Xerox Document Centre
440/432/420
System Administration Guide

650S28280

Table of Contents

1 About This Guide

Welcome to the Xerox family of *Document Centre* products. This *System Administration Guide* provides detailed information, technical specifications and procedural steps when using the integrated features of the machine.

Xerox Welcome Center

If after product installation further assistance is required, please call our experts on the Xerox Welcome Center telephone number. When telephoning, please quote the machine serial number, which may be written in the space below. The serial number is located behind the left hand front cover, as shown:

Serial number:

_____

The Xerox Welcome Center telephone number is provided at the time of product installation. For convenience and future reference, please record the telephone number in the space below:

Welcome Center Telephone Number:

Canada (English, French, and local Toronto) 800-939-3769

United States   800-821-2797

_____

Also, keep a record of any error messages. This information can help problems to be resolved quickly.

Requirements

This guide assumes that the DC440/432/420 has been purchased with the integrated network interface, or has been upgraded with the network upgrade kit. The requirements needed for connection and set up include:

➢ The Xerox CentreWare Network Services CD ROM.

➢ A workstation with the operating system software installed and connected to the same network as the DC440/432/420.

➢ A thorough knowledge of the network configuration.

➢ Cabling to connect the DC440/432/420 to the network.

NOTE: The System Administrator may also need additional information from documentation provided by network and client workstation vendors. Please contact the local Xerox Welcome Center for information on any configurations that are not discussed in this guide.

Conventions

Bracket Text Typeface

The **[Bracket Text]** typeface is used to emphasize the selection of a feature mode or button. For example:

➢ Select **[Image Quality]**.

➢ Apply the new settings.

➢ Select **[Save].**

Bold Typeface

Bold type is used for options that appear on menus. Bold items with brackets represent options selectable at the DC440/432/420 Control Panel or at the workstation. For example:

1. Select the **[Access]** button on the DC440/432/420 Control Panel.

Courier Typeface

When instructed to enter text, the text is shown in the typeface, as in the example below:

1. Type the following at the prompt:

   ```
   a:\setup
   ```

Italic Typeface

The *Italic* typeface is used to indicate references to other chapters and publications. For example:

Refer to the User Guide for instructions on how to make copies.

Notes

Notes are statements that provide additional information. For example:

NOTE: If the *DC 440/432/420* does not include the Finisher and/or High Capacity Feeder, ignore the first step.

Hints

Hints help users perform a task. For example:

HINT: Select the X / Y display areas to display a pop up keypad which can be used to enter and save the values.

Cautions

Cautions are statements that suggest *mechanical* damage as a result of an action. For example:

CAUTION: When cleaning the *DC* 440/432/420, do not use organic solvents or aerosol cleaners.

Warnings

Warnings are statements that alert users to the possibility of *personal* damage. For example:

WARNING:This equipment must be connected to an earthed mains socket outlet.

Related Information Sources

The following additional sources of information are available for the Document Centre 440/432/420:

➢ The Document Centre 440/432/420 User Guide

➢ The Quick Install Cards

➢ The On-line Help systems

➢ The Xerox CentreWare Customer Documentation

2   *Product Overview*

Introduction

This chapter gives an overview of the *DC440/432/420* features and functions and enables familiarity with the device prior to network installation. The following information is provided:

Identifying the Device Components

The *Document Centre 440/432/420* is not simply a conventional copier. It is a digital device capable of being used for copying, faxing, printing and scanning.

The following illustrations show the standard components for each device available. There are also a number of optional components available.

For descriptions and information about the optional components please refer to the User Guide.

Document Centre 440/432/420

Touch Screen

Document Feeder

Document Glass (under the document feeder)

Control Panel

Left Tray

Center Tray

On / Off Switch *(DC420)*

Bypass Tray

Duplex Module

Left Front Cover

Paper Trays

On / Off Switch *(DC440/432)*
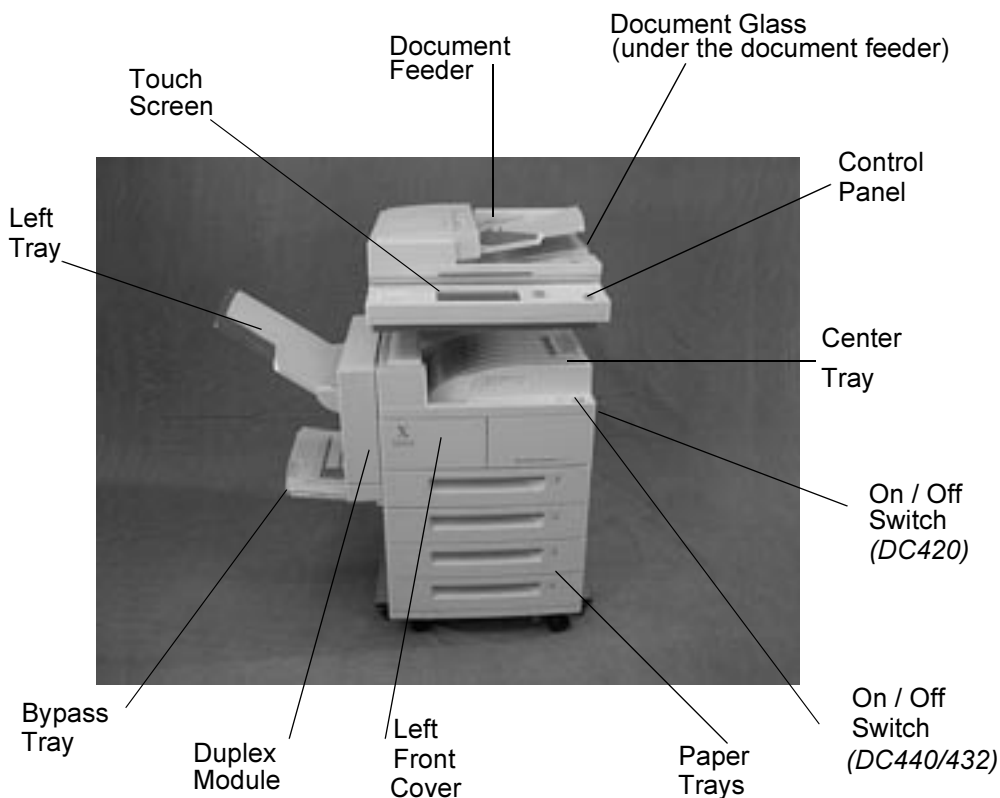
Power On/Off

Powering On

Ensure that the *DC440/432/420* is connected to a suitable power supply and that the power cord is fully plugged in to the electrical outlet.

For detailed technical information, refer to the User Guide.

The *DC440/432/420* takes approximately 3½ minutes to power ON and complete a self test.

DC420

On the *DC420* the power switch is located on the right hand side of the printer.

➢ Locate the ON / OFF switch.

➢ Switch the device to the ON position.

The *DC420* digital copier will take approximately 59 seconds to power ON.

DC440/432

On the *DC440/432* the power switch is located on the top of the printer on the right hand side.

> ➢ Locate the ON / OFF switch.

> ➢ Switch the device to the ON position.

The *DC440/432* digital copier will take approximately 55 seconds to power ON.

Powering Off

When powering off the *DC420*, the device remains on for approximately 10 seconds before the power is terminated. The device is storing files and preparing for the shutdown. During this time, the message "Powering off Please wait..." is shown on the touch screen.

When powering off the *DC440/432*, the message "Powering off Please wait" will not appear on the touch screen. However, the device remains on for approximately 15 seconds before power is terminated. The device is storing files and preparing for the shutdown.

CAUTION: Failure to leave at least 20 seconds between repeated power off /on can result in damage to the *DC440/432/420* hard drive.

NOTE: If the Printer option is installed and the power is turned off, the *DC440/432/420* will remain on for approximately 15 seconds before power is terminated.

Cabling

Interface Ports

As shown in the graphic below, the device has multiple interface port options.

Rear view

Parallel Port

Slot for Token Ring PC Card

Ethernet Port 10 Base T
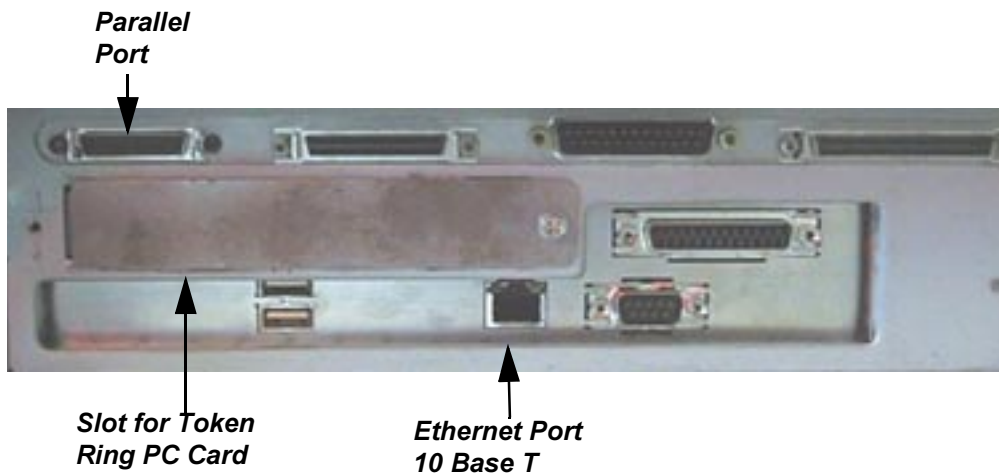
Ethernet

The device is shipped ready to install with:

➤ 10BaseT Unshielded Twisted Pair (RJ45)

➤ 10Base5 (Thicknet)

➤ 10Base2 (Thinnet). A patch cable and a transceiver are needed to make this connection.

CAUTION: Do not connect the device to the network until instructed to do so during the installation procedure.

Token Ring

Token Ring can be implemented via NetWare, Microsoft Networking or TCP/IP.

Refer to the Token Ring chapter of this guide for installation procedures.

NOTE: A working Token Ring network is required in order to proceed with the installation.

The Token Ring PCI card is required for TCP/IP over Token Ring.   Xerox will provide the appropriate Token Ring card for the network configuration.

Parallel Port

The parallel port connection is made via a mini-centronics connector/adapter and an IEEE compatible parallel cable that is directly connected to the PC printer port. With this configuration, there are no network RPRINTER or PSERVER capabilities or options.

Modes

There are three modes available on the machine:

- *Features*
- *Job Status*
- *Machine Status*.

The mode buttons access the screens which enable users to program features, monitor the status of jobs on the machine and obtain general information about the *DC440/432/420*.

NOTE: The features available will depend on the machine configuration.

Features button ————

Job Status button ————

Machine Status button ————
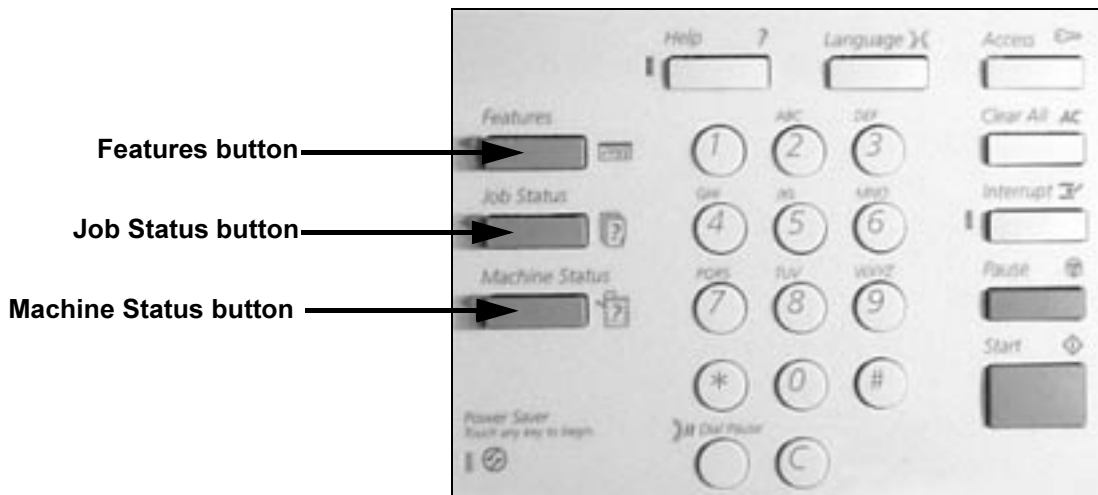
Features button

Select this button to access the feature screens. Each "screen" is accessed by a tab. The first screen for each tabbed feature contains all the basic settings required for each feature. For example, the first *Copy* screen enables programming to make a copy and the first *Fax* screen to send a fax. The additional screens provide settings to allow more detailed programming selections.

➢ Select **[Features]** on the control panel to display the default screen.

NOTE: The first Copy screen is normally the default setting. This can be changed by the Key Operator.

Copy	Added Features	Scan	Media Print	Fax
Output	**Sides Imaged**	**Reduce/Enlarge**	**Paper Supply**	**Image Quality**
Collated	1 → 1 Sided	100%	Auto	Text
Uncollated	1 → 2 Sided	Auto	8½ x 11	Auto
	2 → 2 Sided	8½×5½→8½×14	8½ x 11	Photo
	2 → 1 Sided	8½×11→11×17	11 x 17	
	Other...	Other...	Other...	
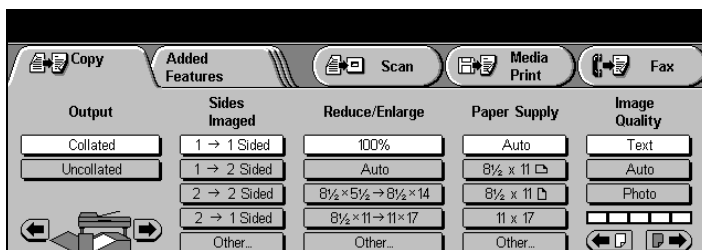
Job Status button

Use *Job Status* to check on the progress of a job and if necessary to change its position in a queue.

➢ Select **[Job Status]** on the control panel.

➢ The *Print Queue* is the default setting and will be automatically displayed.

➢ Select **[Other Queues]** to display the queues available.

Job Status		
Print Queue	Fax Queue	Scan to File Queue
Completed Print Jobs	Completed Fax Jobs	Completed Scan to File Jobs
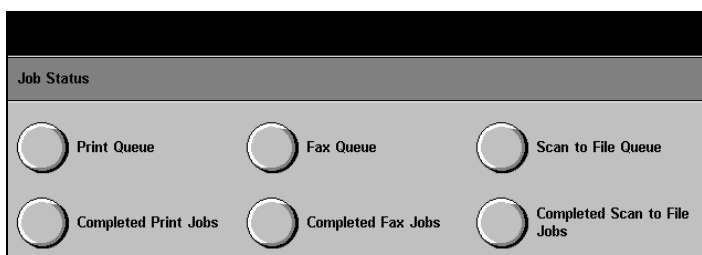
NOTE: The queues available are dependent on the machine configuration.

Print Queue	Maintains pending and active jobs that are to be printed. These include copy jobs, network print jobs, fax print jobs and report jobs.
Completed Print Jobs Queue	Maintains all print jobs that have been successfully completed, canceled by a user or canceled due to a fault.
Fax Queue	Maintains all pending Fax transmission jobs including Fax send, broadcast send, poll, multi-poll and any current active Fax jobs. This queue will also include all Fax scan jobs for delayed Fax jobs including send, MailBox and polling reservation.
Completed Fax Jobs Queue	Maintains all Fax jobs that have been successfully completed, canceled by a user or canceled due to a fault.
Scan to File Queue	Maintains all active and pending Scan to File jobs.
Completed Scan to File Jobs Queue (*Document Centre 440/432*)	Maintains all Scan to File jobs that have been successfully completed, canceled by a user or canceled due a fault.

Machine Status button

Displays information about the *DC440/432/420*. Select this button to confirm the paper supply, review the status of faults and find information required for service calls.

NOTE: Machine Status cannot be accessed during a system fault, when the confirmation window is displayed, or when the Key Operator Tools is accessed on the touch screen.

- ➢ Select **[Machine Status]** button to access the features available.

- ➢ To exit **[Machine Status]**, select **[Job Status]** or **[Features]** at any time.

Machine Information	Paper Supply Status	Faults	Reports & Counters

Customer Support Number

Machine Serial Number
100K******

Software Revision Levels
UI:	S105bX	G3M0:	Not Installed
DC Sys:		G3M1:	Not Installed
MF Sys:	Not Installed	HCF:	Not Installed
IIT Sys:		DSS:	Not Installed
ESS:	Not Installed	Boot:	0.6.1

Machine Information

Displays the Customer Support Number, Machine Serial Number, and Software levels.

Machine Information	Paper Supply Status	Faults	Reports & Counters

Customer Support Number

Machine Serial Number
100K******

Software Revision Levels
UI:	S105bX	G3M0:	Not Installed
DC Sys:		G3M1:	Not Installed
MF Sys:	Not Installed	HCF:	Not Installed
IIT Sys:		DSS:	Not Installed
ESS:	Not Installed	Boot:	0.6.1

Paper Supply Status

Displays the status of each paper tray, the bypass tray, and the optional high capacity feeder. It also displays the size, type, and color of the media in each tray and whether or not fax printing is enabled for each tray (if fax is installed). The Key Operator sets the defaults and enables specific paper for printing fax documents.

Machine Information	Paper Supply Status	Faults	Reports & Counters

Tray	Status	Size	Type	Color
1	No Tray	Other	Standard	White

Faults

Displays a list of the six most recent faults, the date and time of the code and the status (active or cleared). Select the Fault Clearance Instructions button for assistance when clearing an active fault.

Machine Information	Paper Supply Status	Faults	Reports & Counters

No.	Code	Date	Time	Status	
1	N7-4	00-00-00	0:00	Cleared	Fault Clearance Instructions

Reports and Counters

Print Reports

Accesses the various reports available for printing.
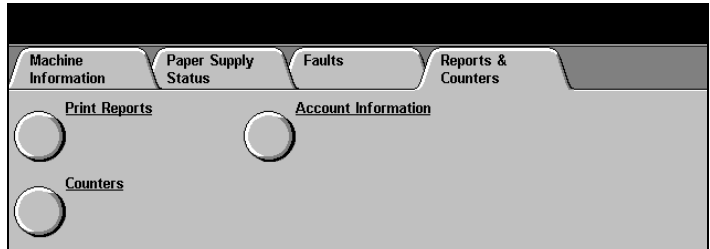
Report Options:

- Options Report (*DC420*) - lists the options currently connected to the machine.

- Pending Jobs Report - lists the jobs that are still in memory and the available memory.

- Printer Configuration - lists the status of the printer options, installed options, PCL options, PostScript options and connectivity options.

- PostScript Font List - lists the available PostScript fonts for the printer.

- PCL Font List - lists the available PCL fonts for the printer.

Account Information

When the Auditron is enabled use this screen to review the limit and current count used against your account number.

Account Information						Exit

	Count	Limit			Count	Limit
Copy:				Fax:		

Counters

Displays the total number of prints made on the machine. Users can also review the counter for individual modes, however if a mode is not installed on the machine the counters button for that mode will not be displayed, for example if Fax is not installed, the counters screen will not display a fax button.

On receipt of a Xerox meter card, check that the serial number on the card matches that shown on the machine, if the information is correct enter the Machine counter reading in the relevant box and return the pre-paid card to Xerox.

➢ Select **[Machine Status]**.

➢ Select **[Reports & Counters]**.

➢ Select **[Counters]**.

Machine Information	Paper Supply Status	Faults	Reports & Counters

Print Reports   **Account Information**

Counters

- ➢ The 'Total Pages Printed' billing counter for the machine will be displayed. Enter this number on the meter reading card.

- ➢ Select **[Exit]**.

- ➢ To exit **[Machine Status]**, select either **[Job Status]** or **[Features]**.

Counters				Exit
Machine		Fax		
Print		Scan		Total Pages Printed
Copy		Services		4771

NOTE: The Services button displays the number of copies/ prints made by the Xerox Service Representative working in the diagnostics mode.

System Controls

Help - accesses additional information about a specific task.

Language - changes the text to the alternative language (if available).

Access - displays a pop-up login window to access the Setup Tools, used to adjust the defaults of the device.

Clear All - resets the default settings and displays the first screen for the current pathway.

* (asterisk) - used to indicate the dialing character. Also used as a wildcard speed dial character.

Interrupt - temporarily interrupts a job to enable another user to program a job.

Pause (Stop) - used to temporarily stop a job.

Start - starts a job.

Power Save Indicator Light - identifies when the device is in power save.

Dial Pause - used to enter a pause in a telephone number when transmitting a fax.

Clear - used to delete a numeric value or the last digit entered. Also replaces the current value with a default value.

 # (hash) - used to indicate the dialling character. Also used to designate a group dial number.

Setup Tools

During manufacture the device is pre-programmed with default settings which can be customised using the Setup Tools. The Setup Tools are accessed via the Access button and the following set up categories are available:

➢ Machine Setups

➢ Fault Override

➢ Copy Setups

➢ Fax Setups

➢ Scan to File Setups

➢ Print Setups

➢ Access Rights

As part of the device network installation process the Print Setups require customising for the network environment. Use the following instructions to become familiar with changing the settings prior to installing the device on the network.

Changing the Settings

To change the settings a password is required. When the *DC440/432/420* is delivered it contains a default password (#22222) which can be used to provide access to the Setup Tools prior to additional PINs and access rights being assigned.

The following procedure is used to change device settings:

> Select the **[Access]** 🔑 button on the Control Panel.

> Select **[#]** and **[22222]** using the buttons on the Control Panel.

> Select **[Enter]** in the pop-up window.
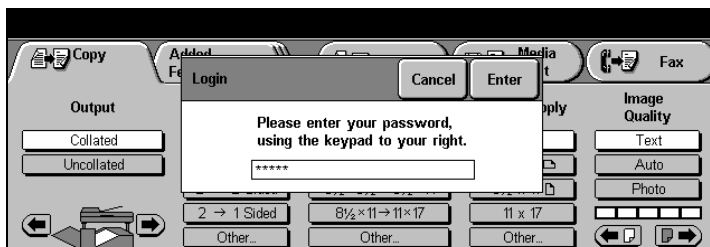
The following screen is displayed and contains buttons for the types of setups available.

NOTE: The graphic representations of the user interface screens in this chapter may differ slightly dependent on model or configuration. However, feature descriptions and functionality remain the same as described.

> Select the button for the setups to be changed.
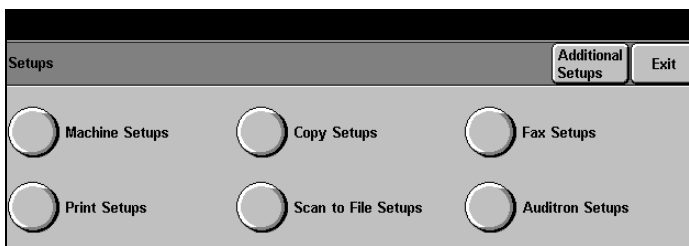
Ethernet Port

The Ethernet port is the default interface used on the *DC440/ 432/420*.

NOTE: The Ethernet port cannot be disabled.

Ethernet Port Set Up

If the speed setting of the Ethernet port needs to be changed perform the following steps:

1. Access the System Administrator set up screens:
   A. Select the **[Access]** button on the *DC440/432/420* Control Panel.
   B. Using the keypad, enter **[#22222]** (or the current System Administrator password) and then select **[Enter]** on the Touch Screen. Enter the # character before entering 22222.

NOTE: #22222 is the factory default password and may be changed by the Xerox Service Representative.

2. Access the Token Ring set up screens:
   A. Select **[Print Setups]**.
   B. Select **[Port Setups]**.
   C. Select **[Ethernet Port]**.

NOTE: The MAC (Machine Access Code) address is read only and cannot be changed.

3. Set up the port speed:
   A. Select **[Speed]**.
   B. Select one of the following options:
      - **[Auto]**
      - **[10 Mps]**
      - **[100 Mps]**
   C. Select **[Save]**.

4. Select **[Close]** on the Port set up screen. The device will reboot and print a Configuration Sheet in approximately 3 minutes.

5. Check the settings on the Configuration Sheet against the information that was entered.

6. Refer to the appropriate chapter of this guide and complete the *DC440/432/420* network installation.

Resident Fonts

PCL Resident Fonts

One of the fonts in the following table can be selected as the default font for the *DC440/432/420*. Other bitmap and scalable fonts can be downloaded with print jobs sent to the device using Xerox CentreWare print drivers. The default font will be used when a font is not defined in the PCL job stream. The PCL versions used are PCL5e and PCL6.

Fonts	
Albertus Albertus Extra Bold	Antique Olive Bold Antique Olive Medium Antique Olive Italic
Arial Arial Bold Arial Italic Arial Bold Italic	CG Omega CG Omega Bold CG Omega Italic CG Omega Bold Italic
CG Times CG Times Bold CG Times Italic CG Times Bold Italic	Clarendon Bold Condensed
Coronet Italic	Courier Courier Bold Courier Italic Courier Bold Italic
Garamond Antiqua Garamond Antiqua Halbfett Garamond Antiqua Kursiv Garamond Antiqua Halbfett Kursiv	Letter Gothic Letter Gothic Bold Letter Gothic Italic

Line Printer Medium 8.5 point (portrait) Line Printer Medium 8.5 point (landscape)	Marigold
Symbol	Times New Roman Times New Roman Bold Times New Roman Italic Times New Roman Bold Italic
Univers Bold Univers Bold Condensed Univers Bold Italic Univers Bold Condensed Italic Univers Medium Univers Medium Condensed Univers Medium Italic Univers Medium Condensed Italic	WingDings

PCL5e Internal Symbol Set

One of the following Symbol Sets can be selected as the default Symbol Set. The default Symbol Set will be used when a Symbol Set is not defined in the PCL5e job stream.

Symbol Sets	
Roman 8	Legal (1U)
Other	Pi Font (15U)
ASCII (7 bit)	Math - 8 (8M)

ISO Text Column (10J) ISO 4 United Kingdom ISO 11 Swedish for Names ISO 15 Italian ISO 17 Spanish ISO 21 German ISO 60 Danish/Norwegian ISO 69 French ISO Latin 1 (0N) ISO Latin 2 (2N) ISO Latin 5 (5N)	PS Math (5M) PS Text
Windows 3.0 Latin 1 (9U) Windows 3.1 Latin 1 (19U) Windows 3.1 Latin 2 (9E) Windows 3.1 Latin 5 (5T)	Desktop (7J)
Ventura Math (6M) Ventura US (14J) Ventura International	Microsoft Publishing (6J)
PC - 850 PC - 852 Latin 2 (17U) PC - 8 PC - 8 Danish/Norwegian (11U) PC Turkish (9T)	GB2312 (19C)

PostScript Resident Fonts

The Adobe PostScript Level 2 Interpreter includes the following set of resident fonts. The *DC440/432/420* supports Type 1 and Type 3 fonts. PostScript fonts are scalable, meaning that all point sizes are supported.

Fonts	
AvantGarde-Book AvantGarde-BookOblique AvantGarde-Demi AvantGarde-DemiOblique	Palatino-Roman Palatino-Bold Palatino-Italic Palatino-BoldItalic

Bookman-Demi Bookman-DemiItalic Bookman-Light Bookman-LightItalic	Symbol
Courier Courier-Bold Courier-Oblique Courier-BoldOblique	Times-Roman Times-Bold Times-Italic Times-BoldItalic
Helvetica Helvetica-Bold Helvetica-Oblique Helvetica-BoldOblique	ZapfChancery-MediumItalic
Helvetica-Narrow Helvetica-Narrow-Bold Helvetica-Narrow-Oblique Helvetica-Narrow-BoldOblique	ZapfDingbats
NewCenturySchlbk-Roman NewCenturySchlbk-Bold NewCenturySchlbk-Italic NewCenturySchlbk-BoldItalic	

3 NetWare

Introduction

This chapter explains how to install the *DC440/432/420* on the various NetWare networks. The following information is provided:

Information Checklist

Before starting the NetWare installation procedures, please ensure the following items are available or have been performed:

Item	By
An existing operational NetWare network is required, these procedures are not designed to install a NetWare network.	Customer
NetWare client, server and operating system software version 3.x, 4.x and 5.x.	Customer
Set the following command at the NetWare Server: reply to get nearest server = on.	Customer
Login to a NetWare file server/tree as Supervisor/Admin, or have the equivalent privileges.	Customer
Test the *DC440/432/420* Copier/Fax to ensure it is installed fully and functioning correctly.	Customer
DC440/432/420 print and fax drivers.	Xerox
Token Ring PC card (Optional).	Xerox

If problems are encountered during the DC440/432/420 installation, refer to the Problem Solving chapter for assistance.

CAUTION: Do not connect the network cable to the *DC440/432/420* until instructed to do so.

NetWare Environments

The NetWare versions and protocols supported in this chapter are as follows:

➢ NetWare Versions supported:

- NetWare 3.x, 4.x, 5.x

➢ Network Protocols supported:

- IPX and IP

The *DC440/432/420* settings which require configuring vary, depending on the NetWare version being used. Identify which instructions are appropriate for the network configuration and refer to the section:

➢ IPX for NetWare 3.x, 4.x Bindery, NDS, or IPX NDPS, 5.x IPX or IPX NDPS refer to page *3-8*.

➢ IP for NetWare 5.x IP or IP NDPS refer to page *3-17*.

NetWare IPX Settings

Installation Options

There are two main methods which can be used to complete the network installation for IPX environment. These are:

➢ Using the Xerox CentreWare Device Admin Wizard

Using the Device Admin Wizard will simplify the network installation by eliminating steps that would otherwise be performed at the *DC440/432/420*, and in PCONSOLE or NWADMIN.

To use this method of installation, refer to page *3-5*.

NOTE: NetWare 5.x IPX NDPS is not supported by Xerox CentreWare. To complete this type of installation use NetWare Utilities.

➢ Using NetWare Utilities

This method requires use of the NetWare utilities PCONSOLE or NWADMIN to configure the network. The device will require configuring using the *DC440/432/420* user interface or CentreWare Internet Services.

To use this method of installation, refer to page *3-8*.

Using the Device Admin Wizard

Installation Procedure

There are three stages required to install the *DC440/432/420* on a NetWare network using the CentreWare Device Admin Wizard:

➢ Network Communication Set Up

> This procedure will enable the *DC440/432/420* to communicate on the NetWare network.

➢ Device Admin Wizard Set Up

> This procedure is used to complete the *DC440/432/420* installation with the Device Admin Wizard.

➢ Test Print

> A print job should be submitted to ensure the *DC440/ 432/420* has been installed and configured correctly.

Network Communication Set Up

At the *DC440/432/420*, perform these steps:

☞ **HINT:** *Xerox CentreWare Internet Services can also be used to configure the DC440/432/420, refer to the Internet Services chapter for instructions.*

1. Connect the device to the network outlet or cable.
2. Access the System Administrator set up screens:
    A. Select the **[Access]** button on the Control Panel.
    B. Using the keypad, enter **[#22222]** (or the current System Administrator password) and then select **[Enter]** on the Touch Screen. Enter the # character before entering 22222.

NOTE: #22222 is the factory default password and may be changed by the Xerox Service Representative.

3. Access the NetWare set up screens:
    A. Select **[Print Setups]**.
    B. Select **[Protocol Setups]**.
    C. Select **[NetWare]**.
4. Enable NetWare:
    A. Select **[Enablement]**.
    B. Select **[Enabled]**.
5. Select the appropriate Interface for the network:
    A. Select **[Interface]**.
    B. From the right side of the screen, select **[Ethernet]** or **[Token Ring]** as the appropriate Interface for the network.

NOTE: Token Ring will not be available as a selection unless it has been installed and configured.

6. Select the appropriate Frame Type for the network:
    A. Select **[Frame Type]**.
    B. From the right half of the screen, select the appropriate frame type for the network:

    [IEEE_802.3]

    [Ethernet II]

    [IEEE_802.2]

    [IEEE_802.5] (Token Ring)

    [Token Ring Snap]
7. Save the new settings and reset the device:
    A. Select **[Save]**.
    B. Select **[Exit]** on the Protocol Setups screen. The device will reboot and print a Configuration Sheet in approximately 3 minutes.
8. Continue with **Device Admin Wizard Set Up** on page *3-7*.

Device Admin Wizard Set Up

Ensure that the Xerox CentreWare *Device Admin Wizard* is installed on the client workstation.

If needed, refer to the Xerox CentreWare documentation for installation instructions.

For more detailed instructions on setting up a network, access the electronic, context-sensitive Help from all Network Services and Admin Services screens and dialogue boxes.

1. Locate and launch the **Device Admin Wizard**.
2. Follow the instructions on each Device Admin Wizard screen to set up the *DC440/432/420* on the network.
3. Power off and power on the *DC440/432/420* so the set up selections will take effect.
4. Using the procedure located in the *Xerox CentreWare documentation*, install the print driver for the workstation.
5. Continue with **Test Print**.

Test Print

To ensure the *DC440/432/420* has been installed on the network correctly a test print should be submitted from a client workstation. Perform the following steps:

1. Open a document on a client workstation.
2. Select the *DC440/432/420* as the printer for sending documents to.
3. Print the document on the device and verify that it prints correctly.
4. Ensure the print driver is installed on every workstation that will be sending jobs to the device.
5. Repeat the test for all workstations that will be sending jobs to the device.
6. The installation process is now complete.

If the test print fails, refer to the Problem Solving chapter for trouble-shooting procedures.

Using NetWare Utilities

Installation Procedure

There are three stages required to install the *DC440/432/420* on a NetWare network using NetWare utilities:

➢ NetWare Set Up

> This procedure is used to set up the network using NetWare's PCONSOLE or NWADMIN utility.

➢ Network Communication Set Up

> This procedure will enable the *DC440/432/420* to communicate on the NetWare network.

➢ Test Print

> A print job should be submitted to ensure the *DC440/432/420* has been installed and configured correctly.

If this is a Token Ring installation, the Token Ring card must be installed and configured before performing this procedure.

Refer to the Token Ring chapter of this guide for additional information.

If running NLSP, ensure that RIP/SAP compatibility is configured on the same segment as the *DC440/432/420*.

NetWare Set Up

The NetWare set up steps vary depending on which version of NetWare is being used. Refer to the correct instructions for the NetWare network:

NetWare 3.x, 4.x and 5.x IPX:

Using the PCONSOLE or NWADMIN utility, perform these steps:

1. Login to File Server or NDS Tree as Supervisor/Admin or equivalent.
2. For Bindery installations, create and configure the Print

Queue, Print Server and Password.

3. For NDS installations, create and configure the Print Queue, Printer and Print Server objects. Assign the *DC440/432/420* to an NDS Name Context. A typeful or typeless name syntax should be used, for example:

NDS Name Context for a Tree with a country code (Typeful):
OU=SALES.O=MYCOMPANY.C=US

NDS Name Context for a Tree without a country code (Typeless):
SALES.MYCOMPANY

NOTE: Please note that no leading or trailing dots should be used.

4. Create a printer and define the printer as *Defined Elsewhere* or *Remote/Other Unknown*.

5. Verify the Frame Type.

6. Verify the Poll Interval.

7. Obtain and record the following information from the set up just completed. This information is needed to configure the *DC440/432/420*:

   File Server Name

   Print Server Name

   Print Server Password

   NDS Tree and NDS Name Context (if applicable)

   Frame Type

   Poll Interval

8. Continue with **Network Communication Set Up** on page *3-12*.

NetWare 5.x IPX NDPS:

NOTE: The NetWare 5 server should have NDPS installed - there will be a broker object in the NDS tree. NDPS is configured either when the server is installed or afterwards using NWCONFIG.
The NDPS broker service must be running on the server.

1. Login as Admin to the tree and context that the Novell NDPS is installed on.

2. Create the NDPS Manager Object:

    A. Select **[Create]** from the object menu in NetWare Administrator, then select **[NDPS Manager]**.

    B. Enter a name for the **NDPS Manager Object**.

    C. Browse the tree for a resident server, i.e. the NetWare 5 server.

    D. Browse the tree for the database volume where the print jobs will be stored.

    E. Select **[Create]**.

3. Install the print drivers on the Broker:

    A. Double click the broker object in NetWare Administrator.

    B. Select **[Resource Management]**.

    C. Select **[Add Resources]**.

    D. Select the type of resource needed.

    E. Select **[Add]**, then browse for the print drivers. The print drivers are located on the CentreWare CD ROM's.

    F. Select **[OK]**.

    G. Select **[OK]**, then select **[Cancel]** to close the broker window.

4. Installing the Printer:

    A. Launch **NWADMIN**.

    B. Select the **NDS Container** where the printer is to be created.

    C. Select **[Create]** from the **Object** menu.

D. Select **[NDPS Printer]**, then select **[OK]**.

E. Enter the name of the NDPS printer.

F. Select **[Create a New Printer Agent]**.

G. Select **[Define Additional Properties]**.

H. Select **[Create]**.

I. Select **Browse** in the **NDPS Manager Name** field and select the **NDPS Manager Object** created in step 2, then select **[OK]**.

J. Select **[Xerox Printer Gateway IP/IPX]** in the **Gateway Type** field.

K. Select **[OK]**.

L. Select **[IPX Protocol]** in the select **Network Protocol for the Printer Agent** dialog box, then select **[OK]**.

M. Select **[Next]** within the **Xerox Setup Wizard** dialog box.

N. Select the required printer from the list of **Available Xerox Devices** text box, then deselect the **Auto Create NDS Objects**.

O. Select **[Next]**.

P. Enter the required details in the **Print Server** and **Print Queue** dialog box, then select **[Next]**.

Q. Select **[Next]** in the **Confirm Choices** dialog box.

R. Select **[Finish]**.

5. Load the print drivers:

A. Select the print drivers to be associated with the printer from the list, then select **[Continue]**.

B. Select **[OK]** in the information screen.

NOTE: It is necessary to power the device off and on after the printer agent has been successfully created. Once completed the printer agent must be shutdown and restarted in the NDPS manager.

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6. Continue with **Network Communication Set Up** on page *3-12*.

Network Communication Set Up

At the *DC440/432/420*, perform these steps:

HINT: Xerox CentreWare Internet Services can also be used to configure the DC440/432/420, refer to the Internet Services chapter for instructions.

1. Connect the *DC440/432/420* to the network outlet or cable.
2. Access the System Administrator set up screens:
   A. Select the **[Access]** button on the *DC440/432/420* Control Panel.
   B. Using the keypad, enter **[#22222]** (or the current System Administrator password) and then select **[Enter]** on the Touch Screen. Enter the # character before entering 22222.

NOTE: #22222 is the factory default password and may be changed by the Xerox Service Representative.

3. Access the NetWare set up screens:
   A. Select **[Print Setups]**.
   B. Select **[Protocol Setups]**.
   C. Select **[NetWare]**.
4. Enable NetWare:
   A. Select **[Enablement]**.
   B. Select **[Enabled]**.
5. Select the appropriate Interface for the network.
   A. Select **[Interface]**.
   B. Select **[Ethernet]** or **[Token Ring]** as the appropriate Interface for the network.

NOTE: Token Ring will not be available as a selection unless it has been installed and configured.

6. Select the appropriate Frame Type for the network:

A.   Select **[Frame Type]**.

B.   Select the appropriate frame type for the network:

[IEEE_802.3]

[Ethernet II]

[IEEE_802.2]

[IEEE_802.5] (Token Ring)

[Token Ring Snap]

IMPORTANT: During the next two steps, ensure that the Print Server Name and the Print Server Password are exactly the same as entered in PCONSOLE or NWADMIN.

7.   Enter the Print Server Name:

A.   Select **[Print Server Name]**.

B.   Select **[Edit]** and use the keyboard to enter the Print Server Name for the *DC440/432/420*.

NOTE: Additional characters are available by selecting the Change Keyboard button.

C.   Select **[Save]**.

8.   Enter the Print Server Password:

A.   Select **[Print Server Password]**.

B.   Select **[Edit]** and enter the password that was assigned to the Print Server. If a password was not assigned, use the Backspace key to delete the default password.

C.   Select **[Save]**.

9.   Enter the Poll Rate:

A.   Select **[Poll Rate]**.

NOTE: This value determines how often the *DC440/432/420* polls the NetWare file server to check if there is a file at the server to be printed or faxed.

B.   Select the numeric window on the screen, and use the pop up screen to enter a value from 1 to 65536

seconds.

10. Select the File Server or Servers.
    A. Select **[Additional Setups]**.
    B. Select **[File Server 1]**.
    C. Select **[Edit]**.
    D. Use the keyboard to enter the name of the NetWare server where the queue was created.
    E. Select **[Save]**.

NOTE: For NDS enter a dash **[-]** as the name of **[File Server 1]**. The name of the file server is only needed when using a Bindery configuration.

    F. For Bindery configurations, to enter the names of additional file servers select **[File Server 2, File Server 3 and File Server 4]** as required, and repeat the above steps.

NOTE: Each additional server requires the identical Print Server Name and Print Server Password.

11. Set the NDS Tree name:
    A. Select **[NDS Tree]**.
    B. Select **[Edit]**.
    C. Use the left arrow key on the keyboard to delete any characters currently in the field.
        For Bindery mode enter a dash **[-]**.
        For NDS mode enter the name of the NDS Tree.

NOTE: Setting the NDS Tree to a dash disables NDS for a Bindery installation.

    D. Select **[Save]**.
12. Set the NDS Context:
    A. Select **[NDS Context]**.
    B. Select **[Edit]**.
    C. Use the left arrow key on the keyboard to delete any

characters currently in the field.
For Bindery mode enter a dash **[-]**.
For NDS enter the Name Context for the *DC440/432/420*. A typeful or typeless name syntax should be used, for example:

NDS Name Context for a Tree with a country code (Typeful):
OU=SALES.O=MYCOMPANY.C=US

NDS Name Context for a Tree without a country code (Typeless):
SALES.MYCOMPANY

    D. Setting the NDS Name Context to a dash disables NDS for a Bindery installation.

    E. Select **[Save]**.

13. Enable/Disable the Service Advertising Protocol:

    A. Select **[Additional Setups]**.

    B. Select **[SAP]**.

    C. Select **[Enable]** or **[Disable]**, as required.

    D. If SAP is enabled then use the arrows, or select the numeric window and use the keypad, to enter the SAP frequency. The range is 15 to 300 seconds. (The default is 60 seconds).

14. Select the language of the server.

    A. Select **[Server Character Set]**.

    B. Use the arrow keys on the screen to scroll through the selection and select the appropriate language for the network.

15. Select **[Save]**.

16. Select **[Exit]** on the Protocol Setups screen. The device will reboot and print a Configuration Sheet in approximately 3 minutes.

17. Check the settings on the Configuration Sheet against those that were set up on the server.

18. Install the *DC440/432/420* print driver at the workstation using the procedure located in the *Xerox CentreWare Documentation*.

19. Continue with **Test Print** on page *3-16*.

NOTE: For a IPX configuration, the selection of the [IPX Number] button will display the external IPX network number.

Test Print

To ensure the *DC440/432/420* has been installed on the network correctly a test print should be submitted from a client workstation. Perform the following steps:

1. Open a document on a client workstation.

2. Select the *DC440/432/420* as the printer for sending documents to.

3. Print the document on the device and verify that it prints correctly.

4. Ensure the print driver is installed on every workstation that will be sending jobs to the device.

5. Repeat the test for all workstations that will be sending jobs to the device.

6. The installation process is now complete.

If the test print fails, refer to the Problem Solving chapter for trouble-shooting procedures.

NetWare IP Settings

Installation Procedure

There are three stages required to install the *DC440/432/420* on a NetWare 5.x IP network using NetWare utilities:

➢ Network Communication Set Up

> This procedure will enable the *DC440/432/420* to communicate on the NetWare network.

➢ NetWare Set Up

> This procedure is used to set up the network using NetWare's PCONSOLE or NWADMIN utility.

➢ Test Print

> A print job should be submitted to ensure the *DC440/432/420* has been installed and configured correctly.

If this is a Token Ring installation, the Token Ring card must be installed and configured before performing this procedure.

Refer to the Token Ring chapter of this guide for additional information.

If running NLSP, be sure that RIP/SAP compatibility is configured on the same segment as the *DC440/432/420*.

NOTE: If you are using TCP/IP without NetWare NDPS, refer to the TCP/IP (LPR Spooling).

Network Communication Set Up

At the *DC440/432/420*, perform these steps:

HINT: *Xerox CentreWare Internet Services can also be used to configure the DC440/432/420, refer to the Internet Services chapter for instructions.*

1. Connect the device to the network outlet or cable.

2. Access the System Administrator set up screens:

   A. Select the **[Access]** button on the *DC440/432/420* Control Panel.

   B. Using the keypad, enter **[#22222]** (or the current System Administrator password) and then select **[Enter]** on the Touch Screen. Enter the # character before entering 22222.

NOTE: #22222 is the default password and may be changed by the Xerox Service Representative.

3. Access the TCP/IP set up screens:

   A. Select **[Print Setups]**.

   B. Select **[Protocol Setups]**.

   C. Select **[TCP/IP]**.

   D. IP Address Setup:
Select **[IP Address]**, then select **[Edit]** and use the keypad on the screen to enter the IP Address for the *DC440/432/420*. This number is assigned by the System Administrator. Then select **[Save]**.

   E. Gateway Address Setup:
Select **[Gateway Address]**, then select **[Edit]** and use the keypad on the screen to enter the Gateway Address of the network. Then select **[Save].**

   F. Subnet Mask Setup:
Select **[Subnet Mask]**, then select **[Edit]**, and use the keypad on the screen to enter the Subnet Mask for the network (the default setting is 255.255.252.0). Then select **[Save]**.

NOTE: The Broadcast Address is set up automatically and cannot be edited.

NOTE: Refer to the *Glossary* for additional information about the Gateway Address, Subnet Mask and Broadcast Address, if needed.

G. Host Name Setup:
    Select **[Host Name]**, then select **[Edit]** and use the keyboard on the screen to enter the Host Name for the *DC440/432/420* to use. Then select **[Save]**.

H. Address Resolution Setup:
    Select **[Address Resolution],** then select the type of addressing to be used.**[STATIC]**, **[RARP]**, **[DHCP]** or **[BOOTP]**.

4. Enable TCP/IP:

    A. Select **[Additional Setups]**.

    B. Select **[Enablement]**, then select **[Enable]**.

5. Select the type of Interface being used:

    A. Select **[Interface]**.

    B. Select either **[Ethernet]** or **[Token Ring]**.

6. Select **[Save]** at the TCP/IP screen to save the network settings.

7. Set up the Port 9100 Printing:

    A. Select **[TCP/IP]**, then select **[Additional Setups]**.

    B. Select **[Port 9100]**.

    C. Select **[Enable]**.

    D. Select **[Save]**.

8. Set up the Line Printer Daemon (LPD):

NOTE: The *DC440/432/420* contains a line printer daemon (LPD) which must be enabled if it is to be used. The LPD can be running in the client workstation, in a server on the network, or in the *DC440/432/420*. The default LPD Port Number is set to 515.

    A. Select **[TCP/IP]**, then select **[Additional Setups]**.

    B. Select **[LPD Enablement]**.

    C. Select **[Enabled]**.

    D. Select **[Save]**.

9. Select **[Exit]** on the Protocol Setups screen.

10. The device will reboot and print a Configuration Sheet in approximately 3 minutes.

11. Check the settings on the Configuration Sheet against the information that was entered.

12. Continue with **NetWare Set Up** on page *3-20*.

NetWare Set Up

Using the NWADMIN Utility

NOTE: The printer should be configured with an IP address and subnet mask.
LPD should be enabled on the printer.
The NetWare 5 server should have NDPS installed - there will be a broker object in the NDS tree. NDPS is configured either when the server is installed or afterwards using NWCONFIG
The NDPS broker service should be running on the server.

1. Login as Admin, to the tree and context that the Novell NDPS is installed on.

2. Create the NDPS Manager Object:
   A. Select **[Create]** from the object menu in NetWare Administrator, then select **[NDPS Manager]**.
   B. Enter a name for the **NDPS Manager Object**.
   C. Browse the tree for a resident server, i.e. the NetWare 5 server.
   D. Browse the tree for the database volume where the print jobs will be stored.
   E. Select **[Create]**.

3. Install the print drivers on the Broker:
   A. Double click on the broker object in NetWare Administrator.
   B. Select **[Resource Management]**.
   C. Select **[Add Resources]**.
   D. Select the type of resource needed.

E. Select **[Add]**, then browse for the print drivers. The print drivers are located on the CentreWare CD ROM's.

F. Select **[OK]**.

G. Select **[OK]**, then select **[Cancel]** to close the broker window.

4. Installing the Printer:

A. Launch **NWADMIN**.

B. Select the **NDS Container** where the printer is to be created.

C. Select **[Create]** from the **Object** menu.

D. Select **[NDPS Printer]**, then select **[OK]**.

E. Enter the name of the NDPS printer.

F. Select **[Create a New Printer Agent]**.

G. Select **[Define Additional Properties]**.

H. Select **[Create]**.

I. Select **browse** in the **NDPS Manager Name** field and select the **NDPS Manager Object** created in step 2, then select **[OK]**.

J. Select **[Xerox Printer Gateway IP/IPX]** in the **Gateway Type** field.

K. Select **[OK]**.

L. Select **[IP Protocol]** in the select **Network Protocol for the Printer Agent** dialog box, then select **[OK]**.

M. Select **[Next]** within the **Xerox Setup Wizard** dialog box.

N. Select the required printer from the list of **Available Xerox Devices** text box.

O. Select **[Next]**.

P. Check the required details in the **Printer Name**, **Printer IP Address** and **Printer Model**.

Q. Select **[Next]**.

R. Select **[Finish]**.

5. Load the print drivers:

   A. Select the print drivers to be associated with the printer from the list, then select **[Continue]**.

   B. Select **[OK]** in the information screen.

6. Continue with **Test Print** on page *3-22*.

Test Print

To ensure the *DC440/432/420* has been installed on the network correctly a test print should be submitted from a client workstation. Perform the following steps:

1. Open a document on a client workstation.

2. Select the *DC440/432/420* as the printer for sending documents to.

3. Print the document on the device and verify that it prints correctly.

4. Ensure the print driver is installed on every workstation that will be sending jobs to the device.

5. Repeat the test for all workstations that will be sending jobs to the device.

6. The installation process is now complete.

If the test print fails, refer to the Problem Solving chapter for trouble-shooting procedures.

4   *Banyan VINES*

Introduction

This chapter explains how to install the *DC440/432/420* on a Banyan VINES network. The following information is provided:

Information Checklist

Before starting the Banyan VINES installation procedures, please ensure the following items are available or have been performed:

Item	By
An existing operational Banyan VINES network is required, these procedures are not designed to install a Banyan VINES network.	Customer
Banyan VINES PCPrint option installed on the server. The *DC440/432/420* emulates the PC Network Printing (PCPrint) program, which enables Banyan VINES network users to access network devices such as the *DC440/432/420* that are attached to a DOS or Windows workstation.	Customer
Test the *DC440/432/420* Copier/Fax to ensure it is installed fully and functioning correctly.	Customer
NOTE: *DC440/432/420* printer drivers for Windows, Windows 95, DOS and Macintosh as required for the clients.	Xerox

If problems are encountered during the DC440/432/420 installation, refer to the Problem Solving chapter for assistance.

CAUTION: Do not connect the network cable to the *DC440/432/420* until instructed to do so.

Banyan VINES Installation

Installation Procedure

There are three stages required to install the *DC440/432/420* on a Banyan VINES network:

➢ Network Communication Set Up

> This requires the *DC440/432/420* to be set up for Banyan VINES.

➢ Banyan Print Service Set Up

> This requires the Banyan VINES network to be configured for the *DC440/432/420*.

➢ Test Print

> A print job should be submitted to ensure the *DC440/ 432/420* has been installed and configured correctly.

Network Communication Set Up

At the *DC440/432/420*, perform these steps:

☞ **HINT:** *Xerox CentreWare Internet Services can also be used to configure the DC440/432/420, refer to the Internet Services chapter for instructions.*

1. Connect the device to the network outlet or cable.
2. Access the System Administrator set up screens:

   A. Select the **[Access]** button on the *DC440/432/420* Control Panel.

   B. Using the keypad, enter **[#22222]** (or the current System Administrator password) and then select **[Enter]** on the Touch Screen. Enter the # character before entering 22222.

NOTE: #22222 is the factory default password and may be changed by the Xerox Service Representative.

3. Access the Banyan VINES set up screens:
    A. Select **[Print Setups]**.
    B. Select **[Protocol Setups]**.
    C. Select **[Banyan VINES]**.
4. Enable Banyan VINES:
    A. Select **[Enablement]**.
    B. Select **[Enabled]**.
5. Select **[Street Talk Name]**, then select **[Edit]** and use the keyboard to enter the Street Talk Name.
6. Select **[Save]**.
7. Select **[Street Talk Password]**, then select **[Edit]** and use the keyboard to enter the Street Talk Password.
8. Select **[Print Service Name]**, then select **[Edit]** and use the keyboard to enter the Print Service Name. The Print Service Name is the service to which the *DC440/432/420* will be connected.

NOTE: Banyan VINES recommends that spaces should not be used in Print Service Names. They can, however, be used with the *DC440/432/420* if the Print Service Name contains them.

9. Select **[Save]**.
10. Select **[Save]** again.
11. Select **[Exit]** on the Protocol Setups screen. The *DC440/432/420* will reboot and print a Configuration Sheet in approximately 3 minutes.
12. Check the settings on the Configuration Sheet against the information that was entered.
13. Continue with **Banyan Print Service Set Up**.

Banyan Print Service Set Up

Detailed instructions on setting up the Banyan Print Service are not provided here. Refer to the *Banyan VINES documentation* for more information, if needed.

1. Using the MUSER, or another utility, create a user name and assign a password for the *DC440/432/420*. The user name and password must be the same as those entered at the *DC440/432/420*.

2. Using the MSERVICE, or another utility, highlight and select **[ADD a Server-Based Service]**.

    A. Enter the Street Talk Name and description.

    B. Select the server where the service will be created.

    C. Select **[Banyan Print Service]**.

    D. Select an appropriate disk location when prompted.

3. Enter the *DC440/432/420* user name as the PCPRINT ST name and Description.

NOTE: The PCPrint ST name must be the same as the user name created earlier, and must also match the Street Talk (user) Name entered at the *DC440/432/420*.

4. Power off and power on the *DC440/432/420* for these set up options to take effect.

5. Install the *DC440/432/420* printer driver on a client workstation:

    A. A variety of client workstations can send files to the File Server to be printed on the device, using Windows NT, Windows, Windows 95, Windows 98 DOS, Macintosh, and X-Windows. Each of these different environments has its own driver or print tool.

    B. Using the procedure located in the *Xerox CentreWare documentation*, install the appropriate *DC440/432/420* driver or print tool on all workstations that will be sending jobs to the device.

6. Continue with **Test Print**.

Test Print

To ensure the *DC440/432/420* has been installed on the network correctly a test print should be submitted from a client workstation. Perform the following steps:

1. Open a document on a client workstation.
2. Select the *DC440/432/420* as the printer for sending documents to.
3. Print the document on the device and verify that it prints correctly.
4. Ensure that the driver is installed on every workstation that will be sending jobs to the device.
5. Repeat the test for all workstations that will be sending jobs to the device.
6. The installation process is now complete.

If the test print fails, refer to the Problem Solving chapter for trouble-shooting procedures.

5   UNIX TCP/IP

Introduction

This chapter explains how to install the *DC440/432/420* in a UNIX TCP/IP environment. The UNIX Workstation Operating Systems covered are SUN OS, SOLARIS, HP-UX and IBM AIX. The following information is provided:

Information Checklist

Before starting the UNIX TCP/IP installation procedures, please ensure the following items are available or have been performed:

Item	By
An existing operational network utilizing a UNIX TCP/IP protocol is required, these procedures are not designed to install the UNIX TCP/IP network.	Customer
SUN OS 4.1x, SOLARIS 1.x, 2.x, 7.x, HP-UX 9.x, 10.x or IBM AIX 4.x.	Customer
Ensure that the correct IP Address is being used for the *DC440/432/420*.	Customer
Ensure that the Gateway Address is set correctly.	Customer
Ensure that the Subnet Mask is set correctly.	Customer
Ensure that the Broadcast Address is set correctly.	Customer
Ensure that the Host Name is set correctly.	Customer
Test the *DC440/432/420* Copier/Fax to ensure it is installed fully and functioning correctly.	Customer
CentreWare UNIX CWPrint Tool.	Xerox

If problems are encountered during the DC440/432/420 installation, refer to the Problem Solving chapter for assistance.

CAUTION: Do not connect the network cable to the *DC440/432/420* until instructed to do so.

UNIX TCP/IP Installation

Installation Procedure

There are four stages required to install the *DC440/432/420* in a UNIX TCP/IP environment:

➢ NetWork Communication Set Up

  This requires the *DC440/432/420* to be set up and configured for TCP/IP.

➢ Workstation Set Up

  This requires the appropriate Workstation Operating System to be configured for the *DC440/432/420*.

➢ Load the CentreWare UNIX CWPrint Tool

  The CentreWare UNIX CWPrint Tool provides a graphical user interface for submitting print jobs in the UNIX environment.

➢ Test Print

  A print job should be submitted to ensure the *DC440/ 432/420* has been installed and configured correctly.

Network Communication Set Up

At the *DC440/432/420*, perform these steps:

HINT: Xerox CentreWare Internet Services can also be used to configure the DC440/432/420, refer to the Internet Services chapter for instructions.

1. Connect the device to the network outlet or cable.
2. Access the System Administrator set up screens:
   A. Select the **[Access]** button on the *DC440/432/420* Control Panel.
   B. Using the keypad, enter **[#22222]** (or the current

System Administrator password) and then select **[Enter]** on the Touch Screen. Enter the # character before entering 22222.

NOTE: #22222 is the default password and may be changed by the Xerox Service Representative.

3. Access the TCP/IP Network Set up screens:
   A. Select **[Print Setups]**.
   B. Select **[Protocol Setups]**.
   C. Select **[TCP/IP]**.
   D. IP Address setup:
      Select **[IP Address]**, then select **[Edit]** and use the keypad on the screen to enter the IP Address for the *DC440/432/420*. This number is assigned by the System Administrator. Then select **[Save]**.
   E. Gateway Address setup:
      Select **[Gateway Address]**, then select **[Edit]** and use the keypad on the screen to enter the Gateway Address of the network. Then select **[Save].**
   F. Subnet Mask Setup:
      Select **[Subnet Mask]**, then select **[Edit]**, and use the keypad on the screen to enter the Subnet Mask for the network (the default setting is 255.255.252.0). Then select **[Save]**.

NOTE: The Broadcast Address is set up automatically and cannot be edited.

NOTE: Refer to the *Glossary* for additional information about the Gateway Address, Subnet Mask and Broadcast Address, if needed.

   G. Host Name Setup:
      Select **[Host Name]**, then select **[Edit]** and use the keyboard on the screen to enter the Host Name for the *DC440/432/420* to use. Then select **[Save]**.
   H. Address Resolution Setup:

Select **[Address Resolution],** then select the type of addressing to be used.**[STATIC]**, **[RARP]**, **[DHCP]** or **[BOOTP]**.

4. Enable TCP/IP:

    A. Select **[Additional Setups]**.

    B. Select **[Enablement]**, then select **[Enable]**.

5. Select the type of Interface being used:

    A. Select **[Interface]**.

    B. Select either **[Ethernet]** or **[Token Ring]**.

6. Select **[Save]** at the TCP/IP screen to save the network settings.

7. Set up the Port 9100 Printing.

    A. Select **[TCP/IP]**, then select **[Additional Setups]**.

    B. Select **[Port 9100]**.

    C. Select **[Enable]**.

    D. Select **[Save]**.

8. Set up the Line Printer Daemon (LPD):

NOTE: The *DC440/432/420* contains a line printer daemon (LPD) which must be enabled if it is to be used. UNIX clients require the LPD to be running in order to print. The LPD can be running in the client workstation, in a server on the network, or in the *DC440/432/420*. The default LPD Port Number is set to 515.

    A. Select **[TCP/IP]**, then select **[Additional Setups]**.

    B. Select **[LPD Enablement]**.

    C. Select **[Enabled]**.

    D. Select **[Save]**.

9. Select **[Exit]** on the Protocol Setups screen.

10. The device will reboot and print a Configuration Sheet in approximately 3 minutes.

11. Check the settings on the Configuration Sheet against the information that was entered.

12. Continue with **Workstation Setup** on page *5-6*.

Workstation Set Up

Instructions are provided for SUN OS, SOLARIS,HP-UX and IBM AIX workstations. Refer to the appropriate instructions for the network environment:

➢ SUN OS - refer to page *5-6*.

➢ SOLARIS - refer to page *5-8*.

➢ HP-UX - refer to page *5-9*.

➢ IBM AIX - refer to page *5-12*.

SUN OS

This procedure uses the appropriate tools to set up the SUN OS workstation environment to communicate with the *DC440/432/420*:

1. Log in at a client workstation as root and add the D*C440/432/420* to the /etc/hosts file. For example:

NOTE: If an NIS server is running on the same segment of the network as the *DC440/432/420*, log in at the NIS server as *root* and add the *DC440/432/420* to the master hosts file. For example:

2. Verify connectivity to the *DC440/432/420*. This can be accomplished by using a UNIX command such as   , as shown in the following example:

3. Edit the /etc/printcap file to contain an entry for the *DC440/432/420* queue using the following example:

A.   is the local client name of the *DC440/ 432/420*.

B.   is the local device name for the printer output. For remote printers, it is required that this parameter be set to nothing.

NOTE: The remote queue name must be set to   in order to spool jobs to the *DC440/432/420.*

C.   identifies the remote device. This is the IP hostname for the *DC440/432/420* in the local client. The remote printer name defaults to **lp**, the default printer.

D.   indicates that the maximum size of the document is unlimited.

E.   is the path to the queue for the *DC440/432/420*.

F.   is the error logging file name.

4. The *DC440/432/420* can be designated as the default print queue. This will make it unnecessary to include the   in the   command line.

A. To designate the *DC440/432/420* as the default print queue, add the following information to the */etc/ printcap* file. This is in addition to the information entered in the previous step:

5. Create the spool directory identified in the *printcap* file and set the access attributes, as shown in the example below. The spool directory should be located on a disk partition large enough to hold copies of documents that will be submitted.

6. Continue with **Load the CentreWare UNIX CWPrint Tool** on page *5-15*.

SOLARIS

This procedure uses the appropriate tools to set up the SOLARIS workstation environment to communicate with the *DC440/432/420*.

1. Log in at a client workstation as root.

2. Use the SOLARIS ADMINTOOL to add the *DC440/432/ 420* to the system host files.

NOTE: Refer to the *SOLARIS documentation* for instructions on using the ADMINTOOL.

    A. Select **[Browse]**.

    B. Select **[Printers]**.

    C. Select **[Edit]**.

    D. Select **[Add]**.

    E. Select **[Local Printer]**.

    F. Enter the **[Host Name]** in the Printer Name field and then select **[OK]**.

    G. Select **[File]**.

    H. Select **[Exit]**.

3. Verify connectivity to the *DC440/432/420*. This can be accomplished by using a UNIX command such as   . For example:

NOTE: The remote queue name must be set to   in order to spool jobs to the *DC440/432/420.*

4.   Continue with **Load the CentreWare UNIX CWPrint Tool** on page *5-15*.

HP-UX

This procedure uses the appropriate tools to set up the HP-UX workstation environment to communicate with the *DC440/432/420*.

1.   Log in at a client as root and add the *DC440/432/420* to the /etc/hosts file. For example:

2.   Verify connectivity to the device. This can be accomplished by using a UNIX command such as `ping` from a terminal command window, as shown in the following example:

NOTE: Select **CTRL+C** to stop the ping command from polling continuously.

3.   There are two procedures that can be used to successfully install the device on an HP-UX workstation. Choose the procedure that will be used to complete the installation and refer to that section now:

>   Using the Command Window TTY Method on page *5-10*.

>   Using the System Administrator Manager (SAM) GUI Method on page *5-11*.

Using the Command Window TTY

This procedure uses a Command Window to manually enter command strings and complete the installation of the *DC440/432/420*.

1. Open a command window on the desktop. From the command prompt (#), enter the information below. Remember that UNIX commands are case-sensitive.

    A. Type **su** to access the super user mode.

    B. Type **sh** to run the Bourn Shell.

    C. Type **lpshut** to stop the print service.

    D. Type the following command on the same line:

NOTE: The queuename is the name of the print queue being created. The hostname is the device `PrinterName` from the etc/hosts file.

The remote queue name must be set to **lp** in order to spool jobs to the device. This is set by the **-orplp** command.

---

2. Type **lpsched** to start the print service.

3. Type **enable** *queuename* to enable the queue to print to the *DC440/432/420*.

4. Type **accept** *queuename* to enable the queue to start accepting jobs from the HP-UX workstation.

NOTE: The *queuename* is the name of the print queue that has been created.

---

5. Type **exit** to exit the Bourn Shell.

6. Type **exit** to exit super user mode.

7. Type **exit** to close the command window.

8. Continue with **Test Print** on page *5-16*.

Using the System Administrator Manager (SAM) GUI Method

This procedure uses the HP System Administrator Manager (SAM) GUI (Graphical User Interface) application to complete the installation of the *DC440/432/420*.

NOTE: Refer to the HP-UX documentation for additional information on using the System Administrator Manager (SAM).

1. Start the **System Administrator Manager (SAM)** application.
2. Select the **[Printers and Plotters]** icon.
3. Select **[Actions]** from the Menu Bar.
4. Select **[Add Remote Printer/Plotter]** from the pull-down menu.
5. Enter the following information into the form displayed in the **Add Remote Printer/Plotter** dialog box:

   A. Printer Name
   B. Remote System Name
   C. For the *Remote Printer Name*, enter **lp**.

NOTE: The *Printer Name* is the name of the print queue being created. The *Remote System Name* is the device `PrinterName` from the *etc/hosts* file.
The *Remote Printer Name* must be set to **lp** in order to spool jobs to the device.

   D. Enable *Remote Printer is on a BSD system* by checking the checkbox.
   E. Ensure the *Remote Cancel Model* is set correctly.
   F. Ensure the *Remote Status Model* is set correctly.
   G. Ensure the *Default Request Priority* is set correctly.
   H. Ensure the *Allow Anyone to Cancel a Request* checkbox is set correctly.
   I. Ensure that the *Make This Printer the Default Destination* checkbox is set correctly.

6. Select **[OK]**.

7. Read and respond to any displayed system messages.

8. Continue with **Test Print** on page *5-16*.

IBM AIX

This procedure uses the appropriate tools to set up the IBM AIX workstation environment to communicate with the *DC440/432/420*.

1. Log in at a client as *root* and add the *DC440/432/420* to the */etc/hosts* file. For example:

2. Verify connectivity to the device.This can be accomplished by using a UNIX command such as ping from a terminal command window, as shown in the following example:

NOTE: Select **CTRL**+**C** to stop the ping command from polling continuously.

3. There are three procedures that can be used to successfully complete the installation of the device. Choose the procedure that you will use to complete the installation and refer to that section now:

> Using the IBM AIX System Management Interface Tool (SMIT) on page *5-13*.
>
> Using the IBM AIX Print Manager on page *5-14*.
>
> Using the Command Line Procedure on page *5-15*.

Using the IBM AIX System Management Interface Tool (SMIT)

This procedure uses the IBM System Management Interface Tool (SMIT) GUI (Graphical User Interface) application to complete the installation of the *DC440/432/420*.

NOTE: Refer to the IBM AIX documentation for additional information on using the System Management Interface Tool (SMIT).

1. Start the **System Management Interface Tool (SMIT)** application.
2. Select **[Print Spooling]**.
3. Select **[Add a Print Queue]**.
4. Select **[remote]** as the attachment type.
5. Select **[Standard Processing]**.
6. Enter the following information into the form displayed in the **[Add a Standard Remote Print Queue]** dialog box:

    A. *Name of QUEUE to add

    B. *HOSTNAME of remote server

    C. For the *Name of QUEUE on remote server*, enter **lp**.

NOTE: The *QUEUE* is the name of the print queue being created. The *HOSTNAME* is the device `PrinterName` from the *etc/hosts* file.
The *Name of QUEUE on remote server* must be set to **lp** in order to spool jobs to the device.

    D. *TYPE of print spooler on remote server* should be set to **BSD**.

    E. DESCRIPTION of the printer on remote server

7. Select **[OK]**.
8. Select **[Done]**.
9. Select **[Add a Standard Remote Print Queue]** dialog box.
10. Close the **System Management Interface Tool** dialog box.

11. Continue with **Test Print** on page *5-16*.

Using the IBM AIX Print Manager

1. Start the **Print Manager** application.
2. Right click in the *Printers* section of the **Print Manager** dialog.
3. Select **[Add New]** from the pop-up menu.
4. Select the **[remote]** icon for the *Attachment Type* in the **[Add Printer/Print Queue]** dialog.
5. Select **[OK]**.
6. Enter the following information into the form displayed in the **[Add Remote Print Queue]** dialog:
   A. NAME of queue to add
   B. NAME of device to add
   C. DESTINATION HOST for remote jobs
   D. For the *Name of QUEUE on the remote server*, enter **lp**.

NOTE: The *NAME of queue* is the name of the print queue being created.   The *NAME of device* is the user entered descriptive name for the device. The *DESTINATION HOST* is the device `PrinterName` from the *etc/hosts* file.
The *Name of QUEUE on the remote server* must be set to **lp** in order to spool jobs to the device.

   E. For the *SHORT FORM FILTER pathname*, enter **l user/lib/lpd/bsdshort**.
   F. For the *LONG FORM FILTER pathname*, enter /**user/ lib/lpd/bsdlong**.
7. Select **[OK]**.
8. Close the **[Add Printer/Print Queue]** dialog.
9. Close the **[Print Manager]** application.
10. Continue with **Test Print**.on page *5-16*.

Using the Command Line Procedure

1. Open a command window on the desktop.

2. From the command prompt (#), enter the following information on the same line. Use the correct case as UNIX commands are case-sensitive:

   ```
   /usr/lib/lpd/pio/etc/piomisc_etc
   mkpq_remote_ext -q 'queuename' -h
   'hostname' -r 'lp' -t 'bsd' -d 'user
   description'
   ```

NOTE: The *queuename* is the name of the print queue being created. The *hostname* is the device `PrinterName` from the *etc/hosts* file.
The *Name of QUEUE on the remote server* must be set to **lp** in order to spool jobs to the device.

3. Close the command window.

4. Continue with **Test Print** on page *5-16*

Load the CentreWare UNIX CWPrint Tool

The CentreWare UNIX CWPrint Tool provides a graphical user interface for submitting print jobs in the UNIX environment. Once a print job is initiated, the tool intercepts the print command and opens the interface. It then forwards a PostScript file to the *DC440/432/420* via the print protocol.

1. Refer to the *Xerox CentreWare documentation* and install the CentreWare UNIX CWPrint Tool.

2. Continue with **Test Print** on page *5-16*.

Test Print

To ensure the *DC440/432/420* has been installed on the UNIX TCP/IP network correctly, a test print should be submitted from a client workstation. Perform the following steps:

1. Start the Open Windows application.
2. Start the CentreWare UNIX CWPrint Tool application.
3. Use the UNIX CWPrint Tool to send a test print to the *DC440/432/420*.
4. Repeat the procedure for all workstations that will be sending jobs to the device.
5. The UNIX TCP/IP installation is now complete.

If the test print fails, refer to the Problem Solving chapter for trouble-shooting procedures.

6   *AppleTalk*

Introduction

This chapter explains how to install the *DC440/432/420* on an AppleTalk network. The following information is provided:

Information Checklist

Before starting the AppleTalk installation procedures, please ensure the following items are available or have been performed:

Item	By
An existing operational AppleTalk network with Macintosh workstation computers equipped with Ethernet network interface cards are required. These procedures are not designed to install an AppleTalk network.	Customer
Macintosh System version 7.x or 8.x.	Customer
Test the *DC440/432/420* Copier/Fax to ensure it is installed fully and functioning correctly.	Customer
DC440/432/420 Macintosh print and fax driver or PPD.	Xerox

If problems are encountered during the DC440/432/420 installation, refer to the Problem Solving chapter for assistance.

CAUTION: Do not connect the network cable to the *DC440/432/420* until instructed to do so.

AppleTalk Installation

Installation Procedure

There are two stages required to install the *DC440/432/420* on an AppleTalk network:

➢ Network Communication Set Up

This requires the *DC440/432/420* to be set up for AppleTalk.

➢ Test Print

A test print should be submitted to ensure the *DC440/432/420* has been installed and configured correctly.

Network Communication Set Up

This procedure is used to set up the network communication parameters of the *DC440/432/420*.

At the *DC440/432/420*, perform these steps:

☞ *HINT: Xerox CentreWare Internet Services can also be used to configure the DC440/432/420, refer to the Internet Services chapter for instructions.*

1. Obtain and record the AppleTalk Printer Name, as it will be needed to set up the *DC440/432/420*.

2. Connect the device to the network outlet or cable.

NOTE: The *DC440/432/420* will attach itself to the default zone of the local segment where it is connected.

3. Access the System Administrator set up screens:

   A. Select the **[Access]** button on the *DC440/432/420* Control Panel.

   B. Using the keypad, enter **[#22222]** (or the current System Administrator password) and then select

[Enter] on the Touch Screen. Enter the # character before entering 22222.

NOTE: #22222 is the factory default password and may be changed by the Xerox Service Representative.

4. Access the AppleTalk set up screens:

   A. Select [Print Setups].

   B. Select [Protocol Setups].

   C. Select [AppleTalk].

5. Enable AppleTalk:

   A. Select [Enablement].

   B. Select [Enabled].

6. Select the Printer Name:

   A. Select [Printer Name], then select [Edit] and use the keyboard to enter the Printer Name for the network (31 characters, or fewer).

7. Select the Zone Name:

   A. Select [Zone Name], then select [Edit] and use the keyboard to enter the Zone Name for the network.

   B. Select [Save].

8. Select [Save] again.

9. Select [Exit] on the Protocol Setups screen. The device will reboot and print a Configuration Sheet in approximately 3 minutes.

10. Check the settings on the Configuration Sheet against the information that was entered.

11. Install the *DC440/432/420* print driver at the workstation using the procedure located in the *Xerox CentreWare documentation*.

12. Continue with **Test Print**.

NOTE: The **Interface** and **Entity Type** buttons are read only. These specifications are defined by the hardware of the network.

Test Print

To ensure the *DC440/432/420* has been installed on the network correctly a test print should be submitted from a client workstation. Perform the following steps:

1. Open a document on a client workstation.
2. Select the *DC440/432/420* in the Chooser as the printer to which the selected document will be sent.
3. Print the document on the device and verify that it prints correctly.
4. Ensure the driver is installed on every workstation that will be sending jobs to the device.
5. Repeat the test for all workstations that will be sending jobs to the device.
6. The installation process is now complete.

If the test print fails, refer to the Problem Solving chapter for trouble-shooting procedures.

7 *Microsoft Networking*

Introduction

This chapter contains installation instructions for Microsoft networking environments. The following information is provided:

Information Checklist

Before starting the Microsoft networking installation procedures, please ensure the following items are available or have been performed:

Item	By
An existing operational Microsoft network is required, these procedures are not designed to install a Microsoft network.	Customer
Test the *DC440/432/420* Copier/Fax to ensure it is installed fully and functioning correctly.	Customer
Xerox CentreWare Network Services (Optional).	Xerox
DC440/432/420 print and fax drivers.	Xerox
Token Ring PC card (Optional).	Xerox

If problems are encountered during the DC440/432/420 installation, refer to the Problem Solving chapter for assistance.

CAUTION: Do not connect the network cable to the *DC440/432/420* until instructed to do so.

Installation Options

Information is provided to support the following Microsoft Networking environments:

➢ Windows NT V4.0 NetBIOS/NetBEUI

➢ Windows NT V4.0 NetBIOS/IP

➢ Windows NT V4.0 TCP/IP

There are two main methods which can be used to complete the network installation. These are:

➢ Using Xerox CentreWare Device Admin Wizard

Using the Device Admin Wizard will simplify the network installation by eliminating steps that would otherwise be performed at the *DC440/432/420*, and by using Microsoft utilities.

To use this method of installation, refer to page *7-4*.

➢ Using Microsoft Utilities

Using Microsoft utilities to install any of the various Microsoft Networking options will also require the device to be configured using the *DC440/432/420* user interface or CentreWare Internet Services.

Procedures using Microsoft utilities are provided for each Microsoft networking environment:

To use this method of installation, refer to page *7-11*.

Using the Xerox CentreWare Device Admin Wizard

Installation Procedure

There are three stages required to install the *DC440/432/420* on a Microsoft network using the CentreWare Device Admin Wizard:

➢ Network Communication Set Up

This procedure will enable the *DC440/432/420* to communicate on the various Microsoft networks. Instructions are provided for the various protocols used for Microsoft Networking.

➢ Device Admin Wizard Set Up

This procedure is used to complete the *DC440/432/420* installation with the Device Admin Wizard.

➢ Test Print

A print job should be submitted to ensure the *DC440/432/420* has been installed and configured correctly.

Network Communication Set Up

Instructions are provided for the various protocols used for Microsoft networking. Refer to the appropriate instructions for the network:

➢ NetBIOS/NetBEUI - refer to page *7-5*.

➢ NetBIOS/IP - refer to page *7-6*.

➢ TCP/IP - refer to page *7-8*.

NetBIOS/NetBEUI

This procedure is used to set up the NetBIOS/NetBEUI network communication parameters of the *DC440/432/420*.

At the *DC440/432/420*, perform these steps:

HINT: Xerox CentreWare Internet Services can also be used to configure the DC440/432/420, refer to the Internet Services chapter for instructions.

1. Connect the *DC440/432/420* to the network outlet or cable.
2. Access the System Administrator set up screens:
   A. Select the **[Access]** button on the Control Panel.
   B. Using the keypad, enter **[#22222]** (or the current System Administrator password) and then select **[Enter]** on the Touch Screen. Enter the # character before entering 22222.

NOTE: #22222 is the factory default password and may be changed by the Xerox Service Representative.

3. Access the NetBios/NetBeui set up screens:
   A. Select **[Print Setups]**.
   B. Select **[Protocol Setups]**.
   C. Select **[NetBIOS]**.
4. Enable NetBios:
   A. Select **[Enablement]**.
   B. Select **[Enabled]**.
5. Select the appropriate Interface for the network:
   A. Select **[Interface]**.
   B. From the right half of the screen, select **[Ethernet]** or **[Token Ring]** as the appropriate Interface for the network.

NOTE: Token Ring will not be available as a selection unless it has been installed and configured.

6. Enter the type of transport:
    A. Select **[Additional Setups]**.
    B. Select **[Transport]**.
    C. Select **[NetBEUI]**.
7. Save the new settings and reset the *DC440/432/420*:
    A. Select **[Save]**.
    B. Select **[Exit]** on the Network Setups screen. The device will reboot and print a Configuration Sheet in approximately 3 minutes.
8. Continue with **Device Admin Wizard Set Up** on page *7-9*.

NetBIOS/IP

This procedure is used to set up the NetBIOS/IP network communication parameters of the *DC440/432/420*.

HINT: Xerox CentreWare Internet Services can also be used to configure the DC440/432/420, refer to the Internet Services chapter for instructions.

At the *DC440/432/420*, perform these steps:

1. Connect the device to the network outlet or cable.
2. Access the System Administrator set up screens:
    A. Select the **[Access]** button on the Control Panel.
    B. Using the keypad, enter **[#22222]** (or the current System Administrator password) and then select **[Enter]** on the Touch Screen. Enter the # character before entering 22222.

NOTE: #22222 is the factory default password and may be changed by the Xerox Service Representative.

3. Access the NetBIOS/IP set up screens:
    A. Select **[Print Setups]**.
    B. Select **[Protocol Setups]**.

      C.   Select **[NetBIOS]**.

4.   Enable NetBIOS:

      A.   Select **[Enablement]**.

      B.   Select **[Enabled]**.

5.   Select the appropriate Interface for the network:

      A.   Select **[Interface]**.

      B.   From the right half of the screen, select **[Ethernet]** or **[Token Ring]** as the appropriate Interface for the network.

NOTE: Token Ring will not be available as a selection unless it has been installed and configured.

6.   Enter the type of transport:

      A.   Select **[Additional Setups]**.

      B.   Select **[Transport]**.

      C.   Select **[IP]**.

      D.   Select **[Save]**.

7.   Enable Line Printer Daemon:

      A.   Select **[TCP/IP]**.

      B.   Select **[Additional Setups]**.

      C.   Select **[LPD Enablement]**.

      D.   Select **[Enabled]**.

NOTE: The default port number for LPD is 515.

8.   Save the new settings and reset the *DC440/432/420*:

      A.   Select **[Save]**.

      B.   Select **[Exit]** on the Protocol set up screen. The device will reboot and print a Configuration Sheet in approximately 3 minutes.

9.   Continue with **Device Admin Wizard Set Up** on page *7-9*.

TCP/IP

This procedure is used to set up the TCP/IP network communication parameters of the *DC440/432/420*.

HINT: Xerox CentreWare Internet Services can also be used to configure the DC440/432/420, refer to the Internet Services chapter for instructions.

At the *DC440/432/420*, perform these steps:

1. Connect the device to the network outlet or cable.
2. Access the System Administrator set up screens:
    A. Select the **[Access]** button on the Control Panel.
    B. Using the keypad, enter **[#22222]** (or the current System Administrator password) and then select **[Enter]** on the Touch Screen. Enter the # character before entering 22222.

NOTE: #22222 is the factory default password and may be changed by the Xerox Service Representative.

3. Access the TCP/IP set up screens:
    A. Select **[Print Setups]**.
    B. Select **[Protocol Setups]**.
    C. Select **[TCP/IP]**.
4. Enable TCP/IP:
    A. Select **[Additional Setups]**.
    B. Select **[Enablement]**.
    C. Select **[Enabled]**.
5. Select the appropriate Interface for the network:
    A. Select **[Interface]**.
    B. From the right half of the screen, select **[Ethernet]** or **[Token Ring]** as the appropriate Interface for the network.

NOTE: Token Ring will not be available as a selection unless it has been installed and configured.

6. Enable Line Printer Daemon:.

    A. Select **[LPD Enablement]**.

    B. Select **[Enabled]**.

NOTE: The default port number for LPD is 515.

7. Save the new settings and reset the *DC440/432/420*:

    A. Select **[Save]**.

    B. Select **[Exit]** on the Protocol set up screen. The device will reboot and print a Configuration Sheet in approximately 3 minutes.

8. Continue with **Device Admin Wizard Set Up** on page *7-9*.

Device Admin Wizard Set Up

Ensure that the Xerox CentreWare Device Admin Wizard is installed on the client workstation.

If needed, refer to the Xerox CentreWare documentation for installation instructions.

For more detailed instructions on setting up the network, access the electronic, context-sensitive *Help* from all Network Services and Admin Services screens and dialogue boxes.

1. Locate and launch the **Device Admin Wizard**.

2. Follow the instructions on each Device Admin Wizard screen to set up the *DC440/432/420* on the network.

3. Power off and power on the device so the set up selections will take effect.

4. Using the procedure located in the *Xerox CentreWare documentation*, install the driver for the workstation.

5. Continue with **Test Print** on page *7-10*.

Test Print

To ensure the *DC440/432/420* has been installed on the network correctly a test print should be submitted from a client workstation. Perform the following steps:

1. Open a document on a client workstation.
2. Select the *DC440/432/420* as the printer to which the selected document will be sent.
3. Print the document on the device and verify that it prints correctly.
4. Ensure that the driver is installed on every workstation that will be sending jobs to the device.
5. Repeat the test for all workstations that will be sending jobs to the device.
6. The installation process is now complete.

If the test print fails, refer to the Problem Solving chapter for trouble-shooting procedures.

Using Microsoft Utilities

Installation Procedure

There are three stages required to install the *DC440/432/420* on a NetWare network using Microsoft utilities:

➢ Network Communication Set Up

This procedure will enable the *DC440/432/420* to communicate on the Microsoft network. Instructions are provided for the all the protocols used for Microsoft Networking.

➢ Workstation Set Up

This requires the workstations on the network to be configured for the *DC440/432/420*.

➢ Test Print

A print job should be submitted to ensure the *DC440/432/420* has been installed and configured correctly.

Network Communication Set Up

Instructions are provided for the various protocols used for Microsoft networking. Refer to the instructions appropriate for the network:

➢ NetBIOS/NetBEUI and NetBIOS/IP - refer to page *7-12*.

➢ TCP/IP - refer to page *7-15*.

NetBIOS/NetBEUI and NetBIOS/IP

NOTE: The *DC440/432/420* can be connected to a Token Ring using the NetBIOS/NetBEUI protocol. If this is a Token Ring installation, the Token Ring card must be installed and configured before performing this procedure. Refer to the *Token Ring* chapter of this guide for additional information.

At the *DC440/432/420*, perform these steps:

☞ *HINT: Xerox CentreWare Internet Services can also be used to configure the DC440/432/420, refer to the Internet Services chapter for instructions.*

1. Connect the device to the network outlet or cable.
2. Access the System Administrator set up screens:
    A. Select the **[Access]** button on the *DC440/432/420* Control Panel.
    B. Using the keypad, enter **[#22222]** (or the current System Administrator password) and then select **[Enter]** on the Touch Screen. Enter the # character before entering 22222.

NOTE: #22222 is the default password and may be changed by the Xerox Service Representative.

3. Access the NetBIOS set up screens:
    A. Select **[Print Setups]**.
    B. Select **[Protocol Setups]**.
    C. Select **[NetBIOS]**.
4. Enable NetBIOS:
    A. Select **[Enablement]**.
    B. Select **[Enabled]**.
5. Select the appropriate interface:
    A. Select **[Interface]**.
    B. From the right half of the screen, select **[Ethernet]** or

[Token Ring] as the appropriate interface for the network.

NOTE: Token Ring will not be available as a selection unless it has been installed and configured. The procedure to install and configure the Token Ring option is located in the *Token Ring* chapter of this guide.

6. Host Name set up:
   A. Select **[Host Name]**, then select **[Edit]** and use the keyboard on the screen to enter the Host Name for the network (14 characters or less).
   B. Select **[Save]**.
7. Share Name set up:
   A. Select **[Share Name]**, then select **[Edit]** and use the keyboard on the screen to enter the Share Name for the network (14 characters or less).
   B. Select **[Save]**.
8. Workgroup Name set up:
   A. Select **[Workgroup]**, then select **[Edit]** and use the keyboard on the screen to enter the Workgroup Name (or Domain Name).
   B. Select **[Save]**.
9. Host Name Remark set up:
   A. Select **[Host Name Remark]**, then select **[Edit]** and using the keyboard on the screen to enter the Host Name Remark for the network.
   B. Select **[Save]**.
10. Share Name Comment set up:
    A. Select **[Additional Setups]**.
    B. Select **[Share Name Comment]**, then select **[Edit]** and use the keyboard to enter the Share Name Comment for the network.
    C. Select **[Save]**.
11. Number of Connections set up:
    A. Select **[Number of Connections]**.

B. Using the arrows on the screen enter the value for the number of connections. The value range is 10 to 30.

12. Type of transport set up:

   A. Select **[Transport]**.

   B. Select either **[IP]** or **[NetBEUI]**.

NOTE: If IP is selected, then the TCP/IP settings must also be completed. Refer to the TCP/IP instructions on page *7-15*.

NOTE: The Workgroup Name entered must be the same as the Workgroup Name (or Domain Name) that clients are using. The Workgroup Name is the name of the group of workstations to which the printer will broadcast.

The *DC440/432/420* is not a master browser. If the *DC440/432/420* is the only device in the workgroup, it will not show up on workstations unless the printer name is entered. In the Windows NT environment, the device appears on the network as though it is a workstation with a printer connected directly to it. This printer can be shared by users on other workstations. The Share Name is the name of the printer that can be shared.

The Host Name is the name of the workstation to which the printer is connected. The complete name of the printer is a combination of these two names. For example:

13. Select **[Save]**.

14. Select **[Exit]**.

15. The device will reboot and print a Configuration Sheet in approximately 3 minutes.

16. Check the settings on the Configuration Sheet against the information that was entered.

17. Continue with **Workstation Set Up** on page *7-18*.

TCP/IP

This procedure is used to set up the TCP/IP network communication parameters of the *DC440/432/420*.

HINT: Xerox CentreWare Internet Services can also be used to configure the DC440/432/420, refer to the Internet Services chapter for instructions.

At the *DC440/432/420*, perform these steps:

1. Connect the device to the network outlet or cable.
2. Access the System Administrator set up screens:
   A. Select the **[Access]** button on the *DC440/432/420* Control Panel.
   B. Using the keypad, enter **[#22222]** (or the current System Administrator password) and then select **[Enter]** on the Touch Screen. Enter the # character before entering 22222.

NOTE: #22222 is the default password and may be changed by the Xerox Service Representative.

3. Access the TCP/IP Network set up screens:
   A. Select **[Print Setups]**.
   B. Select **[Protocol Setups]**.
   C. Select **[TCP/IP]**.
4. IP Address set up:
   A. Select **[IP Address]**, then select **[Edit]** and use the keypad on the screen to enter the IP Address for the *DC440/432/420*. This number is assigned by the System Administrator.
   B. Select **[Save]**.
5. Gateway Address set up:
   A. Select **[Gateway Address]**, then select **[Edit]** and use the keypad on the screen to enter the Gateway Address of the network.
   B. Select **[Save]**.

6. Subnet Mask set up:
   A. Select **[Subnet Mask]**, then select **[Edit]**, and use the keypad on the screen to enter the Subnet Mask for the network (the default setting is 255.255.252.0).
   B. Select **[Save]**.

NOTE: The Broadcast Address is set up automatically and cannot be edited.

NOTE: Refer to the *Glossary* for additional information about the Gateway Address, Subnet Mask and Broadcast Address, if needed.

---

7. Host Name set up:
   A. Select **[Host Name]**, then select **[Edit]** and use the keyboard on the screen to enter the Host Name for the *DC440/432/420* to use.
   B. Select **[Save]**.
8. Address Resolution set up:
   A. Select **[Address Resolution]**.
   B. Select the type of addressing to be used.**[STATIC]**, **[RARP]**, **[DHCP]** or **[BOOTP]**.
9. Enable TCP/IP:
   A. Select **[Additional Setups]**.
   B. Select **[Enablement]**, then select **[Enable]**.
10. Select the type of Interface being used:
    A. Select **[Interface]**.
    B. Select either **[Ethernet]** or **[Token Ring]**.
11. Select **[Save]** at the TCP/IP screen to save the network settings.
12. Set up the Port 9100 Printing.
    A. Select **[TCP/IP]**, then select **[Additional Setups]**.
    B. Select **[Port 9100]**.
    C. Select **[Enable]**.
    D. Select **[Save]**.

13. Set up the Line Printer Daemon (LPD):

A. Select **[TCP/IP]**, then select **[Additional Setups]**.
B. Select **[LPD Enablement]**.
C. Select **[Enabled]**.
D. Select **[Save]**.

14. Select **[Exit]** on the Protocol set up screen.
15. The device will reboot and print a Configuration Sheet in approximately 3 minutes.
16. Check the settings on the Configuration Sheet against the information that was entered.
17. Continue with **Workstation Set up** on page *7-18*.

Microsoft Networking

Workstation Set Up

This section includes the set up procedures for Windows 3.11, Windows 95, and Windows NT workstation environments.

If a LAN Manager or LAN Server network is being run, these procedures are also applicable for enabling peer-to-peer printing for Microsoft networking. To enable printing via a LAN Manager or LAN Server network server, refer to the *Network Set Up documentation* provided with the network software.

Locate and perform the workstation set up procedures for the workstation environment. Choose from:

➢ Windows 3.11 (Windows for Workgroups)

➢ Windows 95

➢ Windows NT V4.0 (NetBIOS/NetBEUI and NetBIOS/IP)

➢ Windows NT V4.0 (TCP/IP)

Windows 3.11 (Windows for Workgroups)

1. Refer to the *Xerox CentreWare documentation* to install and set up the *DC440/432/420* Windows drivers on the workstation. Once the drivers are installed, connect a driver to a port that is mapped to the *DC440/432/420* on the network.
2. Continue with **Test Print** on page *7-22*.

Windows 95

1. Refer to the *Xerox CentreWare documentation* to install and set up the *DC440/432/420* Windows drivers on the workstation. Once the drivers are installed, connect a driver to the *DC440/432/420* on the network.
2. Continue with **Test Print** on page *7-22*.

Windows NT V4.0
(NetBIOS/NetBEUI and NetBIOS/IP)

Use the **Add Printer Wizard** to add the *DC440/432/420* to the network.

1. At the Windows NT workstation, select **[Start]**, select **[Settings]**, and then select **[Printers]**.

2. Double-click on the **[Add Printer]** icon to display the **Add Printer Wizard**.

3. Select **[Network printer server]** and select **[Next]** to display the **Connect to Printer** dialog box.

4. Double-click on **[Microsoft Windows Network]** to display all the Workgroups.

5. Double-click on the appropriate **[Workgroup name]** to display all the Host Names.

6. Double-click on the appropriate **[Host name]** to display all the Printer Names.

7. Double-click on the appropriate **[Printer name]** and a message may be displayed stating that a print driver needs to be installed.

8. Select **[OK]** and a dialog box will be displayed for loading the *DC440/432/420* driver.

9. Insert the CD ROM with the *DC440/432/420* drivers into the workstation and select **[Have Disk]**.

10. Browse to the Windows NT PostScript driver on the CD ROM and select **[OK]**.

11. Select **[OK]**, then select **[OK]** again and the *DC440/432/420* driver will be loaded onto the workstation.

12. A dialog box will be displayed with a message that the printer has been successfully installed.

13. Select **[Finish]**.

14. Continue with **Test Print** on page *7-22*.

Windows NT V4.0 (TCP/IP)

NOTE: TCP/IP Print Services must be installed and running on the workstation.

Use the **Add Printer Wizard** to add the *DC440/432/420* to the network.

1. At the Windows NT workstation, select **[Start]**, select **[Settings]**, and then select **[Control Panel]**.
2. Double-click on the **[Network]** icon and then select **[Services]**.
3. Ensure that Microsoft TCP/IP Print Service is running and select **[Start]**, select **[Settings]**, and then select **[Printers]**.
4. Double-click on the **[Add Printer]** icon to display the Add Printer Wizard.
5. Select **[My Computer]** and then select **[Next]** to display the dialog box listing available ports.
6. Select **[Add Port]** to display the **Printer Ports** dialogbox.
7. Select **[LPR Port]** and select **[New Port]** to display the Add LPR compatible printer dialogbox.
8. Enter the IP Address of the printer in the **[Name or address of server providing lpd]** field.
9. Enter **[lp]** (in lower case) in the **[Name of printer or print queue on that server]** field.

NOTE: lp must be entered regardless of the name of the printer or print queue. **lp** is the name of the remote printer/server on the *DC440/432/420.* This name does not change.

10. Select **[OK]**.
11. Select **[Close]**.
12. With the **New Port** selected, select **[Next]**.
13. Insert the CD ROM with the *DC440/432/420* drivers into the workstation and select **[Have Disk]**.

14. Browse to the Windows NT PostScript driver on the CD ROM and select **[OK]**.

15. Select **[Next]**, and select **[Next]** again and the *DC440/ 432/420* driver will be loaded onto the workstation.

16. Enter the Printer Name and select **[Next]**.

17. Select **[Shared]**, select all the Windows NT V4.0 choices for the operating systems that require access to the printer, and then select **[Next]**.

18. A dialog box will be displayed with a message regarding the printing of a test page.

19. Select **[Finish]** to accept the **Yes** choice.

20. Continue with **Test Print** on page *7-22*.

Windows for Workgroups V3.11 Installation

In general, this installation is similar to the Windows NT V4.0 installation described in this chapter. However, the Windows for Workgroups screens differ from those seen in Windows NT V4.0. A stack and an LPR also requires loading for this environment.

Refer to the Windows documentation for detailed instructions for this procedure.

Test Print

To ensure the *DC440/432/420* has been installed on the network correctly a test print should be submitted from a client workstation. Perform the following steps:

1. Open a document on a client workstation.
2. Select the *DC440/432/420* as the printer to which the selected document will be sent.
3. Print the document on the device and verify that it prints correctly.
4. Ensure the driver is installed on every workstation that will be sending jobs to the device.
5. Repeat the test for all workstations that will be sending jobs to the device.
6. The installation process is now complete.

If the test print fails, refer to the Problem Solving chapter for trouble-shooting procedures.

8 OS/2 Peer-to-Peer Networks Warp 4.0 and Warp Connect 3.0

Introduction

This chapter explains how to install the *DC440/432/420* in an OS/2 Peer-to-Peer network environment. The following information is provided:

Information Checklist

Before starting the OS/2 installation procedures, please ensure the following items are available or have been performed:

Item	By
An existing operational OS/2 network is required, these procedures are not designed to install an OS/2 network.	Customer
Obtain and record the following information: • TCP/IP Address: • Gateway Address: • Subnet Mask: • Broadcast Address: • Host Name: *Refer to the Glossary for additional information about the Gateway Address, Subnet Mask and Broadcast Address, if needed.*	Customer
For NetBIOS/NetBEUI or NetBIOS/IP installations, obtain and record the following additional information: • Share Name: • Workgroup Name: • Host Name Remark: • Share Name Comment:	Customer
Test the *DC440/432/420* Copier/Fax to ensure it is installed fully and functioning correctly.	Customer
DC440/432/420 printer and fax drivers.	Xerox

If problems are encountered during the DC440/432/420 installation, refer to the Problem Solving chapter for assistance.

CAUTION: Do not connect the network cable to the *DC440/432/420* until instructed to do so.

OS/2 Installation

Installation Procedure

Information is provided to support the following OS/2 networking configurations:

➢ OS/2 using NetBIOS/NetBEUI

➢ OS/2 using NetBIOS/IP

➢ OS/2 using TCP/IP

There are three stages required to install the *DC440/432/420* in an OS/2 environment:

➢ NetWork Communication Set Up

This requires the *DC440/432/420* to be set up for TCP/IP or NetBIOS.

➢ Workstation Set Up

This requires the workstations on the network to be configured to communicate with the *DC440/432/420*.

➢ Test Print

A test print should be submitted to ensure the *DC440/432/420* has been installed and configured correctly.

Network Communication Set Up

Instructions are provided for the various protocols used for OS/2 networking. Refer to the appropriate instructions for the network:

➢ NetBIOS/NetBEUI and NetBIOS/IP - refer to page *8-4*.

➢ TCP/IP - refer to page *8-7*

NetBIOS/NetBEUI and NetBIOS/IP

NOTE: The *DC440/432/420* can be connected to a Token Ring using the NetBIOS/NetBEUI protocol. If this is a Token Ring installation, the Token Ring card must be installed and configured before performing this procedure. Refer to the *Token Ring* chapter of this guide for additional information.

At the *DC440/432/420*, perform these steps:

HINT: *Xerox CentreWare Internet Services can also be used to configure the DC440/432/420, refer to the Internet Services chapter for instructions.*

1. Connect the device to the network outlet or cable.
2. Access the System Administrator set up screens:
   A. Select the **[Access]** button on the *DC440/432/420* Control Panel.
   B. Using the keypad, enter **[#22222]** (or the current System Administrator password) and then select **[Enter]** on the Touch Screen. Enter the # character before entering 22222.

NOTE: #22222 is the default password and may be changed by the Xerox Service Representative.

3. Access the NetBIOS set up screens:
   A. On the screen, select **[Print Setups].**
   B. Select **[Protocol Setups]**.
   C. Select **[NetBIOS]**.
4. Enable NetBIOS:
   A. Select **[Enablement]**.
   B. Select **[Enabled]**.
5. Select the appropriate interface:
   A. Select **[Interface]**.
   B. From the right half of the screen, select **[Ethernet]** or

[Token Ring] as the appropriate interface for the network.

NOTE: Token Ring will not be available as a selection unless it has been installed and configured. The procedure to install and configure the Token Ring option is located in the *Token Ring* chapter of this guide.

6. Host Name set up:
    A. Select [Host Name], then select [Edit] and use the keyboard on the screen to enter the Host Name for the network (14 characters or fewer).
    B. Select [Save].

7. Share Name set up:
    A. Select [Share Name], then select [Edit] and use the keyboard on the screen to enter the Share Name for the network (14 characters or fewer).
    B. Select [Save].

8. Workgroup Name set up:
    A. Select [Workgroup], then select [Edit] and use the keyboard on the screen to enter the Workgroup Name (or Domain Name).
    B. Select [Save].

9. Host Name Remark set up:
    A. Select [Host Name Remark], then select [Edit] and using the keyboard on the screen to enter the Host Name Remark for the network.
    B. Select [Save].

10. Share Name Comment set up:
    A. Select [Additional Setups].
    B. Select [Share Name Comment], then select [Edit] and use the keyboard to enter the Share Name Comment for the network. Then select [Save].

11. Number of Connections set up:
    A. Select [Number of Connections].
    B. Using the arrows on the screen enter the value for the

number of connections. The value range is 10 to 30.

12. Type of transport set up:

    A.   Select **[Transport]**.

    B.   Select either **[IP]** or **[NetBEUI]**.

NOTE: If IP is selected, then the TCP/IP settings must also be completed. Refer to the TCP/IP instructions on page *8-7*.

NOTE: The Workgroup Name entered must be the same as the Workgroup Name (or Domain Name) that clients are using. The Workgroup Name is the name of the group of workstations to which the printer will broadcast.

The *DC440/432/420* is not a master browser. If the *DC440/432/420* is the only device in the workgroup, it will not show up on workstations unless the printer name is entered. In the Windows NT environment, the device appears on the network as though it is a workstation with a printer connected directly to it. This printer can be shared by users on other workstations. The Share Name is the name of the printer that can be shared.

The Host Name is the name of the workstation to which the printer is connected. The complete name of the printer is a combination of these two names. For example:

13. Select **[Save]**.

14. Select **[Exit]**.

15. The device will reboot and print a Configuration Sheet in approximately 3 minutes.

16. Check the settings on the Configuration Sheet against the information that was entered.

17. Continue with **Workstation Set Up** on page *8-10*.

TCP/IP

At the *DC440/432/420*, perform these steps:

👉 *HINT: Xerox CentreWare Internet Services can also be used to configure the DC440/432/420, refer to the Internet Services chapter for instructions.*

1. Connect the *DC440/432/420* to the network outlet or cable.
2. Access the System Administrator set up screens:
   A. Select the **[Access]** button on the *DC440/432/420* Control Panel.
   B. Using the keypad, enter **[#22222]** (or the current System Administrator password) and then select **[Enter]** on the Touch Screen. Enter the # character before entering 22222.

NOTE: #22222 is the default password and may be changed by the Xerox Service Representative.

3. Access the TCP/IP Network set up screens:
   A. Select **[Print Setups]**.
   B. Select **[Protocol Setups]**.
   C. Select **[TCP/IP]**.
4. IP Address set up:
   A. Select **[IP Address]**, then select **[Edit]** and use the keypad on the screen to enter the IP Address for the *DC440/432/420*. This number is assigned by the System Administrator.
   B. Select **[Save]**.
5. Gateway Address set up:
   A. Select **[Gateway Address]**, then select **[Edit]** and use the keypad on the screen to enter the Gateway Address of the network.
   B. Select **[Save].**

6. Subnet Mask set up:

   A. Select **[Subnet Mask]**, then select **[Edit]**, and use the keypad on the screen to enter the Subnet Mask for the network (the default setting is 255.255.252.0).

   B. Select **[Save]**.

NOTE: The Broadcast Address is set up automatically and cannot be edited.

NOTE: Refer to the *Glossary* for additional information about the Gateway Address, Subnet Mask and Broadcast Address, if needed.

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7. Host Name set up:

   A. Select **[Host Name]**, then select **[Edit]** and use the keyboard on the screen to enter the Host Name for the *DC440/432/420* to use.

   B. Select **[Save]**.

8. Address Resolution set up:

   A. Select **[Address Resolution]**.

   B. Select the type of addressing to be used.**[STATIC]**, **[RARP]**, **[DHCP]** or **[BOOTP]**.

9. Enable TCP/IP:

   A. Select **[Additional Setups]**.

   B. Select **[Enablement]**, then select **[Enable]**.

10. Select the type of Interface being used:

    A. Select **[Interface]**.

    B. Select either **[Ethernet]** or **[Token Ring]**.

11. Select **[Save]** at the TCP/IP screen to save the network settings.

12. Set up the Port 9100 Printing.

    A. Select **[TCP/IP]**, then select **[Additional Setups]**.

    B. Select **[Port 9100]**.

    C. Select **[Enable]**.

    D. Select **[Save]**.

13. Set up the Line Printer Daemon (LPD):

> **NOTE:** The *DC440/432/420* contains a line printer daemon (LPD) which must be enabled if it is to be used. OS/2 clients require the LPD to be running in order to print. The LPD can be running in the client workstation, in a server on the network, or in the *DC440/432/420*. The default LPD Port Number is set to 515.

    A.   Select **[TCP/IP]**, then select **[Additional Setups]**.

    B.   Select **[LPD Enablement]**.

    C.   Select **[Enabled]**.

    D.   Select **[Save]**.

14. Select **[Exit]** on the Protocol set up screen.

15. The device will reboot and print a Configuration Sheet in approximately 3 minutes.

16. Check the settings on the Configuration Sheet against the information that was entered.

17. Continue with **Workstation Set Up** on page *8-10*.

Workstation Set Up

To enable the workstation environment to communicate with the *DC440/432/420* perform the following steps:

1. Using the procedure located in the *Xerox CentreWare documentation,* install the print driver for the workstation.

2. For TCP/IP configurations, the remote print server name or print queue must be set to **[lp]** (lower case).

3. Continue with **Test Print** on page *8-10*.

Test Print

The procedures for test printing vary depending on the protocol used. Refer to the instructions appropriate for the networking environment:

➢ NetBIOS/NetBEUI and NetBIOS/IP - refer to page *8-10*

➢ TCP/IP - refer to page *8-11*

NetBIOS/NetBEUI and NetBIOS/IP

1. Create a printer share and its access permissions (sharing and connecting).

2. Verify that the job prints correctly.

3. Ensure the driver is installed on every workstation that will be sending jobs to the device.

4. Repeat the test for all workstations that will be sending jobs to the device.

5. The installation process is now complete.

If the test print fails, refer to the Problem Solving chapter for trouble-shooting procedures.

TCP/IP

1. From a workstation on the network, perform the following actions:

   A. Create a printer share and its access permissions (sharing and connecting).

   B. Start **LPRPORTD/LPRMON** and ping to the *DC440/432/420*.

   C. Open **EPM** and send a print job to the *DC440/432/420*.

2. Verify that the job prints correctly.

3. Ensure the driver is installed on every workstation that will be sending jobs to the device.

4. Repeat the test for all workstations that will be sending jobs to the device.

5. The installation process is now complete.

If the test print fails, refer to the Problem Solving chapter for trouble-shooting procedures.

9 TCP/IP (LPR Spooling)

Introduction

This chapter explains how to install the *DC440/432/420* on a network utilizing TCP/IP and LPR Spooling. The following information is provided:

Information Checklist

Before starting the TCP/IP installation procedures, please ensure the following items are available or have been performed:

Item	By
An existing operational network utilizing TCP/IP is required, these procedures are not designed to install a network.	Customer
Obtain and record the following information: • TCP/IP Address: • Gateway Address: • Subnet Mask: • Broadcast Address: • Host Name: *Refer to the Glossary for additional information on the Gateway Address, Subnet Mask and Broadcast Address, if needed.*	Customer
Test the *DC440/432/420* Copier/Fax to ensure it is installed fully and functioning correctly.	Customer
DC440/432/420 print and fax drivers.	Xerox
Token Ring PC card (Optional).	Xerox

If problems are encountered during the DC440/432/420 installation, refer to the Problem Solving chapter for assistance.

CAUTION: Do not connect the network cable to the *DC440/432/420* until instructed to do so.

TCP/IP LPR Spooling Installation

Installation Procedure

There are three stages required to install the *DC440/432/420* in a TCP/IP LPR Spooling networking environment:

➢ Network Communication Set Up

This requires the *DC440/432/420* to be set up for TCP/IP.

➢ Workstation Set Up

This requires the workstations in the networking environment to be configured to communicate with the *DC440/432/420*.

➢ Test Print

A print job should be submitted to ensure the *DC440/432/420* has been installed and configured correctly.

Network Communication Set Up

At the *DC440/432/420*, perform these steps:

☞ *HINT: Xerox CentreWare Internet Services can also be used to configure the DC440/432/420, refer to the Internet Services chapter for instructions.*

1. Connect the device to the network outlet or cable.
2. Access the System Administrator set up screens:
   A. Select the **[Access]** button on the *DC440/432/420* Control Panel.
   B. Using the keypad, enter **[#22222]** (or the current System Administrator password) and then select **[Enter]** on the Touch Screen. Enter the # character before entering 22222.

3. Access the TCP/IP Network set up screens:
    A. Select **[Print Setups]**.
    B. Select **[Protocol Setups]**.
    C. Select **[TCP/IP]**.
4. IP Address set up:
    A. Select **[IP Address]**, then select **[Edit]** and use the keypad on the screen to enter the IP Address for the *DC440/432/420*. This number is assigned by the System Administrator.
    A. Select **[Save]**.
5. Gateway Address set up:
    A. Select **[Gateway Address]**, then select **[Edit]** and use the keypad on the screen to enter the Gateway Address of the network.
    B. Select **[Save].**
6. Subnet Mask set up:
    A. Select **[Subnet Mask]**, then select **[Edit]**, and use the keypad on the screen to enter the Subnet Mask for the network (the default setting is 255.255.252.0).
    B. Select **[Save]**.

NOTE: The Broadcast Address is set up automatically and cannot be edited.

NOTE: Refer to the *Glossary* for additional information about the Gateway Address, Subnet Mask and Broadcast Address, if needed.

7. Host Name set up:
    A. Select **[Host Name]**, then select **[Edit]** and use the keyboard on the screen to enter the Host Name for the *DC440/432/420* to use.
    B. Select **[Save]**.

8. Address Resolution set up:

   A. Select **[Address Resolution]**.

   B. Select the type of addressing to be used.**[STATIC]**, **[RARP]**, **[DHCP]** or **[BOOTP]**.

9. Enable TCP/IP:

   A. Select **[Additional Setups]**.

   B. Select **[Enablement]**, then select **[Enable]**.

10. Select the type of Interface being used:

    A. Select **[Interface]**.

    B. Select either **[Ethernet]** or **[Token Ring]**.

11. Select **[Save]** at the TCP/IP screen to save the network settings.

12. Set up the Port 9100 Printing.

    A. Select **[TCP/IP]**, then select **[Additional Setups]**.

    B. Select **[Port 9100]**.

    C. Select **[Enable]**.

    D. Select **[Save]**.

13. Set up the Line Printer Daemon (LPD):

NOTE: The *DC440/432/420* contains a line printer daemon (LPD) which must be enabled if it is to be used. UNIX clients require the LPD to be running in order to print. The LPD can be running in the client workstation, in a server on the network, or in the *DC440/432/420*. The default LPD Port Number is set to 515.

    A. Select **[TCP/IP]**, then select **[Additional Setups]**.

    B. Select **[LPD Enablement]**.

    C. Select **[Enabled]**.

    D. Select **[Save]**.

14. Select **[Exit]** on the Protocol set up screen.

15. The device will reboot and print a Configuration Sheet in approximately 3 minutes.

16. Check the settings on the Configuration Sheet against the information that was entered.

Workstation Set Up

To enable the workstation environment to communicate with the *DC440/432/420* perform the following steps:

1. At the client, install print drivers and map to the printer. Refer to the *Xerox CentreWare documentation*, for additional information.

2. The remote print server name or print queue must be set to **[lp]** (lower case).

3. Continue with **Test Print** on page *9-6*.

Test Print

To ensure the *DC440/432/420* has been installed on the network correctly a test print should be submitted from a client workstation. Perform the following steps:

1. Open a document on a client workstation.

2. Select the *DC440/432/420* as the printer to which the selected document will be sent.

3. Print the document on the device and verify that it prints correctly.

4. Ensure the driver is installed on every workstation that will be sending jobs to the device.

5. Repeat the test for all workstations that will be sending jobs to the device.

6. The installation process is now complete.

If the test print fails, refer to the Problem Solving chapter for trouble-shooting procedures.

10 Token Ring

Introduction

This chapter explains how to install a Token Ring card into the *DC440/432/420* if required for the network configuration. The following information is provided:

Information Checklist

Before starting the Token Ring installation procedures, please ensure the following items are available or have been performed:

Item	By
An existing operational Token Ring network is required, these procedures are not designed to install a network.	Customer
Test the *DC440/432/420* Copier/Fax to ensure it is installed fully and functioning correctly.	Customer

If problems are encountered during the DC440/432/420 installation, refer to the Problem Solving chapter for assistance.

CAUTION: Do not connect the network cable to the *DC440/432/420* **until instructed to do so.**

Token Ring Installation

The Token Ring PCI card is required for TCP/IP over Token Ring. Xerox will provide the Token Ring card that is best for the network configuration.

Installing the Token Ring PCI Card

NOTE: A working Token Ring network is required in order to proceed with the installation. The Token Ring PCI card must be installed by a Xerox representative.

1. Power off the *DC440/432/420*.
2. Connect the Token Ring cable to the port in the Token Ring PCI card.
3. Connect the other end of the cable to the network.
4. Power on the *DC440/432/420*.
5. To ensure that the *DC440/432/420* correctly detects the Token Ring PCI card, power off and power on the *DC440/432/420* again.
6. Continue with **Network Communication Set Up - PCI Card**.

Network Communication Set Up - PCI Card

1. Access the System Administrator set up screens:
    A. Select the **[Access]** button on the *DC440/432/420* Control Panel.
    B. Using the keypad, enter **[#22222]** (or the current System Administrator password) and then select **[Enter]** on the Touch Screen. Enter the # character before entering 22222.

NOTE: #22222 is the factory default password and may be changed by the Xerox Service Representative.

2. Access the Token Ring set up screens:
   A. Select **[Print Setups]**.
   B. Select **[Port Setups]**.
   C. Select **[Token Ring]**.

NOTE: Token Ring will be automatically enabled after the PCI card has been installed.

3. MAC Address set up:
   A. Select **[MAC Address]**.
   B. Select **[Edit]**, and use the keypad on the screen to enter the MAC address.
   C. Select **[Save]**.
4. Source Routing set up:
   A. Select **[Source Routing]**.
   B. Select one of the following options:
      - **[All]**
      - **[Single]**
      - **[None]**
5. Speed set up:
   A. Select **[Speed]**.
   B. Select one of the following options:
      - **[Auto]**
      - **[4 Mbps]**
      - **[16 Mbps]**
6. Select **[Save]**.
7. Select **[Close]** on the Port set up screen. The device will reboot and print a Configuration Sheet in approximately 3 minutes.
8. Check the settings on the Configuration Sheet against the information that was entered.
9. Refer to the appropriate chapter of this guide and complete the *DC440/432/420* network installation.

11 *Parallel Port Environment*

Introduction

This chapter explains how to install *DC440/432/420* in a parallel port environment. The following information is provided:

Information Checklist

Before starting the parallel port installation procedures, please ensure the following items are available or have been performed:

Item	By
IEEE 1284C Parallel Port Cable	Customer
Test the *DC440/432/420* Copier/Fax to ensure it is installed fully and functioning correctly.	Customer
DC440/432/420 print and fax drivers.	Xerox

NOTE: The installation procedures will install the *DC440/432/420* on the parallel port of the host workstation. The procedure is not intended to connect the host workstation to other workstations.

If problems are encountered during the DC440/432/420 installation, refer to the Problem Solving chapter for assistance.

CAUTION: Do not connect the network cable to the *DC440/432/420* until instructed to do so.

Parallel Port Environment Installation

Installation Procedure

The *DC440/432/420* can be connected directly to the parallel port of a host workstation. A document file can be sent from the host workstation via the parallel port to the *DC440/432/420*, where it is printed. Other workstations can be connected via a network to the host workstation. Each workstation has a queue that can hold a number of files.

The document file is sent from the queue in the workstation to the queue in the host workstation and then on to the queue in the *DC440/432/420* to be printed.

There are three stages required to install the *DC440/432/420* on a Parallel Port:

➢ Parallel Port Communication Set Up

    This requires the *DC440/432/420* to be set up for parallel port printing.

➢ Workstation Set Up

    This requires the workstation to be configured to print to the *DC440/432/420*.

➢ Test Print

    A print job should be submitted to ensure the *DC440/432/420* has been installed and configured correctly.

Parallel Port Communication Set Up

This procedure is used to set up the parallel port communication parameters of the *DC440/432/420*. At the *DC440/432/420*, perform these steps:

1. Access the System Administrator set up screens:

   A. Select the **[Access]** button on the *DC440/432/420* Control Panel.

   B. Using the keypad, enter **[#22222]** (or the current System Administrator password) and then select **[Enter]** on the Touch Screen. Enter the # character before entering 22222.

NOTE: #22222 is the default password and may be changed by the Xerox Service Representative.

2. Access the Parallel Port set up screens:

   A. Select **[Print Setups]**.

   B. Select **[Port Setups]**.

   C. Select **[Parallel Port]**. The Parallel Port set up screen will be displayed.

3. Parallel Port enablement set up:

   A. Select **[Enablement]**.

   B. Select **[Enabled]**.

4. Timeout set up:

   A. Select **[Timeout]** and use the Up and Down arrow keys to select a value from 1 to 60 seconds.

   B. Select **[Save]**. (A value from 10 to 20 is recommended.) The Timeout interval is the number of seconds the *DC440/432/420* will wait to receive input before it declares an End of Job.

5. Select **[Close]**. A message will be displayed stating that the device will be reset so that the set up selections will take effect.

6. The device will reboot and print a Configuration Sheet in approximately 3 minutes.

7. Check the settings on the Configuration Sheet against those entered.

8. Connect one end of the parallel cable to the parallel port at the top rear of the *DC440/432/420*.

9. Power off the host workstation.

10. Connect the other end of the parallel cable to the parallel port on the host workstation.

11. Power on the host workstation.

12. Continue with **Workstation Set Up**.

Workstation Set Up

1. Refer to the *Xerox CentreWare documentation*, and install the *DC440/432/420* drivers for the environment on all the workstations that will be sending jobs to the *DC440/432/420*.

2. Continue with **Test Print**.

Test Print

To ensure the *DC440/432/420* has been installed on the network correctly a test print should be submitted from a client workstation. Perform the following steps:

1. Open a document on a workstation.

2. Select the *DC440/432/420* as the printer to which the document will be sent.

3. Print the selected document on the device and verify that it prints correctly.

4. Repeat the test for all workstations that will be sending jobs to the device.

5. The installation process is now complete.

If the test print fails, refer to the Problem Solving chapter for trouble-shooting procedures.

12 Internet Services

Introduction

This chapter explains how to enable and use the Internet Services feature of *DC440/432/420.* The following information is provided:

Information Checklist

Before starting the procedure for enabling the Internet Services feature, please ensure the following items are available or have been performed:

Item	By
An existing operational workstation with TCP/IP Internet or Intranet accessibility is required. These procedures are not intended to install the TCP/IP stack itself.	Customer
Obtain and record the following information: • A Unique IP Address: • Gateway Address: • Subnet Mask: • Broadcast Address: Refer to the *Glossary* for additional information on the Gateway Address, Subnet Mask and Broadcast Address, if needed.	Customer
Test the *DC440/432/420* Copier/Fax to ensure it is installed fully and functioning correctly.	Customer
Xerox CentreWare Internet Services.	Xerox

If problems are encountered during the DC440/432/420 installation, refer to the Problem Solving chapter for assistance.

Enabling CentreWare Internet Services

Introduction

CentreWare Internet Services uses the embedded HTTP Server on the *DC440/432/420* to allow communication with the *DC440/432/420* if you have a Web Browser with access to the Internet or Intranet is available. By entering the IP Address of the *DC440/432/420* as the URL (Universal Resource Locator) in the Browser, direct access to the *DC440/432/420* is available.

NOTE: Microsoft Internet Explorer version 4.x or later, or Netscape Navigator 4.x or later, should be used. Other browsers may work, but could produce unexpected results.

Many of the selections and settings needed to install *DC440/432/420* on a network can be made using Internet Services, eliminating steps that would otherwise need to be performed at the *DC440/432/420* Control Panel.

Before the Internet Services feature can be used for installing *DC440/432/420* on a network it must be enabled. There are two stages required to enable Internet Services:

➢ Network Communication Set Up

   This requires the *DC440/432/420* to be set up for Internet Services.

➢ Test Print

   A test print should be submitted to ensure the *DC440/432/420* has been installed and configured correctly.

Network Communication Set Up

This procedure is used to enable Internet Services at the *DC440/432/420* Control Panel:

1. Connect the device to the network outlet or cable.

2. Access the System Administrator set up screens:

   A. Select the **[Access]** button on the *DC440/432/420* Control Panel.

   B. Using the keypad, enter **[#22222]** (or the current System Administrator password) and then select **[Enter]** on the Touch Screen. Enter the # character before entering 22222.

NOTE: #22222 is the factory default password and may be changed by the Xerox Service Representative.

3. Set up HTTP/IPP:

   A. Select **[Print Setups]**.

   B. Select **[Protocol Setups]**.

   C. Select **[HTTP/IPP]**.

4. Enable HTTP/IPP:

   A. Select **[Enablement]**.

   B. Select **[Enabled]**.

5. HTTP Port Number set up:

   A. Select **[HTTP Port Number]**.

   B. Select the numeric window on the screen, and then use the pop up screen to enter a value.

   C. Select **[Save]**.

NOTE: The default port number is 80 and it is recommended that this should not be changed.

6. Maximum Number of Connections setup:

   A. Select **[Maximum Number of Connections]**.

   B. Select the numeric window on the screen, and then use the pop up screen to enter a value.

C.   Select **[Save]**.

7.   Keep-Alive Timeout set up:

   A.   Select **[Keep-Alive Timeout]**.

   B.   Select the numeric window on the screen, and then use the pop up screen to enter a value.

   C.   Select **[Save]**.

8.   Select **[Save]**.

9.   Access the TCP/IP Network Setups screen:

   A.   Select **[TCP/IP]** from the Protocols Setups screen.

10.   IP Address set up:

   A.   Select **[IP Address]**, then select **[Edit]** and use the keypad on the screen to enter the IP Address for the *DC440/432/420*. This number is assigned by the System Administrator.

   B.   Select **[Save]**.

11.   Gateway Address set up:

   A.   Select **[Gateway Address]**, then select **[Edit]** and use the keypad on the screen to enter the Gateway Address of the network.

   B.   Select **[Save].**

12.   Subnet Mask set up:

   A.   Select **[Subnet Mask]**, then select **[Edit]**, and use the keypad on the screen to enter the Subnet Mask for the network (the default setting is 255.255.252.0).

   B.   Select **[Save]**.

NOTE: The Broadcast Address is set up automatically and cannot be edited.

NOTE: Refer to the *Glossary* for additional information about the Gateway Address, Subnet Mask and Broadcast Address, if needed.

13.   Host Name set up:

   A.   Select **[Host Name]**, then select **[Edit]** and use the keyboard on the screen to enter the Host Name for

the *DC440/432/420* to use.

  B. Select **[Save]**.

14. Address Resolution set up:

  A. Select **[Address Resolution]**.

  B. Select the type of addressing to be used, **[STATIC]**, **[RARP]**, **[DHCP]** or **[BOOTP]**.

NOTE: If RARD, DHCP or BOOTP are selected an IP address does not have to be entered. The IP address will be assigned to the device at boot.

15. Enable TCP/IP:

  A. Select **[Additional Setups]**.

  B. Select **[Enablement]**.

  C. Select **[Enable]**.

16. Select the type of Interface being used:

  A. Select **[Interface]**.

  B. Select either **[Ethernet]** or **[Token Ring]**.

17. Select **[Save]** at the TCP/IP screen to save the protocol settings.

18. Select **[Save]** to save the network settings.

19. Select **[Exit]** on the Protocol Setups screen. The device will reboot and print a configuration sheet in approximately 3 minutes.

20. Check the settings on the Configuration Sheet against the information that was entered.

21. Continue with **Test Print**.

Test Print

To ensure Internet Services has been set up correctly a test print should be submitted from a client workstation. Perform the following steps:

1. Create a print-ready PostScript, PCL, or ASCII text file and save it on a client workstation.

2. From a workstation that is connected to the Internet or an Intranet, use a Browser to access the *DC440/432/420* embedded HTTP Server Home Page.

3. In the URL field, enter the IP Address of the *DC440/432/420*.

   Example: If the IP Address is 192.168.100.100, enter the following in the URL field:

   http://192.168.100.100

4. Verify that files can be sent from the workstation to the *DC440/432/420* and that they print.

   A. At the CentreWare Internet Services homepage for the *DC440/432/420* select **[Services]**.

   B. Select **[Job Submission]** and complete displayed details.

   C. Select the green **[Start]** button displayed at the bottom of the screen.

5. The Internet Services installation process is now complete.

If the test print fails, refer to the Problem Solving chapter for trouble-shooting procedures.

Using Internet Services to Install DC440/432/420

CentreWare Internet Services provides an alternative method of configuring the device settings in order to successfully complete installation on a network.

Instructions are provided for configuring the device for the following network environments.

Refer to the appropriate instructions for the network being used:

➢ Ethernet - page *12-9*

➢ Parallel Port - page *12-10*

➢ Token Ring - page *12-11*

➢ AppleTalk - page *12-12*

➢ Banyan VINES - page *12-15*

➢ NetWare - page *12-18*

➢ Line Printer Daemon - page *12-23*

➢ Microsoft Network - page *12-25*

➢ TCP/IP - page *12-28*

➢ Port 9100 Printing - page *12-31*

➢ SNMP Configuration - page *12-33*

➢ HTTP/IPP - page *12-39*

NOTE: Microsoft Internet Explorer version 4.x or later, or Netscape Navigator 4.x or later, should be used. Other browsers may work, but could produce unexpected results.

Ethernet

Use these instructions to enable Ethernet using CentreWare Internet Services:

To complete the installation of the *DC440/432/420*, perform these steps:

1. At a client workstation on the network, launch the Internet Browser.

2. In the URL field, enter   followed by the IP Address of the *DC440/432/420*. Then select the **[Enter]** key.

   Example: If the IP Address is 192.168.100.100, enter the following in the URL field:

   http://192.168.100.100

3. At the CentreWare Internet Services Home Page for the *DC440/432/420*, select the **[Properties]** link.

4. Select the plus symbol **[+]** to the left of the **Connectivity** folder in the Properties frame, and then select the **[+]** symbol to the left of the **Interfaces** folder.

5. In the Properties frame, within the Physical Connections folder, select **[Ethernet]**.

6. Enter the appropriate **[Speed (Mbps)]**.

7. Apply the new settings and reset the device:

   A. Select **[Apply New Settings]**. The settings will be sent to the device.

   B. When prompted, enter **[admin]** (lower case) into the Name field and **[22222]** into the Password field and select **[OK]**.

   C. A dialog box indicating the properties have been successfully modified will be displayed.

   D. Select **[OK]**.

   E. Select the **[Status]** tab.

   F. Select **[Reboot Machine]** to enable the selections to take effect.

Parallel Port

Use these instructions to enable Parallel Port Printing using CentreWare Internet Services:

To complete the installation of the *DC440/432/420*, perform these steps:

1. At a client workstation on the network, launch the Internet Browser.

2. In the URL field, enter   followed by the IP Address of the *DC440/432/420*. Then select the **[Enter]** key.

    Example: If the IP Address is 192.168.100.100, enter the following in the URL field:

    http://192.168.100.100

3. At the CentreWare Internet Services Home Page for the *DC440/432/420*, select the **[Properties]** link.

4. Select the plus symbol **[+]** to the left of the **Connectivity** folder in the Properties frame, and then select the **[+]** symbol to the left of the **Interfaces** folder.

5. In the Properties frame, within the Physical Connections folder, select **[Parallel Port]**.

6. Select the checkbox to enable the device's parallel port.

7. Enter the **[Timeout]** parameter.

8. Apply the new settings and reset the device:

    A. Select **[Apply New Settings]**. The settings will be sent to the device.

    B. When prompted, enter **[admin]** (lower case) into the Name field and **[22222]** into the Password field and select **[OK]**.

    C. A dialog box indicating the properties have been successfully modified will be displayed.

    D. Select **[OK]**.

    E. Select the **[Status]** tab.

    F. Select **[Reboot Machine]** to enable the selections to take effect.

Token Ring

Use these instructions to enable Token Ring using CentreWare Internet Services:

NOTE: You must have a working Token Ring network in order to proceed with the installation. A Token Ring PCI card must be installed by a Xerox representative.

To complete the installation of the *DC440/432/420*, perform these steps:

1. At a client workstation on the network, launch the Internet Browser.
2. In the URL field, enter   followed by the IP Address of the *DC440/432/420*. Then select the **[Enter]** key.

    Example: If the IP Address is 192.168.100.100, enter the following in the URL field:

      http://192.168.100.100

3. At the CentreWare Internet Services Home Page for the *DC440/432/420*, select the **[Properties]** link.
4. Select the plus symbol **[+]** to the left of the **Connectivity** folder in the Properties frame, and then select the **[+]** symbol to the left of the **Interfaces** folder.
5. In the Properties frame, within the Physical Connections folder, select **[Token Ring]**.
6. Select the required **[Speed (Mbps)]**.
7. Enter the **[Mac Address]**.
8. Select the required **[Source Routing]**.
9. Apply the new settings and reset the device:
    A. Select **[Apply New Settings]**. The settings will be sent to the device.
    B. When prompted, enter **[admin]** (lower case) into the Name field and **[22222]** into the Password field and select **[OK]**.
    C. A dialog box indicating the properties have been successfully modified will be displayed.

D. Select **[OK]**.

E. Select the **[Status]** tab.

F. Select **[Reboot Machine]** to enable the selections to take effect.

AppleTalk

Use these instructions to install device on an AppleTalk network using CentreWare Internet Services.

Installation Procedure

There are two stages required to install the device on an AppleTalk network using CentreWare Internet Services:

➢ Configure the *DC440/432/420*

> This procedure explains how to use CentreWare Internet Services to configure the device.

➢ Test Print

> A print job should be submitted to ensure the device has been installed and configured correctly.

Configure the DC440/432/420

To complete the installation of the *DC440/432/420*, perform these steps:

1. At a client workstation on the network, launch the Internet Browser.

2. In the URL field, enter   followed by the IP Address of the DC440/432/420. Then select the **[Enter]** key.

> Example: If the IP Address is 192.168.100.100, enter the following in the URL field:
>
> > http://192.168.100.100

3. At the CentreWare Internet Services Home Page for the *DC440/432/420*, select the **[Properties]** link.

4. Select the plus symbol **[+]** to the left of the **Connectivity** folder in the Properties frame, and then select the **[+]** symbol to the left of the **Protocols** folder.

5. In the Properties frame, within the Protocols folder, select **[AppleTalk]**.

6. Make the following selections and settings in the AppleTalk Physical Configuration section of the Protocols frame:

    A. Select the checkbox to enable AppleTalk.

    B. In the Physical Interface field, **Ethernet** will be the default setting.

    C. Enter the **[Printer Name]**. Use a meaningful name, such as the location of the device.

7. Apply the new settings and reset the device:

    A. Select **[Apply New Settings]**. The settings will be sent to the device.

    B. When prompted, enter **[admin]** (lower case) into the Name field and **[22222]** into the Password field and select **[OK]**.

    C. A dialog box indicating the properties have been successfully modified will be displayed.

    D. Select **[OK]**.

    E. Select the **[Status]** tab.

    F. Select **[Reboot Machine]** to enable the selections to take effect.

    G. Exit CentreWare Internet Services.

8. Using the procedure located in the *Xerox CentreWare documentation*, install the driver for the workstation.

9. Continue with **Test Print** on page *12-14*.

Test Print

To ensure the device has been installed on the network correctly a test print should be submitted from a client workstation. Perform the following steps:

1. Open a document on a client workstation.
2. Select the *DC440/432/420* in the Chooser as the printer to which the selected document will be sent.
3. Print the document on the device and verify that it prints correctly.
4. Ensure the driver is installed on every workstation that will be sending jobs to the *DC440/432/420*.
5. Repeat the test for all workstations that will be sending jobs to the *DC440/432/420*.
6. The installation process is now complete.

If the test print fails, refer to the Problem Solving chapter for trouble-shooting procedures.

Banyan VINES

Use these instructions to install device on a Banyan VINES network using CentreWare Internet Services.

Installation Procedure

There are two stages required to install the device on a Banyan VINES network using CentreWare Internet Services:

➢ Configure the *DC440/432/420*

> This procedure explains how to use CentreWare Internet Services to configure the device.

➢ Test Print

> A print job should be submitted to ensure the device has been installed and configured correctly.

Configure the DC440/432/420

To complete the installation of the device, perform these steps:

1. At a client workstation on the network, launch the Internet Browser.
2. In the URL field, enter   followed by the IP Address of the device. Then select the **[Enter]** key.

   > Example: If the IP Address is 192.168.100.100, enter the following in the URL field:
   >
   > > http://192.168.100.100

3. At the CentreWare Internet Services Home Page for the device, select the **[Properties]** link.
4. Select the plus symbol **[+]** to the left of the **Connectivity** folder in the **Properties** frame and then select the **[+]** symbol to the left of the **Protocols** folder.
5. In the Properties frame, within the Protocols folder, select **[Banyan VINES]**.
6. Make the following selections and settings in the Banyan

VINES Physical Configuration section of the Protocols frame:

   A. Select the checkbox to enable Banyan VINES.

   B. In the Physical Interface field, **Ethernet** will be the default setting.

   C. Enter the **[User Name]**.

   D. Enter the **[Password]**.

   E. Confirm the password in the **[Confirm Password]** field.

   F. Enter the **[Print Service Name]**.

7. Apply the new settings and reset the device:

   A. Select **[Apply New Settings]**. The settings will be sent to the device.

   B. When prompted, enter **[admin]** (lower case) into the Name field and **[22222]** into the Password field and select **[OK]**.

   C. A dialog box indicating the properties have been successfully modified will be displayed.

   D. Select **[OK]**.

   E. Select the **[Status]** tab.

   F. Select **[Reboot Machine]** to enable the selections to take effect.

   G. Exit CentreWare Internet Services.

8. Using the procedure located in the *Xerox CentreWare documentation*, install the driver for the workstation.

9. Continue with **Test Print** on page *12-17*.

Test Print

To ensure the device has been installed on the network correctly a test print should be submitted from a client workstation. Perform the following steps:

1. Open a document on a client workstation.
2. Select the device as the printer to which the selected document will be sent.
3. Print the document on the device and verify that it prints correctly.
4. Ensure the driver is installed on every workstation that will be sending jobs to the device.
5. Repeat the test for all workstations that will be sending jobs to the device.
6. The installation process is now complete.

If the test print fails, refer to the Problem Solving chapter for trouble-shooting procedures.

NetWare

Use these instructions to install *DC440/432/420* on a NetWare network using CentreWare Internet Services.

Installation Procedure

There are three stages required to install the *DC440/432/420* on a NetWare network using CentreWare Internet Services:

➢ PCONSOLE or NWADMIN Set Up

> This procedure is used to set up the network using NetWare's PCONSOLE or NWADMIN utility.

➢ Configure the *DC440/432/420*

> This procedure explains how to use CentreWare Internet Services to configure the *DC440/432/420*.

➢ Test Print

> A print job should be submitted to ensure the device has been installed and configured correctly.

PCONSOLE or NWADMIN Set Up

If this is a Token Ring installation, the Token Ring card must be installed and configured before performing this procedure.

Refer to the Token Ring chapter of this guide for additional information.

If running NLSP, be sure that RIP/SAP compatibility is configured on the same segment as the *DC440/432/420*.

Using the PCONSOLE or NWADMIN utility, perform the following steps:

1. Login to File Server as Supervisor or equivalent.
2. Create the Print Queue.
3. Create Print Server Name and Password.
4. Define the printer as *Defined Elsewhere* or *Remote/Other Unknown*.

5. Verify the Frame Type.

6. Verify the Poll Interval.

7. Obtain and record the following information from the set up just completed. This information is needed to configure the device with CentreWare Internet Services:

    File Server Name

    Print Server Name

    Print Server Password

    Frame Type

    Poll Interval

8. Continue with **Configure the DC440/432/420** on page *12-19*.

Configure the DC440/432/420

To complete the installation of the *DC440/432/420*, perform these steps:

1. At a client workstation on the network, launch the Internet Browser.

2. In the URL field, enter   followed by the IP Address of the *DC440/432/420*. Then select the **[Enter]** key.

    Example: If the IP Address is 192.168.100.100, enter the following in the URL field:

    http://192.168.100.100

3. At the CentreWare Internet Services Home Page for the device, select the **[Properties]** link.

4. Select the plus symbol **[+]** to the left of the **Connectivity** folder in the **Properties** frame and then select the **[+]** symbol to the left of the Protocols folder.

5. In the Properties frame, within the Protocols folder, select **[Netware]**.

6. Make the following selections and settings in the **General** section of the **Protocols** frame:

    A. Select the checkbox to enable NetWare.

B. In the Physical Connection field, **Ethernet** will be the default setting. The option to change this setting will be available only if the **Token Ring** option has been installed. Select the appropriate interface.

C. Select the **Frame Type**. Choose from:

   [IEEE_802.3]

   [Ethernet II]

   [IEEE_802.2]

   [IEEE_802.5] (Token Ring)

   [Token Ring Snap]

D. Set the **[Poll Interval]**.
   This value determines how often the *DC440/432/420* polls the NetWare file server to check if there is a file at the server to be printed or faxed. Enter a value from 1 to 240 seconds.

E. Enter the **[Print Server]** name. Use a meaningful name, such as the location of the device.

F. Enter the print server **[Password]**.

G. Confirm the password in the **[Confirm Password]** field.

7. Set the Service Advertising Protocol (SAP):

A. Make the following selections and settings in the Netware **Service Advertising Protocol (SAP)** section of the **Protocols** frame.

   Select the checkbox to enable SAP.

   Enter the **[SAP Interval]**.

8. For a Bindery installation make the following selections and settings in the Netware **Bindery Settings** section of the **Protocols** frame.

A. Enter the **[File Server 1:]** name.
   If using NetWare 3.x, there can be as many as four separate entries, **[File Server 1:]**, **[File Server 2:]**, **[File Server 3:]** and **[File Server 4:]**.

NOTE: If using NetWare 4.x or 5.0, delete any characters currently in the **File Server Name** fields and enter a dash **[-]**.

9. For a NDS installation make the following selections and settings in the Netware **NDS Settings** section of the **Protocols** frame:

   A. Enter the NDS **[Tree]**.

   B. Enter the NDS **[Context]**.

10. Apply the new settings and reset the device:

   A. Select **[Apply New Settings]**. The settings will be sent to the device.

   B. When prompted, enter **[admin]** (lower case) into the Name field and **[22222]** into the Password field and select **[OK]**.

   C. A dialog box indicating the properties have been successfully modified will be displayed.

   D. Select **[OK]**.

   E. Select the **[Status]** tab.

11. Select **[Reboot Machine]** to enable the selections to take effect.

12. Exit CentreWare Internet Services.

13. Install the device printer driver at the workstation using the procedure located in the *Xerox CentreWare documentation*.

14. Continue with **Test Print** on page *12-22*

Test Print

To ensure the device has been installed on the network correctly a test print should be submitted from a client workstation. Perform the following steps:

1. Open a document on a client workstation.
2. Select the device as the printer to which the selected document will be sent.
3. Print the document on the device and verify that it prints correctly.
4. Ensure the driver is installed on every workstation that will be sending jobs to the device.
5. Repeat the test for all workstations that will be sending jobs to the device.
6. The installation process is now complete.

If the test print fails, refer to the Problem Solving chapter for trouble-shooting procedures.

Line Printer Daemon (LPR/LPD)

Use these instructions to install the device on a LPR/LPD network using CentreWare Internet Services.

Installation Procedure

There are two stages required to install the device on a LPR/LPD network using CentreWare Internet Services:

➤ Configure the *DC440/432/420*

> This procedure explains how to use CentreWare Internet Services to configure the device.

➤ Test Print

> A print job should be submitted to ensure the device has been installed and configured correctly.

Configure the DC440/432/420

To complete the installation of the device, perform these steps:

1. At a client workstation on the network, launch the Internet Browser.
2. In the URL field, enter   followed by the IP Address of the *DC440/432/420*. Then select the **[Enter]** key.

    > Example: If the IP Address is 192.168.100.100, enter the following in the URL field:
    >> http://192.168.100.100

3. At the CentreWare Internet Services Home Page for the device, select the **[Properties]** link.
4. Select the plus symbol **[+]** to the left of the **Connectivity** folder in the **Properties** frame and then select the **[+]** symbol to the left of the **Protocols** folder.
5. In the Properties frame, within the Protocols folder, select **[Line Printer Daemon]**.

6. Select the checkbox to enable the Line Printer Daemon protocol.

7. Apply the new settings and reset the device:

   A. Select **[Apply New Settings]**. The settings will be sent to the device.

   B. When prompted, enter **[admin]** (lower case) into the Name field and **[22222]** into the Password field and select **[OK]**.

   C. A dialog box indicating the properties have been successfully modified will be displayed.

   D. Select **[OK]**.

   E. Select the **[Status]** tab.

   F. Select **[Reboot Machine]** to enable the selections to take effect.

   G. Exit CentreWare Internet Services.

8. Using the procedure located in the *Xerox CentreWare documentation*, install the driver for the workstation.

9. Continue with **Test Print** on page *12-27*.

Test Print

To ensure the device has been installed on the network correctly a test print should be submitted from a client workstation. Perform the following steps:

1. Open a document on a client workstation.

2. Select the device as the printer to which the selected document will be sent.

3. Print the document on the device and verify that it prints correctly.

4. Ensure that the driver is installed on every workstation that will be sending jobs to the device.

5. Repeat the test for all workstations that will be sending jobs to the device.

6. The installation process is now complete.

If the test print fails, refer to the Problem Solving chapter for trouble-shooting procedures.

Microsoft Network

Use these instructions to install the device on a Microsoft network using CentreWare Internet Services.

Installation Procedure

There are two stages required to install the device on a Microsoft network using CentreWare Internet Services:

➢ Configure the *DC440/432/420*

This procedure explains how to use CentreWare Internet Services to configure the device.

➢ Test Print

A print job should be submitted to ensure the device has been installed and configured correctly.

Configure the DC440/432/420

To complete the installation of the device, perform these steps:

1. At a client workstation on the network, launch the Internet Browser.
2. In the URL field, enter   followed by the IP Address of the *DC440/432/420*. Then select the **[Enter]** key.

    Example: If the IP Address is 192.168.100.100, enter the following in the URL field:

    http://192.168.100.100

3. At the CentreWare Internet Services Home Page for the device, select the **[Properties]** link.
4. Select the plus symbol **[+]** to the left of the **Connectivity** folder in the **Properties** frame and then select the **[+]** symbol to the left of the **Protocols** folder.
5. In the Properties frame, within the Protocols folder, select **[Microsoft Network]**.

6. Select the checkbox to enable Microsoft Networking.

7. Select the type of **[Transport]**. This will either be TCP/IP, NetBEUI.

NOTE: If the transport selected is TCP/IP the **Physical Connections** settings will be Read Only and reflect the Physical Connection setting in the TCP/IP set up. Refer to page *12-28*

8. In the **Physical Connection** field, **Ethernet** will be the default setting. The option to change this setting will be available only if the **Token Ring** option has been installed. Select the appropriate interface.

9. Enter the **[Maximum Connections]** allowed.

10. Enter the **[Workgroup]** Name.

11. Enter the **[Host Name]**.

12. Enter the **[Host Name Comment]**.

13. Enter the **[Share Name]**.

14. Enter the **[Share Name Comment]**.

15. Apply the new settings and reset the device:

   A. Select **[Apply New Settings]**. The settings will be sent to the device.

   B. When prompted, enter **[admin]** (lower case) into the Name field and **[22222]** into the Password field and select **[OK]**.

   C. A dialog box indicating the properties have been successfully modified will be displayed.

   D. Select **[OK]**.

   E. Select the **[Status]** tab.

   F. Select **[Reboot Machine]** to enable the selections to take effect.

   G. Exit CentreWare Internet Services.

16. Using the procedure located in the *Xerox CentreWare documentation*, install the driver for the workstation.

17. Continue with **Test Print** on page *12-27*.

Test Print

To ensure the device has been installed on the network correctly a test print should be submitted from a client workstation. Perform the following steps:

1. Open a document on a client workstation.

2. Select the device as the printer to which the selected document will be sent.

3. Print the document on the device and verify that it prints correctly.

4. Ensure the driver is installed on every workstation that will be sending jobs to the device.

5. Repeat the test for all workstations that will be sending jobs to the device.

6. The installation process is now complete.

TCP/IP

Use these instructions to install the device on a TCP/IP network using CentreWare Internet Services.

Installation Procedure

There are two stages required to install the device on a TCP/IP network using CentreWare Internet Services:

➢ Configure the *DC440/432/420*

> This procedure explains how to use CentreWare Internet Services to configure the device.

➢ Test Print

> A print job should be submitted to ensure the device has been installed and configured correctly.

Configure the DC440/432/420

NOTE: The TCP/IP settings for the device will have been set up when completing the *Enabling CentreWare Internet* Services section.

To complete the installation of the device, perform these steps:

1. At a client workstation on the network, launch the Internet Browser.
2. In the URL field, enter   followed by the IP Address of the *DC440/432/420*. Then select the **[Enter]** key.

   > Example: If the IP Address is 192.168.100.100, enter the following in the URL field:
   >
   > > http://192.168.100.100

3. At the CentreWare Internet Services Home Page for the *DC440/432/420*, select the **[Properties]** link.
4. Select the plus symbol (+) to the left of the **[Connectivity]**

folder in the **Properties** frame, and then select the plus symbol to the left of the **Protocols** folder.

5. Select **[TCP/IP]** and check the **Protocol Configuration** details are correct. If any of the details are incorrect then enter the correct information.

6. In the **Physical Connection** field, **Ethernet** will be the default setting. The option to change this setting will be available only if the **Token Ring** option has been installed. Select the appropriate interface.

7. Enter the **[Host Name]**.

8. Enter the **[Address Resolution Mode]**.

9. Enter the **[IP Address]**.

10. Enter the **[Subnet Mask]**.

11. Enter the **[Gateway Address]**.

12. Apply the new settings and reset the device:

    A. Select **[Apply New Settings]**. The settings will be sent to the device.

    B. When prompted, enter **[admin]** (lower case) into the Name field and **[22222]** into the Password field and select **[OK]**.

    C. A dialog box indicating the properties have been successfully modified will be displayed.

    D. Select **[OK]**.

    E. Select the **[Status]** tab.

    F. Select **[Reboot Machine]** to enable the selections to take effect.

    G. Exit CentreWare Internet Services.

13. Using the procedure located in the *Xerox CentreWare documentation*, install the driver for the workstation.

14. Continue with **Test Print** on page *12-30*

Test Print

To ensure the device has been installed on the network correctly a test print should be submitted from a client workstation. Perform the following steps:

1. Open a document on a client workstation.
2. Select the device as the printer to which the selected document will be sent.
3. Print the document on the device and verify that it prints correctly.
4. Ensure the driver is installed on every workstation that will be sending jobs to the device.
5. Repeat the test for all workstations that will be sending jobs to the device.
6. The installation process is now complete.

If the test print fails, refer to the Problem Solving chapter for trouble-shooting procedures.

Port 9100 Printing

Use these instructions to install device on an LPD network using CentreWare Internet Services.

Installation Procedure

There are two stages required to install the device on an Port 9100 printing network using CentreWare Internet Services:

➢ Configure the *DC440/432/420*

This procedure explains how to use CentreWare Internet Services to configure the device.

➢ Test Print

A print job should be submitted to ensure the device has been installed and configured correctly.

Configure the DC440/432/420

To complete the installation of the *DC440/432/420*, perform these steps:

1. At a client workstation on the network, launch the Internet Browser.
2. In the URL field, enter   followed by the IP Address of the *DC440/432/420*. Then select the **[Enter]** key.

   Example: If the IP Address is 192.168.100.100, enter the following in the URL field:

   http://192.168.100.100

3. At the CentreWare Internet Services Home Page for the *DC440/432/420*, select the **[Properties]** link.
4. Select the plus symbol **[+]** to the left of the **Connectivity** folder in the **Properties** frame, and then select the **[+]** symbol to the left of the **Protocols** folder.
5. Select **[Port 9100 Printing]** and then select the checkbox to enable Port 9100 Printing.

6. Apply the new settings and reset the device:
    A. Select **[Apply New Settings]**. The settings will be sent to the device.
    B. When prompted, enter **[admin]** (lower case) into the Name field and **[22222]** into the Password field and select **[OK]**.
    C. A dialog box indicating the properties have been successfully modified will be displayed.
    D. Select **[OK]**.
    E. Select the **[Status]** tab.
    F. Select **[Reboot Machine]** to enable the selections to take effect.
    G. Exit CentreWare Internet Services.
7. Using the procedure located in the *Xerox CentreWare documentation*, install the driver for the workstation.

If using a Windows environment, refer to the Microsoft Networking chapter for instructions on workstation set up.

If using an OS/2 Network environment, refer to the OS/2 chapter for workstation set up instructions.

8. Continue with **Test Print** on page *12-32*

Test Print

To ensure the device has been installed on the network correctly a test print should be submitted from a client workstation. Perform the following steps:

1. Open a document on a client workstation.
2. Select the device as the printer to which the selected document will be sent.
3. Print the document on the device and verify that it prints correctly.
4. Make sure that the driver is installed on every workstation that will be sending jobs to the device.
5. Repeat the test for all workstations that will be sending jobs to the device.
6. The installation process is now complete.

If the test print fails, refer to the Problem Solving chapter for trouble-shooting procedures.

SNMP Configuration

Use these instructions to install SNMP using CentreWare Internet Services.

➢ Installing and configuring SNMP - page *12-33*

➢ Add new IP Trap destination addresses - page *12-35*

➢ Add new IPX Trap destination addresses - page *12-36*

➢ Edit existing Trap destination addresses - page *12-37*

Installing and configuring SNMP

To complete the installation of the device, perform these steps:

1. At a client workstation on the network, launch the Internet Browser.
2. In the URL field, enter   followed by the IP Address of the *DC440/432/420*. Then select the **[Enter]** key.

    Example: If the IP Address is 192.168.100.100, enter the following in the URL field:

        http://192.168.100.100

3. At the CentreWare Internet Services Home Page for the *DC440/432/420*, select the **[Properties]** link.
4. Select the plus symbol (+) to the left of the **[Connectivity]** folder in the **Properties** frame, and then select the plus symbol to the left of the **Protocols** folder.
5. Select **[SNMP Configuration]**.
6. Select **[Edit SNMP Properties]** in the SNMP properties section to set change the SNMP configuration.
7. Make the following entries within the **Community Names** section of the **SNMP configuration** frame.

    A.   Enter the **[GET Community Name]**.

B. Enter the **[SET Community Name]**.

NOTE: Changes made to the GET or SET Community Names for this machine will require corresponding changes to each application communicating through SNMP with this machine.

8. Within the **Default Trap Community Name** section of the **SNMP configuration** frame, enter the **[TRAP Community Name]**.

NOTE: The default TRAP Community Name is the TRAP Community Name initially used by new Destination Addresses receiving SNMP event notification. This may be changed when a new Destination Address is added to the list to receive notification of events.
The Default Destination TRAP Community Name may also be used by third-party applications that do not wish to define a unique name for receiving event notifications.

9. Within the **Authentication Failure Generic Traps** section of the **SNMP Configuration** frame select the checkbox to enable Authentication Failure Generic Traps.

NOTE: When Authentication Failure Generic is enabled, this machine delivers traps of this type to Destination Address requesting this event notification.

10. Apply the new settings and reset the device:
   A. Select **[Apply New Settings]**. The settings will be sent to the device.
   B. When prompted, enter **[admin]** (lower case) into the Name field and **[22222]** into the Password field and select **[OK]**.
   C. A dialog box indicating the properties have been successfully modified will be displayed.
   D. Select **[OK]**.
   E. Select the **[Status]** tab.
   F. Select **[Reboot Machine]** to enable the selections to take effect.

G. Exit CentreWare Internet Services.

Add a new IP Trap Destination Address

To add a new IP Trap Destination address, perform these steps:

1. At a client workstation on the network, launch the Internet Browser.

2. In the URL field, enter   followed by the IP Address of the *DC440/432/420*. Then select the **[Enter]** key.

    Example: If the IP Address is 192.168.100.100, enter the following in the URL field:

    http://192.168.100.100

3. At the CentreWare Internet Services Home Page for the *DC440/432/420*, select the **[Properties]** link.

4. Select the plus symbol (+) to the left of the **[Connectivity]** folder in the **Properties** frame, and then select the plus symbol to the left of the **Protocols** folder.

5. Select **[SNMP Configuration]**.

6. Select **[Add IP Address]** in the **SNMP Configuration** frame.

7. Within the **Add IP Trap Destination Address** section of the **SNMP Configuration** frame, make the following selections:

    A. Enter the **[IP Address]**.

    B. Enter the **[UPD Port Number]**.

    C. Select the **[SNMP Version]** by selecting the correct checkbox.

8. Within the **Traps** section of the **SNMP Configuration** frame, make the following selections:

    A. Enter the **[TRAP Community Name]**.

    B. Select the corresponding checkbox for the **[Traps to be Received]** that choices are: **Printer Traps**, **Job Monitoring Traps**, **Cold Start Generic Traps**, **Warm Start Generic Traps** and **Authentication Failure**

Generic Traps (Enable)

9. Apply the new settings and reset the device:

   A. Select **[Apply New Settings]**. The settings will be sent to the device.

   B. When prompted, enter **[admin]** (lower case) into the Name field and **[22222]** into the Password field and select **[OK]**.

   C. A dialog box indicating the properties have been successfully modified will be displayed.

   D. Select **[OK]**.

   E. Select the **[Status]** tab.

   F. Select **[Reboot Machine]** to enable the selections to take effect.

   G. Exit CentreWare Internet Services.

Add a new IPX Trap Destination Address

To add a new IPX Trap Destination address, perform these steps:

1. At a client workstation on the network, launch the Internet Browser.

2. In the URL field, enter   followed by the IP Address of the *DC440/432/420*. Then select the **[Enter]** key.

   Example: If the IP Address is 192.168.100.100, enter the following in the URL field:

   http://192.168.100.100

3. At the CentreWare Internet Services Home Page for the *DC440/432/420*, select the **[Properties]** link.

4. Select the plus symbol (+) to the left of the **[Connectivity]** folder in the **Properties** frame, and then select the plus symbol to the left of the **Protocols** folder.

5. Select **[SNMP Configuration]**.

6. Select **[Add IPX Address]** in the **SNMP Configuration** frame.

7. Within the **Add IPX Trap Destination Address** section of

the **SNMP Configuration** frame, make the following selections:

A. Enter the **[IPX External Network Number]**.

B. Enter the **[Physical MAC Address]**.

C. Enter the **[IPX Socket Number]**.

D. Select the **[SNMP Version]** by selecting the correct checkbox.

8. Within the **Traps** section of the **SNMP Configuration** frame, make the following selections:

A. Enter the **[TRAP Community Name]**.

B. Select the corresponding checkbox for the [**Traps to be Received]** the choices are: **Printer Traps**, **Job Monitoring Traps**, **Cold Start Generic Traps**, **Warm Start Generic Traps** and **Authentication Failure Generic Traps (Enable)**

9. Apply the new settings and reset the device:

A. Select **[Apply New Settings]**. The settings will be sent to the device.

B. When prompted, enter **[admin]** (lower case) into the Name field and **[22222]** into the Password field and select **[OK]**.

C. A dialog box indicating the properties have been successfully modified will be displayed.

D. Select **[OK]**.

E. Select the **[Status]** tab.

F. Select **[Reboot Machine]** to enable the selections to take effect.

G. Exit CentreWare Internet Services.

Edit an Existing Trap Address

To add a new IP Trap Destination address, perform these steps:

1. At a client workstation on the network, launch the Internet Browser.

2. In the URL field, enter   followed by the IP

Address of the *DC440/432/420*. Then select the **[Enter]** key.

> Example: If the IP Address is 192.168.100.100, enter the following in the URL field:
>
>> http://192.168.100.100

3. At the CentreWare Internet Services Home Page for the *DC440/432/420*, select the **[Properties]** link.

4. Select the plus symbol (+) to the left of the **[Connectivity]** folder in the **Properties** frame, and then select the plus symbol to the left of the **Protocols** folder.

5. Select **[SNMP Configuration]**.

6. Select the checkbox of the Trap address to be edited in the **Trap Destination Address** section of the **SNMP Configuration frame**

7. Select **[Edit]** in the **SNMP Configuration** frame.

8. Within the **Edit Traps** section of the **SNMP Configuration** frame edit the corresponding checkbox for the [**Traps to be Received**] that choices are: **Printer Traps**, **Job Monitoring Traps**, **Cold Start Generic Traps**, **Warm Start Generic Traps** and **Authentication Failure Generic Traps (Enable)**

9. Apply the new settings and reset the device:

   A. Select **[Apply New Settings]**. The settings will be sent to the device.

   B. When prompted, enter **[admin]** (lower case) into the Name field and **[22222]** into the Password field and select **[OK]**.

   C. A dialog box indicating the properties have been successfully modified will be displayed.

   D. Select **[OK]**.

   E. Select the **[Status]** tab.

   F. Select **[Reboot Machine]** to enable the selections to take effect.

   G. Exit CentreWare Internet Services.

HTTP/IPP

Use these instructions to set up HTTP/IPP using CentreWare Internet Services.

NOTE: The HTTP settings for the device will have been set up when completing the *Enabling CentreWare Internet* Services section.

To complete the installation of the device, perform these steps:

1. At a client workstation on the network, launch the Internet Browser.

2. In the URL field, enter _____ followed by the IP Address of the *DC440/432/420*. Then select the **[Enter]** key.

    Example: If the IP Address is 192.168.100.100, enter the following in the URL field:

    http://192.168.100.100

3. At the CentreWare Internet Services Home Page for the *DC440/432/420*, select the **[Properties]** link.

4. Select the plus symbol (+) to the left of the **[Connectivity]** folder in the **Properties** frame, and then select the plus symbol to the left of the **HTTP** folder.

5. Select **[Configuration]** and check the **HTTP Configuration** details are correct. If any of the details are incorrect then enter the correct information.

6. Select the checkbox to enable HTTP.

7. Enter the **[Keep Alive Timeout]**.

8. Enter the **[Maximum Connections]**.

9. Apply the new settings and reset the device:

    A. Select **[Apply New Settings]**. The settings will be sent to the device.

    B. When prompted, enter **[admin]** (lower case) into the Name field and **[22222]** into the Password field and select **[OK]**.

    C. A Reconfiguration Successful message will be

displayed.

    D. Exit CentreWare Internet Services.

10. Using the procedure located in the *Xerox CentreWare documentation*, install the driver for the workstation.

11. Continue with **Test Print** on page *12-40*

Test Print

To ensure Internet Services has been set up correctly a test print should be submitted from a client workstation. Perform the following steps:

1. Create a print-ready PostScript, PCL, or ASCII text file and save it on a client workstation.

2. From a workstation that is connected to the Internet or an Intranet, use a Browser to access the *DC440/432/420* embedded HTTP Server Home Page.

3. In the URL field, enter the IP Address of the *DC440/432/ 420*.

    Example: If the IP Address is 192.168.100.100, enter the following in the URL field:

    http://192.168.100.100

4. Verify that files can be sent from the workstation to the *DC440/432/420* and that they print.

    A. At the CentreWare Internet Services homepage for the *DC440/432/420* select **[Services]**.

    B. Select **[Job Submission]** and complete displayed details.

    C. Select the green **[Start]** button displayed at the bottom of the screen.

5. The Internet Services installation process is now complete.

If the test print fails, refer to the Problem Solving chapter for trouble-shooting procedures.

13 Scanning Services

Introduction

This chapter explains how to set up Scanning Services in the supported environments. The following information is provided:

Scanning Overview

Xerox brings the versatility of network scanning to the workstation. By combining the power of the Xerox Document Centre 440/432/420, CentreWare Internet Services, and third-party applications, Xerox provides a network scanning solution for all scanning users.

After the optional Scanning Services kit is installed on the Xerox Document Centre 440/432/420, scanning features can be programmed and documents can be scanned and transferred to a file server. The document can then be accessed from the workstation by an individual user, or shared with other users also connected to the network.

The stored scanned document can be opened by any software application that can view or edit TIFF/PDF files, for example Visioneer PaperPort. This application allows viewing and editing of TIFF files and is provided on a CD ROM and supplied by Xerox when the Scanning Services option is purchased. The scanned image can also be imported into TextBridge Pro for Optical Character Recognition (OCR) processing.

Scanning with DC440/432/420

Scanning a document has traditionally involved a dedicated scanner attached to a single PC. In this environment, a single user at the PC has access to the scanner. Other users cannot scan documents without interrupting the person using the scanner and PC. This is inconvenient and inefficient.
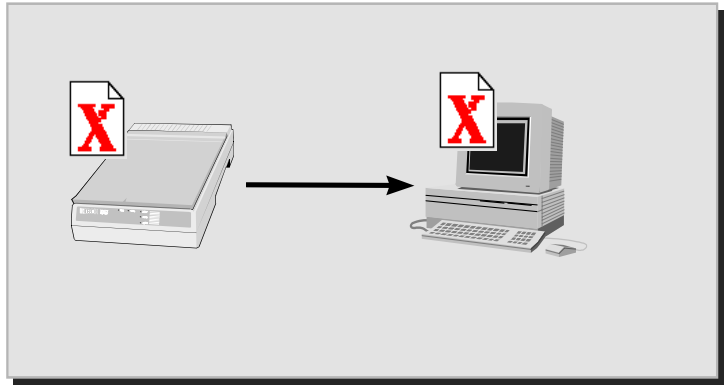
Traditional Scanning

Using the *DC440/432/420*, multiple users can scan and store documents without the use of multiple scanning devices. With the power of the local area network, multiple users are able to access the *DC440/432/420* and use it to scan documents.

Scanning with the *DC440/432/420* is accomplished through the use of a file server. The file server is used as a temporary storage location for the scanned document file. After scanning and storage on the file server, the file can be manually retrieved by a user at a network workstation.

NOTE: Automatic retrieval of the scanned document to a workstation is possible using Xerox CentreWare Network Scanning Services. *Refer to the Xerox CentreWare documentation for more information.*

A "dedicated file server" is not required. The *DC440/432/420* can store documents on an existing file server.
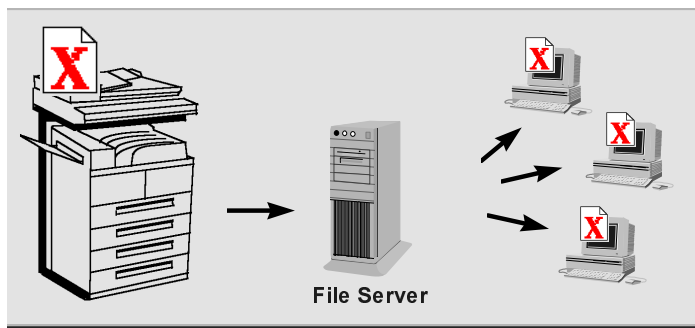
DC440/432/420 Scanning

To perform network scanning, the *DC440/432/420* is installed on a local area network. The protocol of the local area network must be NetWare SPX/IPX or TCP/IP. For the user to retrieve the scanned document file, it must be transferred to a file server. In addition to retrieving documents, users can also scan documents to be e-mailed directly from the *DC440/432/ 420* to an SMTP email server.

The scanning and filing of the document are controlled by a scanning component called a Scan Template.

Scan Templates

The Scan Template is essentially a job ticket for the scanned job. The template is user-programmable, and contains parameters for the scanned document. The user can program parameters such as one-sided or two-sided scanning, scanned image size, and the location on the file server where the file will be stored.

A default template is provided on the device, and with the use of Internet Services additional templates can be created and modified.

NOTE: Xerox CentreWare Network Scanning Services also provides additional template functionality, refer to the Xerox CentreWare documentation for more information.

The Default Template

A default scan template (@default.xst) is created during the installation of the scanning option and is stored on the *DC440/432/420*. It is available for all scanning installations.

It is selected at the *DC440/432/420* Touch Screen and programmed prior to scanning the job.

The Scanning Process

The process for scanning a job is as follows:
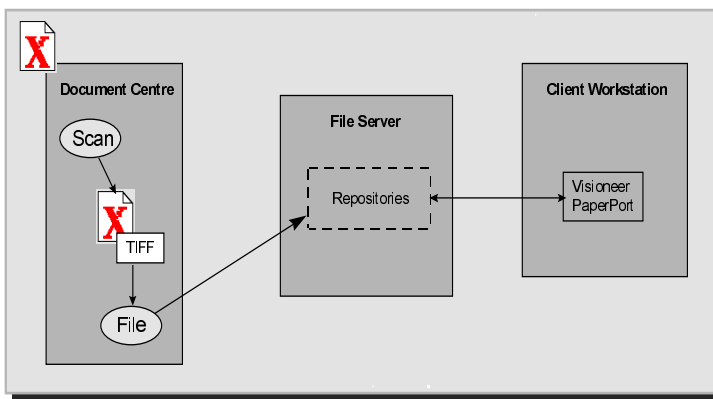
Scanning Process

1. Documents are Scanned at the *DC440/432/420*:

    - A scan template is selected from the *DC440/432/420* Control Panel and additional programming selections are made.

    - The Scan Template defines the Directory and the Document Folder on the server where the scanned file will be stored.

    - The documents can be placed in the Document Feeder or on the Document Glass and the Start button is used to activate the scan operation.

2. Scanned Images are Transferred to File Server Location:

- After the documents have been scanned they are converted to Tagged Image File Format (TIFF) 6.0 or Portable Document File Format (PDF). TIFF files can be either single page or multipage.

- The *DC440/432/420* logs into an account on the file server and stores the TIFF/PDF files in a specific directory (the document repository) on the file server. All pages of a multi-page document are scanned prior to the job being sent to the document repository.

- As with any user account, access to the file server is controlled by a user name and password. This information was entered into the template when it was created.

- The single page TIFF image files are stored in a Folder named NETSCAN.XSM, unless changed on the template.

- The multipage TIFF and PDF files are stored in the folder defined in the document path setting.

- The *DC440/432/420* then logs out of the server.

NOTE: In a NetWare environment, at certain times the *DC440/432/420* requires two network licenses to enable logging in as a printer and logging in to transfer files. If a license is not available, the file transfer will fail and the *DC440/432/420* will not retry the operation. If this occurs, the scan job will have to be run again when a license becomes available.

3. Users Retrieve the Stored Files:

- Users can manually retrieve the TIFF/PDF files and can manipulate the electronic files as required. For example, Visioneer PaperPort can be used to view and edit TIFF files.

- PaperPort has an intuitive interface that enables users to annotate, file, and locate scanned documents. Using PaperPort links, users can transfer documents from the PaperPort desktop to other applications and devices installed on the workstation.

Overview of Repositories

There are two different types of repositories available on the file server, Public Repositories and Private Repositories.

Public Repositories

Public repositories can be selected by all users as the destination for scanned files.

Up to five public repositories can be set up on the *DC440/432/420*. These are the Default Repository and Repositories 1, 2, 3, and 4. These public repositories can be selected when a scan template is created. The scan template for a public repository includes the name required for access to the repository, the password is held on the device.

When this scan template is selected at the *DC440/432/420*, the name and password will not have to be entered because they are already contained in the scan template.

For public repositories, the **Overwrite** Filing Policy may not be appropriate as it allows previously scanned jobs in the directory to be overwritten.

Private Repositories

Private repositories are set up as personal storage areas and require a different login name and password than those used by the *DC440/432/420* to access the public repositories. The correct name and password must be entered at the *DC440/432/420* when the scan template is selected, or the scanning operation will fail. This prevents unauthorized use of private repositories as the destination for scanned files.

Repository Filing Policy

The Filing Policy specifies the method used to store the TIFF/PDF images in the document repository. There are several options:

➢ The **Overwrite** Filing Policy overwrites any scanned image files stored in the document repository before sending the newly scanned files for storage. All overwritten files are lost, but as the files are overwritten, server file space is conserved.

➢ The **Append** Filing Policy does not delete existing files. Newly scanned files are added to existing files in the document repository. It is recommended that old files are deleted on a regular basis in order to conserve server TIFF file format. This policy can only be used with single page TIFF's.

➢ The **New Exact** Filing Policy checks to see if any files already exist with the same file/folder name in the document repository. If there are no files in the repository, the newly scanned files are sent to it. If there are files stored in the repository, the scan job is aborted.

➢ The **New Auto Generate** Filing Policy creates a new directory structure based on time and data for PDF and multipage TIFF files, or a numbered folder name for a single page TIFF file. While this may seem like the safest Filing Policy choice, it does requires more disk space than the Overwrite Filing policy.

Output Image Format

➢ **Multi-Page TIFF** can be enabled using Xerox CentreWare Internet Services. When Multi-Page TIFF is enabled, a single TIFF file will be created containing all the pages of the document. An .XSM folder is not created when scanning

in the Multi-Page TIFF mode. The TIFF file and a log file (.xst) are stored in the repository for each multi-page document that is scanned.

➢ **Portable Document File (PDF)**. The *DC440/432/420* supports both PDF and TIFF File Formats. The PDF image format is a multipage TIFF image enclosed within a PDF wrapper.

➢ **Single Page TIFF**. Each scanned original is converted into one TIFF image file. All of these files will be stored in a directory (foldername.xsm).

NOTE: Not all applications will accept the Multi-Page TIFF format. Applications that do not support Multi-Page TIFFs will typically import and display only the first page of the document.

NETSCAN.XSM Folder

This is the folder the single page TIFF and several supporting files are filed in. The name of the folder can be changed on the template prior to scanning. An explanation of the files contained in the folder follows:

➢ **<filename>.TIF** are the individual TIFF images of the pages that were scanned. There can be several TIFF files if the document has more than one page, or if **Append** was selected for the Filing Policy and more than one document has been scanned. Each page of the document is represented by a different TIFF file.

➢ **NETSCAN.DAT** is an ASCII file which contains the names of the image files scanned with the last scanning operation. This file is updated after every successful storage of an image file.

➢ **NEXTNAME.DAT** is an ASCII file which contains the name of the next available TIF file. This name is controlled and increments based on the Filing Policy specified in the job template.

- **NETSCAN.XST** contains the template information for the last file that was scanned. It is also used as a job log for status and a source for the post-processing of information.
- **XSMDESC.DAT** is an ASCII file containing the document name (0-50 characters).

Repository Locking

More than one *DC440/432/420* can log into a file server and transfer a file to the same document repository, but not at the same time.

When one *DC440/432/420* logs in to transfer a file, the document repository is locked. Another *DC440/432/420* cannot transfer a file to that repository. This prevents possible corruption of the files.

Multiple Logins

More than one *DC440/432/420* can transfer files to different repositories on the same file server at the same time. This is similar to more than one user logging into a file server at the same time to transfer files to different directories.

Existing Accounts

A *DC440/432/420* can use an existing user account if the account is enabled for multiple logins. The account for the scanner is a user account and no different from any other user account.

Set Up Scanning

Scanning Services

Installation Options

There are three main set up options available for Scanning Services. Review each of the options and refer to the appropriate installation instructions for the networking environment.

➢ Xerox CentreWare Network Scanning Services

This application provides additional functionality for programming and processing scanned images. For example, scanned images can be automatically sent to a user's workstation and opened with a specified application, moved to a user's PC or another server for storage or scanned directly into PaperPort on a users desktop for manipulation.

For information for installing and using Xerox CentreWare Network Scanning Services refer to the *Xerox CentreWare documentation*.

➢ Native Scanning

This option requires setting up Scanning Services using utilities in the native network environment. Documents are scanned at *DC440/432/420* and transferred to a central filing location using either NetWare NCP (NetWare Core Protocol) or FTP (File Transfer Protocol).

NetWare NCP is available for Ethernet and Token Ring filing to a NetWare Server. For set up instructions for this environment refer to page *13-13*.

FTP is available for Ethernet and Token Ring (if a PCI card is installed) and requires an FTP server running on a server or a workstation. For set up instructions for this environment refer to page *13-18*.

If TCP/IP protocol has been enabled, the Scan to E-mail function is also available. For set up instructions for this configuration, refer to page *13-25*.

➢ Xerox CentreWare Internet Services

The Internet Services function is accessed through the embedded HTTP server on the *DC440/432/420* and allows System Administrators and users to configure scan settings. This is accomplished by using an Internet browser such as NetScape (version 3.x or later) or Microsoft Internet Explorer (version 4.x or later). For set up instructions using Internet Services refer to page *13-22*.

NetWare

Information Checklist

Before starting the NetWare installation procedures, please ensure the following items are available or have been performed:

Item	By
An existing operational NetWare network is required, these procedures are not designed to install a NetWare network.	Customer
Ensure the *DC440/432/420* is fully functioning on the network prior to installation.	Customer
Use the SYSCON utility for NetWare 3.x, or NWADMIN for NetWare 4.x/5.x to create a Scan User Name and Password - this is user account on the file server for the scanner. When a document is scanned, the *DC440/432/420* logs in to the user account with the user name and password, transfers the file to the server, and then logs out.	Customer
Create a directory on the file server to be used as a File Repository Server. Repositories are directories or filing destinations where documents are stored and held in .XSM (Xerox document storage) format folders. The repository name cannot exceed 8 characters. The default folder name is NETSCAN.XSM. Give the scanner user account all access rights to this directory, except supervisor.	Customer
For an NDS installation, assign the *DC440/432/420* to an NDS Tree and an NDS Name Context.	Customer
Install *DC440/432/420* Scanning Services kit.	Xerox

NOTE: Refer to the *NetWare documentation* for additional information, if needed.

Installation Procedure

1. Enter System Administrator Setups:
   A. Select the **[Access]** button on the *DC440/432/420*.
   B. Using the keypad, enter **[#22222]** (or the current System Administrator password) and then select **[Enter]**. Enter the # character before entering 22222.

2. Access the Scan to File Setups screens and assign the Default Repository Server:
   A. Select **[Scan To File Setups]**.

NOTE: The Job Template Pool and Update All Templates options located on the Scan to File Setups screen are not used in this environment.

   B. Select **[Default Repository]**.
   C. Select **[NetWare]**.
   D. Select **[Server]**.
   E. Select **[Edit]** and enter the name of the NetWare file server that has the user account for the scanner. Select **[Save]** when finished.

   Up to four other public repositories can be set up in addition to the Default Repository. The additional repositories can provide password and directory path information for templates selected with matching server and user names.

3. Assign the Default Repository Path:
   A. Select **[Directory Path]** and then select **[Edit]** and enter the full path, including the volume name, to the directory for the scanner account. For example: (volume name):\(directory name)\(directory name)

NOTE: It is strongly recommended that a directory in the SYS volume is not used as it can fill up quickly with scanned files.

   B. Select **[Save]** when finished.

4. Enter the NDS Tree and NDS Context information

(necessary for Bindery and NDS installations):

A. Select **[NDS Tree]** and select **[Edit]**.

    For Bindery, use the keypad on the screen to enter a dash **[-]**.

    For NDS, use the keypad on the screen to enter the name of the NDS Tree.

NOTE: Refer to the information displayed by NWADMIN and the NetWare documentation for help in determining the name of the NDS Tree.

B. Select **[Save]**.

C. Select **[NDS Context]** and select **[Edit]**.

    For Bindery, use the keypad on the screen to enter a dash **[-]**.

    For NDS, use the keypad on the screen to enter the NDS Context name. This must be a fully qualified name. An example of a complete NDS Context is:

    OU=SHIPPING.OU=MANUFACTURING.O=XEROX. C=US

    In this example, SHIPPING is an organizational unit within MANUFACTURING, which is an organizational unit within XEROX. The US (United States) is the country in which these organizational exist.

NOTE: Refer to the information displayed by NWADMIN and the NetWare documentation for help in determining the exact NDS Context information for the environment.

D. Select **[Save]** when finished.

5. Enter the NetWare Volume Name:

    A. Select **[Volume]**.

    B. Select **[Edit]** and use the keypad on the screen to enter the name of the Volume.

    C. Select **[Save]**.

6. Enter the Login Name and Password.

    A. Select **[Login Name/Password]**.

    B. Select **[Login Name]** and use the keypad on the screen to enter the name of the user account for the scanner.

CAUTION: The Login Name and Password is the name and password of the Scan User account. Ensure the information entered matches the information entered when the account was created using SYSCON or NWADMIN. If the names do not match exactly, the *DC440/432/420* will not log into the file server.

    C. Select **[Save]**.

    D. Select **[Passwod]** and use the keypad on the screen to enter the name of the password for the scanner.

    E. Select **[Save]**.

7. Select **[Save]** to return to the Scan to File Setups screen. If required, select **[Repository 1]** and then **[Additional Setups]** and **[Repository 2, 3, 4]** (as needed) to set up Repositories 1 to 4.

8. Select **[Filing Policy]** and select **[Overwrite]**, **[Append]**, **[New Exact]** or **[New Auto Generate]**.

> **Overwrite** will replace the previous document with the last scanned document.
>
> **Append** will add each document scanned to the repository without deleting any previously scanned documents.
>
> **New Exact** checks to see if any files already exist in the document repository. If there are no files in the repository, the newly scanned files are sent to it. If there are files stored in the repository, the scan job is aborted.
>
> **New Auto Generate** creates a new directory structure, based on the time and date of creation, into which the TIFF images are filed.

CAUTION: Overwrite results in a lost document if it is not moved out of the repository before the next scanning operation. Append uses up file space as additional documents are scanned. If Append is chosen, regularly delete older documents to free up server space.

9. Select **[Save]**.

10. Select **[Confirmation Sheet]**.

    A. Select **[Enabled]** or **[Disabled]**. The Confirmation Sheet provides information about the results of the scanning operation, and can be helpful if problems are encountered during the scanning installation or operation.

    B. Select **[Save]**.

11. Select **[Close]**.

12. Select **[Exit]**.

NOTE: The device automatically reboots and prints a Configuration Sheet in approximately 3 minutes.

13. Check the settings on the Configuration Sheet against the information that was entered.

14. It is recommended that the Visioneer PaperPort software is installed. Refer to page *13-28* for installation instructions.

NetWare (NCP) Scanning Set Up is now complete. A test scan should be performed to ensure Scanning Services has been set up successfully. Continue with **Testing** on page *13-29*.

File Transfer Protocol (FTP)

Information Checklist

Before starting the installation procedures, please ensure the following items are available or have been performed:

Item	By
Ensure that FTP Services is running on a platform on the network.If FTP Services is running on a Windows NT server, ensure that **[Allow Only Anonymous Connections]** is NOT selected.	Customer
Ensure the *DC440/432/420* is fully functioning on the network prior to installation.	Customer
Create a Scan User Name and Password user account for the scanner - this is user account on the file server for the scanner. If the account is created on a Windows NT server, select **[User Cannot Change Password]** and **[Password Never Expires]** when the password is set, and select **[Logon Locally]** under User Rights. When a document is scanned, the *DC440/432/420* logs in to the user account with the user name and password, transfers the file to the server, and then logs out.	Customer
Create a directory to be used as a repository for scanned files. If the directory is created on a Windows NT server, enter the scan user name in the Alias box and select **[Access Read and Write]**. Repositories are directories or filing destinations where documents are stored and held in .XSM (Xerox document storage) format folders.	Customer
Install *DC440/432/420* Scanning Services kit.	Xerox

Installation Procedure

1. Enter System Administrator Setups:

   A. Select the **[Access]** button on the *DC440/432/420*.

   B. Using the keypad, enter **[#22222]** (or the current System Administrator password) and then select **[Enter]**. Enter the # character before entering 22222.

2. Access the Scan to File Setups screens and assign the Default Repository Server:

   A. Select **[Scan To File Setups]**.

NOTE: The Job Template Pool and Update All Templates options located on the Scan to File Setups screen are not used in this environment.

   B. Select **[Default Repository]**.

   C. Select **[TCP/IP]**.

   D. Select **[File Server IP Address]**.

   E. Select **[Edit]** and enter the IP address of the file server that will contain the user account for the scanner. Select **[Save]** when finished.

3. Assign the Default Repository Path:

   A. Select **[Directory Path]** and then select **[Edit]** and enter the full path to the directory for the scanner account, starting at the root of FTP Services. For example:

   \(directory name)\(directory name)

NOTE: The *DC440/432/420* transfers a scanned file to FTP Services which can be running on a variety of platforms including a server or a workstation. The scanned file is transferred to FTP Services at the location in the platform's file system where FTP Services is running. Therefore, the Directory Path starts where FTP Services is running, which could be anywhere in the platform's file system, not necessarily at the root of the file system.

   B. Select **[Save]** when finished.

4. Enter the Login Name.

    A. Select **[Login Name]**.

    B. Select **[Edit]** and use the keypad on the screen to enter the name of the user account for the scanner.

CAUTION: The Login Name is the name of the Scan User account. Ensure the information entered matches the information entered when the account was created. If the names do not match exactly, the *DC440/432/420* will not log into FTP Services. Remember that some FTP Services are case-sensitive.

    C. Select **[Save]** and then select **[Save]** again when finished.

5. Enter the User Password:

    A. Select **[Password]**.

    B. Select **[Edit]** and use the keypad on the screen to enter the password. If no password was assigned, use the left arrow key to delete the default password.

CAUTION: This is the Password for the Scan User Account. Ensure the information entered matches the information entered when the account was created. If the passwords do not match exactly, the D*C440/432/420* will not log into FTP Services. Remember that some FTP Services are case-sensitive.

---

6. Select **[Save]** and then select **[Save]** again when finished to return to the Scan to File Setups screen.

7. If desired, select **[Repository 1]** and then **[Additional Setups]** and **[Repository 2,3, 4]** (as needed) to set up Repositories 1 through 4.

8. Select **[Filing Policy]** and select **[Overwrite]**, **[Append]**, **[New Exact]** or **[New Auto Generate]**.

> **Overwrite** will replace the previous document with the last scanned document.

> **Append** will add each document scanned to the repository without deleting any previously scanned

documents.

New Exact checks to see if any files already exist in the document repository. If there are no files in the repository, the newly scanned files are sent to it. If there are files stored in the repository, the scan job is aborted.

New Auto Generate creates a new directory structure, based on the time and date of creation, into which the TIFF images are filed.

CAUTION: The Overwrite Filing Policy will replace any previously scanned document in the repository with a new scan job. The Append Filing Policy simply adds a new scan job to the repository without deleting older jobs. If Append is selected, regularly delete older documents to free up server space.

9. Select **[Save]**.

10. Select **[Confirmation Sheet]**.

    A. Select **[Enabled]** or **[Disabled]**. The Confirmation Sheet provides information about the results of the scanning operation, and can be helpful if problems are encountered during the scanning installation or operation.

    B. Select **[Save]**.

11. Select **[Close]**.

12. Select **[Exit]**.

NOTE: The device automatically reboots and prints a Configuration Sheet in approximately 3 minutes.

13. Check the settings on the Configuration Sheet against the information that was entered.

14. It is recommended that the Visioneer PaperPort software is installed. Refer to page *13-28* for installation instructions.

FTP Scanning Set Up is now complete. A test scan should be performed to ensure Scanning Services has been set up successfully. Continue with **Testing** on page *13-29*.

Internet Services

Information Checklist

Before starting the installation procedures, please ensure the following items are available or have performed:

Item	By
Ensure that Xerox CentreWare Internet Services has been enabled and configured prior to Scanning Services set up. Refer to the Internet Services chapter of this guide for information.	Customer
Ensure the *DC440/432/420* is fully functioning on the network prior to installation.	Customer
Ensure that there is a fully functioning NetWare Bindery or NDS network operating system, or workstations/servers with an FTP server running prior to installation.	Customer
Either one of the following protocols must be available: • **NCP over IPX/SPX**. NCP (NetWare Core Protocol) is used for all filing connections to NetWare servers and runs over the IPX/SPX transport. • **FTP over TCP/IP**. FTP server software exists for a variety of operating systems; therefore, FTP running over the TCP/IP transport is used for all filing connections to non-NetWare servers.	Customer
Install *DC440/432/420* Scanning Services kit.	Xerox

Installation Procedure

1. Designate the Scanning Account:

    A. Using the native network application, create a scanning account for scanning use.

2. Create Scanning Repositories:

    A. Create a repository directory on a file server using native network tools. The scanning repositories are where scanned documents will be saved as .XSM (Xerox document storage) format files. Five (1 default and 4 additional) repositories can be selected from Internet Services.

3. Set up the Repositories:

    A. Using a recommended browser and the IP address of *DC440/432/420*, access **Internet Services**.

    B. Select **[Properties]**.

    C. Select **[Services]**.

    D. Select **[Stored Templates]**.

    E. Select **[Repository Setup]**.

    F. Select a repository (Default or Repository 1-4) from the **Repository List**.

    G. Select the appropriate protocol **[TCP/IP]** or **[NetWare]**.

    H. Enter the relevant information to complete the Repository set up. This information must match the account and directory information defined with the native network tools on the file server.

    I. Select **[Apply New Settings]**.

    J. When prompted, validate the login, password and path. If the path is valid on the file server, the repository is defined for scanning use with Internet Services.

4. Create Template Pools:

    A.   Define a template pool directory on a file server using native network tools.

5.   Set up the Template Pool:

    A.   Using a recommended browser and the IP address of *DC440/432/420*, access **Internet Services**.

    B.   Select **[Properties]**.

    C.   Select **[Services]**.

    D.   Select **[Stored Templates]**.

    E.   Select **[Template Pool Setup]**.

    F.   Enter the directory path, login name and password for the pool. This information must match the account and directory information defined with the native network tools on the file server.

    G.   Select **[Apply New Settings]**.

    H.   When prompted, validate the login, password and path. If the path is valid on the file server, the Template Pool is defined for scanning use with Internet Services.

6.   Set up the Default Template:

    A.   Using a recommended browser and the IP address of *DC440/432/420*, access **Internet Services**.

    B.   Select **[Properties]**.

    C.   Select **[Services]**.

    D.   Select **[Stored Templates]**.

    E.   Select **[Default Template]**.

    F.   Select **[General]**.

    G.   Select the services required **[File]**, **[Fax]** or **[Local Copy]**.

H. Select each service and set up as required.

I. Select **[Apply New Settings]**. To return the template to its last saved values, select **[Restore Settings]**.

NOTE: Refer to the *User Guide* for further information about creating and modifying templates and template settings.

7. It is recommended that the Visioneer PaperPort software is installed. Refer to page *13-28* for installation instructions.

Internet Services Scanning Set Up is now complete. A test scan should be performed to ensure Scanning Services has been set up successfully. Continue with **Testing** on page *13-29*.

Scan to E-mail

Information Checklist

Before starting the installation procedures, please ensure the following items are available or have been performed:

Item	By
Ensure that the network has a fully functioning SMTP Mail Server.	Customer
Ensure the *DC440/432/420* is fully functioning on the network prior to installation.	Customer
Ensure that the TCP/IP protocol is configured on the device and is fully functional.	Customer
Install *DC440/432/420* Scanning Services kit.	Xerox

Installation Procedure

1. Enter System Administrator Setups:
    A. Select the **[Access]** button on the *DC440/432/420*.
    B. Using the keypad, enter **[#22222]** (or the current System Administrator password) and then select **[Enter]**. Enter the # character before entering 22222.
2. Select **[Scan to File]**.
3. Select **[Additional Setups]**.
4. Select **[Email]**.
5. Select **[Email Server IP Address]**, then use the keypad to enter the IP address of the Email server.
6. Select **[Save]**.
7. Select **[Email From]**, then use the keypad to enter the return email address.

NOTE: The return email address must be of the correct format (for example anyname@xerox.com). This address will appear in all emails sent bt the device to the SMTP mailserver.

8. Select **[Save]**.
9. Select **[Close]**.
10. Select **[Exit]**.

NOTE: The device automatically reboots and prints a Configuration Sheet in approximately 3 minutes.

11. Check the settings on the Configuration Sheet against the information that was entered.
12. It is recommended that the Visioneer PaperPort software is installed. Refer to page xx for installation instructions.

Scan to E-mail Set Up is now complete. A test scan should be performed to ensure Scanning Services has been set up successfully. Continue with **Testing** on page *13-27*

Testing

To ensure scan to Email has be set up successfully, perform the following steps:

1. Place a document in the Document Feeder, or on the Document Glass.
2. Select the **Features Button**.
3. Select **[Scan]**.
4. Select **[Scan to Email]**.
5. Select **[Enter]**, then use the keyboard to enter a valid SMTP email address.
6. Select **[Save]**.
7. Select **[Start]**.

NOTE: Any confirmation report will display a status of "completed". This is not the status of the job being forwarded by the email server.

If the test job fails, refer to the Problem Solving chapter for trouble-shooting procedures.

Installing Visioneer PaperPort (Optional)

Visioneer PaperPort software is provided on a CD ROM and included with the *DC440/432/420* when Scanning Services is purchased. It is recommended that this software should be installed at each client workstation.

PaperPort allows users to annotate, organize, file and locate scanned TIFF documents. After a document is scanned at the *DC440/432/420*, users can access PaperPort and retrieve the scanned file within the PaperPort application. With PaperPort links, users can transfer documents between the PaperPort desktop and other applications and devices on the workstation.

PaperPort contains links to several types of applications and devices, including:

➢ Electronic fax applications

➢ Electronic mail ("E-Mail") applications

➢ Optical character recognition ("OCR") applications

➢ Printers

➢ Personal information managers ("PIM")

➢ Document control systems

To install the PaperPort software from the PaperPort CD ROM:

1. Load the CD ROM, double-click on **[Start]**

2. Follow the instructions on the screen. This procedure will load PaperPort onto the client workstation. It also provides access to PaperPort software documentation.

3. Take a few minutes to become familiar with both the PaperPort *Install Guide* and *On-Line* documentation.

Testing

To ensure Scanning Services has be set up successfully, perform the following steps:

1. Place a document in the Document Feeder, or on the Document Glass.

2. Select **[Scan]** on the *DC440/432/420* Touch Screen.

3. Select **[Scan to File]**.

4. Scan jobs are based on templates that contain programming selections for the job. Verify that **[@default.xst]** is highlighted in the scan template list. This is the default template.

5. If required, modify the template by selecting options from the **[Scan Setups]** tab (for example, **Reduce/Enlarge** or **Basic Image Quality**). Any changes will apply only to the current job. The template settings will be restored after the completion of the scan job.

6. Select the **[Start]** button. After the job is scanned, the *DC440/432/420* files, faxes, and prints the job as specified in the @default.xst scan template. At completion, a Confirmation Sheet (if enabled) is printed that describes the results of the job.

7. Allow approximately one minute for the process to complete a one-page job. It will take longer if multiple pages have been scanned. Check to make sure that the scanned file has been stored in the repository on the file server.

8. The *DC440/432/420* creates a separate TIFF file for each page it scans. (Unless the Enable Multi-Page TIFF option is selected, which will create a single TIFF file for a multi-page document, instead of one TIFF file for each page.) Pages are numbered sequentially. Files are stored on the file server, and the directory path is specified within the job template.

9. If the scanning operation is not successful, check the Confirmation Sheet for a message or other information that may be helpful in identifying the cause of the problem.

10. The scanned file is transferred to a folder in the scanner

account on the file server. The .XSM extension on the folder represents a Xerox document storage format that is designed to simplify integration with third-party software applications.

11. At the workstation, view or list the directory path for the scanner account on the file server. The scanning operation created a folder named *NETSCAN.XSM*.

12. Open the NETSCAN.XSM folder and select the TIFF file. The file can be imported into any software application that can accept TIFF files.

If the test job fails, refer to the Problem Solving chapter for trouble-shooting procedures.

14 Problem Solving

Introduction

This chapter explains the problem solving procedure and how to seek further assistance.

Problem Solving Procedure

If a problem occurs with the network printing, network faxing or network scanning functions of the *DC440/432/420*, this chapter is used to identify the steps to solve the problem.

Use the following procedure to identify and solve the problem:

1. Resolve any local copier or fax problems first. Perform the corrective action that is recommended by the *User Guide*. Do not attempt to resolve a network problem if the local copier and fax functions are not operating correctly.

2. Check that the *DC440/432/420* has power and it is turned on.

3. Check that the network cable is connected to the *DC440/432/420*.

4. Check that the network cable is connected to the workstation.

5. Check that the *DC440/432/420* print/fax driver is selected at the workstation.

6. Check that the software application being used to send print jobs is set up correctly.

7. If available within the print driver, select the *Print PostScript Error Information* option or the equivalent. If there are any PostScript errors, the document may not print, but an error sheet will print if this option is selected. This error information can be helpful in resolving the problem.

8. Power off the device, wait 15 seconds then power back on and check for a configuration report being printed. (A configuration report will not print until the device has completely rebooted, approximately 3 minutes.)

9. If a specific workstation is not printing/faxing then reload the device printer/fax drivers on the workstation.

10. Call the local Xerox Welcome Center where a representative will assist in the diagnosis and solution of the problem.

Scanning Services Information

The following table offers information about errors that may be encountered when using scanning services. If a problem still exists after the corrective action has been performed then follow the problem solving procedure on page *14-2* to seek further assistance.

Problem	Corrective Action
The image quality of the scanned image is not acceptable.	• Ensure the appropriate image quality setting is selected in the template being used. Use the Image Quality **Text** setting for text documents and the **Photo** setting for greyscale images. • Also, try selecting a scanner resolution of 1.2 to 2.0 times the screen frequency of the device that the file will be displayed or printed on.
The optical character recognition ("OCR") application being used with the scanned image does not recognize text accurately.	• Ensure that the Image Quality **Text** setting is selected when scanning the document(s).
The size of the scanned image file is too large	• Select a scanner resolution of 1.2 to 2.0 times the screen frequency of the device that the file will be displayed or printed on.
Error message: File delete, replace failed	• During an Overwrite operation (a Filing Policy option), an attempt to remove files from the remote directory failed. This can be caused by insufficient access rights or by file attributes that are read-only.
Error message: Filing directory already exists	• During a scanning operation, this error can occur when the New Exact Filing Policy is used (set through Internet Services) and the (folder name).XSM directory already exists on the specified path. This is in accordance with the New Exact option.

Problem	Corrective Action
Error message: File transfer failed	• During a scanning operation, the network or destination server happens to go down when the file transfer is occurring. • Another possibility is that the destination disk is full.
Error message: Login failure. Check user, password, and/or setups	A scanning operation has failed. Verify the following from a workstation on the network by logging into the scan account and copying a file into the scan repository: • The user name is invalid or incorrect. • The password is invalid or incorrect. • Also check the following: • The server name is invalid. • The NDS Tree name (NetWare 4.x only) is invalid. • The NDS Context name (NetWare 4.x only) is invalid.
Error message: Protocol not running	• A user tried a scanning operation with a destination on the NetWare server. • The NetWare protocol is not currently enabled. Enable it.
Error message: Remote directory lock failed	The repository being used is in use by another *DC440/432/420*. Check the following: • The specified volume name is invalid. • The specified filing destination (path) is invalid. • The destination disk is full, preventing the creation of the remote directory.

15 Glossary

10Base2	A cable used for networking. It is a coaxial cable consisting of a centre wire and a shield separated by an insulating material. It is commonly called "thinnet".
10Base5	A cable used for networking. It is a coaxial cable consisting of a centre wire and a shield separated by an insulating material. It is often called "thicknet".
10BaseT	A cable used for networking. It is also called "twisted-pair" because it is comprised of two insulated wires twisted together. 10BaseT cable can be shielded or unshielded. Shielded cable provides more protection from noise than unshielded cable.
ASCII	An acronym for **A**merican **S**tandard **C**ode for **I**nformation **I**nterchange. A coding scheme that assigns numeric values to letters, numbers, punctuation, and certain other characters.
Broadcast Address	The Broadcast Address, in combination with the Subnet Mask, identifies other hosts on the subnet to which the host will send broadcast messages.
DHCP	An acronym for **D**ynamic **H**ost **C**onfiguration **P**rotocol. A protocol allowing the principal parameters of network devices (including IP Addresses) to be configured by central DHCP servers.
Driver	Software that is loaded on the client workstation that prepares data to be sent to the DC440/432/420. It is also called a "print driver" or a "print/fax driver". The DC440/432/420 drivers are designed specifically for this Xerox device.
Ethernet	Network transport technology commonly used to send data from one node to another.

Ethernet Address	The Ethernet Address is a unique address that identifies a device on a network. The Ethernet Address is built into the device when it is manufactured. The Ethernet Address consists of six bytes of information and is expressed as hexadecimal numbers with the bytes separated by colons. (Example: 00**:**00**:**08**:**D4**:**05**:**14)
Fax Driver	*See* Driver.
File Server	A network environment in which the nodes communicate with a file server, and not directly with other nodes. NetWare 3.12 and Banyan VINES are file server networking products.
Frame	A group of data sent through the network. It is also called a "packet" or a "message". There are several different types of frames. The data is arranged differently in different types of frames. Nodes on a network must be set up for the same Frame Type in order to communicate.
Gateway Address	The Gateway Address is the IP Address of the gateway, or router, that the DC440/432/420 will use to access devices on other subnets.
HTTP	An acronym for **H**yper Text **T**ransport **P**rotocol. This is the Internet standard that supports the exchange of information on the World Wide Web (WWW). HTTP lays the foundation for transparent access to the Internet.
IEEE	An acronym for **I**nstitute of **E**lectrical and **E**lectronics **E**ngineers. This is an organization of engineering and electronics professionals notable for developing the IEEE 802 standards for the physical and data-link layers of local area networks, following the ISO Open Systems Interconnection (OSI) model.
Internetwork Packet Exchange	*See* IPX.
IP	*See* TCP/IP
IP Address	*See* TCP/IP

IPX	**I**nternetwork **P**acket **E**xchange. IPX is part of NetWare. It routes packets to the correct node and to the correct process within the node.
ISO	An acronym for **I**nternational **S**tandards **O**rganization. An international organization that specifies network standards. The ISO developed the Open Systems Interconnection (OSI) model.
LAN	An acronym for **L**ocal **A**rea **N**etwork. This is a network that serves a relatively small area, such as one building, and does not require telecommunications services to reach all of the nodes. *See also* WAN.
Local Area Network	*See* LAN.
LPD	An acronym for **l**ine **p**rinter **d**aemon. This is a print management program that runs on a host.
Message	*See* Frame.
NCP	*See* NetWare Core Protocol.
NetWare	A network operating system from Novell. Clients log onto one or more file servers, which provide services such as mail, printing, and filing.
NetBIOS/NetBEUI	A peer-to-peer networking system using the NetBEUI protocol.
NetBIOS/IP	A peer-to-peer networking system using the IP protocol.
NetWare Core Protocol	A protocol used by a NetWare client to request services from a NetWare server.
Node	A device on a network that has an address and can send and/or receive data to and from other devices on the network.
Packet	*See* Frame.
PCL	An acronym for **P**rinter **C**ontrol **L**anguage, which is used by Hewlett-Packard. This is a set of commands that tell a printer and printer driver how to print a document.

PCL5e	A Hewlett-Packard Printer Control Language (PCL) that is the first version of PCL to support bi-directional communication between printer and computer.
PCONSOLE	A NetWare utility that can be used to create, configure, monitor, and manage queues in a NetWare server, and to attach print servers to the queues.
PDL	An acronym for **P**age-**D**escription **L**anguage. This refers to a programming language, such as PostScript, that is used to describe output to a printer or a display device, which then uses the instructions from the PDL to construct text and graphics and create the required page image.
Peer-to-Peer	A network environment in which the nodes communicate directly with other nodes. Windows for Workgroups, NetWare Lite, and Macintosh System 7 are examples of peer-to-peer networking products.
Print driver	*See* Driver.
Protocol	The rules that control the transmitting and receiving of data.
Queue	A place where jobs are stored temporarily, while they are waiting to be processed. A print queue will hold several print jobs. A printer that is attached to the print queue will print the jobs one at a time.
RARP	An acronym for **R**everse **A**ddress **R**esolution **P**rotocol. This is a method for providing IP Addresses to nodes on a network. When a node powers up, it broadcasts a RARP packet containing its Ethernet Address. The RARP server receives the packet and sends the IP Address back to the node.
Reverse Address Resolution Protocol	*See* RARP.
RJ45	A connector used to connect a 10BaseT cable to a device.
Router	A device that directs network packets to the segment of the network for which the packet is intended, and excludes packets that are not intended for a segment. Routers reduce unnecessary network traffic and control access to segments of the network.

SAP	An acronym for **S**erver **A**dvertising **P**rotocol. Nodes on a NetWare network broadcast "SAP packets" at intervals to advertise their presence to other nodes.
Sequenced Packet Exchange	*See* SPX.
Server Advertising Protocol	*See* SAP.
SPX	An acronym for **S**equenced **P**acket **E**xchange. SPX is part of NetWare. It ensures that packets are received in the correct order and that there are no errors.
Subnet Mask	There are approximately 4.3 billion different addresses in the IP Address range of 000.000.000.000 to 255.255.255.255. These addresses can be divided into smaller, and much more manageable subnetworks, or subnets. The Subnet Mask identifies which part of the IP Address contains the Subnet Address and which part contains the host (or device) address.
TCP/IP	An acronym for **T**ransmission **C**ontrol **P**rotocol / **I**nternet **P**rotocol. TCP/IP is a set of communications protocols that is supported by a variety of computer platforms. TCP controls the data transfer and IP controls the routing of the data. The IP Address is a unique address that identifies a device in a network. The IP Address has to be set in the DC440/432/420 by the System Administrator. The IP Address consists of four bytes of information and is expressed as decimal numbers with the bytes separated by dots. (Example: 13.1.188.2)
Thicknet	*See* 10Base5.
Thinnet	*See* 10Base2.
TIFF	An acronym for **T**agged **I**mage **F**ile **F**ormat. A standard file format commonly used for scanning. Images scanned with the DC440/432/420 are captured in a TIFF 6.0 file format.
Twisted-pair	*See* 10BaseT.

WAN   An acronym for **W**ide **A**rea **N**etwork. This is a network that
                              serves a relatively large area, such as buildings in different
                              cities and requires telecommunications services to reach all
                              the nodes. *See also* LAN.

Wide Area Network   *See* WAN.

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W

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