

PHASER® 860  
COLOR PRINTER  
NETWORKING SETUP GUIDE







Phaser<sup>®</sup> 860 Color Printer  
Networking Setup Guide

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# Contents

<b>Network Printing with Xerox Color Printers</b> .....	<b>1</b>
Configuration Page .....	2
Networking Software .....	2
<b>Connecting Your Printer to a Network</b> .....	<b>3</b>
Direct Ethernet Connection to Macintosh or PC .....	3
Ethernet Interface .....	4
<b>Installing Printer Drivers</b> .....	<b>5</b>
Running the Installer From the Printer's Hard Disk .....	5
Running the Xerox Installer From the Printer's CD-ROM .....	5
<b>Novell NetWare</b> .....	<b>6</b>
Configuration Software for NetWare Networks .....	6
<b>TCP/IP Configuration</b> .....	<b>7</b>
Host (Computer) Configuration .....	7
Setting Up the Printer for TCP/IP Printing .....	7
Windows 95/98/ME: PhaserPort Software .....	8
Windows NT .....	9
Installation on Workstations for Client-server Printing .....	9
Installation on Workstations for Peer-to-Peer Printing .....	9
UNIX .....	10
OS/2 Warp and LAN Servers .....	10
Macintosh .....	11
<b>Setting the Printer's IP Address</b> .....	<b>13</b>
Automatic IP Addressing .....	13
Other Methods for Setting the Printer's IP Address .....	14
Setting the IP Address From the Front Panel .....	15
Dynamic Host Configuration Protocol .....	16
Supported DHCP Fields .....	16
Setting the IP Address Using CentreWare IS .....	16
Domain Name Service (DNS) .....	17

<b>EtherTalk Configuration</b> .....	<b>18</b>
Setting Up the Macintosh Ethernet Port for EtherTalk.....	18
Setting Up the Printer for EtherTalk.....	18
Finding the Printer's Name in the Chooser .....	18
Changing the Printer's Name (Optional) .....	20
Changing the Printer's EtherTalk Zone (Optional).....	21
<b>Internet Printing Protocol (IPP)</b> .....	<b>22</b>
Running the Xerox Installer .....	22
Obtaining the Printer's URL (Network Path) .....	22
Creating an IPP Printer .....	22
<b>CentreWare Internet Services</b> .....	<b>23</b>
Accessing the Printer From a Browser .....	23
<b>Printer Management</b> .....	<b>24</b>
Job Accounting .....	24
Intelligent Ready .....	25
MaiLinX Alerts .....	26
Usage Profile Reports.....	27
Printing Usage Profile Reports.....	28
Sending Reports via E-mail .....	29
Xerox Usage Analysis Tool .....	30
<b>Network Protocols</b> .....	<b>31</b>
Determining Enabled Protocols.....	31
Disabling and Enabling Protocols .....	31
Disabling and Enabling Protocols Using the Front Panel .....	32
Disabling Protocols Using CentreWare IS.....	32
<b>Getting Help</b> .....	<b>33</b>
Help From the World Wide Web .....	33
<b>Index</b> .....	<b>34</b>

# Network Printing with Xerox Color Printers

This guide provides information to help you quickly install your printer in the following environments:

- Windows 95, Windows 98 and Windows ME
- Windows NT 4.x and Windows 2000
- Novell NetWare
- EtherTalk

For information on installing the printer in UNIX environments, see the *CentreWare Services for UNIX Systems Quick Install Guide*.

The PostScript utility files on the printer's CD-ROM can be sent to the printer for network configuration in DOS environments. Before you begin network configuration:

- Set up your printer and connect it to the network. See your printer's user documentation for information about setting up the printer. For information about connecting the printer to the network, see *page 3*.

For NetWare environments. 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 client software are used, and the network topology (frame types, routers, hubs, and cabling).

## Configuration Page

The information supplied on the Configuration Page is helpful when you are installing and configuring the printer on a network. There are two ways to print the Configuration Page:

### Printing a Configuration Page From the Front Panel

Use this method if your printer is not yet configured on the network.

1. With **Menus** highlighted, press the **OK** key.
2. Scroll to **Printer Setup Menu** by pressing the **Scroll Up** or **Scroll Down** key.
3. Press the **OK** key.
4. Scroll to **Print Configuration Pages**.
5. Press the **OK** key.
6. To exit the menu system, scroll to **Exit** and press the **OK** key.

### Printing a Configuration Page Using CentreWare Internet Services

With a TCP/IP connection and a World Wide Web browser, you can use CentreWare Internet Services.

1. Connect to the printer via CentreWare IS (see *page 23*).
2. On the main CentreWare IS page, click the **Print** button.
3. On the left side of the Print page, click **Print Configuration Page**.
4. On the Print Configuration page, click the green button.

For more information on CentreWare IS, see *page 23*.

## Networking Software

Your printer's software CD-ROM contains software for installing your 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 running the installer, see *page 5*.



# Connecting Your Printer to a Network

## Direct Ethernet Connection to Macintosh or PC

### Requirements

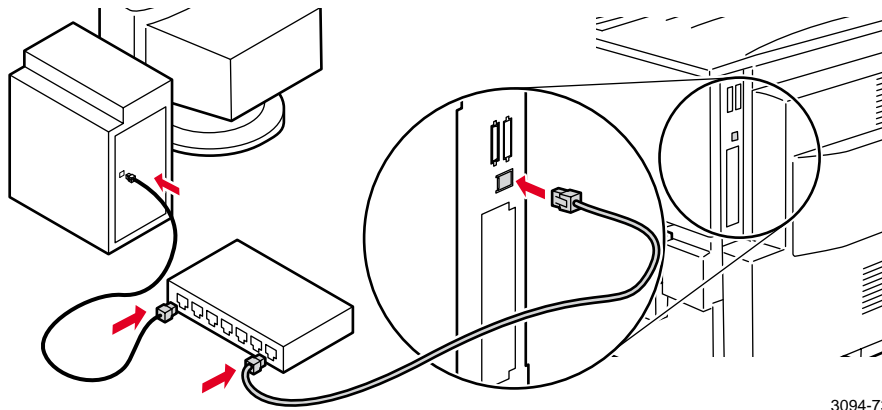
- Two RJ-45, twisted-pair, 10Base-T cables
- An Ethernet-port hub

### Procedure

1. Turn off your computer and the printer.
2. Connect one end of an Ethernet cable to the Ethernet port on your computer. Connect the other end to the hub.
3. Connect the other cable to the hub and the Ethernet port on the printer.

### Note

The printer is not a SCSI device. Do not connect the printer to your computer through the SCSI ports.



4. Turn on your computer and printer.
5. After the computer and printer are connected, refer to the configuration instructions for your network type.

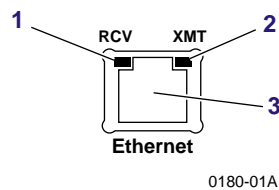
## Ethernet Interface

- Conforms to IEEE 802.3 and Ethernet II standards.
- Twisted pair (10BaseT or 100BaseTx) connection.
- 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.

## Ethernet Connections and Indicators



1. RCV (receive) indicator (green); blinks while the interface is receiving.
2. XMT (transmit) indicator (yellow); blinks while the interface is transmitting.
3. Twisted pair (10BaseT) connector.

## Ethernet Cables

100BaseTx requires Category 5 (100-Ohm UTP) cabling.

To fully comply with EMI (electromagnetic interference) specifications, the use of shielded or screened cables may be required. “Shielded” describes IBM-defined cables used with the DB-9 connector. “Screened” describes cables that are electrically similar to Category 4 UTP (Unshielded Twisted Pair), but with an added shield or screen.

### Caution

Do not use “silver satin” telephone extension cables for 10BaseT networks, either as drop cords or as patch cables in the wiring closet. (Silver satin cables are flat, usually silver or gray, with 28-gauge stranded or tinsel conductors.) Do not use shielded twisted pair cable intended for IBM Token Ring networks or voice-grade (level 1 or 2) unshielded twisted pair cables. These cables do not meet the requirements for 10BaseT and will lead to unreliable operation.

# Installing Printer Drivers

## Running the Installer From the Printer's Hard Disk

If a hard drive is installed on the printer, you can run the installer from it. This method requires that you already have a TCP/IP connection to the printer.

1. Connect to your printer via CentreWare IS (see *page 23*).
2. On the printer's main page, click **Install Printer Drivers**.

## Running the Xerox Installer From the Printer's CD-ROM

The Xerox installer for Windows is on your printer's software 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. In most cases, you are required only to make a few installation choices, clicking **Next** to move from screen to screen.

### Windows 95/98/ME/NT/2000

1. Insert the printer's software CD-ROM into your CD-ROM drive.
  - If the Windows autorun feature is enabled, the CD-ROM launches automatically.
  - If the Windows autorun feature is disabled, double-click **My Computer**, double-click the CD icon to access the CD-ROM, then double-click startup.exe.
2. Follow the on-screen instructions to complete the installation.

### Macintosh

1. Insert the printer's software CD-ROM into the CD-ROM drive.
2. Click **Start Me First**.
3. Follow the on-screen instructions to complete the installation.

# Novell NetWare

## Configuration Software for NetWare Networks

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

On the Configuration Page, 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 **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—Use this application to configure the printer and the network when using NetWare 3.x, 4.x and 5.x. Refer to the Printer Management Software CD-ROM for the CentreWare DP software and documentation.
- Novell NWAdmin—Use this utility to manage existing queues on networks running NetWare 4.x or 5.x in NDS or NDPS/NEPS mode.

# TCP/IP Configuration

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

## Host (Computer) Configuration

Choose the procedure appropriate for your environment:

- For installation on workstations when print jobs are to be sent through a print server, see *Installation on Workstations for Client-server Printing* on page 9.
- For installation on a workstation for peer-to-peer printing, see *Installation on Workstations for Peer-to-Peer Printing* on page 9.

## Setting Up the Printer for TCP/IP Printing

The Xerox Installer for Windows automatically performs the following functions to set up your printer:

- Locates your printer on the network.
- Suggests an IP address for the printer if one has not already been assigned (for example, from the front panel or by DHCP). You are given the opportunity to accept the automatically assigned address or assign a different one. For information on other methods of setting the printer's IP address, see *page 13*.
- Windows 95/98/ME—Installs PhaserPort for Windows (if not already installed). PhaserPort for Windows is a Xerox port monitor for printing over Windows 95/98/ME TCP/IP peer-to-peer networks.
- Windows NT—Installs Microsoft TCP/IP Printing Services (if not already installed).
- Installs the driver.
- Creates a printer in the **Printers** window.

## Windows 95/98/ME: PhaserPort Software

### TCP/IP Configuration

If you don't already have a TCP/IP address configured for your PC, contact your system administrator to ensure that the configuration is made according to your company guidelines. If there is no TCP/IP network already in place, configure your PC with a unique address such as 192.1.1.1. To check the IP address for your PC, follow these steps:

1. From the **Start** menu, click **Run**.
2. Type: **winipcfg**. (If the file is not found, TCP/IP may not be installed.)
3. Click **OK**.
4. Choose your network adapter from the list. The IP address is listed in the **IP Address** field.

For more information on installing and configuring TCP/IP in Windows environments, see your Microsoft Windows documentation.

### Changing a port's IP address

If the IP address of the printer is changed, change the IP address of the corresponding port:

1. From the **Start** menu, select **Settings**, then click **Printers**.
2. In the **Printers** window, right-mouse click your printer, then click **Properties**.
3. In the **Properties** dialog, click **Details**.
4. Verify that PhaserPort appears in the **Print to the following port** field and click **Port Settings**.
5. In the **Configure PhaserPort** dialog, enter the correct IP address or DNS name for the printer. If you don't know the printer's IP address or DNS name, click **Browse** to display a list of printers on the network. Double-click the printer you want; PhaserPort automatically enters the information into the **Configure PhaserPort** dialog. To search the network again, click **Refresh**; to expand the search to other subnets, click **Advanced**.
6. Click **OK**.
7. Click **OK** again to apply the changes.

## Windows NT

These procedures are valid for Windows NT 4.x. For information about driver installation for later versions of Windows NT, visit the Xerox web site:

**[www.xerox.com/officeprinting/](http://www.xerox.com/officeprinting/)**

The following procedures describe how to use the Xerox installer for Windows to set up the printer in Windows NT 4.x environments.

## Installation on Workstations for Client-server Printing

Use this procedure to install the printer on workstations when print jobs are to be sent to the printer through a print server.

1. Run the installer as described in *page 5*.
2. When prompted, select **Easy Install**, **Minimal Install**, or **Custom Install**. Continue following the on-screen instructions.
3. The installer searches for the printer:
 

If the installer finds the printer (printer device, or physical printer), you must identify the print server queue, so select **Choose a different printer**. This advances the installer to the next screen, where you can identify the print server queue.

If the installer does not find the printer (printer device, or physical printer), select **Choose the printer myself**. This advances the installer to the next screen, where you can identify the print server queue.
4. When the **How is your printer connected?** is displayed, select **Shared by a network server (client/server)**.
5. When the **Select a printer to set up** message is displayed, browse the displayed Network Neighborhood tree and select the print server queue.
6. Follow the remaining on-screen instructions to complete the installation.

## Installation on Workstations for Peer-to-Peer Printing

1. On all versions of Windows, run the installer as described on *page 5*.
2. When prompted, select **Easy Install**, **Minimal Install**, or **Custom Install**. Continue following the on-screen instructions.
 

The installer attempts to find your printer on the network. If it cannot find the printer, a dialog is displayed prompting you for more information. The on-screen descriptions provide more information.
3. Follow the remaining on-screen instructions to complete the installation.

## UNIX

- For TCP/IP Unix Host configuration, see the *CentreWare Services for Unix Systems Quick Install Guide*.

## OS/2 Warp and LAN Servers

- For TCP/IP configuration for OS/2 Warp and LAN Server, refer to the web at: **[www.xerox.com/officeprinting/infoSMART](http://www.xerox.com/officeprinting/infoSMART)**.



## Macintosh

### Setting Up the Macintosh Ethernet Port for TCP/IP

If your Macintosh is not already set up for TCP/IP, perform the following procedure:

1. From the **Apple** menu, select **Control Panels**. 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.

### Creating an LPR Printer With LaserWriter 8.5.1 or Higher

1. Open the **Desktop Printer Utility**. (This Apple utility is usually found in a folder called **Apple LaserWriter Software**.)
2. Under **Create Desktop**, select **Printer (LPR)**. Click **OK**.
3. Under **PostScript Printer Description (PPD) File**, click **Change**. Choose the appropriate PPD from the list and click **Select**. If your printer's PPD is not listed, you must install it from the printer's CD-ROM.
4. Under **Internet Printer**, click **Change**. In the **Printer Address** field, enter the printer's IP address or domain name. In the **Queue** field, enter **PS** (all upper-case). Click **OK**.
5. Close the dialog box; when prompted, click **Save**.
6. Under **Save desktop printer as**, type a name for the desktop printer. Click **Save**.

Two methods are available for printing via LPR:

- Use the new Desktop Printer (LPR).
- Use the LaserWriter 8.5.1 driver (any printer can be selected), choose **Print** from the **File** menu, and then choose the appropriate LPR printer in the **Printer** drop-down list.

### Creating an AppSocket Printer With LaserWriter 8.6

Xerox provides Macintosh AppSocket printing with PhaserPort for MacOS, on the printer's CD-ROM. PhaserPort for MacOS provides a high-speed, bi-directional communications channel using the new plug-in communication architecture of Apple LaserWriter version 8.6.

AppSocket provides two advantages over LPR:

- AppSocket can be faster than LPR because AppSocket can print the file as it is being received, while LPR requires that the entire file be queued before printing can begin.
- AppSocket provides feedback on print job status, which is not available through LPR.

## PhaserPort for MacOS System Requirements

- Macintosh PowerPC.
- Apple's LaserWriter version 8.6 or later, with Desktop Printing enabled.
- OpenTransport version 1.1 or later networking. TCP/IP networking provided by MacTCP software is not supported. The Macintosh must be properly configured to communicate with the printer (see *page 11*).

## Files and Installation

PhaserPort for MacOS consists of two files:

- *PhaserPortLib*, a special type of shared library recognized by the LaserWriter driver version 8.6.
- *PhaserPort Printer Tool*, a Macintosh PowerPC application for creating desktop printers that communicate with *PhaserPortLib*.

To install PhaserPort for MacOS:

1. Copy *PhaserPortLib* into the folder *System Folder: Extensions: Printing Plug-Ins*.
2. Copy the *PhaserPort Printer Tool* to any folder on the Macintosh.

## Creating a Desktop Printer With PhaserPort for MacOS

1. Launch the *PhaserPort Printer Tool*.
2. In the **Printer Internet Address** field, type the printer's IP address or DNS name.
3. In the **Desktop Printer Name** field, type a name for the desktop printer.
4. Click **Verify** to contact the printer over the TCP/IP network and verify it's network configuration.
5. Click **Create** to create the desktop printer.
6. In the Finder, use the Printing Menu's Setup command to finalize the configuration of the new desktop printer.

### Note

Certain utilities, such as Adobe Font Downloader, are not compatible with PhaserPort for MacOS software, because they attempt to directly communicate with the printer using the AppleTalk protocol. If you must use this software, create an AppleTalk desktop printer, and then delete this printer after running and quitting the non-compatible software.

# Setting the Printer's IP Address

## Automatic IP Addressing

The Xerox Installer for Windows sets the printer's IP address under the following conditions:

- The printer has a network connection.
- TCP/IP is installed on the computer.
- The IP address has not already been assigned (for example, from the front panel or by DHCP).

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 environments; for other environments, see *Other Methods for Setting the Printer's IP Address*.

### Note

With a Windows 95 or Windows 98 peer-to-peer connection, if you change the printer's IP address after the first-time installation, you must change the port's address on the PC through PhaserPort for Windows (see *page 8*).

## Other Methods for Setting the Printer's IP Address

You can set the printer's IP address by any of the following methods:

- Front panel — See *page 15*.
- DHCP — See *page 16*.
- Downloaded configuration file — see [www.xerox.com/officeprinting/infoSMART](http://www.xerox.com/officeprinting/infoSMART).  
Can be used on hosts that do not have BOOTP, or DHCP. For UNIX, use a Xerox-provided shell script to prepare a configuration file. Sending the file to the printer stores the IP address information in the printer's memory, where the printer reads it when reset.
- PostScript Utility files — see the ReadMe file on printer's CD-ROM.  
PC and Macintosh users can also set IP parameters using PostScript utility files. The PC *ReadMe* file is in the *UTILS* directory; the Macintosh *ReadMe* file is in the *Network Utilities* folder.

### Note

When two or more IP address methods are used simultaneously, the printer uses the first address that it successfully obtains.

### Information Required for IP Addressing

Information	Comments
Internet (IP) address for the printer	Format is x.x.x.x, where x represents a decimal number from 0 - 255.
Network mask	If you are unsure, leave this blank; the printer will choose an appropriate mask.
Default Router/Gateway address	If you want to communicate with the printer from anywhere other than the local network segment, You need the router address.
Broadcast address	This is the address the printer uses to send broadcast packets. Regardless of how this parameter is set, the printer accepts broadcast packets from any of the commonly used broadcast address conventions.  It should not be necessary to set this address, because the printer calculates it automatically. However, you can override the default setting.

## Setting the IP Address From the Front Panel

1. With **Menus** highlighted, press the **OK** key.
2. Press the **Scroll Down** key to scroll to the **Network Setup Menu**.
3. Press the **OK** key.
4. Scroll to **TCP/IP Address**.
5. Press the **OK** key.
6. Press the **Scroll Down** or **Scroll Up** key to scroll to the correct number for the first digit of the address, then press the **OK** key to accept that digit.
7. Repeat step 5 for each remaining digit.
8. Scroll to **TCP/IP Network Mask**.
9. Press the **Scroll Down** or **Scroll Up** key to scroll to the correct number for the first digit of the address, then press the **OK** key to accept that digit.
10. Repeat step 9 for each remaining digit.
11. Scroll to **TCP/IP Gateway**.
12. Press the **Scroll Down** or **Scroll Up** key to scroll to the correct number for the first digit of the address, then press the **OK** key to accept that digit.
13. Repeat step 12 for each remaining digit.
14. To exit the menu system, scroll to **Exit** and press the **OK** key.

## 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 do this from the front panel; see *page 32*.

## Supported DHCP Fields

The printer recognizes the DHCP fields listed in the following table.

Field	Description	Values
gw	Gateway address list	List of IP addresses separated by spaces.
ha	Hardware address	Hexadecimal; the <i>ha</i> tag must be preceded by the <i>ht</i> tag.
ht	Hardware type (see Assigned Numbers RFC)	Unsigned decimal, octal, or hexadecimal integer, or one of the following symbolic names:  <b>For UNIX Ethernet:</b> <i>ethernet</i> or <i>ether</i> for 10-Mbit Ethernet (DIX encapsulation); <i>ieee802</i> for IEEE 802 Ethernet (SNAP encapsulation).  <b>For OS/2 Ethernet:</b> <i>ether</i>
ip	IP address	Single IP address.
lg	Log host address(es)	List of IP addresses separated by spaces.
sm	Subnet mask	Single IP address.
dn	IP domain name	Single domain name.
ds	DNS server IP address	Printer recognizes up to two IP addresses, separated by spaces.

## Setting the IP Address Using CentreWare IS

After setting the printer's IP address by another method, you can perform the rest of the TCP/IP configuration using CentreWare IS.

1. Connect to the printer via CentreWare IS (see *page 23*).
2. On the right side of the printer's main CentreWare IS page, click **Properties**.
3. On the left side, under **Protocols**, click **TCP/IP**.
4. Enter your printer's settings and click **Save Changes** at the bottom of the page.

### Note

The changes will not take effect until the printer is reset.

## Domain Name Service (DNS)

The printer supports DNS through an embedded DNS stub resolver. The DNS resolver protocol communicates with one or more DNS servers to request the IP address for a given host name or the host name for a given IP address.

To use an IP host name for the printer, the system administrator must have already configured one or more DNS servers and a local DNS domain name space database.

To set up the printer for DNS, supply an IP domain name and up to two DNS name server IP addresses. There are two ways to set up the printer:

- DHCP — See *page 16*.
- TCP/IP — See the next topic, *DNS Setup Using CentreWare IS*.

### DNS Setup Using CentreWare IS

After setting the printer's IP address, you can set up the printer for DNS using CentreWare IS.

1. Connect to the printer via CentreWare IS (see *page 23*).
2. On the right side of the main CentreWare IS page, click **Properties**.
3. In the **Protocols** group, click **TCP/IP**.
4. Under **DNS Settings** set **Domain Name Service Resolver** to **On**.
5. Enter the following information:
  - Primary Name Server IP Address (required)
  - Second Name Server IP Address (optional)
  - IP Domain Name (required)
  - Additional Search Domain Name(s) (optional)
6. When you are finished entering the settings, click **Save Changes** at the bottom of the page.

#### Note

New parameters will not take effect until the printer is reset.

### Resetting the Printer Using CentreWare IS

1. Connect to the printer via CentreWare IS (see *page 23*).
2. On the right side of the main CentreWare IS page, click **Properties**.
3. Under the **General** tab, select **Resets**.
4. Click **Reset Printer**.

The printer will not update the web page until it finishes resetting.

# 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**.

## Setting Up the Printer for EtherTalk

1. Print the Configuration Page (see *page 2*). Locate the printer's default name.
2. Verify that the printer is in the **Chooser**. See below.
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 (Optional)* on page 20 or *Changing the Printer's EtherTalk Zone (Optional)* on page 21.

## 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 printer driver.
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 Page (see *page 2*) in the EtherTalk field.

4. In the right portion of the **Chooser**, find your printer's name in the list of printers. If the name does not appear, see *page 21*.

### Note

It is possible for the **Printer Name** field on the Configuration Page to be blank. When the printer is turned on, it uses a default name and then checks to see that no other printer on the network has the same name. If enough printers with the same default name are present, it can take several minutes for the printer to establish a unique name. If the **Printer Name** field on the Configuration Page is blank, wait a short time and reprint the Configuration Page.



If the printer is not in the **Chooser**, check that the Configuration Page shows a printer name, a node number, and a zone.

1. If there is no node number, verify that the printer is properly cabled to the network.
2. Test the cable segment by plugging in a new cable segment or using the cable segment of a printer that is in the **Chooser**.
3. If your network uses zones, and there is no zone name on the Configuration Page, or if the Configuration Page shows the wrong zone, see *page 21*.

**Note**

If the printer cannot create a zone, it must already exist.

If the Configuration Page shows the correct printer name, node number, and zone, and 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.
2. If there is a Windows NT server on the network, verify that the printer has not been captured by a Windows NT machine.
3. 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.
4. If using QuickDraw GX, the GX drivers must be installed. If you don't use QuickDraw GX, disable the QuickDraw GX, QuickDraw Helper, and ColorSync extensions.

## Changing the Printer's Name (Optional)

The name is displayed on the Startup Page and Configuration Page. 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.

### Using Apple Printer Utility

1. Locate the *Apple Printer Utility*, included on your printer's CD-ROM.
2. Double-click the **Apple Printer Utility** icon to display the **Printer Selector** window.
3. Select the zone (if applicable) and the printer. Click **Open Printer**. A dialog box is displayed containing **Printer Information** and **Printer Preferences**.
4. Click the triangle to the left of **Printer Preferences**.
5. Click the triangle to the left of **Name**; this displays a dialog box containing a field for the printer's name.
6. Type the new name in the field.
7. Click **Send**.
8. Open the **Chooser** to reselect the printer with its new name.

### Using CentreWare IS

1. Connect to the printer via CentreWare IS (see *page 23*).
2. From the main CentreWare IS page, click **Properties**.
3. In the **Protocols** group on the left side of the screen, click **EtherTalk**.
4. In the **Printer Name** field, type the desired printer name.
5. Click **Save Changes** at the bottom of the page.

### Notes Regarding Duplicate Printer Names on a Network

- If you have more than one printer in the same zone and you choose a name for one printer that is already assigned to another, the second printer registers itself on the network with the number 1 appended to the name. For example, if you attempt to assign a printer the name **Xerox** and another printer in the zone already has the same name, the printer you are naming appears on the network as **Xerox-1**.
- The added number is recalculated each time the printer is turned on. If you have more than one printer with the same name on the network, the printers' names on the network depend on the order in which the printers are turned on. To avoid this confusion, it is recommended that you assign each printer on the network a unique name.
- The added number is displayed in the **Chooser**, on the printer's front panel, and on the Startup Page. On the Configuration Page, the name, without the characters @ : = \*, and with the added number, appears in the **EtherTalk** area. The **Printer Name** under **General Information** is the name as it was set, not as it is displayed in the **Chooser**.

## Changing the Printer's EtherTalk Zone (Optional)

### Using PostScript utility files.

See the ReadMe files on the printer's CD-ROM. The Macintosh *ReadMe* file is in the *Network Utilities* folder; the PC *ReadMe* file is in the *UTILS* directory.

### Using CentreWare IS

1. Connect to the printer via CentreWare IS (see *page 23*).
2. From the main CentreWare IS page, click **Properties**.
3. In the **Protocols** group on the left side of the screen, click **EtherTalk**.
4. In the **Zone** field, type the desired zone, then click **Save Changes** at the bottom of the page.

# Internet Printing Protocol (IPP)

## Running the Xerox Installer

1. Run the Xerox installer as described under *page 5*.
2. When the prompted to select how your printer is connected, click **Other**.
3. Complete the installation by following the on-screen instructions.

## Obtaining the Printer's URL (Network Path)

1. Connect to the printer via CentreWare IS (see *page 23*).
2. From the main CentreWare IS page, click **Properties**.
3. In the **Protocols** group on the left side of the screen, click **IPP (Internet Printing Protocol)**. The **Network Path** field on the CentreWare IS IPP page displays the printer's URL.

## Creating an IPP Printer

1. Select **Start**. Select **Settings**. Select **Printers**.
2. Double-click **Add Printer** to launch the Microsoft Add Printer Wizard.
3. When prompted, select **Network Printer**.
4. When prompted for Network Path (Windows 9x) or URL (Windows NT/2000), enter the printer's URL, in the following format:

**http://printer-ip-address:631**

For *printer-ip-address* substitute your printer's IP address or DNS name. (The printer's URL is displayed on the CentreWare IS IPP page in the **Network Path** field.)

# CentreWare Internet Services

CentreWare IS is a printer administration and support tool using World Wide Web technology. With CentreWare IS software, you can access printer status and manage your printer over a TCP/IP network using a web browser.

CentreWare IS gives you the following capabilities:

- Receive printer status and manage printers, independent of network servers and operating systems.
- Define a link to your local web server's support page.
- Access online manuals and technical support information by using built-in links to the Xerox web site.

CentreWare IS provides an easy-to-use, consistent interface that you can use for most of the configuration tasks described throughout this guide.

CentreWare IS requires only a World Wide Web browser and a TCP/IP connection between the printer and the network. (TCP/IP and HTTP must be enabled in the printer.)

For complete information on using CentreWare IS, see the CentreWare IS Online Help.

## Accessing the Printer From a 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 Status page from your web browser by entering the printer's URL (Uniform Resource Locator), just as you would to visit any web site. The printer's URL is:

**`http://printer's-IP-address/`**

where *printer's-IP-address* is the IP address or DNS name you set during TCP/IP configuration.

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

Example using DNS name: **`http://Xerox_Marketing/`**

# Printer Management

## Job Accounting

The printer stores information about jobs printed in a log file. The log file is stored either in the printer's memory or on a hard disk, if one is connected to the printer. If the log file is stored in the printer's memory, it is lost when the printer is reset; therefore, it is recommended that a hard disk be used for job accounting.

The log file is a list of job accounting records. Each record contains fields such as user name, job name, pages printed, job times, and ink used. Not all fields are supported by all printers. For details, refer to the CentreWare DP or CentreWare IS online help.

The job accounting values reported vary depending on the protocol and print command used when each job was printed. For example, using NPRINT over NetWare provides the printer with the most information about the job being printed. When using Windows and NetWare, the job name is often LST: or LST:BANNER. Other jobs from other ports may provide even less information about the job.

Job accounting is available through CentreWare DP and CentreWare IS. See *page 24*.

## Using CentreWare IS

1. Connect to the printer via CentreWare IS (see *page 23*).
2. On the right side of the main CentreWare IS page, click **Jobs**.

The **Job Accounting Links** page has links that enable you to browse, download, and clear job accounting records.

For complete information on CentreWare IS job accounting, including clearing job information, downloading job information to a file, and job accounting file formats, see the CentreWare IS Help.

## Intelligent Ready

Intelligent Ready is an automated system that monitors the printer's usage and warms up the printer when you are most likely to need it. You can turn Intelligent Ready on or off from the printer's front panel. CentreWare IS provides full control of the printer's automatic warm-up and standby settings.

### Enabling and Disabling Intelligent Ready From the Front Panel

To turn Intelligent Ready mode on or off, on the front panel:

1. With **Menus** highlighted, press the **OK** key.
2. Scroll to **Printer Setup Menu** by pressing the **Scroll Up** or **Scroll Down** key.
3. Press the **OK** key.
4. Scroll to **Intelligent Ready**.
5. Press the **OK** key.
6. Scroll to display either **On** or **Off**.
7. Press the **OK** key.
8. To exit the menu system, scroll to **Exit** and press the **OK** key.

### Setting up Intelligent Ready Using CentreWare IS

1. Connect to the printer via CentreWare IS (see *page 23*).
2. On the right side of the page, click **Properties**.
3. In the **General** group, click **Warm-up**.
4. Follow the instructions on the page to set up Intelligent Ready or standby settings.
5. Click **Save Changes** to save your changes.

## MaiLinX Alerts

MaiLinX alerts allows the printer to automatically send e-mail to the system administrator and others under the following conditions:

- When printer errors, warnings, and alerts occur.
- When the printer requires attention (for example, when service is required).
- When a reply to a CentreWare IS Remote Internet Printing message is desired. See the *CentreWare Internet Services Setup and User Guide* for more information on CentreWare IS Remote Internet printing.

Three designated users can receive messages: SysAdmin, Service, and Key User. Printer messages reporting errors, alerts, and warnings can be individually assigned to any of these users. You can customize the message text and the subject line in the Status Notification messages.

Status Notification is supplied by the printer's SMTP (Simple Mail Transport Protocol) client.

### Setting up CentreWare IS Status Notification

1. Connect to the printer via CentreWare IS (see *page 23*).
2. On the right side of the main CW IS page, click **Properties**.
3. On the left side of the page, click **Mail Alerts**.
4. Follow the instructions on the page to set up Status Notification.
5. Click **Save Settings** to save your changes.

For complete information on CentreWare IS Status Notification, see the CentreWare IS Help.



## Usage Profile Reports

The printer can generate reports detailing printer usage. Usage profile reports track over 160 items, including:

- Unique printer information, such as printer name, date installed, total pages printed, options installed, and network ID.
- Supplies usage data (for example, ink). By tracking supplies usage, you can order supplies in advance, so your printer will always be well-stocked with supplies.
- Media and tray information, such as how often prints are made on paper compared to transparencies, and how often each tray is used.
- Job characteristics, such as size and timing of jobs.

### Types of Reports

- **Job report** — The job report contains information on the last printed job. This report can only be e-mailed; it cannot be printed, because printing it creates a new job that overwrites the report data. The job report is useful in environments where billing for each print job is required.
- **Full report** — The full report contains detailed printer usage information for all jobs printed during the life of the printer. The full report is available in several formats. See the following table for details.

#### Full Report Formats

Printed	E-mailed
Viewable; fields are labeled for easy reading. The following three formats available: <ul style="list-style-type: none"> <li>■ Empty fields omitted.</li> <li>■ All fields shown.</li> <li>■ For OCR (optical character recognition). All fields are shown, with labels, but the reports are set up to be readable by OCR equipment. All text is in a monospace font and each data value is in a fixed location on the page.</li> </ul>	The following two formats available: <ul style="list-style-type: none"> <li>■ For viewing. Empty fields omitted; fields labeled for easy reading.</li> <li>■ For spreadsheet. All fields shown; for easy import into spreadsheets, most data is numerically encoded, and field labels are omitted.</li> </ul>

### Setting up Usage Profile Reporting

1. Connect to the printer via CentreWare IS (see *page 23*).
2. On the right side of the page, click **Jobs**.
3. Select **Usage Profile** on the left, then choose **Usage Profile Properties**.
4. Follow the instructions on the page for setting up reports.
5. Click **Save Changes** to save your changes.

For complete information on Usage Profile reporting, including descriptions of each field in the report, see the CentreWare IS Help.

## Printing Usage Profile Reports

### From the Front Panel

1. With **Menus** highlighted, press the **OK** key.
2. Scroll to **Support Menu** by pressing the **Scroll Up** or **Scroll Down** key.
3. Press the **OK** key.
4. Scroll to **Usage Profile Menu**.
5. Press the **OK** key.
6. Scroll to **Print Usage Profile**.
7. Press the **OK** key.
8. To exit the menu system, scroll to **Exit** and press the **OK** key.

### Using CentreWare IS

1. Connect to the printer via CentreWare IS (see *page 23*).
2. On the right side of the page, click **Jobs**.
3. On the left side of the page, click **Usage Profile**.
4. Click **Print Usage Profile Report** to print a full report with empty fields omitted.

# Sending Reports via E-mail

## From the Front Panel

### Note

To send Usage Profile reports via e-mail, the printer must be properly set up via CentreWare IS. For more information, see *Setting up Usage Profile Reporting* on page 27.

1. With **Menus** highlighted, press the **OK** key.
2. Scroll to **Support Menu** by pressing the **Scroll Up** or **Scroll Down** key.
3. Press the **OK** key.
4. Scroll to **Usage Profile Menu**.
5. Press the **OK** key.
6. Scroll to **Email Full Report** or **Email Job Report**.
7. Press the **OK** key.
8. To exit the menu system, scroll to **Exit** and press the **OK** key.

## Using CentreWare IS

### Note

To send Usage Profile reports via e-mail, the MaiLinX must be properly set up via CentreWare IS. For more information, see *Setting up Usage Profile Reporting* on page 27.

1. Connect to the printer via CentreWare IS (see *page 23*).
2. On the right side of the main page, click **Jobs**.
3. On the left side of the page, click **Usage Profile**.
4. Enter the desired e-mail address in the **Send to Specific Address** field.
5. Click **Send Usage Profile Report**.

## Xerox Usage Analysis Tool

The Xerox Usage Analysis Tool is a Windows client/server application that allows system administrators to automatically track Xerox printer usage and obtain job accounting records. The tool supports large networks, with many users and printers.

Job accounting and printer usage data is stored in a database. The application can be run on multiple clients using a single server. The data can be exported to a spreadsheet for viewing, analysis, and billing.

Complete information on using the Usage Analysis Tool is provided by the application's online Help system.

### System Requirements

- IP network
- Xerox Color Printers with Ethernet interface (optional hard disk recommended)
- A PC with at least 32 MB of RAM. At least 1 GB of hard disk space is recommended for the server
- Supported operating systems: Windows 95, Windows 98, Windows MD, Windows NT 4.0, Windows 2000
- For export to spreadsheet (for graphing, billing, data analysis): Microsoft Excel 97 or Excel 2000

### Installation

The Usage Analysis Tool is on the printer's CD-ROM. A single integrated installer is used to install printer drivers, the Usage Analysis Tool, and other software. The same installer is used for client and server installations.

1. Run the installer as described on *page 5*.
2. When prompted, make the following selections:
  - a. Select **Custom Install**.
  - b. When prompted to select the components and sub-components you want to install, check **Net Admin. Support** under **Components**, then check **Usage Analysis Tool** under **Sub-components**.

During installation, additional components may be installed, such as JavaVM, runtime Microsoft Access, and the Windows database interface (ODBC).

# Network Protocols

## Determining Enabled Protocols

All protocols can be enabled and disabled. The Configuration Page displays which protocols are enabled. If a protocol is enabled, the field for that protocol lists the current parameters. If the protocol is disabled, the field for that protocol contains an entry reading **Off**.

## 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. There are four ways to disable protocols:

- Use the printer's front panel — see *page 32*.
- Using CentreWare DP — In NetWare environments, you can use CentreWare DP. See the *CentreWare DP Setup and User Guide*.
- Using CentreWare IS — see *page 32*.  
With a TCP/IP connection and a World Wide Web browser, you can use CentreWare IS.
- Using PostScript Utility Files  
Send the appropriate PostScript utility file to the printer. See the *ReadMe* files on the printer's CD-ROM. The PC *ReadMe* file is in the *UTILS* directory; the Macintosh *ReadMe* file is in the *Network Utilities* folder.

You can enable protocols by the same procedure. Just select the command to enable a protocol rather than disable it.

## Disabling and Enabling Protocols Using the Front Panel

1. With **Menus** highlighted, press the **OK** key.
2. Scroll to **Network Setup Menu** by pressing the **Scroll Up** or **Scroll Down** key.
3. Press the **OK** key.
4. Scroll to **DHCP/BOOTP**, **TCP/IP**, **EtherTalk**, **NetWare**, or **IPP**.
5. Press the **OK** key.
6. Scroll to display either **On** or **Off**.
7. Press the **OK** key.
8. To exit the menu system, scroll to **Exit** and press the **OK** key.

## Disabling Protocols Using CentreWare IS

1. Connect to the printer via CentreWare IS (see *page 23*).
2. On the main CentreWare IS page, click **Properties**.
3. On the left side of the page, in the Protocols group, select the protocol to be disabled. This displays the page for that protocol.
4. On the page are fields labeled with the settings for the protocol. To disable a setting or protocol, select **Off**.
5. Click **Save Changes** at the bottom of the page.

# Getting Help

## Help From the World Wide Web

Xerox Color Printer web site	<a href="http://www.xerox.com/officeprinting">www.xerox.com/officeprinting</a>
Documentation	<a href="http://www.xerox.com/officeprinting/support">www.xerox.com/officeprinting/support</a>
Technical support	<a href="http://www.xerox.com/officeprinting/860support">www.xerox.com/officeprinting/860support</a>
Color use tips for novices and experts	<a href="http://www.colorconnection.xerox.com">www.colorconnection.xerox.com</a>
CentreWare IS	<a href="http://www.officeprinting.xerox.com/phaserlink">http://www.officeprinting.xerox.com/phaserlink</a>
infoSMART™ Knowledge Base	<a href="http://www.xerox.com/officeprinting/infoSMART">www.xerox.com/officeprinting/infoSMART</a>
Anonymous FTP server	<a href="ftp://ftp.tekcolor.com/">ftp://ftp.tekcolor.com/</a>
E-mail update notices	<a href="http://www.colorconnection.xerox.com">www.colorconnection.xerox.com</a>

# Index

## A

- Apple Printer Utility
  - changing printer's name 20

## B

- broadcast address 14

## C

- cables 4
- CentreWare DP 6
- CentreWare IS 23
  - accessing the printer 23
  - changing printer's name 20
  - job accounting 24
  - printing a Configuration Page 2
  - printing Usage Profile reports 28
  - sending Usage Profile reports via e-mail 29
  - setting IP address 16
  - setting up Intelligent Ready 25
  - setting up Usage Profile reports 27
  - Status Notification 26
  - URL for the printer 23
  - warm-up settings 25
- Configuration Page
  - printing from CentreWare IS 2
  - printing from the front panel 2
  - protocols enabled 31
- customer support 33

## D

- DHCP 16
- disabling protocols 31
- DNS
  - printer configuration 17
- DOS 1

## E

- enabling protocols 31
- Ethernet
  - adapters 4
  - cables 4
  - direct connection to Macintosh or PC 3
  - terminators 4
- EtherTalk
  - printer zone changing 21

## F

- front panel
  - printing a Configuration Page 2
  - sending Usage Profile reports by e-mail 29
  - setting Intelligent Ready 25
  - setting printer's IP address 15

## G

- gateway IP address 14

## I

- Installer
  - Macintosh 5
  - Windows 5
- Intelligent Ready
  - setting from CentreWare IS 25
  - setting from the front panel 25
- IP address
  - automatic 13
  - gateway address 14
  - network mask 14
  - setting from CentreWare IS 16
  - setting from the front panel 15
  - setting using DHCP 16
  - setting using PostScript utility files 14
- IPP (Internet Printing Protocol) 22

## J

- job accounting 24
  - in CentreWare IS 24

## M

- Macintosh
  - EtherTalk 18
  - TCP/IP setup 11

## N

- NetWare
  - configuration software 6
- network mask 14
- Network Path 22
- network protocols
  - determining enabled 31
  - enabling & disabling 31
- networking software 2



## P

- PhaserPort
  - for Macintosh 11
  - for Windows 8
- PostScript utility files 1
  - using to change printer's EtherTalk zone 21
  - using to enable and disable protocols 31
  - using to set printer's IP address 14
- printer name
  - blank on configuration page 18
  - changing 20
  - duplicates on a network 20
  - in the Chooser 18

## S

- Status Notification 26

## T

- TCP/IP
  - configuration 7
  - Macintosh 11
  - PC configuration 8
  - Windows NT 9
- technical support 33
- terminators
  - Ethernet 4

## U

- UNIX 1
- URL
  - CentreWare IS 23
  - IPP (Network Path) 22
- Usage Analysis 30
- Usage Profile reports
  - full report 27
  - job report 27
  - overview 27
  - printing from CentreWare IS 28
  - sending by e-mail from the front panel 29
  - sending via e-mail from CentreWare IS 29
  - setting up 27
  - types 27
- using in DOS environments 1

## W

- Windows 95/98/ME 8
- Windows NT/2000 9
- World Wide Web 23

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