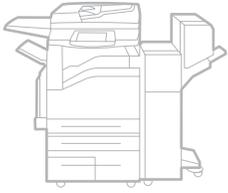


WorkCentre® 7400 Series
Multifunction Printer



WorkCentre® 7425/7428/7435 System Administrator Guide

English
Français Guide de l'administrateur système
Español Guía del administrador del sistema
Português Guia de Administração do Sistema



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General Information

1

This chapter includes:

- [Resources](#) on page 10

Resources

You can get information about your printer from the following sources.

Information	Source
Installation Guide Quick Use Guide User Guide (PDF) User Documentation	Packaged with printer Packaged with printer Customer Documentation CD www.xerox.com/office/WC7425_WC7428_WC7435docs
Information about menu selection or error messages on control panel Information pages	Control panel Help (?) button Control panel menu
Print Drivers	www.xerox.com/office/WC7425_WC7428_WC7435drivers
Recommended Material List – North America Recommended Material List – Europe	www.xerox.com/paper www.xerox.com/europaper
Online Support Assistant Technical Support	www.xerox.com/office/WC7425_WC7428_WC7435support www.xerox.com/office/WC7425_WC7428_WC7435support
Registration	www.xerox.com/office/register
Supplies	www.xerox.com/office/WC7425_WC7428_WC7435support

Installation

2

This chapter includes:

- [Installation](#) on page 12
- [Print Driver Installation](#) on page 13

Installation

Overview

1. Connect one end of a Category 5 twisted pair cable to a live network drop. Connect the other end of the cable to the RJ-45 socket at the rear of the printer.
2. Set the printer's power switch to **On** and wait until the main screen is displayed.
3. Print a Configuration Report. Refer to the Configuration Report to determine which ports and protocols are enabled for your network. For more information see [Configuration Report](#) on page 22.
4. Enable the printer's internet services (HTTP) and TCP/IP protocol so that you can configure the printer using the CentreWare Internet Services Web interface. For more information see [CentreWare Internet Services](#) on page 23.
5. Install the print drivers and set up computers to communicate with the printer.
6. If you have purchased optional features for your printer, such as Scanning to the printer's Hard Drive, configure these options. For more information see [Scanning and Faxing](#) on page 97.

Changing the Default Main Screen

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Touch **Common Service Settings**, touch **Screen/Button Settings**, select **Service Screen Default**, touch **Change Settings**, make your selection and touch **Save**.
6. Touch **Close** until the Tools tab is displayed.
7. Wait for the Auto Clear service to log you out.

Print Driver Installation

Supported Operating Systems

- Windows 2000 Professional, 2000 Server, 2003 Server, XP Professional, Vista
- Macintosh OSX 10.3 and newer
- UNIX

Obtaining Drivers

Drivers are on a CD that came with your printer. If you do not have the CD, you can download drivers at www.xerox.com/office/WC7425_WC7428_WC7435drivers.

TCP/IP Peer to Peer (LPR or Standard TCP/IP) Printing

Windows Print Driver Installation

1. On the Windows XP desktop, click **Start**, then **Printers and Faxes**. The Vista path is **Start\Control Panel\Printer(s)**.
2. Double-click **Add Printer**.
3. When the Add Printer Wizard screen displays, click **Next**.
4. Select **Local Printer** and deselect **Automatically detect and install my Plug and Play printer**. Click **Next**.
5. Select **Create a new port** and choose **LPR** from the **Type** drop down menu. (LPR becomes available when Print Services for UNIX is installed, as above).

Note: If you prefer to print raw data to Port 9100 on the printer, choose **Standard TCP/IP Port**. Click **Next**.

6. When prompted, enter the IP address of the printer.
7. Enter a name for the print queue (such as raw). If you selected the Standard TCP/IP port, you can accept the default name provided by Windows. Click **Next**.
8. You will be prompted for a print driver. Select **Have Disk** and browse to the location of your print driver.
9. Select the .INF file, then click **Open**.
10. When the Install from Disk screen displays, verify that the path and file name are correct and click **OK**.
11. Select the model that corresponds to your printer and click **Next**.
12. Enter a name for your printer and select either **Yes** or **No** to make this printer your default printer. Select Yes if you will be printing primarily to this printer from your applications. Click **Next**.
13. Select **Yes** to print a test page. Click **Next**.
14. Click **Finish**.

Configure the Print Driver

1. Click **Start**, select **Printers and Faxes**. The Vista path is **Start\Control Panel\Printer(s)**.
2. Right click the printer's icon and select **Properties**.
3. Use the available tabs to set the printer's job processing defaults, including enabling Bi-Directional Communication. Additional settings may be accessed by clicking the **Printing Preferences** button on the General Tab.

NetBIOS over IP Peer to Peer Printing

Before You Start

1. Obtain the print driver for your computer's operating system. See [Obtaining Drivers](#) on page 13.
2. Print a Configuration Report. See [Configuration Report](#) on page 22.
3. On the Configuration Report, verify that SMB and TCP/IP are enabled. Verify that the workgroup's default name is Workgroup, or a valid, 15 character maximum, workgroup name. Also note the printer's SMB Host Name (which assures the uniqueness of the printer's name within the Workgroup). To enable SMB, see [Microsoft \(NetBIOS over IP\) Networks](#) on page 52. Modify the name of the Workgroup, or printer's name (SMB Host name) using CentreWare Internet Services.
4. Make sure to configure the DNS/WINS Server(s) for NetBIOS name to IP address resolution. Then provide the printer with the addresses of the Servers. For more information, see [TCP/IP Protocol Configuration](#) on page 43.

An Alternate Procedure for Setting up NetBIOS over IP Peer to Peer Printing

Note: Experienced System Administrators can use the following procedure:

1. On Windows XP computers, from the **Properties** selection of the **Local Area Connection** icon, verify that the Internet Protocol (TCP/IP) is installed. Select the protocol and click **Properties**. Verify that TCP/IP is configured for use of the DNS Server. Click the **Advanced** button and select the **DNS** tab. Verify that the check box labeled Register this connection's addresses in DNS is checked. Select the **WINS** Tab and verify that the NetBIOS setting is set to either Use NetBIOS Setting from the DHCP Server, or that NetBIOS is enabled over TCP/IP. Click **Cancel** twice and verify that the Client for Microsoft Networks is installed. Finally, with your Operating System Installer Disk readily available, through **Add/Remove Programs** and **Add/Remove Windows Components**, select **Other Network File and Print Services**. Click **Details**, check the box for **Print Services for UNIX**, and click **OK** and **Next**.
2. When prompted for the Name or address of the server providing LPD enter the printer's **SMB Host Name** as seen on the printer's Configuration Report.
3. When prompted for a queue name, enter your preference of an easily-identified name for this printer.
4. Install the print driver on your computer and, when prompted to select a port to print through, select the LPR port that you just created.
5. Print a Test Print to verify successful communication with the printer.

NetBIOS over IP Client/Server Printing

Before You Start

1. Obtain the print driver for your computer's operating system. See [Obtaining Drivers](#) on page 13.
2. Print a Configuration Report. See [Configuration Report](#) on page 22.
3. On the Configuration Report, verify that SMB is enabled. Also, verify that TCP/IP is enabled as one of the supported protocols. To enable SMB, see [Microsoft \(NetBIOS over IP\) Networks](#) on page 52).
4. Set Up a Server to Queue Jobs to the Printer. If you have not already set up a Server, for a quick-step set up procedure, for help see [Microsoft \(NetBIOS over IP\) Networks](#) on page 52.

Windows Print Driver Installation

Verify that the Correct Protocols and Services are Installed in the Computer

1. Verify that the Internet protocol (TCP/IP) is installed in the Computer. On the Windows XP desktop, click **Start, Control Panel**, and double click **Network Connections**. Right click the **Local Area Connection** icon and select **Properties**.
On the Windows 2000 Desktop, right click the **My Network Places** icon and select **Properties**. Right click the **Local Area Connection** icon and select **Properties**.
2. Verify that the Internet Protocol (TCP/IP) has been loaded. If it has, click this item and click the **Properties** button to verify that this computer is using either a dynamic or static method to obtain a valid TCP/IP address.
3. Also verify that this computer is using a DNS (or WINS) Server for resolution of the NetBIOS Host name (typically the same name as the computer's Internet host name). If the TCP/IP protocol is not loaded, click the **Install...** button, then select **Protocol** as the type of network component that you wish to install. Click the **Add...** button and select **Internet Protocol (TCP/IP)**.
4. With your operating system installer disk readily available, click the **Have Disk...** button and follow any remaining instructions.
5. Verify that the **Client for Microsoft Networks** is installed in the computer. On the Windows XP desktop, click **Start, Control Panel**, and double click **Network Connections**. Right click the **Local Area Connection** icon and select **Properties**.
On the Windows 2000 Desktop, right click the **My Network Places** icon and select **Properties**. Right click the **Local Area Connection** icon and select **Properties**.
6. If the Client for Microsoft Networks is not loaded, click the **Install...** button, then select **Client** as the type of network component that you wish to install.
7. Click the **Add...** button and select **Client for Microsoft Networks**.
8. With your operating system installer disk readily available, click the **Have Disk...** button and follow any remaining instructions.

Add the Printer to the Windows Desktop

1. On the desktop, from **Start**, select **Printers and Faxes**.
2. Double-click **Add Printer**. From **Printer Tasks**, select **Add a printer**.
3. When the Add Printer Wizard displays, click **Next**.
4. Select **Network Printer** and click **Next**.

Installation

5. In Windows XP, on the Specify a Printer screen, select **Connect to this printer** (or to browse for a printer, select this option and click **Next**). As a shortcut, if you know the UNC (Universal Naming Convention) of the printer, enter it in the text box. Click **Next**.
In Windows 2000, on the Locate Your Printer screen, select **Type the printer name or click next to browse for a printer**. Click **Next**.
6. When the Browse for Printer screen displays, wait for the screen to finish loading its list of Shared Printers. The displayed format for many of these Shared Printers is the UNC of the Printer (for example, \\computer (i.e. Server) name\share (i.e. Printer) name).
7. On the Browse for Printer screen, either click one of the displayed Servers or UNC's, or enter the UNC of your server and its shared printer. Click **Next**.
8. When prompted for the driver files, select **Have Disk** and browse to the location of your print driver.
9. Select the .INF file then click **Open**.
10. When the Install from Disk screen displays, verify the path and file name are correct and click **OK**.
11. Select the model that corresponds to your Printer and click **Next**.
12. Enter a name for your Printer and select either **Yes** or **No** for making this printer your default Windows printer. Select Yes if you will be printing primarily to this printer from your Windows applications. Click **Next**.
13. Select **Yes** to print a test page. Click **Next**.
14. Click **Finish**.

Configure the Print Driver

1. On the desktop, from **Start**, select **Printers and Faxes**.
2. Right click the printer's icon and select **Properties**.
3. Use the available tabs to set the printer's job processing defaults, including enabling Bi-Directional Communication. Additional settings may be accessed by clicking the Printing Preferences button on the General Tab.

IPP Printing – Windows

IPP (the Internet Printing Protocol) enables the convenience of printing over the Internet or Intranet through the creation of an IPP network port. This printing service is available for other computer operating systems through downloads from the Microsoft Web site. Follow the instructions provided by Microsoft to install the IPP service on operating systems other than Windows 2000 and XP.

Before You Start

1. Obtain the print driver for your computer's operating system. See [Obtaining Drivers](#) on page 13.
2. Print a Configuration Report. See [Configuration Report](#) on page 22.
3. On the Report, under the TCP/IP data label, verify that the printer has a valid IP Address, Subnet Mask, and Gateway displayed. If it does not, assign these addresses to the printer. For more information see [TCP/IP Protocol Configuration](#) on page 43.
4. On the Report, verify that Port 9100 is displayed with a Port Status of Enabled. If it is not, enable Port 9100. Click the **Port Status** in the **Connectivity** folder on the **Properties** tab of CentreWare Internet Services and make sure that the **Port 9100** check box is selected.

5. On the report, verify that IPP is enabled. If it is not, enable it. See [IPP Configuration](#) on page 54.
6. Verify that IPP is using DNS to resolve Host Names to IP Addresses in support of IPP printing. Enter your printer's IP address into your Web browser's address field to access CentreWare Internet Services. Click the **Properties** tab. Click the **Connectivity** folder, then on the **Protocols** folder and select **IPP**. Verify that the **DNS Enablement** check box is selected.

Verify that TCP/IP is Installed in the Computer

1. On the Windows 2000 Desktop, right click the **My Network Places** icon and select **Properties**. Right click the **Local Area Connection** icon and select **Properties**.
On the Windows XP desktop, click **Start, Control Panel**, and double click **Network Connections**.
2. Right click the **Local Area Connection** icon and select **Properties**.
3. Verify that the Internet Protocol (TCP/IP) has been loaded. If it has, click this item and click the **Properties** button to verify that this computer is using either a dynamic or static method to obtain a valid TCP/IP address.
4. If the TCP/IP protocol is not loaded, click the **Install...** button, then select **Protocol** as the type of network component that you wish to install. Click the **Add...** button and select **Internet Protocol (TCP/IP)**.
5. With your Operating System Installer Disk readily available, click **Have Disk...** and follow any remaining instructions.
6. Once the protocol has been installed, you can click the item and click the Properties button to verify or set up the method being used for TCP/IP addressing.

Add the Printer to the Windows Desktop

1. On the desktop, from the Start menu, select **Printers and Faxes**. The Vista path is **Start\Control Panel\Printer(s)**.
2. On Windows XP, from Printer Tasks, select **Add a printer**.
3. When the Add Printer Wizard displays, click **Next**.
4. Select **Network Printer** and click **Next**.
5. To create an IPP printer select **Connect to a printer on the Internet...**
6. Type `http://` followed by the printer's fully qualified Domain name or IP address in the URL field. You may have to type `/ipp` after the printer's name or ip address. the printer's name can be either the Internet Host Name or the SMB Host Name as shown on the printer's Configuration Report, depending on the name resolution used by your network (DNS or WINS).
7. Click **Next**.
8. When prompted for the driver files, select **Have Disk** and browse to the location of your print driver.
9. Select the .INF file then click **Open**.
10. When the Install from Disk screen displays, verify the path and file name are correct and click **OK**.
11. Select the model that corresponds to your printer and click **Next**.
12. Enter a name for your printer and select either **Yes** or **No** for making this printer your default Windows printer. Select Yes if you will be printing primarily to this printer from your Windows applications. Click **Next**.
13. Select **Yes** to print a test page. Click **Next**.
14. Click **Finish**.

Configure the Print Driver

1. On the Windows XP desktop, from **Start**, select **Printers and Faxes**. The Vista path is **Start\Control Panel\Printer(s)**.
2. Right click the printer's icon and select **Properties**. Use the available tabs to set the printer's job processing defaults, including enabling Bi-Directional Communication. Additional settings may be accessed by clicking the **Printing Preferences** button on the General tab.

EtherTalk (AppleTalk) Peer to Peer Printing

Before You Start

1. Obtain the print driver for your computer's operating system. See [Obtaining Drivers](#) on page 13.
2. Print a Configuration Report. See [Configuration Report](#) on page 22.
3. On the Configuration Report, under the EtherTalk data label, verify that the EtherTalk port is enabled, and that the printer has been assigned an EtherTalk (Printer) Name and an EtherTalk zone. If one or more of these parameters needs to be configured, see [EtherTalk \(AppleTalk\) Configuration](#) on page 57.

Installation Instructions for Macintosh OS X 10.3 and Newer

1. Double click to open the folder containing the drivers.
2. Double click to open the machine model.dmg.
3. Double click to open the machine model.pkg file.
4. When the Welcome screen displays, click **Continue**.
5. Click **Continue**, then **Agree** or **Accept** to accept the License Agreement.
6. Select the required disk (if necessary) where you want to install the printer. Click **Continue**.
7. Click **Install**.
8. Click **Close**, and restart the computer.
9. When the computer has restarted, double click the hard drive icon.
10. Double click the **Applications** icon.
11. Double click the **Utilities** folder.
12. Double click **Print Center** icon.
13. Double click **Add** to add a new printer.
14. Select **AppleTalk** as your network protocol.
15. Select the required **AppleTalk** zone.
16. Select the printer that you wish to set up.
17. Select the **Printer Model** (that is, choose the PPD for your printer).
18. Click **Add**.
19. Print a document from an application to verify that the printer is installed correctly.

Common UNIX Printing System (CUPS)

Overview

The Common UNIX Printing System (CUPS) was created by Easy Software Products in 1998 as a modern replacement for the Berkeley Line Printer Daemon (LPD) and AT&T Line Printer (LP) system designed in the 1970's for printing text to line printers.

Currently available for downloading from a number of sources on the Internet, such as www.cups.org, CUPS is offered in both source code and binary distributions.

Before You Start

Verify that IPP and Port 9100 are enabled at your printer. For more information see [IPP Configuration](#) on page 54 and [Configure Port 9100 \(Raw Printing\)](#) on page 51.

Installing CUPS on the UNIX computer

The instructions for installing and building CUPS are contained in the CUPS Software Administrators Manual, written and copyrighted by Easy Software Products and available for downloading at www.cups.org/documentation.php. An Overview of the Common UNIX Printing System, Version 1.1 by Easy Software is also available at this site.

A case history of the building and installation of CUPS source code on a FreeBSD 4.2 machine, is described in the article entitled Using CUPS – the Common UNIX Printing System, by Ralph Krause, available at www.cups.org, through [thes/documentation/tutorials/BSD Today – Using CUPS selections](#). Directory locations for the CUPS files, as described in this article, are the following:

- Programs were copied to `/usr/local/bin` and `usr/local/sbin`.
- Documentation was copied to `/usr/local/share/docs/cups`.
- A directory called `/usr/local/share/cups` was created for various CUPS data files.
- The configuration files were copied to `/usr/local/etc/cups`.

The binary distribution of CUPS is available in tar format with installation and removal scripts, as well as in rpm and dpkg formats for RedHat and Debian versions of Linux. After logging into the computer as root (su) and downloading the appropriate files to the root directory, the CUPS installation process begins as follows:

Tar format:

After untarring the files, run the installation script with `./cups.install` (and press **Enter**).

RPM format:

```
rpm -e lpr
```

```
rpm -i cups-1.1-linux-M.m.n-intel.rpm (and press Enter).
```

Installation

Debian format:

`dpkg -i cups-1.1-linux-M.m.n-intel.deb` (and press **Enter**).

Note: RedHat Linux, versions 7.3 and newer, include CUPS support, so software downloading is unnecessary. Also, CUPS is the default printing system used by Mandrake Linux.

Installing the Xerox PPD on the Computer

The Xerox PPD for CUPS should be available on one of the CDs that came with your printer. If you no longer have the CDs, download the PPD from:

www.xerox.com/office/WC7425_WC7428_WC7435support.

From the CD or from the downloaded Internet file, with root privileges copy the PPD into your cups ppd folder on your computer. If you are unsure of the folder's location, use the Find command to locate the ppd's. An example of the location of the ppd.gz files in RedHat 8.1 is `/usr/share/cups/model`.

Adding the Xerox Printer

1. Use the PS command to make sure that the CUPS daemon is running. The daemon can be restarted from Linux using the init.d script that was created when the CUPS RPM was installed. The command is `> /etc/init.d/cups restart`. A similar script or directory entry should have been created in System V and BSD. For the example of CUPS built and installed on a FreeBSD 4.2 machine from the source code, run `cupsd` from `/usr/local/sbin`. (`cd /usr/local/sbin cupsd` press **Enter**).
2. Type `http://localhost:631/admin` into the address (URL) box of your Web browser and press **Enter**.
3. For User ID, type `root`. For the requested password, type the root password.
4. Click **Add Printer** and follow the on screen prompts to add the printer to the CUPS printer list.

Printing with CUPS

CUPS supports the use of both the System V (`lp`) and Berkeley (`lpr`) printing commands.

- Use the `-d` option with the `lp` command to print to a specific printer.
`lp -dprinter filename` (and press **Enter**)
- Use the `-P` option with the `lpr` command to print to a specific printer.
`lpr -Pprinter filename` (and press **Enter**)

For complete information on CUPS printing capabilities, see the CUPS Software Users Manual available from www.cups.org/documentation.php.

Installing Unicode Fonts

The Xerox Unicode 3.0 font kit for SAP is available for this printer. Install the Unicode fonts to print documents in multiple languages, in an SAP environment. To order the kit, contact your Xerox representative.

Administrative Tools

3

This chapter includes:

- [Configuration Report](#) on page 22
- [CentreWare Internet Services](#) on page 23

Configuration Report

To print a Configuration Report:

1. Press the **Machine Status** button on the control panel.
2. Press the **Print Reports** button.
3. Press the **Copy Reports** button.
4. Press the **Configuration Report** button.
5. Press the green **Start** button, to the right of the control panel's numeric keypad.
6. The printing process will be displayed on the touch screen.

The Configuration Report is formatted into two columns with horizontal ruled lines indicating four distinct data display areas on the print.

- The first area displays System Settings.
- The second area displays Copy Service Settings.
- The third area displays Print Service Settings.
- The fourth area displays Communication Settings.

CentreWare Internet Services

CentreWare Internet Services is the Web interface to the HTTP server in the printer. It allows you to configure the printer remotely from a Web browser on a network computer.

Note: You must set your Web browser so that it will not use a proxy server to access CentreWare Internet Services.

System Administrator Login ID and Passcode

If authentication is enabled, you must enter the system administrator login ID and passcode to access all printer settings. These credentials are required when accessing printer settings at the control panel, and through CentreWare Internet Services. You are required to enter system administrator credentials when accessing settings in the Properties tab in CentreWare Internet Services.

The default settings are:

- Administrator Login ID: **admin**
- Passcode: **1111**

For more information see [Authentication](#) on page 62.

Changing Internet Services (HTTP) Settings

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Press the **Tools** tab.
5. Press **Connectivity & Network Setup**.
6. Press **Port Settings**.
7. When the Port Settings menu displays, press the down arrow key to view additional selections.
8. Press the **Internet Services (HTTP)** selection line.
9. Press the **Change Settings** button in the lower right corner of the Port Settings menu screen.
10. When the Internet Services (HTTP) menu displays, you have two settings available for selection. The Port Settings menu selections are Port Status and Internet Services Port Number. After pressing the selection line, to access available settings press the **Change Settings** button in the lower right corner of the touch screen.

Enabling Internet Services (HTTP)

1. Press **Port Status** in the Internet Services (HTTP) menu.
2. Press the **Change Settings** button.
3. Press **Enabled**.
4. Press **Save**.

5. To exit the screen, without making any changes, press the **Cancel** button.

Internet Services Port Number

1. Press **Internet Services Port Number** in the **Internet Services (HTTP)** menu.
2. Press **Change Settings**.
3. On the Port Number screen, use the keypad to enter the port number (default of 80).
4. Press **Save**.
5. Press **Cancel** to exit without making changes.
6. To exit the Internet Services Selection Menu touch **Close** in the upper right corner of the touch screen.
7. To exit the Port Settings menu, returning to the printer's Tools screen, touch **Close** again.

Proxy Server Settings

To use the Web Service button on the printer (if available), which enables the printer to access HTTP file servers on the Internet, you need to enter your Proxy Server information as described here.

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Click the **Connectivity** folder, then the **Protocols** folder.
5. Select **Proxy Server Settings** folder.
6. Place a check mark in the **Use Proxy Server** check box.
7. From the **Proxy Setup** drop down menu, select either **Same Proxy for All Protocols**, or **Different Proxy for each Protocol**, depending upon your Proxy Server setup.
8. In the **Addresses to Bypass Proxy Server** box, enter up to 1024 characters of IP addresses, fully qualified host names, or wildcard host names (such as *.eng), separated by semicolons. Functioning like the local address exception list in a typical Web browser, these addresses will be permitted to bypass the Proxy Server.
9. For the **HTTP or HTTPS Server Names**, provide a name of up to 255 characters in length for one or both of these Proxy Servers. A fully qualified domain name or IP address can be used.

Note: Make sure that DNS is enabled See [TCP/IP Protocol Configuration](#) on page 43.

10. Leave the Port Number set to 8080 (the IANA recognized proxy port) unless you are using a different port number. If you are using a different port number, enter it in the available box.
11. Check the **Authentication** box if client authentication is required for the Proxy Server.
12. Enter the **Login Name** for access to the proxy server. Up to 32 characters can be entered.
13. Enter the **Password** for access to the proxy server. Up to 32 characters can be entered.
14. Click **Apply**.
15. Enter the System Administrator user ID and password when prompted and click **OK**.

Overview

CentreWare Internet Services contains the following main menu tabs:

- **Status:** View the status of the printer's trays and consumables.
- **Jobs:** View the current job queue, as well as a history of processed jobs.
- **Print:** Change Job Submission settings.
- **Scan:** Create and edit Distribution Templates.
- **Properties:** Allows you to configure the printer for job processing, options support, and network communications.

Note: If authentication is enabled, you must enter the system administrator User Name and Password (default **admin, 1111**) if prompted, to access the Properties tab.

- **Support:** View system administrator and Xerox contact information.

Status Tab

The Status tab allows you to see the status of the printer's trays and consumables.

- **General** for a general description of the printer. Click **Reboot Machine** to restart the printer.
- **Trays:** View the status of the desired item.
- **Consumables:** View the status of the desired item.

Press Refresh a refresh a status page.

Jobs Tab

The Jobs tab allows you to view the current job queue, as well as a history of processed jobs.

- **Active Jobs:** View the current job queue.
- **Job History List Folder:** View a list of jobs that have been printed, copied, and scanned.
- **Error History:** View a list of Errors and the time and date when they occurred.

Print Tab

The Print tab allows you to edit job submission settings. Delivery methods include Immediate Print, Sample Set, Delayed Print, and Secure Print. Click **Browse...** to locate your print-ready job. Click **Submit Job** when you are ready to submit your job. For information, see [Secure Print](#) on page 87.

Note: Print-ready jobs must be in a file format that the printer recognizes (PostScript files with a .ps file extension, for example).

Scan Tab

Includes Job Templates, Folder, and Job Flow Sheets.

- **Folder:** Lets you create individual folders into which you can direct scanned documents. These documents can then be retrieved and printed, either at the printer or locally at your computer, as explained in the Scanning to the printer's Hard Drive (Folder) topic. For more information see [Scanning to the Printer's Hard Drive \(Folders\)](#) on page 128.
- **Job Templates:** Customize and use Job Templates to scan and transfer documents directly to Network Servers. For more information see [Network Scanning \(Using Templates\)](#) on page 112.
- **Job Flow Sheets:** Change the sheet type, and order and assign a user name. For more information see [Setup and Use of Job Flow Sheets with Folders](#) on page 131.

Properties Tab

The Properties tab allows you to configure the printer's job processing options and network communications settings.

Note: If authentication is enabled, you must enter the system administrator User Name and Password (default **admin, 1111**) if prompted to access the Properties tab. You may also be prompted for the user name and password when changing settings in the Properties tab.

- **Configuration Overview:** Provides shortcuts to commonly used configuration pages within the Properties tab. Click **Settings**, then **Configure**, to go directly to the page without having to navigate through the folders in the directory tree on the left.
- **Description:** Allows you to see and edit basic identification information about your printer.

General Setup Folder

The General Setup folder contains the following pages and folders:

- **Configuration:** Lists current printer settings such as memory allocation; available page description languages and their version numbers; firmware (software) versions for the controller and printer components; hard disk partition information; and hardware information (indicating the availability of the Ethernet Port and Hard Disk, for example).
- **Job Management:** Allows you to set permissions that allow system administrators or general (non-administrator) users to delete jobs from the printer's print queue.
- **Paper Tray Attributes:** Provides a display of the available trays (including bypass), their media settings, and tray selection order.
- **Paper Settings:** Displays paper settings, which can be manipulated and set for installed trays. See the printer's User Guide for more information.
- **Power Saver Settings:** Displays the settings for low power mode and sleep mode. Low Power Mode is selectable from 1 to 240 minutes. Sleep Mode is selectable from 1 to 240 minutes.
- **Stored Job Settings:** Set a minimum passcode length for jobs stored on the printer.
- **Memory Settings:** View or change the amount of memory allocated on the hard drive for spooling incoming jobs into buffers (dedicated to specific ports or protocols).
- **Internet Services Settings:** View or change the Auto Refresh Interval, or the Display Language (if available).

- **Pool Server Settings:** Set up the login details from this device to a remote template pool server.
- **Cloning:** Copy the settings and Web-generated scan templates of one printer and transfer them to other printers operating with the same version of system software. Groups of settings can be cloned, depending on the optional features installed on the printer.
- **Alert Notification Folder**
 - **Billing Meter Read Alerts:** Set up an e-mail notification to the designated Billing Administrator whenever billing meters are automatically read by the Meter Assistant.
 - **Supplies Data Sent Alerts:** Set the receiving E-mail address for alerts from the Supplies Assistant.
- **Billing & Counters Folder:** View the total number of pages, images, or jobs processed by the printer.
- **Smart eSolutions Folder:** Set up automatic billing meter reading and supplies reporting. For more information see [Xerox Smart eSolutions](#) on page 189.

Connectivity Folder

- **Port Settings:** Enable or disable ports. Note that if any selections, such as Port 9100 for example, are unavailable for setting using the printer's control panel, they can be set here. You can enable or disable the following ports:
 - EtherTalk
 - NetWare (for Novell networks)
 - SNMP
 - SMB
 - LPD
 - Port 9100
 - Send E-mail
 - Receive E-mail
 - E-mail Notification Service
 - Internet Services
 - FTP Client
 - IPP
 - UPnP Discovery
 - WebDAV
 - Bonjour
 - WSD
 - SOAP
- **Physical Connections Folder**
 - **Ethernet:** View or change Ethernet (speed) Settings from a drop down selection list. Selections include: Auto (auto sensing), (10/100Base-TX), 100Base-TX (Half or Full Duplex), and 10Base-TX (Half or Full Duplex). The MAC Address of the printer is also displayed, but not editable.
 - **Parallel:** View or change the enablement settings for Bi-Directional Communications (a check box) and Auto Eject Time (Parallel Port Timeout), with a range of 5 to 1275 seconds.

- **USB:** View or change the Auto Eject Time, which is the length of time the Controller will wait for an end of job command before processing the job.

Note: Parallel and USB are options that must be installed before they will be displayed.

- **Protocols Folder:** View or modify the communication protocols used by the printer. SMTP Server, and POP3 Setup allow you to configure E-mail server addresses, for E-mail scanning. Set your proxy server parameters for Meter Assistant and Web Service (if available) on the Proxy Server page.
- **LDAP Folder:** The LDAP folder contains the same settings available under Authentication Configuration in the Security folder. This allows you to configure authentication for the printer using LDAP, or to independently configure LDAP for use with the printer, such as in address book for E-mail.

Services Folder

- **Print Mode:** Set the page description language emulation used by the printer's input ports displayed on the screen. Depending upon the Ports enabled at the printer, the list of ports will include: Parallel, AppleTalk (with PostScript), SMB, LPD, IPP and Port 9100. Typical page description selections for each port include: Auto (auto select), PostScript, HP-GL/2, PCL, and TIFF/JPEG.
- **Language Emulations Folder:** View and change the printer's default preferences for processing Page Description Languages.
- **E-mail Folder:** View and change the printer's default E-mail message settings, and import a public address book from a .CSV file, for use with E-mail, Fax, and Internet Fax. Click the **Browse...** button to locate your CSV formatted file, then click **Import Now**.
- **Internet Fax:** View and change the printer's default Internet Fax message settings, and import a public address book from a .CSV file, for use with E-mail, Fax, and Internet Fax. Click the **Browse...** button to locate your CSV formatted file, then click **Import Now**.
- **Fax Folder:** View and change the printer's default Fax and Server Fax settings, and import a public address book from a .CSV file, for use with E-mail, Fax, and Internet Fax. Click the **Browse...** button to locate your CSV formatted file, then click **Import Now**. Enable or disable Confirmation printing (Server Fax).
- **Network Scanning Folder:** Set up Network Scanning using Templates.
- **Machine Software Folder:**
 - **Upgrades:** Enable the printer for software upgrades.
 - **Manual Upgrade:** Upgrade the printer software.
- **Xerox Services Folder:** Set up the Xerox Communication Server. This is the Xerox server that supports automatic billing and supplies reporting. For more information see [Xerox Smart eSolutions](#) on page 189.
- **Custom Services Folder**
 - **Validation Options:** Works with a validation server, which is used in an enterprise network to certify the authenticity of Digital Certificates used for file encryption. Note that Digital Certificates typically work with SSL/TLS encryption, which is set up from the Machine Digital Certificate Management in the Security folder. The host name and path settings for a validation server are set up through the Validation Server in the Network Scanning subfolder.
 - **Custom Services:** Enable Custom Services and Password Transmission.

Accounting Folder

Configure Accounting server and login options.

Security Folder

- **Authentication Configuration:** Set up the printer with local and remote Authentication. User Details Setup is used to configure the characteristics of the login prompt for User Authentication.
- **Remote Authentication Server:** Configure authentication administered by a remote server.
- **IP Filtering:** Set up IP address restrictions for access to this device.
- **Audit Log:** Enable or disable the Audit Log.
- **Machine Digital Certificate Management:** Manage digital certificates stored on the printer.
- **IP Sec:** Configure IP Sec encryption.
- **Certificates Management:** Sets the categories for trusted certificate management (used with digital certificates).
- **802.1x :** Enable and configure 802.1x settings.
- **SSL / TLS:** Configure the settings for SSL / TLS encryption.
- **PDF / XPS Security Settings:** Add a digital signature to PDF and XPS files.
- **System Administrator Settings:** Change the Login ID and Passcode used by the System Administrator to access Tools on the printer's control panel, and to modify Properties in CentreWare Internet Services.

Details of Some Properties Tab Features

Setting TIFF (and other PDL) Processing Properties

To set the Printer's default TIFF / JPEG, PostScript, PCL, or HP-GL/2 processing properties, perform the following steps:

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Click the **Services** folder.
5. Click the **Printing** folder, then the **Language Emulations** folder.
6. Click **TIFF / JPEG**, or **PostScript**, or **PCL**, or **HP-GL/2** to access the printer's list of default settings for processing the selected Page Description Language.
7. Select a Printer number and click **Edit** (when available) to access a list of numerous processing settings.
8. Click **Apply**.

Setting PDL Emulations

To set the PDL (Page Description Language) Emulations, used by the printer's Input Ports, perform the following steps:

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Click the **Services** folder.
5. Click the **Printing** folder, then the **Language Emulations** folder to see the Page Description Languages currently supported by system software.
6. Click **Print Mode** to access a list of the printer's Input Ports, displaying the Page Description Language emulations they are currently set to use.
7. Depending upon the Ports enabled at the printer, the list of displayed Ports includes: **Parallel, AppleTalk (with PostScript), SMB, LPD, IPP, WSD, and Port 9100**. Typical Page Description selections for each Port include: **Auto (auto select), PostScript, HP-GL/2, PCL and TIFF/JPEG**.
8. Click **Apply**.

Banner Sheet Printing

When documents are sent to print at the printer, a banner sheet is printed identifying the PC that sent the print job. The banner sheet is printed on paper from a selected tray. When the selected tray is empty, the printer will automatically switch to another tray with the same size paper and print the banner sheet from that tray. The printer will continue to print banner sheets from this secondary tray until the selected tray is refilled.

To set banner sheet printing and select a banner sheet paper tray:

1. Press the **Log In/Out** button on the control panel.
2. Enter the System Administrator's Login ID and Passcode if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Touch **System Settings**.
6. In the Group column, touch **Print Service Settings**.
7. In the Features column, touch **Other Settings**.
8. On the Other Settings screen, in the Items column, touch **Banner Sheet**, then touch **Change Settings**.
9. On the Banner Sheet screen, select one of the following:
 - Off
 - Start Sheet (the default choice)
 - End Sheet
 - Start Sheet & End Sheet
10. Touch **Save**.

11. To select a banner sheet tray:
 - a. On the Other Settings screen, in the Items column, touch **Banner Sheet Tray**, then touch **Change Settings**.
 - b. Select the tray that will hold the banner sheet paper.
 - c. **Tray 3** is the suggested choice, with **Tray 4** as the secondary tray.
12. Touch **Save**.

Set the Ethernet Speed

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Click the **Connectivity** folder, then the **Physical Connections** folder.
5. Click **Ethernet**.
6. Select your network speed from the drop down list.
7. Click **Apply**, then click **Reboot Machine**.

Configure TCP/IP Settings

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Click the **Connectivity** folder, then the **Protocols** folder.
4. Click **TCP/IP**.
5. Review the available selections as displayed on your screen and explained in the TCP/IP Configuration Selection List, below.
6. Accept the default Host Name, or type in your own unique Host Name for this printer.
7. Select the desired method for obtaining an IP Address.
8. If Static is selected, type in the addresses that apply for IP Address, Subnet Mask, and Gateway.

Caution: Changing the IP address for the printer will affect NetBIOS/IP, LPR/LPD, FTP, SNMP, and Port 9100 printing. It will also interrupt the ability to communicate with the printer using the CentreWare Internet Services. When you change the printer's IP Address, make sure to print out a Configuration Report so that you have a record of the TCP/IP addresses for use with computers that need to communicate with the printer using TCP/IP.

Note: If DHCP or BOOTP addressing method is selected, you cannot manually change the IP Address, Subnet Mask, or Gateway. Select Manual if you wish to manually enter these addresses.

Note: When using DHCP, set a reasonably long Lease Time for the IP Address so that the printer can be restarted, when taken out of service for maintenance, without being assigned a new IP Address.

Note: Upon rebooting, when the system comes up, if it can't locate a DHCP server on the network it will use whatever IP address it was previously configured with.

9. Determine the method to use to supply the DNS Server IP Addresses (to resolve Host Names with IP Addresses).
10. Determine whether or not Dynamic DNS should be enabled.
11. Click **Apply**, then click **Reboot Machine**.

TCP/IP Configuration Selection List

As displayed on your screen, the following selections are available for TCP/IP Configuration.

- **IP Mode:** Select the IP Mode that applies to your network environment.
- **General**
 - **Host Name:** The default entry assures a name that is unique to this device on the network.
 - **IP Address Resolution:** Use this drop down menu to select the method to use to assign IP Addresses. Select Static, DHCP, RARP, BOOTP, or DHCP/Autonet. Note that with the Autonet option selected, if a Windows 2000 client can't contact the DHCP server, it will assign itself an IP address from the 169.254.0.0 class B address space. This is also known as zero configuration, or Bonjour, networking. Make sure to check the Enabled box for Self Assigned Address at the bottom of your screen.
 - **IP Address:** To be filled in manually only when Static addressing is selected.
 - **Subnet Mask:** To be filled in manually only when Static addressing is selected.
 - **Gateway Address:** To be filled in manually only when Static addressing is selected.
- **Domain Name:** Enter the fully qualified domain name here. For example: xerox.com.
- **DNS Configuration**
 - **DNS Server Address Resolution:** If enabled with a check mark, the printer will contact the DHCP Server for the IP Addresses of up to three DNS Servers. If unchecked, this information must be entered manually.
 - Three DNS Address boxes are supplied for the manual entry of DNS Server addresses.
 - **Dynamic DNS Update:** If your DNS Server does not support dynamic IP address updates there is no need to enable this check box. Check the Overwrite box to enable DNS information overwriting.
 - **Generate Domain Search List Automatically:** A check box is provided for enabling automatic Domain searches.
 - **Domain Names 1,2,3:** Three text boxes are provided for the entry of Domains to search (for example, Xerox.com).
 - **Connection Timeout:** An entry box is provided for entering a Timeout for searches of Domains.
- **Zero Configuration Networking:** Used with DHCP/Autonet selected from the IP Address Resolution drop down menu, when this box is checked the printer will assign itself an IP address from the 169.254.0.0 class B address space.

Note: Changes to TCP/IP settings will not be applied until you restart (reboot) the printer.

Configure LPD

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Click the **Connectivity** folder, then the **Protocols** folder.
5. Select **LPD** in the directory tree.
6. The available selections include:
 - **Port Number:** (Default value is **515**.) As this is the port for the TCP Spooler assigned by the IANA (Internet Assigned Numbers Authority), the default value should not need to be changed.
 - **TBCP Filter:** (Displayed when PostScript is enabled).
 - **Connection Time-Out**
 - **Maximum Number of Sessions:** Enter the maximum number of simultaneously connected hosts for this interface.
7. Enter a **Time Out** value for jobs being sent to the printer through this port. This is the length of time that the controller will wait for an end of job command before printing the current job.
8. Click the **Apply** to accept the changes, or **Undo** to return the settings to their previous values.

Note: Changes to settings are not applied until you restart the printer. A Reboot Machine button is available on the Status Tab of CentreWare Internet Services.

Configure SNMP

It is possible to remotely define and modify GET (Read Only), SET (Read/Write), and Trap SNMP (Simple Network Management Protocol) community names for the printer. You can also enter the System Administrator's Name here for packet identification purposes.

SNMP Community Name properties that can be configured

- **Community Name (Read Only):** This is the password for SNMP GET requests from the SNMP Manager to the Agent in the printer. Applications, such as Xerox Printer Map or CentreWare Conductor, obtaining information from the printer by SNMP use this password.
- **Community Name (Read/Write):** This is the password for SNMP SET requests from the SNMP Manager to the Agent in the printer. Applications, such as Xerox Printer Map or CentreWare Conductor, which set information on the printer by SNMP use this password.
- **Community Name (Trap Notification):** This is the default password for SNMP TRAPS sent from the printer to the Manager by SNMP.

Configuring SNMP Community Names in CentreWare Internet Services

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Click the **Connectivity** folder, then the **Protocols** folder.
5. Select **SNMP Configuration** in the directory tree, and check the **Enable** box for the version desired.
6. Enter a name for **Community Name (Read Only)**, also known as GET.
7. Enter a name for **Community Name (Read/Write)**, also known as SET.

Caution: Caution: If you change the GET and/or SET Community Names, you must also change the names in all network applications that are communicating by SNMP with this printer.

8. Enter a name for **Community Name (Trap Notification)**. This is the default password for SNMP TRAPS sent from the printer to the Manager by SNMP.
9. Optionally enter the System Administrator's name for packet identification purposes.
10. Select a trap and click **Edit** in the Trap Notification Settings section.
11. Select your transport method (IPX or UDP) and fill in the trap destination information for your selected method.
12. Select the event(s) that you wish to report on by checking the applicable box(es).
13. Click **Apply** to accept the changes, or the **Undo** button to return the settings to their previous values.

Note: Changes to settings will not be applied until you restart the printer. A Reboot Machine button is available on the Status Tab of CentreWare Internet Services.

Configuring IPP

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Click the **Connectivity** folder, then the **Protocols** folder.
5. Select **IPP** in the directory tree.
6. The available selections include:
 - **Port Number Static Display:** This is the port number assigned by IANA (Internet Assigned Numbers Authority). The default value is **631**.
 - **Additional Port Number:** You can enter port **80** (HTTP) here as a backup port.
 - **TBCP Filter:** Displayed when PostScript is enabled.
 - **Administrator Mode:** This is disabled by default.
 - **DNS**
 - **Connection Time-out**
7. Select the DNS check box. The DNS Server will be available to resolve Host Names to IP Addresses, in support of printing with IPP.

8. Enter a **Connection Time Out** value for jobs being sent to the printer through this Port. This is the length of time that the Controller will wait for an end of job command before printing the current job.
9. Click **Apply** to accept changes, or **Undo** to return settings to their previous values.

Note: Setting changes are not applied until you restart the printer. There is a Reboot Machine button on the Status tab of CentreWare Internet Services.

Modify the HTTP (Internet Services) Settings

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Click the **Connectivity** folder, then the **Protocols** folder.
5. Select **HTTP** in the directory tree.
6. The available selections include:
 - **Port Number:** The default value is **80**, which is the HTTP Port number assigned by the IANA (Internet Assigned Numbers Authority). This default value should not need to be changed.
 - **Maximum Connections**
 - **Connection Time-out**
 - **Secure HTTP (SSL):** Select the check box to set all HTTP communications with the printer to encrypted communications. If you do this you will have to have a digital certificate installed on the printer. For more information see [Configuration of HTTPS \(SSL/TLS\) Communication Encryption](#) on page 76.
 - **Secure HTTP Port Number:** HTTP traffic will be routed to this port when using HTTP with SSL encryption.
7. In the **Maximum Connections** entry box, accept the default value, or enter a number for the maximum number of hosts (networked computers) that can be connected to the printer's HTTP Server (CentreWare Internet Services) at one time.
8. In the **Connection Time-Out** entry box, accept the default value, or enter the number of seconds that a browser connection can remain open without any activity.
9. Click **Apply** to apply setting changes, or **Undo** to return settings to their previous values.

Note: Setting changes are not applied until you restart the printer. There is a Reboot Machine button on the Status Tab of CentreWare Internet Services.

Configure WSD (Web Services on Devices)

As stated by Microsoft, WSD is Microsoft's implementation of the printers Profile for Web Services (DPWS) standard, a specification that enables devices, such as printers, cell phones, cameras, and home entertainment centers, to use standard Web-based protocols (HTTP and UDP) to discover one another, advertise their services over the IP (versions 4 or 6) network, and report on their operational status.

Typically, a device such as a network printer will use a small amount of flash memory to store WSD-related information. The WSD device then advertises a primary endpoint that can be located through WS-Discovery (via UDP) on a Windows Vista client.

The endpoint supplies metadata about itself through WS-Metadata Transfer. This information typically includes manufacturer, device information, and service host metadata (information on offered services).

WSD provides two way communication, enabling a printer to both receive jobs and to send status notifications to Windows clients when events occur, such as supplies running low.

To configure this printer for WSD, perform the following steps.

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Click the **Connectivity** folder, then the **Protocols** folder.
5. Select **WSD** in the directory tree.
6. The available selections include:
 - **Port Number:** Enter the port number between 1 and 65535. Port 80 is the recommended HTTP default. Do not use the numbers assigned to the other ports.
 - **TBCP Filter:** Check to enable TBCP Filter when PostScript data is to be processed. This is only available when the optional PostScript 3 kit is installed. When the transmission data includes binary data or EPS data, disable this. For Windows, follow the Output Protocol setting in the printer Settings tab of the Properties screen of the print driver.
 - **Data Receive Time-Out:** Enter the timeout period for receiving data from WSD clients between 1 and 65535 seconds in 1 second increments.
 - **Notification Delivery Time-Out:** Enter the timeout period for notification delivery to WSD clients between 1 and 60 seconds in 1 second increments.
 - **Maximum TTL:** The Time to Live setting (in seconds) for undelivered IP datagrams (such as UDP being used with WSD). Enter a value 1 and 10.
 - **Maximum Number of Subscribers:** Enter the maximum number of clients for reserved notification between 1 and 200.
7. Click **Apply** to apply setting changes, or the Undo button to return settings to their previous values.

Note: Setting changes are not applied until you restart the printer. There is a convenient button on the Status Tab of CentreWare Internet Services.

Configure Port 9100 (Raw Printing)

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Click the **Connectivity** folder, then the **Protocols** folder.
5. Select **Port 9100**.
6. The available selections include:
 - **TCP Port Number:** The default is **9100**. This does not need to be changed.
 - **TBCP Filter:** Displayed when PostScript is enabled.
 - **Connection Time-Out**
7. Enter a Time Out value for jobs being sent to the printer through this port. This is the length of time that the Controller will wait for an end of job command before printing the current job.
8. Click **Apply** to accept changes, or **Undo** to return settings to their previous values.

Note: Setting changes are not applied until you restart the printer.

Note: If Port 9100 is not displayed in the Properties Tab directory tree, click **Port Status** in the directory tree. Use your mouse to place a check mark in the check box on the Port 9100 line. Click the **Apply** button, then click the **Reboot Machine** button (always available on the Status Tab) to remotely reboot the printer.

IP Filtering (IP Address Restriction)

Using CentreWare Internet Services, access to the printer's Services can be restricted by Host IP Address.

To restrict device access, perform the following steps:

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Click the **Security** folder.
5. Select **IP Filtering**.
6. Choose which IP Filtering to apply depending upon the address space used with your network. Note that IPv4 is the traditional (xxx.xxx.xxx.xxx) address space used with TCP/IP networks.
 - **IP Filter Enablement:** If enabled with a check mark, access to the printer's services will be restricted to the list of IP Addresses and Subnet Masks specified by clicking the Edit button. If disabled (unchecked), host access to the printer is universal (unrestricted).
 - **Add or Edit:** When this button is clicked, a list of ten lines of IP Address and Subnet Mask entry boxes is displayed. Sometimes referred to as a restriction list, this list is used to supply the IP Addresses and Subnet Masks of up to ten hosts (individual computers) that are authorized to access the printer's services. All other hosts, not specified in this list, will be prevented from accessing the printer's services.

7. Click **Apply** when done.

Note: Changes to settings are not applied until you restart the printer. A Reboot Machine button is available on the Status Tab of CentreWare Internet Services.

Configure EtherTalk (AppleTalk)

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Click the **Connectivity** folder, then the **Protocols** file folder.
5. Select **EtherTalk** in the directory tree.

Note: If EtherTalk is not displayed in the Properties Tab directory tree, click the **Port Settings** in the directory tree. Use your mouse to place a check mark in the check box on the **EtherTalk** line. Click the **Apply** button.

6. The available selections include:
 - Printer Name
 - Zone Name
7. Enter the name that you wish to assign to this printer. This is the name that will appear in the Chooser.
8. Either accept the default zone of * which lets the closest router assign the printer to a zone, or assign the printer to a zone (with a 32 character naming limit).
9. Click the **Apply** button to accept changes, or **Undo** to return settings to their previous values.

Note: Changes to settings are not applied until you restart the printer. A Reboot Machine button is available on the Status Tab of CentreWare Internet Services.

E-mail, SMTP, and POP3 Settings

You can change E-mail, SMTP, and POP3 settings in CentreWare Internet Services. For complete information on required E-mail settings, see [Scan to E-mail](#) on page 100.

Bonjour (if available)

Bonjour (also called Zero-Configuration Networking) allows devices to communicate using 169.254/16 IPv4 addressing, over the same physical or logical (such as in ad hoc, or isolated (non- DHCP) networks).

When the Bonjour protocol is enabled on ALL communicating devices, and those devices are connected, Host names of the individual devices will be resolved to IPv4 addressing, without the use of a DNS server, and IP communications can then take place.

To view the Host Name and Printer Name automatically assigned to this machine under Bonjour, do the following:

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Click the **Properties** tab.
5. Click the **Connectivity** folder, then the **Protocols** folder.
6. Click **Bonjour**.

Note: If Bonjour is not displayed in the Properties tab, click **Port Settings** and check **Bonjour**. Click **Apply**. If Bonjour is not available in the Port Settings list, click **TCP/IP** in the **Protocols** folder, and scroll to the bottom of the displayed page to Zero-Configuration networking.

7. Make a note of the Host Name and Printer Name for reference in working with other Bonjour (zero-configuration) connected computers.

Note: You can change these names, however the Host Name must be unique on the network. The automatically generated Host Name should assure its uniqueness. The Host Name has a 32 character limit, while the Printer Name has a 62 character limit. If you change either name, be sure to click Apply. You can reboot the printer remotely using the **Reboot Machine** button, which is available on the Status Tab of CentreWare Internet Services.

Support Tab

Click **Change Settings** to edit the contact information.

Network Management

4

This chapter includes:

- [General](#) on page 42
- [TCP/IP Protocol Configuration](#) on page 43
- [TCP/IP LPD Enablement](#) on page 46
- [TCP/IP Dynamic Addressing](#) on page 48
- [IP Filtering \(IP Address Restriction\)](#) on page 50
- [Configure Port 9100 \(Raw Printing\)](#) on page 51
- [Microsoft \(NetBIOS over IP\) Networks](#) on page 52
- [IPP Configuration](#) on page 54
- [EtherTalk \(AppleTalk\) Configuration](#) on page 57
- [AS400 Printing](#) on page 59

General

Ethernet Speed Setting

The printer's Ethernet Interface has speed settings of Auto (10/100Base-TX, 100Base-TX (Half or Full Duplex), and 10Base-TX (Half or Full Duplex). By default the Ethernet Port Configuration is set to **Auto**.

To Change the Network Speed

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Press **Connectivity & Network Setup**.
6. Press **Protocol Settings**.
7. When the Protocol Settings menu displays, the selection line labeled **Ethernet Rated Speed**.
8. Press the **Change Settings** button.
9. On the Ethernet Rated Speed screen note which one of the buttons is highlighted as the current setting for Ethernet speed. The available settings are **Auto** (default), 100 Mbps Full Duplex, 100 Mbps Half Duplex, 10 Mbps Full Duplex, 10 Mbps Half Duplex.
10. To change settings, press your setting of choice, then press the **Save** button.
11. To exit the Ethernet Setting screen, without making any changes, press the **Cancel** button.
12. To exit the Protocol Settings menu, returning to the Tools tab, press the **Close** button.
13. Wait several seconds and the Auto Clear service should log you out.

Note: Note that if you changed any settings in the Protocol Settings menu, the printer will automatically reboot to register and enable your new settings.

TCP/IP Protocol Configuration

To view or change the settings of the printer's TCP/IP Protocol Configuration, perform the following steps:

Accessing TCP/IP Protocol Settings at the Printer

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Press **Connectivity & Network Setup**.
6. Press **Protocol Settings**.
7. When the Protocol Settings menu displays, note that with the exception of selection one (Ethernet Rated Speed), the remaining selections are specific to TCP/IP address settings. Choose your setting by pressing the numbered, horizontal selection line on the touch screen. Note that the current status of each setting is shown on the applicable line. After pressing a selection line, to access available settings press the **Change Settings** button in the lower right corner of the touch screen.

TCP/IP – IP Mode

1. Press the selection line labeled **TCP/IP – Mode**.
2. Press **Change Settings**.
3. Select the IP Mode best suited to your network environment. Note that your choices include IPv4 Mode, IPv6 Mode, and Dual Stack. The printer supports IPv6 addressing with an automatically-built Local Address for broadcasting to routers that can supply the network layer configuration parameters.
4. For traditional networks (using an address space of xxx.xxx.xxx.xxx), select IPv4 and press **Save**.
5. Note that the printer may reboot.

IP Address Resolution

1. On the Protocol Settings menu, press the selection line labeled **IPv4 (or other mode) Address Resolution**.
2. Press the **Change Settings** button.
3. On the settings screen, note which one of the buttons is highlighted as the current setting for the TCP/IP Addressing method. The available settings are DHCP, BOOTP, RARP, DHCP/Autonet, and STATIC. **DHCP/Autonet** is the default setting.
4. To change settings, press your selection of choice, then press the **Save** button.
5. To exit the screen, without making any changes, press the **Cancel** button.
6. Press **Close** and, if you made any changes, the system will reboot.

IPv4 IP Address

1. Used for static IP Addressing (with STATIC selected as your addressing method), on the Protocol Settings menu, press the selection line labeled **IPv4 Address**. Note that the IP Address may be viewed, but not changed, with dynamic addressing enabled.
2. Press the **Change Settings** button.
3. On the settings screen, use the numeric keypad to enter the appropriate IP Address.
4. To save settings, press the **Save** button.
5. To exit the screen, without making any changes, press the **Cancel** button.

IPv4 Subnet Mask

1. Used for static IP Addressing (with STATIC selected as your addressing method), on the Protocol Settings menu, press the selection line labeled **IPv4 Subnet Mask**. Note that the Subnet Mask may be viewed, but not changed, with dynamic addressing enabled.
2. Press the **Change Settings** button.
3. On the settings screen, use the numeric keypad to enter the appropriate Subnet Mask.
4. To save settings, press the **Save** button.
5. To exit the screen, without making any changes, press the **Cancel** button.

IPv4 Gateway Address

1. Used for static IP Addressing (with STATIC selected as your addressing method), on the Protocol Settings menu, press the selection line labeled **IPv4 Gateway Address**. Note that the Gateway address may be viewed, but not changed, with dynamic addressing enabled.
2. Press the **Change Settings** button.
3. On the settings screen, use the numeric keypad to enter the appropriate gateway.
4. To save settings, press the **Save** button.
5. To exit the screen, without making any changes, press the **Cancel** button.

IPv4 IP Filter (IP Address Restriction)

Note: Before enabling the IPv4 IP filter, open CentreWare Internet Services on your computer. This will prevent you from accidentally disabling communication with the printer from your computer (blocking your own IP address).

1. In the Protocol Settings menu, press the selection line labeled **IPv4 IP Filter**.
2. Press the **Change Settings** button.
3. On the settings screen, note which of the two buttons is highlighted as the current setting for IP Address restriction. The available settings are **Enabled** or **Disabled**. **Disabled** is the factory default setting.
4. To change settings, press your setting of choice, then press the **Save** button.
5. To return to the Protocol Settings menu, without making changes, press the **Cancel** button.

Exiting the Protocol Settings Menu and Returning to the Tools Tab

1. To exit the Protocol Settings menu, returning to the Tools tab, press the **Close** button in the upper right corner of the Protocol Settings menu screen.
2. Wait several seconds and the Auto Clear service should log you out.

Note: If you changed any settings in the Protocol Settings menu, the printer will automatically reboot to register and enable your new settings.

TCP/IP LPD Enablement

To support TCP/IP printing through the computer's LPR port in the case of Windows XP, the LPD (Line Printer Daemon) must be enabled at the printer.

Changing LPD Settings at the Printer

To view or change the printer's LPD setting, perform the following steps:

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Press **Connectivity & Network Setup**.
6. Press **Port Settings**.
7. When the Port Settings menu displays, press the selection line labeled **LPD**.
8. Press the **Change Settings** button in the lower right corner of the Port Settings menu screen.
9. When the LPD selections menu displays, note that you have a choice of setting selections by numbered horizontal lines, with the current status of each setting shown. The Close button in the upper right corner of the screen returns you to the Port Settings menu. After pressing the selection, to access available settings press the **Change Settings** button in the lower right corner of the touch screen.

Port Status (LPD Enablement)

1. On the LPD selections menu, press the selection line labeled **Port Status**.
2. Press the **Change Settings** button.
3. On the LPD Port Status screen, note which of the two buttons is highlighted as the current setting for LPD Enablement. The available settings are Enabled or Disabled. For the LPD to function, it must be set to **Enabled**.
4. To change settings, press your setting of choice, then press the **Save** button.
5. To exit the screen, without making any changes, press the **Cancel** button.

LPD Port Number

1. On the LPD selections menu, press the selection line labeled **LPD Port Number**.
2. Press the **Change Settings** button.
3. Note the setting of **Port 515**, which is the recommended, default value. To change the setting, use the keypad displayed on screen.
4. To change settings, press your setting of choice, then press the **Save** button.
5. To exit the screen, without making any changes, press the **Cancel** button.

LPD Maximum Number of Sessions

1. Select **LPD – Maximum Number of Sessions**.
2. Press **Change Settings**.
3. Select a number from 1 to 10.
4. To change settings, press **Save**.
5. To exit, without making changes, press **Cancel**.

Exiting the LPD Selections Menu

To exit the LPD selections menu, which returns you to the Port Settings menu, press the **Close** button in the upper right corner of the touch screen.

Exiting the Port Settings Menu and Returning to the Tools Tab

1. To exit the Port Settings menu, returning to the printer's Tools screen, press the **Close** button in the upper right corner of the Port Settings menu screen.
2. Wait several seconds and the Auto Clear service should log you out.

Note: If you changed any settings in the Port Settings menu, the printer will automatically reboot to register and enable your new settings.

TCP/IP Dynamic Addressing

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Click the **Connectivity** folder, then the **Protocols** folder.
5. Click **TCP/IP**.
6. Review the available selections as displayed on your screen and explained in the TCP/IP Configuration Selection List, below.
7. Accept the default Host Name, or type in your own unique Host Name for this printer.
8. Select **DHCP** or **BOOTP** as your method for obtaining an IP Address.

Caution: Changing the IP address for the printer will affect LPR/LPD, FTP, SNMP, and Port 9100 printing. It will also interrupt the ability to communicate with the printer using CentreWare Internet Services. When you change the printer's IP Address, make sure to print out a Configuration Report so that you have a record of the TCP/IP addresses for use with computers that need to communicate with the printer using TCP/IP.

Note: When using DHCP, set a reasonably long Lease Time for the IP Address so that the printer can be shut down and serviced, when required, without being continuously assigned a new IP Address.

Note: Upon rebooting, when the system comes up, if it can't locate a DHCP server on the network it will use whatever IP address it was previously configured with.

9. Determine the method to use to supply the DNS Server IP Addresses (to resolve Host Names with IP Addresses).
10. Determine whether or not Dynamic DNS should be enabled.
11. Click **Apply** when done.

TCP/IP Configuration Selection List

As displayed on your screen, the following selections are available for TCP/IP Configuration.

IP Mode

Select the IP Mode that applies to your network environment.

General

- **Host Name:** The default entry assures a name that is unique to this device on the network.
- **IP Address Resolution:** Use this drop down menu to select the method to use to assign IP Addresses. Select STATIC, DHCP, RARP, BOOTP, or DHCP/Autonet.

Note that with the Autonet option selected, if a Windows 2000 client can't contact the DHCP server, it will assign itself an IP address from the 169.254.0.0 class B address space. This is also known as zero configuration, or Bonjour, networking. Make sure to check the Enabled box for Self Assigned Address at the bottom of your screen.

- **IP Address:** To be filled in manually only when Static addressing is selected.
- **Subnet Mask:** To be filled in manually only when Static addressing is selected.
- **Gateway Address:** To be filled in manually only when Static addressing is selected.

Domain Name

Enter the fully qualified domain name here. For example: xerox.com.

DNS Configuration

- **DHCP Address Resolution:** If enabled with a check mark, the printer will contact the DHCP Server for the IP Addresses of up to three DNS Servers. If unchecked, this information must be entered manually.
- **DNS Server Addresses**
- **Dynamic DNS Update:** If your DNS Server does not support dynamic IP address updates there is no need to enable this check box. Check the Overwrite box to enable DNS information overwriting.
- **Generate Domain Search List Automatically:** A check box is provided for enabling automatic Domain searches.
- **Domain Names 1,2,3:** Three text boxes are provided for the entry of Domains to search (for example, Xerox.com).
- **Connection Timeout:** An entry box is provided for entering a Timeout for searches of Domains.

Zero Configuration Networking

Used with DHCP/Autonet selected from the IP Address Resolution drop down menu, when this box is checked the printer will assign itself an IP address from the 169.254.0.0 class B address space.

Changes to TCP/IP settings will not be applied until you restart (reboot) the printer.

IP Filtering (IP Address Restriction)

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Click the **Properties** Tab.
5. Click the **Security** folder.
6. Select **IP Filtering**.
7. In either the IPv4 area or the IPv6 area, complete the following steps.

Note: IPv4 is the traditional (xxx.xxx.xxx.xxx) address space used with TCP/IP networks.

- a. To allow universal, unrestricted access to the printer, clear the **Enabled** check box.
- b. To restrict access to specific IP Addresses and Subnet Masks:
 - Click the **Enabled** check box.
 - Click **Add** or **Edit** to add or edit an IP address from which you intend to accept jobs. Click **Apply**.

Note: IP filtering will not work until at least one IP address has been added. This prevents turning off ALL access to the printer.

- Click **Delete** to delete an IP address. Click **Apply**.
8. Click **Apply** when done.
 9. Send a test job.

Configure Port 9100 (Raw Printing)

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Click the **Connectivity** folder on the left, then the **Protocols** folder.
5. Select **Port 9100** in the directory tree.
6. The available selections include:
 - **TCP Port Number:** The default value is **9100**. This typically does not need to be changed.
 - **End of Job Timeout:** Enter a **Time Out** value for jobs being sent to the printer through this Port. This is the length of time that the Controller will wait for an end of job command before printing the current job.
 - **TBCP Filter:** A check box (displayed when PostScript is enabled).
7. Click the **Apply** button to accept changes, or the **Undo** button to return settings to their previous values.

Note: Setting changes are not applied until you restart the printer.

Note: If Port 9100 is not displayed in the Properties Tab directory tree, click the **Port Status** in the Connectivity folder in the tree. In the Port Status table, use your mouse to place a check mark in the check box on the Port 9100 line. Click the **Apply** button, then click the **Reboot** button (always available on the Status Tab) to remotely reboot the printer.

Microsoft (NetBIOS over IP) Networks

Before You Start

1. Print a Configuration Report. See [Configuration Report](#) on page 22.
2. Referring to the report, verify that SMB is enabled. To enable SMB at the printer, if required, follow the procedure below.
3. Referring to the Configuration Report, verify that DNS is enabled. The use of Naming Servers is required to resolve NetBIOS device names to IP addresses for packet routing over the TCP/IP network.
4. To enable the printer to communicate with the Naming Servers, see [TCP/IP Dynamic Addressing](#) on page 48.
5. When using WINS or DNS, be sure to refer to your Server Operating System documentation for the appropriate procedure to use to enable NetBIOS name to IP address resolution on the Server.

Enabling SMB Setting at the Printer

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Press **Connectivity & Network Setup**.
6. Press **Port Settings**.
7. When the Port Settings menu displays, press the **SMB** selection line.
8. Press the **Change Settings** button in the lower right corner of the Port Settings menu screen.
9. When the SMB selection menu displays, note that you have only one setting available on a single, numbered horizontal line. Press this selection line.
10. Press the **Change Settings** button.
11. On the SMB Port Status screen, note which of the two buttons is highlighted as the current setting for SMB Enablement. The available settings are Enabled or Disabled. To enable SMB at the printer, select the **Enabled** setting.
12. Press the **Save** button on the touch screen, which returns you to the SMB selection menu. (To exit the screen, without making changes, press the **Cancel** button.)
13. Exit the SMB selection menu and return to the Port Settings menu by pressing the **Close** button in the upper right corner of the touch screen.
14. Exit the Port Settings menu by pressing the **Close** button in the upper right corner of the Port Settings menu screen.
15. To exit the Tools screen, wait several seconds for the Auto Clear service to log you out.

Viewing or Configuring the SMB Host Name or WINS Server

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Click the **Properties** Tab.
5. Click the **Connectivity** folder, then the **Protocols** folder.
6. Select **Microsoft Networking** in the directory tree.
7. The available selections include:
 - **Transport**
 - **Maximum Connections**
 - **Workgroup Name**
 - **SMB Host Name**
 - **TBCP Filter:** (Displayed when PostScript is enabled).
 - An enabling check box for supporting **Unicode** (supplying the Host name and Workgroup name in Unicode characters during SMB transmission).
 - An enabling check box for **Auto Master Mode**. When the master browser for the workgroup cannot be found, if this box is checked, this host will become the master browser.
 - An enabling check box for **Password Encryption** (during SMB transmission).
 - **WINS Server:** For using a WINS Server to resolve NetBIOS names (SMB host names) to IP addresses.
8. Select **TCP/IP** from the Transport menu.
9. Accept the default value, or enter a value from 3 to 10, for maximum number of connections allowed in Maximum Connections.
10. Accept the Workgroup name shown, or enter your own workgroup name.
11. Either accept the default SMB Host Name, which is automatically built by the printer to assure the name's uniqueness, or enter your preferred name. Note that this will be the NetBIOS name that is resolved by the Naming Server (DNS or WINS) to an IP Address for the printer.
12. If using a WINS server, enable the **WINS Server Address Resolution** check box. When enabled, the printer will contact the DHCP Server for the IP Addresses of the Primary and Secondary WINS (Windows Internet Naming Service) Servers. Note that two IP Address lines, with entry boxes, are provided for manual entry (when DHCP is not selected).
13. To apply setting changes, click the **Apply** button, then click the **Reboot** button to reboot the printer. To exit without making any changes, click the **Undo** button.

Note: To use the printer's NetBIOS name over the TCP/IP Network, the DNS and WINS Servers must be configured for NetBIOS name to IP address resolution. Also, make sure that the printer is informed of the addresses of the DNS/WINS Servers. For more information see [TCP/IP Dynamic Addressing](#) on page 48 and [Microsoft \(NetBIOS over IP\) Networks](#) on page 52.

Setting Up a Computer to Print Directly to the printer

See [Microsoft \(NetBIOS over IP\) Networks](#) on page 52.

IPP Configuration

The Internet Printing Protocol provides a convenient way to print over the Internet or Intranet using the printer's IP address. To support this type of printing, make sure that Port 9100 is enabled at the printer. Click **Port Status** in the Connectivity folder on the Properties Tab of CentreWare Internet Services and make sure that the check box on the Port 9100 line is checked. The Internet Printing Protocol must also be enabled at the printer, and the Internet Print Service must be available and installed on the individual computer's version of Windows. IPP support is already built into Windows operating systems. For other desktop operating systems it is available as a download from Microsoft at www.microsoft.com. The final step is to install the IPP print driver. For more information, see [Print Driver Installation](#) on page 13.

Changing IPP Settings at the Printer

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Press **Connectivity & Network Setup**.
6. Press **Port Settings**.
7. Press the **IPP** selection line on the Port Settings menu.
8. Press the **Change Settings** button in the lower right corner of the Port Settings menu screen.
9. When the IPP selection menu displays, note that you have two selections available on numbered horizontal lines. The first selection is Port Status. The second is IPP – Added Port Number. The Close button in the upper right corner of the screen returns you to the Port Settings menu. After pressing the horizontal line selection, to access available settings press the **Change Settings** button in the lower right corner of the touch screen.

Port Status (IPP Enablement)

1. On the IPP selection menu, press **Port Status**.
2. Press the **Change Settings** button.
3. On the IPP Port Status screen, note which of the two buttons is highlighted as the current setting for IPP Enablement. The available settings are Enabled or Disabled. To print with IPP, this setting must be **Enabled**.
4. To change settings, press your setting of choice, then press the **Save** button.
5. To exit the screen, without making any changes, press the **Cancel** button.

IPP – Added Port Number

Note: If you just enabled the IPP port, the machine may have to reboot before you can view or change the Port Number.

1. On the IPP Selection menu, press the selection line labeled **IPP – Added Port Number**.
2. Press the **Change Settings** button.
3. Use the displayed keypad to add a Port Number, such as **80** (the displayed default for HTTP).
4. To save the setting, press **Save**.
5. To exit the screen, without making any changes, press **Cancel**.

Exiting the IPP Selection Menu

To exit the IPP selection menu, which returns you to the Port Settings menu, press the **Close** button in the upper right corner of the touch screen.

Exiting the Port Settings Menu and Returning to the Tools Tab

1. To exit the Port Settings menu, returning to the Tools screen, press the **Close** button in the upper right corner of the Port Settings menu screen.
2. Wait several seconds and the Auto Clear service should log you out.

Note: If you changed any settings in the Port Settings menu, the printer will automatically reboot to register and enable your new settings.

Configuring IPP Settings with CentreWare Internet Services

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Click the **Connectivity** folder, then the **Protocols** folder.
5. Click **IPP**.
6. The available selections include:
 - **Port Number:** The default value is **631**. This is the port number assigned by IANA (Internet Assigned Numbers Authority).
 - **Add Port Number**
 - **TBCP Filter:** Displayed when PostScript is enabled.
 - **Administrator Mode:** This is **disabled** by default.
 - **DNS Enablement**
 - **Connection Timeout**
7. Verify that **DNS** is checked (**Enabled**) by default. If enabled, the DNS Server will resolve Host Names to IP Addresses, in support of printing with IPP.

Network Management

8. Enter a **Time Out** value for jobs being sent to the printer through this Port. This is the length of time that the Controller will wait for an end of job command before printing the current job.
9. Click the **Apply** button to accept changes, or the Undo button to return settings to their previous values.

Note: Setting changes are not applied until you restart the printer.

EtherTalk (AppleTalk) Configuration

The EtherTalk Protocol enables computer to printer communications over the EtherTalk (AppleTalk) network.

Changing EtherTalk Settings at the Printer

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Press **Connectivity & Network Setup**.
6. Press **Port Settings**.
7. Press the **EtherTalk** selection line on the Port Settings menu.
8. Press the **Change Settings** button in the lower right corner of the Port Settings menu screen.
9. When the EtherTalk selection menu displays, note that you have only one selection available on a single, numbered horizontal line, with the current status of this setting shown. The **Close** button in the upper right corner of the screen returns you to the Port Settings menu. After pressing the horizontal line selection, to access available settings press the **Change Settings** button in the lower right corner of the touch screen.

Port Status (EtherTalk Enablement)

1. On the EtherTalk selection menu, press the selection line labeled **Port Status**.
2. Press the **Change Settings** button.
3. On the Port Status screen, note which of the two buttons is highlighted as the current setting for EtherTalk Enablement. The available settings are Enabled or Disabled. To print with EtherTalk, this setting must be **Enabled**.
4. To change settings, press your setting of choice, then press the **Save** button.
5. To exit the screen, without making any changes, press the **Cancel** button.

Exiting the EtherTalk Selection Menu

To exit the EtherTalk selection menu, which returns you to the Port Settings menu, press the **Close** button in the upper right corner of the touch screen.

Exiting the Port Settings Menu and Returning to the Tools Tab

1. To exit the Port Settings menu, returning to the Tools screen, press the **Close** button in the upper right corner of the Port Settings menu screen.
2. Wait several seconds for the Auto Clear service to log you out.

Note: If you changed any settings in the Port Settings menu, the printer will automatically reboot to register and enable your new settings.

Configuring EtherTalk Settings with CentreWare Internet Services

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Click the **Connectivity** folder, then the **Protocols** folder.
5. Click **AppleTalk (EtherTalk)**.

Note: If this selection is unavailable, click **Port Status**, check the EtherTalk box, then click **Apply**.

6. The available selections include:
 - **Printer Name:** Enter the name that you wish to assign to this Printer. This is the name that will appear in the Chooser.
 - **Zone Name:** Either accept the default zone of * which lets the closest router assign the printer to a zone, or assign the printer to a zone (with a 32 character naming limit).
7. Click **Apply** to accept changes, or **Undo** to return settings to their previous values.

Note: Setting changes are not applied until you restart (reboot) the printer.

AS400 Printing

AS400 Raw TCP/IP Printing to Port 9100 (CRTDEVPRT)

This is the procedure to set up printing to a printer from an AS/400 using the SNMP drivers. This procedure is intended for users familiar with the AS/400 system, especially those experienced with printing in an AS/400 environment. The AS/400 must run V4R5 of OS/400 so that the SNMP drivers are present (or V4R3/V4R4 with the most current PTFs installed). The printer must have port 9100 enabled.

To enable port 9100

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
 2. Click the **Properties** tab.
 3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
 4. Click the **Connectivity** folder.
 5. Click the **Protocols** folder.
 6. Select **Port 9100** in the directory tree.
 7. Ensure the **Enabled** box is checked to enable Raw TCP/IP Printing.
 8. Leave the **TCP Port Number** set to 9100 for Port 1.
 9. Leave the **Bidirectional** and **Maximum Connections** settings at their default values.
 10. Set the **End of Job Timeout** to the number of seconds to wait before processing a job without an End Of Job indicator.
 11. Leave the **PDL Switching Enabled** box at its default value.
 12. Click **Apply** to accept the changes, **Undo** to return the settings to their previous values, or **Default All** to enter printer defaults for all settings (recommended).
- Note:** The settings are not applied until you restart the printer.
13. Click the **Status Tab**.
 14. Click the **Reboot Machine** button and click **OK** to reboot the printer. The network controller takes approximately 5 minutes to reboot and network connectivity will be unavailable during this time.

To create a device description

To create a device description from your terminal's command line.

1. Select the F-4 key to prompt the CRTDEVPRT command. Enter the following parameters:

- **Device Description:** Xeroxprinter
- **Device Class:** *lan
- **Device Type:** 3812
- **Device Model:** 1

2. Press Enter to continue, and enter the following parameters:

- **Lan Attachment:** *IP
- **Port Number:** 9100
- **Online at IPL:** *yes
- **Font Identifier:** 11
- **Form Feed** *autocut

Note: For some versions of AS400, the default may match some of these parameters.

3. Leave all other parameters at their defaults, press Enter, and enter the following parameters:

- **Activation Timer:** 170
- **Inactivity Timer:** *sec15
- **Host Print Transform:** *yes

4. Press Enter to continue, and enter the following parameter:

- **Manufacturer Type and Model:** *hp5si

5. Leave the remaining parameters set to their default values and press Enter to continue. Enter the following parameters:

- **Remote Location:** Enter the IP address of the printer.
- **User defined options:** *IBMSHRCNN
- **System driver program:** *IBMSNMPDRV

6. Leave all other options set to the default values and press **Enter**. A message indicates that you created the printer Xeroxprinter.

7. Set the printer on and start a print writer. Then place a spool file in the appropriate queue to test the printer.

Security

5

This chapter includes:

- [Authentication](#) on page 62
- [Scheduled Image Overwrite](#) on page 84
- [Secure Watermark](#) on page 85
- [Secure Print](#) on page 87
- [Xerox Common Access Card](#) on page 89

Authentication

Overview

Procedure

1. Set up authentication
2. Set up authorization (LDAP authorization access)
3. Set up access control (device access, service access)

Users Types

- **Authenticated Users:** Are registered with the printer. When using a restricted service, authenticated users are prompted to type their user IDs on the authentication screen.
- **Guest Users:** Are permitted to use the printer using the Guest password set by the System Administrator.

Authentication Types

- **No Login Required:** Users can access any service without restriction. This is the default type for the printer.
- **Login to Local Accounts:** This type uses the user information registered on the printer to manage authentication.

Note: Setting Login Type to Login to Local Accounts automatically sets Accounting Type to Local Accounting. Local Accounting cannot be disabled while Login Type is set to Login to Local Accounts.

- **Login to Remote Accounts:** Network Access (authentication) uses the user information managed on a remote accounting service to manage authentication. Network Access allows a unified management of user information for multiple devices.

Note: When registering user information on a remote authentication server, use up to 32 characters for a user ID and up to 128 characters for a password. For SMB, the password limit is 32 characters.

- **Login Type set to Xerox Secure Access:** This authentication type is used for third-party solutions that support Xerox Secure Access.

Effects of Authentication on Job Flow Sheets and Folders

When Login to Local Accounts is enabled, even if authentication is not enabled for the copy, fax, scan, or print services, authentication will be required for folder and job flow sheet operations.

For full details on the effects of Authentication on Job Flow Sheets and Folders, refer to that topic in the printer's User Guide.

Configuring Authentication

Preparations:

1. Ensure that the printer is on and connected to the network.
2. Ensure that the TCP/IP and HTTP protocols are configured on the printer, and you can access CentreWare Internet Services. For more information see [CentreWare Internet Services](#) on page 23.
3. Ensure that the Authentication Server to be used is functional on your network. Refer to your manufacturer's documentation for instructions to complete this task.

Configuring Local Machine Authentication

When Login to Local Accounts is enabled, the System Administrator can define pass codes for authorized users (and guests, when the selection is available) to use to authenticate to the system and access restricted services.

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Select the **Security** folder, then **Authentication Configuration**. Enter your user name and password at the prompt (default: **admin, 1111**).
5. Select **Login to Local Accounts** from the **Login Type** drop down list.
6. Select the **Print Stored File from Folder**, or **Folder to PC/Server Enabled** check boxes to enable these services.
7. Select the **Non-account Print Enabled** check box if you want to enable printing for people without accounts.
8. Click **Apply**, then click **Reboot Machine**.
9. Refresh your browser, click the **Security** folder, then **Authentication Configuration**.
10. Click **Next**.
11. To create or edit a user account, enter an Account Number in the **Account Number** box and click **Edit**. You can have up to 1000 user accounts.
12. Set the following for the user.
 - **Feature Access:** Copy Service, Fax Service, Scan Service, Print Service
 - **User Role:** System Administrator, Account Administrator, User, Authorization Group

Note: Authorization Group is a feature that has its own configuration options in CentreWare Internet Services.

Note: Set each Feature Access as desired. Do not set a Feature Access to No Access, unless you wish to deny user access to that specific feature.

13. Click **Apply**.

To configure Local Machine Authentication at the printer:

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Touch **Authentication/Security Settings**, then **Authentication**.
6. Touch **Login Type** to change the Login Type, or touch **Access Control**, then **Feature Access** to change Feature Access.

To view, create and edit user accounts at the printer:

1. Touch **Account** in the **Tools** tab.
2. Touch **View User Accounts**.

Configuring Remote Authentication

When Login to Remote Accounts is enabled, users of the printer will be asked to provide a user name and password to be validated by the designated authentication server. If this validation is successful, the printer and any restricted services will be available for individual use.

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Select the **Security** folder, then the **Authentication Configuration**. Enter your user name and password at the prompt (default: **admin, 1111**).
5. Select **Login to Remote Accounts** from the Login Type drop down list.
6. Select the **Print Stored File from Folder**, or **Folder to PC/Server Enabled** check boxes to enable these services.
7. Select the **Non-account Print Enabled** check box if you wish to allow printing for a user without and account.
8. If you want to allow guest access to the printer, select **On** next to **Guest User**. The default setting is **Off**. If you select **On**, enter a Guest user name and a passcode (4 – 12 alphanumeric characters). Retype the passcode.
9. To have the printer cache remote account information, select **Enabled** next to **Save remote accounts in this machine**. Specify if you want to have the cached information deleted (click **Delete Remote Accounts**), and specify how often you want to delete cached information by selecting a deletion day, month and time.
10. Click **Apply**, then **Reboot Machine**.
11. Click **Next**.
12. Click **Configure** for Authentication System.
13. Select your system (Kerberos (Windows 2000), Kerberos (Solaris), LDAP, SMB, or Authentication Agent) from the **Authentication System Settings** drop down list and click **Apply**.
14. Enter the **Server Response Time-Out**, and the **Search Time-Out**.

15. Select the **Enabled** check box next to Assign UPN (User Principal Name) if desired.
16. Click **Reboot Machine**.

Configure Remote Authentication for a Kerberos Server (Windows 2000 or Solaris)

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Click the **Security** folder.
5. Click the **Remote Authentication Servers** folder. Enter your user name and password at the prompt (default: **admin, 1111**).
6. Click Authentication System and pick **Kerberos (Windows 2000)** or **Kerberos (Solaris)** from the drop down list. Click **Apply**, and click **Reboot Machine**.
7. Navigate back to the **Remote Authentication Servers** folder and click **Kerberos Server**.
8. Under Kerberos Server 1 (Default), enter the **Primary Server Name / IP Address**, **Primary Port Number** (default port for a Kerberos server is **88**), and the **Domain Name** (Realm name).

Note: Realm name for a Kerberos (Solaris) server should be in upper case. Example: YOURDOMAIN.NET

9. Enter the IP Address of the Primary Server.
10. The Secondary Server information is optional.
11. Enter details for up to 4 alternate Domain Controllers and backups, if required.
12. Click **Apply**, and supply the Administrator User name and password if prompted.

Configure Remote Authentication for SMB

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Click the **Security** folder.
5. Click the **Remote Authentication Servers** folder. Enter your user name and password at the prompt (default: **admin, 1111**).
6. Click **Authentication System** and pick **SMB** from the **Authentication System Settings** drop down list.
7. Enter the **Server Response Time-Out**, and the **Search Time-Out**.
8. Select the **Enabled** check box next to **Assign UPN (User Principal Name)** if desired.
9. Click **Apply**, and click **Reboot Machine**.
10. Click **SMB Server**.
11. From the **SMB Server Setup** drop down menu, select your desired method. The selections include: By Domain Name, and By Domain Name and Server Address / IP Address.
12. Enter the Domain name (up to 15 characters) in the **Domain Name** box, for every Domain Controller specified. This entry is required regardless of the selection made from the SMB Server Setup drop down menu.

Note: FQDN requires DNS and SMB Host Name requires WINS to be enabled on the printer.

13. Enter the IP Address, FQDN, or SMB host name of the domain controller (up to 64 characters) in the **SMB Server 1 Server Name / IP Address** box (if By Domain Name and Server Address / IP Address was selected for SMB Server Setup).
14. Enter the IP Address, FQDN, or SMB host name of up to 4 additional SMB servers, if applicable.

Note: FQDN requires DNS and SMB Host Name requires WINS to be enabled on the printer.

15. Click **Apply**.

Configure Remote Authentication for LDAP

1. Set up the LDAP Server. For information about setting up an LDAP server, see [LDAP Server Configuration](#) on page 106.
2. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
3. Click the **Properties** tab.
4. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
5. Click the **Security** folder.
6. Click the **Remote Authentication Servers** folder. Enter your user name and password at the prompt (default: **admin, 1111**).
7. Click Authentication System and pick **LDAP** from the **Authentication System Settings** drop down list.
8. Enter the **Server Response Time-Out**, and the **Search Time-Out**.
9. Select the **Enabled** check box next to **Assign UPN (User Principal Name)** if desired.
10. Click **Apply**, and click **Reboot Machine**.

LDAP User Mappings

You can click **LDAP User Mappings** to specify the attributes to search for within the LDAP database. For more information about LDAP user mappings, see [LDAP User Mappings](#) on page 108.

LDAP Authentication

To set LDAP for authentication, click **LDAP Authentication**. For Authentication Method, choose either Direct Authentication or Authentication of User Attributes. Direct Authentication uses the user name and password entered by the User for authentication with the LDAP server. Authentication of User Attributes allows you to specify the what is entered by the user (Attribute of Typed User Name) and what is used by the device (Attribute of the Login User Name) to authenticate the user. If Use Added Text String is enabled (default disabled), then what ever text is entered in the Text String Added to User Name box is added to the user input prior to authentication.

Knowledge of LDAP Server authentication requirements and capabilities are required to properly configure these settings.

LDAP Group Access

LDAP server user groups can be used to control access to the printer. For example, the LDAP server may contain a group of users called Admin. You can configure the Admin group on the printer so that the members of that group will have administrator access to the printer. When a user logs in at the printer with their network authentication account, the printer performs an LDAP look-up to determine if the user is a member of any groups. If the LDAP server confirms that the user is a member of the Admin group, the user will have administrator access.

The following groups are available:

- Color Access Group
- System Administrator Access Group
- Account Administrator Authorization Group

In one of the group access boxes, enter a name for the group. Repeat for other group access boxes.

Note: Entries should be in base DN format (for instance, cn=Admin, ou=people, dc=xerox, dc=com).

Configuring Network Authentication (by a Remote Accounting server)

Network authentication uses the user information managed on a remote Accounting server to manage authentication (access) to available machine services.

Enable Network Authentication

To enable Network Authentication for use with this printer, at your networked computer, perform the following steps:

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. If prompted, enter the system administrator user name and password (default: **admin, 1111**).
4. Select the **Security** folder, then the **Authentication Configuration**.
5. Select **Login to Remote Accounts** from the **Login Type** drop down list.
6. Select the **Print Stored File from Folder**, or **Folder to PC/Server Enabled** check boxes to enable these services.
7. Select the **Non-account Print Enabled** check box if you want to enable printing for people without accounts.
8. Click **Apply**, then click **Reboot Machine**.
9. Refresh your browser, click the **Accounting** folder, then **Accounting Configuration**.
10. Select **Network Accounting** from the **Accounting Type** drop down list.
11. From the **Verify User Details** drop down menu, select either **Yes** or **No** (keep logon records). The Yes selection will verify user information. When No (keep logon records) is selected, User ID and Account ID must be entered at the printer, but user information will not be checked. A logon record will be kept by the printer, however.
12. Click **Apply**, then click **Reboot Machine**.

Note: Refresh your Web browser, then click **User Details Setup** to set the Store User Details setting. You can set either NVM or hard disk as the destination for saved authentication information. User Details Setup also allows you to configure the characteristics of the login prompt for User Authentication.

Configure Communications Between the Accounting Server and the Printer

Refer to the remote Accounting server manufacturer's documentation for the specific procedures to follow to configure communications between the server and the printer.

The server will contact the printer based upon Accounting service parameters set up at the server, such as the printer's IP address and polling frequency.

Required network communications and server settings will be stated by the server's manufacturer.

Sample list of set up requirements for Xerox Secure Access Unified ID System's Accounting service

- Enable TCP/IP and HTTP on the printer.
- Set up a static or reserved DHCP IP address for the printer.
- Enable TCP/IP port 80 communications at the printer.
- Download the Controller Interface for Xerox from the Xerox Secure Access Unified ID System™ Web site.
- Install the Controller Interface for Xerox at the server.
- Verify that you have purchased a license for the Controller Interface for Xerox, as well as a license for each device communicating with the server.
- Register each printer at the server (using the printer's IP address for identification).

Enable the Accounting Option in Computer Print Drivers

Use the Windows Add Printer dialogs to add the printer's print driver to individual, networked computers. For more information see [Print Driver Installation](#) on page 13.

In the print driver default setting dialogs, locate and then enable the Accounting option. This step assures that print jobs from individual computers will be recognized by the authentication system, rather than being unrecognized and deleted by the printer.

For Windows operating systems, the default setting dialogs are accessed by right clicking on the printer's icon in the Printers window for Windows 2000, or the Printers and Faxes window for Windows XP. Select Properties from the displayed menu, then locate and enable the Accounting option.

Configuring Xerox Secure Access (Authentication)

Xerox Secure Access enables customers to leverage Xerox Partner Solutions to provide user authentication with an optional card reader. Users can access the features available at the printer once they have been authenticated.

Secure Access and Accounting

Secure Access can be enabled with Network Accounting or the Xerox Standard Accounting feature for accounting purposes. To configure Xerox Secure Access with Network Accounting, refer to the Configuring Network authentication (by a remote Accounting server) topic in this section. To configure Xerox Secure Access with Xerox Standard Accounting, refer to the Optional information, in the Information Checklist below, then see [Enabling Xerox Standard Accounting](#) on page 171.

Note: Secure Access cannot be enabled at the same time as Foreign printer Interface.

Information Checklist

1. Ensure that the printer is fully functional on the network. TCP/IP and HTTP protocols must be configured so that you can access CentreWare Internet Services.
2. Ensure that the Xerox Partner authentication solution (Secure Access Server, Controller, and Card Reader) is installed and communicating with the printer. Follow the installation instructions from the manufacturer of the authentication solution to correctly set the printers up.
3. Ensure that SSL (Secure Sockets Layer) is configured on the printer. The Xerox Partner authentication solution communicates with the printer via HTTPS.
4. (Optional) Ensure that Network Accounting is configured if you want the printer to send user account information to a Network Accounting server. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services. Click the **Properties** tab, click the **Security** folder, click **Authentication Configuration**, and select **Xerox Secure Access** for Login Type, matched to **Network Accounting** for Accounting Type.
5. For use with Xerox Standard Accounting, you select Xerox Secure Access for Login Type, then select Xerox Standard Accounting for Accounting Type. For instructions on setting up Xerox Standard Accounting, see [Enabling Xerox Standard Accounting](#) on page 171. For instructions on setting up your Network Accounting server, refer to the instructions that came with your accounting package, and see [Configuring Network Authentication \(by a Remote Accounting server\)](#) on page 67.

Note: When authentication is set to Xerox Secure Access, Xerox Standard Accounting is not available.

You may also need another Authentication Server (running LDAP in an ADS environment, for example) to communicate with the Secure Access Server providing that server with user credential information. A second Authentication Server may be necessary for Web User Interface Authentication, if this feature is additionally desired.

6. If you have an LDAP server on your network, you can configure LDAP on the printer, preferably from the Remote Authentication Server / Directory Service folder. For more information, see [LDAP Server Configuration](#) on page 106.

Configuring Xerox Secure Access with Remote Authentication

To configure Xerox Secure Access with Remote Authentication:

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. If prompted, enter the system administrator user name and password (default: **admin, 1111**).
4. Click the **Security** folder, then **Authentication Configuration**.
5. In the Authentication Configuration > Step 1 of 2 page:
 - a. Select **Xerox Secure Access** from the **Login Type** drop down list.
 - b. Select the **Print Stored File from Folder**, or **Folder to PC/Server Enabled** check boxes to enable these services.
 - c. Select the **Non-account Print: Enabled** check box if you wish to allow printing for a user without an account.
 - d. Select **Apply**, then reboot the printer after the prompt.
 - e. Select **Next** to continue to the Authentication Configuration > Step 2 of 2 page.
6. In the Authentication Configuration > Step 2 of 2 page, click **Configure** next to **Authentication System**.
7. In the Authentication System page:
 - a. Select **Authentication Agent** from the **Authentication System Settings** drop down list,
 - b. Set the **Server Response Time-out**, and **Search Time-out**.
 - c. Select the **Assign UPN (User Principal Name): Enabled** check box to assign a user principal name.
 - d. Select **Apply**, then reboot the printer after the prompt.
8. To set service access:
 - a. Refresh your Web browser.
 - b. Click the **Security** folder, then **Authentication Configuration**.
 - c. In the Authentication Configuration > Step 1 of 2 page, click **Next**.
 - d. Under Device Default State Configuration, click **Configure** next to **Service Access**.
 - e. Select one of the following for each service you want to control:
 - **Unlocked**: Allow unrestricted access.
 - **Locked (Show Icon)**: Require login for access. The service icon is visible to all users in the all services screen.
 - **Locked (Hide Icon)**: Require login for access. The service icon is hidden until an authorized user logs in.
 - f. Click **Apply** and enter the Administrator User name and password when prompted (default of **admin and 1111**).
 - g. Click **OK**.
 - h. Click **Reboot Machine** when it displays on screen.

Enable Specific Xerox Secure Access Settings

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Select the **Security** folder.
5. In the **Security** folder, select the **Remote Authentication Servers** folder.
6. In the Remote Authentication Servers folder, select **Xerox Secure Access Settings**.
7. In the Xerox Secure Access Settings area:
 - a. Enter text in the **Default Prompt** and **Default Title** boxes to create the prompt and prompt title that will be displayed on the printer's screen informing users how to authenticate themselves at the printer.
 - b. If the Title and Prompt have been configured on the Secure Access Server, then that information will override the information entered here.
 - c. Select the **Enable** box for **Local Login** to allow users to log in locally at the printer.
 - d. Select the **Enable** box for **Get Accounting Code** to get user accounting data from a networked Accounting Server (if used).
 - e. Click **Apply**.

Using Secure Access

1. Read the printer's prompt to determine what needs to be done to be authenticated at the printer. Authentication methods include swiping a card, placing a proximity card near the reader, or entering a user ID or PIN (personal identification number).
2. If the printer requests further information such as accounting details, enter this information at the printer.
3. The printer will confirm successful authentication allowing access to previously locked system features.
4. When finished, press the **Login/Out** button.

Configure Color Copy Access for LDAP Group

Refer to your LDAP server documentation for the full range of information that can be entered into this LDAP dialog to fully support both e-mail applications and authentication using your LDAP server.

Creating Color Access Group within Active Directory

This procedure describes how to create an Active Directory color access group to be used to restrict color copying and printing.

Click **Start**, click **Control Panel**, double-click **Administrative Tools**, and then click **Active Directory Users and Computers**.

1. In the Active Directory Users and Computers window, expand the domain folder.
2. In the console tree, right-click the **Users** folder in which you want to add a new group.
3. Click **New**, and then click **Group**.

Security

4. Type the name of the new group. Use a name that you can easily associate with the role or service for which you are creating.
5. To add users and/or groups to the newly created color access group, right-click the group and select **Properties**.
6. Click the **Members** tab, then click the **Add** button to add members to the group.
7. Click **Finish**.

LDAP Group Access

1. Click the **Properties** tab, click the **Connectivity** folder, click the **Protocols** folder, then click the **LDAP** folder.
2. In the LDAP folder, click **LDAP Group Access**.
3. On the LDAP Group Access page:
4. In the Color Authorization area, on the Color Access Group line, type **CN=Color,CN=Users,DC=crmttrinity,DC=lab**
5. Click **Apply**, then reboot the printer at the prompt.
6. Continue with the next procedure to set Authentication Configuration.

Authentication Configuration

1. Click the **Properties** tab, then click the **Security** folder.
2. Click **Authentication Configuration**.
3. The Properties tab refreshes and the Authentication Configuration > Step 1 of 2 page appears.
4. On the Authentication Configuration > Step 1 of 2 page, in the Authentication Configuration box:
 - a. In the **Login Type** drop down list, click or verify **Login to Remote Accounts**.
 - b. On the **Folder to PC / Server** line, click or verify the **Enabled** check box.
 - c. On the **Non-account Print** line, ensure that the **Enabled** check box is not checked if you wish to enable people without accounts to continue to print.
 - d. On the **Guest User** line, in the drop down list, click or verify **Off**.
5. Click **Apply**, then reboot the printer following the prompt.
6. Continue with the next procedure to set Authentication System.

Authentication System

1. Click the **Properties** tab, click the **Security** folder, then click the **Remote Authentication Servers** folder.
2. In the Remote Authentication Servers folder, click **Authentication System**.
3. On the Authentication System page, in the **Authentication Type** box:
 - a. In the **Authentication System Settings** drop down list, click or verify **LDAP**.
 - b. Click **Apply**, then reboot the printer at the prompt.

Configure Color Copy Access Control at the Printer

1. Press the **Log In/Out** button on the printer control panel.
2. Enter the default User Name (**admin**) and Password (**1111**) if prompted.
3. Touch **Enter**.

4. Press the **Machine Status** button.
5. Touch the **Tools** tab.
6. Touch **Authentication / Security Settings**.
7. In the Group column, touch **Authentication**.
8. In the Features column, touch **Access Control**.
9. On the Access Control screen, touch **Feature Access**.
10. On the Feature Access screen:
 - a. In the Items column, touch **Color Copying**.
 - b. Touch the **Change Settings** button.
11. On the Color Copy screen, touch **Locked**, then touch **Save**.
12. Reboot the printer.
13. Press the Services button, touch the **Copy** icon, then the **Color** button.
14. The Login screen appears. The printer is configured for Color Copy Access for LDAP Group.

To Enable Print Color Access Control

This process will restrict a user from printing in color unless they are authorized to do so via the Active Directory group.

1. Click **Start**, click **Control Panel**, double-click **Printers and Faxes**, then right-click the printer to be enabled. In the printer pop-up menu, click **Properties**.
2. In the Properties dialog box, click the **Options** tab.
3. On the Options tab, in the Options Settings area, click the **Predefined Configurations** folder.
4. In the the Predefined Configurations area, click the **Color Access Control** field and click **Enabled**.
5. Click the **Color Access Group** field and type or enter the color access group name.
6. Click **Apply**, then click **OK**.

Note: On the client side, if the user that installs the print driver is a member of the group given permission to print in color, then the Output Color option within the driver will be selectable between Color and Black and White. If the user does not have permission to print in color, then the Output Color option within the driver will list Black and White and is not selectable.

Access Control

After configuring the Authentication system, you must specify what services and features are to be controlled by authentication and will require the user login.

- **Device Access:** Use for restricting access to the Services Pathway, Job Status Pathway, or Machine Status pathway. Device Access settings are:
 - **Unlocked:** Allow unrestricted access
 - **Locked:** Require login for access.
- **Service Access:** Use for restricting access to each individual service (copy, e-mail, etc). Services Access settings are:
 - **Unlocked:** Allow unrestricted access.

Security

- **Locked (Show Icon):** Require login for access. The service icon is visible to all users in the all services screen
 - **Locked (Hide Icon):** Require login for access. The service icon is hidden until an authorized user logs in.
1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
 2. Click the **Properties** tab.
 3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
 4. Click the **Security** folder
 5. Click **Authentication Configuration**.
 6. In the Authentication Configuration box, select the **Next** button.
 7. In the Device Default State Configuration section, select the **Configure** button next to Device Access and/or Service Access, and **Apply** and supply the Administrator User name and password if prompted.

802.1x

The printer supports 802.1x authentication based on the Extensible Application Protocol (EAP). 802.1x can be enabled for devices connected through both wired and wireless Ethernet networks. As described here, the 802.1x configuration is used to authenticate the printer, rather than individual users. After the printer has been authenticated, it will be accessible to users on the network.

The administrator can configure the printer to use one EAP type. EAP types currently supported on the printer are:

- EAP-MD5
- PEAP/EAP-MS-CHAPv2
- EAP-MS-CHAPv2

Information Checklist

Create a user name and password on your authentication server which will be used to authenticate the Xerox device.

Ensure your 802.1x authentication server and authentication switch are available on the network.

Configure 802.1x with CentreWare Internet Services

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Click the **Security** folder.
5. Click **IEEE 802.1x**.
6. Select the **Enabled** check box next to **Enable IEE 802.1x**.

7. Select the required **Authentication Method**.
8. Enter the User Name and Password required by your authentication switch and server.
9. Click **Apply**, then **Reboot Machine**.

Encryption Service Overview

You may have to purchase the Security Kit option to enable encryption with your printer. If you cannot generate a self-signed certificate, or enable SSL/TLS Communication, as stated under Configuration of HTTP Communication Encryption, in this section, contact your Xerox Representative to purchase the option.

The communication data between the printer and computers on a network can be encrypted. Encryption for the printer is set up using CentreWare Internet Services. Note that the quickest and easiest, although not the most trusted, method to use to set up initial HTTP communication encryption is the generation of a self-signed certificate. Click Printer Digital Certificate Management in the **Security** folder on the Properties page of CentreWare Internet Services. Use this to manage all the digital certificates, of various types, stored on the printer.

Types of Encryption Services Available

Encryption of HTTP Communications from a Client to the Printer (Server Certificate)

The SOAP port, Internet service (HTTP) port, IPP port, and WebDAV port use the HTTP server of the printer.

The SSL/TLS suite of protocols is used in the encryption of HTTP communications from a client to the printer. A user of a client computer accesses the printer's HTTP server by typing https://, followed by the IP address of the printer, into the Address box of a Web browser application. The printer then offers the client a Digital Certificate, which the client accepts (after reviewing the validity of same). Upon acceptance of the Digital Certificate, a Public Key exchange takes place, encryption algorithms are agreed upon between the two parties, and the client uses the server's Public Key to communicate with the server using digitally signed and encrypted data.

Digital certificates imported from a Certificate Authority, or self-signed certificates created with CentreWare Internet Services, can be used as SSL/TLS certificates on the printer's HTTP server.

Encryption of HTTP Communications from the Printer to a Remote Server (Client Certificate)

The SSL/TLS suite of protocols is used to encrypt HTTP communications with a remote server.

No client certificate is typically required for this activity. However, if a remote server is set to require an SSL client certificate, an SSL/TLS client certificate must be registered on the printer.

Digital certificates imported from a Certificate Authority can be used as SSL/TLS certificates on the printer's HTTP server.

Note: When Remote Server Certificate Validation is enabled, under SSL/TLS Settings in CentreWare Internet Services, the root certificate of the remote server must be registered to the printer (imported with CentreWare Internet Services) to verify the Digital certificate of same.

E-mail Encryption/Digital Signature

S/MIME certificates, imported from a Certificate Authority (in PKCS7 format), can be used on the printer's for E-mail Encryption.

Note: To import S/MIME certificates, use the Machine Digital Certificate Management in the **Security** folder on the Properties tab of CentreWare Internet Services.

Encryption/Digital Signature of Scanned Files (PDF/XPS Documents)

While no digital signatures are required to encrypt PDF and XPS documents, these documents can be signed with imported PKCS12 Digital signatures.

When adding digital signatures to PDF or XPS documents, scan file certificates imported to the printer from a Certificate Authority, are typically used.

To import PKCS12 scan file certificates, use the Machine Digital Certificate Management in the **Security** folder on the Properties Page of CentreWare Internet Services.

IP Sec (typically used to encrypt FTP) can be enabled from the Security file folder on the Properties tab of CentreWare Internet Services.

802.1x can be enabled for devices connected through both wired and wireless Ethernet networks. It is used to authenticate the printer on the 802.1x network, rather than individual users. 802.1x can be enabled from the Security file folder on the Properties tab of CentreWare Internet Services.

Configuration of HTTPS (SSL/TLS) Communication Encryption

Two methods are available depending on the type of certificate.

- Create a self-signed certificate on the printer with CentreWare Internet Services, and enable HTTPS. This method is used primarily for Server certificates.
- Enable HTTPS, and import a signed certificate from a Certificate Authority, using the Machine Digital Certificate Management in the Security folder on the Properties Page of CentreWare Internet Services.
- To see this, at least one certificate must have been created and stored on the printer. This is one of the purposes for creating a self-signed certificate.

Before enabling any encryption or digital signing feature, or importing any digital certificates, check the status of the certificate and create a new certificate if there is not one already created:

1. In CentreWare Internet Services, click the **Properties** tab, then click the **Security** folder.
2. Click **Machine Digital Certificate Management**.
3. Click **Create New Certificate**.
4. Select **Self-Signed Certificate** and click **Continue**.
5. Select **Public Key Size** (512 Bits or 1024 Bits).
6. Set **Issuer** (default device host name)
7. **Apply**.

After clicking Machine Digital Certificate Management in the Security folder, the current status is displayed. If the status shows "A Self-Signed Certificate is established on this machine", then you do not need to create new certificate.

Note: You must enable HTTP – SSL/TLS Communication in order to Upload Signed Certificates and to see Certificate Management , and Certificate Revocation Retrieval Settings in the Security folder.

Configuring Certificates with CentreWare Internet Services

Two methods are available to configure certificates with CentreWare Internet Services: creating a self-signed certificate (for SSL server), and importing a signed certificate from a Certificate Authority.

This section describes how to create a self-signed certificate (for SSL server).

Note: When importing a certificate, if the same certificate has been already registered in Local Device or Others, the certificate cannot be imported. Delete the registered certificate before importing.

1. Open your Web browser and enter the printer's IP address into the Address box of your Web browser, and press the Enter key.
2. Click the **Properties** tab.
3. Click the **Security** folder.
4. Click **Machine Digital Certificate Management**.
5. When prompted, enter the system administrator user name and password (default: **admin, 1111**).
6. Generate a certificate.
 - a. Click the **Create Self-Signed Certificate** button.
 - b. Set the size of the **Public Key** as necessary.
 - c. Set **Issuer** as necessary.
7. Click the **Apply** button.
8. Refresh the Web browser.
9. Click the **Security** folder.
10. Click **SSL/TLS Settings**.
11. Select the **Enable** check box for **SSL / TLS Server Communication**.
12. Check the **SSL / TLS Port Number**.

Note: The default port is **443**.

13. Click **Apply** and click **Reboot Machine**. The printer will be unavailable for a short period of time.

Configuration of E-mail Encryption/Digital Signature

Configuration on the Printer

Import an S/MIME certificate from a Certificate Authority (in PKCS7 format), then configure the certificate on the printer using CentreWare Internet Services.

To send encrypted e-mail from the machine, you will need the public key of the recipient to be loaded on the device.

Note: The e-mail address of the machine must match the e-mail address specified in the certificate must match, otherwise S/MIME will be disabled.

Note: The e-mail address of the device must be set before you are able to select the S/MIME device certificate to use.

Configuration on a Computer

To send encrypted e-mail to the printer, you will need a copy of the printer's S/MIME certificate on your computer to allow you to encrypt E-mail being sent to the printer. The S/MIME certificate represents the Public Key of the printer, allowing encryption or digital signing to take place.

To acquire the Public Key, you must use the Export feature or send a digitally signed E-mail.

Configuring S/MIME certificates with CentreWare Internet Services

To configure S/MIME certificates with CentreWare Internet Services, first enable HTTP communications (as stated under Configuration of HTTP Communication Encryption in this section). Next, import an S/MIME certificate from a Certificate Authority (in PKCS7 format). Finally, enable S/MIME.

First import an S.MIME certificate:

1. Open your Web browser and enter the printer's IP address, beginning with https, into the Address box of your Web browser, and press **Enter**.
Example:
https://192.168.1.1/
2. Click the **Properties** tab.
3. Click the **Security** folder.
4. Click **Machine Digital Certificate Management**.
5. When prompted, enter the system administrator user name and password (default: **admin, 1111**).

6. Click **Upload Signed Certificate**.

Note: When importing a certificate, if the same certificate has been already registered in Local printer or Others, the certificate cannot be imported. Delete the existing certificate before importing the new one.

- a. Enter the **Password**. (if required)
 - b. Re-enter the **Password** (if required).
 - c. Enter a file name for the file you want to import, or select the file to be imported by clicking the Browse button.
7. Click the **Import** button.
 8. Refresh the Web browser.
 9. Click the **Security** folder.

Configure the certificate:

10. Click **Certificates Management**.
11. Select **Local printer** for **Category**, **S/MIME** for **Certificate Purpose**, and then click the **Display the List** button.
12. Place a check mark in the box in front of the **Certificate** you wish to view details for.
13. Click the **Certificate Details** button.
14. Click the **Use this certificate** button.
15. Click **Reboot Machine**. The printer will be unavailable for a short period of time.

Configure S/MIME settings:

16. Refresh the Web browser.
17. Click the **Security** folder.
18. Click **SSL/TLS Settings**.
19. Select the **Enable** check box for **S/MIME Communication**.
20. Apply the settings.
 - a. Click **Apply**.
 - b. The right frame on the Web browser will change to the printer reboot display.
 - c. Click **Reboot Machine**. The printer will be unavailable for a short period of time.

Configure the settings for S/MIME.

21. Refresh the Web browser.
22. Click the **Security** folder.
23. Click **S/MIME Settings** and set the following items.
 - **Message Digest Algorithm:** Select a message digest algorithm from **SHA1** or **MD5**.
 - **Contents Encryption Method:** Select a contents encryption method from **3DES**, **RC2-40**, **RC2-64**, or **RC2-128**.
 - **Certificate Auto Store:** Click the check box to automatically save an S/MIME certificate attached to an e-mail received from an address registered in your address book.
 - **Receive Untrusted E-mail:** Decide whether or not you wish to receive untrusted E-mail.
 - **Receive Untrusted iFAX:** Decide whether or not you wish to receive untrusted iFAXes.

Security

- **Digital Signature – Outgoing E-mail:** Decide whether or not to add a digital signature to outgoing E-mail, and the method to use if a signature is desired. Select **Always Add Signature**, **Do not add Signature**, or **Select During Send**.
- **Digital Signature – Outgoing iFAX:** Decide whether or not to add a digital signature to outgoing iFAXes, and the method to use if a signature is desired.

Note: The Fax option is required.

24. Click **Apply**.

Configuration on a Computer

The following describes the configuration for a remote, networked computer.

Sending Scanned Data by S/MIME Encrypted E-mail from the Printer to a Computer

An S/MIME certificate must be imported, configured, and stored on the printer as stated in this section under Configuring S/MIME certificates with CentreWare Internet Services.

When importing the S/MIME certificate, make sure that a root certificate is included for use with the Supported E-mail applications shown below.

Receiving E-mail with S/MIME Digital Signature from the Printer

No settings are required on a recipient computer.

Sending S/MIME Encrypted E-mail by E-mail Printing from a Computer to the Printer

It is necessary to register the S/MIME certificate of the printer on the computer.

There are two methods to set an S/MIME certificate of the printer on the computer:

- **Sending e-mail with S/MIME digital signature from the printer to the computer**
To send e-mail with an S/MIME digital signature from the printer, configure to attach the digital signature when sending E-mail in the Digital Signature – Outgoing E-mail settings.
- **Exporting an S/MIME certificate to the computer using CentreWare Internet Services and registering the exported S/MIME certificate in the certificate storage location of the E-mail application.**

Note that the exporting of certificates is accomplished using the Trusted Certificates Management under Security folder on the Properties page of CentreWare Internet Services. For information on how to register a certificate in an E-mail application, refer to the manuals provided with the E-mail application.

Sending E-mail with S/MIME digital signature from a computer to the printer

It is necessary to register a personal certificate of a sender's E-mail address, an intermediate certificate authority certificate of the personal certificate, and a root certificate on the printer.

Supported E-mail applications

E-mail applications that can send and receive E-mail to and from the printer are:

- Outlook 2000/2002/2003
- Outlook Express 6
- Netscape 7.x

Configuration of Scan File Signatures (PDF/XPS Documents)

Configuration at the Printer

Import a certificate from a Certificate Authority (in PKCS12 format), then configure the certificate on the printer using CentreWare Internet Services.

Configuration on a Computer

Prepare for verification of the PDF or XPS signature.

Configuring Scan File certificates with CentreWare Internet Services

To configure certificates with CentreWare Internet Services, first enable HTTP communications (as stated under Configuration of HTTP Communication Encryption in this section). Next, import a certificate from a Certificate Authority (in PKCS12 format). Finally, set the certificate as a scan file certificate.

1. Start a Web browser.
2. Enter the printer's IP address, beginning with https, into the Address box of your Web browser, and press **Enter**.
Example:
https://192.168.1.1/
3. Click the **Properties** tab.
4. Click the **Security** folder.
5. Click **Machine Digital Certificate Management**.
6. Click **Upload Signed Certificate**.

Note: When importing a certificate, if the same certificate has been already registered in Local printer or Others, the certificate cannot be imported. Delete the existing certificate before importing the new one.

- a. Enter the **Password**.
- b. Re-enter the **Password**.
- c. Enter a file name for the file you want to import, or select the file to be imported by clicking the **Browse** button.
- d. Click the **Import** button. When a screen to enter the user name and password appears, enter the System Administrator user ID and password into User Name and Password, and then click **OK**.

Note: The default user ID is **admin** and the default password is **1111**.

7. Refresh the Web browser.
8. Click the **Security** folder.
9. Configure the certificate.
 - a. Click **Trusted Digital Certificate Management**.
 - b. Select **Local printer** for **Category**, **Scan File** for **Certificate Purpose**, and then click the **Display the List** button.
 - c. Place a check mark in the box in front of the certificate you wish to view details for.
 - d. Click the **Certificate Details** button.
 - e. Click the **Use this certificate** button.
 - f. Click **Reboot**. The printer will reboot and the setting values will be reflected.
10. Configure the settings for PDF/XPS Signatures.
 - a. Refresh the Web browser.
 - b. Click the **Security** folder.
 - c. Click **PDF/XPS Security Settings** and then set the following items.
 - **PDF Signature:** Select the setting for **PDF Signature** from **Do not add signature**, **Always add visible signature**, **Always add invisible signature**, or **Select during send**.
 - **XPS Signature:** Select the setting for **XPS Signature** from **Do not add signature**, **Always add visible signature**, **Always add invisible signature**, or **Select during send**.
 - d. Click the **Apply** button.

Configuration on a Computer

Confirm that the digital certificate being used by the printer to encrypt PDF and XPS files has been imported and is registered on the recipient's computer. This will assure the ability to conduct two way digital signing of files, should this capability be desired or needed.

IP Sec

IP Sec (IP Security) is comprised of the IP Authentication Header and IP Encapsulating Security Payload protocols, that secure IP communications at the network layer of the protocol stack, using both authentication and data encryption techniques. The ability to send IP Sec encrypted data to the printer is provided by the use of a public cryptographic key, following a network negotiating session between the initiator (client computer) and the responder (printer or server). To send encrypted data to the printer, the computer and the printer have to establish a Security Association with each other by verifying a matching password (shared secret) to each other. If this authentication is successful, a session public key will be built and used to send IP Sec encrypted data over the TCP/IP network to the printer.

Providing additional security during the Public Key negotiating process, Digital Certificates can alternatively be used in place of the Shared Secret, to encrypt the Public Key information being exchanged between communicating parties. The Digital Certificate resides on the printer (managed as stated in this Encryption section in the Configuring Scan File certificates topic) and must also have been imported and stored on the computer that is encrypting data being sent to the printer.

Certificates add digital signatures (individualized checksums verifying data integrity) to datagrams during the public key negotiating process, greatly assisting in securing that data from network sniffers.

Enabling IP Sec

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Click the **Security** folder.
5. Select **IP Sec** in the directory tree.
6. Enable the Protocol by placing a checkmark in the **Enabled** box.
7. Select **Pre-Shared Key** to use the Shared Secret (between this device and remote computers also possessing the secret). Note that if you select **Digital Signature**, the Shared Secret boxes will be grayed out and you will have to supply a certificate stored on this device to the remote computer that wishes to send IP Sec encrypted data to this device.
8. Enter the Shared Secret (a password) in the Shared Secret and Verify Shared Secret boxes.
9. Select **Enabled** (default setting) for the **Communicate with Non-IP Sec Device** setting, so that computers not set up for encryption can still communicate with this device.
10. Click **Apply** when done and supply the Administrator User Name and Password, if prompted.

Note: The default user ID is **admin** and the default password is **1111**.

FIPS 140-2

To enable FIPS 140-2 encryption:

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. If prompted, enter the system administrator user name and password (default: **admin, 1111**).
4. Click the **Security** folder and click **FIPS140 Validation Mode**.
5. Click the **Enabled** check box and click **Apply**.

Note: FIPS 140-2 encryption does not apply to the following services and protocols: SMB, NetWare, SNMP v3, PDF Direct Print Service.

Scheduled Image Overwrite

A TCP/IP network-connected device can be set to overwrite image data on a scheduled basis.

The Image Overwrite will delete all image data from the hard disk.

To enable a scheduled image overwrite, perform the following steps:

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Click the **Security** folder.
4. Click **Scheduled Image Overwrite**.
5. Click the Scheduled Image Overwrite **Enabled** check box.
6. Configure the **Frequency, Day, Week, Hour, and Minute** settings.

Note: The printer will be taken off-line each day at the specified time to perform the overwrite.

7. Click **Apply**.
8. Click **OK** to confirm.
9. If prompted, enter the system administrator user name and password (default: **admin, 1111**).

Secure Watermark

This procedure enables the System Administrator to set parameters for the inclusion of a Secure Watermark as the background for any documents that are copied or printed on this, or another identical model machine.

Secure Watermark works with copy job, client print, folder print, media print, incoming fax prints and reports.

You must purchase the Security option to enable this feature. Contact your Xerox representative to purchase the option.

Secure Watermark configuration items include:

- Default Watermark Effect
- Default Watermark
- Font Size
- Background Pattern
- Date Format
- Font Color
- Density
- Watermark / Background Contrast
- Force Watermark – Copy Job
- Force Watermark – Client Print
- Force Watermark – Print Stored File
- Force Watermark – Media Print
- Custom Watermark 1
- Custom Watermark 2
- Custom Watermark 3

Configuring Secure Watermark

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Touch **System Settings**.
6. Touch **Common Service Settings**.
7. Touch **Watermark**. If not visible, use the scrolling arrow in the Features column.
8. On the Watermark screen, in the Items column, touch the item to be configured, then touch **Change Settings**. The screen for the item will open.
9. On the selected item screen, make your change and touch **Save**.

Security

10. Touch **Close** to return to the **Tools** tab.
11. Press the **Log In/Out** button.
12. Select **Log Out**.
13. Place a copy in the document feeder of the printer and press the **Start** button.
14. Place the copy just made into the document feeder of the same, or an identical model, machine, and attempt to make a copy. Note that copying of this document is prohibited.

Secure Print

Supported by the printer's print driver, or CentreWare Internet Services Print tab, this feature directs the printing of confidential documents, or documents which should not be seen by third parties, to a User Account on the printer. The user can then access his or her Account, with a numeric password, at the printer, and privately print out the stored documents.

Using Secure Print from the Print Driver

To use the Secure Print feature from the print driver, installed on a networked computer, perform the following steps.

1. Open a document to print from the computer.
2. Select **Print** in your software application, select the **Printer**, then select **Properties**.
3. On the **Paper / Output** tab, select **Secure Print** as your **Job Type**.
4. Enter **Passcode** (1-12 digits). Enter the **Passcode** again in the Confirm Passcode field.
5. Click **Setup...** and enter a **User ID** (such as 001) and a numeric password.
6. Click **OK** on successive driver screens until the job prints.
7. Go to the printer and press the **Job Status** button.
8. Press the **Secure Print Jobs & More** tab.
9. Press **Secure Print**.
10. Highlight your user ID and press **Job List**.
11. Enter **Passcode** and select **Confirm**.
12. Select a job or select **Select All**.
13. Click **Print**.
14. Press **Close** several times, when done, to return to the Job Status screen.
15. Press the **Services** button on the control panel to return to the Services screen.

Using Secure Print from CentreWare Internet Services

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Print** tab.
3. Scroll down to the bottom of the page to see the Secure Print radio button.
4. Click the **Secure Print** radio button to enable it.
5. Enter a **User ID** (such as 001).
6. Enter your desired, numeric passcode in the two boxes provided.
7. Use the **Browse...** button to locate your PRINT READY file.
8. Click **Submit Job**. Then go to the printer and press the **Job Status** button.
9. Press the **Secure Print Jobs & More** tab.
10. Press **Secure Print**.

Security

11. Highlight your user ID and press **Job List**.
12. Enter **Passcode** and select **Confirm**.
13. Select a job or select **Select All**.
14. Click **Print**.
15. Press **Close** several times, when done, to return to the Job Status screen.
16. Press the **Services** button on the control panel to return to the Services screen.

Xerox Common Access Card

Xerox Common Access Card is an optional solution which provides an advanced level of security to sensitive information. By using this solution, you can restrict access to the walk-up features of the printer. This ensures that only authorized users are able to copy, scan, E-mail, and fax information.

The key benefit of this solution is its two-factor identification requirement. Users must insert their access card and enter a unique Personal Identification Number (PIN) at the device. This provides added security in the event that a card is lost or stolen.

The Xerox Common Access Enablement kit integrates with Xerox multifunction printers and existing common access and personal identity verification cards and readers.

Supported Card Readers

The customer is responsible for providing a card reader for each Printer. The following card readers are compatible with the solution:

- Gemplus GemPC Twin
- Gemplus GemPC USB SL
- SCM Micro SCR3310
- Panasonic ZU9PS
- Omnikey Cardman 3021USB
- Omnikey Cardman 3121USB

Note: Other CCID compliant readers may function with the solution, but have not been validated.

Supported Card Types

The customer is also responsible for purchasing and configuring the access cards. The following card types are recommended:

- Axalto Pegasus 64K / V2
- Axalto Cyberflex 32K / V1
- Axalto Cyberflex 64K \ V2
- Gemplus GemXpresso 64K / V2
- Oberthur 72K \ V2
- Oberthur Cosmopoll 32K / V1
- Oberthur D1 72K / V2 (contact-less and PIV)

Note: Other card types may function with the solution, but have not been validated.

Preparation

The following items and information are required before installation

- **Compatible Card Reader:** See [Supported Card Readers](#) on page 89.
- **Compatible Access Card:** See [Supported Card Types](#) on page 89.
- **Common Access Card Enablement Kit**
- **TCP/IP enabled on the Printer**
- **DNS Host name or static IP address assigned**
- **Network Settings to be checked to ensure network is fully functional**
- **Domain Controller (DC) information:**
 - Domain Controller authentication environment
 - IP address or Host Name
 - Domain information
 - Domain Controller Root and Intermediate certificates
 - Check that all certificates are in 64 bit X.509 format
 - Determine if the DC is registered with the OCSP at this site
- **OCSP Server information:**
 - OCSP Server URL
 - OCSP Root and Intermediate Certificates
 - Check that all certificates are in 64 bit X.509 format
- **Proxy Server configuration details**

To set up the Domain Controller (DC) validation, you will need to determine if your site validates the DC against the OCSP server. Many sites use OCSP to validate individuals, but do not register the DC with it. If you set up the Printer to validate the DC and it isn't registered, the procedure will fail.

The retrieved DC certificate is compared to the one stored at installation. This provides a high level of security as it prevents rogue DCs masquerading as the real DC.

Note: Certificates are often obtained from the Information Technology professionals that support your organization.

Server Requirements

Ensure your network infrastructure supports Common Access Card or Personal Identification Verification (PIV).

Names or IP addresses of all servers and domains are required during setup.

Electrical Requirements

The USB port on the back of the printer's network controller provides the power required for any of the supported card readers.

Installing the Common Access Card Software

Ensure that you have downloaded the Xerox WorkCentre software before performing these instructions.

If you are using a Proxy Server to reach external addresses, turn the proxy off at your browser before beginning the software install process. You can also send the printer to the list of exceptions that do not use the Proxy Server.

Follow the instructions below to install the Xerox WorkCentre software.

Enable software upgrades:

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. If prompted, enter the system administrator user name and password (default: **admin, 1111**).
4. Click the **Services** folder.
5. Select **Machine Software**, then **Upgrades**.
6. Select the **Enabled** check box, and then select **Apply**.

Locate the Software:

7. Select **Properties** then **Services**.
8. Select **Machine Software** then **Manual Upgrade**.
9. Browse to the location of the software which was downloaded from the Xerox Web site and select the file.
10. The path to the software file displays in the browse window.

Install the software on the Printer:

11. Select **Install Software**. The software file will begin uploading, and a message will be displayed when finished.

The status of the upgrade is shown at the printer and the CentreWare Internet Services interface is no longer accessible.

Check the upgrade status:

12. Check the upgrade status at the printer, by pressing the **Machine Status** button on the control panel and verifying the updated System Software level.
13. Once the software has been upgraded, the printer reboots automatically.

Note: The system may reboot more than once, depending on the software level of the machine before the upgrade.

14. Print out a Configuration Report to verify the new software level.
15. The Common Access Card settings are now ready for configuring, using the CentreWare Internet Services interface.

Enabling and Configuring the Common Access Card Feature

Enabling the Common Access Card Software Option

Once the correct version of the software has been successfully loaded and verified, the Common Access Card software feature needs to be enabled on the printer.

This procedure should be performed by your System Administrator, or someone with System Admin access rights.

1. Press the **Log In/Out** button on the control panel.
2. Using the keyboard screen, enter the following PIN number into the System Administrator's Login ID field: ***6421145151**.

Note: To de-activate the PIN number, simply enter the following PIN number into the System Administrator's Login ID field: ***6421145150**.

3. Touch **Next**.
4. Touch **Logout**. The printer will reboot.
5. Login as the System Administrator and select the **Machine Status** button.
6. Locate the Tools tab and select the **System Settings** followed by the **Common Settings** option, and then the **Maintenance** option.
7. Next, select the **Software Option** button and select the **Keyboard** button to enter the supplied number.
8. When finished, press the **Save** button, followed by the **Reboot** button for changes to take effect.

Configuring the Date and Time to update automatically using Network Time Protocol (NTP)

Ensure that the **NTP Enable** box is enabled on the printer. In order to do so, the System Administrator must log in to the printer.

1. Press the **Log In/Out** button on the control panel.

Note: In order to login as the System Administrator, you must select System Administrator from the pull down menu. Verify that this selection is being made. If you see the option for Registered User, then you will not be able to login as the System Administrator.

2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Next, select the **Machine Status** button.
4. Touch the **Tools** tab.
5. On the right side of the display, under Features, select the **Machine Clock/Timers** option.
6. Select the option for **NTP Time Synchronization**.
7. Select the **Change Settings** option and select the **On** option.
8. Select the **Save** option.
9. Select the **Time Server Address** option.

10. Select the **Change Settings** option and enter the IP address of the server in which the network time will be synched with.
11. Press the **Save** button.
12. Press the **Log In/Out** button.
13. Touch **Logout**. The printer will automatically reboot.

Configure Authentication settings for CAC

Note: These installation steps can also be performed at the printer. This is be done by logging in as the System Administrator, selecting the **Machine Status** button, then proceeding to the **Tools** tab and navigating to the **Authentication/Security Settings** button. From the **Authentication/Security Settings** button, continue to navigate to **Authentication**, followed by **Login Type**. Then navigate back to the **Tools** menu option for **System Settings**. Select **Common Service Settings** and navigate to **Connectivity & Network Setup**. Select **Remote Authentication Server Settings**, followed by **Authentication Systems**. Then select **Kerberos (Windows 2000)**. Enter the network settings for the Authentication server by selecting **Kerberos Server Settings**.

To configure the Authentication settings from your computer, you must use CentreWare Internet Services.

Note: Verify that your Common Access Card reader is plugged in and operational.

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Click the **Security** folder.
5. Select the option for **Authentication Configuration**, and select **Login to Remote Accounts** from the pull down menu. After selected, press the **Apply** button. The system will automatically reboot.
6. While still in the Security folder, scroll down and click the **Remote Authentication Servers/Authentication System Settings** folder.
7. Locate and select the **Authentication System** folder.
8. Press the pull down arrow and select the option for **Kerberos (Windows 2000)** and select **Apply**.
9. Enter the Kerberos server network address and realm name for all available Kerberos servers.
10. When entering the domain names, make sure to use ALL CAPS in the field.

Configuring the CAC Device Access Control

Note: This installation process can also be performed at the printer. This can be done by logging in as the System Administrator, selecting the **Machine Status** button, then proceeding to the **Tools** tab and navigating to the **Authentication /Security Settings** button. From the **Authentication/Security Settings** button, continue to navigate to **Authentication**, followed by **Access Control**.

1. Continuing from the previous setup, select **Authentication Configuration** in the **Security** folder.
2. Select either the **Device Access** configure button, or the **Service Access** configuration button.
3. If you select the **Device Access** configure button, the following window will appear.

Note: If you wish to “Lock” individual device pathways, you may choose to lock any combination of **All Services**, **Job Status Pathway**, or **Machine Status Pathway**. After you have made your selection, or selections, press the **Apply** button for your selections to be saved.

Use this option to Lock individual Services as well as configure your desired combination of services.

Note: When the Common Access Card is enabled, the full Copy Service feature is locked by default.

Configure CAC Settings at the Printer

Note: Be sure that the Common Access Card Reading device has been installed prior to the following procedure steps.

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator’s Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Select the **Authentication/Security Settings** button, followed by the **Authentication** button.
4. Select the **User Details Setup** button, and set the **Use of Smartcard** option to **Enabled**.

Note: If you set this value to **Enable PKI Only**, the smartcard is used only for signing and/or encrypting the scan document, not for authentication.

5. Set the **SmartCard Link Mode** to **No Passcode required**.
6. Set the **SmartCard Certificate Verification Mode** to **Disabled**.

Note: By setting the option to Disabled, you are only verifying the PIN on the card. By selecting the option for Enabled, you are verifying both the PIN and the Certificate.

Setting up Certificates for Authentication

The following procedure is performed using the CentreWare Internet Services. Access the Printer by typing in the device’s IP address in your Web browser’s address field.

Note: Certificates can only be registered on the device when SSL is enabled on the device. This can be accomplished by first creating a self-signed certificate on the device and then enabling SSL. This procedure must be performed by someone with System Administrator rights.

1. At your computer, Login to the CentreWare Internet Services as the System Administrator.
2. Select the **Properties** tab, and select the **Security** folder and navigate down until you locate the Machine Digital Certificate Management option.
3. Select the **Create New Self Signed Certificate** option.
4. Select **Apply**.
5. Next, while still under the **Security** folder, scroll down the list and locate the option for **SSL / TLS Settings**.
6. The following window will be displayed. Under the HTTP – SSL / TSL Communication check box, make the selection for **Enabled**, and then select **Apply**.
7. The Printer will need to be rebooted before the changes can take effect. Select the **Reboot Machine** option.

Note: After the Printer has returned online, the System Administrator can load the required Root Certificate Authority certificates for the Domain Controllers and the OCSP Server.

- At your computer, within the option for **Machine Digital Certificate Management** locate and select the option for **Upload Signed Certificate**. This option should now be available to you based on the machine reboot.

Uploading Signed Certificates

After selecting the **Upload Signed Certificate** option, the System Administrator will perform the following procedures.

- Upon selecting the **Upload Signed Certificate** button, the following window will display. The System Administrator can browse to the directory location on the PC where the certificates will be stored.
- After the certificate has been saved to the PC, the System Administrator can manage certificates that are loaded onto the Printer, as well as the functions they are to be used for.

Note: In order to review all the certificates, select the option for Other to view the available certificates.

- Select the desired options and select the **Display the list** button.
- When the certificates are listed, you can select one by checking the box and then select **Certificate Details** to review.
- The Certificate Details window will allow the System Administrator to Export this certificate, Delete, or Use this certificate.

Checking Proxy Server details

If required by your network environment, ensure the Proxy Server details have been configured.

- At your computer, select the **Properties** tab in CentreWare Internet Services.
- From the displayed window, select the option for **Connectivity**.
- Next, select the option for **Proxy Server**.
- The Proxy Server option needs to be **Enabled** and the server address needs to be configured.
- Select the option for **Apply**.

Certificate Revocation Retrieval Settings

The System Administrator can use the functionality found in the Certificate Revocation Retrieval Settings option to configure the desired Online Certificate Status Protocol (OCSP) or Certificate Revocation List (CRL).

- Under the **Security** folder, select the option for **Certificate Revocation Retrieval Settings**.
- Under the Level of Certificate Verification section, select the **Level of Certificate Verification** setting for the Common Access Card to **High**.

The following Level of Certificate Validation descriptions are listed below;

- Low:** The revocation status of certificates is not checked.

- **Medium:** The revocation status of certificates is checked, but if the certificate status cannot be obtained due to a network issue, the certificate will be considered valid.
 - **High:** The revocation status of certificates is checked. A certificate is only considered valid after verifying that the certificate has not been revoked.
3. Next, under **Retrieval of Certificate Status**, select the option for **By OCSP** for Common Access Card setup.

Note: The By Retrieving CRL option checks the certificate status on the Printer after retrieving a CRL.

4. Next, under the URL for the **OCSP Responder With** option, this should be setup by the System Administrator for the Common Access Card setup. There is also an option to use an URL that's available on a certificate.
5. Next, set the **OCSP Communication Timeout Value** option based on your network performance.
6. Under the **CRL** options, verify that the check mark box for **Auto Retrieval of CRL** is **unchecked**.

Note: The CRL Retrieval Time-out is not required for Common Access Card setup.

7. Upon making your selections, select the **Apply** button to register your selections. This will initiate the printer to reboot, allowing the settings to take effect.

Configuring E-mail Signing Feature

The following procedure will be performed at the printer.

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Select the option for **System Settings**.
6. Locate and select the option for **Connectivity & Network Set-up**.
7. On the right side of the display, scroll down the list and locate the option for **Security Settings**.
8. Select the option for **S/MIME Settings**.
 - For Option #6 Digital Signature – Outgoing Mail, select the option for **Always Add Signature** and press the **Save** button.
 - For Option #7 Signing Certificate – Outgoing Email, select the option for **SmartCard Certificate** and press the **Save** button.
9. Press the **Log In/Out** button, and select the option for **Reboot**.

Scanning and Faxing

6

This chapter includes:

- [Enabling Options with Software Keys](#) on page 98
- [Special Features](#) on page 99
- [Scan to E-mail](#) on page 100
- [Network Scanning \(Using Templates\)](#) on page 112
- [Scan to PC \(FTP/SMB\)](#) on page 121
- [Scan to Home](#) on page 126
- [Scanning to the Printer's Hard Drive \(Folders\)](#) on page 128
- [Setup and Use of Job Flow Sheets with Folders](#) on page 131
- [Scan to PC Desktop](#) on page 136
- [Installing and Using the Network Scanner Utility](#) on page 138
- [Xerox Extensible Interface Program](#) on page 140
- [Fax](#) on page 142
- [Server Fax](#) on page 154
- [Internet Fax \(iFAX\)](#) on page 162

Enabling Options with Software Keys

Options such as Scanning (E-Mail, Folder, Network, Twain), Security (Disk Overwrite, Secure Watermark), Internet Fax (iFAX), Server Fax, and Job Based Accounting, require purchase and subsequent enabling with a supplied 12 character key. Software keys are usually included with the kit documentation as a sticker on the manual, or they may be already installed on the printer as per the purchase agreement.

Upon receipt of the software key, use the following procedure to enable the associated Option.

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Touch **System Settings**.
6. Touch **Common Service Settings**.
7. Touch **Maintenance**. Note that you may have to use the scrolling arrow to see this selection.
8. Touch **Software Options** and touch **Keyboard**. Enter the key, using the on-screen keyboard, in the box provided.
9. Touch **Save**, then touch **Reboot**.

Special Features

Some features can be customized, and special features can be enabled. For example, you can change the duration of built-in timers. Contact your Xerox representative for more information about special features, and special feature codes.

To enable a special feature:

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. If prompted, enter the system administrator user name and password (default: **admin, 1111**).
4. Click the **Security** folder, then **Feature Enablement**.
5. Enter the code for the special feature and click **Apply**.

Scan to E-mail

E-mail Overview

You must purchase the Scanning option to Scan to E-mail. If you did not, contact your Xerox Representative to purchase this option.

The following E-mail features are available.

- E-mail: Scanned documents can be converted into an electronic format and transmitted via E-mail.
- iFAX: Unlike conventional fax machines which utilize public phone lines, the printer can transmit or receive scanned data as e-mail attachments using either corporate networks or the Internet. Contents of E-mail are processed according to the settings of Print iFAX Headers and Contents in CentreWare Internet Services.
- E-mail Printing: E-mail with attachments in either TIFF or PDF format can be sent to the printer. Received E-mail will automatically be printed. Contents of E-mail are processed according to the settings of Print Mail Headers and Contents in CentreWare Internet Services.
- Job Completion Notice: When a computer has submitted a job to the printer, a notification of the job's completion can be sent by E-mail. Xerox recommends that you register the address of a network administrator or a shared address.

Preparations

Before you set up the Scan to Email feature, confirm that:

1. The printer is turned on and connected to a network.
2. TCP/IP protocol is enabled on the printer.
3. The device has been set up with DNS.
4. The Domain Name settings for the network have been correctly setup for the printer.

Obtain the following information:

Item	Description
SMTP, POP3, or SMTP mail server Host Name or IP address.	If using an external mail server, ask your internet service provider to provide this information.
SMTP, POP3, or SMTP login and password.	
The printer's assigned email address.	This E-mail address will appear in the From field on E-mails sent from the printer.
Email addresses (optional).	A local address book can be created to store E-mail addresses.
LDAP server host name.	Email addresses stored in a network address book LDAP can be referenced from the printer.

Registering an E-mail account

A mail account for the printer needs to be registered to a mail server when using POP3 mail receiving protocol.

Note: For information on mail account registration, refer to your mail server documentation.

Configuring E-mail Environment

Enable the E-mail ports and configure the printer E-mail address, TCP/IP environment, and E-mail server from the printer.

Installation Procedure

This section describes the configuration procedure to use the E-mail feature on the printer.

The following two steps are necessary to use the E-mail feature.

- Enabling the E-mail ports and setting TCP/IP
- Configuring the E-mail Environment

Enabling the E-mail Ports and Setting TCP/IP

First enable the E-mail ports, then set the IP address.

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Select **System Settings**.
6. Select **Connectivity & Network Setup**.
7. Select **Port Settings**.
8. On the Port Settings screen, select **Send E-mail** and then select **Change Settings**.
9. On the Send E-mail screen, select **Port Status** and select **Change Settings**.
10. On the Send E-mail Port Status screen, select **Enabled** then select **Save**.
11. Select **Close**.
12. On the Port Settings screen, select **Receive E-mail**, then select **Change Settings**.
13. On the Receive E-mail screen, select **Port Status**, then **Change Settings**.
14. On the Receive E-mail Port Status screen, select **Enabled**, then select **Save and Close**.
15. On the Port Settings screen, select **Email Notification Service**, then select **Change Settings**.
16. On the Email Notification Service screen, select **Port Status**, then **Change Settings**.
17. Select **Enabled**, then **Save**.
18. Select **Close** until the **Tools** screen is displayed.
19. Set an IP address.

If an IP address is already set, this step is not necessary. Also, in an environment with DHCP or BOOTP, configure the way to obtain an IP address. If the address cannot be obtained automatically or static configuration is preferred, configure an IP address, a subnet mask, and a gateway address as stated below.

- a. Select **Protocol Settings**.
- b. Select **IPv4 (or other mode) Address Resolution** and then select **Change Settings**.
- c. Select one from **DHCP, BOOTP, RARP, DHCP/Autonet** or **Static** and then select **Save**. If you select anything other than Static, proceed to Step 4.

Note: When using a DHCP server, also configure the DNS, or WINS (Windows Internet Name Service) server (WINS for SMB support). To set a DHCP server, use CentreWare Internet Services.

- d. On the Protocol Setting screen, select **TCP/IP - IP Address** and select **Change Settings**.
- e. Enter the IP address using the numeric keypad.

Note: Enter address in the format xxx.xxx.xxx.xxx. The xxx should be a numeric value in the range from 0 to 254. 224 – 255.xxx.xxx.xxx and 127.xxx.xxx.xxx cannot be used.

Note: When moving to the next value without entering all 3 digits, select **Next**.

- f. Select **Save**.
- g. Configure **TCP/IP - Subnet Mask** and **TCP/IP - Gateway Address** using the same process as stated above.

Note: Enter the Gateway address in the format xxx.xxx.xxx.xxx. The xxx should be a numeric value in the range from 0 to 255. However, 224 – 255.xxx.xxx.xxx and 127.xxx.xxx.xxx cannot be used.

Note: Specify the subnet mask by a combination of the numbers 0, 128, 192, 224, 240, 248, 252, 254, and 255. However, you cannot use 0 between non-zero values.

Note: If you do not set the gateway address, enter 0.0.0.0.

20. Select **Close** until the Tools screen is displayed.

21. Wait several seconds for the Auto Clear service to log you out.

22. If you changed any settings, the printer will automatically reboot to register and enable your new settings. After the printer is restarted, print out a Configuration Report to confirm that the ports are enabled and TCP/IP is correctly configured.

For information on how to print a Configuration Report, see [Configuration Report](#) on page 22.

Configuring E-mail

Note: This can also be done using CentreWare Internet Services. For more information, see [CentreWare Internet Services](#) on page 23.

1. Press the **Log In/Out** button on the control panel.
2. Enter the user ID with the numeric keypad or the keyboard displayed on screen, and select **Enter**.

Note: The default user ID is **admin**. When using the Authentication feature, a password is required. The default password is **1111**.

3. Press the **Machine Status** button.

4. Set the E-mail address, host name, and domain name.
 - a. Select the **Tools** tab.
 - b. Select **Connectivity & Network Setup**.
 - c. Select **Machine's E-mail Address/Host Name**.
 - d. Select **E-mail Address** and then select **Change Settings**.
 - e. Enter an E-mail address using the displayed keyboard.
 - f. Select **Save**.
 - g. Set a host name and a domain name.
 - h. Select **Close**.

If SMTP has been selected as the Mail Receiving Protocol

Aliases cannot be configured. A user can choose an account name (the left side of the @). An address (the right side of the @) is a combination of a host name and a domain name.

Example: mymail@myhost.example.com

- **Account name:** mymail
- **Host name:** myhost
- **Domain name:** example.com

Acceptable SMTP Mail Address Formats

Received Mail Destination	Services	Description
BOX***@Host name.Domain name	Fax Print	(*** = Mailbox number) <ul style="list-style-type: none"> • If a Mailbox number that is not setup is specified, it is a receive error. • If a Mailbox number out of range is specified, it is printed. • Password for Mailbox needs to be set to No (no password). • Machine will ignore the case in the text string BOX. • For ***, the mailbox number setup on a receiver machine is specified in three digits. The scope of specification is 001 to 200. • As the mailbox number is embedded in a part of a mail address, input just normal destination as usual. Example: box003@myhost.example.com
“AX=###@ Host name.Domain name”	Store to Folder Print	(### means FAX number at transfer destination) <ul style="list-style-type: none"> • If judged as syntax error, it is printed. Example: FAX=18001112222@myhost.example.com
Any local part other than the above@	Store to Folder Fax	Host name.domain name <ul style="list-style-type: none"> • The local part means the left text string of @ in a mail address. Example: anything@myhost.example.com

If POP3 has been selected as the Mail Receiving Protocol

Specify a POP user name to an account name (the left side of the @), and a POP3 receiving mail server to an address (the right side of the @). A user can decide an alias such as mymail@example.com.

Example: mymail@mb1.abc.example.com

Account name : mymail

Set the protocol for receiving E-mail.

1. From the Connectivity & Network Setup list, select **Other Settings**.
2. Select **Protocol to Receive E-mail** and then select **Change Settings**.
3. Select either **SMTP** or **POP3** as appropriate for your environment.
4. Select **Save** and then press **Close**.

If SMTP has been selected as the Mail Receiving Protocol

1. From the Connectivity & Network Setup list, select **Outgoing/Incoming Email Settings** (i.e. E-mail Send/Receive Settings).
2. Select **SMTP Server Settings** and then set the following item for the SMTP server.
 - **SMTP Server Port Number:** Enter a value in the range from 1 to 65535. The default is 25.

If POP3 has been selected for the Mail Receiving Protocol

1. From the Connectivity & Network Setup list, select **Outgoing/Incoming Email Settings** (i.e. E-mail Send/Receive Settings).
2. Select **POP3 Server Settings** and then set the following items for the POP3 server.
 - **Server Name/IP Address:** Enter the POP3 Server Name/IP Address and press **Save**.

Note: Enter the address in the format xxx.xxx.xxx.xxx. The xxx should be a numeric value in the range from 0 to 255. However, 224 – 255.xxx.xxx.xxx and 127.xxx.xxx.xxx cannot be used.

- **Port Number:** Enter a value in the range from 1 to 65535. The default is 110.

Note: Do not use the numbers of any other ports.

- **Polling Interval:** Set the interval for checking the e-mail on the POP3 server.
 - **Login Name:** Enter the name to log in to the POP3 server and press **Save**.
 - **Password:** Enter the same password twice in the New Password and Re-enter Password. If you do not set the password, leave it blank and select **Save**.
 - **POP Password Encryption:** Select **On (APOP)** to encrypt the password, if desired. Select **Save** and then press **Close**.
3. Set the protocol for sending E-mail.

From the Connectivity & Network Setup list, select **Outgoing/Incoming Email Settings**, then select **SMTP Server Settings**, and set the following items for the SMTP server.

- **SMTP Server Name/IP Address:** Enter the SMTP Server Name/IP Address and press **Save**.

Note: Enter the address in the format xxx.xxx.xxx.xxx. The xxx should be a numeric value in the range from 0 to 255. However, 224 – 255.xxx.xxx.xxx and 127.xxx.xxx.xxx cannot be used.

- **SMTP Server Port Number:** Enter a value in the range from 1 to 65535. The default is 25.

Note: This configuration is not necessary if SMTP has been selected for the Mail Receiving Protocol and has already been configured.

- **E-mail Send Authentication:** Select **Off**, **POP before SMTP**, or **SMTP AUTH**. If you are having trouble sending E-mail, to see if Authentication is the problem, set this item to Off and set the SMTP Server IP Address (above) to a server that does not require authentication.

Note: If POP before SMTP is selected, the POP3 settings must be set.

- **SMTP AUTH Login Name:** Set this item if SMTP AUTH is selected for E-mail Send Authentication.
 - **SMTP AUTH Password:** Set this item if SMTP AUTH is selected for E-mail Send Authentication. Enter the same password twice in the New Password and Re-enter Password. If you do not set the password, leave it blank and select **Save**.
4. Select **Close** until the Connectivity & Network Setup list is again displayed.

5. Setting S/MIME Security (optional).
 - a. From the Connectivity & Network Setup list, select **Security Settings**. If the selection is not visible, use the scrolling arrow to display it.
 - b. Select **S/MIME Settings** and set the following items.
 - **Device Certificate – S/MIME**: Link a certificate to the printer. You must have an S/MIME certificate on the printer to perform encryption. For information on S/MIME certificates, see [Configuring S/MIME certificates with CentreWare Internet Services](#) on page 78.
 - **S/MIME Communication**: Set whether to enable or disable S/MIME Communication when a certificate ID is set.
 - **Receive Untrusted E-mail**: Set whether to receive untrusted E-mail or not.
 - **Receive Untrusted iFAX** : Set whether to receive untrusted iFAX or not.
 - **Message Digest Algorithm**: Select a message digest algorithm from SHA1 or MD5.
 - **Message Encryption Method**: Select a contents encryption method from 3DES, RC2-40, RC2-64, or RC2-128.
 - **Digital Signature – Outgoing E-mail**: Set whether to always attach a digital signature to E-mail or to select a digital signature when sending E-mail.
 - **Digital Signature – Outgoing iFAX**: Set whether to always attach a digital signature to iFAX or to select a digital signature when sending iFAX.
 - **Signing Certificate for Email Attachment**: Device Certificate allows you to determine which certificate is to be used to sign Email attachment. Smart Card Certificate is only effective when Always add signature is selected for Digital Signature – Outgoing Email.
 - **Certificate Auto Store**: Select whether or not to automatically store a S/MIME certificate attached with the E-mail when receiving E-mail sent from an address registered in the address book.
6. Select **Close** repeatedly until the Tools screen is displayed.
7. Wait several seconds for the Auto Clear service to log you out.
8. After the printer is restarted, print a Configuration Report to confirm that each item is configured. For information on how to print a Configuration Report, see [Configuration Report](#) on page 22.
9. Test the E-mail transmission from the printer by pressing the Services button, then touching the on-screen E-mail button, then the New Recipient button. Type in your E-mail address, then press **Close**. Place a document in the document feeder and press the green **Start** button on the control panel.

Note: To set up the address book for use with LDAP (network search), see [LDAP Authentication](#) on page 66.

LDAP Server Configuration

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Click the **Connectivity** folder, then the **Protocols** folder, then the **LDAP** folder.
4. Click **LDAP Server**, and under Server Information, enter the IP address (or host name) in the box

Note: If entering the LDAP address by host name, make sure to use the fully qualified domain name of the LDAP server (for example, ldapserver.mycompany.com)

5. Enter the **Port Number** (default 389).
6. Specify the LDAP server type from the **LDAP Server** drop down list.
7. If desired, enter the path to the LDAP objects to limit the LDAP search in the Search Directory Root area. The entry should be in base DN format (for instance, ou=people, dc=xerox, dc=com).
8. For Login Credentials to search entries, choose whether system credentials entered on CentreWare Internet Services will be used for LDAP queries, or the Credentials of the Remotely Authenticated User (Credentials entered by the user when logging in at the machine's control panel). For System Login Name and Password, enter the Login Name and Password (if required) in the boxes provided for access to the LDAP server.

Note: Login credentials are not required to supply address information for E-mail.

9. Enter your required number for Maximum Number of Search Results. This is the maximum number of addresses that will appear which match the search criteria selected by the user.
10. Select **Use LDAP Server Time-Out** or select **Wait** and enter a **Search Time-Out** (5-120 seconds).
11. Select the **LDAP Referrals: Enabled** check box if you would like the server to refer to additional LDAP servers, when user information is initially unavailable.
12. If using LDAP Referrals, enter the number of additional servers (1-5) to check for user information (LDAP Referral Hop Limit).
13. For **Perform Query On**, select the method that you would like LDAP to use to perform searches.
 - **Mapped Name Field:** Will search on the single LDAP field currently mapped to Common Name on the LDAP User Mappings page
 - **Surname and Given Name Fields:** Will combine the sn and givenName fields in LDAP and search on the combination of both.
14. Click **Apply**, and enter the Administrator User name and password if prompted.
15. To enable encryption (SSL) for LDAP communications, perform the following.
 - a. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
 - b. Click the **Properties** tab.
 - c. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
 - d. Click the **Security** folder.
 - e. Click **SSL/TLS** Settings.
 - f. Check the **Enabled** check box next to **LDAP – SSL / TLS Communication**.
 - g. Click **Apply** and enter the Administrator User name and password if prompted.
 - h. Reboot the printer.

LDAP User Mappings

You can click LDAP User Mappings in the LDAP setup section to test LDAP searches, verify mappings and specify the attributes to search for within the LDAP database. The LDAP test function will perform the same search that would occur at the machine's control panel. It will base its search on the current settings for Search Name Order (Mapped Name Field or the combination of Surname, GivenName, the LDAP field currently Mapped to Common Name on the LDAP User Mappings page (if Search Order is set to Mapped Name Field) and Custom Filters (if configured). The test page will return the first matching search result for the test name entered and populate the LDAP Mappings drop down boxes with all LDAP fields / attributes returned for that entry.

Note: The device uses partial name searches, so searching for smit, will return Smith, Joe; Smithson, John; etc. This can be overridden using custom filters.

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Click the **Connectivity** folder, then the **Protocols** folder, then the LDAP folder.
5. Click **LDAP User Mappings**
6. To verify / change LDAP mappings, you must first perform a test search. In the User Name box, enter a name or part of a name that is in LDAP and press the Search button.
7. If the search is successful, the drop down boxes in the Properties section and the Example of search result column will get populated with the results. Change the Imported Headings drop downs to match the LDAP field you wish to map to the associated property (Common Name, Email Address, Business Phone, Office, Business Address, Home). If the search is not successful, verify LDAP settings and try again.

Custom Filters

You can click **Custom Filters** in the LDAP setup section to customize LDAP searches. For the **Email Address Filter**, in the box provided, type in the LDAP search string (filter) that you wish to apply. The filter defines a series of conditions that the LDAP search must fulfill in order to return the information you seek. The form of the text based search string (filter) is LDAP objects placed inside parenthesis. In the search filter, LDAP should be used to specify the text entered by the user as the search criteria. For example, to find all users with common name that starts with the search string entered by the user, the filter would be (cn=LDAP*). If you are not familiar with LDAP search strings, use an Internet browser search to find examples.

E-Mail Recipient Control

Domain Filtering

Domain filtering allows you to configure a list of up to 50 domain names that are either:

- **Restricted:** Blocked as email recipients
- **Authorized:** Allowed as email recipients

Using Blocked Domains will not allow the user to add any email recipient that is in the blocked domain list. All other domains are allowed. Using Allowed Domains will only allow the user to add recipients that are contained in the authorized domain list. All other domains are blocked.

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. If prompted, enter the system administrator user name and password (default: **admin, 1111**).
4. Click the **Services** folder, then the Email folder.
5. Click **Defaults**.
6. In the General section, click **Edit**.
7. In the Domain Filtering section, choose either **Allow Domains** to specify a list of authorized domain names or **Block Domains** to specify a list of restricted domain names.
8. Scroll to the bottom of the screen and select **Apply**. You will be prompted to reboot the machine.
9. Return to the Domain Filtering section and select the **Edit** button.
10. Input up to 50 domain names in the domain list.
11. Scroll to the bottom of the screen and click **Apply**. Supply the Administrator User name and password if prompted.

Restricting a User from Editing the Address Book

The machine can be configured such that users are not able to edit the public address book that is stored locally on the device. When using Local Authentication, you may grant certain users the privilege of editing the address book when this restriction is enabled (See Local Authentication setup). For all other types of authentication, only the System Administrator will be able to modify the public address book with this restriction enabled.

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Select **System Settings**.
6. Select **Common Service Settings**.
7. Select **Other Settings**.
8. Select **Restrict User to edit Address Book** and press **Change Settings**.
9. Choose **Yes** and press **Save**.

Only Allow Recipients from the Address Books

The machine may be configured to only allow the user to select email recipients from the Address Books. This will prevent emails to any recipients that are not contained in the address books. To ensure security, the users should be restricted from editing the address book when enabling this setting (see above).

1. Press the **Log In/Out** button on the control panel.

2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Select **System Settings**.
6. Select **Common Service Settings**
7. Select **Other Settings**
8. Select **Recipient Selection Method** and press **Change Settings**.
9. Choose **Only from Address Book** and press **Save**.

Automatically Add User to the To or CC fields and Locking the Recipient List

The machine may be configured to automatically add the authenticated user to the To and/or the CC fields when sending an email. Additionally, you may restrict the user from adding any additional recipients so they are only authorized to email their own account. To enable this feature you must:

- Configure LDAP.
 - Configure Authentication.
 - Restrict Access to (Lock) the E-mail service.
 - Enable Add me to To field or Add me to CC field.
 - Lock the recipient list (optional)
1. Configure LDAP. See [LDAP Server Configuration](#) on page 106.
 2. Configure Authentication. See [Configuring Authentication](#) on page 63.
 3. Restrict Access to (Lock) the E-mail service. See [Access Control](#) on page 73.
 4. Enable **Add me to To field** or **Add me to CC field** and lock the recipient list.
 - a. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
 - b. Click the **Properties** tab.
 - c. If prompted, enter the system administrator user name and password (default: **admin, 1111**).
 - d. Click the **Services** folder, then the Email folder
 - e. Click **Defaults**
 - f. Check the **Enabled** check box next to **Add me to To** field to automatically add the user as a To recipient.
 - g. Check the Enabled check box next to the **Add me to CC** field to automatically add the user as a CC recipient.
 - h. Lock the recipient list (optional). In the **Edit E-mail Recipients** section, uncheck the **Enabled** check box.
 - i. Click **Apply** and enter the Administrator User name and password if prompted.

Custom Keyboard Button

You can customize the .com button on the keyboard of the control panel.

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Select **System Settings**.
6. Select **Common Service Settings**.
7. Select **Screen / Button Settings**.
8. Select **Customize Keyboard Button**.
9. Enter the text to appear on the custom keyboard button.
10. Press **Preview** to preview the custom keyboard button.
11. Press **Save**.

Network Scanning (Using Templates)

Overview

Network Scanning is an optional feature for this printer, available for purchase from your Xerox Sales Representative.

Network Scanning allows a user to scan an original document and convert it to an electronic file. The final destination of the electronic file depends on the template chosen by the user at the printer.

The template may reside on the printer, or may be cached on the printer from a pool of templates pulled from a remote server.

The set up of templates, template pool servers, and file repositories is accomplished using Centroware Internet Services (the printer's internally-contained Web pages) as stated in this section.

Once the scanned file is stored on the pre-determined server, the file can be redirected and manipulated with such software as the following:

SMARTsend scanning services

Built on the Microsoft .NET platform, this server-based software works with new and legacy Multifunction Systems to enable hardcopy documents to be scanned in black and white or color, and converted into such standard digital formats as PDF, JPEG, and TIFF. This Web-based application requires no additional client software installation and uses wizards to simplify workflow (template) creation. Once a workflow, or distribution process, is created, it can be saved as a paper or electronic cover sheet. The cover sheet can be set up to direct the scanned file to a wide variety of destinations. Such destinations include an email address or distribution list, network folder, FTP folder, remote printer, Web URL, Domino.doc, Domino, Microsoft SharePoint and Xerox DocuShare.

Scan to PC Desktop

For information regarding the use of Scan to PC Desktop, including Paperport, OmniPage, and ImageRetriever applications, see [Scan to PC Desktop](#) on page 136.

Additional Notes

Network Scanning User Authentication

Authentication can be enabled to prevent unauthorized access to the Network Scanning feature. If Authentication is enabled, users will be prompted to enter a 4 to 12 digit pass code before they can access the Network Scanning feature. For more information see [Authentication](#) on page 62.

Multifunction Printer Authentication

If using a SMARTsend server, a valid Windows account must be created on the SMARTsend Server for the printer's authentication. The account enables each device to communicate with the SMARTsend server to exchange template information and other configuration data. For account creation instructions, refer to the FreeFlow SMARTsend Installation and Administration Guide.

Template Considerations when using SMARTsend

A single Xerox printer cannot use both CentreWare Network Scanning services and SMARTsend. If legacy CentreWare Network Scanning Services templates need to be utilized within SMARTsend, use the SMARTsend Template Importer to import the desired templates, as stated in the FreeFlow SMARTsend Installation and Administration Guide.

Use of a Validation Server

If you will be communicating with HTTPS to servers using SSL/TLS encryption, you can set the host name and directory (which might be a cache on a Repeater) of the Validation Server used to validate Digital Certificates over the enterprise network. To set these parameters, enter the IP Address of the printer into your Web browser and press **Enter**. Click the **Properties** tab in CentreWare Internet Services, then click the **Services** folder. Select **Network Scanning**, then **Validation Server**. Select **HTTP** or **HTTPS**, enter the host name of the server, then enter the directory name (if required) specified by the validation server manufacturer. Click **Apply**.

Installation Checklist

Please ensure that the following items are available or have been performed.

1. Ensure the printer is on and connected to a network.
2. Enable the purchased Scanning option. For instructions, see [Enabling Options with Software Keys](#) on page 98. Contact your Xerox Sales Representative if you have not purchased the Scanning option.
3. Ensure that the TCP/IP and HTTP protocols are configured on the printer and are fully functional. This is required to access CentreWare Internet Services to configure Network Scanning.
To verify that the TCP/IP and HTTP protocols are correctly configured, print a Configuration Report. For more information see [Configuration Report](#) on page 22.
To configure TCP/IP, see [TCP/IP Protocol Configuration](#) on page 43.
To enable HTTP, see [Enabling Internet Services \(HTTP\)](#) on page 23.
4. Ensure that the FTP Client and SMB port are enabled on the printer. To verify this, print a Configuration Report.
To enable FTP and SMB, see [Scan to PC \(FTP/SMB\)](#) on page 121.
5. Note that after configuring a scan filing location (file repository) you need to create at least one template for users to select to scan their documents to the pre-configured repository.

Configure a Scan Filing Location

Scanning with the printer is accomplished through user selection of templates on the printer that route scanned jobs to network servers. After storage on the server, the files can be retrieved at any properly configured networked computer. A dedicated file server is not required to receive scans. A dedicated server is required, however, for the installation and use of SMARTsend software to remotely manage the pool of templates (workflows), displayed locally to device users, if so desired. Scanning is configured on the printer using one of the file transfer options below.

- **FTP (File Transfer Protocol):** Requires an FTP service running on a server or a computer.
- **SMB (Server Message Block):** Available for filing to an environment that supports the SMB protocol.

Note: As other filing methods become available, their configuration will be similar to the procedures for configuring scan filing repositories using FTP and SMB described in this section.

Configure a Scan Filing Repository using FTP

Installation Checklist

1. Ensure that a File Transfer Protocol (FTP) service is running on the server or computer where images scanned by the printer will be stored. Write down the IP address or host name.
2. Create a user account and password for the printer. When a document is scanned, the printer logs in using the account, transfers the file to the server or computer and logs out. Write down the user account and password.
3. Create a directory (folder) within the FTP root to be used as a scan filing location (repository). Write down the directory name.

Enter the Scan Repository Details in CentreWare Internet Services

1. At your computer, open your Web browser and enter the IP address of the printer in the Address or Location field. Press **Enter**.
2. Click the **Properties** tab.
3. Click the **Services** folder, then the **Network Scanning** file folder.
4. Click the **File Repository Setup**.
5. Select **Edit**, or a **File Repository Setup** number in the Default File or Alternate File Destinations list, then click **Edit**.
6. Enter a **Name** to describe the File Repository.
7. Select **FTP** for Protocols.
8. Enter either an IP Address or Host Name for the server.
9. Enter **21** for **Port Number**.
10. For **Document Path**, type in the name of the folder on the remote server that has been set up to receive device scans. Do not use forward slashes as the printer will add them by default.
11. Supply the **Login Name** and **Password** for the printer to log into the file server. The default login method is **System** (for automatic device log in). Available options are **Authenticated User and Domain**, **Authenticated User**, **Prompt at User Interface**, and **System**. If Remotely Authenticated

User (and domain) is selected, the authenticated user (and domain) details will be used for authentication at the file repository. (Remote Authentication must be configured). If Prompt at User interface is chosen, user will be prompted at the time of the scan. If system is selected, the Login Name and Password specified for System will always be used for authentication at the file repository.

12. Re-enter the password.
13. Click **Apply**.
14. Enter the administrator User Name and Password and click **OK**. The default is **admin** and **1111**.
15. Test the FTP connection by logging into the scan directory from a remote PC using the user account and password. Create a new folder within the directory and then delete the folder. If you cannot perform this function, check the user account access rights and FTP service setup.

Configure General Settings

1. Click **General**.
2. To print a Confirmation Sheet after every scan job, select **On** from the **Confirmation Sheet** drop down menu.
3. Check the **User Name** and **Domain Name** boxes if you want these items to appear on the Job Log. The Job Log works with the Document Management Fields feature and is filed with the scan job.
4. Click **Apply**.
5. Enter the administrator User Name and Password and click **OK**. The default is **admin** and **1111**.

Configure a Scan Filing Repository using SMB

Installation Checklist

1. Create a shared folder to be used as a scan filing location (repository) for scanned documents. Note the Share Name of the folder and the Computer Name or Server Name.
2. Create a user account and password for the printer with full access rights to the scan directory. Write down the user account and password.
3. Test the settings by attempting to connect to the shared folder from another PC by logging in with the user account and password. Create a new folder within the directory and then delete the folder. If you cannot perform this function check the user account access rights.

Enter the Scan Repository Details in CentreWare Internet Services

1. At your computer, open your Web browser and enter the IP address of the printer in the Address or Location field. Press **Enter**.
2. Click the **Properties** tab.
3. Click the **Services** folder, then the **Network Scanning** file folder.
4. Click the **File Repository Setup**.
5. Select **Edit**, or a File Repository Setup number in the **Default File** or **Alternate File Destinations** list, then click **Edit**.
6. Enter a **Name** to describe the File Repository.

7. Select **SMB** for Protocols.
8. Enter either an IP Address or Host Name for the server.
9. Enter **445** for **Port Number**.
10. Enter the **Share Name** in the Share box.
11. For **Document Path**, type in the name of the folder on the remote server that has been set up to receive device scans. Do not use back slashes as the printer will add them by default.
12. Supply the **Login Name** and **Password** for the printer to log into the file server. Note that the default login method is **System** (for automatic device log in).
13. Re-enter the password.
14. Click **Apply**.
15. Enter the administrator User Name and Password and click **OK**. The default is **admin** and **1111**.

Configure General Settings

1. Click **General**.
2. To print a Confirmation Sheet after every scan job, select **On** from the Confirmation Sheet drop down menu.
3. Check the **User Name** and **Domain Name** boxes if you want these items to appear on the Job Log. The Job Log works with the Document Management Fields feature and is filed with the scan job.
4. Click **Apply**.
5. Enter the administrator User Name and Password and click **OK**. The default is **admin** and **1111**.

Configure Scan to HTTP

The printer can be configured to scan to either an HTTP or an HTTPS destination. To set up a remote template pool repository, see the next procedure.

To Configure the Scan Repository Details using CentreWare Internet Services:

1. At your computer, open your Web browser and enter the IP address of the printer in the Address or Location field. Press **Enter**.
2. Click the **Properties** tab.
3. Click the **Services** folder, then the **Network Scanning** folder.
4. Click **File Repository Setup**.
5. On the File Repository Setup page, in the **Default File Destination** box, click **Edit**.
6. On the File Destination page, in the Settings area:
 - a. On the Friendly Name line, type the name of the file destination.
7. In the **Protocol** drop down box, click **HTTP** or **HTTPS**.
 - b. The Settings area refreshes and displays more options.
 - c. If you are using HTTP:
 - On the Host Name / IP Address & Port line, type either an IP Address or Host Name for the server.
 - In the Port Number box (unlabeled), type **80**.

- d. If you are using HTTPS:
 - On the **Host Name / IP Address & Port** line, type either an IP Address or Host Name for the server.
 - In the **Port Number** box (unlabeled), type **443**.
 - If you are using SSL, select the **Validate Repository SSL Certificate (trusted, not expired, correct FQDN)** check box.
 - e. For either HTTP or HTTPS, if you are using a proxy server:
 - Click **View HTTP Proxy Server Settings**.
 - On the Proxy Server page, verify that the settings match those in your proxy server environment. Make changes as needed, then click **Apply**.
 - f. On the **Document Path** line, type the HTTP address. Example: /Inetpub/wwwroot/scans/.
 - g. In the Login Credentials to Access the Destination area, click your choice of log in credentials to be used.
 - h. Type the Login Name and Password for the printer.
 - i. Type the password in the Retype Password box.
 - j. Click **Apply**.
8. If prompted, type the administrator User Name and Password and click OK. The default is **admin** and **1111**.
 9. To set up a remote template pool repository, see the next procedure, Setting up a Remote Template Pool Repository.

Setting up a Remote Template Pool Repository (optional)

1. At your computer, open your Web browser and enter the IP address of the printer in the Address or Location field. Press **Enter**.
2. Click the **Properties** tab.
3. Click the **Services** folder, then the **Network Scanning** file folder.
4. Click the **Advanced** folder, then click the **Template Pool Setup**.
5. On the Template Pool Setup page, in the Remote Template Repository area:
 - a. In the **Protocol** drop down box, click **HTTP** or **HTTPS**.
The Remote Template Repository area refreshes and displays more options.
 - b. If you are using HTTP:
 - On the **Host Name / IP Address & Port** line, type either an IP Address or Host Name for the server.
 - In the Port Number box (unlabeled), type **80**.
 - c. If you are using HTTPS:
 - On the **Host Name / IP Address & Port** line, type either an IP Address or Host Name for the server.
 - In the Port Number box (unlabeled), type **443** for the port number.
 - If you are using SSL, click the **Validate Repository SSL Certificate (trusted, not expired, correct FQDN)** check box.

- d. For either HTTP or HTTPS, if you are using a proxy server:
 - Click **View HTTP Proxy Server Settings**.
 - On the Proxy Server page, verify that the settings match those in your proxy server environment. Make changes as needed, then click **Apply**.
 - e. On the **Script path and filename (from HTTP root)** line, type the script path and filename (from HTTP root). Example: /xerox.asp.
 - f. On the **Document Path** line, type the HTTP address. Example: /Inetpub/wwwroot/scans/.
 - g. Type the Login Name and Password for the printer.
 - h. Retype the password.
 - i. Click **Apply**.
6. If prompted, type the administrator User Name and Password and click **OK**. The default is **admin** and **1111**.

Configuring the Default Template in CentreWare Internet Services

You need to create at least one template for users to select to scan their documents to the pre-configured repository. This template is often referred to as the Default Template. The template can be created with either CentreWare Internet Services or SMARTsend software running on a remote template pool server. Once a default template has been created, users can use the Scan tab of CentreWare Internet Services to create individual templates, using the default template as a base.

To create and configure the default template with CentreWare Internet Services, perform the following steps:

1. At your computer, open your Web browser and enter the IP address of the printer in the Address or Location field. Press **Enter**.
2. Click the **Properties** tab.
3. Click the **Services** folder, then the **Network Scanning** file folder.
4. Click the **Default Template**.
5. To edit the filing destinations, on the Default Template page, in the File area, click Edit.
6. In the Filing Destination area:
 - a. Select a filing policy from the drop down list. Note that you can simply accept the default policy (Rename New File).
 - b. For File Destination, note that the displayed destination should match the information previously entered when you configured your Scan Filing Repository. If you have more than one repository, the drop down list allows you to choose your repository.
 - c. To add a scanning destination subdirectory, in the **Add (Optional)** box, type the name of the subdirectory to be added.
 - d. Click **Apply** to save any changes, or **Undo** to exit without saving changes. If you clicked Apply, be prepared to enter the administrator User Name (default of **admin**) and Password (default of **1111**), if prompted.

7. Document Management Field (Optional)

Click **Add** to add data fields to the template. Note that if the box contains listings, you can make individual selections, then click **Edit** instead. This information is filed with your scanned document in the Job Log. The Job Log can then be accessed by third-party software and the information retrieved and associated with the scanned file.

- a. Click **Add**.
 - b. Refer to the displayed descriptions to set your parameters as desired.
 - c. Click **Apply** when done.
8. To set parameters for the default template, select **Edit** for any of the available categories of settings. These include: Network Scanning, Advanced Settings, Layout Adjustment, Filing Options, Report Options, Network Scanning Image Settings, and Compression Capability. Click **Apply** to save your settings.
9. Linearized PDF files allow the first page of a large PDF file to be displayed in a user's Web browser, before the entire file is downloaded from the Web server. This fast first page display helps to alleviate Internet user frustration in waiting for an entire file to download before displaying the file's contents.
10. To set the printer to create linearized PDF files:
- a. On the Default Template page, in the Network Scanning Image Settings area, click **Edit**.
 - b. In the Fast Web Viewing Options area, click **Linearized PDF**.
 - c. Click **Apply**.
11. Searchable PDF and PDF/A. The Searchable Format provides a second layer of data with the text of the scanned document. The second layer is converted via OCR technology, enabling the text of the document to be searched, copied, and pasted.
12. To set the printer to create searchable PDF files:
- a. On the Default Template page, in the Network Scanning Image Settings area, click **Edit**.
 - b. In the Searchable PDF Defaults area, click **Searchable**.
 - c. Click **Apply**.

XPS is Microsoft's electronic paper format, an alternative to PDF. XPS is currently supported as a saved file format in Microsoft Office 2007, with an XPS viewer built into Windows Vista. Microsoft states that Windows Vista uses the XPS format as a document format, a windows spool file format, and a page description language for printers.

Note: If the Searchable XPS option is available, the Searchable Format provides a second layer of data with the text of the scanned document. The second layer is converted via OCR technology, enabling the text of the document to be searched, copied, and pasted.

Select MRC Compression, if available, to use Mixed Raster Content (MRC) compression. MRC is used to divide the scanned image based on content, and then compress each area in the optimal manner for that image area. This option allows for smaller output files with better image quality.

Note: Some PDF reading applications may not support MRC compressed PDF's.

Setting up a Remote Template Pool Repository (optional)

1. At your computer, open your Web browser and enter the IP address of the printer in the Address or Location field. Press **Enter**.
 2. Click the **Properties** tab.
 3. Click the **Services** folder, then the **Network Scanning** file folder.
 4. Click the **Advanced** folder, then click **Template Pool Setup**.
 5. For **Protocol**, use the drop down menu to select the protocol you will be using to communicate with the template pool server. Current selections are **FTP**, **NewWare**, **SMB**, **HTTP**, and **HTTPS**. Other selections, when available, will be set up similarly.
 6. Supply the **Host Name / IP Address** (and Share Name, in the case of SMB).
 7. Supply the **Port Number**. The default is 21 for FTP, 445 for SMB, and 80 for HTTP and HTTPS.
 8. For **Document Path**, type in the name of the folder on the remote server containing the pool of templates. Do not use forward slashes with FTP or back slashes with SMB.
 9. Supply the **Login Name** (account name) and **Password** for the printer to access the remote server.
- Note:** For information on creating accounts on the SMARTsend server, refer to the FreeFlow SMARTsend Installation and Administration Guide.
10. Re-enter the password in the **Retype Password** box.
 11. If available, check the Polling Settings check box to set up automatic, timed polling with the template pool server. This will help to assure that the latest scanning templates are available to users of the printer.
 12. Click **Apply**.
 13. Enter the administrator User Name and Password and click **OK**. The default is **admin** and **1111**.

Testing Network Scanning (using templates)

1. Press the **Services** button on the control panel.
2. Press the **Network Scanning** button.
3. See if the template you created is displayed on screen.
4. If it is, press it. If it is not, return to the beginning of this section and repeat the required procedures.
5. Place a document in the document feeder and press the **Start** button.
6. On a network-connected PC, open a connection to the repository server, log in, and see if the document arrived in the repository folder.

Scan to PC (FTP/SMB)

Overview

This feature is designed to convert scanned data to TIFF, JPEG, or PDF format, and then use the FTP or SMB protocol to send the data to a computer (server or computer) on the network.

Note: It is assumed that you purchased the Scanning option to enable Scanning to FTP/SMB with your printer. If you did not, contact your Xerox Representative to purchase this option.

Note: For scanning to SMB, make sure that a shared folder is created for saving scanned data on the network.

Note: For scanning to FTP, make sure that the server is running the FTP service and that you have created a directory within the FTP root to be used as a scan filing location.

Requirements for FTP

When using FTP transmission, one of the following FTP servers, with an account on that server (login name and password), is required.

- Microsoft Windows Server 2003
FTP service of Microsoft Internet Information Server 6.0
- Microsoft Windows 2000 Server, Microsoft Windows Server 2008, Microsoft Windows 2000 Professional, Microsoft Windows XP, Microsoft Windows Vista
FTP service of Microsoft Internet Information Server 3.0 or later
- Mac OS X
FTP service of Mac OS X 10.1.5/10.2.x/10.3.8/10.3.9/10.4.2
Refer to the manual provided with the software for how to configure the FTP service.

Requirements for SMB

When using SMB transmission, a computer running one of the following Operating Systems, which includes a shared folder, is required.

- Microsoft Windows 2000
- Microsoft Windows Server 2003
- Microsoft Windows XP

Installation Procedure

This section describes the configuration procedure to use the Scan to PC (FTP/SMB) feature on the printer.

The following two steps are necessary to use the Scan to PC (FTP/SMB) feature.

1. Enable the required ports and set TCP/IP. Enable the FTP port and SMB port on the printer, and then set the printer's IP address. If you will be using SMB on a Microsoft Network, make sure to enable either DNS or WINS as part of the TCP/IP configuration. For FTP, make sure that DNS is enabled.
2. Preparing an FTP directory or SMB shared folder on the receiving computer (server or computer). Create an FTP directory or SMB shared folder to receive scanned documents over the network.

Enabling Ports and Setting TCP/IP

To use Scan to PC (FTP/SMB) you need to enable the applicable Ports (SMB or FTP client) on the printer, and make sure that an IP address has been set on the printer.

Note: The configuration can also be performed using CentreWare Internet Services. For information, see [CentreWare Internet Services](#) on page 23.

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. When using the SMB protocol, enable the SMB port.
 - a. Select **Connectivity & Network Setup**.
 - b. Select **Port Settings**.
 - c. Select **SMB** and then select **Change Settings**.
 - d. Select **Port Status** and then select **Change Settings**.
 - e. Select **Enabled** then select **Save**.
 - f. Select **Close** until the Port Settings screen is displayed.
6. When using the FTP protocol, enable the FTP client port.
 - a. From the Tools tab, select **Connectivity & Network Setup**, then **Port Settings**.
 - b. From the Port Settings screen, select **FTP Client** and then select **Change Settings**.
 - c. Select **Port Status** and then select **Change Settings**.
 - d. Select **Enabled** then select **Save**.
 - e. Select **Close** repeatedly until the Tools screen is displayed.

7. Set an IP address.

If an IP address is already set, this step is not necessary. Also, in an environment with DHCP or BOOTP, configure the way to obtain an IP address. If the address cannot be obtained automatically, or static configuration is preferred, configure an IP address, a subnet mask, and a gateway address as follows.

- a. Select **Protocol Settings**.
- b. Select **IPv4 (or other mode) Address Resolution**, then select **Change Settings**.
- c. Select one from **DHCP**, **BOOTP**, **RARP**, **DHCP/Autonet** or **Static**, and then select **Save**. If you select anything other than Static, proceed to Step 5.

Note: When communicating by TCP/IP make sure to enable the use of a DNS (or WINS for SMB) server in CentreWare Internet Services.

- d. On the Protocol Settings screen, select **TCP/IP – IP Address** and then **Change Settings**.
- e. Enter the IP address using the numeric keypad.

Note: Enter the address in the format xxx.xxx.xxx.xxx. The xxx should be a numeric value in the range from 0 to 255. However, 224 – 255.xxx.xxx.xxx and 127.xxx.xxx.xxx cannot be used.

- f. Select **Save**.
- g. Configure **TCP/IP – Subnet Mask** and **TCP/IP – Gateway Address** using the same process as stated above.

Note: Enter the Gateway address in the format xxx.xxx.xxx.xxx. The xxx should be a numeric value in the range from 0 to 255. However, 224 – 255.xxx.xxx.xxx and 127.xxx.xxx.xxx cannot be used.

Note: Specify the subnet mask by a combination of the numbers 0, 128, 192, 224, 240, 248, 252, 254, and 255. However, you cannot use 0 between non-zero values.

Note: If you do not set the gateway address, enter 0.0.0.0.

8. Select **Close** until the Tools screen is displayed.
9. Wait several seconds for the Auto Clear service to log you out.
10. If you changed any settings, the printer will automatically reboot to register and enable your new settings. After the printer is restarted, print out a Configuration Report to confirm that the ports are enabled and TCP/IP is correctly configured. For more information, see [Configuration Report](#) on page 22.

Receiving Computer Configuration

The following describes the configuration procedure for the receiving computer (server or computer).

Using FTP

1. Ensure that File Transfer Protocol (FTP) services is running on the server or computer where images scanned by the printer will be stored. Note down the IP address or host name.
2. Create a user account and password for the printer. When a document is scanned, the printer logs in using the account, transfers the file to the server or computer and logs out. Note down the user account and password details.

3. Create a directory within the FTP root to be used as a scan filing location (repository). Note down the directory path.
4. Test the FTP connection by logging in to the scan directory from a PC with the user account and password. Create a new folder within the directory and then delete the folder. If you cannot perform this function check the user account access rights and the FTP service setup.

Using SMB

1. Create a shared folder to be used as a scan filing location (repository) for scanned documents. Note the Share Name of the folder and the Computer Name or Server Name.
2. Create a user account and password for the printer with full access rights to the scan directory. Note down the user account and password.
3. Test the settings by attempting to connect to the shared folder from another PC by logging in with the user account and password. Create a new folder within the directory and then delete the folder. If you cannot perform this function check the user account access rights.

Adding the Receiving Computer's Address to the Address Book

To direct your scanned documents to the appropriate receiving computer (server or computer) you will need to add the Receiving Computer's Address to the printer's Address Book as follows.

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Select **Setup & Calibration**, then touch **Address Book**.
6. Select an available Address Number.
7. Touch **Create/Delete**.
8. Touch **Address Type**, then touch **Change Settings**.
9. Select **Server** as the address type, and select **Save**.
10. Select each item to be set, and select **Change Settings**. When each setting is complete, select **Save**.
11. Select **Transfer Protocol** from the Configuration Report and select **FTP** or **SMB** or **SMB (UNC format)**.
12. When FTP or SMB is selected, touch **Server Name/IP Address** on the Configuration Report and enter the Host name or IP Address of the computer (server or computer) designated to receive scanned files. When entering a Host name, use the fully qualified domain name. For example: myhost.example.com. Do not use forward or backward slashes.
13. Select **Shared Name (SMB Only)** to enter the name of the shared folder on the receiving computer. Enter the name only, without any backward slashes.
14. Select **Save In** to enter the directory for storing documents. When FTP or SMB is selected, supply the name of the directory (without any forward or backward slashes). When SMB (UNC format) is selected, if available, use the Universal Naming Convention format such as \\host name\shared name\directory name.

15. Select **User Name** and provide the User account name assigned to the directory on the receiving computer.
16. Select **Password** and provide the password to access the User account on the receiving computer.
17. Select **Port Number** to set the communications port number. Standard Port is recommended.
18. When done changing and saving settings, touch **Close** (repeatedly, if necessary) to exit to the **Tools** screen.
19. Wait several seconds for the Auto Clear service to log you out.

Using the Scan to PC (FTP/SMB) Feature

After the appropriate ports have been enabled, TCP/IP has been configured, and the receiving computers address added to the Address Book, the Scan to PC (FTP/SMB) feature can be used as follows.

1. Select **Scan to PC** from the Services screen.
2. Touch **Transfer Protocol**, select a protocol, and touch **Save**.
3. Note that you can touch the blank lines on the screen and manually enter Server settings, or touch **Address Book**. For SMB you can also browse the Microsoft Network.
4. Select the Receiving Computer (computer or server) in the list contained in the Address Book and touch **Save**.
5. Place your document in the document feeder and press the control panel's large, green **Start** button. Progress of the data transfer will be displayed on screen.

Scan to Home

The Scan to Home option is supported through the Network Scanning service. Essentially, it is a template file (.xst) stored locally on the printer, but in a different directory than the network scanning templates or folder folders.

To access the Scan to Home template, press the Services button at the control panel, and touch Network Scanning . The printer queries LDAP to acquire the authenticated user's home directory, or appends the authenticated user's login name to a predefined network home path.

Preparing for Scan to Home Installation

1. Ensure the printer is fully functioning on the network prior to installation.
2. Enable the Scan to Home option. For instructions, see [Enabling Options with Software Keys](#) on page 98. Contact your Xerox Sales Representative if you have not purchased the Scan to Home option.
3. Ensure that the TCP/IP and HTTP protocols are configured on the printer and fully functional. This is required to access CentreWare Internet Services to configure Network Scanning.
4. Enable LDAP authentication. For more information, see [LDAP Authentication](#) on page 66.
5. Configure the LDAP protocol for the System (or an Authenticated User) to log in to the LDAP server. For more information, see [LDAP Server Configuration](#) on page 106.

Configure Scan to Home

Note: Scan to Home does not work without Remote Account mode.

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Touch **Authentication / Security Settings**, then **Authentication**, then **Login Type**. Select **Login to Remote Accounts**.
6. Select **Save**.
7. Select **Yes** to change login type.
8. Press the **Login/Out** button.
9. Select **Reboot Now**.
10. At your computer, open your Web browser and enter the IP address of the printer in the Address or Location field. Press **Enter**.
 - a. Click the **Properties** tab.
 - b. Select the **Security** folder.
11. Select the **Remote Authentication Servers** folder.

12. Select **Authentication System**, select **LDAP** from the **Authentication Settings** drop down list, then click **Apply**. Click **Reboot Machine**.
13. Select **Authentication Configuration**.
14. In the **Login Type** box, select Login to Remote Accounts, then click **Apply**. The printer will reboot.
15. At your computer, open your Web browser and enter the IP address of the printer in the Address or Location field. Press Enter.
16. Click the **Properties** tab.
17. Select the **Services** folder.
18. Select the **Scan to Home** folder.
19. Select **General**.
20. On the Scan to Home page, in the Status area:
 - a. On the **Status** line, click the **enabled** box.
 - b. In the **Friendly Name** box, type in a user-recognizable name of up to 35 characters for the template that will appear in Template Details on the printer's touch screen.
 - c. On the **Determine Home Directory** line, ensure that the radio button next to **LDAP Query** is selected.
 - d. The printer will query the LDAP server with the user's authenticated login name and retrieve the user's home directory to set up the template scanning path to that directory.
21. In the LDAP Mapping for Home Directory area:
 - a. To define the LDAP home directory to a name other than homeDirectory, click **LDAP Mapping for Home Directory**.
 - b. To create a scanning subdirectory within the user's home directory, select **Automatically Create Subdirectory** and specify a general name.

Scanning to the Printer's Hard Drive (Folders)

You must purchase the scanning option to scan to a folder on the printer's hard drive. Contact your Xerox Representative for more information.

Refer to the Enabling Options with Software Keys in this section to enable your purchased option on the printer with the supplied 12 character key.

Setting Up Folders at the Printer

Scanning to the printer's hard drive requires the set up of individual Folders to receive scanned files. Up to 200 Folders can be set up to support this type of scanning. To set up Folders, perform the following steps:

Note: If you log in as Administrator all folders are created with the owner as System Administrator.

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Press **Setup & Calibration**.
6. Press **Create Folder**.
7. When the numbered list of folders is shown on screen, use the supplied arrow keys to scroll through the list to locate an unassigned folder number.
8. Select an unassigned folder number from the displayed list.
9. Press the **Create & Delete** button in the lower right corner of the folder selection screen.
10. When the New Folder – Passcode screen displays, use the **On** and **Off** buttons on the left side of the screen to determine whether or not a password will be required to access the folder. If On is selected, use the printer's numeric keypad to enter a numbered password.
11. Press the **Save** button to save your settings. (To exit the screen, without saving settings, press the **Cancel** button.)
12. When the Folder settings screen displays (after assigning a password), note that you have five setting selections displayed on five numbered horizontal lines. The available selections include: Folder Name, Check Folder Passcode, Delete Files After Retrieval, Delete Expired Files, and Link Job Flow Sheet to Folder.
13. To assign a name to the folder, press the **Folder Name** selection line.
14. Press the **Change Settings** button.
15. Use the touch screen keyboard to enter a name for your folder.
16. When finished entering in a name, press the **Save** button in the upper right corner of the screen. (To exit the screen, without saving changes, press the **Cancel** button.)
17. On the Folder settings screen, press any other selection lines of interest and touch the **Change Settings** button, as previously described, to access and make setting changes. Use the **Save** button to save your changes.

18. To exit the Folder settings screen, press the **Close** button in the upper right corner of the screen.
19. To exit the screen that lists all assigned and unassigned folders, press the **Close** button in the upper right corner of the screen.

Configuring Expiration Settings for Stored Documents

This setting allows the System Administrator to set a document expiration timer to delete documents stored in, but not retrieved from, folders.

1. Press the **Log In/Out** button on the control panel.
2. On the keypad enter **admin** or the current System Administrator Login ID. Touch **Next** when finished.
3. On the keypad enter **1111** or the current Passcode. Touch **Enter** when finished.
4. From the Tools screen, use the arrow control in the **Group** menu to scroll to **Stored File Settings**.
5. Select **Expiration Date for Files in Folder** and touch **Change Settings**.
6. Select **On**, set the timer controls, and touch **Save**.
7. Make any other selections desired, press Change Settings, then press **Save**.
8. Press **Close** to return to the Tools screen.
9. To exit the Tools screen, wait several seconds for the Auto Clear service to log you out.

Setting Up Folders with CentreWare Internet Services

Note: Scanning to the printer's hard drive requires the set up of individual Folders to receive scanned files. Up to 200 Folders can be set up to support this type of scanning. To set up Folders, perform the following steps:

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Scan** tab.
3. Click **Folder**.
4. When the numbered list of folders is shown, locate an unassigned folder number from the displayed list and click the **Create** button for that folder.
5. Type in a name for this Folder in the Folder Name entry box.
6. Type in a pass code in the **Folder Passcode** entry box.
7. Confirm the pass code by retyping it in the **Retype Passcode** box.
8. Use the drop down arrow to set **Check Folder Passcode** to **Always** (recommended) to secure your folder.
9. Place a checkmark in the **Delete Files after Print or Retrieve** box if you wish to delete documents from your folder after retrieving or printing.
10. Place a checkmark in the **Delete Expired Files with** box to use this feature in place of, or as an augmentation to, Auto Delete.
11. Click **Apply** when done.

Scanning to Folders

Scanning to the printer's hard drive requires the set up of individual folders to receive scanned files. Up to 200 folders can be set up to support this type of scanning. To learn how to set up an individual folder, see [Setting Up Folders at the Printer](#) on page 128.

To scan to a Folder, perform these steps:

1. From the printer's Main screen, press the **Scan to Folder** button.
2. When the **Scan to Folder** screen displays, a list of Folders will be shown. Use the supplied arrow to scroll through the icons to locate your Folder.
3. Select your Folder by pressing its selection line on the touch screen.
4. When the **Password** screen displays, enter your password (series of numbers) using the control panel's numeric keypad.
5. Press the **Confirm** button on the touch screen.
6. Use the displayed controls to set up scanning parameters, then place your document in the document feeder, and press the control panel's large, green **Start** button.
7. Press the **Services** button to return to the printer's Main screen.

Retrieving Images from Folders

Images are retrieved from Folders using CentreWare Internet Services.

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Scan** Tab.
3. Click **Folder**.
4. Locate your folder, then click **File List**.
5. Enter your Passcode when prompted and click **Apply**.
6. Use your mouse to place a check mark in the box in front of the file that you wish to retrieve.
7. After selecting individual retrieval options, click the **Retrieve** button. Note that you can also specify printing options and print the document by clicking Print File.
8. Click **Save this** provided on the next screen displayed to begin the image downloading process.
9. Note that after downloading a document, you can delete that document from your Folder by rechecking the box in front of the file just downloaded and clicking the **Delete** button.

Setup and Use of Job Flow Sheets with Folders

Overview

Job flow is a feature for executing a series of registered actions.

The target of a job flow is documents stored in a Folder.

Two methods are available:

- Automatically start a job flow when a document is stored in a Folder
- Select a job flow to manually act on documents stored in a Folder.

To start a job flow, you must link the job flow sheet to a Folder, or to documents within a Folder. Documents are then processed as specified on the job flow sheet.

To automatically document processing in a Folder with a job flow sheet, see [Creating a Folder and Linking to a Job Flow Sheet \(for Automatic Processing\)](#) on page 134.

To manually link document processing in a Folder with a job flow sheet, see [Manually Linking to a Job Flow Sheet to Documents in a Folder](#) on page 135.

Features supported for Job Flow

Incoming Folder Documents	Available Outgoing processing
Faxes for private polling	Printing, Fax forwarding (up to 100 recipients), iFAX transmission (up to 100 recipients)
Scanned documents	Printing, Fax forwarding (up to 100 recipients), iFAX transmission (up to 100 recipients)
Fax to Folder	Printing, Fax forwarding (up to 100 recipients), iFAX transmission (up to 100 recipients)
iFAX received	Printing, Fax forwarding (up to 100 recipients), iFAX transmission depending on System Administration mode settings

Enabling Ports and Setting TCP/IP

In order to use the job flow service, you must enable the SOAP port, the SNMP port, the Internet Service (HTTP) port, and set IP addresses. The procedure for setting the printer is as follows.

Note: The configuration can also be performed using CentreWare Internet Services. For more information, see [CentreWare Internet Services](#) on page 23.

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.

3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Enable the SOAP port.
 - a. Select **Connectivity & Network Setup**.
 - b. Select **Port Settings**.
 - c. Select **SOAP** and then select **Change Settings**.
 - d. Select **Port Status** and then select **Change Settings**.
 - e. Select **Enabled** then select **Save**.
 - f. Select **Close** until the Port Settings screen is displayed.
6. Enable the SNMP port.
 - a. Select **SNMP** and then select **Change Settings**.
 - b. Select **Port Status** and then select **Change Settings**.
 - c. Select **Enabled** then select **Save**.
 - d. Select **Close** until the Port Settings screen is displayed.
 - e. Enable the Internet Service (HTTP) port using the same process as stated above.
 - f. Select **Close** repeatedly until the Tools screen is displayed.
7. Set an IP address.

If an IP address is already set, this step is not necessary. Also, in an environment with DHCP or BOOTP, configure the way to obtain an IP address. If the address cannot be obtained automatically, or static configuration is preferred, configure an IP address, a subnet mask, and a gateway address as follows.

 - a. Select **Protocol Settings**.
 - b. Select **IPv4 (or other mode) Address Resolution** and then select **Change Settings**.
 - c. Select one from **DHCP, BOOTP, RARP, DHCP/Autonet** or **Static**, and then select **Save**. If you select anything other than Manual, proceed to Step 5.

Note: When communicating by TCP/IP make sure to enable the use of a DNS (or WINS for SMB) server in CentreWare Internet Services.

- d. On the Protocol Settings screen, select **TCP/IP – IP Address** and then **Change Settings**.
- e. Enter the IP address using the numeric keypad.
- f. Enter the address in the format xxx.xxx.xxx.xxx. The xxx should be a numeric value in the range from 0 to 255. However, 224 – 255.xxx.xxx.xxx and 127.xxx.xxx.xxx cannot be used.
- g. Select **Save**.
- h. Configure TCP/IP – Subnet Mask and TCP/IP – Gateway Address using the same process as stated above.

Note: Enter the Gateway address in the format xxx.xxx.xxx.xxx. The xxx should be a numeric value in the range from 0 to 255. However, 224 – 255.xxx.xxx.xxx and 127.xxx.xxx.xxx cannot be used.

Note: Specify the subnet mask by a combination of the numbers 0, 128, 192, 224, 240, 248, 252, 254, and 255. However, you cannot use 0 between non-zero values.

If you do not set the gateway address, enter 0.0.0.0.

8. Select **Close** until the **Tools** screen is displayed.

9. Wait several seconds for the Auto Clear service to log you out.
10. If you changed any settings, the printer will automatically reboot to register and enable your new settings. After the printer is restarted, print out a Configuration Report to confirm that the ports are enabled and TCP/IP is correctly configured. For information on how to print a Configuration Report, see [Configuration Report](#) on page 22.

Configuring the SNMP Port

Configure the transport protocol for the SNMP port using CentreWare Internet Services.

1. Start a Web browser on a network connected computer.
2. Enter the printer's IP address in the address box of the browser and press **Enter**.
3. Click the **Properties** tab.
4. Click **Port Status**.
5. Select (place a checkmark in) the **UDP** check box next to **SNMP**.
6. Click **Apply**.
7. Enter the System Administrator user ID and password when prompted and click **OK**.
8. Click the **Reboot** button when it displays. If a Reboot button fails to display, click the Status tab and click **Reboot Machine** from that screen.

Creating Job Flow Sheets

Before you can add a job flow sheet to a folder, you need to create at least one job flow sheet. To create a job flow sheet, perform the following steps.

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Select **Setup & Calibration**.
6. Touch **Create Job Flow Sheets**.

Note: If this selection is unavailable, follow the instructions in the next topic, [Creating a Folder and Linking to a Job Flow Sheet](#), to create your flow sheet.

7. Touch **Create**.
8. Select items to be set from the displayed item list, then touch **Change Settings**. When done, touch **Save**.
 - **Name:** Set the name, up to 128 characters in length, for the job flow sheet.
 - **Description:** Set the description, up to 256 characters in length, for the job flow sheet.
 - **Keyword:** Enter a keyword, up to 12 characters in length, for job flow search.
 - **Send as Fax:** Specify the fax transmission address. You can specify a total of up to 100 addresses, using either Address Numbers or by manual input (New Recipient).

- **Send as iFAX:** Specify the E-mail address. You can specify the address using either the Address Book, or by manual input (New Recipient).
 - **Send as E-mail:** Specify the E-mail address. You can specify the address using either the Address Book, or by manual input (New Recipient).
 - **Transfer via FTP (1) and (2):** Specify transfer to an FTP server. You can specify the address using either the Address Book, or by manual entry into the boxes supplied.
 - **Transfer via SMB (1) and (2):** Specify transfer to an SMB server. You can specify the address using either the Address Book, or by manual entry into the boxes supplied.
 - **Print :** Select **On** (if desired), then specify Print and Finishing settings. This prints a copy of your document after it has been scanned.
9. When done with setting selections, touch **Save**.
 10. Touch **Close** or **Exit** to exit the Setup Menu screen and return to the Tools screen.
 11. Wait several seconds for the Auto Clear service to log you out.

Creating a Folder and Linking to a Job Flow Sheet (for Automatic Processing)

Before you can a job flow sheet to a folder, you need to create at least one folder for your use. In the process of creating the folder, you can to your newly created Job Flow Sheet.

To create a folder and it to a Job Flow Sheet (for automatic processing), perform the following steps.

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Select the **Setup & Calibration** button.
6. Press the **Create Folder** button.
7. When the numbered list of Folders is shown on screen, use the supplied arrow keys to scroll through the list to locate an unassigned Folder number.
8. Select an unassigned Folder number from the displayed list.
9. Press the **Create & Delete** button in the lower right corner of the Folder selection screen.
10. When the New Folder – Passcode screen displays, use the **On** and **Off** buttons on the left-hand side of the screen to determine whether or not a password will be required to access the Folder. If **On** is selected, use the printer's numeric keypad to enter a numbered passcode of up to 20 digits.
11. Press the **Save** button to save your settings. (To exit the screen, without saving settings, press the **Cancel** button.)
12. When the Folder settings screen displays (after assigning a password), note that you have five setting selections displayed on five numbered horizontal lines. The available selections include: Folder Name, Check Passcode, Delete Documents After Retrieval, Delete Expired Documents, and Job Flow Sheet to Folder.
13. To assign a name to the Folder, press the **Folder Name** selection line.
14. Press the **Change Settings** button.
15. Use the touch screen keyboard to enter a name for your Folder.

16. When finished entering in a name, press the **Save** button in the upper right corner of the screen. (To exit the screen, without saving changes, press the Cancel button.)
17. On the Folder settings screen, press any other selection lines of interest and use the Change **Settings** button, as previously described, to access and make setting changes. Use the **Save** button to save your changes.
18. To link this Folder with your Job Flow Sheet, touch **Job Flow Sheet to Folder** and touch **Change Settings**.
19. Touch **Create/Change** to set the Folder to a previously-created Job Flow Sheet.

Note: If no Job Flow sheets are displayed, press **Create** to create one and follow the instructions supplied in the Creating Job Flow Sheets topic in this section.

20. Select your Job Flow Sheet from the list (clicking **Refresh**, if necessary) and touch **Save**.
21. Touch the **Auto Start** check box to place a checkmark in the box for automatic processing of documents as they are received in the Folder.
22. To exit the Job Flow Sheet to Folder screen, press the **Close** button in the upper right corner of the screen.
23. To exit the Folder settings screen, press the **Close** button in the upper right corner of the screen.
24. To exit the screen that lists all assigned and unassigned Folders, returning to the Tools screen, press the **Close** button.
25. Wait several seconds for the Auto Clear service to log you out.

Manually Linking to a Job Flow Sheet to Documents in a Folder

1. Touch **Send from Folder** on the Services screen.
2. Select a **Folder**, enter the password, then touch **Confirm**.
3. On the **Document List** screen, select a document.
4. Touch **Job Flow Settings**.
5. Touch **Select Job Flow Sheet**.
6. Select a job flow sheet and press the on-screen **Start** button.

Testing Job Flow Sheet Operation (for Automatic Processing)

1. Press the Services button on the control panel.
2. Touch **Scan to Folder**.
3. Select your Folder, enter the password, then touch **Confirm**.
4. Place a document in the document feeder.
5. Select your scanning options.
6. Press the control panel's large, green **Start** button.
7. Check the destination that was specified on your Job Flow Sheet to verify that the document was received.

Scan to PC Desktop

Overview

Scan to PC Desktop is now a core element of the Xerox FreeFlow Digital Workflow collection for the office.

With either solution, the purpose of PaperPort is to create a program on the networked PC, providing a windows-style desktop for the management of scanned image and text items.

The purpose of OmniPage is to quickly turn PDF files into easily editable word processing and spreadsheet documents.

The purpose of Image Retriever 5.2 is to provide a method to monitor a specified server folder for incoming scanned items. Monitoring of E-mail can also be added in the case of the Professional program edition.

The Scan to PC Desktop solution is typically sold in 25 user licenses packages. For enterprises requiring more than 100 licenses, special pricing is available. Consult your Xerox Representative for details.

Perform the procedures for setting up this device to Scan to SMB. For more information, see [Scan to PC \(FTP/SMB\)](#) on page 121.

Software Installation Procedure

To install Scan to PC Desktop components on networked computers, refer to the Scan to PC Desktop Network Installation Guide, Version 7.0. This document should have come with your software license package, and is also available from www.xerox.com/support. If you go to the Web site, type **Scan to PC Desktop** in the upper right corner Search box and press **Enter**. Select **Support** under **FreeFlow Scan to PC Desktop**. Select your language and click **Go**.

The software manufacturer requires PaperPort to be installed before Image Retriever in all cases. Also, during the installation of PaperPort Professional 10, PDF Create! 2.0 must be installed.

Configure Image Retriever 5.2 on Networked Computers

Referring to the Scan to PC Desktop: Image Retriever 5.2 documentation, configure Image Retriever 5.2 on the networked computers.

Testing Scan to PC Operation

1. Perform a scan at the printer.
2. Go to a networked computer running Image Retriever 5.2.
3. Right click the **Image Retriever** icon in Windows.
4. Click the **Settings** command to display the Image Retriever Settings dialog.
5. Verify that the SMB Repository (server) UNC is pointing correctly to the server and shared folder.

6. Click **Get Now**.
7. Start the PaperPort program and verify that the scanned item appears on the PaperPort desktop.

Installing and Using the Network Scanner Utility

To retrieve scanned documents directly from a folder into an image-editing application such as Adobe® Photoshop®, you need to install the Network Scanner Utility (scan driver) on your computer.

You can additionally install and use Network Scanner Utility 3 to view and import scanned files, without using a client-side image-editing program. For Network Scanner Utility 3 installation instructions, refer to instructions contained on the Driver/Network Utility CD ROM that came with the printer.

Before Installing the Network Scanner Utility

Before installing the Network Scanner Utility, make sure that your computer meets the following requirements:

- You must be running Windows XP or Windows 2000. Windows 2000 Server/Advanced Server Terminal Service is not compatible with this feature.
- Your computer must be operating with a i486DX4/100 MHz processor or faster, have 32 MB RAM or greater, and have 40 MB or more of free hard drive space (not including space for storing scanned data).
- Your computer must be connected to a network using the TCP/IP protocol.
- Your image-editing application must be compatible with the TWAIN interface to import scanned data.

Installing the Network Scanner Utility

1. Insert the Driver/Network Utility (Windows) CD ROM into your computer's CD drive.
2. Open Windows Explorer, click the drive letter for your CD ROM drive, and open **Drivers\Scan\Disk1**.
3. Double click **Setup.exe** and follow the instructions displayed on screen.

Uninstalling the Network Scanner Utility

1. From the Windows 2000 desktop, from the **Start** menu, select **Settings, Control Panel**, then double click **Add/Remove Programs**. On the Windows XP desktop, click **Start, Control Panel**, then double click **Add/Remove Programs**.
2. Select **Fuji Xerox Network Scanner Utility**, then click **Add Remove**.
3. Click **Yes**.

Importing Scanned Data from the Folder to an Image-Editing Application

1. Start a TWAIN-compatible application program, such as Photoshop.
2. From the **File** menu, select the command for selecting the scan source (Import/Twain Source, in Photoshop).
3. Select **FX Network Scan** from the displayed list and click **Select**.

4. From the File menu, select the command to import the image from the scanner. In Photoshop, for example, this would be Import/Twain.
5. If the scanner doesn't automatically display on screen allowing its selection with the **Select Scanner** button, perform the next six steps. Otherwise go to step 12 below.
6. Click **Refresh**.
7. Click **Options**.
8. Click **Change Display** in the scanner selection box.
9. To display scanners on other sub-networks, register them under Scanner Registration.
10. Click **OK**.
11. Select the scanner for connection from the displayed list, then click **Select Scanner**. You can also double click the displayed scanner's name.
12. Enter the folder number and password when prompted.
13. Click **Open Folder**.
14. From the displayed document list, select the document you wish to import and click **Import**.

Importing Scanned Data from the Folder using Network Scanner Utility 3

1. On your Windows desktop, select **Start\Programs\FujiXerox\Network Scanner Utility\Network Scanner Utility 3**.
2. Select the scanner for connection from the displayed list, then click **Select Scanner**.
3. If no items are shown in the list, click **Refresh**, then **Options**, then **Change Display** and register the scanner's IP address and name. Click **OK** when done.
4. Enter the folder number and password when prompted.
5. Click **Open Folder**.
6. From the displayed document list, select the document you wish to import and click **Import**.

Xerox Extensible Interface Program

Xerox Extensible Interface Platform (XEIP) enables independent software vendors and partners to develop customized programs to be accessed directly from the Xerox device. Users can enter their authentication login at the printer and access a set of features and options designed specifically for their business needs.

For example, a hospital could customize the printer to help better manage patient forms. By touching an icon on the display, a healthcare worker could access the hospital's Web-based document management system and browse a list of patient forms.

Users can quickly scan and capture paper documents, preview thumbnails, and add them to frequently used document storage locations. For example:

- A tutor can scan notes directly to a specific course repository for students to access.
- A student can scan assessment papers to their course folder for their tutor to mark.

Xerox Extensible Interface Platform utilizes Web-based Xerox Partner solutions including Omtool™, Xerox Secure Access Unified ID System™ and FreeFlow™ SMARTsend™ to enable users to access document repositories at the printer display screen.

Additional resources may be required on the printer depending on the solution. For further information, contact your Xerox Sales Representative.

XEIP Setup

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. If prompted, enter the system administrator user name and password (default: **admin, 1111**).
4. To enable the printer for XEIP applications:
 - a. Click the **Properties** tab.
 - b. Click the **Services** folder, the **Custom Services** folder, then **Custom Services**.
 - c. In the Custom Services area, click **Enabled**.
 - d. Click **Apply**.
5. To enable a digital certificate (if needed):
 - a. Click the **Properties** tab.
 - b. Click the **Security** folder, then **Machine Digital Certificate Management**.
 - c. Click **Create New Certificate**.
 - d. Select **Self-Signed Certificate** or **Certificate Signing Request (CSR)**. Click **Continue**.
 - e. In the Create Self-Signed Certificate area, select **Public Key Size**. Click **Apply**.

6. To enable SSL:
 - a. Click the **Properties** tab.
 - b. Click the **Security** folder, then **SSL/TLS Settings**.
 - c. If prompted, enter the system administrator user name and password (default: **admin, 1111**).
 - d. In the SSL/TLS Settings area, on the **HTTP – SSL / TLS Communication** line, click **Enabled**.
 - e. Click **Apply**.

Note: If changes were made to the SSL settings you may need to reboot the system. When SSL is enabled, you must enter **https://** (before your printer's IP address) in the address field of your browser to access CentreWare Internet Services. Example: **https://13.140.244.11**.

7. To enable the ports:
 - a. Click the **Properties** tab.
 - b. Click the **Connectivity** folder, then **Port Settings**.
 - c. On the **SNMP** line, click **Enabled**.
 - d. On the **SMB** line, click **Enabled**.
 - e. On the **FTP Client** line, click **Enabled**.
 - f. On the **SOAP** line, click **Enabled**.
 - g. Click **Apply**.
8. To ensure that IPv4 is enabled by default:
 - a. Click the **Properties** tab.
 - b. Click the **Connectivity** folder, then the **Protocols** folder.
 - c. In the **Protocols** folder, click **TCP/IP**.
 - d. In the IP Mode area, on the **IP Mode** line, click or verify **IPv4**.
 - e. If you clicked IPv4, click **Apply**.

EIP applications can now register to the printer. You may need to map buttons to Custom Services at the printer in order to see the new applications.

Fax

Overview

The optional Fax feature works much the same as a standard facsimile machine. Extra features, covered in this section, such as the Address Book, Group Dial, Comments, and the use of Folders, are meant to provide additional capabilities in support of the Fax feature.

Note: It is assumed that you purchased the appropriate 1 or 3 line Fax hardware kit for use with your printer. If you did not, contact your Xerox Representative to purchase this option.

Note: The FAX or Internet Fax (iFAX) features and the Server Fax feature are mutually exclusive. If Server Fax is enabled, even if the printer is equipped with an internal fax board, scanning to the internal FAX will be disabled. While the Server Fax feature is enabled, the iFAX service will also be disabled. Also note that Folder to FAX (a Job Flow Sheet destination) and Direct Fax (LAN Fax) are not supported when Server Fax is enabled. The default when both options have been installed is to enable the internal fax board and Internet Fax. Server Fax will be disabled. You can use CentreWare Internet Services, to select which Fax Service to enable. For more information see [Server Fax](#) on page 154.

Checking and Setting Critical Fax Parameters

Refer to the Fax Settings Topic (including Fax Defaults and Fax Control) in this section to determine if Fax Defaults and Fax Control parameters are correctly set for your environment.

Before You Start

You cannot use the printer with a call waiting service.

A facsimile located close to a main unit of a cordless phone can cause distorted images or interrupted transmission. The printer should be installed at least five meters away from the main unit of the cordless phone.

If the digital line leased for your company network is multiplexed, facsimile communication may be restricted as follows:

- The features using our unique transmission method, such as Recipient Print Sets, Relay Broadcast and Remote Folder, are not available.
- The transmission speed is limited.
- Super G3 cannot be used.

Communications modes

- G3 (Auto) – Normal Fax communications: The printer automatically switches modes in the following order of priority: Unique SG3 - Unique ECM - Unique G3 - ITU-T SG3 - ITU-T ECM - ITU-TG3 depending on the capabilities of the remote terminal.
- F4800: Select this mode when transmitting over noisy or bad telephone lines, as can be the case with overseas calls.

Connecting the Phone Line

- **LINE 1** Connect the fax to a public switched telephone network (PSTN). An external telephone cannot be connected.
- **TEL** An external telephone is connected here.
- **LINE 2 (Line 2)** Connect to a public line.
- **LINE 4 (Line 4)** Connect to a public line.

Local Terminal Information Settings

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Touch **Fax Mode Settings**.
6. Touch **Local Terminal Information**.
7. Select the items to enter information and touch **Change Settings**.
 - a. Enter a Local Name, up to 20 characters, then touch **Save**.
 - b. Enter a Company Logo, up to 30 characters, then touch **Save**.
 - c. Enter a Machine Password, up to 20 digits, then touch **Save**.

Note: The password prevents your machine from receiving faxes, or being polled by other machines that are not F-Code compatible.

- d. Enter **G3 Fax ID**, up to 20 digits, then touch **Save**.
 - e. Enter **G3 Dial Type, Tone, 10pps, or 20pps**, then touch **Save**.
 - f. Enter **G3 Line Type, PSTN or PBX**, then touch **Save**.
8. When complete, touch **Close** repeatedly until the Tools screen is displayed.
 9. Wait several seconds for the Auto Clear service to log you out.

Address Book Setup

Use of this feature enables Fax users to select recipients by 3 digit numbers, which can be used to support speed dialing.

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Select **Setup & Calibration**.
6. Touch **Add Address Book Entry**.
7. Select an available Address Number.
8. Touch **Create/Delete**.

9. Touch **Address Type**, then touch **Change Settings**.
10. Touch **Fax**, then touch **Save**.
11. Select the items you would like to enter information for and touch **Change Settings**.
 - **Fax Number**: Up to 128 characters, then touch **Save**.
 - **Name**: Up to 18 characters, then touch **Save**.
 - **Index**: Only 1 digit (used for a quick find), then touch **Save**.
 - **Relay Station setup**: **On** or **Off**, then touch **Save**.
 - **Starting Rate**: G3 Auto or Forced4800bps, then touch **Save**.
 - **Resolution**: Choose one, then touch **Save**.
 - **Cover Note**: **On** or **Off**, then touch **Save**. If **On**, select **Comment (Recipient Comment)** then touch **Save**.
 - **Maximum Image Size**: choose one then touch **Save**.
 - **Delayed Start**: **On** or **Off**, then touch **Save**. If **On**, choose **Start Time**, then touch **Save**.
 - **Remote Folder**: **On** or **Off**, then touch **Save**. If **On**, enter Folder number, then touch **Next**, and password if required.
 - **F Code**: **On** or **Off**, then touch **Save**. If **On**, enter F Code and password, then touch **Next**.
12. When complete, touch **Save** to exit the settings screen.
13. Touch **Close** to exit the Address Book screen, returning to the **Tools** screen.
14. To exit the Tools screen, wait several seconds for the Auto Clear service to log you out.

Group Send Setup

This setting supports Group Send (broadcast) Fax transmissions to up to 20 address numbers in a pre-designated group. Refer to the Group Send topic in the printer's User Guide for full information. To set up a Group, perform the following steps.

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Select **Setup & Calibration**.
6. Touch **Group Send**.
7. Select a Group number.
8. Touch **Create/Delete**.

9. Use the numeric keypad to enter the three-digit Address Numbers of recipients contained in the printer's Address Book.

Note: Refer to the Address Book Setup topic in this section to learn how to set up address numbers so that they are available for selection here.

10. Touch **Add to this Group** to add recipients, one number at a time, to the group.
11. When complete, touch **Save**.
12. Touch **Close** to return to the Tools screen.
13. To exit the Tools screen, if desired, wait several seconds for the Auto Clear service to log you out.

Comments

This feature can be used to add comments to a Cover Note (Cover Page).

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Select **Setup & Calibration**.
6. Touch **Comments**.
7. Select a Comment number.
8. Touch **Create/Delete**.
9. Enter a Comment, up to 18 characters, then touch **Save**.
10. When complete, touch **Close** until the Tools screen is displayed.
11. To exit the Tools screen, if desired, wait several seconds for the Auto Clear service to log you out.

Create a Folder

The printer has 200 folders available. A folder must be created before you can use Remote Folder or route received documents into folders (using the File Destination / Output Destination settings). Folder Fax Receive or Private Polling documents are stored in the Folder. This is also convenient for differentiating between received documents and documents to be transmitted (such as by Private Polling).

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Select **Setup & Calibration**.
6. Touch **Folder**.
7. Select an unassigned Folder number from the displayed list.

8. Touch **Create/Delete**.
 - a. **Check Passcode**: Select On or Off, then touch **Save**. Note that it is recommended that you select **On**, then provide a password, to secure access to your Folder.
 - b. **Folder Name**: Enter a name, then touch **Save**.
 - c. **Check Passcode**: The selections below are viewable when On is selected.
 - **Save (Write)**: A password is required in selecting a folder.
 - **Print/Delete (Read)**: A password is required to print and delete folder documents.
 - **Always (All Operations)**: A password is required for both operations described above.
 - d. **Delete Documents After Retrieval**
 - **No**: Saves documents in Folder.
 - **Yes**: Deletes documents from Folder.
 - e. **Delete Documents with Expiration Date**
 - **No**: Continues to save documents in Folder.
 - **Yes**: Documents will be deleted from Folder after expiration date.
 - f. **Link Job Flow Sheet to Folder**: Select this option, then touch **Change Settings** to link a Job Flow Sheet to this Folder. The Job Flow Sheet routes incoming jobs to other destinations specified on the Job Flow Sheet. To create a new Job Flow Sheet, to link to an existing Folder, touch **Create/Change**.

Note: For full information on the use of Job Flow Sheets, see [Setup and Use of Job Flow Sheets with Folders](#) on page 131.

9. When complete, touch **Close** until the Tools screen is displayed.
10. To exit the Tools screen, wait several seconds for the Auto Clear service to log you out.

File Destination / Output Destination

Received Fax documents will be routed to the output tray or Folder specified by these settings.

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Touch **Fax Mode Settings**.
6. Select **File Destination/Output Destination**.
7. Select the **Box Selector – Line Setup** button.
8. Touch **Change Settings**.
9. Make the appropriate selections and touch **Save** when done.

Note: If Box Selector is selected as an Output Destination, when On is selected, you will have to enter a folder number, then touch **Save**.

10. When complete, touch **Close** until the Tools screen is displayed.
11. Wait several seconds for the Auto Clear service to log you out.

Fax Forwarding

For each Fax line, you can configure Incoming Faxes to be automatically routed to an internal Folder. Faxes that have been routed to one of these folders can be additionally sent to one or more of the following destinations upon being received:

- **Print:** Print a hardcopy output of the received Fax.
- **Send as Fax:** Forward the Fax to another Fax Number
- **Send as Internet Fax:** Forward the Fax to an Internet Fax Address
- **Send as Email:** Forward the Fax to an email recipient as an attachment
- **FTP transfer:** File the Fax to an FTP repository
- **SMB transfer:** File the Fax to an SMP repository

To configure fax forwarding:

1. Open your Web browser and enter the IP address of the printer in the address field. Press Enter.
2. Click the **Properties** tab.
3. Click the **Services** folder, then the **Fax** folder.
4. Select **Fax Receive Options**.
5. In the Folder Selector Setup section, select the check box next to the line you wish to configure and press **Change Settings**.
6. Select the enable check box for **Save Incoming Fax in Designated Folder**, specify the **Folder Number** and press **Apply**. For more information see [Create a Folder](#) on page 145.
7. Select **Fax Receive Options** again.
8. In the Folder Selector Setup section, select the check box next to the line you wish to configure and click **Change Settings**.
9. Select **File Transfer Settings**.
10. Check the boxes next to all destination options you would like faxes for this line to be forwarded to and press **Next**.
11. Enter appropriate settings for all selected destinations and press **Apply**.

Fax Settings (including Fax Defaults and Fax Control)

Common Settings: Audio Tones and Reports

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Touch **Common Service Settings**.
6. Touch **Audio Tones**. Select an item to change (Tone, Volume, etc.), touch **Change Settings**, set the item, and touch **Save**.
7. Touch **Close** to return to **Common Service Settings** selections.

8. Touch **Reports**. Select each item of interest, then touch **Change Settings** to modify the desired setting. Touch **Save** to save any new settings.
 - **Job History Report**: Automatically print every 50 print operations. Default is **0=Off**.
 - **Activity Report**: Automatically print every 100 transactions. Select either **On** or **Off**.
 - **Transmission Report-Undelivered**: Automatically print. Select either **On** or **Off**.
 - **Transmission Report-Job Deleted**: Automatically print. Select either **On** or **Off**.
 - **Folder Report**: Automatically print. Select either **On** or **Off**.
 - **Broadcast/Multi-poll Report**: Automatically print. Select either **On** or **Off**.
 - **Relay Broadcast Report**: Automatically print. Select **Off**, **Send to Relay Station**, **Print at Local Station**, **Send to Relay**, or **Print at Local**.

Note: A Relay Station is another Fax-capable machine to which faxes can be sent. Use of the second machine can help to cut down on broadcast Fax phone charges, such as those associated with long distance calls.

- **Scan File Transfer Report**
 - **2-sided Report**: Default is **1-sided**.
 - **Recipient on Activity Report**: How many characters from other party is printed on Activity Report. Select **First 40 characters**, or **Last 40 characters**.
 - **Job Flow Error Report**: Automatically print. Select either **On** or **Off**.
9. Touch **Close** to return to the Tools screen.

Fax Mode Settings (including Fax Defaults and Fax Control)

These settings include: Screen Defaults, Fax Defaults, Fax Control, File Destination / Output Destination, Reduce/Enlarge Presets, Original Size Defaults, and Local Terminal Information.

For information on File Destination / Output Destination settings and Local Terminal Information settings see **Fax** on page 142.

Note: Information on Fax Defaults and Fax Control is critical to the operation of the Fax feature and should be carefully evaluated to assure that settings are correct for the current working environment.

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Touch **Fax Mode Settings**.
6. Touch **Screen Defaults**.

7. Select a Line to enter or change, then touch **Change Settings**. Touch **Save** to save any new settings.
 - **Fax Screen Default:** Select **General Settings** or **Address Book** This will be the Fax service screen that users see when they touch the Fax button.
 - **Address Book Default:** Leave this setting at the default of 1, or enter an address book (Fax folder) number to display when the Address Book button is touched by users of the Fax service screen. Note that the Fax folder needs to be created in advance of this setting.
 - **Transmission Screen:** Select either **On** or **Off**.
8. Touch **Close** until the Fax Mode Settings selections are again displayed.
9. Touch **Fax Defaults**.
10. Select a Line to enter or change, then touch **Change Settings**. Touch **Save** to save any new settings.
 - **Resolution**
 - **Original Type**
 - **Lighten/Darken**
 - **Mixed Size Originals**
 - **Starting Rate:** Select G3 Auto or Forced4800bps.
 - **Delayed Start – Start Time:** This can be a useful feature for saving time-based phone charges.
 - **Transmission Header Text:** Select **On** or **Off**. This adds the sender name and phone number to faxes.
 - **Confirmation Options:** Select **On** or **Off**. If set to On a report will print when transmission completes successfully.
 - **Delivery Receipts/Read Receipts**
 - **iFAX Profile**
 - **iFAX Subject**
11. Touch **Close** until the Fax Mode Settings selections are again displayed.
12. Touch **Fax Control**.
13. Select the Line to enter or change, then touch **Change Settings**. Touch **Save** to save any new settings.
 - **Re-enter Recipients**
 - **Re-enter Broadcast Recipients**
 - **Re-enter Speed Dial Recipients**
 - **Transmission Header Text – Polling:** You can leave this setting at its default value.
 - **Documents for Polling – Auto Delete:** Set as desired to delete documents from folders after polling same.
 - **Rotate 90 degrees**
 - **Sender ID**
 - **Save Undelivered Faxes**
 - **Save Deleted Faxes**
 - **Saved Faxes – Auto Delete**
 - **Transmission Interval**

- **Batch Send**
- **Manual Send/Receive Default:** Select the default setting for manual Fax operations.
- **Fax Receiving Mode:** Leave this setting at Auto Receive for unattended operation.
- **Border Limit**
- **Auto Reduce on Receipt**
- **Tray for Printing Incoming Faxes**
- **2 Pages up on Receipt**
- **2-sided Print**
- **Edge Erase – Top & Bottom Edges**
- **Edge Erase – Left & Right Edges**
- **Reduce 8.5 x 11 Original to A4**
- **Pseudo-Photo Gradation Mode**
- **Box Selector – Line Setup:** Enable this setting to enable Fax Folders to receive incoming faxes.
- **Memory Full Procedure**
- **Maximum Stored Pages**
- **Mixed Sized Originals Scanning Mode**
- **Folder Receive Display (Priorities 1 through 3)**
- **Direct Fax:** To use Direct Fax from the PCL or PostScript driver, make sure this setting is Enabled.

14. When complete, touch **Close** until the Tools screen is displayed.

15. Wait several seconds for the Auto Clear service to log you out.

To Configure Fax to Folder

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Touch **System Settings**.
6. In the Group column, touch **Fax Service Settings**.
7. Touch **System Settings**. Under Group, select **Fax Service Settings**.
8. Under Features, touch **Fax Control**.
9. Touch **Folder Selector Setup**.
10. Touch **Change Settings**.
11. Touch **Enable**.
12. Touch **Save**.
13. Touch **Close**.
14. Under Features, select **Fax Received Options**.
15. Touch **Folder Selector Setup**.

16. Touch the line you wish to configure.
17. Touch **Change Settings**.
18. Touch **On**.
19. Enter the folder number (use leading zeros).
20. Touch **Save**.
21. Touch **Close**.
22. Touch **Close**.
23. Log out.

LAN Fax (PCL Drivers)

You can facsimile documents directly from your PC in the same way you would print a document. This is known as the LAN Fax.

Initial Setup

Refer to the TCP/IP Peer to Peer (LPR or Standard TCP/IP) Printing topic, in the Print Drivers section, and add the printer to the Windows 2000 or Windows XP desktop using a Standard TCP/IP Port. After the driver has been installed, perform the following steps:

1. Right click the Printer's icon and select **Properties**.
2. Click the **Options** tab, then click the **Get Information from Printer** button.
3. The Network Address box should now be displaying the printer's IP address and a checkmark should appear in the Enable Bi-Directional Communication check box. Also, the Fax Module listing in the Items box should now be displayed as Available.

Adding a Recipient to a Fax Phonebook

1. From the **File** menu of your program, select **Print** to display the Print dialog.
2. Check that the correct (PCL) printer is selected, and then click **Properties** to display the Properties dialog.
3. On the **Paper/Output** tab, select **Fax** from the **Job Type** drop down menu. The options on the Fax tab will now be available for your selection.
4. Select the necessary settings on the Fax tab.
5. Click the **Fax Phonebook** button to select your fax recipient or to enter a new recipient.
6. If your recipient is not selectable from an existing Phonebook, select **New...**, select **Individual**, click **OK**, enter the recipient's Name and Fax number, and click **OK**.
7. Click **Close** to close the Fax Phonebook dialog, then click **OK**.

Sending the Fax

1. When the Print dialog is displayed, click **OK**.
2. On the Fax Recipient dialog, to send to the previously-entered, new recipient, click **Look Up Phonebook**.

3. Double click the name of the new individual previously entered (in step 6 above) and click **OK**.

Note: Alternatively, you can manually enter a Name (of up to 30 characters) and a Fax Number.

4. Click **OK**, then **OK** again to send your Fax.

LAN Fax (PostScript Drivers)

You can facsimile documents directly from your PC in the same way you would print a document. This is known as the LAN Fax.

Initial Setup

Refer to the TCP/IP Peer to Peer (LPR or Standard TCP/IP) Printing topic, in the Print Drivers section, and add the printer to the Windows 2000 or Windows XP desktop using a Standard TCP/IP Port. After the driver has been installed, perform the following steps:

1. Right click the Printer's icon and select **Properties**.
2. Click the **Configuration** tab, then click the **Get Information from Printer** button.
3. The Network Address box should now be displaying the printer's IP address and a checkmark should appear in the Enable Bi-Directional Communication check box. Also the Fax Module listing, in the Installable Options folder on the printer Settings tab, should now be displayed as Available. If it is shown as Not Available, click the selection and set the Fax Module listing to **Available**.

Adding a Recipient to a Fax Phonebook

1. From the **File** menu of your program, select **Print** to display the Print dialog.
2. Check that the correct (PS) printer is selected, and then click **Properties** to display the Properties dialog.
3. On the **Paper/Output** tab, select **Fax** from the **Job Type** drop down menu. The options on the Fax tab will now be available for your selection.
4. Select the necessary settings on the Fax tab.
5. Click the **Fax Phonebook** button to select your fax recipient or to enter a new recipient.
6. If your recipient is not selectable from an existing Phonebook, select **New...**, select **Individual**, click **OK**, enter the recipient's Name and Fax number, and click **OK**.
7. Click **Close** to close the Fax Phonebook dialog, then click **OK**.

Sending the Fax

1. When the Print dialog is displayed, click **OK**.
2. On the Fax Recipient dialog, to send to the previously-entered, new recipient, click **Look Up Phonebook**.
3. Double click the name of the new individual previously entered (in step 6 above) and click **OK**.

Note: Alternatively, you can manually enter a Name (of up to 30 characters) and a Fax Number.

4. Click **OK**, then **OK** again to send your Fax.

Stopping the Fax (when necessary)

1. Go to the printer and press the **Job Status** button.
2. Select the fax job you wish to cancel, in the Current and Pending Jobs list.
3. Press **Cancel** to cancel the job.

Server Fax

Overview

The Server Fax feature enables you to fax documents without having a telephone line directly connected to your printer. This is achieved by sending the documents to a separate, networked fax server with its own connection to the telephone system.

It is assumed that you already purchased and enabled the Scanning option. If you did not, contact your Xerox Representative to purchase same. A hard disk and network card are required device hardware. Their presence can be confirmed by printing a Configuration Report. For more information see [Configuration Report](#) on page 22.

The Server Fax option also needs to be purchased from your Xerox Representative, then enabled on the printer using a software key. See [Enabling Options with Software Keys](#) on page 98.

As stated in this section, you will be setting up a network connection to a Xerox-certified, third party fax server (server running fax management software) which will receive, store, and redirect incoming documents to the server's fax boards, or other destinations determined by fax server software setup.

Note: The FAX or Internet Fax (iFAX) features and the Server Fax feature are mutually exclusive. If Server Fax is enabled, even if the printer is equipped with an internal fax board, scanning to the internal fax will be disabled. While the Server Fax feature is enabled, the iFAX service will also be disabled. Also note that Folder to fax (a Job Flow Sheet destination) and Direct Fax (LAN Fax) are not supported when Server Fax is enabled. The default when both options have been installed is to enable the internal fax board and Internet Fax. Server Fax will be disabled. You can use CentreWare Internet Services, to select which Fax Service to enable. For more information see [Server Fax](#) on page 154.

Installation Checklist

Please ensure that the following items are available or have been performed.

1. Ensure the printer is fully functioning on the network prior to installation.
2. Enable the purchased Scanning option. For more information see [Enabling Options with Software Keys](#) on page 98. Contact your Xerox Sales Representative if you have not purchased the Scanning option.
3. Enable the purchased Server Fax option. For more information see [Enabling Options with Software Keys](#) on page 98. Contact your Xerox Sales Representative if you have not purchased the Server Fax option.
4. Verify that Scan to Fax Server is now the currently enabled Fax Service, as follows:
 - a. At your computer, open your Web browser and enter the IP address of the printer in the Address or Location field. Press **Enter**.
 - b. Click the **Properties** tab.
 - c. Click the **Services** folder.
 - d. Click the **Fax** folder.

- e. Click **Fax Repository Setup** and verify that Scan to Fax Server is displayed in the selection box.
 - f. Enter the administrator User Name and Password and click **OK**. The default is **admin** and **1111**.
5. Ensure that the TCP/IP and HTTP protocols are configured on the printer and are fully functional. This is required to access the printer's CentreWare Internet Services Web pages, which can be used to configure Server Fax settings from a network-connected computer.
- To verify that the TCP/IP and HTTP protocols are correctly configured, print a Configuration Report. For more information [Configuration Report](#) on page 22.
- To configure TCP/IP, see [TCP/IP Protocol Configuration](#) on page 43.
6. To enable HTTP, see [Enabling Internet Services \(HTTP\)](#) on page 23.
 7. Ensure that the FTP Client and SMB port are enabled on the printer. To verify this, print a Configuration Report.
- To enable FTP and SMB, see [Scan to PC \(FTP/SMB\)](#) on page 121.
8. Install and configure the Xerox-certified, third party fax server per the fax management software manufacturer's instructions.

Note: If the fax server will be using TCP/IP to communicate, it is recommended that the server be assigned a static IP address.

Configure a Fax Filing Location (Repository)

Faxing from the printer to a fax server is very similar to the other methods of faxing available to users on the printer. The user simply selects the Fax button from the All Services screen, enters a Recipient phone number when prompted, places a document in the document feeder, and presses Start.

The scanned document is converted into a TIFF file, and a job log is sent along with the image data to the fax server.

The transferred image resides in a directory on the fax server (commonly known as the fax repository). The server monitors the repository for documents to be faxed, and faxes any documents it finds per the routing instructions contained in the job log. The System Administrator uses a Web browser on any networked computer to access the CentreWare Internet Services Web pages, residing on the printer, to configure communications with the fax server, and designate the location of the repository on the server.

Protocols available for use in communicating with the fax server include:

- **FTP (File Transfer Protocol):** Requires an FTP service running on the fax server.
- **SMB (Server Message Block):** Available for filing to an environment that supports the SMB protocol.
- **SMTP:** Follow the basic instructions for enabling the E-mail ports. See [Scan to E-mail](#) on page 100. You will need to know the fully qualified domain name of the fax server on your network (e.g. SMTP.yournet.net). Also, follow the fax server software manufacturer's instructions to establish fax server to email server communications in your network environment.

Configure a Fax Filing Repository using FTP

Installation Checklist

1. Ensure that a File Transfer Protocol (FTP) service is running on the fax server where images scanned by the printer will be stored. Write down the IP address or Host Name.
2. Create a user account (login name) and password for the printer on the server. When a document is scanned, the printer logs in using the account, transfers the file to the server, and logs out. Write down the user account (login name) and password.
3. Following the fax server software manufacturer's instructions, create a directory (repository) on the server (likely within the FTP root) to be used as a scan filing location. Write down the directory name and path to same.
4. If allowed by the fax server software manufacturer, test the FTP connection by logging into the scan directory from a remote PC using the user account and password. Create a new folder within the directory and then delete the folder. If you cannot perform this function, check the user account access rights and FTP service setup. You can also wait until you have finished setting up device to server communications, as stated in this section, then send a fax to the server to test the communications setup.

Enter the Fax Repository Details in CentreWare Internet Services

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. If prompted, enter the system administrator user name and password (default: **admin, 1111**).
4. Click the **Services** folder.
5. Click the **Fax** folder.
6. Click the **Fax Repository Setup**.
7. Select **FTP** for Protocol.
8. Enter either an IP Address or Host Name for the fax server in the box or boxes provided.
9. Enter **21** for **Port Number** (for FTP).
10. For **File Path**, type in the name of the folder on the server that has been set up to receive device scans. Do not use forward slashes.
11. Supply the **Login Name** and **Password** for the printer to log into the fax server.
12. Retype the password.
13. Click **Apply**.
14. If prompted, enter the administrator User Name and Password and click OK. The default is **admin** and **1111**.

Configure General Settings

1. Click **Defaults**.
2. To print a Confirmation Sheet, select Auto Print On, Auto Print Off, or Print when delivery fails, from the drop down menu. Note that the Confirmation Sheet only shows whether data was sent to the fax server. It does not show whether the fax was successfully sent by the fax server.
3. Check the User Name and Domain (Realm) boxes if you want these items to appear on the Job Log. The Job Log is filed with the scan job.
4. Click **Apply**.
5. If prompted, enter the administrator User Name and Password and click OK. The default is **admin** and **1111**.

Configure the Fax Server

Configure the fax server so that it is able to monitor the fax repository for incoming documents. Refer to the fax management software manufacturer's documentation to complete this task.

Test Faxing through the Server

1. Go to the printer and press the **Services** button.
2. Press the **Fax** button.
3. Enter a valid fax number.
4. Place a document in the document feeder and press the **Start** button on the control panel.
5. Verify that the fax was received by the specified fax machine.

Configure a Fax Filing Repository using SMB

Installation Checklist

1. Following the fax server software manufacturer's instructions, create a shared folder on the fax server to be used as a scan filing location (repository) for scanned documents. Write down the Share Name of the folder and the Computer Name or Server Name.
2. Create a user account (login name) and password for the printer on the server. Make sure that the printer has full access rights to the scan directory. Write down the user account (login name) and password.
3. If allowed by the fax server software manufacturer, test the settings by attempting to connect to the shared folder from another PC by logging in with the user account and password. Create a new folder within the directory and then delete the folder. If you cannot perform this function check the user account access rights and Share setup. Note that you can also simply wait until you have finished setting up device to server communications, as stated in this section, then send a fax to the server to test the communications setup.

Enter the Fax Repository Details via CentreWare Internet Services

1. At your computer, open your Web browser and enter the IP address of the printer in the Address or Location field. Press **Enter**.
2. Click the **Properties** tab.
3. Click the **Services** folder.
4. Click the **Fax** folder.
5. Click **Fax Repository Setup** and select **SMB** for Protocol.
6. Enter an IP Address or Host (NetBIOS) Name and Port.
7. Enter **139** for **Port Number**.
8. Enter **Share name** and **File Path**.
9. For **Document Path**, type in the name of the folder on the server that has been set up to receive device scans. Do not use back slashes.
10. Supply the **Login Name** and **Password** for the printer to log into the fax server.
11. Enter the password again in the **Retype Password** box.
12. Click **Apply**.
13. If prompted, enter the administrator User Name and Password and click OK. The default is **admin** and **1111**.

Configure General Settings

1. Click **Defaults**.
2. To print a Confirmation Sheet, select **Auto Print On**, **Auto Print Off**, or **Errors Only**, from the drop down menu. Note that the Confirmation Sheet only shows whether data was sent to the fax server. It does not show whether the fax was successfully sent by the fax server.
3. Check the User Name and Domain Name (Realm) boxes if you want these items to appear on the Job Log. The Job Log is filed with the scan job.
4. Click **Apply**.
5. If prompted, enter the administrator User Name and Password and click OK. The default is **admin** and **1111**.

Configure the Fax Server

Configure the fax server so that it is able to monitor the fax repository for documents. Refer to the fax management software manufacturer's documentation to complete this task.

Test Faxing through the Server

1. Go to the printer and press the **Services** button.
2. Press the **Fax** button.
3. Enter a valid fax number.
4. Place a document in the document feeder and press the **Start** button located to the right of the control panel's numeric keypad.
5. Verify that the fax is received by the specified fax machine.

Configure a Fax Filing Repository using SMTP

Installation Checklist

1. Ensure that the TCP/IP protocol is configured on the printer and is fully functional. To configure TCP/IP, see [TCP/IP Protocol Configuration](#) on page 43.
2. Follow the basic instructions for enabling the E-mail ports. See [Scan to E-mail](#) on page 100.
3. Also, in the Scan to E-mail section, follow the instructions for Configuring E-mail Environment to set the Machine E-mail Address. This address will then be displayed in the From field of the Fax.
4. You will need to know the fully qualified domain name of the fax server on your network (e.g. SMTP.yournet.net).
5. Follow the fax server software manufacturer's instructions to create a directory (repository) on the server to be used as a scan filing location.
6. Follow the fax server software manufacturer's instructions to determine what, if any, additional protocols or ports need to be enabled at the printer to support SMTP (email) filing with the server.
7. Follow the fax server software manufacturer's instructions to establish fax server to email server communications in your network environment.

Enter the Fax Repository Details via CentreWare Internet Services

1. At your computer, open your Web browser and enter the IP address of the printer in the Address or Location field. Press **Enter**.
2. Click the **Properties** tab.
3. Click the **Services** folder.
4. Click the **Fax** folder.
5. Click **Fax Repository Setup** and select **SMTP** for **Protocol**.
6. In the Domain Name box, enter the fully qualified domain name of the fax server on your network (e.g. SMTP.yournet.net).
7. For **E-mail Address Display Format**, choose whether to add FAX= in front of E-mail addressing. If in doubt, select **Do not add FAX=**.
8. Click **Apply**.
9. If prompted, enter the administrator User Name and Password and click **OK**. The default is **admin** and **1111**.

Configure General Settings

1. Click the **Defaults**.
2. To print a Confirmation Sheet, select **Auto Print On**, **Auto Print Off**, or **Error Only**, from the drop down menu. Note that the Confirmation Sheet only shows whether data was sent to the fax server. It does not show whether the fax was successfully sent by the fax server.
3. Check the User Name and Domain (Realm) boxes if you want these items to appear on the Job Log. The Job Log is filed with the scan job.

4. Click **Apply**.
5. If prompted, enter the administrator User Name and Password and click **OK**. The default is **admin** and **1111**.

Configure the Fax Server

Configure the fax server so that it is able to monitor the fax repository for documents. Refer to the fax management software manufacturer's documentation to complete this task.

Test Faxing through the Server

1. Go to the printer and press the **Services** button.
2. Press the **Fax** button.
3. Enter a valid email address.
4. Place a document in the document feeder and press the **Start** button on the control panel.
5. Verify that the email was received by the specified recipient.

Features that Support Server Fax

Address Book Setup

Use of this feature enables Fax users to select recipients by 3 digit numbers. Note that a maximum of 50 characters can be designated for each destination and that only fax destinations can be used. Also note that all Address Book information other than Fax Number, Destination Name, and Index Character will be ignored. For example, the Extension/Outside line attribute of address book will be ignored.

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Select **Setup & Calibration**.
6. Touch **Add Address Book Entry**.
7. Select an available Address Number.
8. Touch **Create/Delete**.
9. Touch **Address Type**, then touch **Change Settings**.
10. Touch **Fax**, then touch **Save**.
11. On the the Address (Speed Dial) - Fax screen, Enter the Fax number, Name and Index.
12. Touch **Save** twice.

Group Send

This setting supports Group Send (broadcast) Fax transmissions to up to 20 address numbers in a pre-designated group.

Note: When Group Send is designated with Server Fax, the group number retained by the server is used instead of the group number retained by the printer. You will have to know what group the three digit number represents at the server, before selecting its use at the printer's control panel.

Fax Mode Settings (Screen Defaults and Fax Defaults such as Delayed Start)

These settings include Screen Defaults and Fax Defaults.

Screen defaults sets the screen displayed at the printer's control panel when the Fax button is pressed.

Fax defaults lets you set the parameters for Delayed Start communications. This can be a useful feature for saving time-based phone charges. Note that the fax will be immediately sent from the printer to the fax server repository, however the server will send the fax at the time designated by this feature.

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Touch **Fax Mode Settings**.
6. Touch **Screen Defaults**.
7. Select a Line to enter or change, then touch **Change Settings**. Touch **Save** to save any new settings.
 - **Fax Screen Default:** Select General Settings or Address Book This will be the Fax service screen that users see when they touch the Fax button.
 - **Address Book Default:** Leave this setting at the default of **1**, or enter an address book (Fax folder) number to display when the Address Book button is touched by users of the Fax service screen. Note that the Fax folder needs to be created in advance of this setting.
8. Touch **Close** until the Fax Mode Settings selections are again displayed.
9. Touch **Fax Defaults**.
10. Select **Delayed Start – Start Time**.
11. Touch **Change Settings**, make the desired changes, then touch **Save**.
12. Touch **Close** until the Tools screen is displayed.
13. Wait several seconds for the Auto Clear service to log you out.

Color Mode, Resolution, File Format, and File Name

Note that when using Server Fax, these features are set to fixed values which cannot be changed. The setting for Color Mode is Monochrome. The setting for Resolution is Fine, and the setting for File Format is TIFF. In addition, the Server Fax feature also automatically assigns file names.

Internet Fax (iFAX)

Overview

When the iFAX feature is enabled, the printer can transmit scanned data as an e-mail attachment using either corporate networks or the Internet, unlike conventional fax machines which utilize public phone lines. Also, the printer can receive e-mails transmitted from other machines which support the iFAX service. When the printer receives e-mail from an iFAX-compatible machine, the received document is printed automatically.

Note: It is assumed that you purchased the Internet Fax option to enable iFAX with your printer. If you did not, contact your Xerox Representative to purchase this option.

Note: The FAX or Internet Fax (iFAX) features and the Server Fax feature are mutually exclusive. If Server Fax is enabled, even if the printer is equipped with an internal fax board, scanning to the internal FAX will be disabled. While the Server Fax feature is enabled, the iFAX service will also be disabled. Also note that Folder to FAX (a Job Flow Sheet destination) and Direct Fax (LAN Fax) are not supported when Server Fax is enabled. The default when both options have been installed is to enable the internal fax board and Internet Fax. Server Fax will be disabled. You can use CentreWare Internet Services to select which Fax Service to enable. For more information see [Server Fax](#) on page 154.

System Requirements

- Internet Fax kit
- The printer is connected to the network and communication through TCP/IP is available.
- The environment is prepared for e-mail exchange.

Installation Procedure

The configuration procedure to use the iFAX feature on the printer is comprised of the following steps.

1. Enable the ports which are used for the iFAX feature, and set an IP address of the printer.
2. Configure the items for the iFAX feature on the printer.

Note: The configuration can also be performed using CentreWare Internet Services. For more information, see [CentreWare Internet Services](#) on page 23.

Enabling the E-mail Ports and Setting TCP/IP

First enable the ports for the e-mail feature, then set the IP address. The procedure for setting the printer is as follows.

Note: First enable the E-mail port, then set the IP address.

Note: The configuration can also be performed using CentreWare Internet Services. For more information, see [CentreWare Internet Services](#) on page 23.

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Select **System Settings**.
6. Select **Connectivity & Network Setup**.
7. Select **Port Settings**.
8. On the Port Settings screen, select **Receive E-mail** and then select **Change Settings**.
9. On the Receive E-Mail screen, select **Port Status** and select **Change Settings**.
10. On the Receive E-Mail Port Status screen, select **Enabled**, then select **Save**.
11. Select **Close** until the Port Settings screen is displayed.
12. On the Port Settings screen, select **Send E-Mail**, and then select **Change Settings**.
13. On the Send E-Mail screen, select **Port Status** and select **Change Settings**.
14. On the Send E-Mail Port Status screen, select **Enabled** then select **Save**.
15. Select **Close** until the Tools screen is displayed.
16. Set the IP address.

If an IP address is already set, this step is not necessary. Also, in an environment with DHCP or BOOTP, configure the way to obtain an IP address. If the address cannot be obtained automatically or static configuration is preferred, configure an IP address, a subnet mask, and a gateway address as stated below.

- a. Select **Protocol Settings**.
- b. Select **IPv4 (or other mode) Address Resolution** and then select **Change Settings**.
- c. Select one from **DHCP, BOOTP, RARP, DHCP/Autonet** or **Static** and then select **Save**. If you select anything other than Static, proceed to Step 4.

Note: When using a DHCP server, also configure the DNS, or WINS (Windows Internet Name Service) server (WINS for SMB support) in CentreWare Internet Services. For more information, see [CentreWare Internet Services](#) on page 23.

- d. On the Protocol Settings screen, select **TCP/IP - IP Address** and select **Change Settings**.
- e. Enter the IP address using the numeric keypad.

Note: Enter address in the format xxx.xxx.xxx.xxx. The xxx should be a numeric value in the range from 0 to 255. However, 224 – 255.xxx.xxx.xxx and 127.xxx.xxx.xxx cannot be used.

- f. Select **Save**.

- g. Configure TCP/IP - Subnet Mask and TCP/IP - Gateway Address.

Note: Enter the Gateway address in the format xxx.xxx.xxx.xxx. The xxx should be a numeric value in the range from 0 to 255. However, 224 – 255.xxx.xxx.xxx and 127.xxx.xxx.xxx cannot be used.

Note: Specify the subnet mask by a combination of the numbers 0, 128, 192, 224, 240, 248, 252, 254, and 255. However, you cannot use 0 between non-zero values.

Note: If you do not set the gateway address, enter 0.0.0.0.

17. Select **Close** until the Tools screen is displayed.
18. Wait several seconds for the Auto Clear service to log you out.
19. If you changed any settings, the printer will automatically reboot to register and enable your new settings. After the printer is restarted, print out a Configuration Report to confirm that the ports are enabled and TCP/IP is correctly configured. For information on how to print a Configuration Report, see [Configuration Report](#) on page 22.

Configuring the E-mail Environment

Note: The configuration can also be performed using CentreWare Internet Services. For more information, see [CentreWare Internet Services](#) on page 23.

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Select **Connectivity & Network Setup**.
6. Select **Machine E-mail Address/Host Name**.
7. Select **E-mail Address** and then select **Change Settings**.
8. Enter an E-mail address using the displayed keyboard.
9. Select **Save**.
10. Set a host name and a domain name as above.
11. Select **Close**.

If SMTP has been selected for the Mail Receiving Protocol

Aliases cannot be configured. A user can decide an account name (the left side of the @ mark). An address (the right side of the @ mark) is a combination of a host name and a domain name.

Example: mymail@myhost.example.com

- **Account name:** mymail
- **Host name:** myhost
- **Domain name:** example.com

If POP3 has been selected for the Mail Receiving Protocol

Specify a POP user name to an account name (the left side of the @ mark), and a POP3 receiving mail server to an address (the right side of the @ mark). A user can decide an alias such as mymail@example.com.

Example: mymail@mb1.abc.example.com

- **Account name:** mymail

12. Set the protocol for receiving E-mail.

- From the **Connectivity & Network Setup** list, select **Other Settings**.
- Select **E-mail Receive Protocol** and then select **Change Settings**.
- Select either **SMTP** or **POP3** as appropriate for your environment.
- Select **Save**.
- Select **Close**.

If POP3 has been selected for the Mail Receiving Protocol

- From the **Connectivity & Network Setup** list, select **Outgoing/Incoming** (i.e. E-mail Send/Receive Settings).
- Select **POP3 Server Settings** and then set the following items for the POP3 server.

POP3 Server Name/Address

- Enter the POP3 Server Name/IP Address and press **Save**.

Note: Enter the address in the format xxx.xxx.xxx.xxx. The xxx should be a numeric value in the range from 0 to 255. However, 224 – 255.xxx.xxx.xxx and 127.xxx.xxx.xxx cannot be used.

POP3 Server Port Number

Enter a value in the range from 1 to 65535. The default is **110**. Do not use the numbers of any other ports.

Polling Interval

Set the interval for checking the e-mail on the POP3 server.

Login Name

Enter the name to log in to the POP3 server and press **Save**.

Password

Enter the same password twice in the New Password and Re-enter Password. If you do not set the password, leave it blank and select **Save**.

POP3 Password Encryption

Select **On (APOP)** to encrypt the password, if desired.

- Select **Save**.
- Select **Close**.

13. Set the protocol for sending E-mail.

- From the **Connectivity & Network Setup** list, select **Outgoing/Incoming**, then select **SMTP Server Settings**, and then set the following items for the SMTP server.

SMTP Server Name/Address

Enter the SMTP Server Name/IP Address and press **Save**.

Note: Enter the address in the format xxx.xxx.xxx.xxx. The xxx should be a numeric value in the range from 0 to 255. However, 224 – 255.xxx.xxx.xxx and 127.xxx.xxx.xxx cannot be used.

SMTP Server Port Number

Enter a value in the range from 1 to 65535. The default is **25**.

Note: This configuration is not necessary if SMTP has been selected for the Mail Receiving Protocol and has already been configured.

E-mail Send Authentication

Select one from **Off**, **POP before SMTP**, or **SMTP AUTH**. If you are having trouble sending E-mail, to see if Authentication is the problem, set this item to **Off** and set the SMTP Server IP Address (above) to a server that does not require authentication.

Note: If POP before SMTP is selected, the POP3 settings must be set.

SMTP AUTH Login Name

Set this item if SMTP AUTH is selected for E-mail Send Authentication.

SMTP AUTH Password

Set this item if SMTP AUTH is selected for E-mail Send Authentication. Enter the same password twice in the New Password and Re-enter Password. If you do not set the password, leave it blank and select Save.

b. Select **Close** until the Connectivity & Network Setup list is again displayed.

Login Credentials for Sending Email

14. Select from System or Remotely Authenticated user. If Remotely Authenticated User is selected, the authenticated user details will be used for authentication of outgoing emails. (Remote Authentication must be configured). If system is selected, the Login Name and Password specified for System will always be used for authentication of outgoing emails.

15. Setting S/MIME Security (optional)

a. From the **Connectivity & Network Setup list**, select **Security Settings**. If the selection is not visible, use the scrolling arrow to display it.

b. Select **S/MIME Settings** and set the following items:

- **Device Certificate - S/MIME:** Link a certificate to the printer. You must have an S/MIME certificate on the printer to perform encryption. For information on S/MIME certificates, see [Configuring S/MIME certificates with CentreWare Internet Services](#) on page 78.
- **S/MIME Communication:** Set whether to enable or disable S/MIME Communication when a certificate ID is set.
- **Receive Untrusted E-mail:** Set whether to receive untrusted E-mail or not.
- **Receive Untrusted iFAX:** Set whether to receive untrusted iFAX or not.
- **Message Digest Algorithm:** Select a message digest algorithm from SHA1 or MD5.
- **Message Encryption Method:** Select a contents encryption method from 3DES, RC2-40, RC2-64, or RC2-128.
- **Digital Signature – Outgoing E-mail:** Set whether to always attach a digital signature to E-mail or to select a digital signature when sending E-mail.
- **Digital Signature – Outgoing iFAX:** Set whether to always attach a digital signature to iFAX or to select a digital signature when sending iFAX.
- **Certificate Auto Store:** Select whether or not to automatically store a S/MIME certificate attached with the E-mail when receiving E-mail sent from an address registered in the address book.

16. Select **Close** repeatedly until the Tools screen is displayed.

17. Wait several seconds for the Auto Clear service to log you out.

18. After the printer is restarted, print a Configuration Report to confirm that each item is configured.

For information on how to print a Configuration Report, see [Configuration Report](#) on page 22.

Testing iFAX

Sending From the Printer to Another iFAX-capable Machine

1. Test the iFAX transmission from the printer.
2. Press the **Services** button, then touch the **Internet Fax** button.
3. Select **New Recipient**, then the **To** button, in the **Recipient's** drop down list.
4. Enter the destination address, using the displayed keyboard.
5. Touch the **Add** button, then touch **Close**.
6. Place your document in the document feeder and press the **Start** button located to the immediate right of the control panel's numeric keypad.
7. Check to see if the other machine printed the incoming iFAX.

Note: To set up the address book for use with LDAP (network search), see [LDAP Authentication](#) on page 66.

Printer Management

7

This chapter includes:

- [Xerox Standard Accounting](#) on page 170
- [Annotation \(Bates Stamping\)](#) on page 177
- [Media Card Reader](#) on page 179
- [USB Printing](#) on page 184
- [Thumbnail Preview](#) on page 187
- [Hard Disk Data Encryption](#) on page 188
- [Xerox Smart eSolutions](#) on page 189

Xerox Standard Accounting

Overview

When enabled, Xerox Standard Accounting (XSA) tracks the numbers of Copy, Print, Network Scanning, E-mail, Server Fax, Internet Fax and Embedded Fax jobs (when these features are installed on the printer), for each user. Usage limits can also be applied to users to restrict the total numbers of copy, print, fax and scan jobs that a user can perform. Administrators can print a report which contains all XSA data.

XSA is set up through CentreWare Internet Services. Administrators must create accounts and specify limits before users are authorized to access the printer.

When XSA is set up, users must enter their account details at the printer to use the printer. When they have finished their job, their XSA allocation is reduced by the number of prints, copies or scans performed. When XSA is enabled, users must enter their account details in the printer driver to print documents from their computers.

The XSA feature is mutually exclusive from any other accounting feature. If XSA is enabled at the printer, you cannot enable Foreign printer Interface, Auditron or Network Accounting.

Each device supports unique XSA User IDs and Group Accounts.

All user IDs must be assigned to one or more group accounts.

Note: The XSA settings and account data are stored in the printer. It is strongly recommended that you back up the settings and data regularly using the Cloning available under the XSA folder of CentreWare Internet Services as described in this section. Should the printer lose your XSA data and settings you can restore them from the backup file that you produced by the Cloning process.

Installation Checklist

Before starting the installation procedure, please ensure the following items are available or have been performed.

1. Ensure that your device is fully functioning on the network.
2. Ensure that the TCP/IP and HTTP protocols are configured on the printer and fully functioning. This is required to access CentreWare Internet Services to configure Xerox Standard Accounting.

To verify that the TCP/IP and HTTP protocols are correctly configured, print a Configuration Report. For more information see [Configuration Report](#) on page 22.

To configure TCP/IP, see [TCP/IP Protocol Configuration](#) on page 43.

To enable HTTP, see [Enabling Internet Services \(HTTP\)](#) on page 23.

Enabling Xerox Standard Accounting

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. If prompted, enter the system administrator user name and password (default: **admin, 1111**).
4. Select the **Accounting** folder, then click **Accounting Configuration**.
5. Select **Xerox Standard Accounting** from the **Accounting Type** drop down list.

Note: It is also possible to select Xerox Accounting for use with an Authentication Server. See [Secure Access and Accounting](#) on page 69.

6. Click **Apply**, then **Reboot Machine**.
7. Navigate back to the same page and click **Next**.
8. Under Device Default State Configuration, click **Configure** next to **Service Access**.
9. Select one of the following for each service you want to control:
 - **Unlocked:** Allow unrestricted access.
 - **Locked (Show Icon):** Require login for access. The service icon is visible to all users in the all services screen.
 - **Locked (Hide Icon):** Require login for access. The service icon is hidden until an authorized user logs in.
10. Click **Apply** and enter the Administrator User name and password when prompted (default of **admin** and **1111**).
11. Click **OK**, then click **Reboot Machine**.

Create a Group Account

1. On the Properties tab of CentreWare Internet Services, click the **Accounting** folder, then the **Xerox Standard Accounting** folder.
2. Click **Group Accounts** to create a new group account.
3. In the Group Accounts Account ID box, enter an ID for the new group account (for example 001). The Group Account can be numeric values up to a maximum of 32 characters. Group Account ID's must be unique.
4. Enter a name for the group account in the Account Name box (for example Xerox). The group name can be alphanumeric characters to a maximum of 32 characters. The Group Account name must be unique.
5. Click **Apply**. The account will now be available in the Group Accounts list. Refresh your browser, then click **Group Accounts** again to see the new group.

Create a User Account and Set Usage Limits

Note: At least one group account must be created before you create user accounts.

1. On the Properties tab of CentreWare Internet Services, click the **Accounting** folder, then the **Xerox Standard Accounting** folder in the directory tree.
2. Click **Manage Accounting**.

3. Click the **Add New User** button.
4. Enter an ID for the user. The user ID can contain alphanumeric characters to a maximum of 32 characters (for example: A10). User ID's must be unique.
5. Enter the user name (for example Jane Smith). The user name can contain alphanumeric characters to a maximum of 32 characters. User names must be unique.
6. Enter a passcode in the **Passcode** box.
7. Specify the usage limits for this account in the User Limits boxes. The maximum value for each limit is 9999999.
8. Click **Apply** when you have finished setting the usage limits.

Maximum Usage Limits and Resetting Individual Usage Limits

The first time a user logs into the printer after they have reached their maximum usage limit, a message displays on the touch screen. The message notifies the user that they have reached their limit for the feature. Users will not be unable to use the feature until their limit is reset.

If the user performs a copy job at the printer, and mid way through the job their limit is exceeded, the job will not continue.

If the user performs a scan job at the printer, and mid way through the job their limit is exceeded, the job will be cancelled.

If the user's limit is reached before a print job is completed, the printer will notify the user that their limit has been reached. The job will be deleted from the print queue. The job may run over due to sheets committed to the paper path.

Note: The system administrator has unlimited access to the printer.

To Reset User Limits

1. On the Properties tab of CentreWare Internet Services, click the **Accounting** folder, then the **Xerox Standard Accounting** folder in the directory tree.
2. Click **Manage Accounting**.
3. Place a checkmark in the box for the desired **User ID**.
4. Click **Limits and Access**.
5. Enter the new **User Limits**, check the **Reset** box, and click **Apply**.

Using XSA at the printer

When you enable XSA, users must enter a valid user name at the printer to access any services to which access restriction has been applied. Refer to Enable Xerox Standard Accounting in this section for the specific service restricting procedure.

At the Printer

1. Press the **Services** button, if necessary, to display all the available service buttons.
2. Press any button representing a service to which restricted access has been applied.

3. When the Press the Log In/Out button message displays on screen, press the **Log In/Out** button.
4. Enter a **User ID** and touch **Confirm**.

Note: If the User is a member of more than one Group Account, he or she will be asked to select the account that they wish to log into.

5. When the User is logged in, the selected service screen will be displayed. The User can now use that service, with usage tracked by XSA.

Resetting Usage Data

At your Computer

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Click the **Accounting** folder, then the **Xerox Standard Accounting** folder in the directory tree.
5. Click the **Report and Reset**.
6. To reset all usage data to zero, click the **Reset Usage Data** button.
7. Click **OK** to confirm.

Warning: Do not click **Reset to Default** unless you intend to delete all users, accounts and usage data from your machine.

Print a Usage Report

At your Computer

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Click the **Accounting** folder, then the **Xerox Standard Accounting** folder in the directory tree.
5. Click the **Report and Reset**.
6. Click the **Generate Report** button.
7. Follow any additional displayed prompts to save the XSA Report.csv (comma separated value) file to your computer.

Enable XSA in your Print Drivers

Refer to the driver documentation for the steps to follow to enable XSA in your print drivers.

Backing Up XSA Data and Settings and Cloning to Another Device

The Cloning feature enables you to copy/backup settings, including Xerox Standard Accounting (XSA) settings and account information, to a file on your computer or Server. Cloning will create a .dat file that can be used to restore the data and settings on the same machine or to clone the settings to other machines. Both the source and target machines must have the same version of software for the .dat file to be accepted. The software version is located on the Properties tab, under General Setup.

Settings available for cloning are:

- Connectivity settings
- E-Mail settings
- Internet Fax settings
- Job Management settings
- Authentication settings
- Fax settings
- Network Scanning Settings
- Network Scanning Templates
- Audit Log settings

To clone / backup a machine's settings

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Click the **General Setup** folder, then **Cloning**.
4. In the Cloning area, in the **Create Clone File** box, select the settings that you wish to clone.
 - To see a detailed listing of the settings that will be cloned, click **View Feature Details**
 - To clone all features, verify that all features are checked and then click **Clone**.
 - To customize the configuration file, disable any of the features by clearing the check boxes next to the feature(s), then click **Clone**.
5. Enter the current administrator User name and password, if prompted. The default is **admin** and **1111**.
6. Right click the **.dat** link that appears and select **Save Target As**.
7. A dialog box will prompt you to specify and name and location for the cloned file. Ensure the extension reads **.dat**.
8. Click **Save**. The .dat file can now be used to restore the information to the same machine or to clone other machines.

To Restore Settings or Clone Settings to another Machine

This procedure will cause the machine to reboot and will be unavailable over the network for several minutes.

Note: All machines must have the same version of software for the .dat file to be accepted

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Click the **General Setup** folder, then **Cloning**.
5. In the **Cloning** area, in the **Install Clone File** box:
6. Click **Browse** and move through your file system to the .dat file.
7. Click **Open**.
8. Click **Install**.
9. If prompted, enter the current administrator User name and password. The default is **admin** and **1111**.
10. The machine will be unavailable over the network for several minutes.

Once rebooted a Configuration Report should automatically print, if enabled. If the Configuration Report does not automatically print, manually print the Configuration Report. For more information see [Configuration Report](#) on page 22.

Looking at the Configuration Report, verify that some or all of your settings have been cloned to the new machine. Also, note that it may be necessary for you to use your Web browser to view the Xerox Standard Accounting set up of Users and Groups on the new machine.

Audit Log

With TCP/IP and HTTP-based processes running on the printer, exposure to access attacks, eavesdropping, file tampering, service disruption, and identity (password) theft is significantly increased.

The Audit Log, regularly reviewed by the Security Administrator, often with the aid of third party analyzing tools, helps to assess attempted security breaches, identify actual breaches, and prevent future breaches.

The Audit Log is enabled or disabled from the Audit Log on the Properties tab of CentreWare Internet Services, accessed from a networked computer running a Web browser. Access to logged data is also accomplished from the Audit Log on the Properties tab of CentreWare Internet Services, but additionally requires the enabling of SSL/TLS encryption. For more information see [Configuration of HTTPS \(SSL/TLS\) Communication Encryption](#) on page 76.

Events tracked in the Audit Log, include: Starting and Stopping of the printer, Login/Logout events, Changes to system settings, and job completions.

Accessing the Audit Log feature

The Audit Log feature is accessed through CentreWare Internet Services as follows:

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. Enter the system administrator User Name and Password (default **admin, 1111**) if prompted.
4. Click the **Audit Log**.
5. Supply the Administrator User Name and Password (defaults of **admin** and **1111**), when prompted.

Annotation (Bates Stamping)

Overview

Adding notes to scanned and copied pages (annotation) is primarily a user-controlled feature. Bates Stamping is used in the legal profession to sequentially number or date/time-mark documents as they are scanned and copied by the system. A number of parameters are available for selection, as specified below.

Note: Other forms of annotation are available, with default parameters set by the System Administrator using the same button-pressing sequence stated in this section under Configuring a precise bates stamp location. For these other forms of annotation, note that you will need to press the **Copy Defaults** button, after pressing **Copy Service Settings** on the **Tools** tab, to modify stamp settings.

Configuring Bates Stamp Settings

1. Insert a document in the printer's document feeder.
2. Press **Copy** on the Main (**All Services**) screen.
3. Press the **Output Format** tab.
4. Press the **Annotations** button.
5. Select **Bates Stamp**.
6. Set Bates Stamping to **On**.
7. Press the **Prefix** text box, and press **Edit** if necessary, to use the displayed keyboard to specify the Prefix to use.
8. Press **Save**.
9. Press the **Number of Digits** button to assign the number of digits for printed page numbers. Press **Save** to save setting changes.
10. Press **Apply To** in order to specify the pages on which to print the Bates Stamp. Press **Save** to save changes.
11. Press **Position** to specify the relative position on the page for the printed Bates Stamp. Note that, if available, a precise location can be set by the System Administrator. Press **Save** to save changes.
12. Press **Format & Style** to specify the size and color of type for the Bates Stamp. Press **Save** to save changes.
13. Press **Save** when done, then press **Save** again.
14. Press the **Start** button.

Configuring a Precise Bates Stamp Location

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.

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4. Touch the **Tools** tab.
5. Press **Copy Service Settings**.
6. Press **Copy Control**.
7. Press the down arrow to scroll to the Bates Stamping selection lines.
8. Press the applicable Bates Stamp position lines to set the precise location for your Bates stamp, using x and y axes.
9. Press **Change Settings** to change settings.
10. Press **Save** to save your changes.
11. Press **Close** until the System Settings screen is displayed.
12. Press **Exit** on the System Settings screen to return to the Main (All Services) screen.

Media Card Reader

The Media Card Reader is available as an optional kit. After the Media Card Reader is installed, you can print digital camera image data (Exif), and documents (PDF, TIFF) stored on the media card.

For more information, refer to the Media Card Reader User Guide.

Note: Exif is a file format that embeds information required to print data in an image taken by digital cameras.

The printer uses two media printing modes:

- **Media Print – Text:** Prints data stored in document format. It is helpful to think of the word text as synonymous with document.
- **Media Print – Photos:** Prints data stored in the standard format of most digital cameras.

Media Card Reader Hardware

- **Access Indicator:** This light illuminates when the media card is inserted.
- **Eject Button:** Press this button to eject the media card.
- **Media Slot:** Insert the media card into this slot.

Supported Media and File Formats

The Media Card Reader supports CompactFlash media only. To use media other than CompactFlash, insert the media into a CompactFlash adaptor.

Note: The media and the CompactFlash adaptor are optional.

The media and file formats that can be used are as follows.

Supported Media

- SmartMedia
- CompactFlash
- CompactFlash (MicroDrive)
- SD Card
- Memory Stick
- xD-Picture Card

Supported File Formats

- **Media Print – Photos**
 - **JPEG**
 - **TIFF:** DCF1.0-compliant JPEG/TIFF (Exif2.0, Exif2.1, Exif2.2)
- **Media Print – Text**

- **PDF:** .pdf, PDF1.3 or later
- **TIFF:** .tif, gray scale 4 bit/8 bit uncompressed, 4 bit/24 bit compressed by JPEG, compressed by MH/MMR

Important Notes and Restrictions

- MagicGate Memory Stick is not supported.
- Image files other than files in Exif format (JPEG and TIFF files created on computers) cannot be printed.
- If an image file in Exif format is edited or saved on a computer, the file format is changed and no longer remains in Exif format.
- Do not save image files and document files in the same medium.
- A media card containing over 900 files may not be detected properly.
- In Media Print – Text mode, PDF files or TIFF files stored in folders cannot be printed.
- PDF files stored on Mac OS cannot be printed and displayed on the screen.
- If characters not supported by the printer are used in file names, the file names will not be displayed on the screen.
- Characters up to 255 can be recognized as a file name. However, not more than 100 characters will be displayed.
- Use media formatted by digital cameras or computers (FAT12, 16, 32 only).
- Only use media recommended by Xerox. For the information on recommended media, contact our Customer Support Center.
- If anything is wrong with a media card, the process aborts within a few minutes and an error message appears.
- Before turning the printer Off, be sure to eject the media card.

Inserting and Ejecting Media

Caution: Do not press the Eject Button, pull out the USB cable, or power off the printer when the Access Indicator light is illuminated. Data stored on the media card may be damaged.

1. Before ejecting the medium, touch the antistatic label.
2. Press the **Eject** button, and then pull out the media card.

Selecting and Printing Text Files

1. Insert the media card into the Media Slot of the Media Card Reader.
2. Press the **Services** button.
3. Touch the **Media Print – Text** icon.
4. After the files are imported, touch the appropriate button. You can choose from:
 - Select All
 - Select from List
 - Select Range

5. Touch the **Media Print Text** and **Advanced Settings** tabs as required to change any appropriate print settings.
6. Press the **Start** button.

Media Print Text Tab

The Media Print Text tab allows you to select from a variety of printing options.

The options for the Media Print Text tab include:

- **Output Color:** Color or Black & White.
- **Paper Supply:** Choose the paper tray to be used as a source when printing.
- **2-sided Printing:** Choose 1-sided, 2-sided (Flip on long edge), or 2-sided (Flip on short edge).
- **Multiple-Up:** Choose from Off, 2 Pages Up, or 4 Pages Up.

Index Print

The Index Print button allows you to print a collection of miniature (30mm x 40mm) images onto one page from the files on the media card.

When you select the Index Print button, you will only be able to specify the number of copies printed. All other printing options remain at their previous settings.

Advanced Settings

The Advanced Settings tab allows you to select from a variety of printing options.

You can choose to set Bitmap Smoothing to On or Off on this tab. Selecting the On option smooths out rough and jagged edges within your document.

Selecting and Printing Photo Files

1. Insert the media card into the Media Slot of the Media Card Reader.
2. Press the **Services** button.
3. Touch the **Media Print – Photos** icon.
4. After the files are imported, touch the appropriate button. You can choose from:
 - Select All
 - Select from List
 - Select Range
5. Touch the **Media Print Photos** and **Advanced Settings** tabs as required to change any appropriate print settings.
6. Press the **Start** button.

Media Print Photos Tab

The Media Print Photos tab allows you to select from a variety of printing options. The Media Print Photos tab is shown below. The options for the Media Print Photos tab include:

- **Output Color:** Color or Black & White.
- **Paper Supply:** Choose the paper tray to be used as a source when printing.
- **2-sided Printing:** Choose 1-sided, 2-sided (Flip on long edge), or 2-sided (Flip on short edge).
- **Output Photo Size:** Choose from Full Page Print, any available Output Size, or anywhere from 2 to 8 Pictures per Page.

Index Print

The Index Print button allows you to print a collection of miniature (30mm x 40mm) images onto one page from the files on the media card. When you select the Index Print button, you will only be able to specify the number of copies printed. All other printing options remain at their previous settings.

Advanced Settings

The Advanced Settings tab allows you to select from a variety of printing options.

You can choose to set Bitmap Smoothing to On or Off on this tab. Selecting the On option smooths out rough and jagged edges within your document.

Problem Solving

If one of the following symptoms occurs, or if an error message appears on the screen, follow the remedy to solve the problem.

Symptom 1: The access indicator light of the Media Card Reader does not illuminate.

- **Cause:** The USB cable may not be connected correctly.
- **Remedy:** Turn the printer off, unplug the USB cable, and then insert the cable into the connector securely.

Symptom 2: The Media Print - Photos and Media Print - Text icons are not displayed on the All Services screen.

- **Cause:** The printer does not recognize the media card reader properly.
- **Remedy:** Power off the printer, pull out the USB cable, and then insert the cable into the connector securely.

Symptom 3: Blank sheets are output.

- Cause: Files that cannot be printed by the printer (image files not saved in Exif format) are included in the selected files.
- Remedy: Image files not saved in Exif format cannot be printed by Index Print. Delete the image files that cannot be printed by Index Print, and then print files again.

Note: If an image file in Exif format is edited or saved on a computer, the file format is changed and no longer remains in Exif format.

USB Printing

Overview

The USB Printing option is available as a kit for the XOG Template Usage Guidelines printer.

If the Media Card Reader is installed, Exif image data from digital cameras and document files (PDF, TIFF) can be printed.

Note: Exif is a file format that embeds information required to print data in an image taken by digital cameras. If an image file in Exif format is edited or saved on a computer, the file format is changed and no longer remains in Exif format.

The printer uses two media printing modes:

- **Media Print – Text:** Prints data stored in document format. It is helpful to think of the word text as synonymous with document.
- **Media Print – Photos:** Prints data stored in the standard format of most digital cameras.

Note: The USB Printing option is similar to the Media Card Reader option, but there are several important differences.

Supported Media and File Formats

USB Printing supports typical USB flash drives.

Supported File Formats

- Media Print - Text
- PDF: PDF1.3 or later
- TIFF: gray scale 4 bit/8 bit uncompressed, 4 bit/24 bit compressed by JPEG, compressed by MH/MMR
- XPS
- Media Print - Photos
- JPEG
- TIFF - DCF1.0-compliant JPEG/TIFF (Exif2.0, Exif2.1, Exif2.2)

Note: The photo files must be in the format that they were stored in on the camera. Copy the folder, (for instance, a DCIM folder) to the USB drive.

Important Notes and Restrictions

- Image files other than files in Exif format (JPEG and TIFF files created on computers) cannot be printed.
- If an image file in Exif format is edited or saved on a computer, the file format is changed and no longer remains in Exif format.
- Do not save image files and document files in the same medium.
- In Media Print - Text mode, PDF files or TIFF files stored in folders cannot be printed.
- PDF files stored on Mac OS cannot be printed and displayed on the screen.
- If characters not supported by the printer are used in file names, the file names will not be displayed on the screen.
- Characters up to 255 can be recognized as a file name. However, not more than 100 characters will be displayed.

Selecting and Printing Text Files

1. Insert the USB drive into the USB slot.
2. Press the **Services** button.
3. Touch the **Media Print – Text** icon.
4. After the files are imported, touch the appropriate button. You can choose from:
 - Select All
 - Select From List
 - Select Range
5. Touch the **Media Print Text** or **Advanced Settings** tabs as required to change any appropriate print settings.
6. Touch the file to be printed.
7. Press the **Start** button.

Media Print Text Tab

The Media Print Text tab allows you to select from a variety of printing options.

The options for the Media Print Text tab include:

- **Output Color:** Color or Black & White.
- **Paper Supply:** Choose the paper tray to be used as a source when printing.
- **2-sided Printing:** Choose 1-sided, 2-sided (Flip on long edge), or 2-sided (Flip on short edge).
- **Output:** Choose stapling options as needed.
- **Index Print:** The Index Print button allows you to print a collection of miniature (30mm x 40mm) images onto one page from the files on the media card. When you select the Index Print button, you will only be able to specify the number of copies printed. All other printing options remain at their previous settings.

Advanced Settings Tab

The Advanced Settings tab allows you to select from a variety of printing options.

- **Multiple-Up:** Choose from Off, 2 Pages Up, or 4 Pages Up.
- **Bitmap Smoothing :** Smooths out rough and jagged edges within your document.

Selecting and Printing Photo Files

Note: The photo files must be in the format that they were stored in on the camera. Copy the folder, (for instance, a DCIM folder) to the USB drive.

Insert the USB drive into the USB slot.

1. Press the **Services** button.
2. Touch the **Media Print – Photos** icon.
3. After the files are imported, touch the appropriate button. You can choose from:
 - Select All
 - Select From List
 - Select Range
4. Touch the **Media Print Photos** or **Advanced Settings** tabs as required to change any appropriate print settings.
5. Touch the file to be printed.
6. Press the **Start** button.

Media Print Photos Tab

The Media Print Photos tab allows you to select from a variety of printing options. The Media Print Photos tab is shown below. The options for the Media Print Photos tab include:

- **Output Color:** Color or Black & White.
- **Paper Supply:** Choose the paper tray to be used as a source when printing.
- **2-sided Printing:** Choose 1-sided, 2-sided (Flip on long edge), or 2-sided (Flip on short edge).
- **Output Photo Size:** Choose from Full Page Print, any available Output Size, or anywhere from 2 to 8 Pictures per Page.
- **Index Print:** The Index Print button allows you to print a collection of miniature (30mm x 40mm) images onto one page from the files on the media card. When you select the Index Print button, you will only be able to specify the number of copies printed. All other printing options remain at their previous settings.

Advanced Settings Tab

The Advanced Settings tab allows you to select from a variety of printing options.

You can choose to set Bitmap Smoothing to On or Off on this tab. Selecting the On option smooths out rough and jagged edges within your document.

Thumbnail Preview

Thumbnail Preview is an optional feature and may not be available on your machine. Review the instructions that are included in the Thumbnail kit.

To view a thumbnail preview and print a document

1. Press the **Services** button on the printer's control panel.
2. Touch **Send from Folder**.
3. Select **Folder Name**. A list of Folder Names are displayed with a number association. The numbers are used as identifiers for commonly used folders. You may identify the folder by the name or number, depending on how you choose to identify the folder.
4. Select the document name from the Document List. The document selected will be used to send to the printer. When a document is identified and selected, a check mark will be placed in the Order field. More than one document can be selected.
5. In the Folder, a document to be previewed may be any print, scan, or fax job. On a thumb drive, a document may only be a JPEG in the Exchangeable image file format (Exif). Exif JPEGs are JPEGs as they are stored on a digital camera. A JPEG produced by Photoshop or any other image modification and storage software will not work properly.
6. Select **Thumbnail**. The Thumbnail feature will open a preview window of the selected document. A small, thumbnail-sized image will display on your screen. This option is useful in determining if you have chosen the correct document.
7. Select **Print**.
8. The folder print settings will display.
9. Select the **Paper Supply, Output, and 2-sided Printing Options**.
10. Select **Print**.
11. The selected document will be printed to the specified location.

Hard Disk Data Encryption

The controller hard disk data encryption is enabled by default on your printer. This encryption feature provides an additional level of data security on the printer, while operating at a low level within the operating system. The impact on performance is very small.

Enabling or disabling disk encryption will result in a system reboot and a hard disk initialization. During hard disk initialization, all customer information, folders, templates, and other information stored on the disk will be lost.

To Verify or Change Hard Disk Data Encryption

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Touch **Common Service Settings**.
6. Scroll to **Other Settings**.
7. Touch **Data Encryption**, and touch **Change Settings**. Touch **On**, then touch **Save**.

Enabling or disabling disk encryption will result in a system reboot and a hard disk initialization. During hard disk initialization, all customer information, folders, templates, and other data stored on the disk will be lost.

Encryption Key For Confidential Data

When enabling Data Encryption, the system administrator may also create an Encryption Key For Confidential Data. The system administrator may either verify the default encryption key, or enter a new alpha-numeric string of up to 12 characters to be used by the encryption algorithm.

Xerox Smart eSolutions

To enable the printer for Automated Meter Reading and Supplies Replenishment:

Enable communications with the Xerox Smart eSolutions Server

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. If prompted, enter the system administrator user name and password (default: **admin, 1111**).
4. Click the **Services** folder, then the Xerox Services Folder
5. Click the **Xerox Communication Server**
6. In the Communication Setup area, check the **Server Communication** check box
7. Set the transmission time for a time when the printer will most likely be turned on during the day
8. Click **Apply**.

Set up the Internet Proxy Server (optional)

1. Click the **Properties** tab.
2. Click the **Connectivity** folder, then the **Protocols** folder.
3. Click **Proxy Server**.
4. In the General area, select the **User Proxy Server** check box, click **Enabled**
5. If you have selected **Same Proxy for all Protocols** for **Proxy Setup**, you must enter the Internet Proxy address in the HTTP section.
6. If you have selected **Different Proxy for Each Protocol**, be sure to enter the Internet Proxy address in the HTTPS section.
7. Click **Apply**.

Configure DNS

1. Click the **Properties** tab.
2. Click the **Connectivity** folder and select the **Protocols** folder then select TCP/IP.
3. In the **DNS Configuration** section select **Obtain DNS Server Address Automatically**, or manually enter the DNS Server address information (when using STATIC, BOOTP, or RARP IP address resolution).
4. Click **Apply**.
5. You may be prompted to reboot the printer.

Validate that your Printer has been Registered for Smart eSolutions

1. Click the **Properties** tab.
2. Click the **Services** folder, then the **Xerox Services** folder.

3. Click **Xerox Communication Server**
4. In the Communication Log area check for the word **Success** or **Fail** in the message.
 - **Example:** id:20301,00 Success, , ,
 - **Example:** id:20301,04 Fail, , ,

Cancelling Communications with the Xerox Smart eSolutions Server

1. Open your Web browser and enter the IP address of the printer in the address field. Press **Enter** to open CentreWare Internet Services.
2. Click the **Properties** tab.
3. If prompted, enter the system administrator user name and password (default: **admin, 1111**).
4. Click the **Services** folder, then the **Xerox Services** folder.
5. Click **Xerox Communication Server**.
6. In the Communication Setup area, uncheck the **Server Communication** check box.
7. Click **Apply**.

Troubleshooting

8

This chapter includes:

- [General Troubleshooting Procedure](#) on page 192
- [TCP/IP Troubleshooting](#) on page 193
- [NetBIOS over IP Troubleshooting](#) on page 195
- [IPP Troubleshooting](#) on page 198
- [EtherTalk Troubleshooting](#) on page 201
- [Scanning to Hard Drive Troubleshooting](#) on page 202
- [Image Quality Troubleshooting](#) on page 204

General Troubleshooting Procedure

1. Make sure that the printer is ON and that the Main screen (typically the All Services screen) is displayed.
2. Make sure that the printer is plugged into a live network drop, typically with a Category 5 twisted pair cable attached to the RJ-45 socket at the rear of the printer.

Note: You can often determine if the drop is live by looking at the and activity (if available) light or lights at the rear of the printer. If these lights are lit and/or blinking, you have a live connection. If you cannot determine if the drop is live, plug the printer into another drop being used by another machine that is fully functioning on the network. You can use a hub to connect both machines to the live network drop so that you do not interrupt the operations of the working machine. If you do not have access to a second working drop, or a hub, connect a laptop to the RJ-45 socket at the rear of the printer using a crossover (not a patch) cable.

3. Print a Configuration Report. For more information, see [Configuration Report](#) on page 22. Referring to the Configuration Report, determine if the appropriate ports and protocols are enabled for your Network environment.

To support communicating with the printer's CentreWare Internet Services, the TCP/IP protocol should be enabled. The printer should also have a valid IP Address, Subnet Mask, and Gateway displayed. For more information, see [TCP/IP Protocol Configuration](#) on page 43.

As some Network Environment settings can only be configured through CentreWare Internet Services on the printer, if this tool is shown as disabled on the Configuration Report. For more information see [Enabling Internet Services \(HTTP\)](#) on page 23.

4. At any networked computer, or at your laptop connected to the printer with a crossover cable, open your Web browser and enter the TCP/IP address of the printer (as shown on the Configuration Report) into the Address or Location field. Press Enter. If the HTTP port is enabled at the printer, you should see CentreWare Internet Services. Note that depending upon Authentication and Encryption settings, you might also see an Administrator Log In prompt, or a Digital Certificate prompt. With the display of these prompts or pages you have proven that the printer is communicating with HTTP over the TCP/IP network. A ping command (see [TCP/IP Troubleshooting](#)), issued from the computer's command prompt, can further verify this working connection.
5. To troubleshoot network communication problems interfering with printing or scanning to the printer's hard drive (folders), refer to the specific topic, that applies to your network operating environment, within this Troubleshooting section.
6. To resolve problems with system options, refer to the Configuration Report to determine if the options are installed, enabled, and properly configured on your machine.
To enable purchased options, see [Enabling Options with Software Keys](#) on page 98.
To properly configure enabled options, see [Scanning and Faxing](#) on page 97.

TCP/IP Troubleshooting

Use the following check list to troubleshoot your network communication problem.

Check Physical Media and Network Interface Cards

1. Verify that the printer is on.
2. Verify that the printer and Computer are using the correct cabling to communicate over the network. Use category 3 UTP patch (not crossover) cable for 10 Base T communications, category 5 UTP patch (not crossover) cable for 10 Base T / 100 Base TX communications, and Token Ring cabling for Token Ring networks.
3. Verify that the cable at both the printer and Computer is fully plugged into the Network Interface Card (NIC). Check the light, which is typically a green LED, to make sure that it is lit. Typically, but not always, a second light on the Network Interface Card will be intermittently flashing, indicating the presence of network traffic. If neither of these lights is lit, there is a problem with the NIC.

At the Printer

1. Print a Configuration Report. Under the Ethernet Rated Speed data label on the List, verify that your communications speed is correctly set for your network and that you have a MAC address listed. The driver for your NIC works at the Media Access Control (MAC) layer of the protocol stack. If no MAC address is shown, you have either a bad NIC or no NIC at all. Replace or install the Network Interface Card.
2. Under the TCP/IP data label, determine the method being used to assign TCP/IP addressing to the printer. Specifically note the Mode being used. IP version 4 is the traditional mode using address formats of xxx.xxx.xxx.xxx. Verify that the IP Address, Subnet Mask, and Gateway addresses are correct for your network and have not changed from their previous settings.

Note: The use of DHCP (the DHCP Server) with a short lease time can cause the printer to be assigned a new IP Address when it is powered off for an extended period of time. This will interrupt communications with computers using the old IP address. If you do not want the IP address to be subject to constant changes, either increase the lease time at the DHCP Server, or use the Static IP Addressing method. For more information see [TCP/IP Protocol Configuration](#) on page 43.

3. Under the LPD data label, if you are communicating with the printer through an LPR port, make sure that LPD is Enabled. Also verify that the displayed port number is 515. For more information see [TCP/IP LPD Enablement](#) on page 46.
4. Under the Port 9100 data label, to enable the printer to automatically determine the Page Description Language to use in processing jobs sent over the computer's LPR port, make sure that this Port is enabled. This is the meaning of the word raw when used to name the queue during LPR port creation. For more information, see [Configure Port 9100 \(Raw Printing\)](#) on page 51.
5. Under the CentreWare Internet Services data label, verify that this feature is Enabled.

At the Computer

1. Open your Web browser and enter the TCP/IP address of the printer in the Address or Location field. Press **Enter**. If the printer's CentreWare Internet Services (Web pages) begin to display on the computer, you are communicating with the printer. If not, make sure that your Web browser is not set to use a proxy server and repeat the procedure. If unsuccessful, perform the next step.
2. Verify that the computer has been assigned an IP address, subnet mask, and gateway address by running a Command (DOS) prompt, typing ipconfig/all (Windows 2000/XP) and pressing **Enter**. If any of the addresses are incorrect or missing, right click the **Network Neighborhood** icon (**My Network Places** in Windows 2000), and make sure that the TCP/IP protocol is installed and properly configured for IP addressing. For XP, click **Start/My Network Places**, then right click in the open window, select **Properties**, right click **Local Area Connection**, and then select **Properties**.
3. Run a Command (DOS) prompt on the computer and perform ping tests to verify successful packet transmission first to the computer's NIC, then to the Gateway (if being used), then to the printer's NIC. To run Ping Tests, at the Command (DOS) prompt, type: **ping xxx.xxx.xxx.xxx** and press **Enter**. Note that there is a space between the word ping and the first xxx. Let xxx.xxx.xxx.xxx first represent the computer's IP address, then the IP address of the default gateway, and finally the IP address of the printer. If successful, you will receive a reply such as: Reply from xxx.xxx.xxx.xxx: bytes=32 time<10ms TTL=128. If you receive Time Out or 0 bytes received notifications, the printer being pinged is incorrectly configured or malfunctioning.
4. If Web browser and Ping Tests are successful but you are still unable to print to the printer, verify that the driver is using the correct LPR Port to print through. On Windows desktops, select **Start, Settings, Printers (Start/Printers and Faxes in XP)**, right click the printer's icon, and select **Properties**. Select the **Ports** Tab (Windows 2000) and verify that the LPR Port being printed through matches the IP Address of the printer. If the IP address does not match, you are printing to the wrong device on the network. Either select the correct port from the displayed list, or use the **Add Port** button to create a new port with an IP Address matching that of your printer.
5. If the correct Port is being used by the driver but you are still unable to print, perform the following procedure. In Windows 2000 or XP, verify that Print Services for UNIX are installed in the computer. For more information see [TCP/IP Peer to Peer \(LPR or Standard TCP/IP\) Printing](#) on page 13.
6. Note that access to this printer's Services can be restricted by Host IP addresses. As this feature could cause communications to appear to fail in certain instances, see [IP Filtering \(IP Address Restriction\)](#) on page 37.
7. To assure successful printing, make sure that the printer is configured to support the Page Description Language (PDL) being used by your driver. To check the PDL being used by the driver, print a test job to file. Open and view the job in a program such as Notepad. The PDL being used by the driver will be displayed in the first few lines of Printer Language. Next, check the Page Description Languages being supported by the printer's ports. For more information, see [Setting PDL Emulations](#) on page 30. The PDL being used by the driver, and the PDL supported by the Port you are printing to, must match for successful printing to occur.

NetBIOS over IP Troubleshooting

Use the following check list to troubleshoot your network communication problem.

Check Physical Media and Network Interface Cards

1. Verify that the printer is powered On.
2. Verify that the printer and Computer are using the correct cabling to communicate over the network. Use category 3 UTP patch (not crossover) cable for 10 Base T communications, category 5 UTP patch (not crossover) cable for 10 Base T / 100 Base TX communications, and Token Ring cabling for Token Ring networks.
3. Verify that the cable at both the printer and Computer is fully plugged into the Network Interface Card (NIC). Check the light, which is typically a green LED, to make sure that it is lit. Typically, but not always, a second light on the Network Interface Card will be intermittently flashing, indicating the presence of network traffic. If neither of these lights is lit, there is a problem with the NIC.

At the Printer

1. Print a Configuration Report. On the Configuration Report, verify that SMB is enabled. For more information, see [Microsoft \(NetBIOS over IP\) Networks](#) on page 52.
2. On the Configuration Report, note that the default name of the printer's workgroup is Workgroup and that the printer has a unique SMB Host Name. To modify the printer's Workgroup or SMB Host Name, if required, use your computer's Web browser to access the CentreWare Internet Services. For more information, see [Microsoft \(NetBIOS over IP\) Networks](#) on page 52.
3. On the Configuration Report, under the TCP/IP data label, note what method the printer is using to acquire its TCP/IP addresses. If the method shown is STATIC, make sure that the printer has a valid IP address, Subnet Mask, and Gateway address for the network.
4. On the Configuration Report, verify that DNS is enabled. The use of Naming Servers is REQUIRED to resolve NetBIOS device names to IP addresses for packet routing over the TCP/IP network. If in doubt as to whether DNS and WINS are enabled, see [Microsoft \(NetBIOS over IP\) Networks](#) on page 52.

Warning: If the printer is not informed of the addresses of the DNS/WINS Servers, you may not be able to see or use the printer's NetBIOS name on the network. Make sure that the printer is informed of the addresses of the DNS/WINS Servers, using the instructions supplied in the above mentioned procedures.

5. Under the CentreWare Internet Services data label, verify that this feature is Enabled. You must use this tool at your computer if you need to change the printer's Workgroup name, the SMB Host Name, the TCP/IP (internet) Host Name, or DNS settings. Note that when using DNS to resolve host names to IP addresses, the NetBIOS name (SMB Host) and the TCP/IP Host Name must be the same.

At the DNS or WINS Server

1. Refer to the Server Operating System documentation for the appropriate procedure to use to enable Host name to IP address resolution on the Server.
2. Make sure that the printer's TCP/IP (internet) Host Name and NetBIOS (SMB Host) Name (which should be identical for DNS) is being mapped to an IP Address on the Server.
3. Refer to the printer's Configuration Report and verify that the printer's TCP/IP Host and NetBIOS (SMB Host) Names continue to match the entries in the Server's database. Also verify that the IP Address shown on the Report matches the IP address in the Server's database. If the information is incorrect on the Server, NetBIOS communications from the computers to the printer will be disrupted.

At the Computer

1. Open your Web browser and enter the TCP/IP address of the printer in the Address or Location field. Press **Enter**. If the printer's CentreWare Internet Services (Web pages) begin to display on the computer, you are communicating with the printer. If not, make sure that your Web browser is not set to use a proxy server and repeat the procedure. If unsuccessful, perform the next step.
2. On Windows 2000 computers, verify that the Internet protocol (TCP/IP) is installed and that it is configured for DNS resolution of the NetBIOS Host Name. Also verify that the Client for Microsoft Networks is installed. Finally, through **Add/Remove Programs** and **Add/Remove Windows Components**, select **Other Network File and Print Services**, click **Details**, check the box for **Print Services for UNIX**, and click **OK** and **Next**.
3. Run a Command (DOS) prompt on the computer and perform ping tests to verify successful packet transmission first to the computer's NIC, then to the Gateway (if being used), then to the printer's NIC. To run Ping Tests, at the Command (DOS) prompt, type: **ping xxx.xxx.xxx.xxx** and press **Enter**. Note that there is a space between the word ping and the first xxx. Let xxx.xxx.xxx.xxx first represent the computer's IP address, then the IP address of the default gateway, and finally the IP address of the printer (as shown on the Configuration Report).
4. If communicating with the printer in a Peer to Peer environment, at the Computer's Desktop double click the Network Neighborhood icon and see if the Printer's SMB Host Name appears in the Workgroup indicated on the Configuration Report. If it does not, SMB may not be enabled at the printer, or there is no Master Browser in the Workgroup. Check the Configuration Report to verify that SMB is enabled and, if necessary, enable Auto Master Mode. For more information, see [Microsoft \(NetBIOS over IP\) Networks](#) on page 52.
5. From your Computer's Desktop, click Start/Settings/Printers (Start/Printers and Faxes in XP), right click the Printer's icon and select Properties. From the Ports Tab (Windows 2000) determine the Port that the driver is using to print through. For peer to peer communications, the port name should match the SMB Host name of the printer as shown on the Configuration Report. If it doesn't you are printing to the wrong port and either need to select the correct port or use the **Add Port** button to create a new port for the driver to print through. For more information, see [TCP/IP Peer to Peer \(LPR or Standard TCP/IP\) Printing](#) on page 13. If the name matches, use the General Tab of the driver to print a test page to determine the status of communications between the Computer and the printer.
6. If communicating with the printer in a Client/Server environment, at the Computer's Desktop double click the Network Neighborhood icon and see if the Printer's Server is displayed. If you double click the Server's name, a list of Shared printers should be displayed, with the Printer being

one of the printers shown. Note that since the Printer is identified as a Share name on the Server, it may not have the same name as the SMB Host name on the Configuration Report. If you do not recognize your Server or Printer's name in the list, perform the following step.

7. From your Computer's Desktop, click **Start/Settings/Printers (Start/Printers and Faxes in XP)**, right click the Printer's icon and select **Properties**. From the **Ports** Tab (Windows 2000) determine the Port that the driver is using to print through. For Client/Server communications, the port name should be in the form of a UNC (universal naming convention) such as \\Computer_name\Share_name. If it isn't you are printing to the wrong port and either need to select the correct port or use the **Add Port** button to create a new port for the driver to print through. If the name looks correct, use the **General** tab of the driver to print a test page to determine the status of communications between the computer and the printer.
8. Note that if you have the UNC of the Printer, you can enter this into the text box of the **Run** command on your computer. When you press **Enter**, the computer will attempt to reconnect to the network Server and Printer Share that was specified by the UNC. Depending upon how the Server was configured you can then either manually or automatically reinstall the driver.
9. To assure successful printing, make sure that the printer is configured to support the Page Description Language (PDL) being used by your driver. To check the PDL being used by the driver, print a test job to file. Open and view the job in a program such as Notepad. The PDL being used by the driver will be displayed in the first few lines of Printer Language. Next, check the Page Description Languages being supported by the printer's ports. The PDL being used by the driver, and the PDL supported by the Port you are printing to, must match for successful printing to occur. For more information, see [Setting PDL Emulations](#) on page 30.

IPP Troubleshooting

Use the following check list to troubleshoot your network communication problem.

Check Physical Media and Network Interface Cards

1. Verify that the printer is powered On.
2. Verify that the printer and Computer are using the correct cabling to communicate over the network. Use category 3 UTP patch (not crossover) cable for 10 Base T communications, category 5 UTP patch (not crossover) cable for 10 Base T / 100 Base TX communications, and Token Ring cabling for Token Ring networks.
3. Verify that the cable at both the printer and Computer is fully plugged into the Network Interface Card (NIC). Check the light, which is typically a green LED, to make sure that it is lit. Typically, but not always, a second light on the Network Interface Card will be intermittently flashing, indicating the presence of network traffic. If neither of these lights is lit, there is a problem with the NIC.

At the Printer

1. Print a Configuration Report. Under the Ethernet Rated Speed data label on the Report, verify that your communications speed is correctly set for your network and that you have a MAC address listed. The driver for your NIC works at the Media Access Control (MAC) layer of the protocol stack. If no MAC address is shown, you have either a bad NIC or no NIC at all. Replace or install the Network Interface Card.
2. Under the CentreWare Internet Services data label, verify that this feature is **Enabled**.
3. Under the TCP/IP data label, determine the method being used to assign TCP/IP addressing to the printer. Verify that the IP Address, Subnet Mask, and Gateway addresses are correct for your network and have not changed from their previous settings.

Note: The use of DHCP (the DHCP Server) with a short lease time can cause the printer to be assigned a new IP Address when it is powered off for an extended period of time. This will interrupt communications with computers using the old IP address. If you do not want the IP address to be subject to constant changes, either increase the lease time at the DHCP Server, or use the Static IP Addressing method . For more information, see [TCP/IP Protocol Configuration](#) on page 43.

4. Under the IPP data label, verify that the IPP Port is Enabled. For more information, see [IPP Configuration](#) on page 54.
5. Under the IPP data label, verify that IPP is using DNS to resolve Host Names to IP Addresses in support of IPP printing. If it is not, type the printer's IP address into your Web browser's address field and press enter. Click the **Properties** tab. Click the **Connectivity** folder, then the **Protocols** folder and click **IPP**. Verify that the **DNS Enablement** Check Box is checked. If it is not checked, check it with your mouse and click **Apply**, then **Reboot Machine**.
6. Under the IPP data label, verify that the Port number associated with IPP is 631. This is the port number assigned to IPP by the Internet Assigned Numbers Authority.

At the Computer

Note: As IPP (the Internet Printing Protocol) is supported by all Windows computers, the following procedure is written specifically for Windows. The IPP printing service is available for other computer operating systems through downloads from the Microsoft Web site. In general, troubleshooting procedures for other operating systems will be similar to this one.

1. Open your Web browser and enter the TCP/IP address of the printer in the Address or Location field. Press **Enter**. If the printer's CentreWare Internet Services (Web pages) begin to display on the computer, you are communicating with the printer. If not, make sure that your Web browser is not set to use a proxy server and repeat the procedure. If unsuccessful, perform the next step.
2. Verify that the Internet protocol (TCP/IP) is installed in the Windows 2000 or XP computer. On the Windows 2000 Desktop, right click **My Network Places** and select **Properties**. Right click **Local Area Connection** and select **Properties**. On the Windows XP desktop, click **Start, Control Panel**, and double click **Network Connections**. Right click the **Local Area Connection** icon and select **Properties**. Verify that the Internet Protocol (TCP/IP) has been loaded. If it has, click (highlight) this item with your mouse and click the **Properties** button to verify that this computer is using either a dynamic or static method to obtain a valid TCP/IP address, and that the computer's host name is being resolved using DNS. If the TCP/IP protocol is not loaded, click the **Install...** button, then select **Protocol** as the type of network component that you wish to install. Click the **Add...** button and select **Internet Protocol (TCP/IP)**. With your operating system installer disk readily available, click the **Have Disk...** button and follow any remaining instructions. Once the protocol has been installed, you can click (highlight) the item with your mouse and click the **Properties** button to verify or set up the method being used for TCP/IP addressing.
3. Perform ping tests to verify successful packet transmission first to the computer's NIC, then to the Gateway (if being used), then to the printer's NIC. To run Ping Tests, click **Start, Run**, then type: **ping xxx.xxx.xxx.xxx** and press **Enter**. Note that there is a space between the word ping and the first xxx. Let xxx.xxx.xxx.xxx first represent the computer's IP address, then the IP address of the default gateway, and finally the IP address of the printer. If successful, you will receive a reply such as: Reply from xxx.xxx.xxx.xxx: bytes=32 time<10ms TTL=128. If you receive Time Out or 0 bytes received notifications, the printer being pinged is incorrectly configured or malfunctioning.
4. If Web browser and Ping Tests are successful but you are still unable to print to the printer, verify that the driver is using an IPP Port to print through. From the Windows desktop, select **Start, Settings, Printers (Start/Printers and Faxes in XP)**, right click the printer's icon, and select **Properties**. Select the **Ports** Tab and verify that the IPP Port being printed through matches the IP Address, or fully qualified Domain Name, of the Printer. If the IP address (or fully qualified Domain Name) does not match, you are printing to the wrong device on the network. Either select the correct port from the displayed list, or use the **Add Port** button to create a new IPP port with an IP Address (or fully qualified Domain Name) matching that of your printer.

Note: A fully qualified Domain Name consists of the printer's internet Host Name, followed by its internet domain name, separated by periods.

5. Note that access to this printer's Services can be restricted by Host IP addresses. This feature could cause communications to appear to fail in certain instances. For more information, see [IP Filtering \(IP Address Restriction\)](#) on page 50.

Troubleshooting

6. To assure successful printing, make sure that the printer is configured to support the Page Description Language (PDL) being used by your driver. To check the PDL being used by the driver, print a test job to file. Open and view the job in a program such as Notepad. The PDL being used by the driver will be displayed in the first few lines of Printer Language. Next, check the Page Description Languages being supported by the printer's ports. The PDL being used by the driver, and the PDL supported by the Port you are printing to, must match for successful printing to occur. For more information, see [Setting PDL Emulations](#) on page 30.

EtherTalk Troubleshooting

Use the following check list to troubleshoot your network communication problem.

Check Physical Media and Network Interface Cards

1. Verify that the printer is powered ON.
2. Verify that the printer and Computer are using the correct cabling to communicate over the network. Use category 3 UTP patch (not crossover) cable for 10 Base T communications, category 5 UTP patch (not crossover) cable for 10 Base T / 100 Base TX communications, and Token Ring cabling for Token Ring networks.
3. Verify that the cable at both the printer and Computer is fully plugged into the Network Interface Card (NIC). Check the light, which is typically a green LED, to make sure that it is lit. Typically, but not always, a second light on the Network Interface Card will be intermittently flashing, indicating the presence of network traffic. If neither of these lights is lit, there is a problem with the NIC.

At the Printer

1. Print a Configuration Report. Under the Ethernet Rated Speed data label on the Report, verify that your communications speed is correctly set for your network and that you have a MAC address listed. The driver for your NIC works at the Media Access Control (MAC) layer of the protocol stack. If no MAC address is shown, you have either a bad NIC or no NIC at all. Replace or install the Network Interface Card.
2. Under the CentreWare Internet Services data label, verify that this feature is Enabled.
3. Under the EtherTalk data label, verify that the Port is enabled, and that printer has been assigned an EtherTalk Printer Name and an EtherTalk zone. If one or more of these parameters needs to be configured, see [EtherTalk \(AppleTalk\) Configuration](#) on page 57.
4. Under the EtherTalk data label and at the bottom of the Configuration Report, verify that PostScript is installed in the printer. If a PostScript license is installed in the printer, the PostScript logo will be clearly displayed at the bottom of the Report.

Note: If a PostScript license is not installed in the printer, EtherTalk will not be displayed on the Configuration Report, and will be unavailable for configuration using CentreWare Internet Services. Consult your Xerox Representative for assistance.

At a Macintosh Computer

Verify that the Printer is visible in the Chooser. If it is not, install the Driver and PPD file. For more information, see [EtherTalk \(AppleTalk\) Peer to Peer Printing](#) on page 18.

Scanning to Hard Drive Troubleshooting

Use the following check list to troubleshoot your network communication problem.

Note: It is assumed that you purchased the Scanning option to enable Scanning to the Hard Drive with your printer. If you did not, contact your Xerox Representative to purchase this option.

Check Physical Media and Network Interface Cards

1. Verify that the printer is On.
2. Verify that the printer and Computer are using the correct cabling to communicate over the network. Use category 3 UTP patch (not crossover) cable for 10 Base T communications, category 5 UTP patch (not crossover) cable for 10 Base T / 100 Base TX communications, and Token Ring cabling for Token Ring networks.
3. Verify that the cable at both the printer and Computer is fully plugged into the Network Interface Card (NIC). Check the light, which is typically a green LED, to make sure that it is lit. Typically, but not always, a second light on the Network Interface Card will be intermittently flashing, indicating the presence of network traffic. If neither of these lights is lit, there is a problem with the NIC.

At the Computer

1. Print a Configuration Report. Under the Ethernet Rated Speed data label on the Report, verify that your communications speed is correctly set for your network and that you have a MAC address listed. The driver for your NIC works at the Media Access Control (MAC) layer of the protocol stack. If no MAC address is shown, you have either a bad NIC or no NIC at all. Replace or install the Network Interface Card.
2. Under the CentreWare Internet Services data label, verify that this feature is enabled.
3. Under the TCP/IP data label, determine the method being used to assign TCP/IP addressing to the printer. Verify that the IP Address, Subnet Mask, and Gateway addresses are correct for your network and have not changed from their previous settings.

Note: The use of DHCP (the DHCP Server) with a short lease time can cause the printer to be assigned a new IP Address when it is powered off for an extended period of time. This will interrupt communications with computers using the old IP address. If you do not want the IP address to be subject to constant changes, either increase the lease time at the DHCP Server, or use the Static IP Addressing method. For more information, see [TCP/IP Protocol Configuration](#) on page 43.

At the Printer

1. Verify that you have correctly set up your folder. For more information, see [Setting Up Folders at the Printer](#) on page 128.
2. Scan a test document to your Folder. For more information, see [Scanning to the Printer's Hard Drive \(Folders\)](#) on page 128.

At the Computer

1. Open your Web browser and enter the TCP/IP address of the printer in the Address or Location field. Press Enter. If CentreWare Internet Services displays on the computer, you are communicating with the printer. If not, make sure that your Web browser is not set to use a proxy server and repeat the procedure. If unsuccessful, perform the next step.
2. Verify that the computer has been assigned an IP address, subnet mask, and gateway address by running a Command (DOS) prompt, typing **ipconfig/all** (Windows 2000/XP) and pressing **Enter**. If any of the addresses are incorrect or missing, right click the **Network Neighborhood** icon (**My Network Places** in Windows 2000) and make sure that the TCP/IP protocol is installed and properly configured for IP addressing.
3. Run a Command (DOS) prompt on the computer and perform ping tests to verify successful packet transmission first to the computer's NIC, then to the Gateway (if being used), then to the printer's NIC. To run Ping Tests, at the Command (DOS) prompt, type: **ping xxx.xxx.xxx.xxx** and press **Enter**. Note that there is a space between the word ping and the first xxx. Let xxx.xxx.xxx.xxx first represent the computer's IP address, then the IP address of the default gateway, and finally the IP address of the printer. If successful, you will receive a reply such as: Reply from xxx.xxx.xxx.xxx: bytes=32 time<10ms TTL=128. If you receive Time Out or 0 bytes received notifications, the printer being pinged is incorrectly configured or malfunctioning.
4. When CentreWare Internet Services are successfully displayed on your monitor, retrieve your scanned test document. For more information, see [Retrieving Images from Folders](#) on page 130.

Image Quality Troubleshooting

Problem	Cause	Solution
Repeating white or colored marks / spots / lines / bands every 94 mm (approx 3.75 in) or 37 mm (approx 1.5 in)	The drum cartridge has deteriorated or is damaged.	Replace the drum cartridge that matches the color of the defect.
Repeating Image, Mark or Spot every 84mm (approx. 3.25 in).	Media was run in incorrect mode causing toner offsetting. Defect or contamination on Fuser Roll.	Check that the media type selections match the media type being used. Run 10 blank sheets. Replace the Fuser Assy.
White streak or deletion running full length of sheet from Lead edge to trail edge.	Dirt / contamination on printhead.	Clean all printheads using cleaning tool.
Black or Color streaks running full length of sheet from Lead edge to trail edge.	The drum cartridge has deteriorated or is damaged.	Replace the drum cartridge that matches the color of the streak.
Light / uneven density or faint image.	Media was run in incorrect mode causing poor image transfer. Damp paper causing poor image transfer. Non-recommended media is being used.	Check that the media type selections matches the media type being run. Load new paper. Use Xerox recommended media.
Black lines or spots on copies when using document feeder.	Document glass or CVT glass are dirty	Clean document glass & CVT glass.
Completely blank copies when document feeder or document glass is used.	Two or more sheets fed together. Systems error.	Check for multifed sheets in output. Fan the paper or load fresh paper. Power machine Off / On.
Completely blank output when printing.	Two or more sheets fed together. Poor connection with printer.	Check for multifed sheets in output. Fan the paper or load new paper. Check / reseal data cables. Power machine Off / On.

Problem	Cause	Solution
High background or dirt on copy.	<p>The document glass or document cover is dirty.</p> <p>Document may be transparent (a transparency).</p> <p>Document is on colored paper or rough paper.</p> <p>Document is on glossy paper.</p>	<p>Clean the document glass and document cover.</p> <p>Place a sheet of paper over transparent documents.</p> <p>Select Auto Background Suppression.</p> <p>For glossy documents place a transparency between the document and glass. Power machine Off / On.</p>
The copy density is too dark or too light.	Copy density is set to Lighten or Darken on Image Quality Image options screen.	Check Lighten / Darken setting on Image Quality Image Options screen. Adjust as needed.
The Image is slightly misaligned on Copies or Prints.	<p>Paper is not properly loaded or aligned in paper tray.</p> <p>Paper guides in Tray 5 not aligned with paper stack.</p> <p>Guides in Document feeder are not in correct position.</p>	<p>Check that paper is correctly loaded in paper tray.</p> <p>Ensure that guides are located against stack in Tray 5.</p> <p>Ensure that guides in document feeder are correctly located.</p>
Copy is misaligned or skewed.	Document is not correctly located on document glass.	Ensure that document is aligned with registration edges on the document glass.
Color reproduction is not as expected.	<p>Incorrect color matching settings in print driver.</p> <p>Color parameters have changed.</p>	<p>Check / correct color matching driver settings.</p> <p>Run Color calibration procedure - see Color Calibration on page 206.</p>
Missing image or image deletions.	<p>Damp paper causing poor image transfer.</p> <p>Paper in tray may be folded or wrinkled.</p> <p>Document on glass includes paste up sections.</p>	<p>Load new paper.</p> <p>Check condition of paper in paper tray, replace a/r.</p> <p>Place small stack of paper on top of document to hold it flat to document glass.</p>
Wrinkled, damaged or Creased Sheets.	<p>Paper is damp / old.</p> <p>Poor quality paper being used.</p> <p>Paper not correctly loaded in paper trays.</p>	<p>Load new paper.</p> <p>Use Xerox recommended media.</p> <p>Check / reload paper in trays.</p>
Toner rubs off sheet or smudges.	<p>Media was run in incorrect mode causing poor fusing of image.</p> <p>Damp paper being used.</p> <p>Non recommended media being used.</p> <p>Two or more sheets fed together.</p>	<p>Check that the media type selections matches the media type being run. Load new paper.</p> <p>Use Xerox recommended media.</p> <p>Check for blank sheets in output.</p> <p>Replace the Fuser Assy.</p>

Problem	Cause	Solution
Excessive paper curl.	Paper is damp / old. Poor quality paper being used. Custom cut paper has wrong grain direction.	Load new paper. Turn paper stack over. Use Xerox approved media, see RML. Load custom cut paper in different orientation or cut short grain.

Color Calibration

The color calibration procedure is used to ensure consistent color reproduction over time for copies and prints. Performing the calibration procedure adjusts the output densities to be as close to the printer's specified values as possible. If performed on media which has lower densities the outcome will be increased densities and vice versa. It should be performed if optimal color reproduction and consistency over time is desired.

1. Press the **Log In/Out** button on the control panel.
2. Enter the **System Administrator's Login ID** and **Passcode** if prompted (default **admin, 1111**), and press **Enter**.
3. Press the **Machine Status** button.
4. Touch the **Tools** tab.
5. Select the **Setup & Calibration** button.
6. Select the **Calibration** button from the Group section. The Calibration screen will be displayed.
7. Select the required calibration button:
 - Copy Job 1 – Text & Text/Photo Modes
 - Copy Job 2 – Photo Mode
 - Print Job 1 – Lower quality modes
 - Print Job 2 – Higher quality modes
8. Select the **Paper Supply** button. The Paper Supply screen will be displayed.
9. Select the required paper tray to print the Calibration Test Page from the list displayed, and then select the **Save** button.
10. Select the **Target** button.
11. Select the required calibration type:
 - Copy & Print Jobs
 - Copy Jobs Only
 - Print Jobs Only
 - None

Note: To fully calibrate both copies and prints it is necessary to run all four job types and apply them to the corresponding type. If such precision is not needed one should select the most important output type and then apply the results to both copy and print jobs. If one is experiencing color reproduction issues in one Job type but not the others then it is only necessary to run calibration for the problematic job type.

12. Select the **Save** button.
13. Select the **Start** button on the Touch Screen. A Calibration Test Page will print with instructions on how to perform the calibration.
14. Follow the instructions to perform the calibration, and then select the **Start** button on the touch screen. A message stating the calibration was successful or unsuccessful will be displayed.

Note: The calibration sheet with the two magenta (pink) squares on the top and bottom of the page, must be placed face -down (printed side) with the magenta squares along the left side of the document glass. If the calibration sheet is not positioned correctly on the glass, a message will be displayed. Make sure the calibration sheet is positioned correctly, and then select the Start button on the Touch Screen.

Select the **Confirm** button.

15. Repeat steps 6 - 14 for any other calibration type that is required.
16. When finished calibrating, select the **Close** button.
17. Press the **Log In/Out** button on the control panel.
18. Select the **Logout** button on the Touch Screen.

