

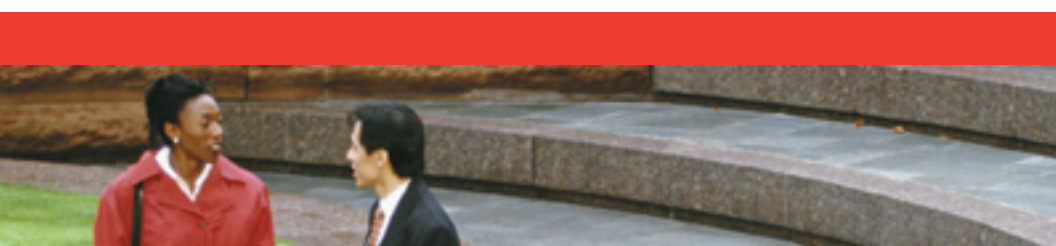


PHASER™ 3400 PERSONAL LASER PRINTER

NETWORK GUIDE



XEROX
NETWORK PRINTERS



Phaser™ 3400 Personal Laser Printer
Network Guide

June 2001

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Network Printing with Xerox Phaser Printers

This guide provides information to help you quickly install your printer when you have one of the following operating systems:

- Windows 95, Windows 98, Windows 98se, and Windows Me
- Windows NT 4.0 and Windows 2000
- Mac OS 7.5 or higher

With the following protocols:

- TCP/IP
- Novell NetWare
- EtherTalk or AppleTalk

Set up your printer and connect it to the network. For information about setting up the printer, refer to the **Installation** poster. For information about connecting the printer to the network, see page 3.

To speed the setup process and avoid conflicts, familiarize yourself with the components of your network. You should know which version(s) of NetWare are installed, which versions of the client software are used, and the network topology (frame types, routers, hubs, and cabling).

Configuration Sheet

The information supplied on the Configuration Sheet is helpful when you are installing and configuring the printer on a network. It consists of three pages. You can print the Configuration Sheet:

- From the Control Panel
- Using the Phaser 3400 web server

Printing a Configuration Sheet from the control panel

You can use this method even if your printer is not yet configured on the network.

1. Make sure the printer has been turned on.
2. Hold down the **Print** button until all lights blink.
3. Release the button.

The printer prints the Configuration Sheet.

Printing a Configuration Sheet using the Phaser 3400 web server

With a TCP/IP connection, you can view and change printer options by accessing internal web pages in your printer. To print the Configuration Sheet:

1. Open the Internet Explorer web browser (version 4.0 or higher).
2. For the **Address**, type **http://**, then the IP address of the Phaser 3400 printer, then press the **Enter** key. For example, if the IP address is 192.25.26.81, type:
<http://192.25.26.81>
3. On the main page, click the **Print** button.

The printer prints the Configuration Sheet.

For more information on the Phaser 3400 web server, see page 14.

Networking software

The Phaser 3400 printer CD-ROM contains software for installing the printer on a network. The CD-ROM also contains online documentation, printer drivers, and other printer software. A single integrated installer is used to install printer drivers and other software. For information on using the installer, see page 4.

Connecting Your Printer to a Network

Setting up an Ethernet connection to a Macintosh or PC

Requirements

- Two RJ-45, twisted-pair, Ethernet 10BaseT or 100BaseT cables
- An Ethernet hub

The Phaser 3400 printer's Ethernet interface conforms to IEEE 802.3 and Ethernet II standards. Use twisted pair (10BaseT or 100BaseT) connections. Thick coax (10Base5) and thin coax (10Base2) connections require adapters; contact your dealer to obtain adapters, cables, and terminators.

Caution

To avoid damaging the Ethernet interface, turn off the printer before making any Ethernet connections.

Procedure

1. If the printer is on, turn it off.
2. Connect one end of an Ethernet cable to the Ethernet port on the printer.
3. Connect the other end of the cable to the hub. (Do not connect the cable to a port on the hub labeled **Uplink**).
4. Turn on the printer.
5. Refer to the configuration instructions for your environment.

Installing Printer Drivers

Running the Xerox installer from the printer's CD-ROM

The Xerox installer for Windows is on your Phaser 3400 printer CD-ROM. A single integrated installer is used to install printer drivers and other software.

The Xerox installer automatically performs printer installation tasks and creates a printer driver icon. You are only required to make a few installation choices, clicking **Next** to move from screen to screen.

Windows 95/98/98se/Me/NT/2000

1. Insert the Phaser 3400 printer's CD-ROM into your CD-ROM drive.
2. When the CD-ROM automatically runs, click to select your language. (If you have auto-run turned off, run **setup.exe** from the CD-ROM.)
3. To install the printer driver, click **Printer Driver** and follow the on-screen instructions to install the printer driver software.

Macintosh

Use the installer application to automatically install the PostScript PPD onto your computer's hard disk.

1. Insert the Phaser 3400 printer's CD-ROM into the CD-ROM drive.
2. Double click the CD-ROM icon.
3. Double click the folder for your language.

German	Deutsch
English	English
Spanish	Espanol
French	Francais
Italian	Italiano
Portuguese	Portugues

4. Double click the Installer icon.
5. On the introductory screen, click the **Continue** button.
6. Read the installation notes, then click the **Continue** button.
7. In the Installer dialog box, click the **Install** button.

Set up the printer in the **Chooser**.

TCP/IP Configuration

The Configuration Sheet reports important information that you will need for TCP/IP configuration. For information on printing a Configuration Sheet, see page 2.

Host (computer) configuration

Choose the procedure appropriate for your environment:

- For installation on a workstation for peer-to-peer printing, see *Installation on Workstations for Peer-to-Peer Printing* on page 5.
- For installation on workstations when print jobs are to be sent through a print server, see *Installation on Workstations for Client-server Printing* on *Installation on Windows workstations for client-server printing* on page 5.

Setting up the printer for TCP/IP printing

Make sure that TCP/IP is installed in your PC. The Xerox Installer for Windows automatically performs the following functions to set up the printer:

- Locates your printer on the network.
- Automatically chooses an IP address for the printer if one has not already been assigned (for example, by the DHCP server).
If you want to assign a different one, you can accomplish this through the SetIP utility or through a web browser by accessing the Phaser 3400 internal web server. For information on other methods of setting the printer's IP address, see page 8.
- Installs the driver.
- Creates a printer driver icon in the **Printers** window.

Installation on Windows workstations for peer-to-peer printing

1. On all versions of Windows, run the installer as described on page 4.
2. The installer attempts to find your printer on the network. If it cannot find the printer, it displays a dialog box prompting you for more information. The on-screen descriptions provide more information.
3. Follow the remaining on-screen instructions to complete the installation.

Installation on Windows workstations for client-server printing

Use this procedure on workstations when print jobs are to be sent to the printer through a print server. The print server must already be set up and configured.

1. Install the driver as described on page 4.
2. Click **Start**, select **Setting**, and then click **Printers**.
3. Right-click on the Phaser 3400 printer and click **Properties** from the popup menu.
4. On the **Details** tab, click the **Add Port** button.
5. Verify that **Network** is the port that is selected.
6. Either manually type in the network path or select it as follows:
 - a. Click the **Browse** button.
 - b. Double-click the server to which the printer is attached.
 - c. Select the Phaser 3400 printer (or the share name that was designated by the network administrator).
 - d. Click the **OK** button.

Note

If you are not sure which server the Phaser 3400 printer is attached to or if the Phaser 3400 printer is not selectable on the server, contact your network administrator for support.

7. When the network portion of the **Add Port** dialog box shows the path, click the **OK** button.
8. The **Details** tab should now display the network path for **Print to the Following Port**. Click the **Apply** button.
9. When you see the **Fonts Downloaded to this printer while connected to LPT1 may be lost** message, click the **OK** button. You may need to resend the fonts again on `\\your server name\your printer name`.
10. On the **General** tab, click the **Print Test Page** button.

Macintosh

Setting up the Macintosh Ethernet port for TCP/IP

When using OS 8.5 or higher, you can use TCP/IP to print from your Macintosh. If your Macintosh is not already set up for TCP/IP, perform the following procedure:

1. From the **Apple** menu, select **Control Panels**, and select **TCP/IP**.
2. From the **Connect via** menu, select **Ethernet**.
3. Specify how the Macintosh will obtain its IP address: **Manually** or by **DHCP**.
4. If you select **Manually**, specify the IP address in the dialog box.
5. Close the dialog box and click **Save** for changes to take effect.

Creating a LPR printer with LaserWriter 8.5.1 or higher

1. Locate the **Desktop Printer Utility** in the **Apple Extras** folder.
2. Double click on the **Desktop Printer Utility**.
3. Under **Create Desktop**, select **Printer (LPR)** and click the **OK** button.
4. Under **PostScript Printer Description (PPD) File**:
 - a. Click the **Change** button.
 - b. Choose the appropriate PPD from the list. If your printer's PPD is not listed, you must install it onto your computer's hard drive by using the Phaser 3400 CD-ROM's installer program.
 - c. Click the **Select** button.
5. Under **Internet Printer**:
 - a. Click the **Change** button.
 - b. In the **Printer Address** field, enter the printer's IP address or domain name.
 - c. In the **Queue** field, enter **RAW** (all upper-case).
 - d. Click the **OK** button.
6. Close the dialog box and, when prompted, click the **Save** button.
7. Under **Save desktop printer as**, type a name for the desktop printer and click the **Save** button.

Two methods are available for printing via LPR:

- Dragging a file to the Desktop Printer (LPR).
- Use LaserWriter 8.5.1 (or higher) by choosing **Print** from the **File** menu, then choosing the appropriate LPR printer in the **Printer** drop-down list.

Setting the Printer's IP Address

The factory default method used by the printer to obtain its IP address: The printer first looks for a DHCP server to assign its IP address. If a DHCP server is not available, then the printer assigns an IP address for itself.

Automatic IP addressing

The printer automatically assigns an IP address to itself under the following conditions:

- The printer has no network connection.
- The TCP/IP protocol is installed on the computer.
- The printer connects to the network with no DHCP server available.
- The IP address has not already been assigned.

During the installation process, you can accept the automatically assigned address or assign a different one. For small networks, the automatically assigned address will work in most cases. For large networks, see your network administrator to determine if the suggested address will work.

The Xerox installer for Windows is the recommended method for setting the IP address in a Windows environment.

Other Methods for setting the printer's IP address

If necessary, you can set a static IP address for the printer using one of the following methods:

- Using the Phaser 3400 web server
- Using the SetIP utility

Using the Phaser 3400 web server to set a static IP address

1. Open the Internet Explorer web browser (version 4.0 or higher).
2. For the **Address**, type **http://**, then the IP address of the Phaser 3400 printer, then press the **Enter** key. For example, if the IP address is 192.25.26.81, type:
http://192.25.26.81
3. On the main page, click the **Admin** button, then select **TCP/IP**.
4. For **Protocol**, select **Static**.
5. Click the **OK** button.

Using the SetIP utility to set a static IP address (Windows users only)

1. Install the SetIP Utility from the Phaser 3400 CD-ROM:
 - a. Insert the Phaser 3400 product CD into your PC and select your language.
 - b. Select **Network Management Tools** and select **Install SetIP Utility**.
 - c. Follow the instructions to install the SetIP utility.
2. Click **Start**, select **Xerox SetIP**, and then click **SetIP**.
3. In the **set ip** window, enter the remainder of the **Printer MAC Address**, **IP address**, **Subnet Mask**, and **Default Gateway**.

Note

The **Printer MAC Address** is listed on the Configuration Sheet as **Print Server Name**.

It is best to have the Subnet Mask and Default Gateway be the same as for your computer.

The screenshot shows a window titled "set ip" with a grey background. At the top, there is a label "Printer MAC Address :" followed by a text box containing "0000F0A0". Below this is a section titled "TCP/IP Parameter" enclosed in a rounded rectangle. Inside this section are three labels: "IP Address :", "Subnet Mask :", and "Default Gateway :", each followed by a text box containing three dots. At the bottom of the window are three buttons: "Update", "Reset", and "Exit".

4. Click the **Update** button to save the settings.

After updating the IP address, users can detect the printer through TCP/IP.

Dynamic Host Configuration Protocol

Dynamic Host Configuration Protocol (DHCP) is a system in which UNIX and Windows NT servers can dynamically allocate IP addresses. The printer is a DHCP client; when the printer is reset, it receives an IP address from the DHCP server.

Enabling DHCP on the printer

Make sure that the printer's DHCP protocol is enabled. You can check this setting from the Phaser 3400 web server on the printer by following these steps:

1. Open the Internet Explorer web browser (version 4.0 or higher).
2. For the **Address**, type **http://**, then the IP address of the Phaser 3400 printer, then press the **Enter** key. For example, if the IP address is 192.25.26.81, type:
http://192.25.26.81
3. On the main page, click the **Admin** button.
4. Click **TCP/IP**.
5. In the box next to **IP Address Assignment Method**, choose **DHCP**.
6. Click the **Apply** button.

Note

There are other fields that may need to be changed to match your network, such as the Subnet Mask and Default Gateway. Consult your network administrator for details. Be sure to click the Apply button to save settings.

EtherTalk Configuration

Setting up the Macintosh Ethernet port for EtherTalk

1. From the Apple menu, select **Control Panels**. Select **AppleTalk**.
2. From the **Connect via** menu, select **Ethernet built-in**.
3. Close the window and click **Save**.

Setting up the printer for EtherTalk

1. Print the Configuration Sheet; (refer to page 2 for information about printing the Configuration Sheet). Locate the printer's default name, which is **Xer0000f0axxxxx** (with **x** representing a hexadecimal number).
2. Verify that the printer is in the **Chooser**, as described in the following section.
3. When you have located the printer in the **Chooser**, you may want to change the printer's name or zone. See *Changing the printer's name* on page 12 or *Changing the printer's EtherTalk zone* on page 12.

Finding the printer's name in the Chooser

1. From the Apple menu, select **Chooser**.
2. In the upper-left corner of the **Chooser**, click the LaserWriter 8 icon. If the LaserWriter 8 icon is not in the **Chooser**, you need to install the LaserWriter 8 printer driver from the Mac OS system disk.
3. If a list of zones appears in the lower-left portion of the **Chooser**, select the proper zone.

Note

The printer's default zone is listed on the Configuration Sheet in the **AppleTalk** field; (refer to page 2 for information about printing the Configuration Sheet). The printer cannot create a zone; the zone must already exist.

4. In the right portion of the **Chooser**, find your printer's name in the list of printers. If the name does not appear, verify that the printer is on and that the cables are functioning correctly.

If the printer is not in the **Chooser**:

- Check that the Configuration Sheet shows a printer name and a zone.
- Verify that the printer is properly cabled to the network.
- Test the cable segment by plugging in a new cable segment or using the cable segment of a printer that is in the **Chooser**.

If the Configuration Sheet shows the correct printer name and zone but the printer is still not visible in the **Chooser**, check the following items:

- 1. If there is a Novell NetWare server on the network, verify that the NetWare server has been configured for AppleTalk Phase 2 routing and addressing.
- If there is a Windows NT server on the network, verify that the printer has not been captured by a Windows NT machine.
- If the printer continually reboots when connected to the network, it is possible that a router is broadcasting a zone of *, which is an invalid zone.

Changing the printer's name

The printer's name is displayed on the Configuration Sheet. The printer's default name is **Xer0000f0axxxxx** (with **x** representing a hexadecimal number). The name also appears in the **Chooser**. The name can be up to 31 characters long. It may contain any printable characters; however, the characters @ : = * are deleted from the name used on AppleTalk. A change is persistent across printer power cycles.

You can change the printer name by using the Phaser 3400 web server:

1. Open the Internet Explorer web browser (version 4.0 or higher).
2. For the **Address**, type **http://**, then the IP address of the Phaser 3400 printer, then press the **Enter** key. For example, if the IP address is 192.25.26.81, type:
http://192.25.26.81
3. On the main page, click the **Admin** button, then select **AppleTalk**.
4. If desired, change the printer name and description.
5. Click the **Apply** button.

Changing the printer's EtherTalk zone

You can use the Phaser 3400 web server to change the EtherTalk zone:

1. Open the Internet Explorer web browser (version 4.0 or higher).
2. For the **Address**, type **http://**, then the IP address of the Phaser 3400 printer, then press the **Enter** key. For example, if the IP address is 192.25.26.81, type:
http://192.25.26.81
3. On the main page, click the **Admin** button, then select **AppleTalk**.
4. The **ZIP** item enables you to change the current EtherTalk Zone.
5. Click the **Apply** button.

Novell NetWare

Configuration software for NetWare networks

The Configuration Sheet reports information that you need for NetWare configuration. For information on printing a Configuration Sheet, see page 2.

On the Configuration Sheet, all zeros in one or more of the **IPX Networks** fields indicates that the printer does not recognize the network connection; this probably indicates a faulty cable connection, an incorrect frame type, or that **Reply to Get Nearest Server** has not been set to **On**. (It must be set to **On** for at least one file server or router on the same segment as the printer.)

For Windows environments, the following software is available:

- CentreWare DP (available July 2001) - Use this application to configure the printer and the network when using NetWare 3.x, 4.x and 5.x.
- Novell NW Admin - Use this utility from Novell to manage existing queues on networks running NetWare 4.x or 5.x in NDS or NDPS/NEPS mode.

The Phaser 3400 Web Server

The Phaser 3400 web server is a printer administration and support tool that uses TCP/IP and a web browser to configure the printer. You do not need an internet connection to use this tool. It is the preferred software tool to set up and maintain the printer on the network.

Accessing the printer from a web browser

Once a TCP/IP connection to the printer has been established and the printer's IP address is set, you can visit the printer's web server using the Internet Explorer web browser (version 4.0 or higher). Enter the printer's IP address (or the DNS name you set during TCP/IP configuration) as the URL (Uniform Resource Locator), just as you would to visit a web site.

Example using an IP address: `http://192.1.1.1/`

Example using a DNS name: `http://Xerox_Marketing/`.

Note

The printer's IP address is listed on the Configuration Sheet, which you can print from the control panel, as described on page 2.

Network Protocols

Determining enabled protocols

All protocols can be enabled and disabled. The Configuration Sheet displays which protocols are enabled.

Disabling and enabling protocols

After your network configuration is complete, you may want to disable protocols that you are not using to avoid unnecessary network traffic. You can disable protocols by:

- Using CentreWare DP (available July 2001)
- Using the Phaser 3400 web server

Disabling protocols using the Phaser 3400 web server

To disable (or enable) protocols using the Phaser 3400 web server:

1. Open the Internet Explorer web browser (version 4.0 or higher).
2. For the **Address**, type **http://**, then the IP address of the Phaser 3400 printer, then press the **Enter** key. For example, if the IP address is 192.25.26.81, type:
http://192.25.26.81
3. On the main page, click the **Admin** button.
4. Click on the appropriate protocol.
5. Click to check or uncheck the checkbox to enable or disable the protocol.
6. Click the **Apply** button.

Getting Help from the World Wide Web

Xerox printer web site:

www.xerox.com/officeprinting

Technical support:

www.xerox.com/officeprinting/support

On-line documentation:

www.xerox.com/officeprinting/documentation

Local sales and support centers:

www.xerox.com/officeprinting/contacts

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XEROX

www.xerox.com/officeprinting

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