double-click the Add/Remove Programs icon in the Control Panel, click the Add/Remove Windows Components button, and then click the Components button. In the Windows Components dialog box, make sure the Internet Information Service (IIS) is selected.
$\square$ Internet Explorer 4.01 or better installed.
- The computer is connected to the network and TCP/IP is correctly set.


## Printer

You need to set up the printer that you want to manage with Printer Status Page.

1. Make sure the printer is connected to the network, and TCP/IP is correctly set for the printer.
2. Install the printer driver using the Add Printer wizard. When you install the EPSON printer driver for Windows 2000, Printer Status Page is also installed. See "Printing via Standard TCP/IP Port Monitor in Windows 2000" on page 5-2 and the following notes to install the printer driver.

## Note:

- Install printer drivers using the Add Printer wizard. Do not install using Setup.exe because the Printer Status Page is not installed in this way.
- Use Standard TCP/IP Port Monitor for the port.
- When the Printer Sharing dialog box appears during installation, select Share as.


## Managing Printers from a Browser

This section explains how to manage printers from a browser.

## Accessing the Print Server Page

To access the Print Server Page, which contains a list of all the printers on the server, type one of the following:

- http:/ / the hostname (DNS name) of the server/printers
- http:/ / the computer name (WINS name) of the server/printers
- http://the IP address of the server/printers


## Example: http://hv100/printers

The following page appears, providing the information listed below.


| Items | Explanation |
| :--- | :--- |
| Name | The print queue name of the shared printer. By <br> clicking the print queue name, you can access <br> the Print Queue Page. |
| Status | Status of the print queue. |
| Location | The location specified when adding the printer. |
| Jobs | Number of jobs currently in the print queue. |
| Models | Model name of the printer. |
| Comment | Comments specified when adding the printer. |

## Print Queue Page

When you click the printer name in the Print Server Page, the following page appears. You can manage printing from the menu on the left. For information on these menus, see Windows 2000 online help. Click "Device Status" to display the Printer Status Page.

| F EPSON AL-C2000 Advanced on xxx.xxw. xxx.xxx - Microsoft Internet Explorer |  | - \|미 $\times$ \| |
| :---: | :---: | :---: |
| File Edit Yiew Favorites | ools Help | 产 |
|  |  |  |
|  |  | Links 》 |
|  | EPSON AL-C2000 Advanced on $\times \times \times \times \times \times \times \times \times \times \times \times$ |  |
|  | Printer Queue: Toner Low Waiting Time: 0 Pending Documents: 0 |  |
| VIEW |  |  |
| Document List <br> Properties <br> Device Status All Printers | Document Status Owner Pages Size Submitted |  |
| PRINTER ACTIONS |  |  |
| Pause <br> Resume <br> Cancel All Documents |  |  |
| DOCUMENT ACTIONS |  |  |
| Pause <br> Resume <br> Cancel |  |  |
| \% Done | 3 Internet | $1 /$ |

## Printer Status Page

To access the Printer Status Page, do one of the following;

- Click the "Device Status" link in the Print Queue Page.
- Select the target printer from the Windows 2000 Printer folder, and click the "Get More Info" link.


## Note:

The appearance of the screen and the items listed below differ depending on your printer.


| Items | Explanation |
| :--- | :--- |
| Printer image | Displays the current printer status image. |
| Status message | Displays the current printer status information. |
| Summary | Displays the consumable (toner, ink, etc.) and <br> paper remaining information. |
| Network | Displays the printer's network information. |

## Summary menu

The Summary menu contains consumable and paper information.

## Note:

The items listed below differ depending on the printer.
Table 1: Page printer

| Items | Explanation |
| :---: | :--- |
| Paper |  |
| Device | Name of the paper source. |
| Size | Size of the paper loaded in the paper <br> source. |
| Type | Type of paper loaded in the paper source. |
| Remaining Paper | The remaining paper is indicated by a green <br> bar. If the paper source is a cassette, the bar <br> turns red as the paper runs out. If the paper <br> source is a tray, the bar does not turn red. |
| Toner | The remaining toner is indicated by a green <br> bar. As the toner level gets low, the toner <br> icon blinks. For color printers, the amount of <br> color toner remaining is also indicated. |
| Photoconductor Unit | If the photoconductor is separate from the <br> toner cartridge, a service life bar appears. <br> This does not appear when the <br> photoconductor is connected to the toner <br> cartridge. |
| Fuser Oil Roll | Indicates the remaining service life of the oil <br> roll. Appears on color printers only. |
| Waste Toner Collector | Indicates amount of waste toner. Appears <br> on color printers only. |

## Network menu

The Network menu contains following information. Click the appropriate tab to see the settings you want.

| Items | Explanation |
| :--- | :--- |
| Ethernet | Displays the printserver's information such as <br> model name, hardware and software <br> version of the print server, and physical layer <br> type of the interface. |
| NetWare | Displays the NetWare settings of the print <br> server. |
| AppleTalk | Displays the AppleTalk settings of the print <br> server. |
| TCP/IP | Displays the TCP/IP settings of the print <br> server. |
| NetBEUI | Displays the NetBEUI settings of the print <br> server. |
| SNMP | Displays the SNMP settings of the print server. |

## Chapter 14

## EpsonNet WebManager

The EpsonNet WebManager is software designed to manage network devices. It allows network administrators to easily control network devices such as network printers and interface cards attached to a printer. The EpsonNet WebManager offers following features:

- It allows you to search and monitor network devices and to make settings for network devices.

I It offers a Group Management function that helps you manage devices as a group.

- It supports Windows, Macintosh, and UNIX platforms to give network administrators flexibility in managing network devices.


## Note:

EpsonNet WebManager can only be installed in Windows 98/95/2000/NT 4.0/NT 3.51 operating systems.
$\square$ It allows you to manage both EPSON printers and nonEPSON printers that support Printer MIB.

## Note:

$\square$ Before installing and using EpsonNet WebManager, be sure to read the README file. This file contains the latest information on EpsonNet WebManager.

- The term device refers to a network printer, interface card, or network adapter in this manual.


## System Requirements

## Note:

- Before using EpsonNet WebManager, the computer and other devices such as network printers and interface cards must be properly connected to the network.
- Since EpsonNet WebManager runs on a web browser, you must install TCP/IP and a web browser before using EpsonNet WebManager.

EpsonNet WebManager server operating systems
The EpsonNet WebManager server is the computer on which you have installed EpsonNet WebManager.

Operating system: Windows 98, Windows 95 Windows 2000 (Server \& Professional) Windows NT 4.0 (Server \& Workstation) Windows NT 3.51 (Server \& Workstation)

Processor: Pentium 200 MHz or better recommended Memory: 64MB

Hard disk space: 20MB

EpsonNet WebManager client operating systems
You can access the EpsonNet WebManager server from the following operating systems through a browser. See the README file for supported browsers.

- Windows 98/95/2000/NT 4.0/NT 3.51
- Macintosh
- UNIX (see the README file for the available UNIX systems)
- Monitor: $1024 \times 768$ or higher resolution VGA monitor with support for 256 or more display colors


## Printers

EPSON printers

- Laser printers

EPL-5700/N1200/N1600/N1610
EPL-N2000/N2050/N2700/N2750
EPL-N4000/N4000+/C8000/C8200
AL-C2000

- Ink jet printers

Stylus COLOR 800/850/900/1520/3000
Stylus PRO 5000/9000

- Dot-matrix printers

FX-880/980/1180/2180
LQ-2080/2180
DFX-8500
DLQ-3000+

## Note:

All future printers with a Type B interface, except PostScript printers, are planned to be supported.

Non-EPSON printers

- Non-EPSON printers that support Printer MIB

Interface cards

- EPSON Type B Ethernet Interface Card model C82362*,

C82363*, and C82364*

Network adapter

- EpsonNet 10/100 Base Tx Ext. Print Server model C82378*


## EpsonNet WebManager Functions

EpsonNet WebManager provides you with the following functions:

- Device list function

Searches for devices such as printers and interface cards on the network and displays a device list with current status.

- Device details function

You can make or change the printer settings through EpsonNet WebManager.

- Network settings function You can make or change the network interface settings through EpsonNet WebManager.
- Group management function

Groups can help you manage network devices more effectively.

## Note:

When using EpsonNet WebManager with Internet Explorer in Mac OS, the Map view, Notice window, and Device Detailed window may not be available.

Some functions of EpsonNet WebManager may not be available depending on the combination of network devices.

| Device combination | Functions of EpsonNet WebManager |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Printer | Interface <br> card | Device <br> list | Device <br> details | Network <br> settings | Group <br> management |
| EPSON <br> printer | C82378* | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| EPSON <br> printer | *1 <br> C82362* <br> C82363* <br> C82364* | $\checkmark$ | - | $\checkmark$ | $\checkmark$ |
| EPSON <br> printer <br> (without <br> Printer MIB) | *2 <br> C82362* <br> C82363* <br> C82364* | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| EPSON <br> printer(with <br> Printer MIB) | *2 <br> C82362* <br> C82363* <br> C82364* | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| EPSON <br> printer | Built-in <br> network <br> interface | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Non-EPSON <br> printer (with <br> Printer MIB) | - | $\checkmark$ | $\checkmark$ | - | $\checkmark$ |

$\checkmark$ indicates availability.

* Interface cards with software version 1.x.
*2 interface cards with software version $2 . x$ or later.


## Note:

- The setting items in the Device details function will differ depending on the printer.
- The EPSON printers that have a built-in network interface and support Printer MIB are EPL-N2050, EPL-N2700, EPL-N2750, EPL-N4000, EPL-N4000+, EPL-C8200, and AL-C2000 (as of March, 2000).


## EpsonNet WebManager Operating Structure

EpsonNet WebManager needs to be installed in the computer that works as the network server. You can select the either of the two methods described below to use EpsonNet WebManager.

## EpsonNet WebManager and a web browser running on the same PC

No special server is required. Just install EpsonNet WebManager and a web browser on the same computer that functions as a server. All administration is possible from the network administrator's Windows 98/95/2000/NT 4.0/NT 3.51 computer.


## EpsonNet WebManager and a web browser running on different PCs

Install EpsonNet WebManager in the server, and install a web browser in the client computers. Run the web browser on a client computer to access EpsonNet WebManager on the server. Multiplatform network administration is possible from Windows, Macintosh, and UNIX platforms through the browser.


## Installing EpsonNet WebManager

Follow the steps below to install EpsonNet WebManager.

1. Be sure that TCP/IP is installed, and the IP address or host name is set for the computer. (Register the host name in the hosts file in the Windows directory.)
2. Insert the software CD-ROM in the CD-ROM drive.
3. The EPSON Installation Program screen opens automatically.

If the EPSON Installation Program screen does not appear automatically, click Start and Run (Windows 98/95/2000/NT 4.0); or choose Run from the File menu in the Program Manager (Windows NT 3.51). Then, enter D: \EPSETUP.EXE and click OK (substitute the appropriate drive letter if necessary).
4. Double-click Install EpsonNet WebManager; or you can also install by selecting Install EpsonNet WebManager and then clicking the arrow at the top right.
5. Follow the on-screen instructions to complete the installation.

## Note:

You do not need to install EpsonNet WebManager in the client computer. Just announce the IP address or host name of the server to any clients who use EpsonNet WebManager from a client computer.

## Starting EpsonNet WebManager

## From the server

To start EpsonNet WebManager, click Start, point to Programs, then EpsonNet WebManager, then click EpsonNet WebManager (Windows 98/95/2000/NT 4.0); or click the EpsonNet WebManager icon in the EpsonNet WebManager window (NT 3.51).

## From the client

Run the web browser and type the IP address (or the host name) of the server and default port number.

- Format:
http:/ / the IP address or host name of the server:8090/
- Example:
http://192.168.100.201:8090/


## Opening the Online Guide

After starting EpsonNet WebManager, be sure to read the EpsonNet WebManager's online manual. It provides important information and instructions for using the EpsonNet WebManager.

You can view the online manual by clicking the Help button in the main menu. Then click Online Manual.

Also, when you click the question mark button on the current screen, a help screen appears describing the functions on that page.

## Uninstalling EpsonNet WebManager

Follow the steps below to uninstall EpsonNet WebManager.

## Windows 98/95/2000/NT 4.0

1. Click Start, point to Settings, and then click Control Panel.
2. Double-click the Add/Remove Programs icon.
3. Select EpsonNetWebManager and click the Add/Remove button (Window 98/95/NT 4.0) or the Change/Remove button (Windows 2000).
4. The message "Are you sure you want to completely remove the selected application and all of its components?" appears. Click Yes.

## Windows NT3.51

1. Double-click the Uninstall icon in the EpsonNet WebManager window.
2. The message "Are you sure you want to completely remove the selected application and all of its components?" appears. Click Yes.
3. The message "Uninstall successfully completed" appears. Click OK.

## Chapter 15

Troubleshooting

## General Problems

## Unable to configure the Internal Print Server or unable to print from the network.

| Cause | What to do |
| :--- | :--- |
| Printer settings or network <br> settings may be incorrect. | First, check if you can print a status <br> sheet, as described in "Printing a <br> status sheet" on page 2-2. |
|  | If not, set the interface mode of the <br> printer's control panel to Auto or |
|  | Option. If you can print a status sheet, <br> check the network settings. |

## Unable to set the IP address using arp/ping commands.

## Cause What to do

The network cable may be disconnected.

The Get IP Address setting on Network Menu of the printer's control panel is incorrect.

Connect the network cable. Also, check the network environment.

Select PING for Get IPAddress in Network Menu of the printer's control panel.

## Unable to start EpsonNet WinAssist.

| Cause | What to do |
| :--- | :--- |
| You have added or deleted | Uninstall EpsonNet WinAssist and |
| protocols after installing | reinstall it. |
| EpsonNet WinAssist. |  |

## The message "TCP/IP cannot be used." appears when you start EpsonNet WinAssist.

| Cause | What to do |
| :--- | :--- |
| TCP/IP is not installed in the <br> computer. | Install the TCP/IP protocol. |

The computer's IP address is Set the IP address for the computer. not set correctly.

## The message "Could not complete communicating configuration data" appears when you send settings to the Internal Print Server.

| Cause | What to do |
| :---: | :---: |
| You are using a dial-up router. | Run Command Prompt from the computer in which EpsonNet WinAssist/MacAssist is installed, then type the following command; |
|  | Format: >ROUTE_ADD_the IP address of the Internal Print Server_ the IP address of the computer (the under bar represents one space) |
|  | Example: >ROUTE ADD 192.168.192.168 22.33.44.55. |

## Unable to make settings using EpsonNet WebAssist.

Cause
What to do

You haven't set the IP address for the Internal Print Server.

Set the IP address for the Internal Print Server using EpsonNet WinAssist, MacAssist, or the arp/ping commands, as described in the "Connecting to the Network" section. You can check the IP address on a status sheet.

## The Printer Model and IP Address do not appear in the EpsonNet WinAssist dialog box.

Cause What to do

If the IP address is set to the default IP address.

Set a valid IP address.
Refresh the status. To do this, select Refresh from the View menu.

Set the larger value for the time-out. To do this, select Timeout from the Tool menu. EpsonNet WinAssist may slow down significantly.

## An extra account might be generated when using the dial-up network.

| Cause | What to do |
| :--- | :--- |
| NetWare is set to Enable | Set NetWare to Disable in the |
| even though you are not | NetWare screen of the EpsonNet |
| using NetWare. | WebAssist. |

How to get an IP address.
In order to acquire your IP address, you need to apply with NIC (Network Information Center) in your country. Ask your system administrator for more information.

## Problems Specific to Your Network

## Environment

## NetWare Environment

## Nothing prints even though clients can complete sending data to the printer.

| Cause | What to do |
| :--- | :--- |
| Clients may not be | Make sure clients are registered as |
| registered, or the Internal | users of the print queue and the print <br> Print Server may not be <br> logged in to the NetWare <br> server. |
| server. Also, make sure the Internal <br> Print Server is logged in to the |  |
|  | NetWare server. If you need more <br> information about Print Server mode <br> or Remote Printer mode, see <br> "Introduction to NetWare Settings" |
|  | on page 3-1 or your NetWare manual. |

## EpsonNet WinAssist will not start correctly

## Cause

What to do

Microsoft NetWare
Directory Service is installed in your computer.

If you are using NDS service, use Novell NetWare Client.

## It takes long time to start EpsonNet WinAssist.

| Cause | What to do |
| :--- | :--- |
| Novell Client service is | Double-click Network in the Control |
| installed. | Panel, then the network adapter used. |
|  | Clear the items related to IPX to |
| unbind IPX. |  |

## The printers do not appear in the EpsonNet WinAssist dialog box.

Cause What to do

The printer is turned off. Turn on the printer.
The printer is not in the same To search for an Internal Print Server segment as the computer where you installed in other segments, use the Search Options of EpsonNet WinAssist.
EpsonNet WinAssist.

## Windows 98/95 Environment

Dial-up connection dialog box appears when printing with TCP/IP via EpsonNet Direct Print.
Cause What to do

You have selected the phone line or a modem (for Internet Explorer 4.0x) for the Internet connection.

Printing will complete normally after you cancel this dialog, but the message will appear every time you print until you change this setting.

## Windows NT Environment

## Clients cannot print with TCP/IP via Windows NT Server 3.51 (NTFS).

| Cause | What to do |
| :--- | :--- |
| You have not changed the | You need to change the type of access |
| type of access. | in the |
|  | $\backslash$ WWINNT35 $\backslash$ system32 $\backslash$ spool $\backslash$ PRIN |
|  | TERS directory of the NT Server. See <br>  <br>  <br>  <br>  <br> "Changing the type of access of the <br> spool directory" on page 5-9. |

No client except an administrator is able to print via Windows NT Server 4.0/3.51.

| Cause | What to do |
| :--- | :--- |
| CREATOR OWNER has been | Add CREATOR OWNER by clicking |
| deleted from the Printer | the Add button on the Printer |
| Permissions list, or | Permissions dialog box, or set |
| CREATOR OWNER is set to | CREATOR OWNER to Manage |
| Print or No Access. | Documents (a default setting). |

## Macintosh Environment

## Printers do not appear in the Chooser.

Cause What to do

EtherTalk is not selected in the Network or AppleTalk Control Panels.

What to do
For models without Open Transport: Make sure to select EtherTalk in the Network Control Panel.

For models with Open Transport:
Make sure to select Ethernet in the AppleTalk Control Panel, and make sure AppleTalk is active in the Chooser. Also, check the network equipment including the hub cable.

## Problems Using EPSON Status Monitor 3

## The Current Status menu shows "A communication error has occurred."

| Cause | What to do |
| :--- | :--- |
| The printer is turned off. | Make sure that the power cord is <br> properly plugged into the electrical <br> outlet. Turn on the printer. |
| The printer is running a self- <br> test or initializing itself. | Turn off the printer to terminate the <br> self-test, and then turn it on again. <br> Allow the printer enough time to <br> finish initialization. |
| The printer is not ready to  <br> print. Make sure the printer is ready to print. <br> For details, see your printer's users <br> guide. |  |

## The status information does not match the real status of the printer.

| Cause | What to do |
| :--- | :--- |
| EPSON Status Monitor 3 <br> monitors the printer at <br> regular intervals. | Wait until EPSON Status Monitor 3 <br> monitors the printer next time. |
|  |  |

## NetWare printers cannot be monitored.

Cause What to do

You are using EpsonNet
WinAssist.

You cannot use EPSON Status
Monitor 3 and EpsonNet WinAssist at the same time. Quit EpsonNet WinAssist and use EPSON Status
Monitor 3. To use EpsonNet WinAssist, quit EPSON Status
Monitor 3 first.

You can only monitor NetWare printers in Remote Printer mode if the printer port number is set to 0 .

| Cause | What to do |
| :--- | :--- |
| This is set internally by | Use the NetWare control tool to set the |
| EPSON Status Monitor 3. | port number to 0. |

NDS printers cannot be monitored.

| Cause | What to do |
| :--- | :--- |
| You are not using Novell's | If you are using Windows NT, use |
| Client. | Novell IntranetWare Client. If you are |
|  | using Windows 95, use Novell |
|  | IntranetWare Client 32. |

# An application error occurs, and NetWare printers cannot be monitored when Allow monitoring for shared printer is selected for monitoring Windows shared printers under Windows NT 4.0. 

Cause What to do

There is a known bug in the operating system.

Install Service Pack 2 or higher before monitoring Windows shared printers under Windows NT 4.0.

Double-click Services in the Control Panel and stop the EPSON Printer Status Agent service. Restart EPSON Status Monitor 3 and then restart the service. This procedure must be repeated every time you log on to Windows NT 4.0.

Windows shared printers cannot be monitored.

| Cause | What to do |
| :---: | :---: |
| This is set internally by | Right-click the Network |
| EPSON Status Monitor 3. | Neighborhood and then click |
|  | Properties. Verify that File and printer sharing for Microsoft |
|  | Networks is shown in the list of installed components. |
|  | Verify that EPSON Status Monitor 3 is installed in the computer hosting the Windows shared printer, and be sure that the Allow monitoring of shared printers check box is checked in the Monitoring Preferences dialog box. |
|  | In Windows 98/95, IPX/SPX compatible protocols cannot be set in the control panel Network and Network module. |

## Appendix A

## Specifications

## Network Software

NetWare 3.1x, 4.1x, or 5

EtherTalk (AppleTalk)
TCP/IP
NetBEUI

## Network Connectors

IEEE 802.3 10BaseT / 100BaseTX STP (shielded twisted-pair) cable via RJ-45 connector

Note:
The RJ-45 connector cannot be connected to the phone line connection.


[^0]:    PPrinted on Recycled Paper.

