XEROX®

WorkCentre® 7132

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System Administration Guide

ME3613E4-2

www.xerox.com/support

Table of Contents

1 Before Using the Machine

Welcome to the Xerox family of WorkCentre products.

This System Administration Guide provides detailed information, technical specifications and procedures for using the integral features of the machine.

Xerox Welcome Center

If you need assistance during or after product installation, visit the Xerox website for on-line solutions and support.

http://www.xerox.com/support

If you require further assistance, contact our experts at the Xerox Welcome Center. A local representative telephone number may have been provided when the product was installed. For convenience and future reference, please record the telephone number in the space below.

Welcome Center or local representative telephone number:

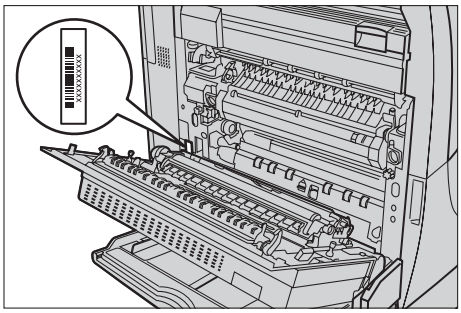
#_____

Xerox US Welcome Center: 1-800-821-2797

Xerox Canada Welcome Center: 1-800-93-XEROX (1-800-939-3769)

Serial Number

When you call the Welcome Center you will need the serial number which is located on the left side of the machine behind Cover A, as shown in the diagram.



For your convenience, record the serial number in the space below.

Serial Number:

_____

Keep a record of any error messages. This information helps us solve problems faster.

Languages Displayed on the Touch Screen

You can change the languages in the following two ways.

To change the language for temporary use, press the <Language> button on the control panel, then select the required language.

NOTE: The language returns to the default language after rebooting the machine.

To change the default language, enter the System Settings mode, select [Common Settings], then select [Screen/Button Settings]. In the [Screen/Button Settings] screen, select the required language as [Default Language]. For more information, refer to the Setups chapter of the User Guide.

Conventions

This section describes the conventions used throughout this System Administration Guide. In this guide, you will find that some terms are used interchangeably:

- Paper is synonymous with media.
- Document is synonymous with original.
- Xerox WorkCentre 7132 is synonymous with the machine.

Key Operator/System Administrator

Key Operator describes the person who is responsible for hardware maintenance.

System Administrator refers to the person who sets up the network, installs the print drivers, and manages software.

Orientation

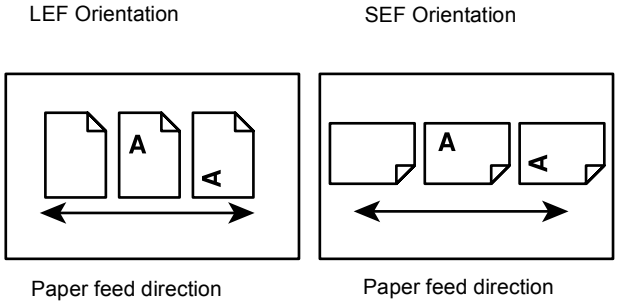
Orientation is used to mean the direction of images on the page. When the image is upright, the paper (or other media) can be either long edge feed or short edge feed.

Long Edge Feed (LEF)

When loading documents long edge feed into the document feeder, load with one of the long edges facing into the document feeder. The short edges appear at the top and bottom of the paper, facing the front and back of the document feeder. When loading paper long edge feed into a paper tray, place the paper with one of the long edges on the left-hand side and one of the short edges toward the front of the tray.

Short Edge Feed (SEF)

When loading documents short edge feed into the document feeder, load with one of the short edges facing into the document feeder. The long edges appear on the top and bottom of the paper, facing the front and back of the document feeder. When loading paper short edge feed into a paper tray, place the paper with one of the short edges on the left-hand side and one of the long edges toward the front of the tray.



Text in [Square Brackets]

Indicate that these are names of the screens, tabs, buttons, features and option categories on the screen. They are also used when referring to file and folder names on a PC.

For example:

- Select [System Settings] on the [System Administrator Menu] screen.
- Close [config.txt] and then open the [drivers] folder.

Text in <Angle Brackets>

Indicate that these are names of the hard buttons, numeric or symbol buttons, lights on the control panel or symbols on the power switch label.

For example:

- Press the switch to the <I> position to switch the machine on.
- Press the <Log In/Out> button on the control panel.

Italic Typeface

The Italic typeface is used to indicate references to other sections and chapters.

For example:

Machine Status – page 25.

Warnings

Warnings are statements that alert you to the possibility of personal harm.

For example:

WARNING: This product must be connected to a protective earth circuit.

Cautions

Cautions are statements that suggest the possibility of mechanical damage as a result of an action.

For example:

CAUTION: Do not connect the network cable to the machine until instructed to do so.

Notes

Notes are statements that provide additional information.

For example:

NOTE: It is recommended that you change the password from the default one. For further assistance, contact your Xerox Welcome Center.

Related Information Sources

The following additional sources of information are available for the machine.

- Xerox WorkCentre 7132 Quick Network Setup Guide on the PCL Print Driver CD-ROM
- Xerox WorkCentre 7132 Quick Use Guide
- Xerox WorkCentre 7132 User Guide
- The On-line Help systems (Print Drivers and CentreWare Utilities)
- The CentreWare Utilities Documentation (HTML)

NOTE: Please note that the screens shown in this System Administration Guide apply to a fully configured machine and therefore may not exactly represent the configuration being used.

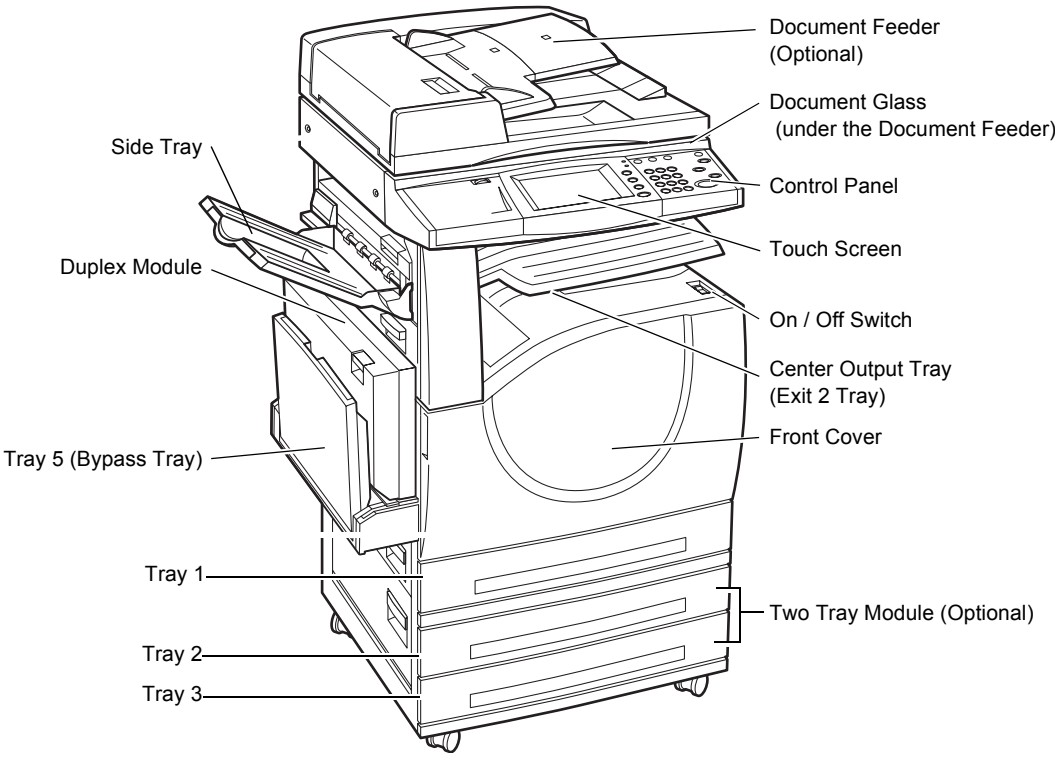
2 Product Overview

This chapter gives an overview of the features and functions of the machine and enables familiarity with the device network installation.

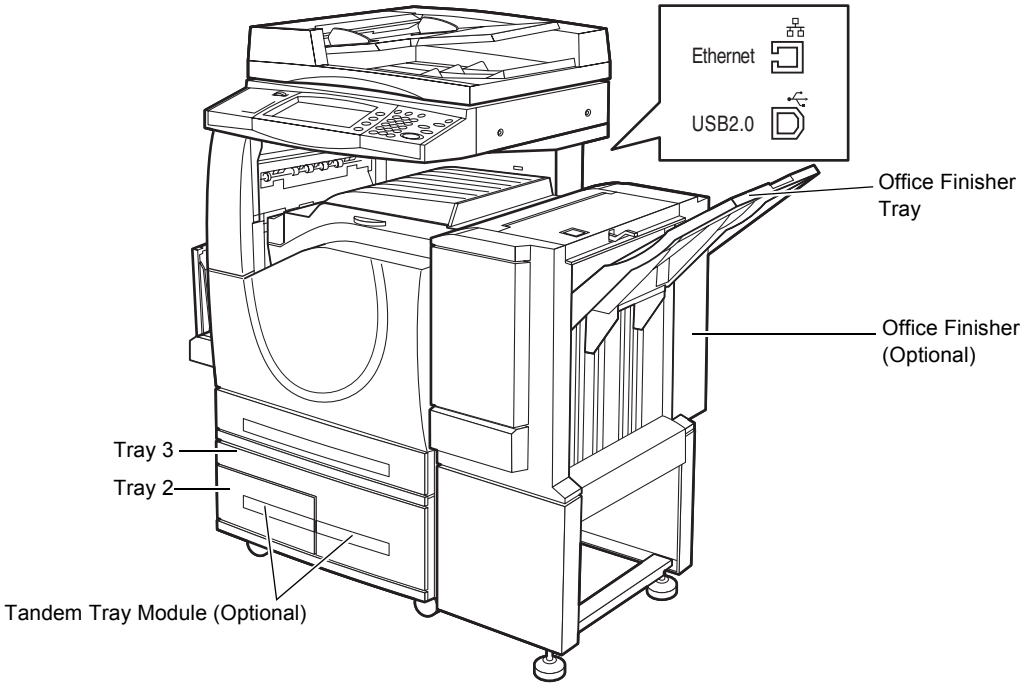
Detailed information is provided in the following sections.

Machine Components

The following diagrams show the standard and optional components of the machine. Configuration may vary depending on the model.



NOTE: Depending on the configuration, the Document Glass Cover is attached instead of the Document Feeder. Two optional paper trays can be attached.



Telephone socket

Located at the back of the machine. The telephone socket is used to connect to the fax kit.

USB 1.1 (Host) Port

Located at the back of the machine. This port is used to connect to the fax kit.

USB 1.1 (Device) Port

Located at the back of the machine. This port is used to connect to a PC for software update downloads.

USB 2.0 (Device) Port

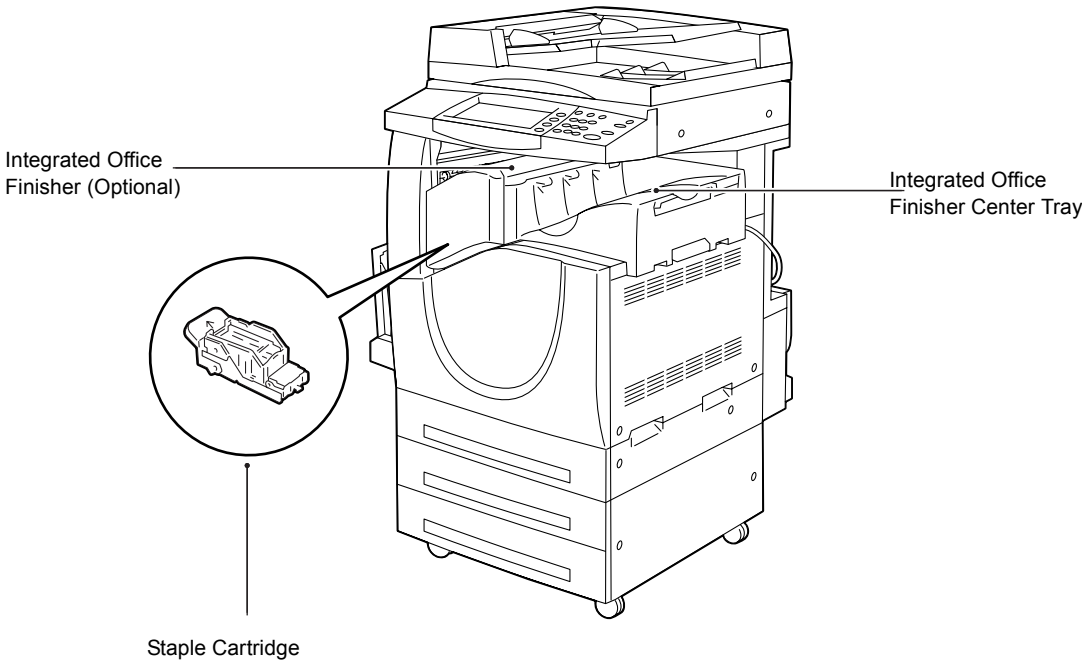
Located at the back of the machine. This port is used to connect to a local client computer and is used as an input port for printing data.

100Base-TX/10Base-T Port

Located at the back of the machine. This port is used to connect to a network cable when the optional printer kit is installed.

Office Finisher

Allows you to staple or sort copies automatically. The Office Finisher Tray can hold 1,000 sheets of 20 lb bond or 80 g/m^2 paper in Letter/A4 size or smaller.



Integrated Office Finisher

Allows you to staple or sort copies automatically. The Integrated OfficeFinisher Center Tray can hold 500 sheets of 20 lb bond or 80 g/m2 paper in Letter/A4 size or smaller.

Duplex Module

Allows you to make double-sided copies. The Duplex Module can be used when paper is supplied from Tray 1, 2, or 3. For more information, refer to 2 Sided Copying in the Copy chapter of the User Guide.

Trays 2 & 3

At the base of the machine, the following optional trays will be available, depending on the configuration.

- Two Tray Module – Can be added to the standard 1-tray configuration. Each tray can hold 520 sheets of 20 lb bond or 80 g/m^2 paper.
- Tandem Tray Module – Can be added to the standard 1-tray configuration to provide high volume paper sources. Tray 2 can hold a maximum of 900 sheets of 20 lb bond or 80 g/m^2 paper in Letter or A4 size, long edge feed. Tray 3 can hold 1,200 sheets of 20 lb bond or 80 g/m^2 paper in Letter or A4 size. The Tandem Tray Module is referred to as “TTM” in this manual.

Tray 5 (Bypass)

Allows you to bypass the standard paper trays to print on different sized paper. The Bypass Tray can hold 100 sheets of 20 lb bond or 80 g/m^2 paper in sizes ranging from B6 (SEF) or Envelope Monarch (LEF) to A3 (SEF) or 11 × 17 inch (SEF).

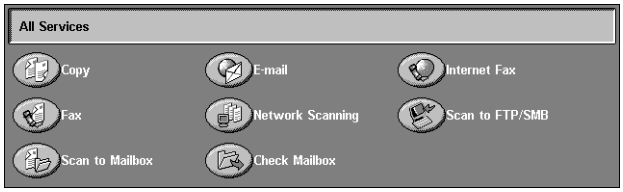
NOTE: Do not place paper with a length less than 140mm in the Bypass Tray, as this may cause paper jams and potentially damage the inside of the machine.

Services and Features

The machine has various features and provides valuable services. The following description outlines the features and explains the options on the <All Services> screen.

NOTE: The arrangement of icons for the services and features displayed on the screen can be changed by the Key Operator.

1. Press the <All Services> button on the control panel.
2. Select the required service.



Copy

Allows you to copy documents in various ways. For example, you can produce output which has been reduced or enlarged to a different size, or copy two or four independent documents onto one sheet of paper. For more information, refer to the Copy chapter of the User Guide.

E-mail

Allows you to send scanned documents by e-mail in various ways. For example, you can set the density for scanning, or specify the file format for saving the documents. For more information, refer to the Scan/E-mail chapter of the User Guide.

Internet Fax

Allows you to send and receive faxes over the Internet or intranet. Internet Fax provides reduced cost of transmissions compared to the use of a conventional phone line. After scanning documents, you can send scanned data by e-mail, and can also receive scanned data in an e-mail attachment sent from an Internet Fax compatible machine. For more information, refer to the Fax/Internet Fax chapter of the User Guide.

Fax

Allows you to send regular fax documents. You can send documents in a reduced or enlarged format, or specify destinations using the Address Book or speed dialing features. For more information, refer to the Fax/Internet Fax chapter of the User Guide.

Network Scanning

Allows you to scan documents and store them as electronic documents on a file server on the network by selecting a job template which has various assigned parameters. You can retrieve the stored electronic documents by accessing the file server from a PC. For more information, refer to Network Scanning in the Scan/E-mail chapter, and Job Templates in the CentreWare Internet Services chapter of the User Guide.

Scan to FTP/SMB

Allows you to scan and store documents to specified destinations using the FTP or SMB protocol. For more information, refer to Scan to FTP/SMB in the Scan/E-mail chapter of the User Guide.

Scan to Mailbox

Enables the confidential mailbox or polling feature by storing the scanned documents in private mailboxes. For more information, refer to Scan to Mailbox in the Scan/E-mail chapter of the User Guide.

Check Mailbox

Allows you to confirm, print, or delete the documents in a mailbox. It also allows you to change or release linkage with a job flow sheet and execute the linked job flow sheets. For more information, refer to the Check Mailbox chapter of the User Guide.

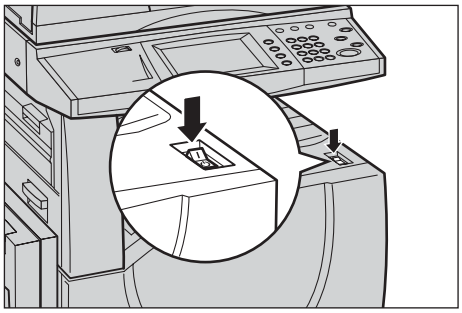
Power On/Off

Powering On

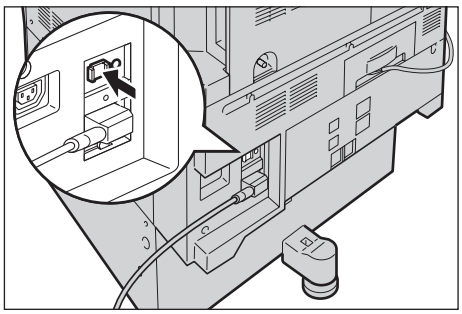
Make sure that the machine is connected to a suitable power supply and that the power plug is firmly connected to the electrical outlet.

The machine is ready to make copies a maximum of 42 seconds after powering on (varies with machine configuration.) For more information, refer to Machine Specifications in the Specifications chapter of the User Guide.

1. Press the power switch to the <I> position.



NOTE: If the machine does not start up, check that the RESET button on the back of the machine is in the reset position (depressed).



Powering Off

Before turning the power off, wait at least 5 seconds after all copy or print jobs have completely finished.

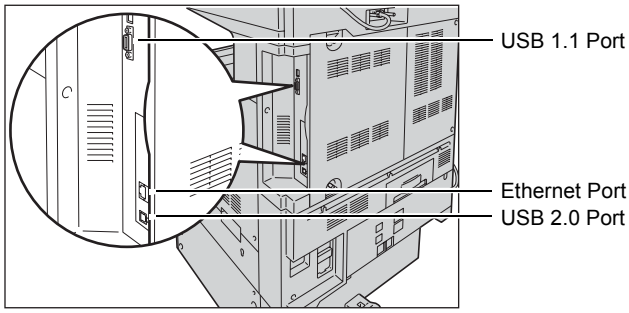
When you switch off the machine, it remains on for approximately 10 seconds while it stores files and prepares for shutdown. The machine then shuts down completely.

CAUTION: Wait at least 20 seconds between powering the system on and off. Failure to do this could cause damage to the hard disk and the machine.

Cabling

Interface Ports

The machine has multiple interface ports as shown in the following diagram.



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USB 1.1 (Device) Port

Located at the back of the machine. This port is used to connect to a PC for software update downloads.

USB 2.0 (Device)

USB 2.0 is provided for connection to a PC and is used as an input port for printing data. This is compatible with Full Speed (12 Mbps), and High Speed (480 Mbps), but is not compatible with Low Speed (1.5 Mbps).

Ethernet 10BASE-T/100BASE-TX

The machine is compatible with SMB, LPD, EtherTalk, NetWare, IPP, HTTP, DHCP, SMTP, POP, DDNS, RARP, Bonjour and Port9100. It supports an Ethernet connector as a standard feature.

There are five Ethernet interface options available on the touch screen: Auto, 100BASE-TX (Full Duplex), 100BASE-TX (Half Duplex), 10BASE-T (Full Duplex), and 10BASE-T (Half Duplex). 10BASE-T and 100BASE-TX support 10 Mbps and 100 Mbps respectively. When AUTO is selected, the machine detects the communication speed automatically when powered on and adjusts its settings accordingly.

EtherTalk, NetWare, and TCP/IP protocols that use Ethernet can be switched automatically according to the applied transmission protocol.

NOTE: EtherTalk will function when the optional PostScript Kit is installed.

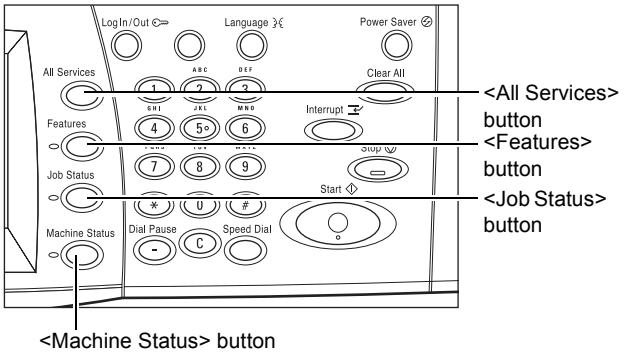
Modes

Use the mode buttons to access the screens which allow you to select features, monitor the status of jobs and obtain general information on the machine.

There are four buttons on the machine.

- All Services
- Features
- Job Status
- Machine Status

NOTE: These buttons do not respond when the machine is in the System Settings mode.

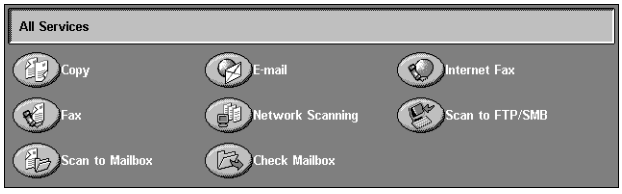


All Services

Use this button to access all the services available on the machine.

NOTE: The arrangement of service icons displayed on the screen can be changed by the Key Operator.

1. Press the <All Services> button on the control panel.



Features

Use this button to go back one previous screen. If you are using the [Job Status] screen or [Machine Status] screen, press the <Features> button to return to the previous copy, fax, or scan feature screen. The copy, fax, or scan feature screen does not change if you press this button if you are currently viewing one of these screens. In this case, use the <All Services> button to select the copy, fax, or scan feature.

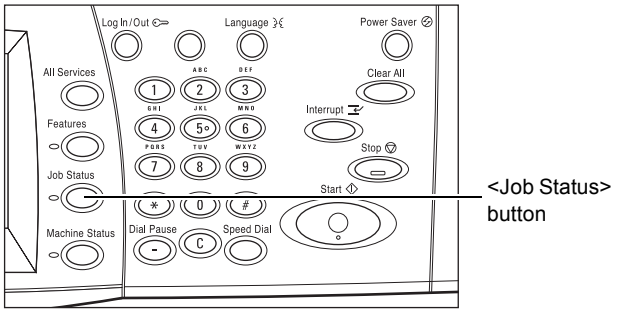
Job Status

Use this button to check the progress of a job, or display the log and detailed information of completed jobs. The latest job is displayed at the top of the list. You can also check, delete, or print documents stored in the public mailbox of the machine. Use the scroll buttons to switch between screens.

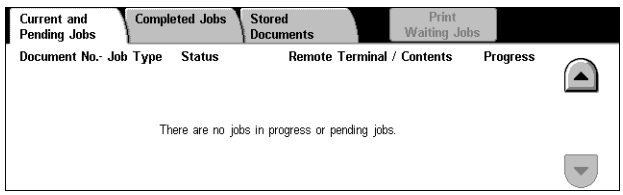
For more information on each feature, refer to the following.

Current and Pending Jobs – page 20
Completed Jobs – page 21
Stored Documents – page 22

1. Press the <Job Status> button on the control panel.
Press the <Features> or <All Services> button at any time to exit.



2. Select the required option.

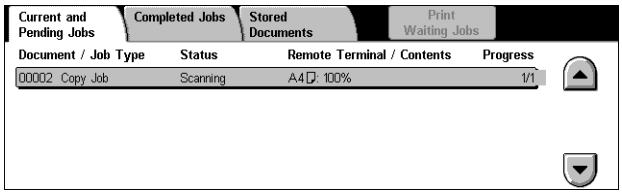


Current and Pending Jobs

This feature allows you to view incomplete jobs that are waiting, in progress or suspended. You can see job attributes, or promote/delete the job.

1. Press the <Job Status> button on the control panel.

2. Select the [Current and Pending Jobs] tab. Use the scroll buttons to switch between screens.



3. Select a job to cancel or promote as required.

Document/Job Type

Identifies each job by number and type.

Status

Displays the status of the job, such as copying, printing, and scanning.

Remote Terminal/Contents

Displays the name of the recipient for a fax job, the paper size for a copy job, or the box number for a scan job, etc.

Progress

Displays the current and total number of pages in a job that is printing, scanning, sending, or receiving.

Job Screen

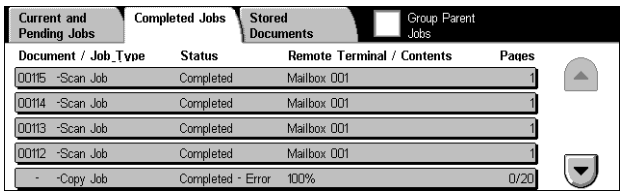
This feature allows you to select a job from the list to display detailed information on the job or to promote/delete it. The content of the screen and the buttons displayed will vary depending on service type and job status.

- Stop – Cancels jobs that are being processed or on hold.
- Promote Job – Promotes a job in the list to be processed immediately after the one being processed. The promoted job will be marked with an arrow in the job list on the [Current and Pending Jobs] screen.
- Last Original – Indicates the current scan batch is the last in a job to be scanned.
- Next Original – Sequentially scans more sections in the same scan job.
- Start – Starts scanning the next document or prints a job being held on the machine.
- Print Waiting Jobs – Prints the jobs waiting in the incomplete jobs queue.

Completed Jobs

This feature allows you to view the finished jobs in the machine. You can select a job in the list to display detailed attributes for that job. The contents of each screen may differ depending on the type or status of the job.

1. Press the <Job Status> button on the control panel.
2. Select the [Completed Jobs] tab. Use the scroll buttons to switch between screens.



Document/Job Type

Identifies each job by job number and type.

Status

Displays the status of the job, such as completed, cancelled, shutdown.

Remote Terminal/Contents

Displays the name of the recipient for a fax job, the paper size for a copy job, or the box number for a scan job.

Pages

Displays the number of printed, scanned, sent, or received pages. For cancelled jobs, the status will be blank.

Group Parent Jobs

Select this check box to group all parent jobs together in the job list.

Job Attributes

Select a job on the <Completed Jobs> screen to display the job attributes. The attributes displayed vary depending on the type of job.

- Show Children Jobs – Select this button to show all child jobs for the selected job. The button is displayed only when there are child jobs available.
- Job History Report – Select this button to print a job history report for both parent and child jobs.

NOTE: The Job History Report feature is enabled by setting the [Print Report Button] setting to Enabled in the [Common Settings] > [Reports] feature. For more information, refer to Reports in the Setups chapter of the User Guide.

Stored Documents

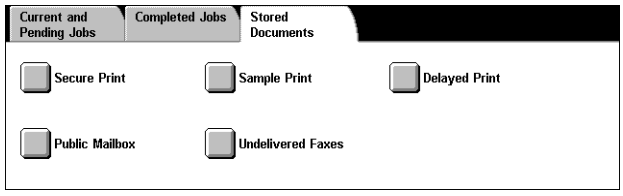
This feature allows you to check locally stored documents, print stored documents, and delete stored documents.

NOTE: The jobs displayed are sent from a PC using the print driver. For more information, refer to PCL Driver On-line Help.

For more information, refer to the following.

Secure Print – page 22
Sample Print – page 23
Delayed Print – page 24
Public Mailbox – page 24
Undelivered Faxes – page 25

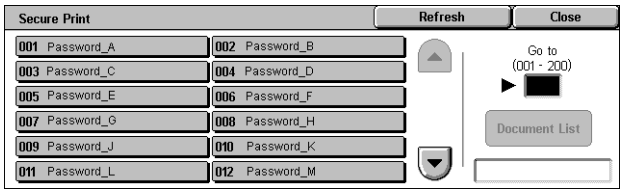
1. Press the <Job Status> button on the control panel.
2. Select the [Stored Documents] tab.
3. Select the required option.



Secure Print

This feature allows you to print or delete password-protected stored documents. A secure print job requires a User ID and a password registered in the machine.

1. Select [Secure Print] on the [Stored Documents] screen.
2. Select a User ID. Use the scroll buttons to switch between screens.



3. Select [Document List].
4. Enter the password and select [Confirm].
5. Select a document to print or delete.
6. Select the required option.

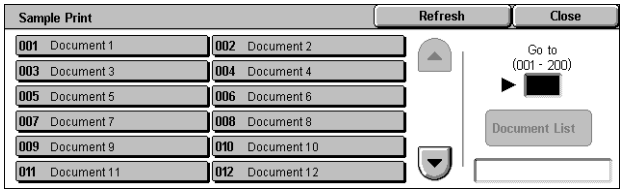
- Refresh – Refreshes the displayed information.
- Go to – Specifies the Secure Print number to be displayed on the screen. Enter a number within the range of 001 to 200 using the scroll buttons or the numeric keypad.
- Document List – Displays the password input screen for the selected user ID in the list. Enter the password to display the list of stored documents. The following options are available:
  - Select All – Selects all documents in the list.
  - Delete – Deletes a document.
  - Print – Prints a document selected in the list. Select whether or not to delete the stored documents after printing.

NOTE: If you have forgotten the password, contact the Key Operator. The Key Operator can access the stored documents without entering the password.

Sample Print

This feature allows you to print a sample set of a document prior to printing the whole quantity. You can choose whether or not to print more sets after checking the print result.

1. Select [Sample Print] on the [Stored Documents] screen.
2. Select a User ID. Use the scroll buttons to switch between screens.



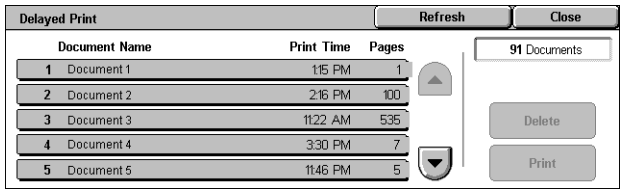
3. Select [Document List].
4. Select a document to print or delete.
5. Select the required option.

- Refresh – Refreshes the displayed information.
- Go to – Specifies the Sample Print number to be displayed on the screen. Enter a number within the range of 001 to 200 using the scroll buttons or the numeric keypad.

- Document List – Displays the list of stored documents for the selected user ID in the list. The following options are available:
  - Select All – Selects all documents in the list.
  - Print – Prints a document selected in the list. After printing, the documents are deleted.
  - Delete – Deletes a document selected in the list.

Delayed Print

This feature allows you to store documents on the machine for printing at a later time. You can check, print or delete the stored documents before the specified print time.



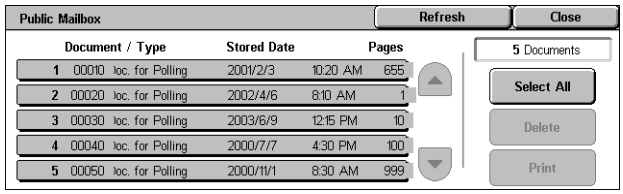
1. Select [Delayed Print] on the [Stored Documents] screen.
2. Select a document to print or delete. Use the scroll buttons to switch between screens.
3. Select the required option.

- Document Name – Identifies each document by name.
- Print Time – Displays the time the document will be printed.
- Pages – Displays the number of pages.
- Refresh – Refreshes the displayed information.
- Print – Prints a document selected in the list.
- Delete – Deletes a document selected in the list.

Public Mailbox

This feature allows you to check, print, and delete documents stored in a public mailbox on the machine for polling.

For more information, refer to Save in: Public Mailbox in the Fax/Internet Fax chapter of the User Guide.



1. Select [Public Mailbox] on the [Stored Documents] screen.
2. Select a document to print or delete. Use the scroll buttons to switch between screens.
3. Select the required option.

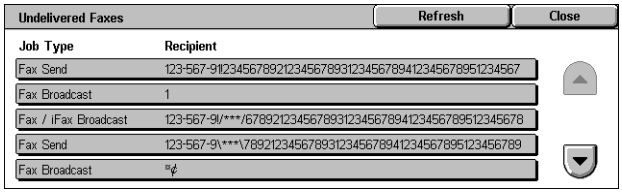
- Document/Type – Identifies each document by number and type.
- Stored Date – Displays the date the document was stored.
- Pages – Displays the number of printed, scanned, sent, or received pages.
- Refresh – Refreshes the displayed information.
- Select All – Selects all the documents in the [Public Mailbox].

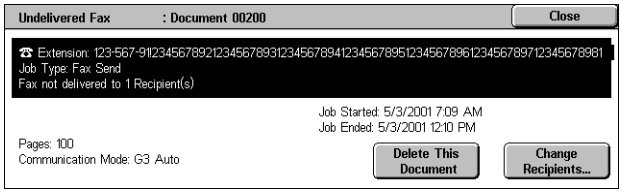
- Print – Prints a document selected in the list.
- Delete – Deletes a document selected in the list.

Undelivered Faxes

This feature allows you to delete or resend undelivered faxes. You can resend faxes to their original recipient or change the recipient.

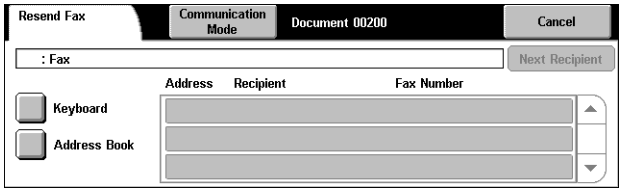
1. Select [Undelivered Faxes] on the [Stored Documents] screen.
2. Select a document to delete or resend. Use the scroll buttons to switch between screens.
3. Press the <Start> button on the control panel to resend the fax to the original recipient. Alternatively, select to delete the document or send the document to a different recipient.





- Delete This Document – Deletes the selected document. A confirmation screen is displayed before the document is deleted.
- Change Recipients – Displays the [Resend Fax] screen where you can specify a new fax recipient.

1. Select the [Change Recipients] button on the [Undelivered Fax] screen.
2. Specify a new recipient using the keyboard or the address book.



- Communication Mode – Displays the [Communication Mode] screen where you can select the [G3 Auto] or [F4800] communication mode. For more information, refer to Communication Mode in the Fax/Internet Fax chapter of the User Guide.

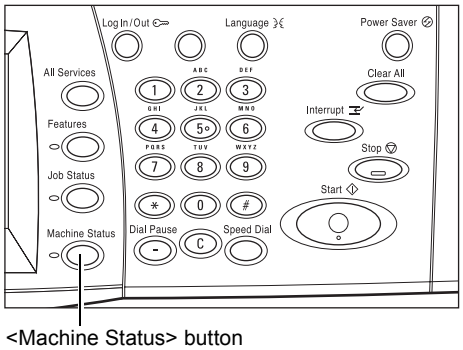
Machine Status

Use this button to check the machine status, the billing meter, the status of the toner cartridges and print various reports.

For more information on each feature, refer to the following.

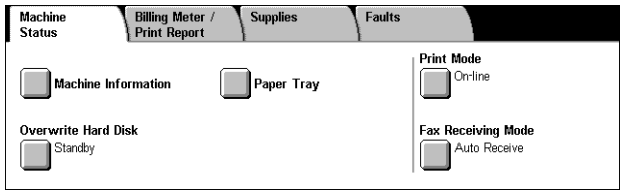
Machine Status – page 26
Billing Meter/Print Report – page 28
Supplies – page 31
Faults – page 31

1. Press the <Machine Status> button on the control panel. Press the <Features> or <All Services> button at any time to exit.



<Machine Status> button

2. Select the required option.



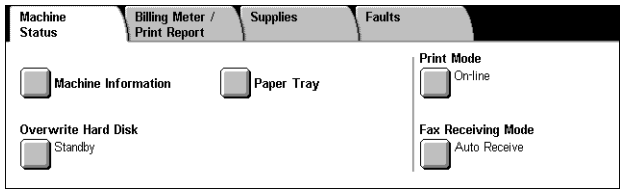
Machine Status

This section describes how to view general information about the machine, the status of paper trays and the hard disk, and how to change the print mode or fax receiving mode.

For more information on the features available, refer to the following.

Machine Information – page 26
Paper Tray – page 27
Overwrite Hard Disk – page 27
Print Mode – page 27
Fax Receiving Mode – page 28

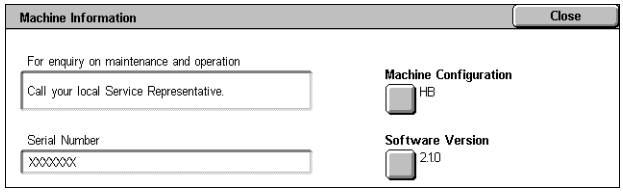
1. Press the <Machine Status> button on the control panel.
2. Select the [Machine Status] tab.
3. Select the required option.



Machine Information

This feature allows you to view user support information and the serial number of the machine as well as the machine configuration and the software version.

1. Select [Machine Information] on the [Machine Status] screen.
2. Select the required option.



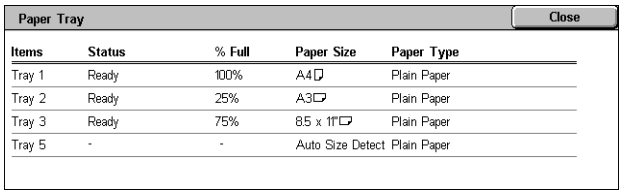
- Machine Configuration – Displays the [Machine Configuration] screen. You can view the status of the machine components. The list displays the hardware components and the options supported on the machine.

- Software Version – Displays the [Software Version] screen. You can identify the software versions of the components of the machine.

Paper Tray

This feature allows you to check the status of each paper tray, including the bypass tray and the optional Tandem Tray Module. It also displays the size, type, and remaining amount of media in each tray.

1. Select [Paper Tray] on the [Machine Status] screen.

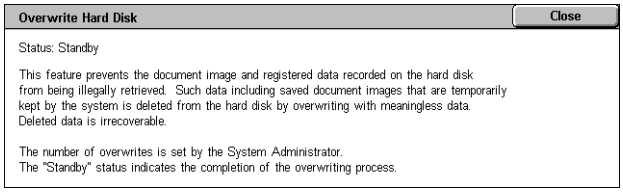


Overwrite Hard Disk

This feature displays the overwriting status of the hard disk.

NOTE: This option is displayed if the feature is enabled in the System Settings by the Key Operator.

1. Select [Overwrite Hard Disk] on the [Machine Status] screen.



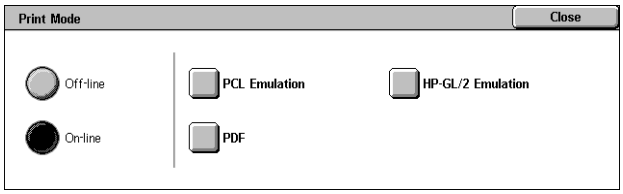
Print Mode

This feature allows you to change the default printer mode and emulation parameter settings.

For the lists of emulation parameters and their values, refer to Emulation Parameters in the Print chapter of the User Guide.

1. Select [Print Mode] on the [Machine Status] screen.

2. Select the required option.



- Off-line – Takes the printer off-line. The printer is unavailable in this mode.
- On-line – Puts the printer on-line, ready to accept data.
- PCL Emulation – Allows you to set parameter values for PCL emulation to print documents. For a list of parameters, refer to the User Guide.
- HP-GL/2 Emulation – Allows you to set parameter values for HP-GL/2 emulation to print documents. It also allows you to store, retrieve, and delete up to 20 emulation settings.
  - Retrieve Programming – Retrieves emulation settings and makes them active.

- Programming – Allows you to set emulation parameter item values. For a list of parameters, refer to the User Guide.
- Store/Delete Programming – Allows you to store user-programmed emulation mode parameters on the machine.
- Default Programming – Sets the default emulation mode settings when the machine is turned on.

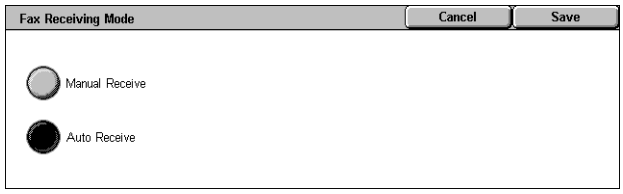
• PDF – Allows you to set parameter values and a password for PDF direct printing.

- Setup – Allows you to set emulation parameter item values for PDF direct printing. For a list of PDF parameters, refer to the User Guide.
- Password – Allows you to enter a password to restrict access to PDF direct printing.

Fax Receiving Mode

This feature allows you to set the fax reception mode: Manual Receive or Auto Receive.

1. Select [Fax Receiving Mode] on the [Machine Status] screen.
2. Select the required option.



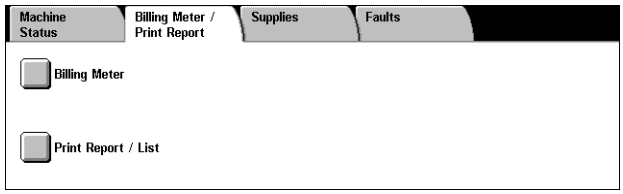
• Manual Receive – Starts receiving a fax or polling after you have answered the call and confirmed it is a fax.

• Auto Receive – Receives a fax automatically.

Billing Meter/Print Report

This section describes the features that allow you to view the billing meter information, and also specify the output sequence for various reports and lists.

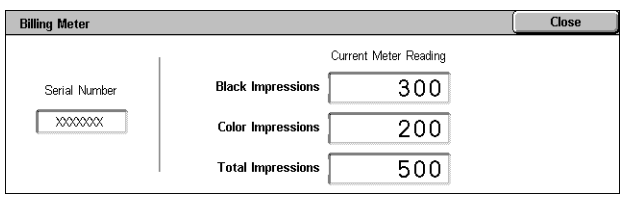
1. Press the <Machine Status> button on the control panel.
2. Select the [Billing Meter/Print Report] tab.
3. Select the required option.



Billing Meter

This feature allows you to view the total number of prints made on the machine using the [Current Meter Reading]. You can also view the serial number.

1. Select [Billing Meter] on the [Billing Meter/Print Report] screen.



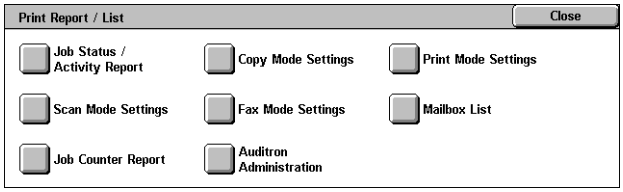
- Serial Number – Displays the serial number of the machine.
- Current Meter Reading – Displays the following current meter readings:
  - Black Impressions – Displays the number of total black and white copies and prints.
  - Color Impressions – Displays the number of total color copies and prints.
  - Total Impressions – Displays the number of total copies and prints.

Print Report/List

This feature allows you to print various reports and lists for each service.

1. Select [Print Report/List] on the [Billing Meter/Print Report] screen.

2. Select the required option.



- Job Status/Activity Report – Displays the [Job Status/Activity Report] screen. Select a report option and press the <Start> button on the control panel to print the report.
  - Job History Report – Lists the jobs recorded on the machine. The data for the last 50 jobs is printed. Print reports are available for [All Jobs], [Fax/E-mail/Scan Jobs], [Auto Transfer Jobs], and [Print Jobs]. You can also specify [Associated Jobs] when you select [All Jobs].
  - Activity Report – Lists activity results of incoming and outgoing communications.
  - Error History Report – Lists the 50 most recent errors that occurred in the machine.
  - Stored Document List – Lists the documents stored in mailboxes for printing, scanning, and faxing. Also displays the fax jobs queued on the machine.
- Copy Mode Settings – Displays [Copy Mode Settings] screen. Select a report option and press the <Start> button on the control panel to print the report.
  - Settings List - Common Items – Lists common settings, such as hardware configuration, network information, and print and copy feature settings.
- Print Mode Settings – Displays the [Print Mode Settings] screen. Select a report option and press the <Start> button on the control panel to print the report.
  - Setting List - Common Items – Lists common settings, such as hardware configuration, network information, and print and copy feature settings.
  - PCL Settings List
  - PCL Form List
  - PDF Settings List
  - TIFF Settings List
  - TIFF Logical Printer List
  - PS Logical Printer List
  - HP-GL/2 Settings List

  - HP-GL/2 Stored Programming List
  - HP-GL/2 Palette List
  - Font List
  - PCL Font List
  - PostScript Font List
- Scan Mode Settings – Displays the [Scan Mode Settings] screen. Select a report option and press the <Start> button on the control panel to print the report.
  - Settings List: [Setting List - Common Items] – Lists common settings, such as hardware configuration, network information, and print and copy feature settings. [Extended Features Settings List] – Lists settings specific to fax and scan features. [Domain Filter List] – Lists domains registered for domain filtering.
  - Job Template List – Lists the job templates that can be used on the machine. For more information on job templates, refer to Services in the CentreWare Internet Services chapter of the User Guide.
  - Address Book – Lists the contents of address books and relay stations for the 50-address selections on the right-hand side of the screen. Multiple selections are supported.
- Fax Mode Settings – Displays the [Fax Mode Settings] screen. Select a report option and press the <Start> button on the control panel to print the report.
  - Settings List: [Setting List - Common Items] – Lists common settings, such as hardware configuration, network information, and print and copy feature settings. [Box Selector List] – Lists the settings for sorting into mailboxes. [Extended Features Settings List] – Lists settings specific to fax and scan features. [Domain Filter List] – Lists domains registered for domain filtering.
  - Address Book – Lists the contents of address books and relay stations for the 50-address selections on the right-hand side of the screen. Multiple selections are supported. Check boxes are available to select group send settings and to select all address numbers.
  - Comments List – Lists the comments saved for use on cover notes.
  - Billing Data List – Lists the billing data for fax jobs.

NOTE: The Billing Data List option is displayed with Key Operator access.

- Mailbox List – Displays the [Mailbox] screen. Select a report option and press the <Start> button on the control panel to print the report.
  - Mailbox List – Lists the mailbox settings and procedure when storing data in the mailbox.
- Job Counter Report – Displays the [Job Counter Report] screen. Select a report option and press the <Start> button on the control panel to print the report.
  - Job Counter Report – Lists the job counter reports for each feature.
- Auditron Administration – Displays the [Auditron Administration] screen. Select a report option and press the <Start> button on the control panel to print the report.

  When Auditron is [Off]:

– Meter Report (Print Jobs) – Lists the number of pages printed per user and by all users, for color and monochrome jobs.

When Auditron is [On]:

– Auditron Report (Print) – Lists an Auditron report for all print jobs completed by the selected users.

– Auditron Report (Copy) – Lists an Auditron report for all copy jobs completed by the selected users.

– Auditron Report (Fax) – Lists an Auditron report for all fax jobs completed by the selected users.

– Auditron Report (Scan) – Lists an Auditron report for all scan jobs completed by the selected users.

NOTE: The Mailbox List, Job Counter Report, and Auditron Administration options are displayed with Key Operator access.

Automatically Printed Reports/Lists – This section describes the various reports and lists that can be printed automatically. For more information about each type of report, refer to the Setups chapter of the User Guide.

– Job History Report – Lists all jobs logged on the machine.

– Activity Report – Lists activity results of incoming and outgoing communications.

– Transmission Report - Undelivered – Lists undelivered documents and their transmission status.

– Transmission Report - Cancelled – Lists transmissions cancelled by the user.

– Mailbox Report – Lists documents received into a mailbox.

– Broadcast/Multi-poll Report – Lists the results of multi-poll transmissions.

– Relay Broadcast Report – Lists the results of a relay broadcast when the broadcast ends.

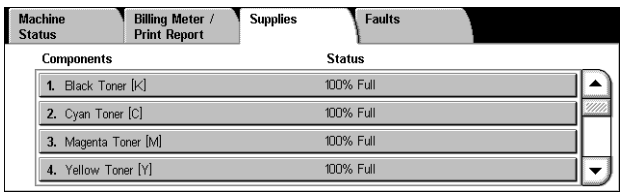
Supplies

This feature allows you to view toner usage and the status of cartridges, and to change consumable supplies when required. For more information, refer to the Maintenance chapter of the User Guide.

1. Press the <Machine Status> button on the control panel.

2. Select the [Supplies] tab on the [Machine Status] screen.

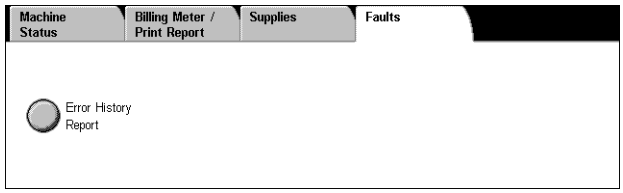
3. Select the required option.



Faults

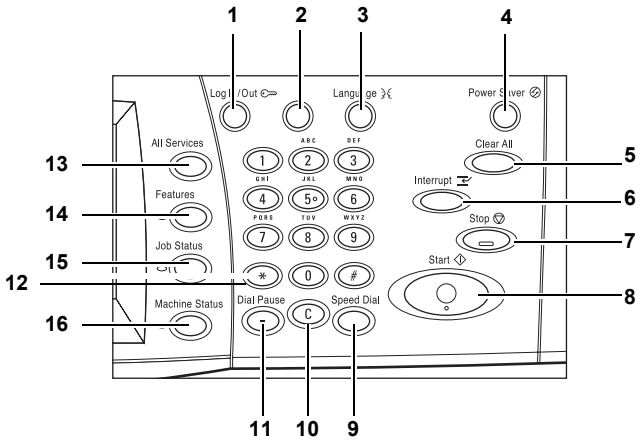
This feature allows you to print a report of recent errors, the date and time of the errors, the error codes, and the status of each error. The status is either active or cleared.

1. Press the <Machine Status> button on the control panel.
2. Select the [Faults] tab.
3. Select [Error History Report] and press the <Start> button on the control panel.



System Controls

The following diagram shows the names and functions of the buttons on the control panel.



	Button	Function
1	<Log In/Out>	Displays the log-in screen to enter the [System Administrator Menu] screen, or when the Authentication feature is enabled. DO NOT press this button again, after you have logged in. This will log you out immediately.
2	<Help>	This button is non-functional on this machine.
3	<Language>	Changes the languages displayed on the touch screen. **NOTE:** Certain characters may be garbled when you change languages.
4	<Power Saver> (green light)	Indicates whether the machine is in power saver mode. Also cancels the current power saver mode setting.
5	<Clear All>	Resets to the default settings and displays the first screen for the current pathway.
6	<Interrupt>	Temporarily interrupts a job for programming a priority job.

	Button	Function
7	<Stop>	Suspends or cancels a job depending on the job type. When multiple jobs are being processed, all the jobs will be suspended or cancelled. Selecting [Stop] on the [Job Status] screen stops only the selected job.
8	<Start>	Starts or resumes a job.
9	<Speed Dial>	Enters speed dial codes.
10	<C>	Deletes a numeric value or the last digit entered, and replaces the current value with a default value. Also cancels suspended jobs.
11	<Dial Pause>	Inserts a pause while dialing a fax number.
12	<*(asterisk)>	Indicates the special character used in a fax number and designates a group code. Also allows you to specify an F Code or a password.
13	<All Services>	Displays the [All Services] screen for selection of all the available services on the machine.
14	<Features>	Returns the display to the previous copy, fax, or scan feature screen when the [Job Status] screen or [Machine Status] screen is selected.
15	<Job Status>	Displays the [Job Status] screen where you can check the progress of a job, or display the log and detailed information of completed jobs.
16	<Machine Status>	Displays the [Machine Status] screen where you can check the machine status, the billing meter, the status of the toner cartridge or print various reports.

Button names and icons used on the control panel may differ depending on the country of purchase.

System Settings

This machine is pre-programmed with default settings which can be customized using the System Settings. The System Settings can be accessed via the <Log In/Out> button. The following set up categories are available.

- Common Settings
- Copy Mode Settings
- Network Settings
- Print Mode Settings
- Scan Mode Settings
- Fax Mode Settings

- E-mail/Internet Fax Settings
- Mailbox/Stored Document Settings
- Setup Menu
- System Administrator Settings
- Login Setup/Auditron Administration

NOTE: CentreWare Internet Services is software that enables you to display, configure and change the settings of the machine by using a browser on a computer instead of the machine's control panel. For more information, refer to the CentreWare Internet Service chapter of the User Guide.

Printing the System Settings List

Follow these steps to print the System Settings List:

1. Press the <Machine Status> button on the control panel.
2. Select the [Billing Meter/Print Report] tab.
3. Select the [Print Report/List].
4. Select the [Print Mode Settings].
5. Select the [Settings List - Common Items].
6. Press the <Start> button on the control panel.

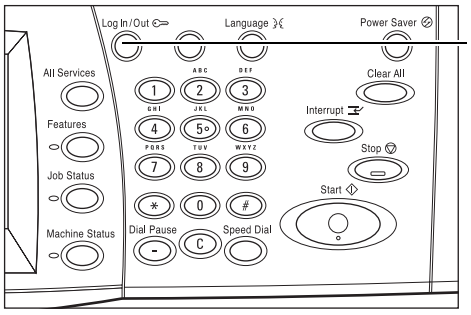
Changing the Settings

A user ID and password are required to change the settings. The default user ID and password for the System Administrator are "11111" and "x-admin" respectively. It allows you to access the System Settings described in this chapter.

NOTE: You are advised to change the default password. For further assistance, contact your Xerox Welcome Center.

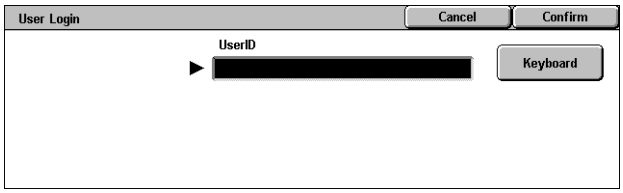
Follow these steps to change the default settings:

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



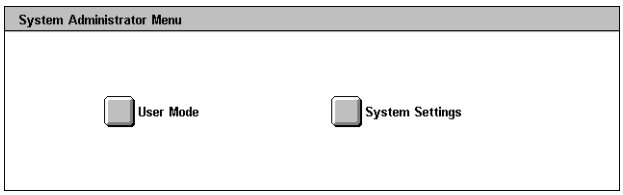
<Log In/Out> button

2. Enter the correct user ID using the numeric keypad on the control panel or the screen keyboard.

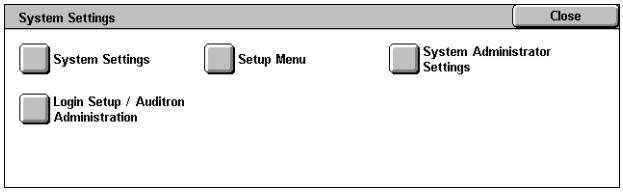


NOTE: The default Key Operator ID is “11111”. If the Authentication feature is enabled, you may be also required to enter a password. The default password is “x-admin”. To change the default user ID or password, refer to System Administrator Settings in the Setups chapter of the User Guide.

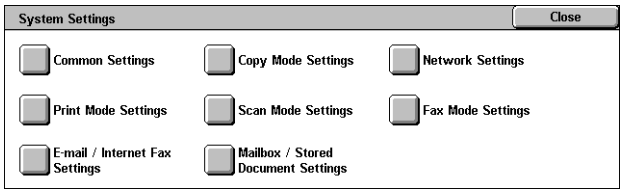
3. Select [System Settings].



4. Select [System Settings].



5. Select the required option and customize to meet your needs.
6. Select [Save].



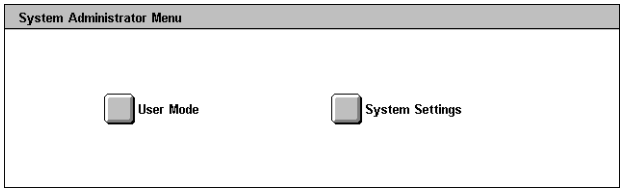
NOTE: The appearance of the touch screens may differ slightly depending on the model and configuration. However, feature descriptions and functionality described here remain the same.

Ethernet Port

The Ethernet port is the default interface used on the machine.

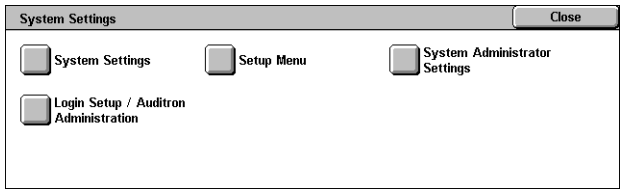
If you need to change the speed setting of the Ethernet port, perform the following steps:

1. Select [System Settings] on the [System Administration Menu] screen.

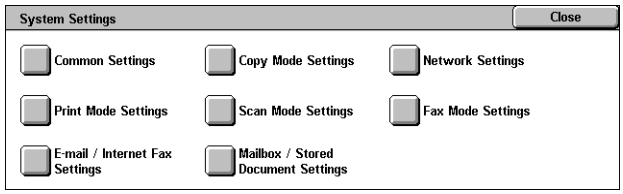


NOTE: For more information on how to display the [System Settings] screen, refer to *Changing the Settings on page 34*.

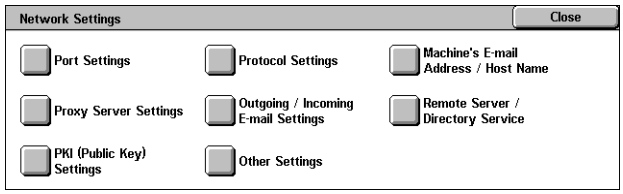
2. Select [System Settings].



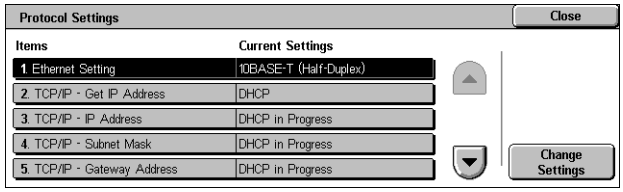
3. Select [Network Settings].



4. Select [Protocol Settings].

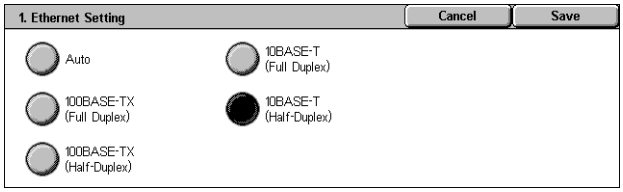


5. Select [Ethernet Setting] and [Change Settings].



6. Set up the port speed.

7. Select [Save].



Auto (10BASE-T/100BASE-TX)

Detects the transmission speed automatically at power on and adjusts itself accordingly.

100BASE-TX (Full Duplex)

Sets the transmission speed to 100 Mbps (Full Duplex).

100BASE-TX (Half-Duplex)

Sets the transmission speed to 100 Mbps (Half-Duplex).

10BASE-T (Full Duplex)

Sets the transmission speed to 10 Mbps (Full Duplex).

10BASE-T (Half-Duplex)

Sets the transmission speed to 10 Mbps (Half-Duplex).

Resident Fonts

PCL Resident Fonts

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

You can view the PCL fonts by printing the Fonts List. For more information on how to print the list, refer to Machine Status chapter of the User Guide.

Value	Description	Value	Description
0	CG Times	41	Times New Bold
1	CG Times Italic	42	Times New Bold Italic
2	CG Times Bold	43	Symbol
3	CG Times Bold Italic	44	Wingdings
4	Univers Medium	45	Line Printer
5	Univers Medium Italic	46	Times Roman
6	Univers Bold	47	Times Italic
7	Univers Bold Italic	48	Times Bold
8	Univers Medium Condensed	49	Times Bold Italic
9	Univers Medium Condensed Italic	50	Helvetica
10	Univers Bold Condensed	51	Helvetica Oblique
11	Univers Bold Condensed Italic	52	Helvetica Bold
12	Antique Olive	53	Helvetica Bold Oblique
13	Antique Olive Italic	54	CourierPS
14	Antique Olive Bold	55	CourierPS Oblique
15	CG Omega	56	CourierPS Bold
16	CG Omega Italic	57	CourierPS Bold Oblique
17	CG Omega Bold	58	SymbolPS
18	CG Omega Bold Italic	59	Palatino Roman
19	Garamond Antiqua	60	Palatino Italic
20	Garamond Kursiv	61	Palatino Bold
21	Garamond Halbfett	62	Palatino Bold Italic
22	Garamond Kursiv Halbfett	63	ITC Bookman Light

Value	Description	Value	Description
23	Courier (default)	64	ITC Bookman Light Italic
24	Courier Italic	65	ITC Bookman Demi
25	Courier Bold	66	ITC Bookman Demi Italic
26	Courier Bold Italic	67	Helvetica Nscroll
27	Letter Gothic	68	Helvetica Nscroll Oblique
28	Letter Gothic Italic	69	Helvetica Nscroll Bold
29	Letter Gothic Bold	70	Helvetica Nscroll Bold Oblique
30	Albertus Medium	71	New Century Schoolbook Roman
31	Albertus Extra Bold	72	New Century Schoolbook Italic
32	Clarendon Condensed	73	New Century Schoolbook Bold
33	Coronet	74	New Century Schoolbook Bold Italic
34	Marigold	75	ITC Avant Garde Book
35	Arial	76	ITC Avant Garde Book Oblique
36	Arial Italic	77	ITC Avant Garde Demi
37	Arial Bold	78	ITC Avant Garde Demi Oblique
38	Arial Bold Italic	79	ITC Zapf Chancery Medium Italic
39	Times New	80	ITC Zapf Dingbats
40	Times New Italic		

Symbol Set

One of the following symbol sets can be selected as the default symbol set. The default symbol set is used when a symbol set is not defined in the PCL job stream.

Code	Value	Short Display	Long Display
8U	277	ROMAN-8	Roman 8 (default)
0N	14	ISO L1	ISO 8859-1 Latin 1
2N	78	ISO L2	ISO 8859-2 Latin 2
5N	174	ISO L5	ISO 8859-9 Latin 5
6N	206	ISO L6	ISO 8859-10 Latin 6
10U	341	PC-8	PC-8
11U	373	PC-8 DN	PC-8 DN

Code	Value	Short Display	Long Display
26U	853	PC-775	PC-775
12U	405	PC-850	PC-850
17U	565	PC-852	PC-852
9J	298	PC-1004	PC-1004 (OS/2)
9T	308	PC-8 TK	PC Turkish
19U	629	WIN L1	Windows 3.1 Latin 1
9E	293	WIN L2	Windows 3.1 Latin 2
5T	180	WIN L5	Windows 3.1 Latin 5
7J	234	DESKTOP	DeskTop
10J	330	PS TEXT	PS Text
12J	394	MC TEXT	MC Text
6J	202	MS PUB	Microsoft Publishing
8M	269	MATH-8	Math 8
5M	173	PS MATH	PS Math
15U	501	PI FONT	Pi Font
1U	53	LEGAL	Legal
1E	37	ISO-4	ISO 4 United Kingdom
0U	21	ISO-6	ISO 6 ASCII
0S	19	ISO-11	ISO 11 Swedish:names
0I	9	ISO-15	ISO 15 Italian
2S	83	ISO-17	ISO 17 Spanish
1G	39	ISO-21	ISO 21 German
0D	4	ISO-60	ISO 60 Norwegian v1
1F	38	ISO-69	ISO 69 French
9U	309	WIN 3.0	Windows 3.0 Latin 1
19L	620	WINBALT	Windows Baltic
19M	621	SYMBOL	Symbol
579L	18540	WINGDINGS	Wingdings

3 Windows TCP/IP

This chapter explains how to set up the machine to operate in a Windows TCP/IP environment. The following information is provided.

Quick Network Setup (DHCP)

Prerequisites for Quick Network Setup Using TCP/IP

1. Confirm that an existing operational network utilizing TCP/IP is available.
2. Confirm that the Ethernet cable is plugged into the multifunction machine and into an operational Ethernet port on the network.

NOTE: The Ethernet cable is an RJ45 type and is not supplied by Xerox.

Configuring an IP Address via DHCP

On startup, the multifunction device defaults to DHCP to obtain its network configurations. A DHCP server delivers an IP address, as well as other configuration settings to the machine. If you use a DHCP server to allocate an IP address to the machine, then proceed as follows:

Procedure for Quick Network Setup Using TCP/IP

1. Power on the machine.
2. Wait a minute or so while the machine negotiates an IP address.
3. Print the System Settings List.
   1) Select the <Machine Status> button on the machine.
   2) Select [Print Report/List].
   3) Select [Print Mode Settings].
   4) Select [Setting List - Common Items].
   5) Press the <Start> button on the machine.
4. Read the System Settings List to confirm that an IP address has been allocated and that it is a valid IP address on your network.

NOTE: If the IP address starts with 169.xxx.xxx.xxx, then the DHCP server has not properly allocated an address or DHCP is not enabled on your network.

5. Record the IP address allocated.
6. From a workstation, open a web browser (such as Internet Explorer), and then enter the IP address in the format "http://xxx.xxx.xxx.xxx" (the xxx's represent the device IP address). If connected properly, you should see a CentreWare Internet Services web page for your machine.

NOTE: CentreWare Internet Services is a powerful tool for configuring the machine remotely. The default user name is "11111" and the password is "x-admin". The user name and password are case sensitive and should be changed after install.

7. Load the print drivers on the workstations that will be accessing the machine.

Quick Network Setup (Static IP)

Prerequisites for Manual Setup of Network Using Static IP Address

NOTE: On startup, the WorkCentre multifunction machine defaults to DHCP to obtain its network configurations, so DHCP must be turned off by manually entering a static IP address.

Before installing, record the following information for use during setup:

TCP/IP Address:
Gateway Address:
Subnet Mask:
DNS Server Address:

NOTE: To obtain this information, contact your System Administrator.

Procedure for Manual Setup of Network Using Static IP Address

1. Power on the machine.
2. Display the [System Settings] screen.

NOTE: For more information about how to display the [System Settings] screen, refer to the Setups chapter of the User Guide.

3. Select [Network Settings].
4. Select [Protocol Settings].
5. Select [TCP/IP - Get IP Address] and [Change Settings].
6. Select [Manual] method for establishing an IP address, and then select [Save].
7. Select [TCP/IP - IP Address], and then [Change Settings].
8. Use the keypad on the screen to enter the IP Address for the machine in the format “XXX.XXX.XXX.XXX”. Enter relevant values (0 to 255) into the highlighted

field and select [Next]. The next 3 digits are highlighted. When you have finished entering all values, select [Save].

9. Select [TCP/IP - Subnet Mask], and then [Change Settings].

10. Using the same method as in step 8, enter the Subnet Mask.

11. Select [TCP/IP - Gateway Address], and then [Change Settings].

12. Using the same method as in step 8, enter the Gateway Address.

NOTE: If you do not wish to set the Gateway Address, enter “0.0.0.0”.

13. Select [TCP/IP - IP Filter], then [Change Settings].

14. Select [On] to filter access to the machine.

NOTE: If you do not wish to use the IP filter feature, select [Off].

NOTE: Use CentreWare Internet Services to register the IP addresses which are not allowed to access the machine. Refer to the CentreWare Internet Services chapter of the User Guide.

15. When you have finished establishing TCP/IP, select [Close] from the [Protocol Settings] screen.

4 CentreWare Internet Services

This chapter explains how to enable and use the CentreWare Internet Services feature of the machine. The following information is provided.

Information Checklist

Before enabling the CentreWare Internet Services feature, make sure that 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 Refer to the glossary for additional information about the Gateway Address and Subnet Mask, if needed.	Customer
Test the machine to make sure that it is installed fully and functioning correctly.	Customer

If problems are encountered during the installation of the machine, refer to *the Problem Solving chapter* for assistance.

CentreWare Internet Services Environments

CentreWare Internet Services uses the embedded HTTP Server on the machine. This allows communication with the machine through a Web browser with access to the Internet or intranet. By entering the IP Address of the machine as the URL (Universal Resource Locator) in the browser, direct access to the machine is available.

CentreWare Internet Services allows you to make not only the same basic settings as from the control panel, but to also make more specialized settings for the machine.

User ID and Password

Many of the features available within Internet Services will require an admin user name and password. The default user name is "11111" and the default password is "x-admin". This ID and Password can be changed by the System Administrator. A user will only be prompted for an admin name and password once in a single browser session.

System Configuration

To use CentreWare Internet Services, you need to enable TCP/IP on the machine.

Target Computers

The OS and browsers that can be used for CentreWare Internet Services are as follows.

OS	Browsers
Windows 98SE Windows Me Windows NT4.0	Internet Explorer 5.5 SP2, 6.0 SP1 Netscape 7 **NOTE:** Activating two or more browsers could produce unexpected results.
Windows 2000	Internet Explorer 5.5 SP2, 6.0 SP1 Netscape 7.1 Navigator
Windows XP	Internet Explorer 6.0 SP1 Netscape 7.1 Navigator Opera 7.2.3
Windows Server 2003	Internet Explorer 6.0 SP1 Netscape 7.1 Navigator
Mac OS 9.2	Internet Explorer 5.1 Netscape 7.02 Navigator
Mac OS X 10.x	Netscape 7.1 Navigator Safari

CentreWare Internet Services Installation

This section describes the settings required to use CentreWare Internet Services.

Installation Procedure

There are two stages required to enable CentreWare Internet Services.

Network Communication Setup

This requires the machine to be set up for CentreWare Internet Services.

Test Access

To make sure that CentreWare Internet Services has been set up correctly, you should access CentreWare Internet Services.

Network Communication Setup

Initially, boot the CentreWare Internet Services port.

1. Connect the machine to the network.
2. Display the [System Settings] screen.

NOTE: For more information about how to display the [System Settings] screen, refer to the Setups chapter of the User Guide.

3. Select [Network Settings].
4. Select [Port Settings].
5. Select [Internet Services (HTTP)] and [Change Settings].
6. Select [Port Status] and [Change Settings].
7. Select [Enabled] and [Save].

Set the port number for CentreWare Internet Services, if required.

8. At the [Internet Services (HTTP)] screen, select [Internet Services Port Number] and [Change Settings].
9. Use the keypad to enter the port number, and select [Save].

Next, establish TCP/IP.

1. Display the [System Settings] screen.

NOTE: For more information about how to display the [System Settings] screen, refer to the Setups chapter of the User Guide.

2. Select [Network Settings].
3. Select [Protocol Settings].
4. Select [TCP/IP - Get IP Address], then [Change Settings].

5. Select a method for establishing an IP address from [DHCP], [BOOTP], [RARP], [DHCP/Autonet], or [Manual], and then select [Save].

NOTE: Use the DHCP server together with the Windows Internet Name Server (WINS) server.

If you selected [Manual] in step 5, then complete steps 6 to 11 to enter the [Protocol Settings]. Otherwise, complete step 14.

6. Select [TCP/IP - IP Address], then [Change Settings].
7. Use the keypad on the screen to enter the IP Address for the machine in the format “xxx.xxx.xxx.xxx”. Enter relevant values (0 to 255) into the highlighted field and select [Next]. The next 3 digits are highlighted. When you have finished entering all values, select [Save].
8. Select [TCP/IP – Subnet Mask], then [Change Settings].
9. Using the same method as in step 7, enter the Subnet Mask.
10. Select [TCP/IP – Gateway Address], then [Change Settings].
11. Using the same method as in step 7, enter the Gateway Address.

NOTE: If you do not wish to set the Gateway Address, enter “0.0.0.0”.

12. Select [TCP/IP - IP Filter], then [Change Settings].
13. Select [On] to filter access to the machine.

NOTE: If you do not wish to use the IP filter feature, select [Off].

NOTE: Use CentreWare Internet Services to register the IP addresses which are not allowed to access the machine. Refer to the CentreWare Internet Services chapter of the User Guide.

14. When you have finished establishing TCP/IP, select [Close] from the [Protocol Settings] screen.

Test Access

Follow the steps below to access CentreWare Internet Services.

1. At a client workstation on the network, launch an internet browser.
2. In the URL field, enter “http://” followed by the internet address of the machine. Then press the <Enter> key on the keyboard.

Example: If the internet address is vvv.xxx.yyy.zzz, enter the following in the URL field:

http://vvv.xxx.yyy.zzz

If the Port number is set, append that to the internet address as follows. In this example, the port number is 80.

http://vvv.xxx.yyy.zzz:80

3. Verify that the home page of CentreWare Internet Services is displayed.

The CentreWare Internet Services installation process is now completed.

If the test fails, refer to *the Problem Solving chapter* for assistance.

NOTE: If the Auditron feature is enabled, you may be required to enter the user ID and password (if one is set up). If you need assistance, contact the Key Operator.

NOTE: When your access to CentreWare Internet Services is encrypted, enter "https://" followed by the internet address, instead of "http://".

Selecting Transport Protocols

When using the NetWare, SMB, or SNMP port, change the transport protocol if required.

- NetWare: IPX/SPX, TCP/IP
- SMB: NetBEUI, TCP/IP
- SNMP: UDP, IPX

1. At the CentreWare Internet Services home page for the machine, select the [Properties] tab.
2. In the [Properties] frame, select [Port Status].
3. Select the required transport protocol.

   NetWare: IPX/SPX, TCP/IP

   SMB: NetBEUI, TCP/IP

   SNMP: UDP, IPX
4. Select [Apply].

Using CentreWare Internet Services to Configure Settings on the Machine

This section provides the full listing of the items that can be set for each port through CentreWare Internet Services.

For a description about each item, refer to the CentreWare Internet Services chapter of the User Guide. Refer to [Properties] > [Proxy Server Settings], [Port Settings] or [Protocol Settings] for links to each page.

NOTE: The following items display only if the port is activated. To activate a port through CentreWare Internet Services, select [Port Status], and then the required port.

Proxy Server Settings

This page allows you to configure the proxy server settings for the communication protocols.

NOTE: Some settings on this page will only be available after you restart CentreWare Internet Services, or after the machine is switched off and on.

1. At the CentreWare Internet Services home page for the machine, select the [Properties] tab.
2. In the [Properties] frame, select the plus symbol [+] to the left of the [Proxy Server Settings] folder.
3. Set up the following option to be displayed in the frame.

General:

- Use Proxy Server – Select whether to use a proxy server.
- Proxy Setup – Select whether to use the same proxy for all protocols or to use a different proxy for each protocol.
- Address to Bypass Proxy Server – Enter an address that bypasses the proxy server.

HTTP Server:

- Server Name – Enter the HTTP server name.
- Port Number – Enter the HTTP proxy server port number.
- Authentication – Select whether to enable HTTP proxy server authentication.
- Login Name – Enter the HTTP proxy server login name.
- Password – Enter the HTTP proxy server password. Enter a password and then re-enter the password for confirmation.

HTTPS:

- Server Name – Enter the HTTPS proxy server name.
- Port Number – Enter the HTTPS proxy server port number.
- Authentication – Select whether to enable HTTPS proxy server authentication.
- Login Name – Enter the HTTPS proxy server login name.
- Password – Enter the HTTPS proxy server password. Enter a password and then re-enter the password for confirmation.

4. Select [Apply] to reflect the new setting.

5. Enter the user ID and password then select [OK].

NOTE: The default user ID is "11111" and the default password is "x-admin".

6. When the reboot message appears, select [Reboot Machine].

NOTE: For more information about the contents of items, refer to the CentreWare Internet Services chapter of the User Guide.

Ethernet

This page allows you to configure the Ethernet settings for the following options.

NOTE: Some settings on this page will only be available after you restart CentreWare Internet Services, or after the machine is switched off and on.

1. At the CentreWare Internet Services home page for the machine, select the [Properties] tab.

2. In the [Properties] frame, select the plus symbol [+] to the left of the [Port Settings] folder.

3. Select [Ethernet].

4. Set up the following option to be displayed in the frame.
   - Ethernet Settings – Select the ethernet transmission format.
   - MAC Address – Displays the MAC address of the machine. This is a display-only item.
5. Select [Apply] to reflect the new setting.
6. Enter the user ID and password then select [OK].

NOTE: The default user ID is "11111" and the default password is "x-admin".

7. When the reboot message appears, select [Reboot Machine].

NOTE: For more information about the contents of items, refer to the CentreWare Internet Services chapter of the User Guide.

USB

This page allows you to configure the USB settings for the following options.

NOTE: Some settings on this page will only be available after you restart CentreWare Internet Services, or after the machine is switched off and on.

1. At the CentreWare Internet Services home page for the machine, select the [Properties] tab.
2. In the [Properties] frame, select the plus symbol [+] to the left of the [Port Settings] folder.
3. Select [USB].
4. Set up the following options to be displayed in the frame.
   - Auto Eject Time – Allows you to specify the time when the paper will be automatically ejected from the printer if no data are sent to the printer.
   - Adobe Communication Protocol (Only available when the optional PostScript Kit is installed.)
5. Select [Apply] to reflect the new setting.
6. Enter the user ID and password then select [OK].

NOTE: The default user ID is "11111" and the default password is "x-admin".

7. When the reboot message appears, select [Reboot Machine].

NOTE: For more information about the contents of items, refer to the CentreWare Internet Services chapter of the User Guide.

EtherTalk

This is only displayed when PostScript Kit is installed. This page allows you to configure the EtherTalk settings.

NOTE: Some settings on this page will only be available after you restart CentreWare Internet Services, or after the machine is switched off and on.

1. At the CentreWare Internet Services home page for the machine, select the [Properties] tab.
2. In the [Properties] frame, select the plus symbol [+] to the left of the [Protocol Settings] folder.
3. Select [EtherTalk].
4. Set up the following options to be displayed in the frame.
   - Printer Name – Enter the printer name for EtherTalk.
   - Zone Name – Enter the EtherTalk zone name.
5. Select [Apply] to reflect the new setting.
6. Enter the user ID and password then select [OK].

NOTE: The default user ID is "11111" and the default password is "x-admin".

7. When the reboot message appears, select [Reboot Machine].

NOTE: For more information about the contents of items, refer to the CentreWare Internet Services chapter of the User Guide.

SMB

This page allows you to configure the SMB settings for the following options.

NOTE: Some settings on this page will only be available after you restart CentreWare Internet Services, or after the machine is switched off and on.

1. At the CentreWare Internet Services home page for the machine, select the [Properties] tab.
2. In the [Properties] frame, select the plus symbol [+] to the left of the [Protocol Settings] folder.
3. Select [SMB].
4. Set up the following options to be displayed in the frame.
   - Workgroup – Enter the workgroup name.
   - Host Name – Enter the host name.
   - Maximum Sessions – Allows you to specify the maximum number of sessions.
   - TBCP Filter (Only available when the optional PostScript Kit is installed.)
   - Unicode Support – Allows you to specify whether to enable Unicode support in the host name and workgroup name during SMB transmission.

- Auto Master Mode – Allows you to enable or disable (on/off) Auto Master Mode.
- Password Encryption – Allows you to enable or disable password encryption during SMB transmission.

5. Select [Apply] to reflect the new setting.

6. Enter the user ID and password then select [OK].

NOTE: The default user ID is "11111" and the default password is "x-admin".

7. When the reboot message appears, select [Reboot Machine].

NOTE: For more information about the contents of items, refer to the CentreWare Internet Services chapter of the User Guide.

NetWare

This page allows you to configure the NetWare settings for the following options.

NOTE: Some settings on this page will only be available after you restart CentreWare Internet Services, or after the machine is switched off and on.

1. At the CentreWare Internet Services home page for the machine, select the [Properties] tab.

2. In the [Properties] frame, select the plus symbol [+] to the left of the [Protocol Settings] folder.

3. Select [NetWare].

4. Set up the following options to be displayed in the frame.

General:

- Host Name – Enter the host name.
- Active Mode – Selects the Active Mode for the printer when using NetWare.
- File Server Name – Enter the file server name.
- Polling Interval – Allows you to set the time interval from when print data enter the print queue until printing starts.
- Number of Searches – Enter the maximum number of searches.
- Password – Enter the print server (PServer) password.
- Re-enter Password – Allows you to verify the PServer password by re-entering the same password.
- TBCP Filter – (Only available when the optional PostScript Kit is installed.)

NDS:

- Tree Name – Enter the tree name.
- Context Name – Enter the context name of the Print Server.

Transport Protocol (IPX/SPX):

- Frame Type – Select the frame type (Auto, Ethernet II, Ethernet 802.3, Ethernet 802.2, Ethernet SNAP).

- Network Address – Displays the network address in the XXXXXXXX:XXXXXXXXXXXX format.

SLP:

- Active Discovery – Allows you to enable or disable the automatic detection of the SLP directory agent.

5. Select [Apply] to reflect the new setting.
6. Enter the user ID and password then select [OK].

NOTE: The default user ID is "11111" and the default password is "x-admin".

7. When the reboot message appears, select [Reboot Machine].

NOTE: For more information about the contents of items, refer to the CentreWare Internet Services chapter of the User Guide.

TCP/IP

This page allows you to configure the following TCP/IP settings.

NOTE: Some settings on this page will only be available after you restart CentreWare Internet Services, or after the machine is switched off and on.

1. At the CentreWare Internet Services home page for the machine, select the [Properties] tab.
2. In the [Properties] frame, select the plus symbol [+] to the left of the [Protocol Settings] folder.
3. Select [TCP/IP].
4. Set up the following options to be displayed in the frame.

General:

- Host Name – Enter the host name.
- Get IP Address – Allows you to set the method for obtaining the IP address by selecting the drop down menu to access the following options (Manual, DHCP, BOOTP, RARP, DHCP/Autonet).
- Machine IP Address – Enter the IP address allocated to the printer in the xxx.xxx.xxx.xxx format.
- Subnet Mask – Enter the subnet mask in the xxx.xxx.xxx.xxx format.
- Gateway Address – Enter the gateway address in the xxx.xxx.xxx.xxx format.

DNS:

- Get DNS Server Address – Allows you to enable or disable the automatic setting of the DNS server address via DHCP.
- DNS Server Address 1 to 3 – Enter the DNS address 1, DNS address 2 and DNS address 3 in the xxx.xxx.xxx.xxx format.
- DNS Domain Name – Enter the DNS domain name.

- Generate Domain Search List Automatically – Allows you to enable to disable the automatic setting to generate the domain search list.
- Domain Name 1 to 3 – Enter the domain name for domain name 1, domain name 2 and domain name 3.
- Connection Time-Out – Allows you to specify the time-out period when searching the domain.
- Dynamic DNS Update – Allows you to enable or disable the dynamic DNS update.

WINS Server:

- Get WINS Server Address – Allows you to enable or disable the automatic setting of the primary and secondary WINS server address via DHCP.
- Primary WINS Server Address – Enter the primary WINS address in the xxx.xxx.xxx.xxx format.
- Secondary WINS Server Address – Enter the secondary (backup) WINS address in the xxx.xxx.xxx.xxx format.

IP Address List: (Allows you to limit the IP addresses used for receiving print data when TCP/IP is enabled.)

- IP Filter – Allows you to enable or disable IP filtering.
- No. – Displays the entry number of the IP address list from 1 to 10.
- Permitted IP Address – Enter the IP address for receiving print data when TCP/IP is enabled.
- IP Mask – Enter an IP address mask for each IP address entered in Permitted IP Address.

5. Select [Apply] to reflect the new setting.

6. Enter the user ID and password then select [OK].

NOTE: The default user ID is "11111" and the default password is "x-admin".

7. When the reboot message appears, select [Reboot Machine].

NOTE: For more information about the contents of items, refer to the CentreWare Internet Services chapter of the User Guide.

LPD

This page allows you to configure the LPD settings for the following options.

NOTE: Some settings on this page will only be available after you restart CentreWare Internet Services, or after the machine is switched off and on.

1. At the CentreWare Internet Services home page for the machine, select the [Properties] tab.

2. In the [Properties] frame, select the plus symbol [+] to the left of the [Protocol Settings] folder.

3. Select [LPD].

4. Set up the following options to be displayed in the frame.
   - Port Number – Allows you to configure the port number.
   - TBCP Filter (Only available when the optional PostScript Kit is installed.)
   - Connection Time-Out – Allows you to specify the connection time-out period when transmission fails.
5. Select [Apply] to reflect the new setting.
6. Enter the user ID and password then select [OK].

NOTE: The default user ID is "11111" and the default password is "x-admin".

7. When the reboot message appears, select [Reboot Machine].

NOTE: For more information about the contents of items, refer to the CentreWare Internet Services chapter of the User Guide.

SNMP

This page allows you to configure the SNMP settings for the following options.

NOTE: Some settings on this page will only be available after you restart CentreWare Internet Services, or after the machine is switched off and on.

1. At the CentreWare Internet Services home page for the machine, select the [Properties] tab.
2. In the [Properties] frame, select the plus symbol [+] to the left of the [Protocol Settings] folder.
3. Select [SNMP].
4. Set up the following options to be displayed in the frame.
   - Community Name (Read Only) – Enter the community name used for display.
   - Community Name (Read/Write) – Enter the community name for display and update.
   - Community Name (Trap Notification) – Enter the trap notification community name.
   - System Administrator – Enter the name of the System Administrator.
   - Trap Notification Settings – Allows you to set the trap destination addresses.
     - Transport
     - Network number (IPX)
     - MAC address (IPX)
     - Socket number (IPX)
     - IP address (UDP)
     - Port number (UDP)
     - Trap version
     - Community String (Trap Notification)

- Notification event

5. Select [Apply] to reflect the new setting.
6. Enter the user ID and password then select [OK].

NOTE: The default user ID is "11111" and the default password is "x-admin".

7. When the reboot message appears, select [Reboot Machine].

NOTE: For more information about the contents of items, refer to the CentreWare Internet Services chapter of the User Guide.

IPP

This page allows you to configure the IPP settings for the following options.

NOTE: Some settings on this page will only be available after you restart CentreWare Internet Services, or after the machine is switched off and on.

1. At the CentreWare Internet Services home page for the machine, select the [Properties] tab.
2. In the [Properties] frame, select the plus symbol [+] to the left of the [Protocol Settings] folder.
3. Select [IPP].
4. Set up the following options to be displayed in the frame.
   - Port Number – The default IPP port number 631 will be displayed. This is a display-only item.
   - Add Port No. – Enter the port number.
   - TBCP Filter (Only available when the optional PostScript Kit is installed.)
   - Administrator Mode – Allows you to enable or disable the Administrator Mode.
   - DNS – Allows you to configure whether to enable/disable DNS.
   - Connection Time-Out – Allows you to specify the connection time-out period when transmission fails.
5. Select [Apply] to reflect the new setting.
6. Enter the user ID and password then select [OK].

NOTE: The default user ID is "11111" and the default password is "x-admin".

7. When the reboot message appears, select [Reboot Machine].

NOTE: For more information about the contents of items, refer to the CentreWare Internet Services chapter of the User Guide.

Port9100

This page allows you to configure the Port9100 settings for the following options.

NOTE: Some settings on this page will only be available after you restart CentreWare Internet Services, or after the machine is switched off and on.

1. At the CentreWare Internet Services home page for the machine, select the [Properties] tab.
2. In the [Properties] frame, select the plus symbol [+] to the left of the [Protocol Settings] folder.
3. Select [Port9100].
4. Set up the following options to be displayed in the frame.
   - Port Number – Allows you to configure the port number.
   - TBCP Filter (Only available when the optional PostScript Kit is installed.)
   - Connection Time-Out – Allows you to specify the connection time-out period when transmission fails.
5. Select [Apply] to reflect the new setting.
6. Enter the user ID and password then select [OK].

NOTE: The default user ID is "11111" and the default password is "x-admin".

7. When the reboot message appears, select [Reboot Machine].

NOTE: For more information about the contents of items, refer to the CentreWare Internet Services chapter of the User Guide.

E-mail

This page allows you to configure the E-mail and iFax (Internet Fax) settings for the following options.

NOTE: Some settings on this page will only be available after you restart CentreWare Internet Services, or after the machine is switched off and on.

1. At the CentreWare Internet Services home page for the machine, select the [Properties] tab.
2. In the [Properties] frame, select the plus symbol [+] to the left of the [Protocol Settings] folder.
3. Select [E-mail].
4. Set up the following options to be displayed in the frame.

E-mail

General:

- Receiving Protocol – Allows you to select the receiving protocol for the job.
- Incoming E-mail Print Options – Allows you to select the print e-mail headers and contents option.
- Incoming Internet Fax Print Options – Allows you to select the print Internet Fax headers and contents options.
- Auto Print Delivery Confirmation Mail – Allows you to enable or disable printing delivery confirmation e-mail, and printing undelivered mail.
- Print Error Notification Mail – Allows you to specify whether to print the error e-mail automatically.
- Response to Read Receipts– Select whether to send a confirmation to MDN.

Domain Filtering:

- Domain Filtering-Receive – Allows you to specify whether to restrict incoming e-mail.
- Permitted Domain – Enter the domain name to permit incoming e-mail when Domain Filtering is enabled.

“From:” Field Security Options:

- Allow Authenticated Users to Edit “From:” Field when – Specify whether users can edit the From field in an e-mail message.
- Allow Guest Users to Edit “From:” Field – Specify whether guest users can edit the From field in an e-mail message.
- Edit “From:” Field when Authorization is not Required – Specify whether non-registered users can edit the From field in an e-mail message.
- Allow Authenticated Users to send E-mail despite Search Failure – Specify whether registered authorized users have permission to send an E-mail, after a search failure on a remote directory service.

Subject:

- Default – Specify the default subject.

Message Body:

- Default – Specify the default message text.
- User – Select whether to send user name and e-mail address.
- Attachment – Select whether to send information about attachments, such as the number of pages and file format.
- Device Information – Select whether to send machine name, serial number, IP address and other machine information.

Signature:

- Default – Specify a default signature to e-mail.

SMTP

Server Settings:

- Server Address – Enter the SMTP server address. Up to 128 characters can be entered, including . (period) and - (hyphen).
- Port Number – Specify the SMTP port number.
- Send Authentication – Select whether and how users are required to authenticate before sending e-mail using an SMTP server.
- User Name – Specify the user ID for SMTP authentication.
- Password – Specify the password for SMTP authentication.

Outgoing Mail Settings:

- Maximum E-mail Size – Allows you to specify the maximum e-mail size.
- Max. No. of Pages for Split Send – Allows you to set the size of outgoing e-mail in pages.

POP3

Server Settings:

- Server Address – Enter the POP3 server address. Up to 128 characters can be entered, including periods (.) and hyphens (-).
- Port Number – Specify the POP3 port number.
- POP Receive Authentication – Select to enable APOP authentication.
- User Name – Enter the POP user address.
- Password – Enter the POP user password.

Incoming Mail Settings:

- POP3 Server Check Interval – Enter the interval to check the POP3 server between 1 and 120 minutes in 1 minute increments.

5. Select [Apply] to reflect the new setting.

6. Enter the user ID and password then select [OK].

NOTE: The default user ID is "11111" and the default password is "x-admin".

7. When the reboot message appears, select [Reboot Machine].

NOTE: For more information about the contents of items, refer to the CentreWare Internet Services chapter of the User Guide.

HTTP

This page allows you to configure the HTTP settings for the following options.

NOTE: Some settings on this page will only be available after you restart CentreWare Internet Services, or after the machine is switched off and on.

1. At the CentreWare Internet Services home page for the machine, select the [Properties] tab.
2. In the [Properties] frame, select the plus symbol [+] to the left of the [Protocol Settings] folder.
3. Select [HTTP].
4. Set up the following options to be displayed in the frame.
   - Port Number – Enter the port number that receives requests from the browser.
   - Maximum Sessions – Enter the maximum number of sessions between 1 and 15.
   - Connection Time-Out – Allows you to specify the connection time-out period when transmission fails.
5. Select [Apply] to reflect the new setting.
6. Enter the user ID and password then select [OK].

NOTE: The default user ID is "11111" and the default password is "x-admin".

7. When the reboot message appears, select [Reboot Machine].

NOTE: For more information about the contents of items, refer to the CentreWare Internet Services chapter of the User Guide.

UPnP

This page allows you to configure the UPnP settings for the following options.

NOTE: Some settings on this page will only be available after you restart CentreWare Internet Services, or after the machine is switched off and on.

1. At the CentreWare Internet Services home page for the machine, select the [Properties] tab.
2. In the [Properties] frame, select the plus symbol [+] to the left of the [Protocol Settings] folder.
3. Select [UPnP].
4. Set up the following option to be displayed in the frame.
   - Port Number – Specify the UPnP port number.
5. Select [Apply] to reflect the new setting.
6. Enter the user ID and password, then select [OK].

NOTE: The default user ID is "11111" and the default password is "x-admin".

7. When the reboot message appears, select [Reboot Machine].

NOTE: For more information about the contents of items, refer to the CentreWare Internet Services chapter of the User Guide.

SSDP

This page allows you to configure the SSDP settings for the following options.

NOTE: SSDP is available only after UPnP is enabled.

NOTE: Some settings on this page will only be available after you restart CentreWare Internet Services, or after the machine is switched off and on.

1. At the CentreWare Internet Services home page for the machine, select the [Properties] tab.
2. In the [Properties] frame, select the plus symbol [+] to the left of the [Protocol Settings] folder.
3. Select [SSDP].
4. Set up the following option to be displayed in the frame.
   - Valid Advertising Period – Specify the time during which the advertising period remains valid.
   - Maximum TTL – Specify the maximum TTL (time to live).
5. Select [Apply] to reflect the new setting.
6. Enter the user ID and password, then select [OK].

NOTE: The default user ID is "11111" and the default password is "x-admin".

7. When the reboot message appears, select [Reboot Machine].

NOTE: For more information about the contents of items, refer to the CentreWare Internet Services chapter of the User Guide.

LDAP

This page allows you to configure the LDAP settings for the following options.

NOTE: Some settings on this page will only be available after you restart CentreWare Internet Services, or after the machine is switched off and on.

1. At the CentreWare Internet Services home page for the machine, select the [Properties] tab.
2. In the [Properties] frame, select the plus symbol [+] to the left of the [Protocol Settings] folder.
3. Select [LDAP].

4. Set up the following option to be displayed in the frame.
   - LDAP Server Address – Enter the LDAP server address.
   - Port Number – Specify the LDAP port number.
5. Select [Apply] to reflect the new setting.
6. Enter the user ID and password, then select [OK].

NOTE: The default user ID is "11111" and the default password is "x-admin".

7. When the reboot message appears, select [Reboot Machine].

NOTE: For more information about the contents of items, refer to the CentreWare Internet Services chapter of the User Guide.

Web DAV

This page allows you to configure the Web DAV settings for the following options.

NOTE: Some settings on this page will only be available after you restart CentreWare Internet Services, or after the machine is switched off and on.

1. At the CentreWare Internet Services home page for the machine, select the [Properties] tab.
2. In the [Properties] frame, select the plus symbol [+] to the left of the [Protocol Settings] folder.
3. Select [Web DAV].
4. Set up the following option to be displayed in the frame.
   - Port Number – Specify the LDAP port number.
5. Select [Apply] to reflect the new setting.
6. Enter the user ID and password, then select [OK].

NOTE: The default user ID is "11111" and the default password is "x-admin".

7. When the reboot message appears, select [Reboot Machine].

NOTE: For more information about the contents of items, refer to the CentreWare Internet Services chapter of the User Guide.

Bonjour

This page allows you to configure the Bonjour settings for the following options.

NOTE: Some settings on this page will only be available after you restart CentreWare Internet Services, or after the machine is switched off and on.

1. At the CentreWare Internet Services home page for the machine, select the [Properties] tab.
2. In the [Properties] frame, select the plus symbol [+] to the left of the [Protocol Settings] folder.

3. Select [Bonjour].

4. Set up the following option to be displayed in the frame.

- Host Name – Enter the host name.
- Printer Name – Enter the printer name.

5. Select [Apply] to reflect the new setting.

6. Enter the user ID and password, then select [OK].

NOTE: The default user ID is "11111" and the default password is "x-admin".

7. When the reboot message appears, select [Reboot Machine].

NOTE: For more information about the contents of items, refer to the CentreWare Internet Services chapter of the User Guide.

5 NetWare

This chapter explains how to install the machine onto a NetWare network. The following information is provided.

Information Checklist

Before installing the machine onto a network, make sure that 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 versions 3.x, 4.x, 5.x or 6.x.	Customer
Obtain and record the following information, if required: • IP address • Gateway address • Subnet mask • Host name Refer to the glossary for additional information about the Gateway Address and Subnet mask, if needed.	Customer
Test the machine to make sure that it is installed fully and functioning correctly.	Customer
Install the print driver.	Customer

If problems arise during the machine installation, refer to *the Problem Solving chapter* for assistance.

CAUTION: Do not connect the network cable to the machine until instructed to do so.

NetWare Environments

System configuration

The machine supports NetWare PServer mode in Bindery or NDS. NetWare 3.x/4.x/5.x/6.x is required to support Bindery. NetWare 4.11 or later is required to support NDS. In the PServer mode, the machine will function as a print server and print jobs from the print queue. The machine uses one file server user license.

NOTE: The machine does not support RPrinter mode.

Target computers

The NetWare versions and NetWare client computers require the following environments.

NetWare versions

A Novell-accredited computer which can be installed with NetWare 3.x/4.x/5.x/6.x.

NetWare client computers

A Novell-accredited computer which can run Windows 95, Windows 98, Windows ME, Windows NT 4.0, Windows 2000, Windows XP or Windows Server 2003.

NOTE: When using the LPD port by Novell Distributed Print Services (NDPS), activate the LPD port on the machine and set the IP address.

IPX/SPX frame types

The machine supports the following Ethernet interfaces.

- 10Base-T (Twisted Pair Cable)
- 100Base-TX (Twisted Pair Cable)

The machine supports the following frame types.

- Ethernet II specification
- IEEE802.3 specification
- IEEE802.3/802.2 specification
- IEEE802.3/802.2/SNAP specification

The machine will send out packets of each frame type on the connected network. It will automatically use the frame type which corresponds to the first response. However, if more than one protocol is running simultaneously on the same network, the machine will use the same frame type as used by the NetWare server.

NOTE: Some network components, such as the hub may not support automatic frame type setup. If the data link indicator light of the port does not light up, match the IPX/SPX setting of the frame type of the machine, to the frame type of the file server.

NetWare Installation

This section describes the installation procedures to use the machine in a NetWare environment.

Installation Procedure

The installation procedure is as follows.

Network Communication Setup

Enable the SMB port.

When using IPX:

Set the Netware port to [Enabled] using the touch screen or CentreWare Internet Services.

When using TCP/IP:

Set the Netware port to [Enabled] using the touch screen or CentreWare Internet Services. Set the IP address on the control panel or CentreWare Internet Services.

For more information, refer to *Network Communication Setup on page 69*.

NetWare Setup

For more information, refer to *NetWare Setup on page 71*.

Workstation Setup

For more information, refer to *Workstation Setup on page 71*.

Test Print

For more information, refer to *Test Print on page 71*.

Network Communication Setup

Use this procedure to set up the network communication parameters of the machine.

At the machine, perform these steps.

NOTE: Keep the SNMP port enabled while you use the machine on the TCP/IP network.

NOTE: Some of the configuration options for this protocol are only available from the CentreWare Internet Services. Refer to the CentreWare Internet Services chapter of the User Guide.

First, enable the NetWare port.

1. Connect the machine to the network.

2. Display the [System Settings] screen.

NOTE: For more information about how to display the [System Settings] screen, refer to the Setups chapter of the User Guide.

3. Select [Network Settings].
4. Select [Port Settings].
5. Select [NetWare], then [Change Settings].
6. Select [Port Status], then [Change Settings].
7. Select [Enabled], then [Save].

Next, establish TCP/IP if you use IP Address for a NetWare network.

1. Display the [System Settings] screen.

NOTE: For more information about how to display the [System Settings] screen, refer to the Setups chapter of the User Guide.

2. Select [Network Settings].
3. Select [Protocol Settings].
4. Select [TCP/IP – Get IP Address], then [Change Settings].
5. Select a method for establishing an IP address from [DHCP], [BOOTP], [RARP], [DHCP/Autonet], or [Manual], and then select [Save].

NOTE: Use the DHCP server together with the Windows Internet Name Server (WINS) server.

If you selected [Manual] in step 5, then complete step 6 to 11 to enter the [Protocol Settings]. Otherwise, complete step 14.

6. Select [TCP/IP - IP Address], then [Change Settings].
7. Use the keypad on the screen to enter the IP Address for the machine in the format “xxx.xxx.xxx.xxx”. Enter relevant values (0 to 255) into the highlighted field and select [Save/Next]. The next 3 digits are highlighted. When you have finished entering all values, select [Save].
8. Select [TCP/IP - Subnet Mask], then [Change Settings].
9. Using the same method as in step 7, enter the Subnet Mask.
10. Select [TCP/IP - Gateway Address], then [Change Settings].
11. Using the same method as in step 7, enter the Gateway Address.

NOTE: If you do not wish to set the Gateway Address, enter “0.0.0.0”.

12. Select [TCP/IP - IP Filter], then [Change Settings].
13. Select [On] to filter access to the machine.

NOTE: If you do not wish to use the IP filter feature, select [Off].

NOTE: Use CentreWare Internet Services to register the IP addresses which are not allowed to access the machine. Refer to the CentreWare Internet Services chapter of the User Guide.

14. When you have finished establishing TCP/IP, select [Close] from the [Protocol Settings] screen.

NetWare Setup

Use PCONSOLE or NetWare Administrator (NWADMIN) to create a print queue, print server and printer, and assign the respective objects. For information on how to use PCONSOLE or NWADMIN, refer to manual which comes with NetWare.

There are two ways to type the name: typeful (OU, O, etc.) and typeless. The user must use the typeful name in order for it to work.

Example: ou=xxxx.o=yyyy.c=zzzzz

When using in the PSERVER mode, set as follows.

- Printer server name – Use the same device name as the target printer.
- Printer location – Set as Auto Load.
- Printer Type – Set as Parallel
- Parallel Setting – Set as Auto Load.

For NetWare 5, only NWADMIN is available for use.

Workstation Setup

Install the PCL print driver on the NetWare client computer. Refer to the HTML document on PCL Print Driver CD-ROM.

Test Print

To make sure that the machine has been installed on the network correctly, submit a test print from a client workstation. Perform the following steps.

1. Open a document on a client workstation.

2. Select the machine as the printer.

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

4. Make sure that the print driver is installed on every workstation that will be sending jobs to the machine.

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

The installation process is now complete.

If the test print fails, refer to *the Problem Solving chapter* for assistance.

6 UNIX TCP/IP

This chapter explains how to set up the machine to operate in a UNIX TCP/IP environment. The UNIX Workstation Operating Systems (OS) supported are Solaris, SunOS, and HP-UX. The following information is provided.

Information Checklist

Before installing the UNIX TCP/IP features on the machine, make sure that the following items are available or have been performed.

Item	By
An existing operational network utilizing a UNIX TCP/IP protocol is required. These steps are not designed to install the UNIX TCP/IP network.	Customer
SunOS 4.1x, Solaris 1.x, 2.x, 7.x, 8.x, 9.x, 10.x, HP-UX 9.x, 10.x, 11.x	Customer
Make sure that the correct IP Address is being used for the machine.	Customer
Make sure that the Gateway Address is set correctly.	Customer
Make sure that the Subnet Mask is set correctly.	Customer
Make sure that the Host Name is set correctly.	Customer
Test the copy and fax features of the machine, to make sure that they are installed fully and functioning correctly.	Customer

If you encounter problems during the installation of the machine, refer to *the Problem Solving chapter* for assistance.

CAUTION: Do not connect the network cable to the machine until instructed to do so.

UNIX TCP/IP Environments

System configuration

The machine uses the Line Printer Daemon Protocol (LPD) that supports TCP/IP as the transport protocol. With the LPD, use the machine as a UNIX network printer.

The LPD supports spool mode, this is where print jobs from clients are spooled once before output. It also supports non-spool mode, this is where print jobs are output sequentially, without spooling.

Target computers

The target computers are as follows.

- Workstation or personal computer with RFC 1179 Line Printer Daemon Protocol

Interface

The LPD is available on the following interfaces:

- Ethernet 100Base-TX
- Ethernet 10Base-T

The applicable frame types conform to Ethernet II (Ethernet interface).

UNIX TCP/IP Installation

This section explains how to install the machine in a UNIX TCP/IP environment.

Installation Procedure

There are three stages.

Network Communication Setup

The machine needs to be set up and configured for TCP/IP.

Workstation Setup

The workstation OS needs to be configured for the machine.

Test Print

A print job should be submitted to make sure that the machine has been installed and configured correctly.

Network Communication Setup

Use this procedure to set up the network communication parameters of the machine.

NOTE: Keep the SNMP port enabled while you use the machine on the TCP/IP network.

NOTE: Some of the configuration options for this protocol are only available from the CentreWare Internet Services. Refer to the CentreWare Internet Services chapter of the User Guide.

Follow the steps below to establish TCP/IP.

1. Connect the machine to the network.
2. Display the [System Settings] screen.

NOTE: For more information about how to display the [System Settings] screen, refer to the Setups chapter of the User Guide.

3. Select [Network Settings].
4. Select [Protocol Settings].
5. Select [TCP/IP - Get IP Address] and [Change Settings].
6. Select a method for establishing an IP address from [DHCP], [BOOTP], [RARP], [DHCP/Autonet], or [Manual], and then select [Save].

NOTE: Use the DHCP server together with the Windows Internet Name Server (WINS) server.

If you selected [Manual] in step 6, then complete steps 7 to 12 to enter the [Protocol Settings]. Otherwise, complete step 15.

7. Select [TCP/IP - IP Address], and then [Change Settings].
8. Use the keypad on the screen to enter the IP Address for the machine in the format “XXX.XXX.XXX.XXX”. Enter relevant values (0 to 255) into the highlighted field and select [Next]. The next 3 digits are highlighted. When you have finished entering all values, select [Save].
9. Select [TCP/IP - Subnet Mask], and then [Change Settings].
10. Using the same method as in step 8, enter the Subnet Mask.
11. Select [TCP/IP - Gateway Address], and then [Change Settings].
12. Using the same method as in step 8, enter the Gateway Address.

NOTE: If you do not wish to set the Gateway Address, enter “0.0.0.0”.

13. Select [TCP/IP - IP Filter], then [Change Settings].
14. Select [On] to filter access to the machine.

NOTE: If you do not wish to use the IP filter feature, select [Off].

NOTE: Use CentreWare Internet Services to register the IP addresses which are not allowed to access the machine. Refer to the CentreWare Internet Services chapter of the User Guide.

15. When you have finished establishing TCP/IP, select [Close] from the [Protocol Settings] screen.

Workstation Setup

This section explains how to change the workstation OS for Solaris, SunOS, and HP-UX workstations. Refer to the relevant instructions below.

Solaris – page 77
SunOS – page 78
HP-UX – page 79

Print language/mode/logical printer

A printer name for the logical printer should correspond to the print language/mode to be used for printing, or to the Logical Printer Number which was registered through CentreWare Internet Services.

Printer Name	Print Language/Mode/Logical Printer
PS*	PostScript
PSASC/PSA*	PostScript
PSBIN/PSB*	PostScript
PCL	PCL
LP	Print language specified on the touch screen of the machine.
DUMP/DMP	Dump mode
AUTO/ATO	Auto detection mode
TIFF/TIF	TIFF direct print
TIFF%n	TIFF (%n: Logical Printer Number 1 to 10 which were registered through CentreWare Internet Services.)
PS%n*	PostScript (%n: Logical Printer Number 1 to 10 which were registered through CentreWare Internet Services.)

*: Requires PostScript Option Kit

You can also add output parameters to the above printer name. The parameters are the same as those for -C option. Insert "_" between the printer name and output parameter, for example "PS_A4".

NOTE: If specifying a different printer name, the print language or mode specified on the touch screen of the machine is used.

NOTE: When setting print languages/modes from the same workstation to a single printer, it is recommended to set one kind of each. If two or more kinds of languages/modes are set, the workstation may display the same job number for some queues (lpq).

NOTE: To print an ASCII-format PostScript file, specify PSASC for data processing with TBCP enabled.

NOTE: To print a binary-format PostScript file, specify PSBIN for data processing with TBCP disabled.

NOTE: When specifying PS, the machine functions as if PSBIN is specified.

NOTE: You cannot use -C option when specifying the printer name with the output parameter.

NOTE: For details about -C option, refer to *-C Option on page 87*.

NOTE: Lowercase characters can also be used for a printer name.

NOTE: Up to 64 characters can be used for a printer name.

NOTE: Output parameters in the print data take priority over the printer name.

Solaris

Follow the steps below to set up a Solaris workstation to communicate with the machine.

1. Log in as root at a client workstation.

2. Use the Solaris ADMINTOOL to add the machine to the system host files.

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

1) Select [Browse].
2) Select [Printers].
3) Select [Edit].
4) Select [Add].
5) Select [Local Printer].
6) Enter the [Host Name] in the Printer Name field and then select [OK].
7) Select [File].
8) Select [Exit].

3. Verify connectivity to the machine, by using a UNIX command such as ping, as shown in the following example:

```
ping PrinterName
PrinterName is alive
```

NOTE: The remote queue name must be set to lp to spool jobs to the machine.

SunOS

Follow the steps below to set up a SunOS workstation to communicate with the machine.

1. Log in at a client workstation as root and add the machine to the /etc/hosts file. For example:

```
IP address [tab] PrinterName
```

NOTE: If an NIS server is running on the same segment of the network as the machine, Log in at the NIS server as root and add the machine to the master hosts file. For example:

```
IP address [tab] PrinterName
```

2. Verify connectivity to the machine, by using a UNIX command such as ping, as shown in the following example:

```
ping PrinterName
PrinterName is alive
```

3. Edit the /etc/printcap file to contain an entry for the machine queue using the following example:

```
PrinterName:\
:lp=:\
:rm=PrinterName:\
:mx#0:\
:sd=/var/spool/lpd/PrinterName:\
:lf=/var/spool/lpd/PrinterName/log:
```

1) `PrinterName` is the local client name of the machine.
2) `lp=` is the local device name for the printer output. For remote printers, this parameter must be set to nothing.

NOTE: The recommended remote queue name is lp. That queue name will work with the machine.

3) `rm=` is the remote device. This is the IP hostname for the machine in the local client. The remote printer name defaults to lp, the default printer.
4) `mx#0` is the indicator that there is no limit on the document size.
5) `sd=` is the path of the queue for the machine.
6) `lf=` is the error log file name.

4. The machine can be designated as the location of the default print queue. It will then be unnecessary to include the PrinterName in the lpr command line.

   1) To designate the machine for the default print queue, add the following to the /etc/printcap file. This is in addition to the information entered in the previous step:

```
lp PrinterName:\
:lp=:\
:rm=PrinterName:\
:mx#0:\
:sd-/var/spool/lpd/PrinterName:
```

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.

```
cd /var / spool / lpd
mkdir PrinterName
chmod 744 PrinterName
```

HP-UX

Follow the steps below to set up an HP-UX workstation to communicate with the machine.

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

```
Ip address [tab] PrinterName
```

2. Verify connectivity to the machine, by using a UNIX command such as ping from a terminal command window, as shown in the following example:

```
ping PrinterName
```

NOTE: Select CTRL+C to cancel the ping command.

3. There are two methods to install the machine on an HP-UX workstation. Choose the method that will be used to complete the installation and refer to the appropriate page:

Using the Command Window TTY Method – page 79
Using the System Administrator Manager (SAM) GUI Method – page 80

Using the Command Window TTY Method

Follow the steps below to use the command window to manually enter command strings.

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

1) Type `su` to access the superuser mode.
2) Type `sh` to run the Bourne shell.
3) Type `lpshut` to stop the print service.
4) Type the following command on one line:

```
lpadmin -pqueuename -v/dev/null -mrmodel -ocmrcmodel-
osmrsmodel -ob3 -orc -ormhostname -orplp
```

NOTE: The queuename is the name of the print queue being created. The hostname is the `PrinterName` for the machine from the etc/hosts file.
The remote queue name must be set to `lp` to spool jobs to the machine. 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 machine.

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 Bourne shell.

6. Type `exit` to exit superuser mode.

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

8. Continue with *Test Print on page 81*.

Using the System Administrator Manager (SAM) GUI Method

Follow the steps below to use the HP System Administrator Manager (SAM) GUI (Graphical User Interface).

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

1. Start the SAM application.

2. Select the [Printers and Plotters] icon.

3. Select [Actions] from the Menu Bar.

4. Select [Add Remote Printer/Plotter] form the pull-down menu.

5. Enter the following information into the form displayed in the [Add Remote Printer/Plotter] dialog box:

1) Printer Name
2) Remote System Name
3) 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 PrinterName for the machine from the etc/hosts file.
The Remote Printer Name must be set to lp to spool jobs to the machine.

4) Enable Remote Printer on a BSD system by selecting the check box.
5) Make sure that the [Remote Cancel Model] is set correctly,
6) Make sure that the [Remote Status Model] is set correctly.
7) Make sure that the [Default Request Priority] is set correctly.
8) Make sure that the [Allow Anyone to Cancel a Request] check box is set correctly.
9) Make sure that the [Make This Printer the Default Destination] check box is set correctly.

6. Select [OK].

7. Read and respond to any displayed system messages.

8. Continue with *Test Print on page 81*.

Test Print

To make sure that the machine 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. Send a test print to the machine.

3. Repeat the procedure for all workstations that will be sending jobs to the machine.

The UNIX TCP/IP installation is now complete.

If the test print fails, refer to *the Problem Solving chapter* for assistance.

Printing

Solaris/HP-UX

This section describes printing from workstations running Solaris or HP-UX. Refer to the manuals supplied with the workstation for full details.

Print (lp)

The lp command is used for printing.

Command format

```
lp [-d printer name] [-n number of copies] File name
```

Command options

The following command options are available.

- `-d printer name`

Specify the printer name registered by the lpadmin command as the -d option. If this option is omitted, the default printer lp will be used.

- `-n number of copies`

This option specifies the number of copies. If one lp command is issued to print multiple files, the number of copies specified will apply to all the files. However, this is only effective when the machine is in the spool mode. In the non-spool mode, the client must be a Windows NT machine to use this option.

NOTE: Some options which are not listed here (e.g. -m option) and which are not processed by the workstation sending the print instructions, will not be valid.

NOTE: In the spool mode, up to 32 files can be printed by one lp command. Any files specified after the 32nd file will be ignored.

Example

To print a file named file1 to a printer named fxPS, enter the following command:

```
%lp -dfxPS file1
```

To output three copies of file1 and then three copies of file 2 to fxPS, enter the following command:

```
%lp -dfxPS -n3 file1 file2
```

Delete (cancel)

The cancel command is used to delete print data.

Command format

```
cancel [printer name] [job number]
```

Command options

The following command options are available.

- `Printer name`

This option specifies the printer name. The cancel command can be effectively used with the combined use of -a, -e and -u as shown below. This option is only valid in the spool mode.

-a	Deletes all the print data belonging to the user issuing the command, from the specified printer.
-e	Deletes all the print data from the specified printer.
-u user name	Deletes all the print data belonging to the specified user, from the specified printer.

- `job number`

This option specifies the job number of the print data to be deleted. These numbers can be checked by issuing an lpstat command.

This option is only valid in the spool mode.

NOTE: Print data which consists of multiple files sent in one print instruction cannot be deleted file by file. All the files will be deleted together.

NOTE: This command is invalid if no options are specified, or if there is no print data which matches the option.

NOTE: You can only delete print data from the same workstation used to send the print data. You cannot delete print data sent by other workstations.

NOTE: When a command to delete print data is received, the file will be deleted even if it is in the process of being printed. Any unprinted data will be cancelled after the file has been deleted.

Example

To delete the print data from printer fxPS for job number 27, enter the following command.

```
%cancel fxPS-27
```

To delete all the print data from printer fxPS, enter the following command.

```
%cancel fxPS -e
```

SunOS

This section describes printing from a workstation running SunOS. See the manuals supplied with the workstation for full details.

Print (lpr)

The lpr command is used to print.

Command format

```
/usr/ucb/lpr [-P printer name] [-# number of copies]
[-C parameter] File name
```

Command options

The following command options are available.

- `-P printer name`

This option specifies the printer name registered at /etc/printcap. If this option is omitted, print data will be output to the default printer lp.

- `-# number of copies`

This option specifies the number of copies. If one lpr command is issued to print multiple files, the number of copies specified by this option will apply to all the files.

This option is only valid in the spool mode.

- `-C parameter`

To print from the machine using the PostScript language, use the -C option to specify the form of output.

This option is valid in the spool mode. In the non-spool mode, the client must be a Windows NT machine to use this option.

NOTE: If the PostScript logical printer and the -C option are configured simultaneously using CentreWare Internet Services, some functions may not work as expected. Also, when specifying the PostScript logical printer as a default printer on UNIX, it is recommended not to use the -C option by lpr. Refer to the -C option of the lpr command.

NOTE: Some options which are not listed here (e.g. -m option) and which are not processed by the workstation sending the print instructions, will not be valid.

NOTE: In the spool mode, up to 32 files can be specified in one lpr command. Any files specified after the 32nd file will be ignored.

Example

To print a file named file1 to a printer named fxPS, enter the following command:

```
%lpr -PfxPS file1
```

To print three copies of file1 and three copies of file 2 to fxPS, enter the following:

```
%lpr -PfxPS -#3 file1 file2
```

To print a file named file1 to a printer named fxPS as an A4-sized (210 × 297 mm/ 8.3 ×11.7 inches) duplex job, enter the following command:

```
%lpr -PfxPS -C,DUP,A4 file1
```

Delete (lprm)

The lprm command is used to delete print data.

Command format

```
/usr/ucb/lprm [-P printer name] job number
```

Command options

The following command options are available.

- `-P printer name`

This option specifies the printer name registered with /etc/printcap. If this option is omitted, the default printer lp will be used.

- `job number`

This option specifies the job number of the print data to be deleted. A job number is a serial number between 1 and 999 determined by the workstation. These numbers can be checked by issuing an lpq command.

Instead of a job number, you can specify a user name or “-”.

This option is invalid in the non-spool mode.

- `User name` is only valid when you log-in as a superuser. When this option is taken, all the print data you specify will be deleted.

This option is invalid in the non-spool mode.

- -
  You can delete all your print data by specifying this option. If this option is issued by a superuser, all the print data received by the machine can be deleted.

This option is invalid in the non-spool mode.

NOTE: Print data which consist of multiple files sent in one print instruction cannot be deleted file by file. All the files will be deleted together.

NOTE: This command is invalid if no options are specified, or if there is no print data which matches the option.

NOTE: You can only delete print data from the same workstation used to send the print data. You cannot delete print data sent by other workstations.

NOTE: When a command to delete print data is received, the file will be deleted even if it is in the process of being printed. Any unprinted data will be cancelled after the file has been deleted.

Example

To delete the print data from printer fxPS for job number 351, enter the following command:

```
%lprm -PfxPS 351
```

Printer Status

Solaris/HP-UX

The lpstat command is used to inquire about the status of the machine.

NOTE: In the non-spool mode, this function is available to Windows NT clients but not to HP-UX/Solaris clients.

Command format

```
lpstat [option]
```

Command options

The following command options are available.

If no option is specified, all the print data-related information will be displayed.

The sequence of the options does not affect the outcome.

To use more than one argument at the same time, separate them by commas and enclose all the arguments with “ ”.

E.g. %lpstat -u “user1,user2,user3”

- -o [printer name]

This option displays the print data for the specified printer.

- `-t`

This option displays all the information.

- `-u [user name]`

This option displays information about print data received from specified users.

- `-v [printer name]`

This option displays the printer name and the path name for the machine. The printer name is specified in the argument.

NOTE: Long file names will be truncated.

NOTE: Information for a maximum of 64 print instructions can be displayed.

NOTE: If two or more types of print languages/modes are set up on a single workstation, identical job numbers may be displayed when an inquiry command (lpstat) is issued.

Example

To inquire about the print data received by a printer named fxPS, enter the following command:

```
%lpstat -ofxPS
```

SunOS

The lpq command is used to inquire about the status of the machine.

NOTE: In the non-spool mode, this function is available to Windows NT clients but not to SunOS clients.

Command format

```
/usr/ucb/lpq [-P printer name] [-l] [user name]
[+interval]
```

Command options

The following command options are available.

- `-P printer name`

This option specifies the printer name registered at /etc/printcap. If this option is omitted, the default printer lp will be used.

- `-l`

This option displays information about the workstation which is sending the print instruction in long format.

- `User name`

This option displays information about print data received from a specified user.

- `+interval`

This option is used to specify the inquiry interval period for the duration of printing, until all the data received has been printed. The interval is set up in seconds.

The screen of the client is refreshed each time the information is returned.

NOTE: Long file names will be truncated.

NOTE: Information for a maximum of 64 print instructions can be displayed.

NOTE: If two or more types of print languages/modes are set up on a single workstation, identical job numbers may be displayed when an inquiry command (lpq) is issued.

Examples

- To inquire about the print data received by a printer named fxPS, enter the following command:

```
%lpq -PfxPS
```

- To display a printer named fxPS in long format, enter the following command:

```
%lpq -PfxPS -l
```

-C Option

On SunOS, the -C option can be used to specify the print format if the machine prints with the PostScript language in spool mode.

This section explains the functions which can be specified and printing operations which will be affected using the -C option.

NOTE: When the PostScript logical printer that was configured using CentreWare Internet Services and the -C option have been specified simultaneously, some of the actions cannot be guaranteed to work. Also, when specifying the PostScript logical printer as a default printer on UNIX, it is recommended not to use the -C option.

Function

The following items can be set up using the -C option.

Selecting a paper tray

When selecting a paper tray, specify either a paper size or a tray. If the paper size is specified, the machine automatically searches and selects the tray.

The following parameters can be specified.

Parameter	Description
INTRAY1/intray1	Selects Tray 1.
INTRAY2/intray2	Selects Tray 2.

Parameter	Description
INTRAY3/intray3	Selects Tray 3 (optional).
INTRAY5/intray5	Selects Tray 5 (manual feed).
INMF/inmf	Selects Tray 5 (manual feed).
A3/a3	Selects the tray which has A3 (297 × 420 mm/11.7 × 16.5 inches) paper loaded.
B4/b4	Selects the tray which has B4 (257 × 364 mm/10.1 × 14.3 inches) paper loaded.
A4/a4	Selects the tray which has A4 (210 × 297 mm/8.3 × 11.7 inches) paper loaded.
B5/b5	Selects the tray which has B5 (182 × 257 mm/7.2 × 10.1 inches) paper loaded.
A5/a5	Selects the tray which has A5 (148 × 210 mm/5.8 × 8.3 inches) paper loaded.
LETTER/letter	Selects the tray which has letter size (216 × 279 mm/8.5 × 11.0 inches) paper loaded.
LEGAL/legal	Selects the tray which has legal size (216 × 356 mm/8.5 × 14.0 inches) paper loaded.

NOTE: If several parameters are specified in the first lpr command, data may not be printed correctly.

NOTE: The system default is used if no tray number is specified, or a specified tray or specified size of paper is not loaded.

NOTE: This option is for specifying paper size only. Paper is selected but the document size is not resized to fit the actual paper size.

NOTE: If the print data specifies a paper tray, those specifications take priority over any -C option.

NOTE: If an invalid combination is specified, the machine may not operate correctly.

NOTE: For some print languages, the specification may be invalid.

Selecting a paper output tray

The following parameters can be specified.

Parameter	Description
OUTDOWN/outdown	Delivers prints to the face-down tray.
STACKER%n/stacker%n	Delivers prints to a finisher tray. (%n: bin number 1)

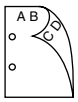
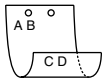
Selecting a paper type

The following parameters can be specified.

Parameter	Description
PTS/pts	Selects plain paper.
PT1/pt1	Selects thick paper 1.
PT2/pt2	Selects thick paper 2.
POH/poh	Selects transparency.
PTP/ptp	Selects tracing paper.
PLB/plb	Selects labels.
PQU/pqu	Selects bond paper.
PRC/prc	Selects recycled paper.

Specifying double-sided printing

The following parameters can be specified.

Parameter	Description
DUP/dup	Double-sided printing as follows: 
TUMBLE/tumble	Double-sided printing as follows: 
SIMP/simp	Single-sided printing

NOTE: If several parameters are specified in an lpr command, data may not print correctly.

NOTE: The system default is used if no parameter is specified.

NOTE: If the print data specifies double-sided or single-sided printing, those specifications take priority over any -C option.

Specifying paper size and double-sided printing

Select a paper size and a binding option. The following parameters can be specified:

Parameter	Description
A3D/a3d	Double-sided printing on A3 (297 × 420 mm/11.7 × 16.5 inches) paper and long-edge binding

Parameter	Description
A3T/a3t	Double-sided printing on A3 (297 × 420 mm/11.7 × 16.5 inches) paper and short-edge binding
A4D/a4d	Double-sided printing on A4 (210 × 297 mm/8.3 × 11.7 inches) paper and long-edge binding
A4T/a4t	Double-sided printing on A4 (210 × 297 mm/8.3 × 11.7 inches) paper and short-edge binding
B4D/b4d	Double-sided printing on B4 (257 × 364 mm/10.1 × 14.3 inches) paper and long-edge binding
B4T/b4t	Double-sided printing on B4 (257 × 364 mm/10.1 × 14.3 inches) paper and short-edge binding
A5D/a5d	Double-sided printing on A5 (148 × 210 mm/5.8 × 8.3 inches) paper and long-edge binding
A5T/a5t	Double-sided printing on A5 (148 × 210 mm/5.8 × 8.3 inches) paper and short-edge binding
B5D/b5d	Double-sided printing on B5 (182 × 257 mm/7.2 × 10.1 inches) paper and long-edge binding
B5T/b5t	Double-sided printing on B5 (182 × 257 mm/7.2 × 10.1 inches) paper and short-edge binding

NOTE: If several parameters are specified in an lpr command, data may not print correctly.

NOTE: The system default is used if no parameter is specified.

NOTE: If the print data specifies double-sided or single-sided printing, those specifications take priority over any -C option.

Specifying collation

The following parameter can be specified.

Parameter	Description
COLLATE/collate	Sorts prints electronically.

NOTE: For some print languages, the collation parameter may be invalid.

Specifying color and print modes

The following color and print mode parameters can be specified.

Parameter	Description
CC/cc	Selects color for color mode and quality priority for print mode.

Parameter	Description
CB/cb	Selects color for color mode and speed priority for print mode.
GC/gc	Selects monochrome for color mode and quality priority for print mode.
GB/gb	Selects monochrome for color mode and speed priority for print mode.
AC/ac	Selects auto (color/monochrome) for color mode and quality priority for print mode.
AB/ab	Selects auto (color/monochrome) for color mode and speed priority for print mode.

NOTE: If several parameters are specified in the first lpr command, data may not print.

NOTE: For some print languages, the color parameter may be invalid.

NOTE: The system default is used if no parameter is specified.

Specifying stapling

The following parameters can be specified for stapling.

Parameter	Description
STAPLETL	Places one staple in the upper left corner of the prints.
STAPLETD	Places two staples at the top of the prints.
STAPLETR	Places one staple in the upper right corner of the prints.
STAPLELD	Places two staples on the left side of the prints.
STAPLERD	Places two staples on the right side of the prints.
STAPLEBL	Places one staple in the lower left corner of the prints.
STAPLEBD	Places two staples at the bottom of the prints.
STAPLEBR	Places one staple in the lower right corner of the prints.

NOTE: If several parameters are specified in the first lpr command, data may not print.

NOTE: For some print languages, the stapling parameter may be invalid.

Printing

To specify the output format of printing, enter the following command:

```
-C,[parameter],[parameter]
```

Enter a "," (comma) after -C followed by the parameters which specify the output format. To specify multiple parameters, separate them with ",".

For example, to print a file named "file1", two-sided on A4 (210 × 297 mm/8.3 × 11.7 inches) on printer fxPS, enter the following command:

```
%lpr -PfxPS -C,DUP,A4 file1
```

NOTE: If the parameter string of the -C option exceeds 64 characters, the operation may not function correctly.

7 EtherTalk

This chapter explains how to set up the machine to operate on an EtherTalk network. The following information is provided.

Information Checklist

Before installing EtherTalk on the machine, make sure that the following items are available or have been performed.

Item	By
An existing operational EtherTalk network with Macintosh workstations equipped with Ethernet network interface cards is required. These procedures are not designed to install an EtherTalk network.	Customer
Macintosh System versions 7.5 or later, 8.x, 9.x, or Mac OS X 10.x	Customer
Test the machine to make sure that it is installed fully and functioning correctly.	Customer
Install the Adobe PS print driver, or PPD (optional).	Customer

If problems are encountered during the machine installation, refer to *the Problem Solving chapter* for assistance.

CAUTION: Do not connect the network cable to the machine until instructed to do so.

EtherTalk Environments

System configuration

As the machine supports EtherTalk protocol, you can print from Macintosh.

NOTE: You will need the optional PostScript Kit to use EtherTalk for printing.

Target computers

The machine supports a Macintosh or Power Macintosh with the following OS:

- Mac OS 7.5 or later, 8.x, 9.x, or Mac OS X 10.x

EtherTalk Installation

This section describes the installation procedure for using the machine in an EtherTalk Environment.

Installation Procedure

There are three stages required to install the machine on an EtherTalk network.

Network Communication Setup

This requires the machine to be set up for EtherTalk.

Workstation Setup

Install the print driver (Adobe PS) for Macintosh.

Test Print

A test print should be submitted to make sure that the machine has been installed and configured correctly.

Network Communication Setup

This procedure is used to set up the network communication parameters of the machine.

At the machine, perform these steps.

NOTE: Keep the SNMP port enabled while you use the machine on the TCP/IP network.

NOTE: Some of the configuration options for this protocol are only available from the CentreWare Internet Services. Refer to the CentreWare Internet Services chapter of the User Guide.

Initially, boot the EtherTalk port.

1. Connect the machine to the network.
2. Display the [System Settings] screen.

NOTE: For more information about how to display the [System Setting] screen, refer to the Setups chapter of the User Guide.

3. Select [Network Settings].
4. Select [Port Settings].
5. Select [EtherTalk], and then [Change Settings].
6. Select [Port Status] and then [Change Settings].
7. Select [Enabled], and then [Save].

Workstation Setup

Install the print driver (Adobe PS) for Macintosh. Install the screen font if necessary. Refer to the PostScript User Guide.

Test Print

To make sure that the machine has been installed on the network correctly a test print should be submitted from a client workstation. Perform the following steps.

1. Open a sample document on a client workstation.
2. Select the machine using the Chooser (Mac OS 9.2) or the Print Center (Mac OS X 10.x).
3. Print the document on the machine and verify that it prints correctly.
4. Make sure that the driver is installed on every workstation that will be sending jobs to the machine.
5. Repeat the test for all workstations that will be sending jobs to the machine.

The installation process is now complete.

If the test print fails, refer to *the Problem Solving chapter* for assistance.

8 Microsoft Networking

This chapter explains how to set up the machine to operate on a Microsoft network. The following information is provided.

Information Checklist

Before starting the Microsoft networking installation procedures, make sure that 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
Obtain and record the following information, if required: • IP address • Gateway address • Subnet mask • Host name Refer to the glossary for additional information about the Gateway Address and Subnet mask, if needed.	Customer
Test the machine to make sure that it is installed fully and functioning correctly.	Customer
Install the print driver.	Customer

If problems are encountered during the installation, refer to *the Problem Solving chapter* for assistance.

CAUTION: Do not connect the network cable to the machine until instructed to do so.

SMB Environments

Server Message Block (SMB) is a protocol for sharing files or printers on Windows OS. This section explains the installation procedure for connecting a printer to a Windows network through SMB.

System configuration

As the machine supports SMB protocol, you can send print data directly to the machine on the same network without going through the server.

You can use either NetBEUI, TCP/IP, or even both as the transport protocol for SMB. You will need to set up the IP address on the machine and the computer if you are using TCP/IP.

NOTE: Windows XP/Windows Server 2003 does not support NetBEUI.

NOTE: You can make SMB settings through CentreWare Internet Services. For more information on how to make SMB settings, refer to *the CentreWare Internet Services chapter.*

Target computers

The following computers support printing through SMB.

Connection	OS	Protocol
Windows network	Windows 95 Windows 98 Windows Me	NetBEUI TCP/IP
	Windows NT 4.0	NetBEUI TCP/IP
	Windows 2000	NetBEUI TCP/IP
	Windows XP Windows Server 2003	TCP/IP

NOTE: NetBEUI is not recommended by Microsoft to be used as a protocol in new networks. It is recommended that this protocol is only used in small networks where existing legacy clients require it.

SMB Installation

This section describes the installation procedure for using the machine on an SMB network.

Installation Procedure

The installation procedure is as follows.

Network Communication Setup

Enable the SMB port.

When using NetBEUI:

Set the SMB port to [Enabled] using the touch screen or CentreWare Internet Services.

When using TCP/IP:

Set the SMB port to [Enabled] using the touch screen or CentreWare Internet Services. Set the IP address on the control panel or CentreWare Internel Services.

Workstation Setup

Install the print driver on the computer.

Test Print

A print job should be submitted to make sure that the machine has been installed and configured correctly.

Network Communication Setup

This procedure is used to set up the network communication parameters of the machine.

At the machine, perform these steps.

NOTE: Keep the SNMP port enabled while you use the machine on the TCP/IP network.

NOTE: Some of the configuration options for this protocol are only available from the CentreWare Internet Services. Refer to the CentreWare Internet Services chapter of the User Guide.

Initially, boot the SMB port.

1. Connect the machine to the network.
2. Display the [System Settings] screen.

NOTE: For more information about how to display the [System Settings] screen, refer to the Setups chapter of the User Guide.

3. Select [Network Settings].
4. Select [Port Settings].
5. Select [SMB], and then [Change Settings].
6. Select [Port Status] and [Change Settings].
7. Select [Enabled], and then [Save].

Next, establish TCP/IP if you use an IP address for your network environment.

1. Display the [System Settings] screen.

NOTE: For more information about how to display the [System Settings] screen, refer to the Setups chapter of the User Guide.

2. Select [Network Settings].
3. Select [Protocol Settings].
4. Select [TCP/IP – Get IP Address], and then [Change Settings].
5. Select a method for establishing an IP address from [DHCP], [BOOTP], [RARP], [DHCP/Autonet], or [Manual], and then select [Save].

NOTE: Use the DHCP server together with the Windows Internet Name Server (WINS) server.

If you selected [Manual] in step 5, then complete steps 6 to 11 to enter the [Protocol Settings]. Otherwise, complete step 14.

6. Select [TCP/IP - IP Address], and then [Change Settings].
7. Use the keypad on the screen to enter the IP Address for the machine in the format “xxx.xxx.xxx.xxx”. Enter relevant value (0 to 255) into the highlighted field and select [Next]. The next 3 digits are highlighted. When you have finished entering all values, select [Save].
8. Select [TCP/IP - Subnet Mask], and then [Change Settings].
9. Using the same method as in step 7, enter the Subnet Mask.
10. Select [TCP/IP - Gateway Address], and then [Change Settings].
11. Using the same method as in step 7, enter the Gateway Address.

NOTE: If you do not wish to set the Gateway Address, enter “0.0.0.0”.

12. Select [TCP/IP - IP Filter], then [Change Settings].
13. Select [On] to filter access to the machine.

NOTE: If you do not wish to use the IP filter feature, select [Off].

NOTE: Use CentreWare Internet Services to register the IP addresses which are not allowed to access the machine. Refer to the CentreWare Internet Services chapter of the User Guide.

14. When you have finished establishing TCP/IP, select [Close] from the [Protocol Settings] screen.

Workstation Setup

Install the print driver on the NetWare client computer. Refer to the HTML document in PCL Print Driver CD-ROM.

Test Print

Make sure that the machine has been installed on the network correctly by submitting a test print from a client workstation. Perform the following steps.

1. Open a document on a client workstation.
2. Select the machine as the printer.
3. Print the document on the machine and verify that it prints correctly.
4. Make sure that the print driver is installed on every workstation that will be sending jobs to the machine.
5. Repeat the test for all workstations that will be sending jobs to the machine.

The installation process is now complete.

If the test print fails, refer to *the Problem Solving chapter* for assistance.

9 TCP/IP (LPD or Port9100)

This chapter explains how to set up the machine to print from a Windows computer through LPD or Port9100. The following information is provided.

Information Checklist

Before starting these procedures, make sure that 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: • IP address • Gateway address • Subnet mask • Host name Refer to the glossary for additional information about the Gateway Address and Subnet mask, if needed.	Customer
Test the machine to make sure that it is installed fully and functioning correctly.	Customer
Install the print driver.	Customer

If problems are encountered during machine setup, refer to *the Problem Solving chapter* for assistance.

CAUTION: Do not connect the network cable to the machine until instructed to do so.

TCP/IP (LPD or Port9100) Environments

System configuration

As the machine supports the LPD and Port9100 protocol, you can print directly from a Windows computer.

When printing from Windows 95/Windows 98/Windows Me computers through the LPD port, use our TCP/IP Direct Print Utility. This tool is installed together with the print drivers. When printing from Windows NT4.0/Windows 2000/Windows XP/Windows Server 2003 computers, use the OS standard LPR port.

When printing through Port9100, change the necessary settings on the computers.

The transport protocol for LPD and Port9100 can be TCP/IP.

You will also need to set up the IP address on the machine and the Windows computers.

NOTE: Windows NT 4.0 does not support printing through Port9100.

Target computers

The following computers support printing through LPD or Port9100.

Connection	OS	Protocol
LPD port	Windows 95 Windows 98 Windows Me Windows NT 4.0 Windows 2000 Windows XP Windows Server 2003 Mac OS X 10.x	TCP/IP
Port9100	Windows 2000 Windows XP Windows Server 2003	TCP/IP

NOTE: The optional PostScript Kit is required when you print from Macintosh.

TCP/IP (LPD or Port9100) Installation

This section describes how to set up the machine to use the LPD and Port9100 protocol.

Installation Procedure

There are three stages to enable printing to the machine through LPD or Port9100.

Network Communication Setup

Enable the following ports using the touch screen or CentreWare Internet Services.

- Printing through LPD: LPD port
- Printing through Port9100: Port9100 port

Set the IP address using the touch screen.

Workstation Setup

This requires the workstations in the networking environment to be configured to communicate with the machine.

Test Print

A print job should be submitted to make sure that the machine has been installed and configured correctly.

Network Communication Setup

This section describes how to set up the network communication parameters of the machine.

At the machine, perform these steps.

NOTE: Keep the SNMP port enabled while you use the machine on the TCP/IP network.

NOTE: Some of the configuration options for this protocol are only available from the CentreWare Internet Services. Refer to the CentreWare Internet Services chapter of the User Guide.

Initially, boot the LPD port or Port9100.

1. Connect the machine to the network.
2. Display the [System Settings] screen.

NOTE: For more information about how to display the [System Settings] screen, refer to the Setups chapter of the User Guide.

3. Select [Network Settings].
4. Select [Port Settings].
5. If you are using the LPD port, select [LPD] and [Change Settings]. If you are using Port9100, select [Port9100] and [Change Settings].
6. If you are using the LPD port, select [Port Status] and [Change Settings]. If you are using Port9100, select [Port Status] and [Change Settings].
7. Select [Enabled] and [Save].

Next, establish TCP/IP.

1. Display the [System Settings] screen.

NOTE: For more information about how to display the [System Settings] screen, refer to the Setups chapter of the User Guide.

2. Select [Network Settings].
3. Select [Protocol Settings].
4. Select [TCP/IP - Get IP Address] and [Change Settings].
5. Select a method for establishing an IP address from, [DHCP], [BOOTP], [RARP], [DHCP/Autonet], or [Manual], and then select [Save].

NOTE: Use the DHCP server together with the Windows Internet Name Server (WINS) server.

If you selected [Manual] in step 5, then complete steps 6 to 11 to enter [Protocol Settings]. Otherwise, complete step 14.

6. Select [TCP/IP - IP Address], then [Change Settings].
7. Use the keypad on the screen to enter the IP Address for the machine in the format “xxx.xxx.xxx.xxx”. Enter relevant values (0 to 255) into the highlighted field and select [Next]. The next 3 digits are highlighted. When you have finished entering all values, select [Save].
8. Select [TCP/IP - Subnet Mask], then [Change Settings].
9. Using the same method as in step 7, enter the Subnet Mask.
10. Select [TCP/IP - Gateway Address], then [Change Settings].
11. Using the same method as in step 7, enter the Gateway Address.

NOTE: If you do not wish to set the Gateway Address, enter “0.0.0.0”.

12. Select [TCP/IP - IP Filter], then [Change Settings].
13. Select [On] to filter access to the machine.

NOTE: If you do not wish to use the IP filter feature, select [Off].

NOTE: Use CentreWare Internet Services to register the IP addresses which are not allowed to access the machine. Refer to the CentreWare Internet Services chapter of the User Guide.

14. When you have finished establishing TCP/IP, select [Close] from the [Protocol Settings] screen.

Workstation Setup

Install print drivers on each client workstation that will be sending print jobs to the machine, and map to the machine as a printer. Refer to the HTML document in PCL Print Driver CD-ROM or document provided with the optional PostScript Kit.

Test Print

To make sure that the machine 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 machine as the printer to which the selected document will be sent.
3. Print the document on the machine and verify that it prints correctly.
4. Make sure that the driver is installed on every workstation that will be sending jobs to the machine.
5. Repeat the test for all workstations that will be sending jobs to the machine.

The installation process is now complete.

If the test print fails, refer to *the Problem Solving chapter* for assistance.

10 USB Port

This chapter explains how to set up the machine in a USB port environment. The following information is provided.

Information Checklist

Before starting the USB port installation procedures, make sure that the following items are available or have been performed.

Item	By
USB Cable	Customer
Test the machine to make sure that it is installed fully and functioning correctly.	Customer
Install the print driver.	Customer

NOTE: The installation procedures will install the machine on the USB port of the host workstation. The procedures are not intended to connect the host workstation to other workstations.

If problems are encountered during the installation of the machine, refer to *the Problem Solving chapter* for assistance.

CAUTION: Do not connect the USB cable to the machine until instructed to do so.

USB Port Environment

System configuration

The machine can be connected directly to the USB port of a host workstation. A document file can be sent from the host workstation via the USB port to the machine for printing. 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 onto the queue in the machine to be printed.

Target computers

The following computers support printing through the USB port.

- Windows 2000/Windows XP/Windows Server 2003
- Mac OS X 10.x

NOTE: The optional PostScript Kit is required when you print from Macintosh.

USB Port Installation

Follow these installation procedures for using the machine on a USB port.

Installation Procedure

There are three stages required to install the machine on a USB port.

USB Port Communication Setup

This requires the machine to be set up for USB port printing.

Workstation Setup

This requires the workstation to be configured to print to the machine.

Test Print

A print job should be submitted to make sure that the machine has been installed and configured correctly.

USB Port Communication Setup

This section describes how to set up USB communication on the machine. The following parameters can be set depending on your requirements. These setups must be done without the USB cable connected.

This procedure is used to set up the USB communication parameters of the machine.

At the machine, perform these steps.

NOTE: Some of the configuration options for this protocol are only available from the CentreWare Internet Services. Refer to the CentreWare Internet Services chapter of the User Guide.

1. Display the [System Settings] screen.

NOTE: For more information about how to display the [System Settings] screen, refer to the Setups chapter of the User Guide.

2. Select [Network Settings].
3. Select [Port Settings].
4. Select [USB], and [Change Settings].
5. Select the item to be set, and then select [Change Settings].
6. Select the required value, then [Save].
7. Repeat step 5 and 6, if required.

Depending on your requirements, select the following communication parameters on the machine.

- Port Status
- Print Mode
- PJL
- Auto Eject Time
- Adobe Communication Protocol

NOTE: Adobe Communication Protocol can be set when the PostScript Kit (optional) has been installed.

Workstation Setup

Before starting Workstation Setup, make sure that the USB cable is disconnected from the computer.

Then perform the following steps.

1. Refer to the HTML document in PCL Print Driver CD-ROM or document provided with the optional PostScript Kit, and install the print drivers for the machine on the workstation that will be sending jobs to the machine.
2. Connect the USB cable to the machine and the workstation.

3. Continue with *Test Print on page 112*.

Test Print

To make sure that the machine has been installed on the USB port correctly, submit a test print from a client workstation. Perform the following steps.

1. Open a document on a workstation.
2. Select the machine as the printer.
3. Print the document on the machine and verify that it prints correctly.
4. Repeat the test for all workstations that will be sending jobs to the machine.

The installation process is now complete.

If the test print fails, refer to *the Problem Solving chapter* for assistance.

11 IPP (Internet Printing Protocol)

This chapter explains how to set up the machine to operate in an IPP (Internet Printing Protocol) environment. The following information is provided.

Information Checklist

Before starting the IPP installation procedures, make sure that the following items are available or have been performed.

Item	By
An existing operational TCP/IP network is required. These procedures are not designed to install a network.	Customer
Obtain and record the following information: • IP address • Gateway address • Subnet mask • Host name Refer to the glossary for additional information about the Gateway Address and Subnet mask, if needed.	Customer
Test the machine to make sure that it is installed fully and functioning correctly.	Customer
Install the print driver.	Customer

If problems are encountered during the installation of the machine, refer to *the Problem Solving chapter* for assistance.

CAUTION: Do not connect the network cable to the machine until instructed to do so.

IPP Environment

System configuration

The machine supports Internet Printing Protocol (IPP). As Windows 2000/Windows XP/ Windows Server 2003/Windows Me are installed with the client software needed to output to an IPP printer, you can specify this printer using the Add Printer Wizard. Using IPP, you can print to a remote printer through the Internet or intranet.

The transport protocol for IPP can be TCP/IP.

Target computers

The following computers support IPP.

Connection	OS	Protocol
TCP/IP	Windows 2000 Windows XP Windows Server 2003 Windows Me	TCP/IP

NOTE: For Internet printing from a Windows Me computer, the IPP port should be installed. For the IPP port installation, see the Windows Me documentation.

IPP Installation

Follow these procedures for installing and using the machine in an IPP environment.

Installation Procedure

There are three stages.

Network Communication Setup

This requires the machine to be set up for IPP.

Workstation Setup

This requires the workstation to be configured to print to the machine.

Test Print

A print job should be submitted to make sure that the machine has been installed and configured correctly.

Network Communication Setup

This section describes how to set up the network communication parameters of the machine.

At the machine, perform these steps.

NOTE: Keep the SNMP port enabled while you use the machine on the TCP/IP network.

NOTE: Some of the configuration options for this protocol are only available from the CentreWare Internet Services. Refer to the CentreWare Internet Services chapter of the User Guide.

Initially, enable the IPP port.

1. Connect the machine to the network.
2. Display the [System Settings] screen.

NOTE: For more information about how to display the [System Settings] screen, refer to the Setups chapter of the User Guide.

3. Select [Network Settings].
4. Select [Port Settings].
5. Select [IPP], then [Change Settings].
6. Select [Port Status], then [Change Settings].
7. Select [Enabled], then [Save].

Next, establish TCP/IP.

1. Display the [System Settings] screen.

NOTE: For more information about how to display the [System Settings] screen, refer to the Setups chapter of the User Guide.

2. Select [Network Settings].
3. Select [Protocol Settings].
4. Select [TCP/IP - Get IP Address], then [Change Settings].
5. Select a method for establishing an IP address from [DHCP], [BOOTP], [RARP], [DHCP/Autonet], or [Manual], and then select [Save].

NOTE: Use the DHCP server together with the Windows Internet Name Server (WINS) server.

If you selected [Manual] in step 5, then complete steps 6 to 11 to enter the [Protocol Settings]. Otherwise, complete step 14.

6. Select [TCP/IP - IP Address], then [Change Settings].

7. Use the keypad on the screen to enter the IP Address for the machine in the format “xxx.xxx.xxx.xxx”. Enter relevant values (0 to 255) into the highlighted field and select [Next]. The next 3 digits are highlighted. When you have finished entering all values, select [Save].
8. Select [TCP/IP - Subnet Mask], then [Change Settings].
9. Using the same method as in step 7, enter the Subnet Mask.
10. Select [TCP/IP - Gateway Address], then [Change Settings].
11. Using the same method as in step7, enter the Gateway Address.

NOTE: If you do not wish to set the Gateway Address, enter “0.0.0.0”.

12. Select [TCP/IP - IP Filter], then [Change Settings].
13. Select [On] to filter access to the machine.

NOTE: If you do not wish to use the IP filter feature, select [Off].

NOTE: Use CentreWare Internet Services to register the IP addresses which are not allowed to access the machine. Refer to the CentreWare Internet Services chapter of the User Guide.

14. When you have finished establishing TCP/IP, select [Close] from the [Protocol Settings] screen.

Workstation Setup

Install print drivers on each client workstation that will be sending print jobs to the machine, and map to the machine as a printer. Refer to the HTML document in PCL Print Driver CD-ROM, for additional information.

"/ipp" needs to be entered at the end of the string in order for the printer to be discovered.

Example: If the internet address is vvv.xxx.yyy.zzz, enter the following in the URL field: http://vvv.xxx.yyy.zzz/ipp

Test Print

To make sure that the machine 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 machine as the printer to which the selected document will be sent.
3. Print the document on the machine and verify that it prints correctly.
4. Make sure that the driver is installed on every workstation that will be sending jobs to the machine.
5. Repeat the test for all workstations that will be sending jobs to the machine.

The installation process is now complete.

If the test print fails, refer to *the Problem Solving chapter* for assistance.

12 E-mail

This chapter explains how to set up the E-mail feature of the machine. The following information is provided.

E-mail Overview

You can send and receive E-mails using the machine.

When sending and receiving an E-mail, the following features are available.

- Scan to E-mail
- E-mail Print
- Mail Notice Service
- Notify Job End by E-mail

Scan to E-mail

If the optional Scan To E-mail Kit is installed in the machine, you can send the scanned documents as an E-mail attachment to one or more E-mail address destinations. You can select the format of the scanned data to be TIFF, JPEG, or PDF.

E-mail Print

You can send an E-mail from a computer to the machine, with a TIFF or PDF document attached. Upon receiving the E-mail, the machine will print it out automatically.

Mail Notice Service

You can set the machine to send an E-mail to a specified address. The E-mail will give notice whenever an error occurs on the machine, or a history of failed E-mail reception requests or print requests.

You can also configure so that an E-mail is sent notifying the completion of a print job which has been requested from your computer.

Notify Job End by E-mail

This is one of the Mail Notice Service features described in the previous paragraph.

You can configure the machine to notify the end of a print job via E-mail. Set this function on the tab which contains the print driver. You can activate this function and specify the addresses to be notified. For information about how to make settings, refer to the Help section of the print driver.

Information Checklist

Before enabling the feature, make sure that 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: • IP address • Gateway address • Subnet mask • Machine Host name • Machine E-Mail Account • SMTP Server Address or Server Name • DNS Server Name if Mail Server Names are used instead of Mail Server Addresses. • LDAP Server Address if global search is required. Refer to the Glossary for additional information about the Gateway Address and Subnet mask.	Customer
Set up the mail server and E-mail accounts.	Customer
Test the machine to make sure that it is installed fully and functioning correctly.	Customer
Install the Scan To E-mail Kit.	Xerox

NOTE: You must have an Internet Service Provider if you wish to acquire an E-mail account through ISP.

If problems are encountered during machine setup, refer to the Problem Solving chapter of the User Guide.

E-mail Environments

System Requirements

The following options are required for the machine.

- Scan To E-mail Kit is required to send scanned documents as E-mail attachments.
- The machine is connected to the network using TCP/IP.
- The environment allows the sending and receiving of E-mail.

Item	Correspondent Specifications
ITU-T Recommendations	ITU-T T.37, T.30, F.185 and E.164
E-mail forwarding	RFC2304, RFC2305
DSN function	RFC1891, 1894
MDN function	RFC2298
SMTP receiving	RFC821, 822, 1869
POP3 receiving	RFC1939
MIME version	Version1.0 (RFC2049)

NOTE: A file may not print if the format differs from those in the above table.

NOTE: It is recommended to use Microsoft Outlook Express 5.5/6.0 or Netscape 7 as an E-mail software.

E-mail Installation

This section describes how to enable the E-mail feature.

Installation Procedure

To use the E-mail feature, configure the following settings on the machine.

Network Communication Setup

Use the touch screen to set the following ports to [Enabled].

- Receive E-mail
- Send E-mail
- Mail Notice Service

Then, set the IP address.

Finally, set the other items required for the E-mail feature.

Test Mail

The E-mail job should be submitted to make sure that the machine has been installed and configured correctly.

Network Communication Setup

NOTE: Some of the configuration options for this protocol are only available from the CentreWare Internet Services. Refer to the CentreWare Internet Services chapter of the User Guide.

NOTE: Keep the SNMP port enabled while you use the machine on the TCP/IP network.

Initially, activate the ports for E-mail.

1. Connect the machine to the network.
2. Display the [System Settings] screen.

NOTE: For more information about how to display the [System Settings] screen, refer to the Setups chapter of the User Guide.

3. Select [Network Settings].
4. Select [Port Settings].
5. Select the required port and then [Change Settings].
   - Scan to E-mail: [Send E-mail]
   - E-mail Print: [Receive E-mail]
   - Mail Notice Service/Notify Job End by E-mail: [Mail Notice Service]
6. Select [Port Status], and then [Change Settings].
7. Select [Enabled], and then [Save].

Next, establish TCP/IP.

1. Display the [System Settings] screen.

NOTE: For more information about how to display the [System Settings] screen, refer to the Setups chapter of the User Guide.

2. Select [Network Settings].
3. Select [Protocol Settings].
4. Select [TCP/IP - Get IP Address], and then [Change Settings].
5. Select a method for establishing an IP address from [DHCP], [BOOTP], [RARP], [DHCP/Autonet], or [Manual], and then select [Save].

NOTE: Use the DHCP server together with the Windows Internet Name Server (WINS) server.

If you selected [Manual] in step 5, then complete steps 6 to 11 to enter the [Protocol Settings]. Otherwise, complete step 14.

6. Select [TCP/IP - IP Address], then [Change Settings].
7. Use the keypad on the screen to enter the IP Address for the machine in the format “xxx.xxx.xxx.xxx”. Enter relevant value (0 to 255) into the highlighted field and select [Next]. The next 3 digits are highlighted. When you have finished entering all values, select [Save].
8. Select [TCP/IP - Subnet Mask], then [Change Settings].
9. Using the same method as in step 7, enter the Subnet Mask.
10. Select [TCP/IP - Gateway Address], then [Change Settings].
11. Using the same method as in step 7, enter the Gateway Address.

NOTE: If you do not wish to set the Gateway Address, enter “0.0.0.0”.

12. Select [TCP/IP - IP Filter], then [Change Settings].
13. Select [On] to filter access to the machine.

NOTE: If you do not wish to use the IP filter feature, select [Off].

NOTE: Use CentreWare Internet Services to register the IP addresses which are not allowed to access the machine. Refer to the CentreWare Internet Services chapter of the User Guide.

14. When you have finished establishing TCP/IP, select [Close] from the [Protocol Settings] screen.

E-mail Setting Setup

Finally, set the other items required for the E-mail feature.

1. Display the [System Settings] screen.

NOTE: For more information about how to display the [System Settings] screen, refer to the Setups chapter of the User Guide.

2. Select [Network Settings].
3. Select the following items, then [Change Settings].
   - [Machine’s E-mail Address/Host Name]
     - E-mail Address
     - Host Name – This is the SMB Host Name of the device
     - Domain Name – This is the DNS information. It has to be set via CentreWare Internet Services when e-mail server names are used (host names are used instead of IP addresses) AND the DNS IP address is left blank.
   - [Outgoing/Incoming E-mail Settings] > [POP3 Server Settings]: when receiving E-mail via POP3
     - POP3 Server Setup
     - POP3 Server IP Address
     - POP3 Server Name – If server name is used, then DNS needs to be configured properly via CentreWare Internet Services.

  - POP3 Server Port Number
  - POP3 Server Check Interval
  - POP3 Server Login name – POP3 login name used SMTP Authentication.
  - POP3 Server Password – POP3 password used for SMTP Authentication.
  - POP3 Password Encryption
- [Outgoing/Incoming E-mail Settings] > [SMTP Server Settings]: when sending or receiving E-mail via SMTP
  - SMTP Server Setup
  - SMTP Server IP Address
  - SMTP Server Name – If server name is used then DNS needs to configured properly via CentreWare Internet Services.
  - SMTP Server Port Number
  - E-mail Send Authentication
  - SMTP AUTH Login Name – SMTP login name used for SMTP Authentication.
  - SMTP AUTH Password – SMTP password used for SMTP Authentication.
- [Outgoing/Incoming E-mail Settings] > [Domain Filter]: if required
  - Domain Filtering – This field will be populated ONLY if restriction is required on sending mail to certain domains.
  - Domain 1 to 50
- [Other Settings]
  - E-mail Receive Protocol

4. Select [Save]

Test Mail

To make sure that E-mail has been set up successfully, perform the following steps:

Scan to E-mail

1. Load the document.

2. Select [E-mail] on the Menu screen.

3. Select the required features for the job.

4. Enter the E-mail address of the recipient.

5. Press the <Start> button.

The document will be scanned and converted to the format that you specified. Then it will be sent as an E-mail attachment.

E-mail Print

1. Use your E-mail software to create an E-mail and then attach a TIFF or PDF document.
2. Enter the E-mail address of the receiving machine.
3. Send the E-mail.
4. After the machine has received the E-mail, printing starts automatically.

13 Scanning Services

This chapter explains how to set up Scanning Services in the supported environments. The following information is provided.

Scanning Overview

Scanning Services brings the versatility of network scanning to the workstation. By combining the power of the machine, CentreWare Internet Services, and third-party applications, scanning services provides a network solution for all scanning requirements.

Scanning features can be programmed and documents can then be scanned and transferred to a file server. You can access those documents from your workstation, or share them with other users connected to the network.

The stored scanned document can be opened by any software application that can view or edit TIFF/PDF/JPEG files.

Scanning with the machine

Scanning services enables multiple users to use the machine to scan and store documents. With the power of the local area network, multiple users can access the machine and use it to scan documents.

To perform network scanning, the machine must be installed on a local area network using TCP/IP protocol. To retrieve a scanned document file, it must be transferred to a file server.

NOTE: ASCII characters are used for the user name, password, and all job template fields when assigned using Scanning Services.

Scanning Process

The machine has five types of scanning functions.

- Scan to E-mail Setup
- Scan to Mailbox Setup
- Network Scanning Setup
- Scan to FTP Setup
- Scan to SMB Setup

The process for scanning a job is as follows.

Scan to E-mail Setup

Hard copies can be scanned at the machine and sent to remote clients as e-mail attachments in Single TIFF, Multi TIFF, PDF, and JPEG format. SMTP and POP3 mail servers are used to send and receive e-mail respectively.

Prerequisites for Scan to E-mail Setup

1. Confirm that an existing operational network using TCP/IP is available.
2. Confirm that DNS and the Domain Name have been correctly setup for the multifunction machine.
3. Confirm that the following ports are enabled:
   - Scan to E-mail: [Send E-mail]
   - E-mail Print: [Receive E-mail]
   - Mail Notice Service/Notify Job End by E-mail: [Mail Notice Service]

Data to Set Up E-mail	Install Requirement	Comments
SMTP mail server Host Name or IP address	Required	If using an external mail server, your Internet Service Provider will provide you with the mail server name or IP address.
SMTP login/password	Required*	
WorkCentre E-mail address	Required	
Local e-mail addresses	Optional	A Local Address Book can be created to store e-mail addresses.
LDAP server address can be enabled	LDAP Host Name	Displays only e-mail addresses on the corporate (LDAP) internal address book.

* Only if the SMTP server requires login and password for authentication.

Procedure for Scan to E-mail Setup

1. From a workstation, open up a web browser (such as Internet Explorer), and then enter the IP address in the format "http://xxx.xxx.xxx.xxx" (the xxx's represent the device IP address). If connected properly, you should see a CentreWare Internet Service web page for your machine.
2. Set up the SMTP server configuration via CentreWare Internet Services:
   1) Click the [Properties] tab.
   2) Click the [Protocols Settings] folder.
   3) Click the [E-mail] folder.
   4) Enter the SMTP mail server Host Name or IP address and Port number (the default is port 25).
   5) Click on the [Apply].
3. Set up the Machine E-mail address:
   1) Click the [Properties] tab.
   2) Click on [Machine Details].
   3) Enter the information for the [Machine E-mail Address].
   4) Click on [Apply].
4. From the machine, load a sample document that you want to e-mail into the document feeder.
5. Select the [E-mail] button on the touch screen.
6. There are three ways to include a destination for an e-mail address:
   - Press the [Keyboard] button to type an e-mail address using the keypad.
   - Select the [Local Address Book], and then select the e-mail destination.
   - If LDAP is enabled, you can select the [Address Book], and then select the destination.
7. Press the <Start> button on the machine.
8. Verify that the recipient(s) received the e-mail with the document attached.

Scan to E-mail Troubleshooting

For internal corporate mail servers, substitute the word "Corporate" for "ISP" in the following troubleshooting table.

Symptom	Possible Cause	Resolution/Validation
SMTP error at multifunction machine	Incorrect Mail Server of Host Name	Validate that the correct ISP mail server name has been entered in the SMTP Host Name field.
	Incorrect settings in Microsoft Outlook Express	Verify that you can access the ISP mail server from within Microsoft Outlook Express and that all settings are correct.
	Incorrect multifunction machine e-mail address entered	Verify that the machine is using the correct e-mail address in the From: field. The E-mail address must match what the ISP's mail server is expecting.
	ISP requires SMTP authentication to their mail server	Check with your ISP to determine if this is a requirement. If so, enable SMTP authentication for the multifunction machine via CentreWare Internet Services.
	ISP does not allow mail on the standard port number 25	Check with your ISP to determine if this is a problem. Ask if they can accept mail on another port number. If so, change the SMTP port number for the multifunction machine via CentreWare Internet Services.
	ISP requires login to the e-mail account via Microsoft Outlook Express before allowing mail to be sent	Check with your ISP to determine if this is a requirement. If so, login to the Microsoft Outlook Express account, and then try sending the e-mail. If this is successful, you can set Outlook Express to check e-mail every 5 or 10 minutes for the multifunction machine's e-mail account.

Scan to Mailbox Setup

This feature allows documents to be stored in a mailbox (public or private) for future processing.

Prerequisites for Scan to Mailbox Setup

Confirm that an existing operational network utilizing TCP/IP is available.

Target Computers

- Windows 95 (Service Pack 1 or later)/Windows 98/Windows Me
- Windows NT 4.0 (Service Pack 4 or later)/Windows 2000/Windows XP/ Windows Server 2003

Data to Set Up Scan to Mailbox	Install Requirement	Comments
Mailboxes are created on the machine	Required	For additional information, refer to the User Guide.
Scan Driver is installed	Optional	This utility can be installed via the CD-ROM to view/print scanned documents.
CentreWare Internet Services	Optional	CentreWare Internet Services can be used to create/edit/view/print scanned documents from the mailboxes.

Procedure for Scan to Mailbox Setup through CentreWare Internet Services

1. From a workstation, open up a web browser (such as Internet Explorer), and then enter the device's IP address in the format "http://xxx.xxx.xxx.xxx" (the xxx's represent the device's IP address). If connected properly, you should see a CentreWare Internet Services web page for your machine.
2. Create mailboxes:
   1) Click the [Properties] tab.
   2) Click the [Mailboxes] folder.
   3) Click the [Edit] button.
   4) Enter the appropriate information.
   5) Click on [Apply].

NOTE: A password will be required when accessing a mailbox, if mailboxes are password-protected on creation.

3. From the touch screen, select [Scan to Mailbox].

1) Select the mailbox number to which you want to scan the document.
2) Load the sample document into the document feeder.
3) Press the <Start> button on the machine.

4. Verify that the scanned document is in the mailbox:

1) Select the mailbox number to which the document was scanned.
2) Select [Document List].

Procedure for Scan to Mailbox Setup through the Control Panel

1. From the [All Services] menu on the touch screen, select [Setup Menu].

2. Select [Mailbox].

3. Select [Create/Delete].

4. Use the keypad to enter required information.

NOTE: If a password is entered for a mailbox, no one else can access that mailbox before entering the password.

5. From the [All Services] menu, select [Scan to Mailbox].

1) Select the mailbox number to which you want to scan the document.
2) Load the sample document into the document feeder.
3) Press the <Start> button on the machine.

6. Verify that the scanned document is in the mailbox:

1) Select the mailbox number to which the document was scanned.
2) Select [Document List].

Workstation Setup

To retrieve scanned document, install the scan driver on Windows computers or activate CentreWare Internet Services. For more information about the operating environment for the scan driver and the installation method, refer to the HTML document in PCL Print Driver CD-ROM. For more information how to retrieve the document, refer to the CentreWare Internet Services chapter of the User Guide.

Network Scanning Setup

Network scanning uses FTP or SMB protocols to transfer scanned documents on to a server or a client. Templates and repositories (folders) need to be set up to enable network scanning. See the User Guide for information about how to set up templates and repositories.

Prerequisites for Network Scanning Setup

1. Confirm that an existing operational network utilizing TCP/IP is available.
2. Confirm that your transfer protocol (FTP/SMB) is configured correctly.
   For more details, refer to *Scan to FTP Setup on page 134* or *Scan to SMB Setup on page 135*.
3. Repository (folder) needs to be created on the FTP or SMB server to hold the scanned document.
4. Confirm that the following ports are enabled:
   1) TCP/IP Port
   2) FTP Client Port or SMB Port (depending on which protocol is used)

Data to Set Up Network Scanning	Install Requirement	Comments
Templates are created via CentreWare Internet Services or any other Xerox Network Scanning Solutions.	Required	Refer to the User Guide, "CentreWare Internet Services" for more information.
Repositories are created via CentreWare Internet Services or any other Xerox Network Scanning Solutions.	Required	Refer to the User Guide, "CentreWare Internet Services" for more information.
Kerberos IP Address	Optional	If Remote Authentication is required, then Kerberos needs to be enabled.

Procedures for Network Scanning Setup

1. Create templates and repositories via CentreWare Internet Services.
2. On the control panel, select [Network Scanning].
3. Select a template from the list. You can also change any other value from the control panel without impacting the template configuration; only the current job will be affected.
4. Load a sample document into the document feeder.
5. Press the green <Start> button on the machine. The job is sent to the server using FTP or SMB protocol as defined within the template.

6. Log on to the FTP or SMB Server. Navigate to the repository (destination) that was specified earlier. Your scanned document is located in that folder.

NOTE: If Kerberos (remote authentication) has been enabled, a separate login screen appears when the Network Scanning feature is selected. Documents are not scanned in unless the Kerberos server authenticates user access.

Remote Authentication Setup (If Required)

The machine uses Kerberos for windows and Kerberos for Solaris for user authentication. When enabled, user access to scanning features (excluding scan to mailbox) will be constrained. A popup message will prompt the user to enter a login and password before using the scanning features. The login and password will be passed to the Kerberos server. Only when the user is authenticated the feature will be made available.

Information Checklist

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: • Remote Server IP address • Remote Server Name • DNS Address if Host Name is used instead of the IP address name • Remote Server Realm Name	Customer

When using Scan to e-mail, Kerberos authentication has the following effect on the feature:

1. Selects [Scan to Mailbox].
2. A login/password popup is displayed requiring the user to provide a username and password to the Kerberos server. Enter the login and password.

The device passes the login and password to the Kerberos server and if a match is found, the user is successfully authenticated.

"From:" field of the e-mail is automatically populated with the device login name and e-mail address created at the time of the device configuration.

If SMTP server requires authentication, the device will use the SMTP username/ password created at the configuration of the device before sending an e-mail to the server.

When using Scan to FTP/SMB, Kerberos authentication has the following effect on the feature:

1. Selects [Scan to FTP/SMB].

2. A login/password popup will be displayed to authenticate users with the Kerberos server. Enters the login and password.

The login and password is passed on to the Kerberos server and if a match is found the user is successfully authenticated.

The user needs to enter a valid login and password for the FTP/SMB server. This may or may not be the user's Kerberos login/password, rather it is a login/password that is accepted by the FTP/SMB server.

When using Network Scanning, Kerberos authentication has the following effect on the feature:

1. Selects [Network Scanning].
2. A login/password popup will be displayed to authenticate users with the Kerberos server. Enter the login and password.

The login and password is passed on to the Kerberos server and if a match is found the user is successfully authenticated.

Through the templates/repositories, the users will enter a valid login/password for FTP/SMB servers. This may or may not be the user login/password; rather it is a login/password that is accepted by the FTP/SMB server.

Public templates are accessible to any user. Private templates require a password that may or may not be different from the Kerberos password.

Remote Authentication Network Communication Setup

1. Connect the machine to the network.
2. Display the [System Settings] screen.
3. Select [Network Settings]
4. Select [Remote Authentication Server/Directory Service]
5. Select [Authentication System], then select [Change Settings] and choose Kerberos 2000 or Kerberos Solaris.
6. Select [Primary Server Setup], then select [Change Settings] and choose to enter an IP address or Server Name.
7. Select [Primary Server IP Address], then enter the IP address of the Kerberos server.
8. Select [Primary Server Name], then enter the name of the server. DNS information needs to be populated through Internet services.
9. Select [Primary Server Port Number] and enter the port number. The default is Port 88.
10. Repeat steps 6 to 9 for the Secondary Server settings.
11. Select [Realm Name] and enter the realm name. This is the fully qualified domain which Kerberos server supports.

Enabling Remote Authentication

1. Connect the machine to the network.
2. Display the [System Settings] screen.
3. Select [Login Setup/Auditron Administration].
4. Select [Login Setup/Auditron Mode] and specify the authentication method to enable Kerberos.

Workstation Setup

For more information about programming templates using CentreWare Internet Services, refer to the CentreWare Internet Services chapter of the User Guide.

Scan to FTP Setup

Files can be scanned on the multifunction machine and routed on to a server or a client using FTP protocol. Directory structures (repositories) need to be created on the server to hold the scanned documents.

Prerequisites for Scan to FTP

1. Confirm that an existing operational network utilizing TCP/IP is available.
2. FTP Server/Client exists and is running.
3. Repository (folder) needs to be created on the FTP server to hold the scanned document.
4. Confirm that the following ports are enabled:
   1) TCP/IP
   2) FTP Client

Data to Set Up Scan to FTP	Install Requirement	Comments
Repositories need to be set up on the FTP server.	Required	This is the location or path of the directory for saving scanned documents.
Server IP Address	Required	This is the IP address of the FTP server.
FTP Login/password information	Optional	This is required if the FTP server requires login/password authentication. Most FTP servers require a login/password.
Kerberos IP Address	Optional	If Remote Authentication is required, then Kerberos needs to be enabled.

Procedure for Scan to FTP

1. On the control panel, select [Scan to FTP].
2. Enter all the information required. See the User Guide for more detailed information.
3. Load a sample document into the document feeder.
4. Press the <Start> button on the machine.
5. Logon to the FTP server. Navigate to the directory path (repository) that was set up earlier on the server. Your scanned document can be found in the specified directory.

NOTE: If Kerberos authentication (remote authentication) has been enabled, a separate login screen appears when the Scan to FTP feature is selected. Documents are not scanned in unless the Kerberos server authenticates user access.

Scan to SMB Setup

Files can be scanned on the multifunction machine and routed on to a server or a client using SMB protocol. Directory structures (repositories) need to be created on the server to hold the scanned documents.

Prerequisites for Scan to SMB Setup

1. Confirm that an existing operational network utilizing TCP/IP is available.
2. SMB Server exists and is running.
3. Repository (folder) needs to be created on the SMB server to hold the scanned document.
4. Confirm that the following ports are enabled:
   1) TCP/IP Port
   2) SMB Port

Data to Set Up Scan to SMB	Install Requirement	Comments
Server IP address	Required	This is the IP address of the SMB server.
Server Shared Name	Required	This is the name assigned to the shared folder on the SMB server.
Repository – directory path, where the document will be stored on the SMB server	Required	This is the location or path of the directory for saving scanned documents.

Data to Set Up Scan to SMB	Install Requirement	Comments
SMB Login/password information	Optional	This is required, if the SMB server requires login/password authentication. Most SMB servers require a login/password.
Kerberos IP Address	Optional	If Remote Authentication is required, then Kerberos needs to be enabled.

Procedure for Scan to SMB Setup

1. On the control panel, select [Scan to SMB].
2. Enter all the information required. See the *User Guide* for more detailed information.
3. Load sample document into the document feeder.
4. Press the <Start> button on the machine.
5. Logon to the SMB server. Navigate to the directory path (repository) that was set up earlier on the server. Your scanned document can be found in the specified directory.

NOTE: If Kerberos authentication (remote authentication) has been enabled, a separate login screen appears when the Scan to SMB feature is selected. Documents are not scanned in unless the Kerberos server authenticates user access.

14 Internet Fax

This chapter explains how to set up the Internet Fax (referred to as iFax) feature of the machine. The following information is provided.

iFax Overview

If the Internet Fax Software key is installed with the optional Fax Kit in the machine, you can send and receive the scanned data as attachments, via an intranet or the Internet. This differs from a facsimile that transmits the data via a telephone line.

Information Checklist

Before enabling this feature, make sure that 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: • IP address • Gateway address • Subnet mask • Host name Refer to the Glossary for additional information about the Gateway Address and Subnet mask.	Customer
Set up the mail server and E-mail accounts.	Customer
Test the machine to make sure that it is installed fully and functioning correctly.	Customer
Install the Internet Fax Kit.	Xerox

iFax Environments

System Requirements

The following options are required for the machine.

- Internet Fax Kit
- The machine is connected to the network using TCP/IP.
- The environment allows the sending and receiving of E-mail.

Item	Correspondent Specifications
ITU-T Recommendations	ITU-T T.37, T.30, F.185 and E.164
iFax format	Sending: RFC2301 (TIFFprofileS/F/J) and 600 x 600 dpi Receiving: RFC2301 (TIFFprofileS/F/J/C)
Facsimile forwarding	RFC2304, RFC2305
DSN function	RFC1891, 1894
MDN function	RFC2298
SMTP receiving	RFC821, 822, 1869
POP3 receiving	RFC1939
MIME version	Version1.0 (RFC2049)

NOTE: A file may not print if the format differs from those in the above table.

iFax Installation

This section describes how to enable the iFax feature.

Installation Procedure

To use the iFax feature, configure the following settings on the machine.

Network Communication Setup

Use the touch screen to set the following ports to [Enabled].

- Receive E-mail
- Send E-mail

Then, set the IP address

Finally, set the other items required for the iFax feature.

Test iFax

The iFax job should be submitted to make sure that the machine has been installed and configured correctly.

Network Communication Setup

NOTE: Some of the configuration options for this protocol are only available from the CentreWare Internet Services. Refer to the CentreWare Internet Services chapter of the User Guide.

NOTE: Keep the SNMP port enabled while you use the machine on the TCP/IP network.

Initially, activate the port.

1. Connect the machine to the network.
2. Display the [System Settings] screen.

NOTE: For more information about how to display the [System Settings] screen, refer to the Setups chapter of the User Guide.

3. Select [Network Settings].
4. Select [Port Settings].
5. Select [Receive E-mail] and then [Change Settings].
6. Select [Port Status] and then [Change Settings].
7. Select [Enabled] and then [Save].
8. On the [Port Settings] screen, select [Send E-mail] and then [Change Settings].
9. Select [Port Status] and then [Change Settings].
10. Select [Enabled] and then [Save].

Next, establish TCP/IP.

1. Display the [System Settings] screen.

NOTE: For more information about how to display the [System Settings], refer to the Setups chapter of the User Guide.

2. Select [Network Settings].
3. Select [Protocol Settings].
4. Select [TCP/IP - Get IP Address], and then [Change Settings].

5. Select a method for establishing an IP address from [DHCP], [BOOTP], [RARP], [DHCP/Autonet], or [Manual], and then select [Save].

NOTE: Use the DHCP server together with the Windows Internet Name Server (WINS) server.

If you selected [Manual] in step 5, then complete steps 6 to 11 to enter the [Protocol Settings]. Otherwise, complete step 14.

6. Select [TCP/IP - IP Address], then [Change Settings].
7. Use the keypad on the screen to enter the IP Address for this machine in the format “xxx.xxx.xxx.xxx”. Enter relevant values (0 to 255) into the highlighted field and select [Next]. The next 3 digits are highlighted. When you have finished entering all values, select [Save].
8. Select [TCP/IP - Subnet Mask], then [Change Settings].
9. Using the same method as in step 7, enter the Subnet Mask.
10. Select [TCP/IP - Gateway Address], then [Change Settings].
11. Using the same method as in step 7, enter the Gateway Address.

NOTE: If you do not wish to set the Gateway Address, enter “0.0.0.0”.

12. Select [TCP/IP - IP Filter], then [Change Settings].
13. Select [On] to filter access to the machine.

NOTE: If you do not wish to use the IP filter feature, select [Off].

NOTE: Use CentreWare Internet Services to register the IP addresses which are not allowed to access the machine. Refer to the CentreWare Internet Services chapter of the User Guide.

14. When you have finished establishing TCP/IP, select [Close] from the [Protocol Settings] screen.

Finally, set the other items required for the iFax feature.

1. Display the [System Settings] screen.

NOTE: For more information about how to display the [System Settings] screen, refer to the Setups chapter of the User Guide.

2. Select [Network Settings].
3. Select the following items, then [Change Settings].
   - [Machine’s E-mail Address/Host Name]
     - E-mail Address
     - Host Name
     - Domain Name
   - [Outgoing/Incoming E-mail Settings] > [POP3 Server Settings]: when receiving E-mail via POP3
     - POP3 Server Setup

  - POP3 Server IP Address
  - POP3 Server Name
  - POP3 Server Port Number
  - POP3 Server Check Interval
  - POP3 Server Login Name
  - POP3 Server Password
  - POP3 Password Encryption
- [Outgoing/Incoming E-mail Settings] > [SMTP Server Settings]: when sending or receiving E-mail via SMTP
  - SMTP Server Setup
  - SMTP Server IP Address
  - SMTP Server Name
  - SMTP Server Port Number
  - E-mail Send Authentication
  - SMTP AUTH Login Name
  - SMTP AUTH Password
- [Outgoing/Incoming E-mail Settings] > [Domain Filter]: if required
  - Domain Filtering
  - Domain 1 to 50
- [Other Settings]
  - E-mail Receive Protocol
- [PKI (Public Key) Settings] > [S/MIME Settings]
  - Device Certificate - S/MIME
  - S/MIME Communication
  - Receive Untrusted E-mail
  - Receive Untrusted iFax
  - Message Digest Algorithm
  - Contents Encryption Method
  - Digital Signature - Outgoing E-mail
  - Digital Signature - Outgoing iFax
  - Certificate Auto Store

4. Select [Save].

Test iFax

To make sure that iFax has been set up successfully, perform the following steps:

Sending:

1. Load the document.
2. Select [Internet Fax] on the <All Services> screen.
3. Select [Internet Fax].
4. Select the required features for the job.
5. Enter the E-mail address of the recipient.
6. Press the <Start> button.

The document will be scanned and converted to TIFF format. Then it will be sent as an E-mail attachment.

Receiving:

When the machine receives an iFax, printing starts automatically.

15 Problem Solving

This chapter contains problem solving procedures and how to seek further assistance. For more information, refer to the following.

Problem Solving Procedures

This section enables you to identify the steps to solve problems relating to the network functions of the machine. Use the following steps to identify and solve the problem. If the problem is not network related, refer to the User Guide for corrective action.

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 machine has power and it is switched on.
3. Check that the network cable is connected to the machine.
4. Check that the network cable is connected to the workstation.
5. Check that the correct print driver for the machine is selected at the workstation.
6. Check that the software application being used to send print jobs is set up correctly.
7. If one workstation is not printing/faxing, then re-install the print driver on the workstation.
8. Call the local Xerox Welcome Center, where a representative will assist in the diagnosis and solution of the problem.

SMB

This section explains the troubleshooting procedures and restrictions while using an SMB environment.

Troubleshooting

This section explains what to do when a problem occurs while using SMB. The possible causes, confirmation methods, and actions are as follows.

When the machine is not found from client computers

Cause	Confirmation Method	Action
The transport protocol is different between the client and the machine.	When selecting [Searching as another computer] ([Start] > [Find] > [Computer]) on the client, the machine can be found. When opening the network computer to search for the machine, it cannot be found.	Match the SMB transport protocol between the machine and each client.
The network (subnet) is invalid.	When selecting [Searching as another computer] ([Start] > [Find] > [Computer]) on the client, the machine can be found. When opening the network computer to search for the machine, it cannot be found.	Set up the machine and client computers in the same networks.
The host name specified for the machine is already defined for a different machine.	Check if the host name is duplicated in the SMB status information of the System Settings List.	Use CentreWare Internet Services to change the host name to a different name, or reset the machine settings to the initial values.

When the machine or other SMB machines are not found from client computers

Cause	Confirmation Method	Action
If the SMB [Auto Master Mode] is [On], there are limits on the number of machines that can retain the machine information. The number varies with the network environment.	The machine or other SMB machines cannot be found using the network computer icon.	Check the SMB [Auto Master Mode] setting. If set to [On], change the setting to [Off].

When printing fails

Cause	Confirmation Method	Action
The machine is processing a print request from another client. (The receiving buffer is set to non-spool mode).	Check that the machine has a print job in progress. (This indicates whether there are files ready to print, and displays any write error dialogs.	After the machine has processed the print request, send a print job or change the mode to the spool mode.
The number of sessions exceeds the maximum.	Check that the machine is processing simultaneous requests (such as print request or status inquiry request) from multiple clients. (This indicates remote clients unable to use the machine, and displays any write error dialogs.	Wait for a while, send a print request again.

When the document cannot be deleted from the printer window

Cause	Confirmation Method	Action
An attempt is made to delete all documents displayed in the printer window. (Only the System Administrator)	Check whether the attempt is made to delete the print job from the Printer menu in the printer window.	Delete the print job from the Document menu in the printer window.
The document owner is invalid.	Check whether the owner of the selected document matches the Windows log-in name.	Use the owner name of the document to log in to Windows, then delete the document.
Service Pack 4.0 or later is not installed in the system. (In Windows NT 4.0)	Check the Service Pack version to be displayed when you start Windows NT 4.0.	Install Service Pack 4.0 or later.

Other

Problem	Action
Job history displays a message that the document name is undefined instead of the correct job name.	Change the [Receiving Buffer - SMB Spool] setting from [Memory] to [Hard Disk].

Restrictions

This section explains the restrictions that apply while using SMB.

Machine settings

- The IP address is a unique address administered system-wide. Consult with the network administrator when setting the necessary parameters.
- The subnet mask and gateway settings may also be required, depending on the networking environment. Consult with the network administrator when setting the necessary parameters.
- When a port status is enabled and there is insufficient memory, the port status may be disabled automatically. In this case, disable all unused ports and reallocate the memory.
- The [Receiving Buffer - SMB Spool] memory allocation needs to be set in response to the operating environment. If the memory allocation is too small, it may prevent receiving messages.

Client settings

- The IP address is a unique address administered system-wide. Consult with the network administrator when setting the necessary parameters.
- Consult with the Network Information Service (NIS) administrator when setting up the network parameters (IP address and other parameters) from a host running NIS.

When the machine is switched off

The following actions take place when the machine is switch off.

- When [Receiving Buffer - SMB Spool] is set to [Memory]:

  All print data spooled in machine memory, including the data currently being printed, is deleted. There is no print data on the machine when the machine is subsequently switched on.

  However, if the machine is switched off immediately after a print request, the print data may be stored on the client. In this case, the print request can be reissued when the machine is subsequently turned on, and the print data is printed on the machine in turn.

- When [Receiving Buffer - SMB Spool] is set to [Hard Disk]:

  All print data spooled on the machine hard disk, including the data currently being printed, is retained. A print request can be reissued when the machine is subsequently turned on, and the print data is printed on the machine in turn.

- When [Receiving Buffer - SMB Spool] is set to [Off]:

  All print data in the receiving buffer, including the data currently being printed, is deleted. There is no print data on the machine when the machine is subsequently switched on.

  However, if the machine is switched off immediately after a print request, the print data may be stored on the client. In this case, the print request can be reissued when

the machine is subsequently turned on, and the print data is printed on the machine in turn.

When printing

- When [Receiving Buffer - SMB Spool] is set to [Hard Disk] or [Memory]:

  Print data cannot be received if the print data size exceeds the available capacity of the hard disk or memory allocation.

NOTE: If the print data exceeds the receiving buffer capacity, the client may retransmit the same print data. In this case, stop the client and make sure that the client does not transmit the print data.

- When [Receiving Buffer - SMB Spool] is set to [Off]:

  Print requests cannot be received from a client if a print request from another client is being processed.

- When the client IP address or computer name is changed:

  When the client IP address or computer name is changed, the machine cannot perform query processing and cancel processing. Turn the machine off and on with the receiving buffer empty of print data.

NOTE: Stopping printing or forced deleting of print data in the machine receiving buffer can be performed using the control panel. For information, refer to the Job Status chapter of the User Guide.

- When the machine is offline:

  If a client issues a print request when the machine is offline, the print data cannot be received, and a write error is generated and displayed in an error dialog box on the client.

- Deleting jobs:

  On Windows NT 4.0, jobs can be deleted if Service Pack 4 or later is installed. Deleting a job while receiving print data generates a write error. In this case, the button to retry printing on the error dialog box is disabled.

Printing using an SMB environment

- On Windows NT 4.0, Windows 2000, and Windows XP, printing in an SMB environment is not available when Unicode support is active.
- On Windows XP, the user name may not be correctly displayed when printing on an SMB port.

Authentication using SMB

When SMB authentication is performed using the assigned IP address or host name, authentication is successful if only the user name and password matches the authentication server, even if the domain name does not match.

NetWare

This section explains what to do when problems occur while using NetWare. The causes, confirmation methods, and actions are as follows.

When printing fails

*: For setting and confirmation methods, refer to the NetWare online documentation.

Cause	Confirmation Method	Action
A network component does not conform to the automatic setting of the frame type.	Check that the data link port light is on in the network component connected to the machine. Then check that frame types of the file server are unified in the network.	Set the machine to the frame type specified for the file server to be connected.
A fault occurred on the network between the client and the machine.	Use NWADMIN to check whether the target printer object is viewed.	Replace the network cable between the client and the machine.
The user name or group name of the print job is not registered in the print queue.	Use NWADMIN or PCONSOLE to check whether the user name or group name of the job has been registered in the print queue.	Re-send the print job to a print queue in which the user name or group name has been registered correctly.
		Use NWADMIN or PCONSOLE to register a user name or group name of the job in the print queue.*
Print jobs cannot be sent to the print queue.	Use NWADMIN or PCONSOLE to check whether the Allow Users To Submit Print Jobs option is set to Yes.*	Use NWADMIN or PCONSOLE to set the Allow Users to Submit Print Jobs to Yes.*
The user name or group name of the job is not defined in the print server.	Use NWADMIN or PCONSOLE to check whether the user name or group name of the job is registered in the target print server.*	Re-send the print job to a print queue in which the user name or group name has been registered correctly.*
		Use NWADMIN or PCONSOLE to register the user name or group name of the job in the print server.*

Cause	Confirmation Method	Action
The print job is in a print queue that is not assigned to the machine.	Use NWADMIN or PCONSOLE to check whether the machine is assigned to the print queue.	Re-send the print job to the print queue assigned to the machine.*
		Use NWADMIN or PCONSOLE to assign the target queue to the machine.*
The data format of the print job does not match the print environment setting of the client.	–	If using Windows on the client, disable Ctrl-D.
The number of print queues assigned exceeds the maximum number that the machine can support.	Use NWADMIN or PCONSOLE to check whether the required print queue is assigned to the machine.*	Re-send the print job to the print queue assigned to the machine.*
No slave file server is specified (bindery service mode).	Use PCONSOLE to check whether a slave file server is registered.*	Use PCONSOLE to register a slave file server.*
Incorrect printer type.	Use PCONSOLE to check the printer type.*	Use PCONSOLE to specify [Remote Parallel, LPT1]. Then reboot the machine.*
The setting for the slave file server is incorrect (bindery mode).	Use PCONSOLE to check the setting.*	Use PCONSOLE to specify the correct setting.*
The actual number of the page of the print job is different from the page number set in the machine.	Use NWADMIN to check whether the starting paper number is the same as that of the print job.*	Use NWADMIN or PCONSOLE to match the [Starting paper] number with the paper number of the print job.*
The IPX checksum is set to an invalid level.	Use the Set command on the file server console to check whether the IPX checksum is set to level 2.	Enter the following command on the file server console to set the IPX checksum to level 0 or level 1. Set Enable IPX Checksum = x (x: 0 or 1)
The NCP packet signature is set to an invalid level.	Use the Set command on the file server console to check whether the NCP packet signature is set to level 3.	Enter the following command on the file server console to set the NCP packet signature to level 0, 1, or 2 and then restart the file server. set NCP Packet Signature Option = x (x: 0, 1, or 2)

Cause	Confirmation Method	Action
The default machine name is invalid.	Print the System Settings List, then check that the 6 least significant digits of the Ethernet address are correct.	Specify the correct Ethernet address, or assign a name other than the default.
No directory tree name is specified.	Print the System Settings List, then check that a tree name is specified.	Specify a tree name.
No context is specified.	Print the System Settings List, and then check that a context is specified.	Specify a context.
Another printer object has been connected.	Use NWADMIN to check that the object is correctly assigned to the required print server.*	Use PCL Print Driver CD-ROM or CentreWare Internet Services to specify the correct file server name, tree name, context name, and active mode.
The file server goes down.	Select [Network Neighborhood] of Windows to search for the file server.	Activate the file server.
A printer having the same machine name exists on the network.	Switch off the machine, and then use NWADMIN to check that the printer object is in the job standby status.	Use PCL Print Driver CD-ROM to specify another machine name.
The NetWare port is not activated.	Print the System Settings List, then check that the port is activated.	Activate the NetWare port.
	Print the System Settings List. When using IPX/SPX, check that the network number remains set to 00000000 (NetWare server down). When using TCP/IP, check that the IP address remains set to 0.0.0.0 (fixed IP address not specified) or an address supply server (DHCP server down).	When using IPX/SPX, start the NetWare server. When using TCP/IP, set the fixed IP address or start the address supply server (DHCP).
Invalid printer configuration.	Use NWADMIN or PCONSOLE to check that the printer configuration is correct.*	Use NWADMIN or PCONSOLE to set the following items. Printer type: Parallel Port: LPT 1 Printer Location: Auto Load (Local).*

When a switch off/on message is displayed

Cause	Confirmation Method	Action
A fault occurred in the NetWare interface.	–	Switch the machine off and on.

When the required printing result is not obtained

Cause	Confirmation Method	Action
The specified print language of the print job is different from one specified in the machine.	Check the print language of the machine.	Specify the same print language of the print job as that of the machine.

When there is no notification of error

When there is no message displayed on the client which has sent print request, the possible causes, confirmation methods, and actions are as follows.

When there is no notification of printer error

Cause	Confirmation Method	Action
The user is not registered in the Notify list of the print server.	Use PCONSOLE to check whether the user name or group name of the job is registered.	Register the user name or group name of the job.

When there is no notification of the completion of the job

Cause	Confirmation Method	Action
When sending the print job from the client, the NOTIFY option is not specified.	When sending the print job, check whether the NOTIFY option has been specified.	When sending the print job, specify the NOTIFY option.
NetWareCASTOFF has been executed on the client.	–	Execute NetWareCASTON on the client.

UNIX

This section explains the troubleshooting procedures while using a UNIX environment.

Troubleshooting

This section explains what to do when a problem occurs while using UNIX. The possible causes, confirmation methods, and actions are as follows.

When printing fails

Cause	Confirmation Method	Action
The IP address is not correct.	Check whether the IP address of the machine is correct.	Specify the correct IP address for the machine.
A network error occurs on the network between the client and the machine.	Use the PING command to check the communication status.	Check the error.
The printer entry setting is not correctly defined on the client.	Check the printer entry setting on the client. Check the /etc/printcap file of the client or use the lpstat command to troubleshoot.	Define the correct printer entry setting.
The system is in offline.	Check if the online lamp is off.	Exit the pause or the machine setting mode, and then check if the online lamp comes on.
The print data size sent in one print command exceeds the buffer memory size (in spool mode).	Check the upper limit of the receiving data size, and then compare it with the size of print data to be sent as one job.	When the print data size exceeds the maximum receiving data size in one file, divide the file into files smaller than the maximum, then re-send the print request.
		When the print data size exceeds the maximum receiving data size in multiple files, reduce the number of files to be printed at one time.
A fault occurred during print processing.	Check the LPD error message displayed on the control panel.	Switch the machine off and on.

Cause	Confirmation Method	Action
The specified transmission speed is different from the transmission speed of the network.	Check whether the transmission speed is specified correctly.	Specify the correct transmission speed.
The client and machine are in different rings connected via a bridge, and the source routing is inactivated.	Check whether the source routing is specified correctly.	Activate the source routing.
The data format of the print job does not match the print environment of the client (print data sent from the client contains TBCP).	–	Specify PSASC as the printer name.
The data format of the print job does not match the print environment of the client (print data sent from the client is in the binary notation).	–	Set the logical printer name to PSBIN to print a binary file in the PostScript language.
Print paper is out.	Check the paper refilling message on the control panel.	Load the paper into the paper tray. When changing the paper size, specify the new size, if required.
The selected transport protocol does not match the client.	Check the transport protocol selected from the control panel.	Select the transport protocol matching the client.

When the required printing result is not obtained

Cause	Confirmation Method	Action
The specified print language is different from the print language of the print data.	Check the specified print language and the print language of the print data.	Specify a print language matching that of the print data.

TCP/IP

This section explains the troubleshooting procedures and restrictions while using TCP/IP.

Troubleshooting

This section explains what to do when a problem occurs while using TCP/IP. The possible causes, confirmation methods, and actions are as follows.

When using Windows 95/Windows 98/Windows Me

When printing fails

Cause	Confirmation Method	Action
The machine is connected to a network that is not available to your computer.	Check whether a router or gateway is between the network connected to your computer and one connected to the machine.	Directly connect the machine to the network connected to your computer.
A fault occurred on the network between your computer and the machine; connection failed.	Check that printer disabled status (network error) is displayed.	Check the network fault.
An invalid IP address is specified for the machine.	Print disabled status (Network Error) is displayed. Select [Properties] from the [Printer] menu on the printer window, and also select [Port Settings] on the [Details] tab. Compare the IP addresses in the [FX TCP/IP DPU Port Setups] and the System Settings List.	Enter the correct IP address in the IP address item of the [FX TCP/IP DPU Port Setup] dialog box.
After a print request was sent from the computer, the machine was switched off, or a print request was sent to a machine that was not switched on.	Print disabled status (Network Error) is displayed. Check whether the machine is switched on.	Switch the machine on.
Print requests are sent from multiple computers to the machine at the same time.	Print disabled status (Network Error) is displayed.	None. Printing restarts automatically.

Cause	Confirmation Method	Action
Printing file cannot be spooled due to insufficient disk capacity of the computer.	Print disabled status (spool error) is displayed. Open [My Computer], then right-click the disk (example: C drive) in which Windows 95/Windows 98/Windows Me is installed. Select [Properties] from the displayed menu, and then check the free space size.	After deleting unnecessary files to increase the free space available, select [Pause Printing] from the [Document] menu of the printer window to enable printing to restart.

When using Windows NT 4.0/Windows 2000/Windows XP/Windows Server 2003

When printing fails

Cause	Confirmation Method	Action
The correct IP address is not specified.	Check whether the IP address of the machine is correct.	Specify the correct IP address for the machine.
When [LPD Spool] is set to [Memory], the size of print data sent in one print request exceeds the maximum size specified.	Check the maximum receiving data size on the touch screen of the machine, and then compare it with the size of print data to be sent as one request.	When the print data size exceeds the maximum size in one file, divide the file into smaller files than the maximum receiving data size, then send the print request again.
		When the print data size exceeds the maximum size in multiple files, reduce the number of files to be printed at one time.
A fault occurred during print processing.	Check the error message on the touch screen.	Switch the machine off and on, and then retry printing.
The selected transport protocol does not conform with the client.	Check the selected transport protocol on the touch screen.	Select a transport protocol conforming with the client.
The print data format to be processed by the machine does not match the data format sent from the client.	–	Disable the output function of Ctrl-D.

When the required printing result is not obtained

Cause	Confirmation Method	Action
The specified print language is different from the print language of the print data.	Check the specified print language and the print language of the print data.	Specify a print language matching that of the print data.
The print driver that accompanies the machine is not being used (a third party print driver is being used).	Check whether the print driver that accompanies the machine is selected.	Select the print driver that accompanies the machine. If the print driver is not found, install and select it. If a third party print driver is used, you may have unexpected results.

When using Macintosh OS X

When printing fails

Cause	Confirmation Method	Action
The LPD port is not active.	Check whether the LPD port has been activated.	Activate the port if printing on a machine detected using Bonjour.

Restrictions

This section explains the restrictions that apply while using TCP/IP.

Machine settings

- The IP address is a unique address administered system-wide. Consult with the network administrator when setting the necessary parameters.
- The subnet mask and gateway settings may also be required, depending on the networking environment. Consult with the network administrator when setting the necessary parameters.
- When a port status is enabled and there is insufficient memory, the port status may be disabled automatically. In this case, disable all unused ports and reallocate the memory.
- The [Receiving Buffer - LPD Spool] memory allocation needs to be set in response to the operating environment. If the memory allocation is too small, it may prevent receiving messages.

Client settings

- The IP address is a unique address administered system-wide. Consult with the network administrator when setting the necessary parameters.

- Consult with the Network Information Service (NIS) administrator when setting up the network parameters (IP address and other parameters) from a host running NIS.

When the machine is switched off

The following actions take place when the machine is switch off.

- When [Receiving Buffer - LPD Spool] is set to [Memory]:

  All print data spooled in machine memory, including the data currently being printed, is deleted. There is no print data on the machine when the machine is subsequently switched on.

  However, if the machine is switched off immediately after a print request, the print data may be stored on the client. In this case, the print request can be reissued when the machine is subsequently turned on, and the print data is printed on the machine in turn.

- When [Receiving Buffer - LPD Spool] is set to [Hard Disk]:

  All print data spooled on the machine hard disk, including the data currently being printed, is retained. A print request can be reissued when the machine is subsequently turned on, and the print data is printed on the machine in turn.

- When [Receiving Buffer - LPD Spool] is set to [Off]:

  All print data in the receiving buffer, including the data currently being printed, is deleted. There is no print data on the machine when the machine is subsequently switched on.

  However, if the machine is switched off immediately after a print request, the print data may be stored on the client. In this case, the print request can be reissued when the machine is subsequently turned on, and the print data is printed on the machine in turn.

When printing

- When [Receiving Buffer - LPD Spool] is set to [Hard Disk] or [Memory]:

  Print data cannot be received if the print data size exceeds the available capacity of the hard disk or memory allocation.

NOTE: If the print data exceeds the receiving buffer capacity, the client may retransmit the same print data. In this case, stop the client and make sure that the client does not transmit the print data.

- When [Receiving Buffer - LPD Spool] is set to [Off]:

  Print requests cannot be received from a client if a print request from another client is being processed.

- When the client IP address or computer name is changed:

  When the client IP address or computer name is changed, the machine cannot perform query processing and cancel processing. Turn the machine off and on with the receiving buffer empty of print data.

NOTE: Stopping printing or forced deleting of print data in the machine receiving buffer can be performed using the control panel. For information, refer to the Job Status chapter of the User Guide.

EtherTalk

This section explains the troubleshooting procedures and restrictions while using EtherTalk.

Troubleshooting

This section explains what to do when a problem occurs while using EtherTalk. The possible causes, confirmation methods, and actions are as follows.

Problem	Cause	Action
A job was printed on a different machine than the assigned machine.	If there are multiple machines on the network with the same name, the machine names are changed automatically depending on the power-on timing of each machine. Print jobs intended to be printed on one machine are sent to another machine.	Change the machine names so that all machine names on the network are unique.
The machine cannot be accessed from a client.	The machine name, used by the client to recognize the machine, cannot be registered if the machine is turned on when not connected to the network.	Turn the machine on after connecting to the network. If the machine is turned on when not connected to the network, turn the machine off, connect to the network, and turn the machine on again.

Restrictions

This section explains the restrictions that apply while using EtherTalk.

Machine Name

The machine name recognized by the client cannot have duplicates on the network. If another machine on the network has the same machine name, the machine name is changed automatically when the machine starts.

Name Change Rules

The machine name is changed as follows:

- When the machine name is 31 characters or less in length

  A numeral is appended to the end of the machine name. If another machine on the network still has the same name as the machine, the numeral is incremented.

- When the machine name is 32 characters long in length

  The last character in the machine name is replaced with a numeral. If another machine on the network still has the same name as the machine, the numeral is incremented.

If the [Protocol Settings] in the [Properties] tab of CentreWare Internet Services is accessed after the machine is initialized with a changed name, the old machine name is displayed. However, the changed machine name is registered on the network, and the client can access the machine using the new machine name. If the machine is turned off and on again after the machine name is changed, the machine attempts to start with the changed machine name. At this point, if there is another machine on the network with the same name, the machine name is changed following the rules above.

It is recommended that all machines on the network be setup with unique machine names.

Zone Name

The zone name can be set using the [Protocol Settings] in the [Properties] tab of CentreWare Internet Services. However, if the assigned zone name does not exist on the network connected to the machine, the zone name is changed to the default zone name. When setting the zone name, make sure that the zone name exists on the network connected to the machine.

Bonjour

This section explains the restrictions while using Bonjour.

Restrictions

This section explains the restrictions that apply while using Bonjour.

Bonjour operating environment

Bonjour can be used on Macintosh computers running Mac OS X 10.2 or later using the Printer Setup Utility or Safari. The Bonjour discovery function is enabled on the same subnet.

Machine Name

- If the machine name or host name settings are changed, print jobs may be printed on printers other than the specified printer.
- If there are multiple machines on the network with the same machine name or host name, a numeral is appended automatically to one of the names so that all names on the network are unique.
- If the machine name or host name is changed, there are restrictions on the number of characters and the type of characters that are valid for name registration. Therefore, it is recommended that the machine name and host name are not changed.

CentreWare Internet Services

This section explains the troubleshooting procedures while using CentreWare Internet Services.

Troubleshooting

This section explains what to do when a problem occurs while using CentreWare Internet Services. The possible causes, confirmation methods, and actions are as follows.

Cause	Confirmation Method	Action
Cannot access to CentreWare Internet Services.	Check if the power of the machine is switched on.	Switch the machine on.
	Print out the System Settings List to check if CentreWare Internet Services port is activated.	Activate the CentreWare Internet Services port.
	Check if the internet address is correctly entered.	Check the internet address. If Services cannot be accessed, enter the IP address to make the connection.
	Check if the proxy server being used.	Depending on the proxy server, connections might not be possible. Without using the proxy server, configure either the browser setting to “not using proxy server” or the address to be used to “not using proxy server”.
The “please wait” message is displayed.	–	Wait for a while as instructed. If nothing happens, click the [Refresh] button. If this does not help, check that the machine is working correctly.
The [Refresh Status] button is not working.	Check if you are using the specified OS and browser.	Use the specified OS and browser.
Selecting menu in the left frame does not change the right frame connection.		
The screen display is distorted.	–	Change the window size of the browser.
The latest information is not displayed.	–	Click the [Refresh Status] button.

Cause	Confirmation Method	Action
Clicking the [Apply] button does not reflect the new settings.	Check if the entered value is correct.	Enter the correct value. If the entry is not valid, it will be automatically changed within the limit.
Clicking the [Apply] button will display messages like “the server has returned ineffective or unrecognizable response” or “no data”.	Check if the user ID and password are correct.	Enter the correct user ID and password.
		Reboot the machine.
Cannot delete the job.	–	Wait for a while and then click the [Refresh Status] button.

Scanning Services

This section explains the troubleshooting procedures while using scan functions.

Troubleshooting

This section explains what to do when a problem occurs while using scan functions. The possible causes, confirmation methods, and actions are as follows.

When SMB transmission to Windows Server 2003 fails

Cause	Confirmation Method	Action
The machine and Windows clock settings do not match as specified by the SMB signature.	SMB transmission fails even with a correct user name and password.	Set the machine and Windows clock settings so that they match.

Other

Problem	Action
On Windows Server 2003 or Windows XP, cannot perform SMB transfers for users without a password.	Change the network access settings as follows. 1. Boot Windows and select [Control Panels] > [Administrative Tools] > [Local Security Policy]. 2. Select [Security Settings] > [Local Policies] > [Security Options]. 3. Set [Accounts: Limit local account use of blank passwords to console logon only] to [Disabled].

Problem	Action
On Windows 2000, Windows XP or Windows Server 2003, cannot perform SMB transfers using the SMB direct host function.	The SMB direct host function (SMB transmission without requiring NetBIOS) is not supported. Change NetBIOS over TCP/IP to [Enabled].
Cannot perform SMB transfers using a DFS access path (\\domainname\ sharename)	DFS access path specification is not supported. Specify a UNC format path (\\hostname\sharename).

Restrictions

This section explains the restrictions that apply while using scan functions.

NOTE: For information on the network scan driver and Mailbox Viewer2 application, refer to the Readme file on the driver CD-ROM.

When retrieving a document from a mailbox

- If [Delete Document After Retrieval] is turned off, the same document can be accessed by many clients. If [Delete Document After Retrieval] is turned on, the document can only be accessed by 1 client. Documents stored or read by a client cannot be seen by other clients. In either case, documents can be added to an accessed mailbox.
- Documents retrieved using CentreWare Internet Services cannot be deleted using CentreWare Internet Services, regardless of the [Delete Document After Retrieval] setting.

Display screen

If a document containing many colors is retrieved and displayed on a system with display mode with fewer colors, the image will not be displayed using the correct colors. The display mode must display more colors than the image for correct reproduction.

Using a network scan driver and Mailbox Viewer2 simultaneously

A single computer using a network scan driver and Mailbox Viewer 2 simultaneously cannot connect to the machine.

A maximum of 3 computers can retrieve a document from the machine simultaneously using either a network scan driver or Mailbox Viewer2.

When polling from another fax machine

A scanned document is not transmitted when polling the machine from another fax machine.

Using TIFF files

TIFF files created using e CentreWare Scan Services or Mailbox Viewer2 are compressed using either MMR, MH, JBIG, or JPEG compression methods. Software that supports these compression methods is required to open TIFF files.

NOTE: Mailbox Viewer2 cannot create TIFF files using the JBIG compression method.

Write capacity limit

The maximum write capacity for a single page is 297 × 432 mm. The largest standard sizes are A3 or 11 × 17 inch.

Number of stored document pages (mailbox)

The maximum number of document pages that can be written to a mailbox in a single write operation is 999 pages. The maximum number also changes in response to the size of the document and resolution.

Network access in an SMB environment

- On Windows NT 4.0, Windows 2000, Windows XP and Windows Server 2003, if the number of shared resources other than those of shared folders, such as printers, is 256 or more, the shared resources are displayed in the shared resources list.
- The list display of workgroup names, server names, shared names, and others on the network are not displayed in alphabetical order.

E-mail Services

This section explains the troubleshooting procedures while using E-mail functions.

Troubleshooting

This section explains what to do when a problem occurs while using E-mail Print, Mail Notice Service, iFax, or Scan to E-mail feature. The possible causes, confirmation methods, and actions are as follows.

Cause	Confirmation Method	Action
Cannot receive E-mail. (E-mail Print, iFax)	Check if the E-mail address of the machine is set.	Set the E-mail address of the machine.
	Check if [Receive E-mail] is activated.	Activate [Receive E-mail].
	Check if the SMTP Server IP Address or POP3 Server IP Address is set correctly.	Set the SMTP Server IP Address or POP3 Server IP Address.
	Check if the POP3 Server Login Name or POP3 Server Password is set correctly.	Set the POP3 Server Login Name or POP3 Server Password.
	Use the CentreWare Internet Services to check if [Enter Rejected Domain Names] is selected in [Domain Filtering] and your domain is included in the rejected domain name.	Set [Domain Filtering] to [Off]. Or remove your domain name from the rejected domain name.
	Check if your SMTP or POP3 server function correctly.	Check your SMTP or POP3 server.

Cause	Confirmation Method	Action
Cannot send E-Mail (Mail Notice Service, iFax, Scan to E-mail)	Check if the E-mail address of the machine is set.	Set the E-mail address of the machine.
	Check if [Mail Notice Service] is activated.	Activate [Mail Notice Service].
	Check if [Send E-mail] is activated.	Activate [Send E-mail].
	Check if the SMTP Server IP Address or POP3 Server IP Address is set correctly.	Set the SMTP Server IP Address or POP3 Server IP Address.
	Use CentreWare Internet Services to check if the Mail Notice settings are set correctly.	Set the Mail Notice settings.
	Use CentreWare Internet Services to check if the recipient mail addresses are set correctly.	Set the recipient mail addresses.
	Check if your SMTP or POP3 server function correctly.	Check your SMTP or POP3 server.

Internet/Intranet Connection

This section explains the troubleshooting procedures and restrictions while using internet and intranet connections.

Troubleshooting

This section explains what to do when a problem occurs while using internet or intranet connections. The possible problems and actions are as follows.

When you cannot connect to the internet/intranet

Problem	Action
Authentication service on a remote server is not supported on the machine.	Basic authentication only is supported on the machine. NTLM/digest is not supported. Change to authentication using SSL as security considerations require.
The remote cooperation service and the machine model options do not match.	If using remote services, purchase the corresponding product, model, or options as necessary.
The IP address is not set correctly.	Check the IP address setting. If the IP address is not set correctly, supply a fixed IP address, or use DHCP or Autonet to assign an IP address.

Problem	Action
The IP gateway address is not set correctly.	Enter the correct IP gateway address if connected to a proxy server or a web server through an IP gateway.
The subway mask is not set correctly.	Enter the correct subway mask that matches the operating environment.
The DNS server address is not set correctly.	Check the DNS server address.
The DNS server address cannot be resolved.	Set the DNS server for resolving addresses. • When using a proxy server: Enter the DNS server address for resolving the proxy server address. • When not using a proxy server: Enter the DNS server address for resolving the recipient addresses.
The address to bypass proxy server setting is incorrect.	Check whether only the address to bypass proxy is specified. If the server is accessed using a direct IP address while specifying an address to bypass proxy in FQDN format, the registered server does not become an excluded object. Therefore, an IP address can be used as the bypass proxy address. Similarly, if the server is accessed using FQDN format while specifying a direct IP address for the bypass proxy address, the registered server does not become an excluded object. Therefore, an FDQN format can be used as the bypass proxy address.
The connected server or proxy server are down.	Check that the server or proxy server you wish to connect to is operating normally.
The network drops out or is disconnected.	Check the network cable connections. A spanning tree environment is recommended to construct a strong environment against network interruptions.
Cannot communicate due to the load on the server application.	Wait a while and try again.
Nothing is displayed on the control panel but an error occurs.	Nothing is displayed on the control panel even when an error occurs during execution of background processes. Display the [Job Status] screen or print a job history report and check the results.
Cannot connect due to proxy server, firewall, or web server access restrictions.	Check if any of the following access restrictions are set. • Address (port) restrictions • SSL usage restrictions • User access restrictions (including access privileges) • Content blocking • Scheme restrictions (for example, HTTP disable) • Transfer data size restrictions • Used method restrictions (for example, POST disable) • HTTP header restrictions (for example, specific browsers) • Time restrictions (for example, time-limited access)

Problem	Action
A certificate is not registered for using the iFlow service.	The iFlow service cannot be used without certificate authentication. Obtain a certificate for the desired machine and register the certificate on the machine.

When you cannot connect to a web server

Problem	Action
The settings are not for using the proxy server.	In a proxy environment, the web server cannot be connected without the proxy server settings. Enter the settings for using the proxy server.
The settings are for using a proxy server in a non-proxy environment.	For environments where connecting via a proxy is not required, such as connecting to an intranet, the settings should not be set for using a proxy server.
The proxy server address is not set correctly.	When setting up a proxy server, the web server cannot be connected if the proxy server address is not set correctly. Enter the correct proxy server address.
The user name and/or password are entered incorrectly when proxy server authentication is set.	Register the user name and password on the machine to grant connection access to the proxy server.

Restrictions

This section explains the restrictions that apply while using internet or intranet connections.

Internet/Intranet connections

Connection to the internet or an intranet depends on various settings, including the destination web server, the used server application, proxy server, and firewall types.

When connecting to the internet or an intranet using server application software, proxy, or firewall supplied by another company, the following conditions are required.

- Windows 2000, Windows XP, Windows Server 2003 operating system
- Conformance with the following conditions
  - RFC2616: Hypertext Transfer Protocol HTTP/1.1
    (Normal connections, SSL connections, Proxy authentication)
  - RFC2617: HTTP Authentication: Basic and Digest Access Authentication
    (Basic authentication support only, others are not supported)
  - RFC2817: Upgrading to TLS Within HTTP/1.1
  - RFC2818: HTTP Over TLS
- HTTP/HTTPS scheme compatibility
- GET/CONNECT/HOST method compatibility

16 Appendix

Xerox Standard Accounting

Overview

When enabled, Xerox Standard Accounting (XSA) tracks the numbers of Copy, Print, Network Scanning, E-mail, Internet Fax and Embedded Fax jobs (when these features are installed on the machine), for each user. Usage limits can also be applied to users to restrict the total numbers of copy, print, fax and scan jobs that a user can perform. Administrators can print a report which contains all XSA data.

XSA is set up through CentreWare Internet Services, the machine's HTTP pages displayed on your web browser. Administrators must create accounts and specify limits before users are authorized to access the machine.

When XSA is set up, users must enter their account details at the machine to use the device. When they have finished their job, their XSA allocation is reduced by the number of prints, copies or scans performed. When XSA is enabled, users must enter their account details in the print driver to print documents from their workstations.

The XSA feature is mutually exclusive from any other accounting feature. If XSA is enabled at the device,

You cannot enable Foreign Device Interface, Auditron or Network Accounting.

Each device supports unique XSA User IDs and Group Accounts.

All user IDs must be assigned to one or more group accounts.

NOTE: The XSA settings and account data are stored in the machine. It is strongly recommended that you back up the settings and data regularly using the Cloning hot link available under the XSA folder of Internet Services as described in this section. Should the machine lose your XSA data and settings you can restore them from the backup file that you produced by the Cloning process.

Installation Checklist

Before starting the installation procedure, please ensure the following items are available or have been performed.

1. Ensure that your device is fully functioning on the network.
2. Ensure that the TCP/IP and HTTP protocols are configured on the device and fully functioning. This is required to access CentreWare Internet Services to configure Xerox Standard Accounting. The Internet Services function is accessed through the embedded HTTP server on the machine and allows System Administrators to configure XSA with a web browser.

To verify that the TCP/IP and HTTP protocols are correctly configured, print a Settings List as stated in the User Guide.

Enable Xerox Standard Accounting (from Internet Services)

At your Workstation

1. Open your web browser and enter the TCP/IP address of the machine in the Address bar. Press [Enter].
2. Click the [Properties] tab.
3. Select [Auditron Administration].
4. Select [Xerox Standard Accounting] from the Auditron Mode drop-down list.
5. Place a checkmark in the Enable box for each service that you wish to restrict access to. For explanations of each service, click the Help button.
6. Click [Apply] and enter the Administrator User name and password when prompted (default of 11111and x-admin).
7. Click [OK].
8. Click the [Reboot Machine] button when it displays on screen.

Create a Group Account

1. On the [Properties] tab of Internet Services, click the [Xerox Standard Accounting] folder in the directory tree.
2. Click the [Group Accounts] link to create a new group account.
3. In the Group Accounts Account ID box, enter an ID for the new group account (for example 001). The Group Account can be numeric values up to a maximum of 32 characters. Group Account ID's must be unique.
4. Enter a name for the group account in the Account Name box (for example Xerox). The group name can be alphanumeric characters to a maximum of 32 characters. The Group Account name must be unique.
5. Click [Apply] . The account will now be available in the Group Accounts list. Note that you may have to refresh your browser, or click another link, then click on Group Accounts again, to see the new group.

Create a User Account and Set Usage Limits

NOTE: At least one group account must be created before you create user accounts.

1. On the [Properties] tab of Internet Services, click the [Xerox Standard Accounting] folder in the directory tree.
2. Click [Manage Accounting].
3. Click [Add New User].

4. Enter an ID for the user. The user ID can contain alphanumeric characters to a maximum of 32 characters (for example: A10). User ID's must be unique.
5. Enter the user name (for example Jane Smith). The user name can contain alphanumeric characters to a maximum of 32 characters. User names must be unique.
6. Specify the usage limits for this account in the User Limits boxes. The maximum value for each limit is 9999999.
7. Click the [Apply] button when you have finished setting the usage limits.

Maximum Usage Limits and Resetting Individual Usage Limits

The first time a user logs into the device after they have reached their maximum usage limit, a message displays on the user interface. The message notifies the user that they have reached their limit for the feature. Users will not be unable to use the feature until their limit is reset. If the user performs a copy job at the machine, and midway through the job their limit is exceeded, the job will not continue.

If the user performs a scan job at the machine, and midway through the job their limit is exceeded, the job will be cancelled.

If the user's limit is reached before a print job is completed, the machine will notify the user that their limit has been reached. The job will be deleted from the print queue. The job may run over due to sheets committed to the paper path.

NOTE: The system administrator has unlimited access to the machine.

To Reset User Limits (if necessary)

1. On the [Properties] tab of Internet Services, click the [Xerox Standard Accounting] folder in the directory tree.
2. Click [Manage Accounting].
3. Place a checkmark in the box for the desired User ID.
4. Click [Limits and Access].
5. Enter the new User Limit, check the Reset box, and click [Apply].

Using XSA at the machine

When you enable XSA, users must enter a valid user name at the machine to access any services to which access restriction has been applied. Refer to Enable Xerox Standard Accounting in this section for the specific service restricting procedure.

At the Machine

1. Press the <All Services> button, if necessary, to display all the available service buttons.
2. Press any button representing a service to which restricted access has been applied.

3. When the “Press the Log In / Out button” message displays on screen, press the [Log In / Out] button.
4. Enter a User ID and touch [Confirm].

NOTE: If the user is a member of more than one Group Account, he or she will be asked to select the account that they wish to log into.

5. When the user is logged in, the selected service screen will be displayed. The user can now use that service, with usage tracked by XSA.

Resetting Usage Data

At your Workstation

1. Open your web browser and enter the TCP/IP address of the machine in the Address or Location field. Press [Enter].
2. Click the [Properties] tab.
3. Click the [Xerox Standard Accounting] folder in the directory tree.
4. Click [Report and Reset].
5. To reset all usage data to zero, click the [Reset Usage Data] button.
6. Click [OK] to confirm.

WARNING: Do not click the [Reset to Default] button unless you intend to delete all users, accounts and usage data from your machine.

Print a Usage Report

At your Workstation

1. Open your web browser and enter the TCP/IP address of the machine in the Address or Location field. Press [Enter].
2. Click the [Properties] tab.
3. Click the [Xerox Standard Accounting] folder in the directory tree.
4. Click [Report and Reset].
5. Click the [Generate Report] button.
6. Follow any additional displayed prompts to save the XSA Report.csv (comma separated value) file to your workstation.

Enable XSA in your Print Drivers

Refer to the driver Help for the steps to follow to enable XSA in your print drivers.

Backing Up XSA data and settings and Cloning to another device

The Cloning feature enables you to copy XSA account information, to a file on your workstation. You can then use this file to restore the data on the same machine or to clone other machines. You can only clone XSA accounts to another Xerox device that supports the XSA feature.

Check that the device you want to clone settings to supports XSA

1. At a networked workstation, open your web browser and enter the TCP/IP address of the machine that you want to clone to. Press [Enter].
2. Click the [Properties] tab.
3. See if Xerox Standard Accounting is shown in the directory tree. If it is not, you cannot clone to this machine.
4. Click the [Xerox Standard Accounting] folder in the directory tree.
5. From the display of available hot links, verify that [Cloning] is among them.

To make a Back-up file

1. At your workstation, open your web browser and enter the TCP/IP address of the machine with the settings that you want to copy, in the Address bar. Press [Enter].
2. Click the [Properties] tab.
3. Click the [Xerox Standard Accounting] folder in the directory tree.
4. Select [Cloning], and then select [Clone].
5. Click [Save] on the dialog box that appears.
6. A dialog box will prompt you to specify the name and location for the cloned file. Ensure the extension reads .dat .
7. Click [Save]. The .dat file can now be used to restore the information to the same machine or to clone other machines.

To Restore Settings or Clone Settings to another Machine

NOTE: This procedure will cause the machine to reboot and will be unavailable over the network for several minutes.

1. Open your web browser and enter the TCP/IP address of the machine that you wish to restore or clone the settings to. Press [Enter].
2. Click the [Properties] tab.

3. Click the [Xerox Standard Accounting] folder in the directory tree.
4. Select [Cloning].
5. In the [Import Clone File] portion of the displayed dialog, click [Browse].
6. Locate the .dat clone file.
7. Click [Import Now].

NOTE: It may be necessary for you to use your web browser to view the Xerox Standard Accounting set up of Users and Groups on the new machine.

17 Glossary

This chapter contains a list of terms used in the System Administration Guide. Each term has a corresponding definition that reflects the meaning of the term as it is used in this Guide.

Terms Defined

Use the following definitions to learn more about the meanings of terms used in this Guide.

10Base-T	10-Mbps baseband Ethernet specification using two pairs of twisted-pair cabling: one pair for transmitting data and the other for receiving data. 10Base-T, which is part of the IEEE 802.3 specification, has a distance limit of approximately 100 meters per segment. See also Ethernet and IEEE.
100Base-TX	100-Mbps baseband Fast Ethernet specification using two pairs of either UTP or STP wiring. The first pair of wires is used to receive data; the second is used to transmit. To guarantee proper signal timing, a 100Base-TX segment cannot exceed 100 meters in length. Based on the IEEE 802.3 standard. See also Ethernet, and IEEE.
1000Base-TX	1000Base-T uses all four cable pairs for simultaneous transmission in both directions through the use of echo cancellation and a 5-level pulse amplitude modulation (PAM-5) technique. In 1999, the 802.3ab standard (1000Base-T) allows Gigabit Ethernet to run over Category 5 copper cable, enabling GigE devices to be readily installed in 100BaseT networks without cable changes. The maximum distance between nodes is based on the type of transceiver and cable used.
ASCII	An abbreviation of American Standard Code for Information Interchange. A coding scheme that assigns numeric values to letters, numbers, punctuation, and certain other characters.
Auditron	A tracking system, which is built into the machine. You can use Auditron to track overall machine usage, individual usage, and usage of each feature separately.
BOOTP	An abbreviation of Bootstrap Protocol. This is a protocol used by a network node to determine the IP address of its Ethernet interfaces, in order to boot a computer from a server via a network.

Client Server	A network environment in which the nodes communicate with a file server, and not directly with other nodes.
DHCP	An abbreviation of Dynamic Host Configuration Protocol. A protocol allowing the principal parameters of network devices (including IP Addresses) to be configured by central DHCP servers.
DNS	An abbreviation of Domain Name System. A system used in the Internet for translating names of network nodes into addresses.
Driver	Software that is loaded on the client workstation that prepares data to be sent to the machine.
Ethernet	Network transport technology commonly used to send data from one network node to another.
FTP	An abbreviation of File Transfer Protocol. An application protocol, part of the TCP/IP protocol stack, used for transferring files between network nodes.
Gateway Address	The Gateway Address is the IP Address of the gateway, or router, that the machine will use to access devices on other subnets.
HTTP	An abbreviation of Hyper Text Transfer Protocol. 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 abbreviation of Institute of Electrical and Electronics Engineers. 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.
IP	See TCP/IP
IP Address	See TCP/IP
IPX	Internetwork Packet Exchange. IPX is part of NetWare. It routes packets to the correct node and to the correct process within the node.
LAN	An abbreviation of Local Area Network. 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.
LDAP	An abbreviation of Lightweight Directory Access Protocol. A protocol that allows sharing of corporate phone book information.
LPD	An abbreviation of Line Printer Daemon. This is a print management program that runs on a host.

NDS	An abbreviation of Novell Directory Services that was formerly known as NetWare Directory Services. This is a database used by Novell NetWare to organize resources for an entire network of NetWare servers. The database itself can be distributed across the network and accessed by all servers.
NetBEUI	An abbreviation of NetBIOS (Network Basic Input/Output System) Extended User Interface. It is an enhanced version of the NetBIOS protocol that is used by network operating systems, such as LAN Manager, LAN Server, Windows for Workgroups, and Windows NT. NetBEUI formalizes the transport frame and adds additional functions.
NetWare	A network operating system from Novell. Clients log onto one or more file servers, which provide services such as e-mail, printing, and filing.
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.
PCL	An abbreviation of Printer Control Language, which is used by Hewlett-Packard. This is a set of commands that tells a printer 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.
PCL6	A Hewlett-Packard Printer Control Language (PCL). It is an interpreted language, similar to but more intelligent than PostScript. This version offers significant changes in the backward compatibility issue for Hewlett-Packard machines.
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.
PDF	An abbreviation of Portable Document Format. It is a file format developed by Adobe Systems. A PDF file can describe documents containing text and images, retaining all the formatting and fonts of the original copy. The document can then be displayed or printed, using application software, hardware, or operating system, which may differ from that used to create the original document.
PDL	An abbreviation of Page-Description Language. 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.

PostScript	PostScript is a page description language (PDL) developed by Adobe Systems. It is an object-oriented language, meaning that it treats images, including fonts, as collections of geometrical objects rather than as bitmaps. PostScript is the standard for desktop publishing because it is widely supported by both hardware and software vendors.
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.
RARP	An abbreviation of Reverse Address Resolution Protocol. 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.
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.
SSDP	An abbreviation of Simple Service Discovery Protocol.
SMB	An abbreviation of Server Message Block. A protocol used to to share files or printers on Windows OS.
SNMP	An abbreviation of Simple Network Management Protocol. A protocol used to help manage complex networks.
SPX	An abbreviation of Sequenced Packet Exchange. SPX is part of NetWare. It makes sure 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.
TBCP Filter	An abbreviation of Tagged Binary Control Protocol. This filter is only available when PostScript is enabled.

TCP/IP	An abbreviation of Transmission Control Protocol / Internet Protocol. 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 machine 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, for example 13.1.188.2.
TIFF	An abbreviation of Tagged Image File Format. A standard file format commonly used for scanning. Images scanned with the machine are captured in a TIFF 6.0 file format.
Twisted Pair	See 10Base-T.

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