

System Administration Guide

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Prepared by:
The Document Company Xerox
GKLS European Operations
Bessemer Road
Welwyn Garden City
Hertfordshire
AL7 1HE
ENGLAND

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1 Before Using the Machine

Welcome to the Xerox family of CopyCentre/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.fujixerox.co.jp/>

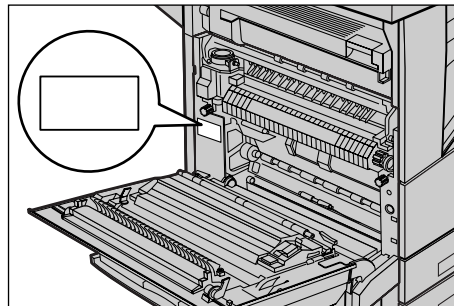
If you require further assistance, contact our experts at the Xerox Welcome Center. A local representative telephone number may have been provided when the product was installed. For convenience and future reference, please record the telephone number in the space below.

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)

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.

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 CopyCentre/WorkCentre/WorkCentre Pro 123/128 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

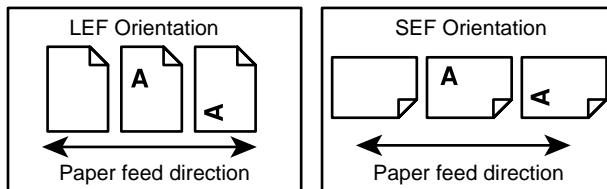
Orientation is used to mean the direction of images on the page. When the image is upright, the paper (or other media) can be either long edge feed or short edge feed.

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.

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 CopyCentre/WorkCentre/WorkCentre Pro 123/128 Quick Reference Guide
- Xerox CopyCentre/WorkCentre/WorkCentre Pro 123/128 User Guide
- The On-line Help systems (Print Drivers and CentreWare Utilities)
- The CentreWare Utilities Documentation (HTML)

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 through the following sections.

Machine Components – page 13

Power On/Off – page 16

Cabling – page 17

Modes – page 18

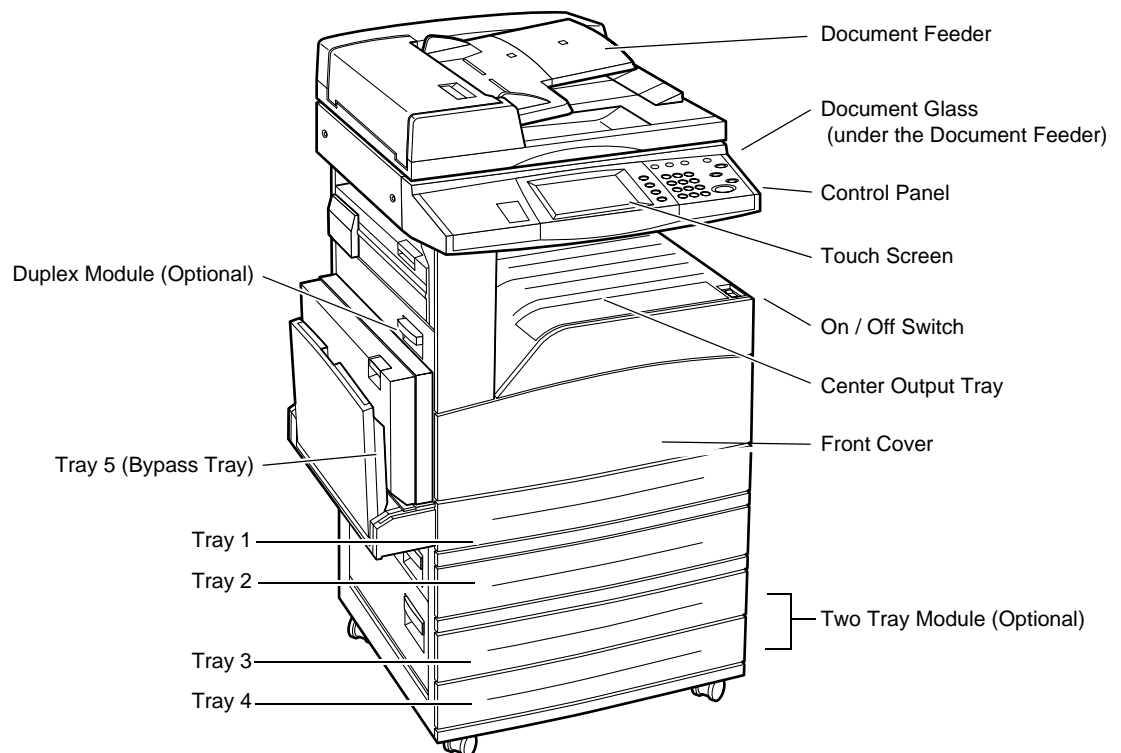
System Controls – page 32

System Settings – page 33

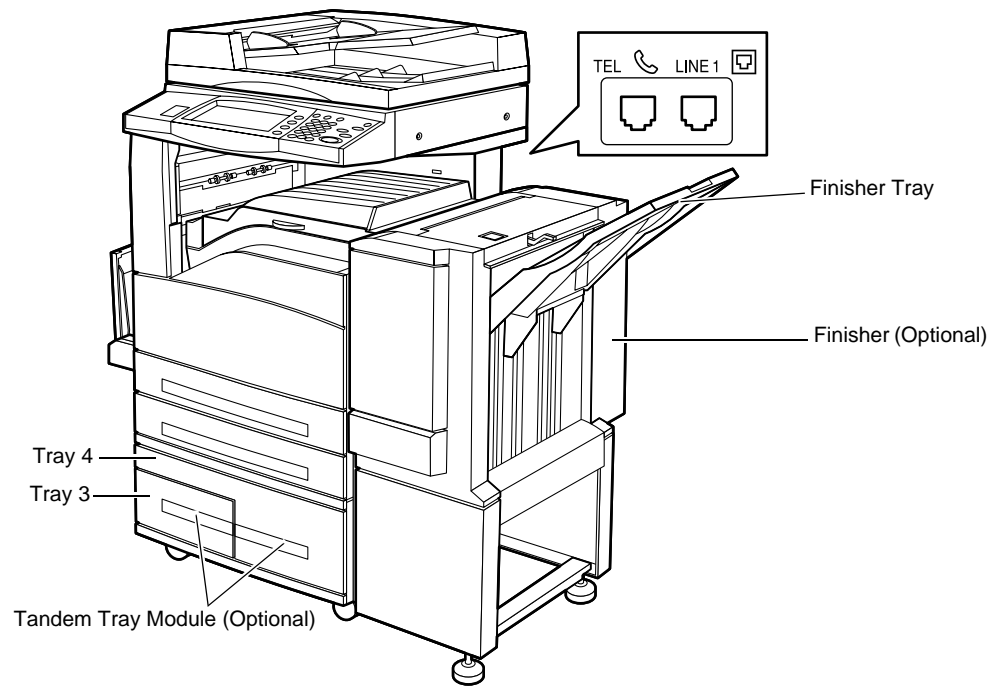
Resident Fonts – page 36

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.



TEL

Located on the back of the machine. Connect a telephone to this jack if required.

LINE 1

Located on the back of the machine. Connect a telephone cable to this jack. Then connect the other end to the wall jack.

Finisher

Allows you to staple or sort copies automatically. The Finisher Tray can hold 1,000 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, 3, or 4. For more information, refer to 2 Sided in the Copy chapter of the User Guide.

Paper Trays 3 & 4

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 2-tray configuration. Each tray can hold 500 sheets of 20 lb bond or 80 g/m² paper.

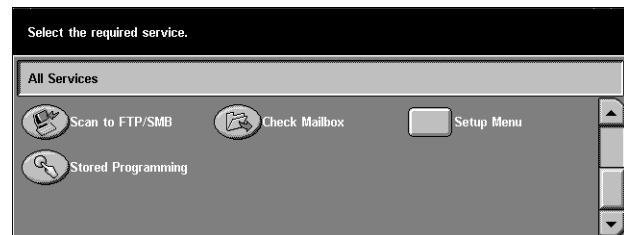
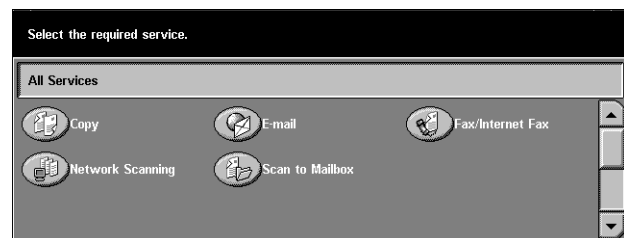
- Tandem Tray Module – Can be added to the standard 2-tray configuration to provide high volume paper sources. Tray 3 can hold a maximum of 800 sheets of 20 lb bond or 80 g/m² paper in Letter or A4 size, long edge feed. Tray 4 can hold 1,200 sheets of 20 lb bond or 80 g/m² paper in Letter or A4 size. The Tandem Tray Module is referred to as “TTM” in this manual.

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. Use the scroll buttons to switch between screens.
3. 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.

Fax/Internet Fax

Allows you to fax documents in various ways. For example, you can send documents in a reduced or enlarged format, or specify destinations using the Address Book or speed dialing features. Internet Fax (iFax) allows you to send and receive faxes over the Internet or intranet. iFax provides reduced cost of transmissions as compared with 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 iFax compatible machine. 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 Job Templates - Network Scanning in the Scan/E-mail chapter, and Job Template in the CentreWare Internet Services 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 Save in: - Scan to Mailbox in the Scan/E-mail 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 Save in: - Scan to FTP/SMB 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.

Stored Programming

Allows you to store programming for a job to a job number using the Stored Programming feature. For more information, refer to the Stored Programming chapter of the User Guide.

Setup Menu

Allows you to set or change the following features from this screen: Mailbox, Stored Programming, Job Flow sheets, Address Book, Group Send, Comment, and Paper Type. For more information, refer to the Setups chapter and the Stored Programming chapter of the User Guide.

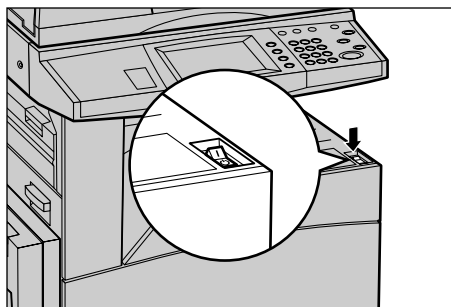
Power On/Off

Powering On

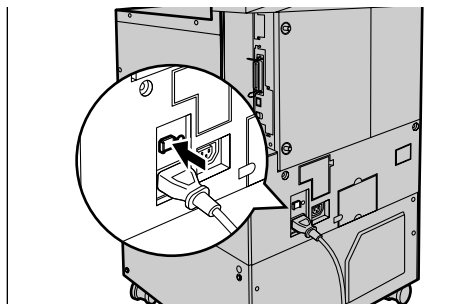
Make sure that the machine is connected to a suitable power supply and that the power plug is firmly connected to the electrical outlet and the power input connector on the machine.

The machine is ready to make copies about 12 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 <l> 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.



Powering Off

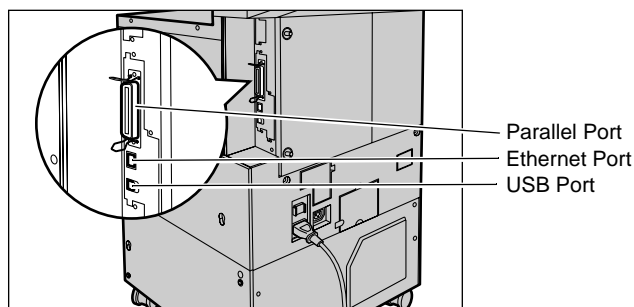
When you switch off the machine, if it is equipped with the optional hard disk, it remains on for approximately 10 seconds while it stores files and prepares for shutdown. The machine then shuts down completely.

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

Cabling

Interface Ports

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



Ethernet 10BASE-T/100BASE-TX

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

There are three Ethernet interface options available on the touch screen: 10BASE-T, 100BASE-TX and AUTO. 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 setting 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.

Parallel (IEEE 1284) Host Connection

One parallel interface is provided for the print use as standard on the machine, which enables direct connection to the host computer.

This high-speed Centronics port, conforming to IEEE 1284, allows two-way communication between a computer and the machine. Use a full-pitch connector.

IEEE1284 (that supports nibble and ECP) is complied for the print use on the standard configuration. For data input via Centronics, Adobe Communication Protocol is supported. Adobe Communication Protocol is compatible with four modes: Raw, Standard, Binary, TBCP.

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

USB 2.0 (Universal Serial Bus)

USB 2.0 is supported for the print use on the standard configuration and is used as an input port for printing data. This is compatible with Full Speed (12 Mbps), and High Speed (480 Mbps), but not applied to Low Speed (1.5 Mbps).

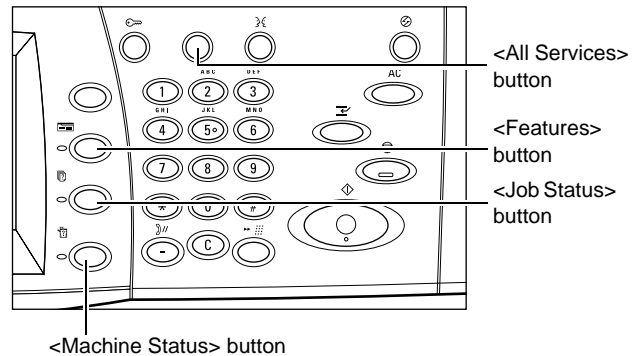
Modes

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 two mode buttons on the machine.

- Job Status
- Machine Status

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

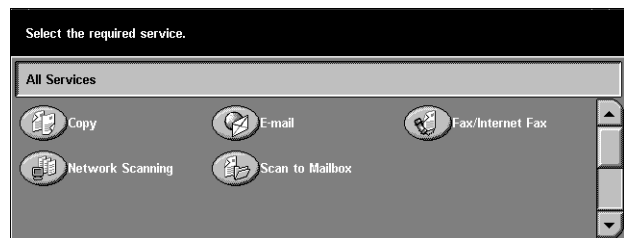


All Services

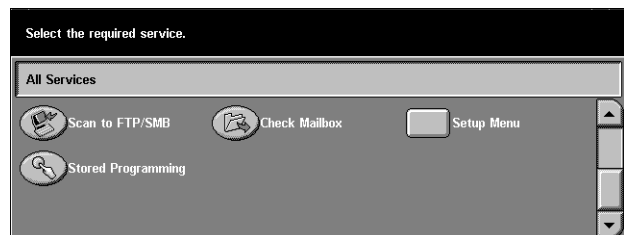
Use this button to access all the services available on the machine.

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.



2. Use the scroll buttons to switch between screens.



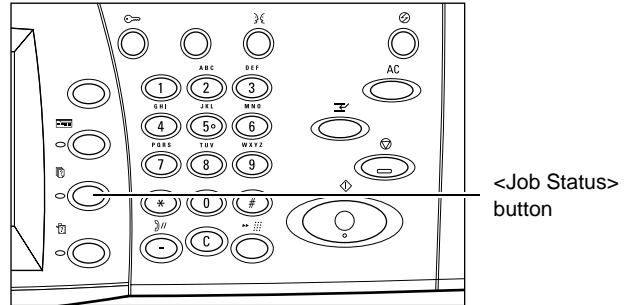
Features

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, even if you press this button while you are in one of these screens. In this case, use the <All Services> button to select the copy, fax, or scan feature screen.

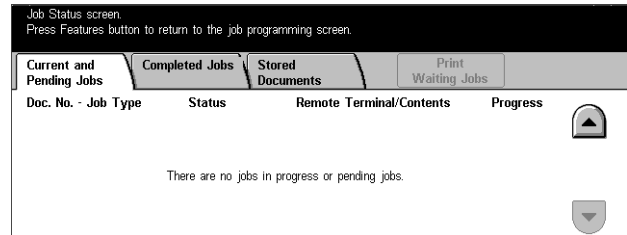
Job Status

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

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.



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

Current and Pending Jobs – page 20

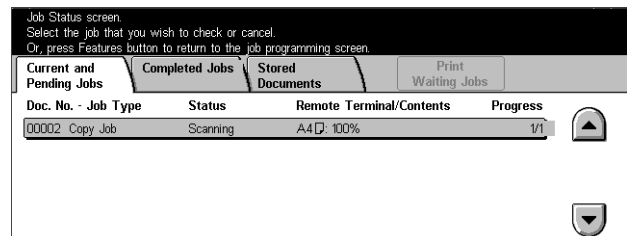
Completed Jobs – page 22

Stored Documents – page 22

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. Select a job from the list to display detailed information on the job or to promote/delete it.

1. Press the <Job Status> button on the control panel.
2. Select the [Current and Pending Jobs] tab.
3. Use the scroll buttons to switch between screens.
4. Select a job to cancel or promote as required.



Doc. No. – Job Type

Identifies each job by job 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

Use this feature to select a job from the list to display detailed information on the job or to promote/delete it. The content of 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

Select this option to finish scanning.

Next Original

Select this option if you have another document to scan.

Start

Starts scanning the next document or prints a job being held on the machine.

Print Waiting Jobs

Select this option to print the jobs waiting in the incomplete jobs queue.

Completed Jobs

This feature allows you to view the finished jobs in the machine. To see the job attributes, select a job in the list to display detailed information on the next screen. 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.
3. Use the scroll buttons to switch between screens.

Job Status screen.
Press Features button to return to the job programming screen.

| Doc. No. - Job Type | Status | Remote Terminal/Contents | Status |
|---------------------|-------------------|--------------------------|--------|
| 00115 -Scan Job | Completed | Mailbox 001 | 1 |
| 00114 -Scan Job | Completed | Mailbox 001 | 1 |
| 00113 -Scan Job | Completed | Mailbox 001 | 1 |
| 00112 -Scan Job | Completed | Mailbox 001 | 1 |
| - -Copy Job | Completed - Error | 100% | 0/20 |

Doc. No. – Job Type

Identifies each job by job number and type.

Status

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

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.

Status

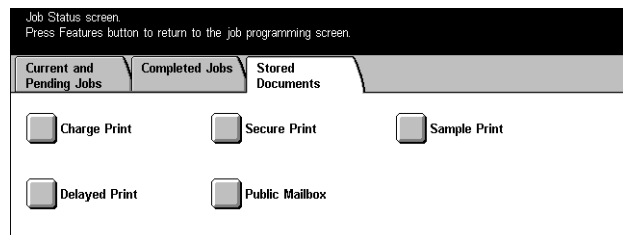
Displays the number of printed, scanned, sent, or received pages. For cancelled jobs, the status will be blank.

Stored Documents

This feature allows you to check locally stored documents in [Charge Print], [Secure Print], [Sample Print], [Delayed Print], and [Public Mailbox]. User actions are required for outputting or deleting these documents.

NOTE: The jobs displayed in [Charge Print], [Secure Print], [Sample Print], and [Delayed Print] are sent from a PC using the print driver. For more information, refer to PCL Driver Online Help.

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



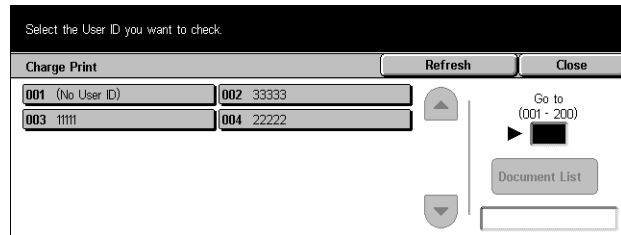
Charge Print

The print jobs that failed authentication (i.e., a wrong user ID and/or password was entered in the print driver) when the Authentication feature is enabled are stored or cancelled as specified in [Charge Print Settings].

If the machine receives a document without a user ID or no user ID is specified in the print driver, the saved document will be listed as [(No User ID)].

The settings for Charge Print are set up by the Key Operator. For more information, refer to Charge Print Settings in the Setups chapter of the User Guide.

1. Select [Charge Print] on the [Stored Documents] screen.

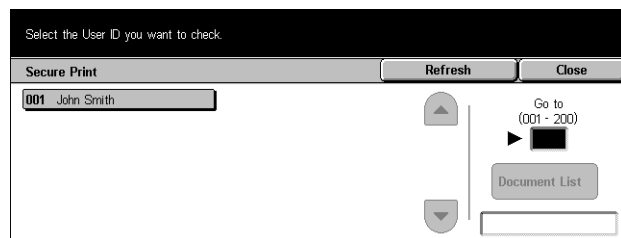


- Refresh – Brings the information up to date.
- Go to – Use this field to specify the Charge Print number to be displayed at the top of the screen. You can set the number within the range of 1 to 200 using the scroll buttons.
- Document List – Displays the log-in screen after selecting a user ID from the list. Enter the required user ID to display the stored documents.
 - Delete - Deletes a document.
 - Print - Prints a document selected in the list. You can select whether or not to delete the stored documents after printing.

Secure Print

A secure print job requires a user ID and a password registered in the machine to print or delete the stored document. A user ID and a password can be specified from the print driver.

1. Select [Secure Print] on the [Stored Documents] screen.



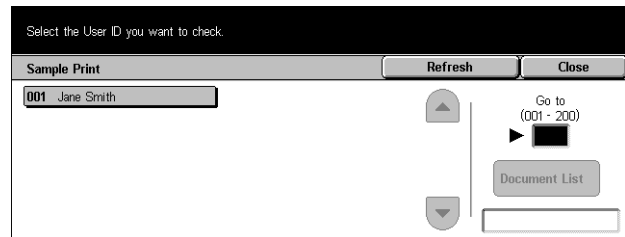
- Refresh – Brings the information up to date.
- Go to – Use this field to specify the Secure Print number to be displayed at the top of the screen. You can set the number within the range of 1 to 200 using the scroll buttons.
- Document List – Displays the password input screen after selecting a user ID from the list. Enter the password to display the stored documents.
 - Select All – Selects all documents in the list.
 - Delete – Deletes a document.
 - Print – Prints a document selected in the list. You can 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 a password.

Sample Print

A sample print job allows you to print one 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. A user ID and a password are required to access the stored document, and the number of copies can be specified from the print driver.

1. Select [Sample Print] on the [Stored Documents] screen.

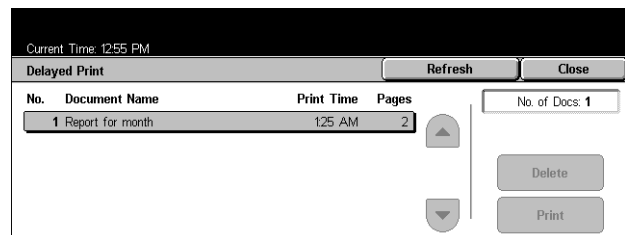


- Refresh – Brings the information up to date.
- Go to – Use this field to specify the Secure Print number to be displayed at the top of the screen. You can set the number within the range of 1 to 200 using the scroll buttons.
- Document List – You can select a user ID from the list and this option to display the documents for the corresponding user ID specified in the print driver. Use the following options to output or delete the documents:
 - 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

The documents with the start time for printing as specified from the print driver can be stored in the machine. You can confirm or output the stored documents before the specified time. You can also delete the stored job.

1. Select [Delayed Print] on the [Stored Documents] screen.



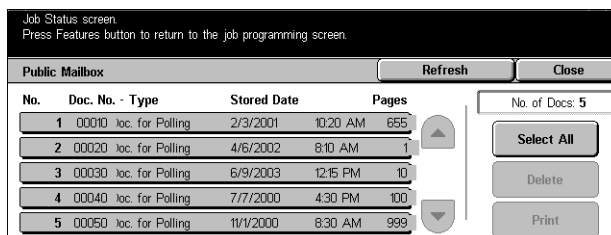
- Refresh – Brings the list up to date.
- Print – Prints a document selected in the list.
- Delete – Deletes a document selected in the list.

Public Mailbox

Allows you to confirm, output, or delete the documents in a public mailbox on the machine.

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.

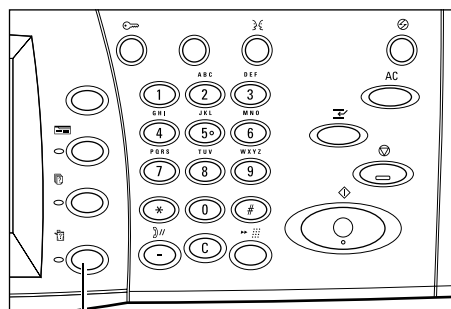


- Refresh – Brings the list up to date.
- Select All – Selects all the documents in the [Public Mailbox].
- Print – Prints a document selected in the list.
- Delete – Deletes a document selected in the list.

Machine Status

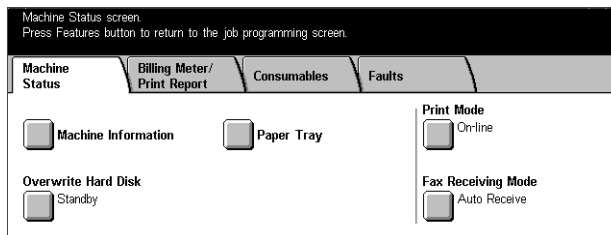
This feature allows you to check the machine status, the billing meter, the status of the toner cartridge or print various reports.

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.



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

Machine Status – page 26

Billing Meter/Print Report – page 28

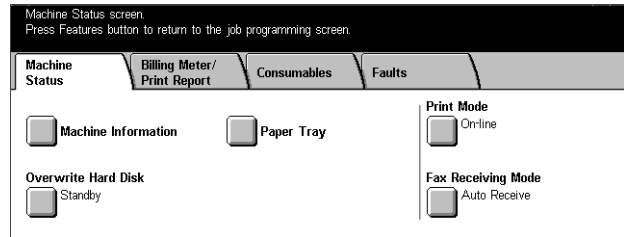
Consumables – page 31

Faults – page 31

Machine Status

This screen allows you to view the general information on the machine and the status of paper trays and the hard disk, or change the print mode or fax receiving mode.

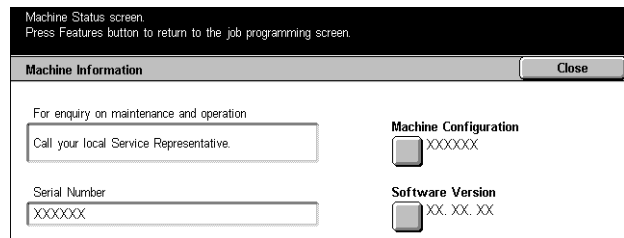
1. Press the <Machine Status> button on the control panel.
2. Select the [Machine Status] tab.
3. Select the required option.



Machine Information

Allows you to view user support information, serial number of the machine, as well as the machine configuration and the software version.

1. Select [Machine Information] on the [Machine Status] screen.



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

Paper Tray

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.

The screenshot shows the 'Paper Tray' screen with a 'Close' button in the top right. It displays a table with the following data:

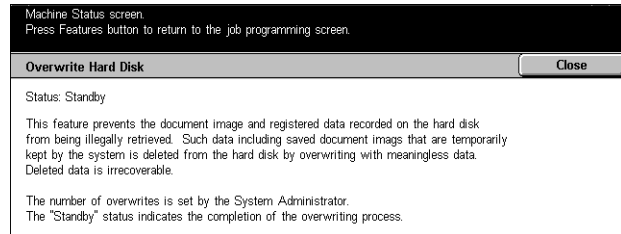
| Items | Status | Filled | Paper Size | Paper Type |
|--------|--------|--------|-------------|------------|
| Tray 1 | OK | 100% | A4 | Plain |
| Tray 2 | OK | 25% | A3 | Plain |
| Tray 3 | OK | 75% | 85x11" | Plain |
| Tray 4 | OK | 50% | A4 | Plain |
| Tray 5 | - | - | Size Detect | Plain |

Overwrite Hard Disk

Displays the overwriting status of the hard disk.

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

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

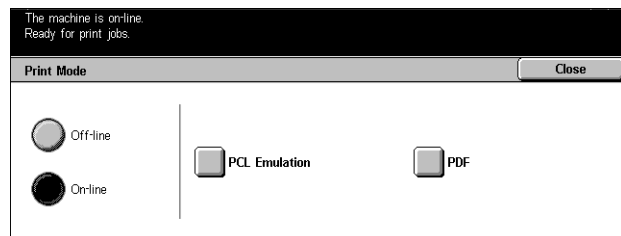


Print Mode

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.



- Off-line – Sets the printer mode to off-line.
- On-line – Sets the printer mode to on-line.
- PCL Emulation – Displays the [PCL Emulation] screen. Use this feature to set parameter values for PCL emulation, which allows you to print documents without using print driver software on your PC.
- PDF – Displays the [PDF] screen. Use this feature to set parameter values and a password for PDF direct printing, which allows you to bypass driver software and send a PDF file directly to the machine.
 - Setup – Allows you to set parameter values for PDF direct printing.
 - Password – Allows you to enter a password to restrict access to PDF direct printing.

Fax Receiving Mode

Allows you to set the fax reception mode: Manual Receive or Auto Receive.

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

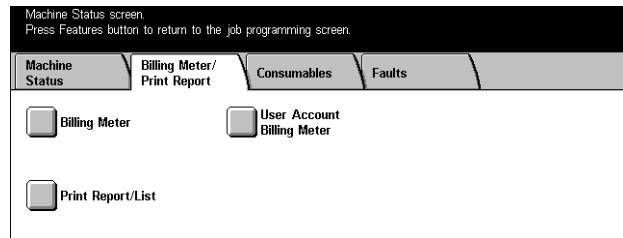


- Manual Receive – Starts receiving a fax or polling after you have answered the call and confirmed it is a fax.
- Auto Receive – Receives a fax automatically.

Billing Meter/Print Report

This screen allows you to view the billing meter information, and also specify the output sequence for various reports and lists.

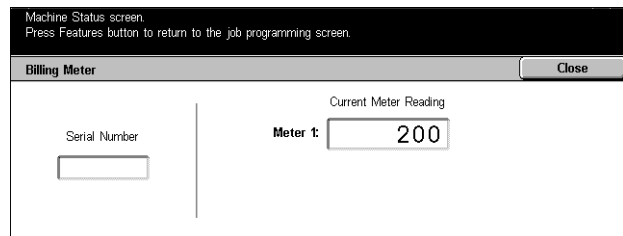
1. Press the <Machine Status> button on the control panel.
2. Select the [Billing Meter/Print Report] tab.
3. Select the required option.



Billing Meter

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.

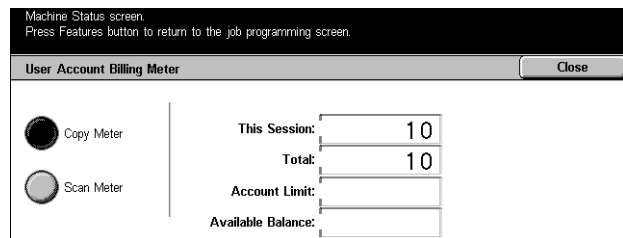


User Account Billing Meter

Allows you to view the number of per session and total impressions of copying or scanning made for a user account, the impression limit set for the account, and the available balance.

NOTE: This button is displayed with Key Operator access.

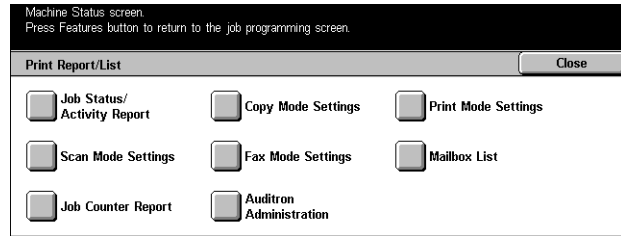
1. Select [User Account Billing Meter] on the [Billing Meter/Print Report] screen.



Print Report/List

Allows you to print various reports and lists for each service.

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



- 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 output the following.
 - Job History Report – Lists the jobs recorded on the machine.
 - Activity Report – Lists the results of the fax transmissions.
 - Error History Report – Lists the 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 the [Copy Mode Settings] screen. Select an option and press the <Start> button to output the following.
 - Settings List – Common Items
- Print Mode Settings – Displays the [Print Mode Settings] screen. Select an option and press the <Start> button to output the following.
 - Setting List – Common Items
 - PCL Settings List
 - PCL Form List
 - PDF Settings List
 - TIFF Settings List
 - TIFF Logical Printer List
 - PS Logical Printer List
 - Fonts List
 - PostScript Fonts List
- Scan Mode Settings – Displays the [Scan Mode Settings] screen.
 - Settings List – Displays the following options on the right hand side. Select an option and press the <Start> button to output the list. [Setting List - Common Items]/[Extended Features Settings List]/[Domain List]
 - Job Template List – Displays the list of job templates that can be used on the machine. For more information on job templates, refer to Job Templates in the CentreWare Internet Services chapter of the User Guide and the CentreWare Network Scanning Services Manual.

- Address Book – Displays ten [Address Book] options on the right hand side. Each option represents 50 addresses, giving 500 in total. Select one or more options and press the <Start> button to output the lists.
- Fax Mode Settings – Displays the [Fax Mode Settings] screen.
 - Settings List – Displays the following options on the right hand side. Select an option and press the <Start> button to output the list.
[Setting List - Common Items]/[Box Selector List]/[Extended Features Settings List]/[Domain List]
 - Address Book – Displays ten [Address Book] options, [Group Send], and [Select All] on the right hand side. Each [Address Book] option represents 50 addresses, giving 500 in total. Select one or more [Address Book] options and/or the [Group Send], or [Select All], and press the <Start> button to output the lists.
 - Comments List – Select this option and press the <Start> button to output this list.
 - Billing Data List – Displays the billing data for fax jobs. Select this option and press the <Start> button to output this list.

NOTE: This option is displayed with Key Operator access.

- Mailbox List – Displays the [Mailbox List] screen.
 - Mailbox List – Displays ten [Mailbox] options and the [Select All] button, on the right hand side. Each [Mailbox] option represents 50 mailboxes, giving 200 in total. Select one or more [Mailbox] options or [Select All], and press the <Start> button to output the lists.

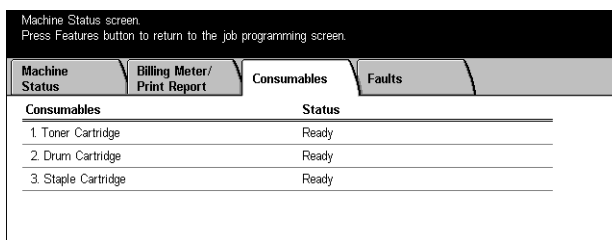
- Job Counter Report – Displays the [Job Counter Report] screen. Select this option and press the <Start> button to output this list.
 - Job Counter Report
 - Auditron Administration – Displays the [Auditron Administration] screen. Select the type of service on the left and the required user account numbers, and press the <Start> button on the control panel to output the list. The multiple user account numbers can be selected, or check the [Select All (0001 - 0500)] check box to select all account numbers.

NOTE: This button is displayed with Key Operator access.

Consumables

This screen allows you to view toner usage and the status of cartridges.

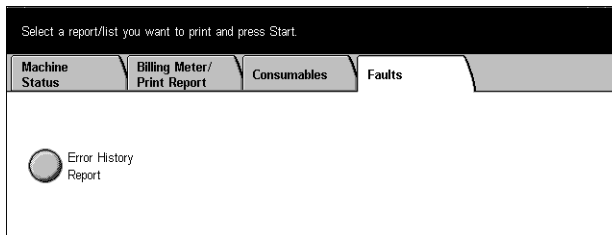
1. Select the [Consumables] tab on the [Machine Status] screen.



Faults

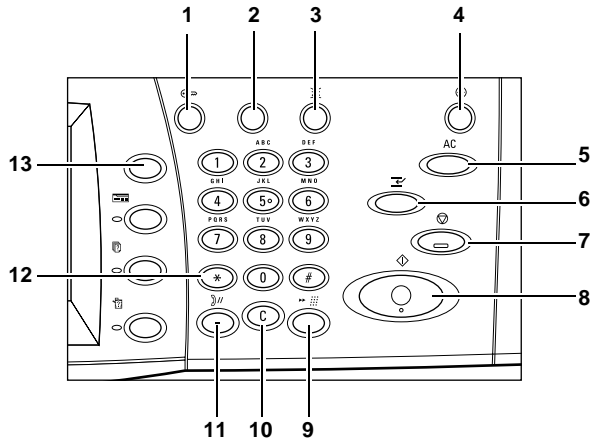
This screen allows you to output a report of recent errors, the date and time of the errors, the error codes, and the status of each error. The status is either active or cleared.

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 to output the report.



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. Also, if you press this button to display the log-in screen when you are already logged in, you will be logged out of the machine. |
| 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 Low Power Mode or Sleep Mode. |
| 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. |
| 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. |

| | Button | Function |
|----|----------------|---|
| 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. |

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

System Settings

During manufacture 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 Settings
- Network Mode Settings
- Print Mode Settings
- Scan Mode Settings
- Fax Mode Settings
- E-mail/iFax Settings
- Mailbox Settings
- Application Communication Settings

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.

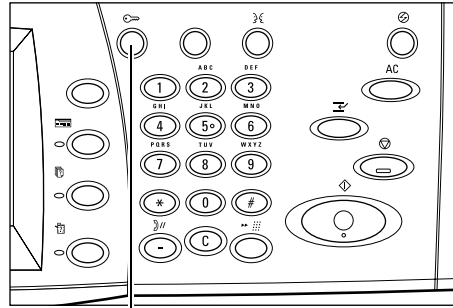
Changing the Settings

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 password from the default one. For further assistance, contact your Xerox Welcome Center.

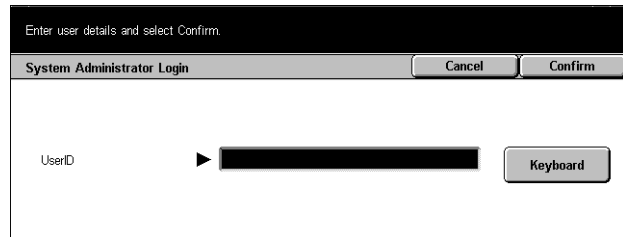
Follow these steps to change the default settings:

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

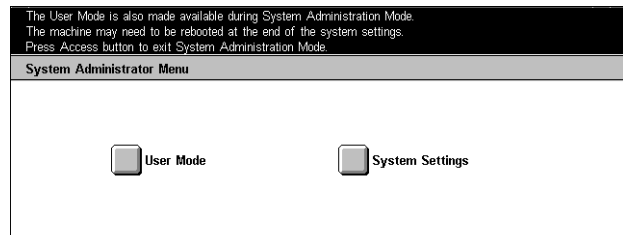


<Log In/Out> button

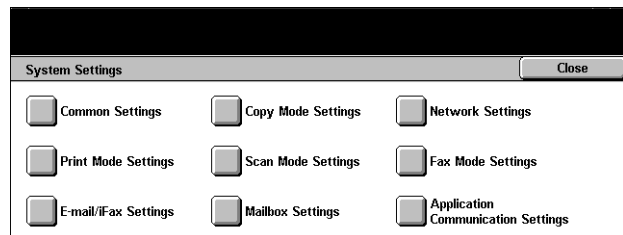
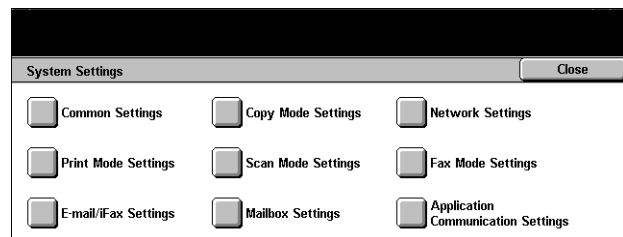
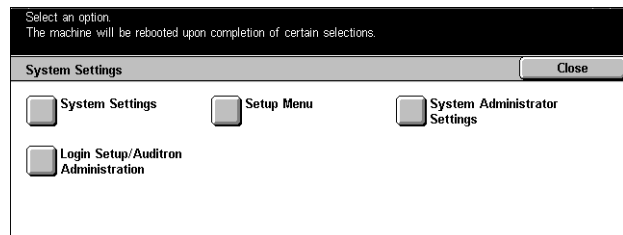
2. Enter the default user ID "11111" using the numeric keypad. If the Authentication feature is enabled, you may be required to enter a password. The default password is "x-admin".
3. Select [Confirm] on the [System Administrator Login] screen.
4. Select [System Settings] on the [System Administrator Menu] screen.



5. Select [System Settings] on the [System Settings] screen.
6. Select [Common Settings] on the [System Settings] screen.



7. Select the required option and customize to meet your needs.
8. 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 Settings] screen.

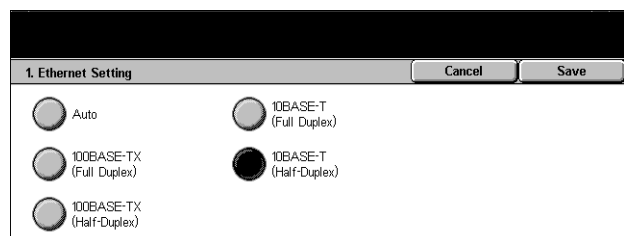
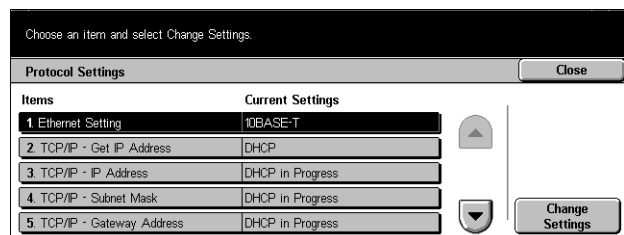
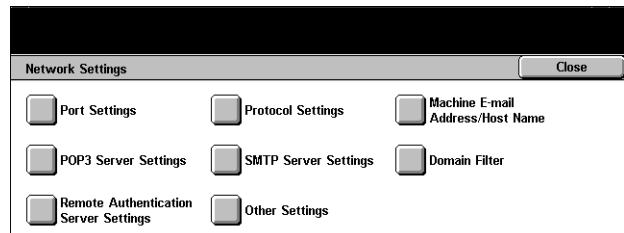
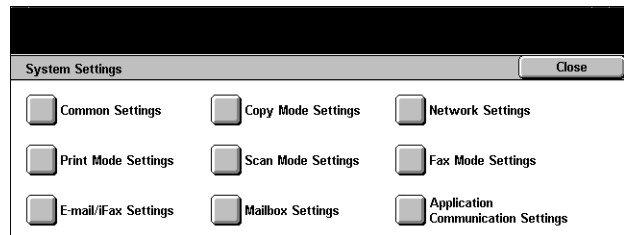
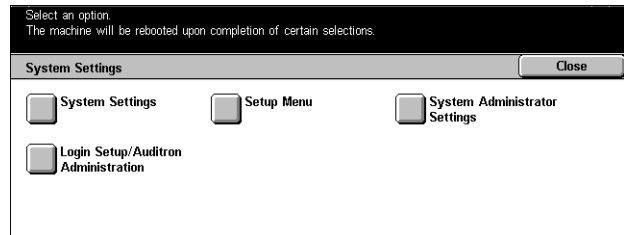
NOTE: For more information on how to display the [System Settings] screen, refer to *Changing the Settings on page 33*.

2. Select [Network Settings] on the [System Settings] screen.

3. Select [Protocol Settings] on the [Network Settings] screen.

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

5. Set up the port speed.
6. 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 |

| Value | Description | Value | Description |
|--------------|-------------------------------|--------------|------------------------------------|
| 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 |
| 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 |
| 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 |

| Code | Value | Short Display | Long Display |
|-------------|--------------|----------------------|---------------------|
| 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 NetWare

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

Information Checklist – page 41

NetWare Environments – page 42

NetWare Installation – page 43

Installation Procedure – page 43

Network Communication Setup – page 43

NetWare Setup – page 44

Workstation Setup – page 45

Test Print – page 45

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: <ul style="list-style-type: none">• 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 NT 4.0 or Windows 2000.

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

For more information, refer to *Network Communication Setup on page 43*.

NetWare Setup

For more information, refer to *NetWare Setup on page 44*.

Workstation Setup

For more information, refer to *Workstation Setup on page 45*.

Test Print

For more information, refer to *Test Print on page 45*.

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: CentreWare Internet Services can also be used to configure the machine. 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.

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 print driver on the NetWare client computer. Refer to the HTML document in CentreWare Utilities 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.

4 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 – page 47*
- UNIX TCP/IP Environments – page 48*
- UNIX TCP/IP Installation – page 48*
- Installation Procedure – page 48*
- Network Communication Setup – page 49*
- Workstation Setup – page 50*
- Test Print – page 55*
- Printing – page 55*
- Solaris/HP-UX – page 55*
- SunOS – page 57*
- Printer Status – page 59*
- Solaris/HP-UX – page 59*
- SunOS – page 60*
- C Option – page 61*

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, 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 *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: CentreWare Internet Services can also be used to configure the machine. 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 51

SunOS – page 52

HP-UX – page 53

Print language/mode/logical printer

A printer name for 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 which was 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.) |

*: Option

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 printer name other than above at printing, 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 each. If two or more kinds of languages/modes are set, the workstation may display the same job number for some query (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 61*.

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 53

Using the System Administrator Manager (SAM) GUI Method – page 54

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 55*.

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] from 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 55*.

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 *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 x 297 mm/ 8.3 x11.7 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). |
| INTRAY4/intray4 | Selects Tray 4 (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) |


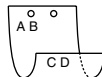
Selecting a paper type

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: The color setting is not available on the machine.

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.

5 EtherTalk

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

Information Checklist – page 67

EtherTalk Environments – page 68

EtherTalk Installation – page 68

Installation Procedure – page 68

Network Communication Setup – page 68

Workstation Setup – page 70

Test Print – page 70

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 10.2 | Customer |
| Obtain and record the following information: <ul style="list-style-type: none">• 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 Adobe PS print driver, or PPD (optional). | Customer |

If problems are encountered during the machine installation, refer to *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 10.2.

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: CentreWare Internet Services can also be used to configure the machine. 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].

Next, establish TCP/IP.

1. 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.

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 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], and then [Change Settings].
 9. Using the same method as in step 7, enter the Subnet Mask.
 10. Select [TCP/IP – Gateway Address] and [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 (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 7.5 or later, 8.x, or 9.x) or the Print Center (Mac OS X 10.2).
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 *Problem Solving chapter* for assistance.

6 Microsoft Networking

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

Information Checklist – page 71

SMB Environments – page 72

SMB Installation – page 73

Installation Procedure – page 73

Network Communication Setup – page 73

Workstation Setup – page 75

Test Print – page 75

Changing the Settings – page 75

Procedure – page 75

Setting Format of config.txt – page 76

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: <ul style="list-style-type: none">• 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 *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

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.

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: CentreWare Internet Services can also be used to configure the machine. 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 CentreWare Utilities 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.

Changing the Settings

This section explains how the System Administrator uses [config.txt] to change the SMB settings.

Procedure

The steps below explain how to overwrite [config.txt] for the machine using a Windows networked computer. You will need the following information: SMB Host Name, Workgroup, System Administrator Name, and System Administrator Password.

1. Open [Network Neighborhood] from the Windows computer, followed by [Workgroup] (default: Workgroup) and then the [printer].

NOTE: The default host name of the machine is FX-xxxxxx, where xxxxxx is the last six characters of the MAC address of the machine. You can check the name by referring to SMB Host Name on the System Settings List.

NOTE: This method does not enable printer search across subnets. For printer search across subnets, you should set the WINS server or edit [LMHOSTS]. For details about [LMHOSTS], refer to your Windows manual.

2. Double click the [admintool] folder.

3. For Windows 95/Windows 98/Windows Me, enter the password (SMB Administrator Password) only. For Windows NT 4.0/Windows 2000/Windows XP, enter the user name (SMB Administrator Name) and password (SMB Administrator Password).

Then, click [OK]. The [admintool] folder will be opened.

NOTE: The factory default for the System Administrator Name is [11111], and the default System Administrator Password is [x-admin]. You are advised to change the name and password from the default ones.

4. Open [config.txt] using a text editing application, for example Notepad.

NOTE: [config.txt] can also be changed from CentreWare Internet Services.

5. Make changes to the appropriate items, and then save and close [config.txt].

NOTE: For more information about [config.txt], refer to *Setting Format of config.txt on page 76*.

The [message.txt] file is then created inside the [admintool] folder.

6. Open [message.txt] and check that it displays the information shown in the following table.

NOTE: If [message.txt] is not displayed, select [Refresh Status] from the [View] menu. If an error message appears, check the information has been set correctly in [config.txt].

7. Close [message.txt].

8. Switch off the machine. After the display on the touch screen clears, switch on the machine again.

NOTE: The changes you have made will be enabled either after switching off and on, or after saving [config.txt] with its Reboot option set to [Yes].

Setting Format of config.txt

| Item | Remarks | Value | Default |
|------------------|--------------------------------|------------------|---|
| Printer Language | Language to be used | English | English |
| Host Name | Host name of the machine | Maximum 15 bytes | FX-xxxxxx (xxxxxx: last 6 characters of the MAC address of the machine) |
| Workgroup | Name of printer workgroup | Maximum 15 bytes | WORKGROUP |
| NetBEUI | Activation of NetBEUI protocol | On/Off | On |
| TCP/IP | Activation of TCP/IP protocol | On/Off | On |

| Item | Remarks | Value | Default |
|-------------------------|--|----------------------------------|-------------------------------|
| Spool | Activation of spool function. Select from Disk, Memory, and Off. If Disk is selected but not recognized, Memory will be used. | Disk/Memory/Off | Disk |
| Max Spool Size | The maximum receive buffer size during spooling. Can be set in 256 KB increments. | 512–32768 KB | 1024 KB |
| Max Receive Buffer Size | The maximum receive buffer size during non-spooling. Can be set in 32 KB increments. | 64–1024 KB | 256 KB |
| JCL | Activation of JCL | On/Off | On |
| Print Mode | Set the printer language. | AUTO/PS*/PCL/ TIFF | AUTO |
| Auto Master Mode | Activation of the automatic browse master feature. Not available when WINS server is designated. | On/Off | On |
| Encrypt Password | Activation of the encrypt password feature. | On/Off | On |
| Time Zone | Set the time zone in units of minutes. | -720 to 720 minutes | 0 (GMT – Greenwich Mean Time) |
| Daylight Saving | Set the period of summer time. Set the time, date, and month for both the start date and end date of summer time. For example “1-012803-023110” will advance the system clock by one hour at 1 a.m. on 28th March, and go back one hour at 2 a.m. on 31st October. | hour-start-end (h-hhddmm-hhddmm) | — |
| Maximum Sessions | Maximum connections of the machine. | 3–10 | 5 |
| Unicode Support | Enable the use of Unicode. If this is disabled then the local code, such as shift-JIS, will be used. | Enable/Disable | Disable |
| DHCP | Activation of DHCP. | Yes/No | Yes |
| Get WINS DHCP | Activation of WINS DHCP. | On/Off | On |
| IP Address | Set the IP address. | — | 0.0.0.0 |
| Subnet Mask | Set the subnet mask. | — | 0.0.0.0 |
| Gateway Address | Set the gateway address. | — | 0.0.0.0 |

| Item | Remarks | Value | Default |
|----------------------------------|--|------------------|---------|
| WINS Primary Server IP Address | Set the WINS primary server IP address. | — | 0.0.0.0 |
| WINS Secondary Server IP Address | Set the WINS secondary server IP address. | — | 0.0.0.0 |
| Administrator Name | Administrator name. | Maximum 20 bytes | 11111 |
| Administrator Password | Password of Administrator. Current setting not displayed. | Maximum 14 bytes | x-admin |
| Location | Comments on location of machine. | Maximum 48 bytes | — |
| Reboot | Machine will reboot after editing the [config.txt] parameter setting file, if the reboot option is set to [Yes]. Usually set to [No] when activated. It will not reboot if there is an error in the setting, even if the reboot option is set to [Yes]. | Yes/No | No |

* Available only when PostScript Kit (optional) is installed.

7 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 – page 79

TCP/IP (LPD or Port9100) Environments – page 80

TCP/IP (LPD or Port9100) Installation – page 80

Installation Procedure – page 80

Network Communication Setup – page 81

Workstation Setup – page 82

Test Print – page 83

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: <ul style="list-style-type: none">• 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 | 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.

NOTE: CentreWare Internet Services allows more detailed settings. For instructions, refer to the CentreWare Internet Services chapter of the User Guide.

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: CentreWare Internet Services can also be used to configure the machine. 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 CentreWare Utilities 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.

8 Parallel Port

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

Information Checklist – page 85

Parallel Port Environment – page 86

Parallel Port Installation – page 86

Installation Procedure – page 86

Parallel Port Communication Setup – page 86

Workstation Setup – page 87

Test Print – page 88

Information Checklist

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

| Item | By |
|---|----------|
| IEEE 1284 Parallel Port 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 parallel 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 parallel port cable to the machine until instructed to do so.

Parallel Port Environment

System configuration

The machine can be connected directly to the parallel port of a host workstation. A document file can be sent from the host workstation via the parallel port to the 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 parallel port.

- Windows 95/Windows 98/Windows Me
- Windows NT 4.0/Windows 2000/Windows XP/Windows Server 2003

Parallel Port Installation

Follow these procedures to install and use the machine on the parallel port.

Installation Procedure

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

Parallel Port Communication Setup

This requires the machine to be set up for parallel 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.

Parallel Port Communication Setup

Connect the machine and the computer with an IEEE 1284 Parallel Port Cable.

1. Insert the interface cable connector into the parallel interface connector of the machine and secure it using the wire clips on both sides.
2. Connect the other end of the interface cable connector to the computer.
3. Switch on the computer.

4. Switch on the machine.

The following steps explain how to set up the parallel port communication parameters described previously.

NOTE: CentreWare Internet Services can also be used to configure the machine. 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 [Parallel] and [Change Settings].**5.** Select the item to be set, and then select [Change Settings].**6.** Select the desired value, then [Save].**7.** Repeat step 5 and 6, if required.

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

- Port Status
- Print Mode
- PJI
- Auto Eject Time
- Adobe Communication Protocol
- Bi-directional Communication
- Input Prime

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

NOTE: Except for Bi-directional, there is no need to change the default setting of the other items for normal use. However, it may be necessary to make changes depending on the OS of each computer.

Workstation Setup

Perform the following steps.

- 1.** Refer to the HTML document in CentreWare Utilities CD-ROM, and install the drivers for the machine on all the workstations that will be sending jobs to the machine.
- 2.** Continue with *Test Print on page 88*.

Test Print

To make sure that the machine has been installed on the parallel 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.

9 USB Port

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

Information Checklist – page 89

USB Port Environment – page 90

USB Port Installation – page 90

Installation Procedure – page 90

USB Port Communication Setup – page 91

Workstation Setup – page 91

Test Print – page 92

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 10.2.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: CentreWare Internet Services can also be used to configure the machine. 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
- PJJ
- 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 CentreWare Utilities CD-ROM or document provided with the optional PostScript Kit, and install the print drivers for the machine on all the workstations that will be sending jobs to the machine.
2. Continue with *Test Print on page 92*.

Test Print

To make sure that the machine has been installed on the parallel 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.

10 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 – page 93

IPP Environment – page 94

IPP Installation – page 94

Installation Procedure – page 94

Network Communication Setup – page 95

Workstation Setup – page 96

Test Print – page 96

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: <ul style="list-style-type: none">• 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: CentreWare Internet Services can also be used to configure the machine. 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 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 CentreWare Utilities CD-ROM, for additional information.

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.

11 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 – page 97

CentreWare Internet Services Environments – page 98

CentreWare Internet Services Installation – page 99

Installation Procedure – page 99

Network Communication Setup – page 99

Test Access – page 100

Selecting Transport Protocols – page 101

Using CentreWare Internet Services to Configure Settings on the Machine – page 102

Ethernet – page 102

Parallel – page 103

USB – page 103

EtherTalk – page 104

SMB (Microsoft Networking) – page 104

NetWare – page 105

TCP/IP – page 106

LPD and Port9100 – page 107

SNMP – page 107

IPP – page 108

E-mail – page 109

HTTP – page 111

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: <ul style="list-style-type: none">• 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 |

| Item | By |
|---|----------|
| 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 |
| Windows XP | Internet Explorer 6.0 SP1 Netscape 7.1 |
| Windows Server 2003 | Internet Explorer 6.0 SP1 Netscape 7.1 |
| Mac OS 8.x, 9.x | Internet Explorer 5.1 Netscape 7.02 |

| OS | Browsers |
|-----------------|--|
| Mac OS X 10.2.6 | Internet Explorer 5.2 Netscape 7.02 |

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 New Settings].

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] > [Protocol Settings] or [Port 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.

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Parallel – page 103

USB – page 103

EtherTalk – page 104

SMB (Microsoft Networking) – page 104

NetWare – page 105

TCP/IP – page 106

LPD and Port9100 – page 107

SNMP – page 107

IPP – page 108

E-mail – page 109

HTTP – page 111

UPnP – page 111

SSDP – page 112

LDAP – page 112

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
5. Select [Apply New Settings] 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].

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

Parallel

This page allows you to configure the parallel 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 [Parallel].
4. Set up the following options to be displayed in the frame.
 - Bi-directional Communication
 - Auto Eject Time
 - Adobe Communication Protocol (Only available when the optional PostScript Kit is installed.)
5. Select [Apply New Settings] 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].

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
- Adobe Communication Protocol (Only available when the optional PostScript Kit is installed.)

5. Select [Apply New Settings] 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].

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
- Zone Name

5. Select [Apply New Settings] 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].

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

SMB (Microsoft Networking)

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
 - Host Name
 - Maximum Sessions
 - TBCP Filter (Only available when the optional PostScript Kit is installed.)
 - Unicode Support
 - Auto Master Mode
 - Encrypt Password
5. Select [Apply New Settings] 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].

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.
 - Host Name
 - Active Mode
 - File Server Name
 - Polling Interval
 - Number of Searches
 - Password
 - Re-enter Password

- TBCP Filter (Only available when the optional PostScript Kit is installed.)
- Tree Name
- Context Name
- Frame Type
- Network Address
- Active Discovery

5. Select [Apply New Settings] 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].

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.
 - Host Name
 - Get IP Address
 - IP Address
 - Subnet Mask
 - Gateway Address
 - Get DNS Address
 - DNS Address 1–3
 - DNS Name
 - Generate Domain Search List Automatically
 - Domain Name 1–3
 - Connection Time-Out
 - Dynamic DNS Update

- Get WINS Server Address
 - Primary WINS Server Address
 - Secondary WINS Server Address
 - IP Filter
5. Select [Apply New Settings] 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].

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

LPD and Port9100

This page allows you to configure the LPD and 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 [LPD] or [Port9100].
4. Set up the following options to be displayed in the frame.
 - Port Number
 - TBCP Filter (Only available when the optional PostScript Kit is installed.)
 - Connection Time-Out
5. Select [Apply New Settings] 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].

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)
 - Community Name (Read/Write)
 - Community Name (Trap Notification)
 - System Administrator
5. Select [Apply New Settings] 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].

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
 - Add Port No.
 - TBCP Filter (Only available when the optional PostScript Kit is installed.)
 - Administrator Mode
 - DNS
 - Connection Time-Out
5. Select [Apply New Settings] 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].

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.
 - Receiving Protocol
 - Print Mail Headers and Contents
 - Print iFax Headers and Contents
 - Auto Print Delivery Confirmation Mail
 - Auto Print Error Mail
 - Maximum E-mail Size
 - Split Size of Outgoing Mail
 - Response to Read Status (MDN)
 - POP3 Server Address
 - POP3 Port Number
 - POP Receive Authentication
 - POP3 Server Check Interval
 - POP User Name
 - POP User Password
 - SMTP Server Address
 - SMTP Port Number
 - SMTP Sending Authentication
 - SMTP Authentication User Name
 - SMTP Authentication Password
 - Domain Filtering-Receive
5. Select [Apply New Settings] 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].

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
 - Maximum Sessions
 - Connection Time-Out
5. Select [Apply New Settings] 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].

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 [Port Settings] folder.
3. Select [UPnP].
4. Set up the following option to be displayed in the frame.
 - Port Number
5. Select [Apply New Settings] 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].

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: 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 [SSDP].
4. Set up the following option to be displayed in the frame.
 - Valid Advertising Period
 - Maximum TTL
5. Select [Apply New Settings] 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].

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 [Port Settings] folder.
3. Select [LDAP].
4. Set up the following option to be displayed in the frame.
 - LDAP Server Address
 - Port Number
5. Select [Apply New Settings] 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].

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

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 – page 115

Information Checklist – page 116

E-mail Environments – page 117

E-mail Installation – page 117

Installation Procedure – page 117

Network Communication Setup – page 118

Test Mail – page 120

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.

- Internet Fax (iFax)
- Scan to E-mail
- E-mail Print
- Mail Notice Service
- Notify Job End by E-mail

Internet Fax (iFax)

If the optional Internet Fax Kit is installed in the machine, you can send and receive the scanned data as attachments, via an intranet or the Internet. The scanned document is converted to TIFF format. This differs from a facsimile that transmits the data via a telephone line. For more information, refer to *Internet Fax chapter on page 139*.

Scan to E-mail

If the optional Internet Fax 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: <ul style="list-style-type: none"> • 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 Internet Fax 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.

- 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 |
| 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: CentreWare Internet Services can also be used to configure the machine. 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 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.
 - [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 CentrWare Internet Services.
 - POP3 Server Port Number

- POP3 Server Login name - POP3 password used SMTP Authentication.
 - POP3 Server Password - POP3 password used for SMTP Authentication.
 - POP3 Password Encryption
 - [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 be 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 login name used for SMTP Authentication.
 - [Domain Filter] : if required
 - Domain Filtering - This field will be populated ONLY if restriction is required on sending mail to certain domains.
 - Domain 1 - 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 – page 123

Scanning with the machine – page 124

Scanning Process – page 124

Scan to Mailbox Setup – page 127

Information Checklist – page 127

Scan to Mailbox Environments – page 128

Installation Procedure – page 128

Network Communication Setup – page 128

Workstation Setup – page 130

Scan using Template (Network Scanning) Setup – page 130

Information Checklist – page 130

Scan using Template Environments – page 131

Installation Procedure – page 131

Network Communication Setup – page 131

Remote Authentication Setup (If Required) – page 133

Scan to FTP/SMB Setup – page 136

Information Checklist – page 136

Scan to FTP/SMB Environments – page 136

Installation Procedure – page 137

Network Communication Setup – page 137

Workstation Setup – page 138

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 and password. Accented characters (ISO8859-1 characters) can also be used when entering template names and other data, for example, metadata information.

Scanning Process

The machine has four types of scanning functions.

- Scan to E-mail
- Scan to Mailbox
- Scan using Template (Network Scanning)
- Scan to FTP/SMB

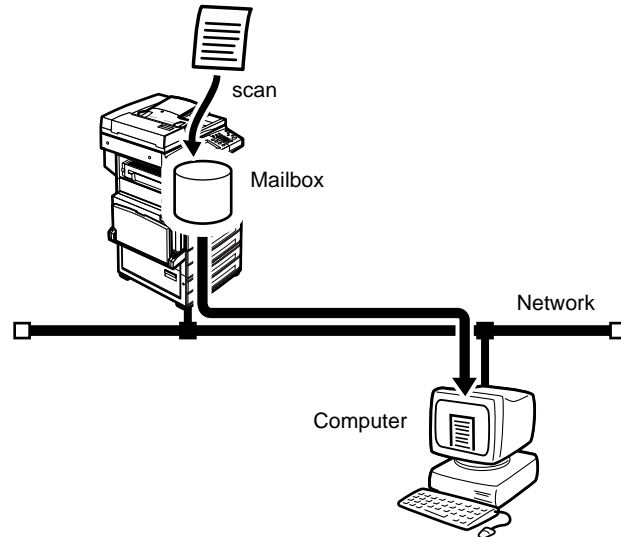
The process for scanning a job is as follows.

Scan to E-mail

If the optional Internet Fax 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. For more information, refer to *E-mail chapter on page 115*.

Scan to Mailbox

You can use the machine to scan the required documents, and store them as data in the mailbox. The stored data can be retrieved from a computer connected to the TCP/IP network if you have installed the scan driver on Windows computers or you have activated CentreWare Internet Services.

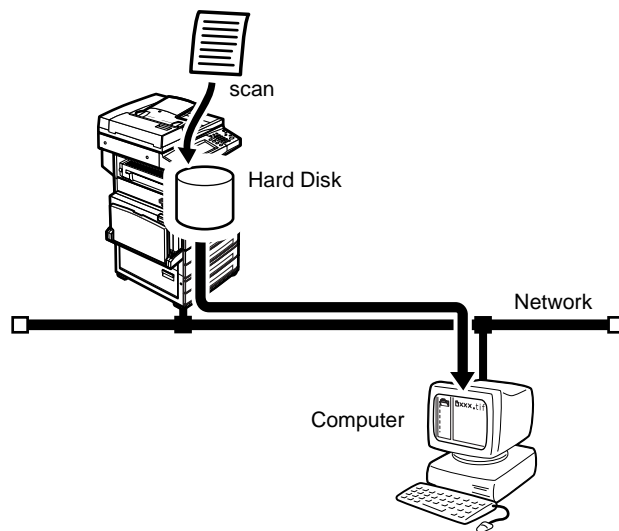


Scan using Template (Network Scanning)

The template is user-programmable, and contains parameters for the scanned document. You can apply the template to the scanned document on the machine. The scanned document will be saved to the hard disk of the machine and then sent automatically to the computer (server) such as an FTP or SMB server connected to the network. CentreWare Internet Services is used to create the templates and configure settings such as the destination for the file.

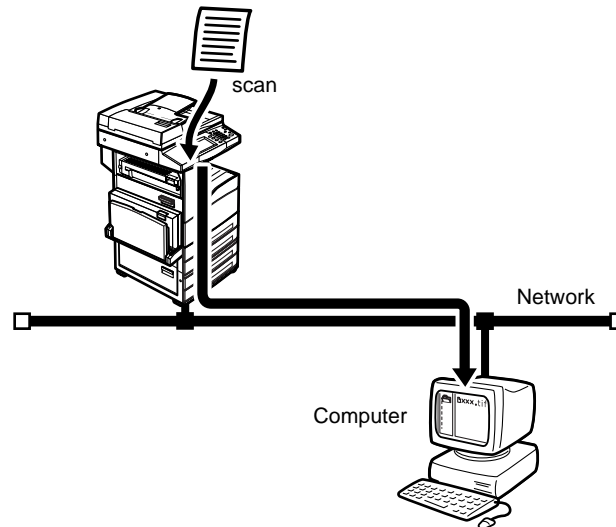
Remote Authentication is available when scanning to a server via FTP or SMB over TCP/IP. Kerberos for Windows 2000 and Solaris are supported on this device.

NOTE: CentreWare Network Scanning Services (optional) can also be used to create the templates which are available only for FTP servers. Refer to the CentreWare documentation for more information.



Scan to FTP/SMB

You can send the scanned documents through a TCP/IP network to a computer (server) such as an FTP or SMB server.



Scan to Mailbox Setup

Information Checklist

Before enabling the feature, make sure that the following items are available or have been performed. If Kerberos has been enabled, refer to *Remote Authentication Setup (If Required)* on page 133.

| 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: <ul style="list-style-type: none"> • IP address • Gateway address • Subnet mask • Host name Refer to the Glossary for additional information about the Gateway Address and Subnet mask. | Customer |
| Test the machine to make sure that it is installed fully and functioning correctly. | Customer |
| Mailboxes need to be created on the touch screen of the machine or via CentreWare Internet Services. | Customer |
| Install the scan driver. | Customer |

If problems are encountered during machine setup, refer to the Problem Solving chapter of the User Guide.

Scan to Mailbox Environments

Network

The machine and the computer must be connected to a network, and be able to communicate using TCP/IP protocol.

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

Installation Procedure

To scan a document to a mailbox, configure the following settings on the machine:

Network Communication Setup

By using the touch screen, activate the Salutation port to [Enabled].

Then set the IP address.

Finally, create mailboxes for saving scanned documents. Refer to the Setups chapter of the User Guide.

Workstation Setup

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

Network Communication Setup

NOTE: CentreWare Internet Services can also be used to configure the machine. 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 Salutation 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 [Salutation], and then [Change Settings].
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], 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 Setting]. 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 Subnet Mask.

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 address 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

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 CentreWare Utilities CD-ROM. For more information how to retrieve the document, refer to the CentreWare Internet Services chapter of the User Guide.

Scan using Template (Network Scanning) Setup

Information Checklist

Before enabling the feature, make sure that the following items are available or have been performed. If Kerberos has been enabled, refer to *Remote Authentication Setup (If Required)* on page 133.

| 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: <ul style="list-style-type: none"> • IP address • Gateway address • Subnet mask • Host name Refer to the Glossary for additional information about the Gateway Address and Subnet mask. | Customer |
| Templates and Repositories must be created via Internet Services or Network Scanning Services. | Customer |
| Test the machine to make sure that it is installed fully and functioning correctly. | Customer |
| Set up the FTP or SMB server. FTP server <ul style="list-style-type: none"> • Windows NT4.0 Server, Windows 2000 Server, and Windows Server 2003: Microsoft IIS 3.0 or later FTP Service must be installed. • Windows NT4.0 Workstation and Windows 2000 Professional: Microsoft IIS 3.0 or later FTP Service or Microsoft Peer Web Service 3.0 or later FTP Service must be installed. • NetWare 5.x FTP Service For information on each FTP service setting, refer to the user guide provided with the software. SMB server <p>The following OS installed computers provide shared folder function:</p> <ul style="list-style-type: none"> • Windows 95/Windows 98/Windows Me • Windows NT4.0/Windows 2000/ Windows XP/Windows Server 2003 | Customer |

| Item | By |
|--|----------|
| Kerberos Server IP or Name if Remote Authentication is required, likewise DNS Server Address or Domain Name if Kerberos Server Name is used. | Customer |

If problems are encountered during machine setup, refer to the Problem Solving chapter of the User Guide.

Scan using Template Environments

Network

The machine and the computer must be connected to a network and be able to communicate using TCP/IP protocol.

Installation Procedure

To send the scanned document to a server using a template, configure the following settings on the machine:

Network Communication Setup

By using the touch screen, activate the Internet Services (HTTP), FTP Client, or SMB port to [Enabled].

Then, set the IP address.

Workstation Setup

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

Network Communication Setup

NOTE: CentreWare Internet Services can also be used to configure the machine. 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 the required port and then [Change Settings].

Mandatory: [Internet Services (HTTP)]

Using FTP server: [FTP Client]

Using SMB server: [SMB]

NOTE: Select [FTP Client] for CentreWare Scan Services (optional).

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], 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 Subnet Mask.

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.

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: <ul style="list-style-type: none"> • Remote Server IP address • Remote Server Server Name • DNS Address if Host Name is used instead of the IP address name • Remote Server Realm Name | Customer |

When using Scan to email, Kerberos authentication has the following affect 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 affect 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 affect 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 Settings]
5. Select [Authentication System], then select [Change Settings] and choose Kerberos 2000 or Kerberos Solaris.
6. Select [Remote Server Setup], then select [Change Settings] and choose to enter an IP address or Server Name.
7. Select [Remote Server IP Address], then enter the IP address of the Kerberos server.
8. Select [Remote Server Name], then enter the name of the server. DNS information needs to be populated through Internet services.
9. Select [Remote Server Port Number] and enter the port number. The default is Port 88.

- 10.** Select [Remote Server Realm Name] and enter the realm name. This is the fully qualified domain which Kerberos server supports.

Remote Authentication Enablement

- 1.** Connect the machine to the network.
- 2.** Display the [System Settings] screen.
- 3.** Select [Login Setup/Auditron Administration].
- 4.** Select [Remote Login Setup] and select "On" 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/SMB Setup

Information Checklist

Before enabling the feature, make sure that the following items are available or have been performed. If Kerberos has been enabled, refer to *Remote Authentication Setup (If Required)* on page 133

| 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: <ul style="list-style-type: none"> • IP address • Gateway address • Subnet mask • Host name Refer to the Glossary for additional information about the Gateway Address and Subnet mask. | Customer |
| Test the machine to make sure that it is installed fully and functioning correctly. | Customer |
| Set up the FTP or SMB server. FTP server <ul style="list-style-type: none"> • Windows NT4.0 Server, Windows 2000 Server, and Windows Server 2003: Microsoft IIS 3.0 or later FTP Service must be installed. • Windows NT4.0 Workstation and Windows 2000 Professional: Microsoft IIS 3.0 or later FTP Service or Microsoft Peer Web Service 3.0 or later FTP Service must be installed. • NetWare 5.x FTP Service For information on each FTP service setting, refer to the user guide provided with the software. SMB server The following OS installed computers provide shared folder function: <ul style="list-style-type: none"> • Windows 95/Windows 98/Windows Me • Windows NT4.0/Windows 2000/ Windows XP/Windows Server 2003 | Customer |

If problems are encountered during machine setup, refer to the Problem Solving chapter of the User Guide.

Scan to FTP/SMB Environments

Network

The machine and the computer must be connected to a network and be able to communicate using a TCP/IP protocol.

Installation Procedure

To send the scanned document to a server, configure the following settings on the machine:

Network Communication Setup

By using the touch screen, activate the FTP Client or SMB port to [Enabled].
Then, set the IP address.

Workstation Setup

Create a shared folder on your computer.

Network Communication Setup

NOTE: CentreWare Internet Services can also be used to configured the machine. 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 the required port and then [Change Settings].

Using FTP server:[FTP Client]

Using SMB server:[SMB]

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], 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 Setting]. 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 Subnet Mask.

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

You need the folder to store scanned data. Create a folder on your computer, and then enable sharing for the folder.

NOTE: When you use UNC format for SMB, only local access is allowed.

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 – page 139

Information Checklist – page 139

iFax Environments – page 140

iFax Installation – page 140

Installation Procedure – page 140

Network Communication Setup – page 141

Test iFax – page 144

iFax Overview

If the optional Internet Fax Kit is installed 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: <ul style="list-style-type: none">• 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.

NOTE: It is recommended to use Microsoft Outlook Express 5.5/6.0 or Netscape 7 as an E-mail software.

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: CentreWare Internet Services can also be used to configure the machine. 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 Setting] 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 E-mail Address/Host Name]
 - E-mail Address
 - Host Name
 - Domain Name

- [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 Encryption
 - [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
 - [Domain Filter] : if required
 - Domain Filtering
 - Domain 1 - 50
 - [Other Settings]
 - E-mail Receive Protocol
- 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 [Fax/Internet Fax] on the Menu screen.
3. Select [iFax].
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 – page 145

Problems using a NetWare Environment – page 146

Problems using an SMB Environment – page 151

Problems using a UNIX Environment – page 153

Problems using a Windows Environment – page 155

Problems using EtherTalk – page 158

Problems using CentreWare Internet Services – page 160

Problems using E-mail Print/Mail Notice Service/iFax – page 161

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.

Problems using a NetWare Environment

This section explains what to do when problems occur while using NetWare. The causes, confirmation methods, and actions are as follows. If a problem still exists after the corrective action has been performed, follow the *Problem Solving Procedures on page 145* to seek further assistance.

When printing fails – page 146

When a switch off/on message is displayed – page 150

When the required printing result is not obtained – page 150

When there is no notification of error – page 151

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 control character or an equal sign (=) was used in a printer name. | Check whether the machine is activated with the entered name. | Initialize the NV memory from the control panel of the machine, then specify a printer name with characters other than control characters or the equal sign (=). |
| 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. | <Action -1> Re-send the print job to a print queue in which the user name or group name has been registered correctly. |
| | | <Action -2> 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.* |

| Cause | Confirmation Method | Action |
|--|--|--|
| 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.* | <Action -1> Re-send the print job to a print queue in which the user name or group name has been registered correctly.* |
| | | <Action -2> Use NWADMIN or PCONSOLE to register the user name or group name of the job in the print server.* |
| 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. | <Action -1> Re-send the print job to the print queue assigned to the machine.* |
| | | <Action -2> Use NWADMIN or PCONSOLE to assign the target queue to the machine.* |
| 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 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 or PCONSOLE to check whether the starting paper number is the same as that of the print job.* | <Action -1> Use NWADMIN or PCONSOLE to match the [Starting paper] number with the paper number of the print job.* |
| | | <Action -2> Use PCONSOLE to stop the print job. When the paper number is invalid, change the number, then re-send the print job to the print queue. |

| Cause | Confirmation Method | Action |
|--|--|--|
| The data format of the print job does not match the print environment setting of the client. | – | When printing a binary file in the PostScript language, make TBCP valid in the machine. If using Windows on the client, disable Ctrl-D. For details, refer the Windows PRINTER.WRI file. |
| 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 0 or 2. | Enter the following command on the file server console to set the IPX checksum to level 1. Set Enable IPX Checksum = x (x: 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 0 or 3. | Enter the following command on the file server console to set the NCP packet signature to level 1, and then restart the file server. set NCP Packet Signature Option = x (x: 1) |
| The connected server is set over the router when using TCP/IP. | Check whether the router can use multi-cast. | When the router cannot use multi-cast, install the NetWare5 server in the same network using TCP/IP. Then describe the address over the router in the [SYS:\ETC\SLP.CFG] file. |
| The IP address has been expired or has not been found when using the DHCP server. | Use the PING command to check whether the IP address of the machine is available. | Set the IP address. |
| Another printer object has been connected. | Use NWADMIN to check that the object is correctly assigned to the required print server.* | Use the CentreWare Utilities 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 the CentreWare Utilities CD-ROM to specify another machine name. |

| Cause | Confirmation Method | Action |
|--|---|---|
| The NetWare port is not activated. | <Confirmation -1> Print the System Settings List, then check that the port is activated. | <Action -1> Activate the NetWare port. |
| | <Confirmation - 2> 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). | <Action -2> 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).* |
| The default machine name is invalid. | Print the System Settings List, then check that the correct machine name is entered. | Specify the correct machine name (printer server name). |
| 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. |
| The transport protocol of the NetWare port is not specified correctly. | Use CentreWare Internet Services to check that the transport protocol is also specified by the server. | Select the transport protocol that the server specifies. |
| A fault occurred during print processing. | Check the NetWare error of the machine displayed on the control panel. | Switch the machine off and on. |

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. |
| Banner page print is specified for the job. | <Confirmation -1> When printing under the CAPTURE/NPRINT print job configuration, use the SHOW option to check that the banner flag is not specified. | <Action -1> When defining the CAPTURE/ NPRINT print job configuration, specify NOBANNER. |
| | <Confirmation -2> When printing from PCONSOLE under the print job configuration created with PRINTCON, check that the banner page print is available. | <Action -2> Inactivate the banner page print in the print job configuration with PRINTCON. |
| The file server and network are in the overload state. | – | <PServer mode> No action. <RPrinter mode> Extend the duration before timeout. |
| A fault occurred during print processing. | Check the NetWare error displayed on the control panel. | Switch the machine off and on. |

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 NAWADMIN or 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. |
| When sending a job using NPRINT/CAPTURE/PCONSOLE, the NOTIFY option is not specified. | When sending the job using NPRINT/CAPTURE/PCONSOLE, check whether the NOTIFY option has been specified. | When sending the job using NPRINT/CAPTURE/PCONSOLE, specify the NOTIFY option. |

Problems using an SMB Environment

This section explains what to do when a problem occurs while using SMB. The possible causes, confirmation methods, and actions are as follows. If a problem still exists after the corrective action has been performed, follow the *Problem Solving Procedures on page 145* to seek further assistance.

When the machine is not found from client computers – page 152

When printing fails – page 153

When the document cannot be deleted from the printer window – page 153

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. |
| Multiple master browsers exist. | Same as the previous Confirmation Method | When multiple clients are in the same workgroup, set the [Auto Master Mode] item in the SMB setting file [config.txt] to OFF, then switch the power off and on. (Only the System Administrator) |
| The network (subnet) is invalid. | Same as the previous Confirmation Method | Set up the machine and client computers in the same networks. |
| Host name search does not function correctly (with TCP/IP). | Use the PING command, and check that a response is returned when specifying the IP address of the machine, and that no response is returned when specifying the host name. | Check the WINS 1st server, WINS 2nd server, and subnet mask items in the SMB setting file [config.txt], and also check the WINS, DNS, and LMHOST contents in the client. (Only the System Administrator) |
| 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. | Take one of the following actions. <ol style="list-style-type: none"> 1. Change the host name to a different name in the SMB setting file [Config.txt]. 2. Use CentreWare Internet Services to change the host name to a different name. 3. Reset the machine settings to the initial values. (Only the System Administrator) |

When printing fails

| Cause | Confirmation Method | Action |
|--|--|--|
| The machine is processing a print request from another client (only non-spool mode). | Check that the machine has a print job in progress. | 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. In Windows 95/Windows 98/Windows NT 4.0, the write error dialog, which indicates insufficient memory for the waiting print job is displayed. | Wait for a while, send a print request again. Alternatively, increase the [Maximum Sessions] in the SMB setting file [config.txt]. Then switch the power off and on. (Only the System Administrator) |

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. |

Problems using a UNIX Environment

This section explains what to do when a problem occurs while using UNIX. The possible causes, confirmation methods, and actions are as follows. If a problem still exists after the corrective action has been performed, follow the *Problem Solving Procedures on page 145* to seek further assistance.

When printing fails – page 154

When the required printing result is not obtained – page 155

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. | <Action -1> 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. |
| | | <Action -2> 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. |
| 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. |

| Cause | Confirmation Method | Action |
|--|---|--|
| 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. |

Problems using a Windows Environment

This section explains what to do when a problem occurs while using Microsoft Windows OS. The possible causes, confirmation methods, and actions are as follows. If a problem still exists after the corrective action has been performed, follow the *Problem Solving Procedures on page 145* to seek further assistance.

When using Windows 95/Windows 98/Windows Me – page 155

When using Windows NT 4.0/Windows 2000/Windows XP/Windows Server 2003 – page 156

When using Windows 95/Windows 98/Windows Me

When printing fails

The following table explains what action to take when a printer disabled status (network error) or (spool error) is displayed when you click [Start] > [Settings] > [Printers] on your computer.

| 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. |
| 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. |

| Cause | Confirmation Method | Action |
|---|--|---|
| 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. | <Action -1> 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. |
| | | <Action -2> 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. | Write down the error message, switch the machine on and off, and then retry printing. If the problem still exists, contact your Xerox Welcome Center. |
| 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. |

Problems using EtherTalk

This section explains what to do when a problem occurs while using EtherTalk. The possible causes, confirmation methods, and actions are as follows. If a problem still exists after the corrective action has been performed, follow the *Problem Solving Procedures* on page 145 to seek further assistance.

| Cause | Confirmation Method | Action |
|---|--|--|
| The name (or the default name) of the machine has been changed. | Check that the machine name has been changed in Chooser. | Change the name of the machine or the other printer to avoid the same name on the network. |
| The machine does not display in Chooser. | Use a network management software to check that the type of the NBP entity name for the machine has been changed from LaserWriter. | If the type of NBP entity name for the machine has been changed from LaserWriter, the machine cannot be selected in Chooser. If the machine must be selected, open the machine using Apple Share Print Server or Windows Server. |
| | Use a network management software to check that the machine exists on the network. Check that the network is connected correctly. | If the machine cannot be found on the network, the machine may be off or the network cable may be faulty. If the machine is on or the network cable is not faulty, contact the Xerox Welcome Center. |
| Unable to obtain the required print results. | Check that the print language between the machine and the print driver are consistent. | Select the print language correctly. If the print language of the machine is in the dump mode, the data sent from the Macintosh will be printed in hexadecimal notations. |
| | Check the installation procedure for the print driver. Check the print driver which came with the machine displays in Chooser. | Install the print driver correctly. If a print driver of a third party is used, you may have unexpected results. If garbled characters are still printed, contact the Xerox Welcome Center. |

| Cause | Confirmation Method | Action |
|---|---|--|
| The machine is not connected. | Check that the machine is selected in Chooser. If the machine is processing another job, the job must be completed before the machine can be connected. | Select the machine in Chooser. |
| | Check that the EtherTalk port is activated or the machine is in the offline mode. | Activate the port or exit the offline mode. If the machine still cannot be connected, contact the Xerox Welcome Center. |
| Although the machine is connected, the machine does not print. | Check that the machine is switched on, paper jam has occurred in the machine, or the network is faulty. | If the problem remains, contact the Xerox Welcome Center. |
| A message to reboot the machine is displayed on the touch screen. | Check that the EtherTalk function has failed. | Switch the machine off and on. If the message still displays, contact the Xerox Support Center. |

Problems using CentreWare Internet Services

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. If a problem still exists after the corrective action has been performed, follow the *Problem Solving Procedures on page 145* to seek further assistance.

| 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 Status] 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. |
| Clicking the [Apply New Settings] 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. |

| Cause | Confirmation Method | Action |
|--|--|--|
| Clicking the [Apply New Settings] 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. |

Problems using E-mail Print/Mail Notice Service/iFax

This section explains what to do when a problem occurs while using E-mail Print, Mail Notice Service, or iFax feature. The possible causes, confirmation methods, and actions are as follows. If a problem still exists after the corrective action has been performed, follow the *Problem Solving Procedures on page 145* to seek further assistance.

| Cause | Confirmation Method | Action |
|---------------------------------|---|--|
| E-mail Print does not function. | Use the touch screen to check if the E-mail address of the machine is set. | Set the E-mail address of the machine. |
| | Use the touch screen to check if [Receive E-mail] is activated. | Activate [Receive E-mail]. |
| | Use the touch screen to 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 the touch screen to 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 touch screen 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 |
|---|---|---|
| The machine cannot print out PDF data attached to the E-mail. | Check if the machine memory is insufficient. | It is recommended that the additional memory should be installed if you frequently send large PDF data as attachment. |
| Mail Notice Service does not notify the machine status. | Use the touch screen to check if the E-mail address of the machine is set. | Set the E-mail address of the machine. |
| | Use the touch screen to check if [Mail Notice Service] is activated. | Activate [Mail Notice Service]. |
| | Use the touch screen to 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 the touch screen to 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 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. |

16 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. |
| 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. |
| 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. |
| 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 bit maps. 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. |
| SPX | An abbreviation of Sequenced Packet Exchange. SPX is part of NetWare. It make 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. |
| 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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