

Xerox Document Centre
220/230/332/340ST

Companion to Getting Started with
Scanning Services

701P99853

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1. Introduction and Scanning Overview

Introduction

Xerox brings the versatility of network scanning to your workstation. By combining the power of the Xerox Document Centre 220/230/332/340ST, 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 220/230/332/340ST, you can select scanning features, scan documents, and transfer them to a file server. The document can then be accessed from your workstation or shared with other users connected to the network, if desired. The document can be opened by any software application that can view or edit TIFF/PDF files. For example, Visioneer PaperPort, which is included on a CD ROM with your DC220/230/332/340ST when you purchase the Scanning Services option can view and edit TIFF files.

NOTE

The DC 332/340ST supports both PDF and TIFF File Formats. The PDF image format is a TIFF image enclosed within a PDF wrapper. The DC220/230ST supports only the TIFF image format.

The scanned image can also be imported into TextBridge Pro for Optical Character Recognition (OCR) processing.

Who Should Use This Guide

This guide is a companion to the *Getting Started with Network Scanning Services* guide and is intended to be used by System Administrators who are setting up network scanning without using CentreWare Network Scanning Services. CentreWare Network Scanning Services is intended for use on Windows based workstations.

There are two other options for setting up scanning services:

- Setting up Native Scanning
- Setting up Scanning Using CentreWare Internet Services

Both of these set up options require the use of procedures in this guide. For Setting up Scanning Using CentreWare Internet Services, you will need to complete some processes here, and then refer to the *Getting Started with Internet Services* guide to complete the set up. All of the procedures for setting up Native Scanning are included here.

Whether you are setting up Native Scanning or Scanning Using CentreWare Internet Services, there are two options for file transfer. They are:

- Setting Up Scanning - NetWare (NCP)
- Setting Up Scanning - FTP (File Transfer Protocol)

Procedures for both of these file transfer options are contained in this guide.

NOTE

If you will be using Xerox's CentreWare Network Scanning Services to set up scanning on the DC220/230/332/340ST, refer to the *Getting Started with Network Scanning Services* guide now.

To use the procedures in this guide effectively, you must have experience working in a network environment. You must also have access to the network and possess Supervisor (Administrator) rights. You may also require documentation provided by network and client workstation vendors.

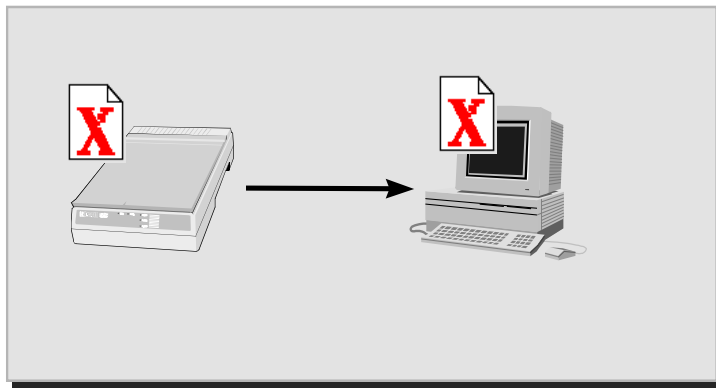
What to Do Next

To complete the setup of the DC220/230/332/340ST and your network to enable scanning, perform the following steps.

1. Review the information in the *Scanning Overview* section of this chapter. Read the entire overview, including the *Overview of Repositories*.
2. Refer to the appropriate chapter of this guide. Choose from:
 - *Set Up Scanning - NetWare*. NCP (NetWare Core Protocol) is available for Ethernet and Token Ring filing to a NetWare server.
 - *Set Up Scanning - FTP (File Transfer Protocol)*. FTP is available for Ethernet and Token Ring (if PCI card installed) and requires an FTP server running on a server or a workstation.
3. **OPTIONAL:** If you are using Xerox CentreWare Internet Services to perform network scanning, refer to the *Getting Started with Internet Services* guide.

Scanning Overview

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

Scanning with the DC220/230/332/340ST

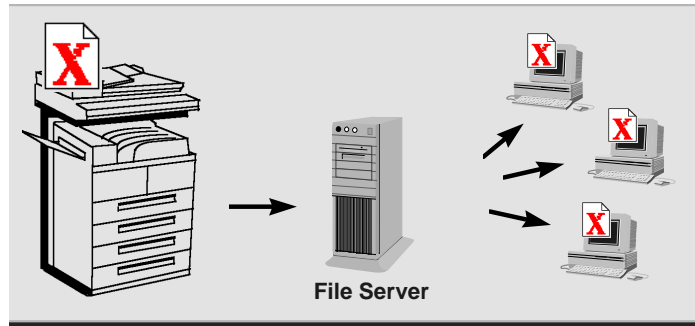
Using the DC220/230/332/340ST, multiple users can scan and store documents without multiple scanning devices. Using the power of the local area network, multiple users can access the scanner and use it to scan their documents.

Scanning with the DC220/230/332/340ST 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's CentreWare Network Scanning Services. Refer to the *Getting Started with Network Scanning Services* guide for more information.

A "dedicated file server" is not required. The DC220/230/332/340ST can store documents on an existing file server.



Scanning with the DC220/230/332/340ST

To perform network scanning, the DC220/230/332/340ST 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. 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.

The Default Template

A default scan template (*@default.xst*) is created during the installation of the scanning option and is stored on the DC220/230/332/340ST. It is available for all scanning installations.

It is selected at the DC220/230/332/340ST Control Panel Touch Screen to begin the scanning process.

NOTE

The Native scanning installations described in this guide provide only the *@default.xst* template for all scanning users.

In this environment, additional scan templates can easily be created using only Xerox's CentreWare Internet Services, or the CentreWare Template Utility. You **MUST** refer to the *Getting Started with Internet Services* guide to create templates with Internet Services, or the *Getting Started with Network Scanning Services* guide to use the CentreWare Template Utility.

The Scanning Process

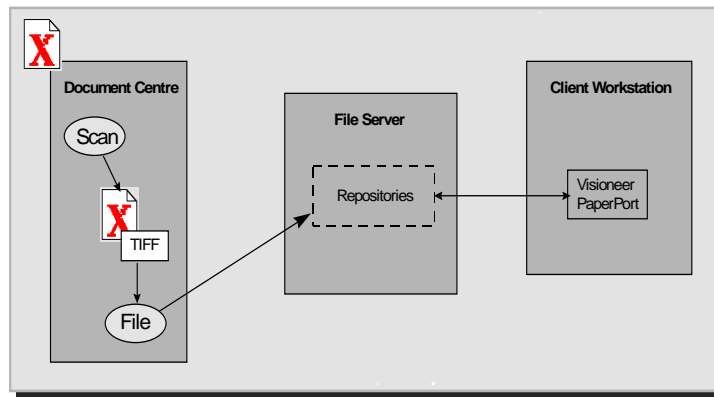
Under the control of the instructions in the scan template, the Xerox DC220/230/332/340ST can scan hard copy documents and create electronic Tagged Image File Format (TIFF) / Portable Document File Format (PDF) files.

NOTE

The DC 332/340ST supports both PDF and TIFF File Formats. The PDF image format is a TIFF image enclosed within a PDF wrapper. The DC220/230ST supports only the TIFF image format.

Using the filing information that is contained in the template, the TIFF/PDF file or files are transferred to a *document repository* on the file server. The document repository is simply a directory on the file server.

All pages of a multi-page document are scanned prior to the job being sent to the document repository.



Scanning Process

After the scanned document files are sent to the file server, the user can retrieve the files from a network workstation.

The three main steps involved in scanning a job are:

1. **Scan a hard copy document at the DC220/230/332/340ST.**
Select a scan template from the Control Panel Touch Screen and

scan the hard copy document at the DC220/230/332/340ST. Scan templates define the Directory and the Document Folder on the server where the scanned file will be stored.

2. **The scanned files are sent to a specified location on the file server.**

After pages have been scanned and converted to TIFF 6.0 files/PDF files, the DC220/230/332/340ST 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. As with any user account, access to the file server is controlled by a user name and password.

To name and store the TIFF/PDF files, a numbering scheme (such as 00000001.TIF, 00000002.TIF, 00000003.TIF) is applied to each file. The DC220/230/332/340ST then logs out of the server.

NOTE

During the transfer of the TIFF/PDF file in a NetWare environment, the DC220/230/332/340ST will be already logged in under one license as a printer, and will log in again to transfer the file. After transfer occurs, the DC220/230/332/340ST logs out, making the second user license available again. While available to other users, the second connection is maintained at the NetWare file server as “Not logged in”. This happens during every scan job. If a license is not available, the file transfer will fail and the DC220/230/332/340ST will not retry the operation. If this occurs, the scan job will have to be run again when a license becomes available.

NOTE

The method used at a workstation to access the document repository and the method used at the DC220/230/332/340ST to send the documents are independent. For instance, the DC220/230/332/340ST may file the TIFF/PDF images using FTP (File Transfer Protocol) to an NT Server; while the workstation may retrieve the images using NetBIOS/NetBEUI.

3. A user retrieves the TIFF/PDF files.

The user manually retrieves the TIFF/PDF files and can then manipulate the electronic file as desired. For example, Visioneer PaperPort, which is included on the Scanning Services option can view and edit TIFF files.

PaperPort has an intuitive interface that enables you to annotate, organize, file, and locate scanned documents. Using PaperPort links, you can transfer documents from the PaperPort desktop to other applications and devices installed on your workstation.

Overview of Repositories

As explained below, 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 their scanned files.

Up to five public repositories can be set up. 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 and the password required for access to the repository.

When this scan template is selected at the DC220/230/332/340ST, the name and password will not have to be entered because the name and password are already contained in the scan template. Be sure to read the *Repository Filing Policy* information on the next page. The **Overwrite** Filing Policy allows previously scanned jobs in the directory to be overwritten. This might be an inappropriate Filing Policy choice for a public repository.

Private Repositories

Private repositories require a name and password that is different from the name and password that the DC220/230/332/340ST uses to access the public repositories. The appropriate name and password must be entered at the DC220/230/332/340ST 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.

NOTE

The appropriate name may also be preset in the scan template when it is originally created. When a scan template is selected that already has the appropriate name, only the correct password must be entered at the DC220/230/332/340ST.

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 deletes any TIFF files stored in the document repository before sending the newly scanned files for storage. All overwritten files are lost, but since the files are overwritten, disk 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 you delete old files on a regular basis in order to conserve server space.
- The *New Exact* Filing Policy 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.
- The *New Auto Generate* Filing Policy creates a new directory structure, based on the time and date of creation, into which the TIFF images are filed. While this may seem like the safest Filing Policy choice, keep in mind that it also requires more disk space than the Overwrite Filing policy.

Output Image Quality

- *Multi-Page TIFF* can be enabled using Xerox CentreWare Internet Services. When Multi-Page TIFF is enabled, a single TIFF file will be created for a multi-page document. This single TIFF file will contain all the pages of the document. An .XSM folder is not created when scanning in the Multi-Page TIFF mode. A single 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 DC 332/340ST supports both PDF and TIFF File Formats. The PDF image format is a TIFF image enclosed within a PDF wrapper. The DC220/230ST supports only the TIFF image format.

CAUTION

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.

Repository Locking

More than one DC220/230/332/340ST can log into a file server and transfer a file to the same document repository, but *not at the same time*.

When one DC220/230/332/340ST logs in to transfer a file, the document repository is locked. Another DC220/230/332/340ST cannot transfer a file to the repository. This prevents possible corruption of the files.

Multiple Logins

More than one DC220/230/332/340ST can transfer files to *different repositories* in 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 DC220/230/332/340ST can use an existing user account if the account is enabled for multiple logins. The account for the scanner is no different from a user account. *It is a user account!*

Logging in to Multiple File Servers

The same DC220/230/332/340ST can log into more than one file server and transfer a file to a document repository, *but not at the same time.*

This is similar to a user logging into more than one file server. The scanner requires accounts in all file servers that it needs to access.

2. Set Up Scanning - NetWare

Before You Start

Prior to starting the installation procedure, perform the following steps:

1. Ensure that the DC220/230/332/340ST is connected, configured, and operating correctly as a printer.
2. Use the SYSCON utility for NetWare 3.x, or NWADMIN for NetWare 4.x to create a user account on the file server for the scanner.
3. Create a directory on the file server to be used as a repository for scanned files. Give the scanner user account all access rights to this directory, except supervisor. The repository name cannot exceed 8 characters.

NOTE

Refer to the NetWare documentation for additional information, if needed.

When a document is scanned, the DC220/230/332/340ST logs into the scanner user account with the user name and password, transfers the file to the repository in the server, and then logs out.

NOTE

The DC 332/340ST supports both PDF and TIFF File Formats. The PDF image format is a TIFF image enclosed within a PDF wrapper. The DC220/230ST supports only the TIFF image format.

Set Up Options

There are two procedures that can be used to successfully set up scanning. Read the information below and choose the procedure that you will use to complete the installation:

- **Set Up Scanning**

To complete the native implementation of scanning for your NetWare environment, go to the section of this chapter titled *Set Up Scanning* now.

- **Use Xerox CentreWare Internet Services**

Xerox's CentreWare Internet Services is accessed through the embedded HTTP server on the DC220/230/332/340ST that 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).

Using Internet Services, you can:

- Create new scan templates
- Update existing scan templates
- Modify scan configurations (including document repository locations), enable and disable Confirmation Sheets, and change Filing Protocols.
- Enable Multi-Page TIFF, which will create a single TIFF file for a multi-page document, instead of one TIFF file for each page

Output Image Quality

- *Multi-Page TIFF* can be enabled using Xerox CentreWare Internet Services. When Multi-Page TIFF is enabled, a single TIFF file will be created for a multi-page document. This single TIFF file will contain all the pages of the document. An .XSM folder is not created when scanning in the Multi-Page TIFF mode. A single 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 DC 332/340ST supports both PDF and TIFF File Formats. The PDF image format is a TIFF image enclosed within a PDF wrapper. The DC220/230ST supports only the TIFF image format.

CAUTION

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.

If you will be using CentreWare Internet Services to complete the installation, perform these steps.

- A. Refer to the chapter titled “Internet Printing” of the *Xerox DC220/230/332/340ST System Administration Guide*.
- B. Follow the instructions located in the section of the chapter titled “Enabling CentreWare Internet Services”.
- C. Finally, refer to “Chapter 3 - Using Internet Services” of the *Getting Started with Internet Services* guide, and follow the instructions in the section titled “Scanning with Internet Services” to complete the scanning set up process.

Item	Purpose	Provided by
DC220/230/332/340ST Scanning Services kit	This kit must be installed before proceeding with the installation steps in this chapter.	Xerox
Scan User Name	When a document is scanned, the DC220/230/332/340ST logs in to the user account with the user name and password, transfers the file to the server, and then logs out.	Customer
Scan User Password	When a document is scanned, the DC220/230/332/340ST logs in to the user account with the user name and password, transfers the file to the server, and then logs out.	Customer
File Repository Server	The hard copy document is scanned by the DC220/230/332/340ST and saved electronically in a designated file server repository.	Customer
Repository Directory	Repositories are directories or filing destinations where documents are stored and held in .XSM (Xerox document storage) format folders. The default folder name is NETSCAN.XSM. A repository name cannot exceed 8 characters.	Customer
NDS Tree	<ul style="list-style-type: none"> ● For an NDS installation, assign the DC220/230/332/340ST to an NDS Tree. ● For a Bindery installation, set the NDS Tree to a dash [-] to disable NDS. 	Customer
NDS Context	<ul style="list-style-type: none"> ● For an NDS installation, assign the DC220/230/332/340ST to an NDS Name Context. ● For a Bindery installation, set the NDS Context to a dash [-] to disable NDS. 	Customer

Table 2-1: General Installation Requirements

Set Up Scanning

1. Enter System Administrator Setups:
 - A. Press the **[Access]** button on the DC220/230/332/340ST Control Panel.
 - B. Using the keypad, enter **[#22222]** (or the current System Administrator password) and then press **[Enter]** on the Control Panel Touch Screen. You must enter the # character before entering 22222.
2. Access the Scan to File Setups screens and assign the Default Repository Server:
 - A. Select **[Additional Setups]** (if necessary) and 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.

Optionally, up to four other public repositories can be setup 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 you do not use a directory in the SYS volume, since it could quickly fill up with scanned files.

- B. Select **[Save]** when finished.
4. Enter the NDS Tree and NDS Context information (necessary for Bindery and NDS installations):
- A. For a NetWare Bindery installation:
- Press **[NDS Tree]**.
 - Press **[Edit]** and use the keypad on the screen to enter a dash [-].
 - Press **[Save]**.
 - Press **[NDS Context]**.
 - Press **[Edit]** and use the keypad on the screen to enter a dash [-].
 - Press **[Save]** and go to Step 5 of this procedure.
- B. For a NetWare NDS installation:
- Press **[NDS Tree]**.
 - Press **[Edit]** and 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.

- Press **[Save]**.
- Press **[NDS Context]**.
- Press **[Edit]** and use the keypad on the screen to enter the NDS Context name. This must be a fully qualified name.

NOTE

Refer to the information displayed by NWADMIN and the NetWare documentation for help in determining the exact NDS Context information for your environment.

An example of the NDS Context information required in this field is:

OU=AAAAA . O=BBBBB . C=CCCCC

where:

AAAAA represents the name of an organizational unit. There can be more than one organizational unit in the NDS Context.

BBBBB is the name of the organization.

CCCCC represents the name of the country you are in.

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 organizations exist.

- C. Press **[Save]** when finished.
5. Enter the Login Name.
 - A. Press **[Login Name]**.
 - B. Press **[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. It should be entered exactly as you entered it when you created the account with SYSCON or NWADMIN. If the names do not match exactly, the DC220/230/332/340ST will not log into the file server.

- C. Press **[Save]**.
6. Enter the User Password:
 - A. Press **[Password]**.
 - B. Press **[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. It should be entered exactly as you entered it when you created the account with SYSCON or NWADMIN. If the passwords do not match exactly, the DC220/230/332/340ST will not log into the file server.

7. Press **[Save]** and then press **[Save]** again when finished to return to the Scan to File Setups screen. If desired, press **[Repository 1]** and **[Repository 2, 3, 4]** (as needed) to set up Repositories 1 to 4.

8. Press **[Filing Policy]** and choose **[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 you choose **Append**, you may want to regularly delete older documents to free up server space.

9. Press **[Save]** after making your Filing Policy selection.
10. Press **[Confirmation Sheet]**.
 - A. Choose **[Enabled]** or **[Disabled]** to specify that a Confirmation Sheet will be printed after each scanning operation. The Confirmation Sheet provides information about the results of the scanning operation, and can be helpful if you encounter a problem during the scanning installation or operation.
 - B. Select **[Save]** after making your selection.
11. Press **[Close]**.
12. Press **[Exit]**.

NOTE

The DC220/230ST automatically reboots and prints a Configuration Sheet in approximately 3 minutes, if Configuration Sheets are enabled. Enabled is the default setting.

13. Check the settings on the Configuration Sheet against the information that was entered.
14. It is recommended that you install the Visioneer PaperPort software, which is shipped on a CD ROM and included with your DC220/230/332/340ST when you purchase Scanning Services. This software should be installed at each client workstation.

PaperPort allows you to annotate, organize, file and locate scanned TIFF documents. After you scan a document at the DC220/230/332/340ST, you can access PaperPort and retrieve the scanned file within the PaperPort application. With PaperPort links, you can transfer documents between the PaperPort desktop and other applications and devices on your 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.

Install the PaperPort software from the PaperPort CD ROM. Load the CD ROM, double-click on **[Start]**, and follow the instructions on the screen. This procedure will load PaperPort onto your client workstation. It also provides access to PaperPort software documentation. Take a few minutes to familiarize yourself with both the PaperPort *Install Guide* and *On-Line* documentation.

15. Test scanning.
 - A. Place the document that you want to scan in the Document Feeder, or place the first page on the Document Glass.
 - B. Select the **[Scan]** feature on the DC220/230/332/340ST Touch Screen.
 - C. Scan jobs are based on templates that contain programming selections for your job. Verify that **[@default.xst]** is highlighted in the scan template list. This is the default template.
 - D. If desired, select **[Added Features]** and modify the template

by selecting options from the *Scan Setups* tab on the DC220/230/332/340ST Touch Screen (for example, *Reduce/Enlarge* or *Basic Image Quality*). Any changes you make from the Touch Screen apply only to the current job. The template settings will be restored after the completion of the scan job.

- E. Press the **[Start]** button. After the job is scanned, the DC220/230/332/340ST 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.
- F. Allow approximately one minute for the process to complete a one-page job. It will take longer if you have scanned multiple pages. Then check to make sure that the scanned file has been stored in the designated repository on the file server.
- G. The DC220/230/332/340ST 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.

NOTE

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.

- H. 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.
- I. At your workstation, view or list the directory path for the scanner account on the file server. The scanning operation created a folder named *NETSCAN.XSM*.
- J. Open the *NETSCAN.XSM* folder. You should see several files in this folder:

0000001.TIF ...0000002.TIF for example, 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. (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.)

NOTE

The DC 332/340 supports both PDF and TIFF File Formats. The PDF image format is a TIFF image enclosed within a PDF wrapper. The DC220/230 supports only the TIFF image format.

NETSCAN.DAT is an ASCII file which contains the names of the TIFF/PDF files scanned with the last scanning operation. This file is updated after every successful storage of a .TIF file.

NEXTNAME.DAT is an ASCII file which contains the name of the next available .TIF file. This name is controlled and incremented 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).

- K. At this point, the TIFF/PDF file can be imported into any software application that can accept TIFF/PDF files.
- L. Scanning is now ready to operate. Subsequent scanning operations can be modified by changing the selections in the Default Template using the DC220/230/332/340ST Touch Screen.
- M. The installation process is now complete.

3. Set Up Scanning - FTP (File Transfer Protocol)

Before You Start

Prior to starting the installation procedure, perform the following:

1. Ensure that the DC220/230/332/340ST is connected, configured, and operating correctly as a network printer.
2. 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.

3. Create a user account 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.

4. 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]**.

NOTE

The DC 332/340ST supports both PDF and TIFF File Formats. The PDF image format is a TIFF image enclosed within a PDF wrapper. The DC220/230ST supports only the TIFF image format.

Set Up Options

There are two procedures that can be used to successfully set up scanning. Read the information below and choose the procedure that you will use to complete the installation:

- **Set Up Scanning**
To complete the native implementation of scanning for your network environment, go to the section of this chapter titled *Set Up Scanning* now.
- **Use Xerox CentreWare Internet Services**

Xerox's CentreWare Internet Services is accessed through the embedded HTTP server on the DC220/230/332/340ST that 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).

Using Internet Services, you can:

- Create new scan templates
- Update existing scan templates
- Modify scan configurations (including document repository locations) enable and disable Confirmation Sheets, and change Filing Protocols.
- Enable Multi-Page TIFF, which will create a single TIFF file for a multi-page document, instead of one TIFF file for each page.

Output Image Quality

- *Multi-Page TIFF* can be enabled using Xerox CentreWare Internet Services. When Multi-Page TIFF is enabled, a single TIFF file will be created for a multi-page document. This single TIFF file will contain all the pages of the document. An

.XSM folder is not created when scanning in the Multi-Page TIFF mode. A single 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 DC 332/340ST supports both PDF and TIFF File Formats. The PDF image format is a TIFF image enclosed within a PDF wrapper. The DC220/230ST supports only the TIFF image format.

CAUTION

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.

If you will be using CentreWare Internet Services to complete the installation, perform these steps.

- A. Refer to the chapter titled “Internet Printing” of the *Xerox Document Centre 220/230/332/340STST System Administration Guide*.
- B. Follow the instructions located in the section of the chapter titled “Enable CentreWare Internet Services”.
- C. Finally, refer to “Chapter 3 - Using Internet Services” of the *Getting Started with Internet Services* guide, and follow the instructions in the section titled “Scanning with Internet Services” to complete the scanning set up process.

Item	Purpose	Provided by
DC220/230/332/340ST Scanning Services kit	This kit must be installed before proceeding with the installation steps in this chapter.	Xerox
Scan User Name	When a document is scanned, the DC220/230/332/340ST logs in to the user account with the user name and password, transfers the file to the server, and then logs out.	Customer
Scan User Password	When a document is scanned, the DC220/230/332/340ST logs in to the user account with the user name and password, transfers the file to the server, and then logs out.	Customer
File Repository Server	The hard copy document is scanned by the DC220/230/332/340ST and saved electronically in a designated file server repository.	Customer
Repository Directory	Repositories are directories or filing destinations where documents are stored and held in .XSM (Xerox document storage) format folders.	Customer

Table 3-1: General Installation Requirements

Set Up Scanning

1. Enter System Administrator Setups:
 - A. Press the **[Access]** button on the DC220/230/332/340ST Control Panel.
 - B. Using the keypad, enter **[#22222]** (or the current System Administrator password) and then press **[Enter]** on the Control Panel Touch Screen. You must enter the # character before entering 22222.
2. Access the Scan to File Setups screens and assign the Default Repository Server:
 - A. Select **[Additional Setups]** (if necessary) and 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 DC220/230/332/340ST 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. Press [**Login Name**].
 - B. Press [**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. It should be entered exactly as you entered it when you created the account. If the names do not match exactly, the DC220/230/332/340ST will not log into FTP Services. Remember that some FTP Services are case-sensitive.

- C. Press [**Save**] and then press [**Save**] again when finished.
- 5. Enter the User Password:
 - A. Press [**Password**].
 - B. Press [**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. It should be entered exactly as you entered it when you created the account. If the passwords do not match exactly, the DC220/230/332/340ST will not log into FTP Services. Remember that some FTP Services are case-sensitive.

- 6. Press [**Save**] and then press [**Save**] again when finished to return to the Scan to File Setups screen.
- 7. If desired, press [**Repository 1**] and [**Repository 2,3, 4**] (as needed) to set up Repositories 1 through 4.
- 8. Press [**Filing Policy**] and choose [**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 you choose **Append**, you may want to regularly delete older documents to free up server space.

9. Press [**Save**] after making your Filing Policy selection.
10. Press [**Confirmation Sheet**].
 - A. Choose [**Enabled**] or [**Disabled**] to specify that a Confirmation Sheet will be printed after each scanning operation. The Confirmation Sheet provides information about the results of the scanning operation, and can be helpful if you encounter a problem during the scanning installation or operation.
 - B. Select [**Save**] after making your selection.
11. Press [**Close**].
12. Press [**Exit**].

NOTE

The DC220/230ST automatically reboots and prints a Configuration Sheet in approximately 3 minutes, if Configuration Sheets are enabled. Enabled is the default setting.

13. Check the settings on the Configuration Sheet against the information that was entered.
14. It is recommended that you install the Visioneer PaperPort software, which is shipped on a CD ROM, and included with your DC220/230/332/340ST when you purchase Scanning Services. This software should be installed at each client workstation.

PaperPort allows you to annotate, organize, file and locate scanned TIFF documents. After you scan a document at the DC220/230/332/340ST, you can access PaperPort and retrieve the scanned file within the PaperPort application. With PaperPort links, you can transfer documents between the PaperPort desktop and other applications and devices on your 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.

Install the PaperPort software from the PaperPort CD ROM. Load the CD ROM, double-click on **[Start]**, and follow the instructions on the screen. This procedure will load PaperPort onto your client workstation. It also provides access to PaperPort software documentation. Take a few minutes to familiarize yourself with both the PaperPort *Install Guide* and *On-Line* documentation.

15. Test scanning.

- A. Place the document that you want to scan in the Document Feeder, or place the first page on the Document Glass.
- B. Select the **[Scan]** feature on the DC220/230/332/340ST Touch Screen.
- C. Scan jobs are based on templates that contain programming selections for your job. Verify that **[@default.xst]** is highlighted in the scan template list. This is the default template.
- D. If desired, select **[Added Features]** and modify the template by selecting options from the *Scan Setups* tab on the DC220/230/332/340ST Touch Screen (for example, *Reduce/Enlarge* or *Basic Image Quality*). Any changes you make from the Touch Screen apply only to the current job. The template settings will be restored after the completion of the scan job.

- E. Press the **[Start]** button. After the job is scanned, the DC220/230/332/340ST 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.
- F. Allow approximately one minute for the process to complete a one-page job. It will take longer if you have scanned multiple pages. Then check to make sure that the scanned file has been stored in the repository on the file server.
- G. The DC220/230/332/340ST 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.

NOTE

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.

- H. 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.
- I. At your workstation, view or list the directory path for the scanner account on the file server. The scanning operation created a folder named *NETSCAN.XSM*.
- J. Open the NETSCAN.XSM folder. You should see several files in this folder:
00000001.TIF ...00000002.TIF for example, 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. (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.)

NETSCAN.DAT is an ASCII file which contains the names of the TIFF/PDF files scanned with the last scanning operation. This file is updated after every successful storage of a .TIF file.

NEXTNAME.DAT is an ASCII file which contains the name of the next available .TIF file. This name is controlled and incremented 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).

- K. At this point, the TIFF/PDF file can be imported into any software application that can accept TIFF/PDF files.
- L. Scanning is now ready to operate. Subsequent scanning operations can be modified by changing the selections in the Default Template using the DC220/230/332/340ST Touch Screen.
- M. The installation process is now complete.

4. Hints and Tips / Problem Solving

Hints and Tips

1. Prior to performing the initial scan job, verify the following from a workstation on the network by logging into the scan account and copying a file into the scan repository:
 - The DC220/230/332/340ST user account and password are correct.
 - The correct rights to the document repository have been assigned to the DC220/230/332/340ST.

Also, make sure that the Confirmation Sheet option is enabled. This provides details of each scan job, including status, filing location, Filing Policy and scan settings. Enabling the Confirmation Sheet is part of the set up procedure detailed in the *Set Up Scanning - NetWare* and *Set Up Scanning - FTP (File Transfer Protocol)* chapters of this guide.

2. You can confirm that a scan job was successfully completed by verifying that the number of pages scanned is the same as the number of files stored in the document repository for that job. (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.)
3. The default directory created for each scan job is NETSCAN.XSM.

NOTE

The DC 332/340ST supports both PDF and TIFF File Formats. The PDF image format is a TIFF image enclosed within a PDF wrapper. The DC220/230ST supports only the TIFF image format.

Installation Considerations

Filing Policy

- An **advantage** of the *Overwrite* policy is that minimal disk space is required since files are deleted and recreated for each scan job. This makes it ideal for users with their own file space allocation.
- A **disadvantage** of the *Overwrite* policy is that with a shared document repository, users will overwrite other users' files, possibly before the file is retrieved by the user.
- An **advantage** of the *Append* policy is that no data is lost because users share a document repository.

A **disadvantage** of the *Append* policy is that disk space may quickly be consumed if not managed properly. This is especially true when each user has his or her own file space.

- An **advantage** of the *New Exact* policy is that it 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.
- A **disadvantage** of the *New Exact* policy is that if there are files stored in the repository, the scan job is aborted.
- An **advantage** of the *New Auto Generate* policy is that it creates a new directory structure, based on the time and date of creation, into which the TIFF/PDF images are filed.
- A disadvantage of the *New Auto Generate* policy is that while this may seem like the safest policy choice, it also requires more disk space than the *Overwrite* policy.

Optical Character Recognition (OCR)

- If you are using the OCR capabilities of Visioneer PaperPort and TextBridge, it is recommended that you use the *Text* image quality selection and the highest resolution possible. This will ensure optimum OCR capabilities.

Scan Templates

- Use Xerox CentreWare Internet Services to create additional scan templates, so users do not need to manually modify the default scan template for each scan job.

Sharing One Document Repository Among Multiple DC220/230/332/340STs

- More than one DC220/230/332/340ST may use a document repository. Simply configure each DC220/230/332/340ST in a similar manner and create additional scan templates on each DC220/230/332/340ST as needed.

Problem Solving

You are here because a problem has been identified with the network scanning functions of the DC220/230/332/340ST.

Resolve any copier problems first. Perform the corrective action that is recommended by the *Xerox Document Centre 220/230/332/340ST User Guide*. Do not attempt to resolve a network scanning problem if the copier functions are not operating correctly.

A. The image quality of the scanned image is not acceptable.

Be sure to select the appropriate image quality setting in the template you are using to scan the image. Use the Image Quality *Text* setting for text documents and the *Photo* setting for grayscale 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.

B. The optical character recognition (“OCR”) application you are using with the scanned image does not recognize text accurately.

Make sure that you have selected the Image Quality *Text* setting when scanning the document(s).

C. 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 Messages

Problem	Corrective Action
File delete, replace failed	<ul style="list-style-type: none"> ● 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.
Filing directory already exists	<ul style="list-style-type: none"> ● 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.
File transfer failed	<ul style="list-style-type: none"> ● 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.
Login failure. Check user, password, and/or setups	<p>A scanning operation failed.</p> <p>Verify the following from a workstation on the network by logging into the scan account and copying a file into the scan repository:</p> <ul style="list-style-type: none"> ● The user name is invalid or incorrect. ● The password is invalid or incorrect. <p>Also check the following:</p> <ul style="list-style-type: none"> ● 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.

Problem	Corrective Action
Protocol not running	A user tried a scanning operation with a destination on the NetWare server. <ul style="list-style-type: none">• The NetWare protocol is not currently enabled. Enable it.
Remote directory lock failed	The repository that you are attempting to send a job into with a scanning operation is in use by another DC220/230/332/340ST. Check the following: <ul style="list-style-type: none">• 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.

5. Glossary

Document Repository	A <i>Document Repository</i> is a filing directory where TIFF/PDF files are stored. Typically, this will be located on a NetWare server or FTP (File Transfer Protocol) server.
Scan Template	A <i>Scan Template</i> controls the features applied to the scanned document as well as the Filing Policy and repository location.
Template Pool	The <i>Template Pool</i> is the central location on a server where scan templates created with Xerox's CentreWare Scanning Services are stored.
Filing Policy	The <i>Filing Policy</i> specifies the method used to store the TIFF/PDF images in the document repository. There are several options: <ul style="list-style-type: none">• Overwrite• Append• New Exact• New Auto Generate
Output Image Format	<ul style="list-style-type: none">• TIFF• Multi-Page TIFF• PDF

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