Xerox DocuPrint Network Printer Series Guide to Configuring and Managing the System

THE DOCUMENT COMPANY
XEROX

Version 7.1
August 2000
721P87461

Xerox Corporation
701 S. Aviation Boulevard
El Segundo, CA 90245

Printed in the United States of America.

Publication number: 721P87461

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Laser safety

Warning: Adjustments, use of controls, or performance of procedures other than those specified herein may result in hazardous light exposure. ⚠

The Xerox DocuPrint printers are certified to comply with the performance standards of the U.S. Department of Health, Education, and Welfare for Class 1 laser products. Class 1 laser products do not emit hazardous radiation. The DocuPrint printers do not emit hazardous radiation because the laser beam is completely enclosed during all modes of customer operation.

The laser danger labels on the system are for Xerox service representatives and are on or near panels or shields that must be removed with a tool. **DO NOT REMOVE LABELED PANELS OR PANELS NEAR LABELS. ONLY XEROX SERVICE REPRESENTATIVES HAVE ACCESS TO THESE PANELS.**

Ozone information

This product produces ozone during normal operation. The amount of ozone produced depends on copy volume. Ozone is heavier than air. The environmental parameters specified in the Xerox installation instructions ensure that concentration levels are within safe limits. If you need additional information concerning ozone, call 1-800-828-6571 to request the Xerox publication 600P83222, *OZONE*.

Operation safety

Your Xerox equipment and supplies have been designed and tested to meet strict safety requirements. They have been approved by safety agencies, and they comply with environmental standards. Please observe the following precautions to ensure your continued safety.

- Always connect equipment to a properly grounded electrical outlet. If in doubt, have the outlet checked by a qualified electrician.

Warning: Improper connection of the equipment grounding conductor may result in risk of electrical shock.

- Never use a ground adapter plug to connect equipment to an electrical outlet that lacks a ground connection terminal.
- Always place equipment on a solid support surface with adequate strength for its weight.
- Always use materials and supplies specifically designed for your Xerox equipment. Use of unsuitable materials may result in poor performance and may create a hazardous situation.
- Never move either the printer or the Printer Controller without first contacting Xerox for approval.
- Never attempt any maintenance that is not specifically described in this documentation.
- Never remove any covers or guards that are fastened with screws. There are no operator-serviceable areas within these covers.
- Never override electrical or mechanical interlocks.
- Never use supplies or cleaning materials for other than their intended purposes. Keep all materials out of the reach of children.
- Never operate the equipment if you notice unusual noises or odors. Disconnect the power cord from the electrical outlet and call service to correct the problem.

If you need any additional safety information concerning the equipment or materials Xerox supplies, call Xerox Product Safety at the following toll-free number in the United States:

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This *Xerox DocuPrint Network Printer Series Guide to Configuring and Managing the System* provides information on how to perform system administration tasks for the DocuPrint NPS.

About this guide

This guide is intended for system administrators who are responsible for setting up and maintaining DocuPrint NPS printers.

Users should have an understanding of Printer Controller operations and, for some tasks, be familiar with basic UNIX commands.

Some of the procedures described in this guide may be performed by the printer operator. For more information on printer operator tasks, refer to *Xerox DocuPrint Network Printer Series Guide to Managing Print Jobs* and the other documents in the Xerox DocuPrint Network Printer Series.

Before using this guide, become familiar with its contents and conventions.

Contents

This section lists the contents of this guide:

- Chapter 1, “Using the system interface,” describes how to access the system at the administrator and operator levels and outlines how to enter commands at the Printer Controller.
- Chapter 2, “Using utility commands,” describes the use of a number of utilities such as backup and restore site files, Configure, and other useful commands.
- Chapter 3, “Starting and stopping the system,” describes how to power on and off the system, and how to start and stop job processing, the sequencer, and the system.
- Chapter 4, “DocuPrint NPS on a Novell network,” contains a brief overview of Novell NetWare, and describes some of the things you must consider before the service representative installs DocuPrint NPS on a Novell network.
- Chapter 5, “Setting system defaults,” provides information on how to set system defaults.
- Chapter 6, “Input and Output profiles,” describes commands used for DocuPrint NPS configured with third party input and output devices.
- Chapter 7, “Setting the Printer Controller date and time,” describes how to set the time on the Printer Controller.

- Chapter 8, “Checking system status and displaying billing meters,” describes how to check status and billing meters.
- Chapter 9, “Managing accounting files and logs,” provides information on how to manage DocuPrint accounting and log files.
- Chapter 10, “Managing fonts,” provides the procedures used to install and maintain fonts on the Printer Controller.
- Chapter 11, “Managing forms,” describes how to print a list and a sample of forms.
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Conventions

This guide uses the following conventions:

- All caps and angle brackets—Within procedures, the names of keys are shown in all caps within angle brackets (for example, press <RETURN>).
- Angle brackets—Variable information, or the position of a specified argument in the command syntax, appears in angle brackets (for example, List Fonts <Pattern>).
- **Bold**—Within procedures, text and numbers that you enter are shown in bold (for example, enter **privilege operator**).
- “Enter”—Within procedures, the two-step process of keying in data and pressing <RETURN> or <ENTER> (for example, enter y).
- *Italics*—Document and library names are shown in italics (for example, the Xerox DocuPrint *Network Printer Series Guide to Configuring and Managing the System*).
- Quotes—Keywords you can enter as arguments appear in quotes (for example, “USLetter”).
- Vertical bars—Alternatives to specified arguments are separated by vertical bars (for example, Set Time <Time | Remote Host Name | IP Address>).

Note: Notes are hints that help you perform a task or understand the text.

Caution: Cautions alert you to an action that could damage hardware or software.

Warning: Warnings alert you to conditions that may affect the safety of people. ⚠

Related publications

The Xerox DocuPrint Network Printer Series includes the following documents:

Decomposition Service and Tools Guide

Guide to Configuring and Managing the System

Guide to Managing Print Jobs

Guide to Performing Routine Maintenance

Guide to Submitting Jobs from the Client

Guide to Using Page Description Language

Installation Planning Guide

Messages Guide

System Overview Guide

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Customer Information Quick Reference Card

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Submitting your Jobs from Macintosh Quick Reference Card

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The documentation set also includes an electronic version, the *DocuPrint NPS Interactive Customer Documentation CD*.

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1. Using the system interface

This chapter describes the user interface for entering commands available to the DocuPrint NPS system administrator or operator. It also identifies commands for changing operator and administrator passwords.

Accessing administrator or operator commands

DocuPrint NPS offers three access levels for Printer Controller commands: user, operator, and administrator. Commands at the administrator and operator levels control most functions of the Printer Controller. There is also a separate access level for your service technician.

Syntax Privilege <Access level> <password>

Arguments <Access level>

Administrator

Allows access to all commands. Requires administrator password.

Operator

Allows access to the subset of commands available to operators. Requires operator password.

No argument or User

Allows access to a limited set of commands that do not allow managing jobs or the system. No password required.

Procedures To access administrator-level commands:

1. At the PS> prompt, enter **privilege administrator.**
2. Enter the administrator password if it is set.

If the PS-admin> prompt is not displayed and you see one or more status messages, press <RETURN> to display the prompt.

To access operator-level commands:

1. At the PS> prompt, enter **privilege operator.**
2. Enter the operator password if it is set.

If the PS-op> prompt is not displayed and you see one or more status messages, press <RETURN> to display the prompt.

Before you leave the system unattended, return to the user level of commands by entering **privilege user** at the prompt.

Listing commands and options

After you have accessed the appropriate level, you can use the DocuPrint Print Service window to enter the commands. For all commands:

- You can enter **?** at the prompt to display all available commands.
- You can enter **?** at any point in a command for more information.

Command shortcuts

You need not enter a command in full—only enough to distinguish it from other commands. For example, you can enter **li doc** for the **List Documents** command. After typing enough characters to make a command word unique, use the space bar to complete the word. After typing enough characters to make a command unique, use the <RETURN> key to execute the command.

Including arguments

Some commands have required or optional arguments. You can enter arguments on the same line as the command. For required arguments, the system will prompt you for the value of each argument if you do not enter it on the command line.

Canceling commands

You can terminate most commands by simultaneously pressing <CONTROL> and <C>.

Change Administrator Password

Use the Change Administrator Password command to change the password used to access the administrator level of commands.

Access level Administrator

Syntax Change Administrator Password

Arguments None. The system prompts you to enter the old, and then a new, Administrator password. The password is not case-sensitive.

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Using remote access (telnet)

You can access the DocuPrint Printer Controller remotely from any client that supports the telnet protocol. You can enter User, Operator or Administrator modes, and use most user interface commands that do not require physical interaction with the system. To establish a telnet connection, refer to your workstation documentation. To log off the remote connection, enter **Quit Connection** or **q.**

You can determine which telnet clients are connected to your Xerox DocuPrint system by entering **List Executives**. An asterisk by the message indicates the client from which you entered the command.

Operators or administrators can set messages to provide information for remote access users.

- Set Status Message—Provides a message when the Show Status command is used, or when remote access users log on. Refer to the chapter “Using utility commands.”
- Broadcast Message to all execs—Sends an immediate message to all logged on remote access users. See the chapter “Using utility commands.”
- Telnet greeting message—An administrator can perform a simple UNIX procedure to set up a message that appears whenever a remote access user logs in. See the chapter “Using Wizard Mode or UNIX shell.”

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2. Using utility commands

This chapter describes utility commands available to the DocuPrint NPS system administrator or operator. You use these commands to perform various tasks: eject floppies or CDs, provide information to remote access users, set feature licensing, and back up and restore site files. The Configure utility allows you to change parameters that are initially set during installation. The modem commands allow you to set up and disable the external modem used by remote service technicians.

Broadcast message to all execs

Use the Broadcast message to all execs command to immediately send a message to all users logged on to the printer controller. This can be useful when you need to perform system maintenance and wish to notify remote access users.

Access level Administrator

Syntax Broadcast Message to all execs

Arguments Enter the text message you wish to broadcast.

Eject CDROM

Use the Eject CDROM command to eject a CD-ROM from the drive.

Access level Administrator

Syntax Eject CDROM

Arguments None

Note: If you need to use the UNIX procedure to mount a CDROM, refer to the chapter “Using Wizard Mode or UNIX shell.”

Eject Floppy

Use the Eject Floppy command to eject a diskette from the diskette drive.

Access level Administrator

Syntax Eject Floppy

Arguments None

Note: If you need to use the UNIX procedure to mount a floppy, refer to the chapter "Using Wizard Mode or UNIX shell."

Format Floppy

Use the Format Floppy command to format a diskette in the diskette drive.

Access level Administrator

Syntax Format Floppy

Arguments None

Copy Documents to Floppy

Use the Copy Documents to Floppy command to copy documents to a floppy diskette. To copy documents:

1. Enter **stop printing**.
2. Put a diskette into the diskette drive.
3. Enter **copy documents to floppy.**

   See the syntax and arguments below.
4. Enter **yes** to confirm the document(s) to be copied and to confirm that the diskette is inserted into the diskette drive.

Any selected documents that have not been completely printed, canceled, or aborted are copied to the diskette in UNIX compressed bar format. A file name is generated for each document as a printerName concatenated with the docID and with a .document extension. An .attrs file is also written for each document. This is an ASCII file showing the document attributes as shown in Service Mode. One additional file named printerName.printerStatus is written to the diskette (an ASCII file of the printer status as shown in Service Mode).

Note: To list the content of the diskette after using the command, enter **bar -tfZ /dev/fd0c** in a UNIX shell window**.** Names listed are in relative paths. To copy the data from the diskette to a hard drive for further processing, enter **bar -xvfZ /dev/fd0c**. The files will be stored in the current working directory.

Access level Administrator

Syntax Copy Documents to Floppy [<docID(s) | custom specification | all>]

Arguments <docID(s)>

The document ID for a specific document (or the range of IDs)

<custom specification>

A custom specification such as sendername=name to copy all the documents with a sendername attribute that matches “name”

<all>

Copies all documents.

Copy Documents to Tape

Use the Copy Documents to Tape command to copy documents to a tape. To copy documents:

1. Enter **stop printing**.
2. Put a tape into the tape drive.
3. Enter **copy documents to tape.**

   See the syntax and arguments below.
4. Enter **yes** to confirm the document(s) to be copied and to confirm that the tape is inserted into the tape drive.

Any selected documents that have not been completely printed, canceled, or aborted are copied to the diskette in UNIX compressed bar format. A file name is generated for each document as a printerName concatenated with the docID and with a .document extension. A .attrs file is also written for each document. This is an ASCII file showing the document attributes as shown in Service Mode. One additional file named printerName.printerStatus is written to the diskette (an ASCII file of the printer status as shown in Service Mode).

Note: To list the content of the tape after using the command, enter **bar -tfZ /dev/rmt/0** in a UNIX shell window**.** Names listed are in relative paths. To copy the data from the diskette to a hard drive for further processing, enter **bar -xvfZ /dev/rmt/0**. The files will be stored in the current working directory.

Access level Administrator

Syntax Copy Documents to Tape [<docID(s) | custom specification | all>]

Arguments <docID(s)>

The document ID for a specific document (or the range of IDs)

<custom specification>

A custom specification such as sendername=name to copy all the documents with a sendername attribute that matches “name”

<all>

Copies all documents.

Examine Document

Use the Examine Document command to display the PDL code of the selected document. Unprintable characters are displayed as a dot. This command does not show binary data.

Access level Administrator

Syntax Examine Document <docID>

Arguments None

Install Remote Update

If your printer controller has a modem, the Xerox service technician can transfer a software update to your system from a remote site. Use the Install Remote Update command to initiate the installation process.

Access Level Administrator

Syntax Install Remote Update

Arguments None

Install Update from Floppy

Use the Install Update from Floppy command to install software upgrades from diskettes.

Access level Administrator

Syntax Install Update From Floppy

Arguments None

Install Update from CDROM

Use the Install Update from CDROM command to install software upgrades from CDROMs.

Access level Administrator

Syntax Install Update from CDROM

Arguments None

Backup Site Files

Use the Backup Site Files command to store a copy of the files that may have been customized for your local site on diskette or tape. The files backed up include /var/db/forms and /usr/xgfc/.

Access level Administrator

Syntax Backup Site Files

Arguments None

Caution: The Backup Site Files command will not save unique customer files such as fonts. Use the UNIX tar command to back up these files. Do not use the PCFS commands, because an extension with more than three characters can result in overwriting your existing files.

Restore Site Files

Use the Restore Site Files command to restore site files from the diskette or tape you created using the Backup Site Files command.

Access level Administrator

Syntax Restore Site Files

Arguments None

Note: The system must be restarted for restored files to be recognized, even though it may appear that restored items are active.

Backup Xerox Files

Use the Backup Xerox Files command to store a copy of your Xerox files on diskette or tape. The files backed up do not include /var/db/forms and /usr/xgfc/.

Access level Administrator

Syntax Backup Xerox Files

Arguments None

Caution: The Backup Xerox Files command will not save unique customer files such as fonts. Use the UNIX tar command to back up these files. Do not use the PCFS commands, because an extension with more than three characters can result in overwriting your existing files.

Restore Xerox Files

Use the Restore Xerox Files command to restore Xerox files from the diskette or tape you created using the Backup Xerox Files command.

Access level Administrator

Syntax Restore Xerox Files

Arguments None

Note: The system must be restarted for restored files to be recognized, even though it may appear that restored items are active.

Backup Virtual Printer List

Use the Backup Virtual Printer List command to store a copy of your virtual printer configuration on diskette or tape.

Access level Administrator

Syntax Backup Virtual Printer List

Arguments None

Restore Virtual Printer List

Use the Restore Virtual Printer List command to restore your virtual printer configuration from the diskette or tape you created using the Backup Virtual Printer List command.

Access level Administrator

Syntax Restore Virtual Printer List

Arguments None

Set Status Message

Use the Set Status Message command to display a message to users each time they access the controller remotely via telnet, or when they use the Show Status command.

Access level Administrator or operator

Syntax Set Status Message <Message>

Arguments <Message>

Enter status message to be displayed to users at login. The message cannot contain linefeeds or carriage returns, but can contain quotation marks.

Note: The command is not available via remote telnet access. It must be entered at the printer controller.

Show Host ID

The Show Host ID command shows the host ID in hexadecimal format. This may be needed when installing licensed software packages such as VIPP.

Access level Administrator

Syntax Show HostID

Arguments None

DocuPrint NPS licensing

Your DocuPrint NPS system utilizes a software licensing string to enable the NPS printing function. If software is not licensed, queueing is disabled, and the system will not receive jobs for printing.

There are other software packages that require licensing. VIPP software requires licensing for production mode. There are several levels of diagnostics packages available for the DocuPrint 180 NPS; each package requires an enabling license. If you do not have the required license, an error message will be displayed.

The Show License Status command displays the number of days that remain until the licensed software expires. If a license has not been installed, or is due to expire in 30 days, a message is displayed when you use the Show Status command using Administrator privilege.

Note: If you have a question about license expiration dates, contact your Xerox representative.

Two commands are available to facilitate licensing. Use the Install Feature License command if you will install the license by entering information at the user interface. Use the Install FlexLicense from Floppy command if you will install the license by using licensing information on a key diskette.

Note: In most cases, the licensing procedure will be performed by a Xerox representative. In the event that you assist with loading, the license information will be provided to you via one of the following methods: e-mail, fax, telephone, or floppy.

Install Feature License

Use the Install Feature License command to install the license by entering information at the user interface.

Access level Administrator

Syntax Install Feature License <Name> <Expiration Date> <Key> <IOT Serial No> <HostID>

Arguments

<Name>

Name of the package to be licensed. For example, XRX_iotdiag_basic unlocks the basic diagnostics package for the Model 180. The license name is case-sensitive and must be entered exactly as provided.

<Expiration Date>

Date the license for your package expires. For example, 07-Mar-2023.

<Key>

Alphanumeric string used to unlock the package. This number is unique for your system's host ID. An example of the key is: XX64FA01XF3EC528X917

<IOT Serial No>

Serial number for your printer (IOT). Used only for diagnostic licensing, but not for NPS or VIPP software licensing. An example of the IOT serial number is:7800205. The number of digits in the serial number will vary depending on the country.

<HostID>

Host ID for your system in hex, as displayed using the Show HostID command. An example of a Host ID number is 8088871e. The system will insert this number automatically.

The following example shows license strings for DocuPrint IPS and NPS software, as well as value-added diagnostics for a model 180.

Table 2-1. **Example license string**

```
####################################
# Xerox License String File © 1998 #
####################################
# Created for Xerox Limited on 01-Jun-1998 by Robert Harper
# Contact: Richard Lande at (44 ) 555386624
# [WBLT output for LicID 135, HOSTID=8088879e, CustProdID 177]
# XRX_NPS_software Feature on Product 180NPS, exp. 07-Mar-2023
FEATURE XRX_NPS_software xeroxpswd 1.000 07-Mar-2023 0 AB64FA01CF3EC528X917
HOSTID=8088871e
# XRX_iotdiag_valueadded Feature on Product 180NPS, exp. 07-Mar-2023
FEATURE XRX_iotdiag_valueadded xeroxpswd 1.000 07-Mar-2023 0 1B442AD17C7EB5D57B10
VENDOR_STRING=7800205 HOSTID=8088871e
```

Install FlexLicense from Floppy

Use the Install FlexLicense from Floppy command to install the license by using licensing information on a key diskette.

Access level Administrator

Syntax Install FlexLicense from Floppy

Arguments None

Show License Status

Use the Show License Status command to display the number of days remaining on the license for each software package installed on your system.

Access level Administrator, Operator

Syntax Show License Status

Arguments None

Table 2-2. **Example license status display**

```
PS-Op> show license status
XRX_VIPP_software          License will expire in 305 days.
XRX_iotdiag_valueadded   License will expire in 247 days.
XRX_NPS_software           License will expire in 247 days.
```

Install License command

This command is used for VIPP licensing prior to DocuPrint NPS release 1.6. **It is no longer used.**

Access level Administrator

Syntax Install License <v1> <v2> <v3> <v4>

Arguments Values for license. Enter each value when prompted. These values are case sensitive and are valid only in the DocuPrint for which they were issued.

Using the Configure utility

The Configure utility allows you to review and update the configuration of your DocuPrint NPS. Most configuration values supplied during installation can be viewed, printed, and modified long after the installation is complete. Configuration values can also be saved on a diskette for later restoration. When you restore values, the system is automatically reconfigured based on the restored values.

You access the Configure utility at the PS-Admin> prompt **Configure.** You will be prompted for the appropriate password.

You can also access this utility in Wizard Mode or from the UNIX shell when you enter **Configure.**

Access level Administrator

Syntax Configure

You will be prompted to enter the UNIX superuser password.

Arguments A list of menu options appears. Enter your selection at the prompt.

1. Print report of installation questions and answers for this DocuPrint.
2. Print report of all configuration parameter values.
3. Review standard installation questions and change answers to some or all.
4. Review key system parameters and change values.
5. View and change individual parameter values.
6. Re-initialize some or all of the DocuPrint software.
7. Back up current configuration values.
8. Restore configuration values from previous backup.
9. Exit the configuration program.

Changeable parameters

The Configure utility enables you to change the parameters shown in the table below. Refer to the table when changing individual parameters (Option 5).

- The column titled “Best option” shows the best option to use in configuring that parameter.
- All parameters can be changed using Option 5. If “5” is shown as the best option, it is the only option for changing that particular parameter.
- **Parameters in boldface type** must be set to “Y” to enable that package. The TCP/IP package is always enabled.

Table 2-3. **Changeable parameters using Configure**

Package	Parameter	Best Option	Purpose of Parameter
Appletalk	**appletalk.enable**	3	Enables receipt of jobs via AppleTalk PAP
	appletalk.forcePS	3	Jobs received via AppleTalk will always be interpreted as PS
	appletalk.netdevice	3	Specifies device on which to run AppleTalk
	appletalk.phase	3	Phase of the AppleTalk Network
	appletalk.zone	3	Zone name of the (phase 2) AppleTalk Network
“driver” package	driver.iotboard	4	XEPI or DCIM—refers to the type of S-bus interface board installed in the DocuPrint controller for interfacing with the printer
jpm	jpm.accounting.format	5	Specifies the format version used for the docuprint_accounting log; can be “2” or “3”.
	jpm.purge	3	Enables automatic Dump Accounting
	jpm.purge.delay	3	# of days to retain information in jpm database
	jpm.purge.save	3	Saves attribute data purged from jpm into a log file
jtprescan	**jtprescan.enable**	3	Enables Xerox Job Ticket Processing (necessary for Xerox print client, MS Windows client, Windows DocuPrint driver)
lpd	**lpd.enable**	3	Enables receipt of jobs sent via lpr command
	lpd.nonstandard-timeout	3	Enables use of lpd timeout other than default of 60 seconds
	lpd.nonstandard-timeout.value	3	Alternate timeout value in seconds
maint	maint.savecore	3	Automatically compresses and saves any core files for debugging purposes
	maint.savecore.maxcore	3	Maximum disk space in MB occupied by saved core files
	maint.savecrash	3	Saves the system state at the time of a system crash. Crash dumps are saved in /var/crash.

Table 2-3. **Changeable parameters using Configure**

Package	Parameter	Best Option	Purpose of Parameter
Novell	**novell.pserver**	3	Enables Print Server function on DocuPrint NPS
	novell.pserver.fs	3	Name of Novell File Server to which DocuPrint's Print Server attaches
	novell.pserver.name	3	Name of DocuPrint's Print Server
	novell.pserver.passwd	3	Password of DocuPrint's Print Server for attaching to Novell File Server
	novell.pserver.queue	3	Novell queue name from which DocuPrint Print Server receives jobs
	novell.rprinter	3	Enables Remote Printer function on DocuPrint NPS
	novell.rprinter.ps	3	Name of Novell Print Server to which DocuPrint's Remote Printer attaches
	novell.external	3	Number of Novell network to which this DocuPrint is physically connected
	novell.framing	3	Ethernet Frame type on Novell network
	novell.internal	3	Network number assigned to the DocuPrint server itself
prtcon	**prtcon.cmdtool**	3	Places a cmdtool option in the OpenWindows menu (Background UNIX shell)
sequencer	**sequencer.attempts**	3	Number of times Sequencer can Restart before current job is Held
	sequencer.reserve-pages	3	Size in MB of /var/db/reserve_pages
SNMP	snmp.enable	3	Enables SNMP agent support
tcpip	tcpip.dns	5	Enables use of Domain Name System
	tcpip.enablemulti-devices	3	Enables TCP/IP on multiple devices
	tcpip.extradevices	3	Specifies devices for the tcpip.extradevices parameter
	tcpip.ipaddress.device	3	Specifies IP addresses for the extra devices
	tcpip.ftp	3	Enables use of File Transfer Protocol to the DocuPrint Server (necessary for downloading new Xerox print client)
	tcpip.netmask.device	3	Specifies net masks for the extra devices
	tcpip.neton	5	Enables general TCP/IP access to the DocuPrint NPS (weakens security; not recommended, incompatible with xclient)
	tcpip.ntp	5	Enables use of Network Time Protocol
	tcpip.router	3	IP address of local TCP/IP router

Table 2-3. **Changeable parameters using Configure**

Package	Parameter	Best Option	Purpose of Parameter
xclient	**xclient.enable**	3	Enables use of the DocuPrint print client
xipp	**xipp.enable**	3	Enables special XIPP prescan filter for use with Xerox Documents on Demand (XDOD)
system	ACOPaper	5	ACO market region can use either US or metric sized paper
	FontDisk	4	Places /imagerfonts on this disk number
	FormsDisk	4	Places /var/db/forms and the VIPP (XGF) customer-installed files in /usr/xgf on this disk number
	HostName	4	TCP/IP hostname
	IOT	4	4050, 4090, 4850, 4890, DP96, 4635, 4180, 92C (Changing this parameter is not supported.)
	IPAddress	4	IP Address of DocuPrint server
	MarketRegion	4	USCO, XCI, RX, or ACO
	NetDevice	4	Ethernet=le0, le1, le2; Token Ring=tr0, tr1, tr2; 100MB Ethernet=hme0, hme1, hme2; Fiber Optic FDDI=nf0, nf1, nf2
	Netmask	3	TCP/IP netmask
	PrinterName	4	Default PrinterName
	ReservePagesDisk	4	Places /var/db/reserve_pages on this disk number
	SpoolDisk	4	Places /var/spool on this disk number
	TimeZone	4	Timezone from /usr/share/lib/zoneinfo

Options

The Configure utility provides the following options.

Printing Configuration Reports: Options 1 and 2

Options 1 and 2 print two different types of configuration reports:

- Option 1: Prints a report of the routine installation questions, with the answers given.
- Option 2: Prints a report of all the configuration parameters with their names and values.

The parameters are grouped by package (a package is a named piece of the DocuPrint software). The parameters at the end of the list are in a special category called System Parameters. These are parameters of the entire system, such as the IOT type. Each parameter in this report has a name (such as FontDisk or tcpip.ftp) that you use if you want to change the value with Option 5. Each

value is enclosed in double-quotation marks. A series of pound signs appears instead of the password values.

When you select Option 1 or 2, Configure prepares a report and submits it to the JPM for printing. At least one tray must also be set, and queueing and printing must be turned on in order for a report to print. The report will be delivered to the sample tray. If queueing is turned off, you will receive a cryptic error message instead.

Reviewing Questions and Answers: Options 3 and 4

Routine configuration values are supplied in answer to questions posed during the installation process. If you decide to change one of the values on the report printed by Option 1, use Option 3 or 4 as follows:

- Option 3: Review or change standard installation questions. When you choose this option, you are asked if you want to review all the questions. If you enter **n**, you will be asked for the name of a package (a package is a named piece of the DocuPrint software) from a list. For example, select Novell to review only the Novell questions. Each question is presented along with the current answer in brackets: [Y].
  - To keep the current answer, select <ENTER>. If, however, you have an Appletalk Phase 2 network and you want to retain the old zone name, you must retype it when you are prompted for an AppleTalk zone name. Otherwise, you will produce an empty zone name.
  - To change the value, enter a new answer. You can enter **?** for helpful information about the parameter. If you make any changes, you will be presented with the list of affected packages and asked to confirm the changes. If you enter **y**, the system will be reconfigured and you will be asked to reboot.
- Option 4: Review or change key system parameters. When you choose this option, you are presented with the questions for key system parameters such as the IP address. Each question is presented along with the current answer in brackets: [Y].
- To keep the current answer, select <ENTER>.
- To change the value, enter a new answer. Enter **?** for helpful information about the parameter. If you make any changes, you will be presented with the list of affected packages and asked to confirm the changes. If you enter **y**, the system will be reconfigured and you will be asked to reboot.

Editing Individual Parameters: Option 5

All parameters can be changed using Option 5. (Routine parameters can be changed by using Options 3 or 4.)

When you select Option 5 you see a list of parameter names and values, grouped by package name as in the report printed by Option 2. Like the printed report, a series of pound signs will appear instead of the password values. A command prompt displays after the names and values are displayed. You can enter any of the following commands:

? Display the list of commands.

D Redisplay the list of all parameters and values.

DP Display the list of parameters and values for a particular package only.

M Modify the value of any parameter.

H Display helpful information about any parameter.

C Commit any changes made to values.

Q Quit.

The following guidelines apply:

- You can change the value of any number of parameters, then commit all the changes at once. The relevant parts of the system are reconfigured when you commit the changes.
- The display produced by the D or DP commands places an asterisk next to values that have been changed.
- When you enter the H or M commands, you are asked for a parameter name. Enter the name exactly as it appears in the list.
- Most parameter names begin with the name of a package, and many have multiple parts separated by periods (such as tcpip.ftp or maint.savecore.maxcore).
- After you have given a value for a parameter, you may be prompted for values that are needed based on the value just supplied.
- Not all of the parameters are useful. Some parameters may not have any effect unless another parameter is set to a particular value (for example, the Novell parameters do not have any effect unless novell.rprinter or novell.pserver is set to “Y”).

Caution: Some parameters may have harmful effects if certain steps are not taken. Read any instructions that are presented very carefully. Note that the IOT type cannot be changed. ⃠

Reinitializing Software: Option 6

If something on the DocuPrint NPS system (for instance, the Job Pool Manager database) becomes corrupted in ways that the automatic repair software cannot detect or process, you may be able to repair the problem by reinitializing the software.

Caution: Reinitializing the software can result in the permanent loss of customer data such as data in the Job Pool Manager, virtual printer definitions, option values, and so forth. Do not use the reinitialize option without careful consideration. Try rebooting to verify that the problem still exists before you reinitialize. ⃠

Note: If you really do have a software corruption problem, reinitializing may not repair it. Some problems can be repaired only by reinstalling the software directly from the original media (CD-ROM).

To reinitialize the software:

1. Select Option 6.
2. To reinitialize just one package, enter **n** (the default).
3. Select the name of a package from the list presented, or select <ENTER> to return to the menu.

Saving and Restoring Values: Options 7 and 8

To back up the values of the configuration parameters, you must have a formatted diskette available to dedicate only to the backup. It is a good idea to keep copies of the printed reports along with the backup diskette.

To create a backup diskette, perform the following:

1. Insert the diskette.
2. Select Option 7 and follow the prompts.

To restore from a backup diskette, perform the following:

1. Insert the diskette.
2. Select Option 8 and follow the prompts.

After the data are retrieved from the diskette, the system will be reconfigured based on the restored values.

1. Reboot the system.
2. To leave Configure, select Option 9 from the menu.
   If you selected Option 5, enter **Q** to return to the main menu, then select Option 9.

Note: Whenever the system is reconfigured, Configure will terminate with a message instructing you to reboot. Be sure to restart the system as directed.

Configure Utility example for changing the hostname

To change the TCP/IP hostname for your system:

1. At the PS-Admin> prompt, enter Configure.
2. Enter **stop queueing** and wait for any print jobs in progress to complete.
3. Enter the superuser password at the prompt.
4. Select Option 4.
5. Select enter for any question that is not about the hostname to retain the previous answer.
6. Enter a new host name when prompted.
7. Enter **y** to confirm the change and reconfigure the system.
8. Enter **restart system.**

Recovering the Job Pool Manager database

The Job Pool Manager is software that manages the database for the jobs. If you see any of the following messages, the database may have become corrupt:

- Message in the DocuPrint Print Service window, after you enter the List Documents command:

  ***RPC error SunRPCBinding error contacting Job Pool Manager: requested service not available

- Message in the Printing Activity Log Window:

  ***Error: SunRPCBinding.Error[requested service not available]

- Messages in the log, /var/log/DocuPrint:

  ...ALERT Job Pool Manager: Unrecoverable Database error...

  The Job Pool Manager automatically recovers by replacing the corrupted database with a new one. After the recovery, execute the Set Tray and Start Queueing commands, even if the Show Status command indicates the tray setting is normal.

If the Job Pool Manager cannot successfully recover, you can follow these steps to recover the database:

1. At the PS-admin> prompt in the DocuPrint Print Service window, enter **Configure.**
2. Enter the superuser password when prompted.
3. Select Option 6.
4. Enter **n** when prompted so as not to initialize all values.
5. Enter **jpm** when prompted for which package.
6. Enter **Y** when prompted “Are you sure you want to re-initialize ’jpm’.”
7. Enter **restart system**.

Enabling and disabling remote service

If your site is set up to use the external modem for service by remote technicians, you need to enable the modem so that the technician can dial into your system. Prior to enabling the modem, be sure to use the Stop All command so that printing and queueing are stopped during the remote service session.

When the remote service session is complete, you can disable the modem and enter the Start All command to resume printing and queueing.

If security is a concern, the modem can be turned off and the cable can be physically disconnected from the system when it is not being used.

Note: Depending on the commands used by the technician, the printer may start up during the remote service session. You should not attempt to operate the system or perform any tasks at the printer during the remote service session. Ensure that everyone working in the printer area knows that the system is undergoing service and that they should not attempt to work with the printer.

Enable modem

After you use the Stop All command to stop printing and queueing, use the Enable Modem command so that the technician can dial into your system.

Note: You may need to physically connect the modem cable and power on the modem prior to enabling it. Connect the modem cable to the A port on the back of the processor.

Ensure that the telephone line is connected to the modem and to the telephone jack.

The modem power cable must be connected to a power outlet and the modem must be powered on.

Access level Administrator

Syntax Enable modem

You will be prompted to enter the Unix root password.

Arguments None

Modem switch settings

On the bottom of the modem are DIP switches that must be properly set for the modem to function. The recommended settings for the US Robotics Courier V.Everything modem are:

Table 2-4. **Modem DIP switch settings**

Switch	Setting	Position
1	OFF	UP
2	OFF	UP
3	ON	DOWN
4	OFF	UP
5	OFF	UP
6	OFF	UP
7	OFF	UP
8	ON	DOWN
9	ON	DOWN
10	OFF	UP

Disable modem

Use the Disable Modem command to disable Port A for incoming calls. This command terminates the existing modem connection and refuses any future connection. After you use the Disable Modem command, use the Start All command to start printing and queueing.

Access level Administrator

Syntax Disable Modem

You will be prompted to enter the Unix root password.

Arguments None

Note: If it is the policy at your site to disconnect the modem for security reasons, power off the modem and, if required, physically disconnect the modem cable from your system once the remote session is complete.

Enable Remote Shell

If the Xerox service technician requires access to the UNIX shell on your printer controller while servicing it via the modem, you will need to enter this command.

Access level Administrator

Syntax Enable Remote Shell

You will be prompted to enter the Unix root password.

Arguments None

Disable Remote Shell

Use this command to disable access to the UNIX shell once the Xerox service technician has completed the remote service session.

Access level Administrator

Syntax Disable Remote Shell

You will be prompted to enter the Unix root password.

Arguments None

Print Documents from Floppy

Use the Print Documents from Floppy command to print a PCL, PostScript, or ASCII file stored on a DOS-formatted diskette.

Access level Administrator

Syntax Print Documents from Floppy <file(s)> <copies> <plex> <media> <VP>

Arguments <file(s)>

Specifies the name of the document you want to print.

<copies>

Specifies the number of copies to print.

<plex>

Specifies simplex, duplex, or tumbleduplex.

<media>

Specifies the media in the format size:type:color:weight.

<VP>

Specifies the name of the virtual printer to use.

Note: This command cannot be used to print a document that was copied to the diskette with the Copy Document to Floppy command.

2. Using utility commands

This chapter describes utility commands available to the DocuPrint NPS system administrator or operator. You use these commands to perform various tasks: eject floppies or CDs, provide information to remote access users, set feature licensing, and back up and restore site files. The Configure utility allows you to change parameters that are initially set during installation. The modem commands allow you to set up and disable the external modem used by remote service technicians.

Broadcast message to all execs

Use the Broadcast message to all execs command to immediately send a message to all users logged on to the printer controller. This can be useful when you need to perform system maintenance and wish to notify remote access users.

Access level Administrator

Syntax Broadcast Message to all execs

Arguments Enter the text message you wish to broadcast.

Eject CDROM

Use the Eject CDROM command to eject a CD-ROM from the drive.

Access level Administrator

Syntax Eject CDROM

Arguments None

Note: If you need to use the UNIX procedure to mount a CDROM, refer to the chapter “Using Wizard Mode or UNIX shell.”

Eject Floppy

Use the Eject Floppy command to eject a diskette from the diskette drive.

Access level Administrator

Syntax Eject Floppy

Arguments None

Note: If you need to use the UNIX procedure to mount a floppy, refer to the chapter "Using Wizard Mode or UNIX shell."

Format Floppy

Use the Format Floppy command to format a diskette in the diskette drive.

Access level Administrator

Syntax Format Floppy

Arguments None

Copy Documents to Floppy

Use the Copy Documents to Floppy command to copy documents to a floppy diskette. To copy documents:

1. Enter **stop printing**.
2. Put a diskette into the diskette drive.
3. Enter **copy documents to floppy.**

   See the syntax and arguments below.
4. Enter **yes** to confirm the document(s) to be copied and to confirm that the diskette is inserted into the diskette drive.

Any selected documents that have not been completely printed, canceled, or aborted are copied to the diskette in UNIX compressed bar format. A file name is generated for each document as a printerName concatenated with the docID and with a .document extension. An .attrs file is also written for each document. This is an ASCII file showing the document attributes as shown in Service Mode. One additional file named printerName.printerStatus is written to the diskette (an ASCII file of the printer status as shown in Service Mode).

Note: To list the content of the diskette after using the command, enter **bar -tfZ /dev/fd0c** in a UNIX shell window**.** Names listed are in relative paths. To copy the data from the diskette to a hard drive for further processing, enter **bar -xvfZ /dev/fd0c**. The files will be stored in the current working directory.

Access level Administrator

Syntax Copy Documents to Floppy [<docID(s) | custom specification | all>]

Arguments <docID(s)>

The document ID for a specific document (or the range of IDs)

<custom specification>

A custom specification such as sendername=name to copy all the documents with a sendername attribute that matches “name”

<all>

Copies all documents.

Copy Documents to Tape

Use the Copy Documents to Tape command to copy documents to a tape. To copy documents:

1. Enter **stop printing**.
2. Put a tape into the tape drive.
3. Enter **copy documents to tape.**

   See the syntax and arguments below.
4. Enter **yes** to confirm the document(s) to be copied and to confirm that the tape is inserted into the tape drive.

Any selected documents that have not been completely printed, canceled, or aborted are copied to the diskette in UNIX compressed bar format. A file name is generated for each document as a printerName concatenated with the docID and with a .document extension. A .attrs file is also written for each document. This is an ASCII file showing the document attributes as shown in Service Mode. One additional file named printerName.printerStatus is written to the diskette (an ASCII file of the printer status as shown in Service Mode).

Note: To list the content of the tape after using the command, enter **bar -tfZ /dev/rmt/0** in a UNIX shell window**.** Names listed are in relative paths. To copy the data from the diskette to a hard drive for further processing, enter **bar -xvfZ /dev/rmt/0**. The files will be stored in the current working directory.

Access level Administrator

Syntax Copy Documents to Tape [<docID(s) | custom specification | all>]

Arguments <docID(s)>

The document ID for a specific document (or the range of IDs)

<custom specification>

A custom specification such as sendername=name to copy all the documents with a sendername attribute that matches “name”

<all>

Copies all documents.

Examine Document

Use the Examine Document command to display the PDL code of the selected document. Unprintable characters are displayed as a dot. This command does not show binary data.

Access level Administrator

Syntax Examine Document <docID>

Arguments None

Install Remote Update

If your printer controller has a modem, the Xerox service technician can transfer a software update to your system from a remote site. Use the Install Remote Update command to initiate the installation process.

Access Level Administrator

Syntax Install Remote Update

Arguments None

Install Update from Floppy

Use the Install Update from Floppy command to install software upgrades from diskettes.

Access level Administrator

Syntax Install Update From Floppy

Arguments None

Install Update from CDROM

Use the Install Update from CDROM command to install software upgrades from CDROMs.

Access level Administrator

Syntax Install Update from CDROM

Arguments None

Backup Site Files

Use the Backup Site Files command to store a copy of the files that may have been customized for your local site on diskette or tape. The files backed up include /var/db/forms and /usr/xgfc/.

Access level Administrator

Syntax Backup Site Files

Arguments None

Caution: The Backup Site Files command will not save unique customer files such as fonts. Use the UNIX tar command to back up these files. Do not use the PCFS commands, because an extension with more than three characters can result in overwriting your existing files.

Restore Site Files

Use the Restore Site Files command to restore site files from the diskette or tape you created using the Backup Site Files command.

Access level Administrator

Syntax Restore Site Files

Arguments None

Note: The system must be restarted for restored files to be recognized, even though it may appear that restored items are active.

Backup Xerox Files

Use the Backup Xerox Files command to store a copy of your Xerox files on diskette or tape. The files backed up do not include /var/db/forms and /usr/xgfc/.

Access level Administrator

Syntax Backup Xerox Files

Arguments None

Caution: The Backup Xerox Files command will not save unique customer files such as fonts. Use the UNIX tar command to back up these files. Do not use the PCFS commands, because an extension with more than three characters can result in overwriting your existing files.

Restore Xerox Files

Use the Restore Xerox Files command to restore Xerox files from the diskette or tape you created using the Backup Xerox Files command.

Access level Administrator

Syntax Restore Xerox Files

Arguments None

Note: The system must be restarted for restored files to be recognized, even though it may appear that restored items are active.

Backup Virtual Printer List

Use the Backup Virtual Printer List command to store a copy of your virtual printer configuration on diskette or tape.

Access level Administrator

Syntax Backup Virtual Printer List

Arguments None

Restore Virtual Printer List

Use the Restore Virtual Printer List command to restore your virtual printer configuration from the diskette or tape you created using the Backup Virtual Printer List command.

Access level Administrator

Syntax Restore Virtual Printer List

Arguments None

Set Status Message

Use the Set Status Message command to display a message to users each time they access the controller remotely via telnet, or when they use the Show Status command.

Access level Administrator or operator

Syntax Set Status Message <Message>

Arguments <Message>

Enter status message to be displayed to users at login. The message cannot contain linefeeds or carriage returns, but can contain quotation marks.

Note: The command is not available via remote telnet access. It must be entered at the printer controller.

Show Host ID

The Show Host ID command shows the host ID in hexadecimal format. This may be needed when installing licensed software packages such as VIPP.

Access level Administrator

Syntax Show HostID

Arguments None

DocuPrint NPS licensing

Your DocuPrint NPS system utilizes a software licensing string to enable the NPS printing function. If software is not licensed, queueing is disabled, and the system will not receive jobs for printing.

There are other software packages that require licensing. VIPP software requires licensing for production mode. There are several levels of diagnostics packages available for the DocuPrint 180 NPS; each package requires an enabling license. If you do not have the required license, an error message will be displayed.

The Show License Status command displays the number of days that remain until the licensed software expires. If a license has not been installed, or is due to expire in 30 days, a message is displayed when you use the Show Status command using Administrator privilege.

Note: If you have a question about license expiration dates, contact your Xerox representative.

Two commands are available to facilitate licensing. Use the Install Feature License command if you will install the license by entering information at the user interface. Use the Install FlexLicense from Floppy command if you will install the license by using licensing information on a key diskette.

Note: In most cases, the licensing procedure will be performed by a Xerox representative. In the event that you assist with loading, the license information will be provided to you via one of the following methods: e-mail, fax, telephone, or floppy.

Install Feature License

Use the Install Feature License command to install the license by entering information at the user interface.

Access level Administrator

Syntax Install Feature License <Name> <Expiration Date> <Key> <IOT Serial No> <HostID>

Arguments

<Name>

Name of the package to be licensed. For example, XRX_iotdiag_basic unlocks the basic diagnostics package for the Model 180. The license name is case-sensitive and must be entered exactly as provided.

<Expiration Date>

Date the license for your package expires. For example, 07-Mar-2023.

<Key>

Alphanumeric string used to unlock the package. This number is unique for your system's host ID. An example of the key is: XX64FA01XF3EC528X917

<IOT Serial No>

Serial number for your printer (IOT). Used only for diagnostic licensing, but not for NPS or VIPP software licensing. An example of the IOT serial number is:7800205. The number of digits in the serial number will vary depending on the country.

<HostID>

Host ID for your system in hex, as displayed using the Show HostID command. An example of a Host ID number is 8088871e. The system will insert this number automatically.

The following example shows license strings for DocuPrint IPS and NPS software, as well as value-added diagnostics for a model 180.

Table 2-1. **Example license string**

```
####################################
# Xerox License String File © 1998 #
####################################
# Created for Xerox Limited on 01-Jun-1998 by Robert Harper
# Contact: Richard Lande at (44 ) 555386624
# [WBLT output for LicID 135, HOSTID=8088879e, CustProdID 177]
# XRX_NPS_software Feature on Product 180NPS, exp. 07-Mar-2023
FEATURE XRX_NPS_software xeroxpswd 1.000 07-Mar-2023 0 AB64FA01CF3EC528X917
HOSTID=8088871e
# XRX_iotdiag_valueadded Feature on Product 180NPS, exp. 07-Mar-2023
FEATURE XRX_iotdiag_valueadded xeroxpswd 1.000 07-Mar-2023 0 1B442AD17C7EB5D57B10
VENDOR_STRING=7800205 HOSTID=8088871e
```

Install FlexLicense from Floppy

Use the Install FlexLicense from Floppy command to install the license by using licensing information on a key diskette.

Access level Administrator

Syntax Install FlexLicense from Floppy

Arguments None

Show License Status

Use the Show License Status command to display the number of days remaining on the license for each software package installed on your system.

Access level Administrator, Operator

Syntax Show License Status

Arguments None

Table 2-2. **Example license status display**

```
PS-Op> show license status
XRX_VIPP_software          License will expire in 305 days.
XRX_iotdiag_valueadded   License will expire in 247 days.
XRX_NPS_software           License will expire in 247 days.
```

Install License command

This command is used for VIPP licensing prior to DocuPrint NPS release 1.6. **It is no longer used.**

Access level Administrator

Syntax Install License <v1> <v2> <v3> <v4>

Arguments Values for license. Enter each value when prompted. These values are case sensitive and are valid only in the DocuPrint for which they were issued.

Using the Configure utility

The Configure utility allows you to review and update the configuration of your DocuPrint NPS. Most configuration values supplied during installation can be viewed, printed, and modified long after the installation is complete. Configuration values can also be saved on a diskette for later restoration. When you restore values, the system is automatically reconfigured based on the restored values.

You access the Configure utility at the PS-Admin> prompt **Configure.** You will be prompted for the appropriate password.

You can also access this utility in Wizard Mode or from the UNIX shell when you enter **Configure.**

Access level Administrator

Syntax Configure

You will be prompted to enter the UNIX superuser password.

Arguments A list of menu options appears. Enter your selection at the prompt.

1. Print report of installation questions and answers for this DocuPrint.
2. Print report of all configuration parameter values.
3. Review standard installation questions and change answers to some or all.
4. Review key system parameters and change values.
5. View and change individual parameter values.
6. Re-initialize some or all of the DocuPrint software.
7. Back up current configuration values.
8. Restore configuration values from previous backup.
9. Exit the configuration program.

Changeable parameters

The Configure utility enables you to change the parameters shown in the table below. Refer to the table when changing individual parameters (Option 5).

- The column titled “Best option” shows the best option to use in configuring that parameter.
- All parameters can be changed using Option 5. If “5” is shown as the best option, it is the only option for changing that particular parameter.
- **Parameters in boldface type** must be set to “Y” to enable that package. The TCP/IP package is always enabled.

Table 2-3. **Changeable parameters using Configure**

Package	Parameter	Best Option	Purpose of Parameter
Appletalk	**appletalk.enable**	3	Enables receipt of jobs via AppleTalk PAP
	appletalk.forcePS	3	Jobs received via AppleTalk will always be interpreted as PS
	appletalk.netdevice	3	Specifies device on which to run AppleTalk
	appletalk.phase	3	Phase of the AppleTalk Network
	appletalk.zone	3	Zone name of the (phase 2) AppleTalk Network
“driver” package	driver.iotboard	4	XEPI or DCIM—refers to the type of S-bus interface board installed in the DocuPrint controller for interfacing with the printer
jpm	jpm.accounting.format	5	Specifies the format version used for the docuprint_accounting log; can be “2” or “3”.
	jpm.purge	3	Enables automatic Dump Accounting
	jpm.purge.delay	3	# of days to retain information in jpm database
	jpm.purge.save	3	Saves attribute data purged from jpm into a log file
jtprescan	**jtprescan.enable**	3	Enables Xerox Job Ticket Processing (necessary for Xerox print client, MS Windows client, Windows DocuPrint driver)
lpd	**lpd.enable**	3	Enables receipt of jobs sent via lpr command
	lpd.nonstandard-timeout	3	Enables use of lpd timeout other than default of 60 seconds
	lpd.nonstandard-timeout.value	3	Alternate timeout value in seconds
maint	maint.savecore	3	Automatically compresses and saves any core files for debugging purposes
	maint.savecore.maxcore	3	Maximum disk space in MB occupied by saved core files
	maint.savecrash	3	Saves the system state at the time of a system crash. Crash dumps are saved in /var/crash.

Table 2-3. **Changeable parameters using Configure**

Package	Parameter	Best Option	Purpose of Parameter
Novell	**novell.pserver**	3	Enables Print Server function on DocuPrint NPS
	novell.pserver.fs	3	Name of Novell File Server to which DocuPrint's Print Server attaches
	novell.pserver.name	3	Name of DocuPrint's Print Server
	novell.pserver.passwd	3	Password of DocuPrint's Print Server for attaching to Novell File Server
	novell.pserver.queue	3	Novell queue name from which DocuPrint Print Server receives jobs
	novell.rprinter	3	Enables Remote Printer function on DocuPrint NPS
	novell.rprinter.ps	3	Name of Novell Print Server to which DocuPrint's Remote Printer attaches
	novell.external	3	Number of Novell network to which this DocuPrint is physically connected
	novell.framing	3	Ethernet Frame type on Novell network
	novell.internal	3	Network number assigned to the DocuPrint server itself
prtcon	**prtcon.cmdtool**	3	Places a cmdtool option in the OpenWindows menu (Background UNIX shell)
sequencer	**sequencer.attempts**	3	Number of times Sequencer can Restart before current job is Held
	sequencer.reserve-pages	3	Size in MB of /var/db/reserve_pages
SNMP	snmp.enable	3	Enables SNMP agent support
tcpip	tcpip.dns	5	Enables use of Domain Name System
	tcpip.enablemulti-devices	3	Enables TCP/IP on multiple devices
	tcpip.extradevices	3	Specifies devices for the tcpip.extradevices parameter
	tcpip.ipaddress.device	3	Specifies IP addresses for the extra devices
	tcpip.ftp	3	Enables use of File Transfer Protocol to the DocuPrint Server (necessary for downloading new Xerox print client)
	tcpip.netmask.device	3	Specifies net masks for the extra devices
	tcpip.neton	5	Enables general TCP/IP access to the DocuPrint NPS (weakens security; not recommended, incompatible with xclient)
	tcpip.ntp	5	Enables use of Network Time Protocol
	tcpip.router	3	IP address of local TCP/IP router

Table 2-3. **Changeable parameters using Configure**

Package	Parameter	Best Option	Purpose of Parameter
xclient	**xclient.enable**	3	Enables use of the DocuPrint print client
xipp	**xipp.enable**	3	Enables special XIPP prescan filter for use with Xerox Documents on Demand (XDOD)
system	ACOPaper	5	ACO market region can use either US or metric sized paper
	FontDisk	4	Places /imagerfonts on this disk number
	FormsDisk	4	Places /var/db/forms and the VIPP (XGF) customer-installed files in /usr/xgf on this disk number
	HostName	4	TCP/IP hostname
	IOT	4	4050, 4090, 4850, 4890, DP96, 4635, 4180, 92C (Changing this parameter is not supported.)
	IPAddress	4	IP Address of DocuPrint server
	MarketRegion	4	USCO, XCI, RX, or ACO
	NetDevice	4	Ethernet=le0, le1, le2; Token Ring=tr0, tr1, tr2; 100MB Ethernet=hme0, hme1, hme2; Fiber Optic FDDI=nf0, nf1, nf2
	Netmask	3	TCP/IP netmask
	PrinterName	4	Default PrinterName
	ReservePagesDisk	4	Places /var/db/reserve_pages on this disk number
	SpoolDisk	4	Places /var/spool on this disk number
	TimeZone	4	Timezone from /usr/share/lib/zoneinfo

Options

The Configure utility provides the following options.

Printing Configuration Reports: Options 1 and 2

Options 1 and 2 print two different types of configuration reports:

- Option 1: Prints a report of the routine installation questions, with the answers given.
- Option 2: Prints a report of all the configuration parameters with their names and values.

The parameters are grouped by package (a package is a named piece of the DocuPrint software). The parameters at the end of the list are in a special category called System Parameters. These are parameters of the entire system, such as the IOT type. Each parameter in this report has a name (such as FontDisk or tcpip.ftp) that you use if you want to change the value with Option 5. Each

value is enclosed in double-quotation marks. A series of pound signs appears instead of the password values.

When you select Option 1 or 2, Configure prepares a report and submits it to the JPM for printing. At least one tray must also be set, and queueing and printing must be turned on in order for a report to print. The report will be delivered to the sample tray. If queueing is turned off, you will receive a cryptic error message instead.

Reviewing Questions and Answers: Options 3 and 4

Routine configuration values are supplied in answer to questions posed during the installation process. If you decide to change one of the values on the report printed by Option 1, use Option 3 or 4 as follows:

- Option 3: Review or change standard installation questions. When you choose this option, you are asked if you want to review all the questions. If you enter **n**, you will be asked for the name of a package (a package is a named piece of the DocuPrint software) from a list. For example, select Novell to review only the Novell questions. Each question is presented along with the current answer in brackets: [Y].
  - To keep the current answer, select <ENTER>. If, however, you have an Appletalk Phase 2 network and you want to retain the old zone name, you must retype it when you are prompted for an AppleTalk zone name. Otherwise, you will produce an empty zone name.
  - To change the value, enter a new answer. You can enter **?** for helpful information about the parameter. If you make any changes, you will be presented with the list of affected packages and asked to confirm the changes. If you enter **y**, the system will be reconfigured and you will be asked to reboot.
- Option 4: Review or change key system parameters. When you choose this option, you are presented with the questions for key system parameters such as the IP address. Each question is presented along with the current answer in brackets: [Y].
- To keep the current answer, select <ENTER>.
- To change the value, enter a new answer. Enter **?** for helpful information about the parameter. If you make any changes, you will be presented with the list of affected packages and asked to confirm the changes. If you enter **y**, the system will be reconfigured and you will be asked to reboot.

Editing Individual Parameters: Option 5

All parameters can be changed using Option 5. (Routine parameters can be changed by using Options 3 or 4.)

When you select Option 5 you see a list of parameter names and values, grouped by package name as in the report printed by Option 2. Like the printed report, a series of pound signs will appear instead of the password values. A command prompt displays after the names and values are displayed. You can enter any of the following commands:

? Display the list of commands.

D Redisplay the list of all parameters and values.

DP Display the list of parameters and values for a particular package only.

M Modify the value of any parameter.

H Display helpful information about any parameter.

C Commit any changes made to values.

Q Quit.

The following guidelines apply:

- You can change the value of any number of parameters, then commit all the changes at once. The relevant parts of the system are reconfigured when you commit the changes.
- The display produced by the D or DP commands places an asterisk next to values that have been changed.
- When you enter the H or M commands, you are asked for a parameter name. Enter the name exactly as it appears in the list.
- Most parameter names begin with the name of a package, and many have multiple parts separated by periods (such as tcpip.ftp or maint.savecore.maxcore).
- After you have given a value for a parameter, you may be prompted for values that are needed based on the value just supplied.
- Not all of the parameters are useful. Some parameters may not have any effect unless another parameter is set to a particular value (for example, the Novell parameters do not have any effect unless novell.rprinter or novell.pserver is set to “Y”).

Caution: Some parameters may have harmful effects if certain steps are not taken. Read any instructions that are presented very carefully. Note that the IOT type cannot be changed. ⃠

Reinitializing Software: Option 6

If something on the DocuPrint NPS system (for instance, the Job Pool Manager database) becomes corrupted in ways that the automatic repair software cannot detect or process, you may be able to repair the problem by reinitializing the software.

Caution: Reinitializing the software can result in the permanent loss of customer data such as data in the Job Pool Manager, virtual printer definitions, option values, and so forth. Do not use the reinitialize option without careful consideration. Try rebooting to verify that the problem still exists before you reinitialize. ⃠

Note: If you really do have a software corruption problem, reinitializing may not repair it. Some problems can be repaired only by reinstalling the software directly from the original media (CD-ROM).

To reinitialize the software:

1. Select Option 6.
2. To reinitialize just one package, enter **n** (the default).
3. Select the name of a package from the list presented, or select <ENTER> to return to the menu.

Saving and Restoring Values: Options 7 and 8

To back up the values of the configuration parameters, you must have a formatted diskette available to dedicate only to the backup. It is a good idea to keep copies of the printed reports along with the backup diskette.

To create a backup diskette, perform the following:

1. Insert the diskette.
2. Select Option 7 and follow the prompts.

To restore from a backup diskette, perform the following:

1. Insert the diskette.
2. Select Option 8 and follow the prompts.

After the data are retrieved from the diskette, the system will be reconfigured based on the restored values.

1. Reboot the system.
2. To leave Configure, select Option 9 from the menu.
   If you selected Option 5, enter **Q** to return to the main menu, then select Option 9.

Note: Whenever the system is reconfigured, Configure will terminate with a message instructing you to reboot. Be sure to restart the system as directed.

Configure Utility example for changing the hostname

To change the TCP/IP hostname for your system:

1. At the PS-Admin> prompt, enter Configure.
2. Enter **stop queueing** and wait for any print jobs in progress to complete.
3. Enter the superuser password at the prompt.
4. Select Option 4.
5. Select enter for any question that is not about the hostname to retain the previous answer.
6. Enter a new host name when prompted.
7. Enter **y** to confirm the change and reconfigure the system.
8. Enter **restart system.**

Recovering the Job Pool Manager database

The Job Pool Manager is software that manages the database for the jobs. If you see any of the following messages, the database may have become corrupt:

- Message in the DocuPrint Print Service window, after you enter the List Documents command:

  ***RPC error SunRPCBinding error contacting Job Pool Manager: requested service not available

- Message in the Printing Activity Log Window:

  ***Error: SunRPCBinding.Error[requested service not available]

- Messages in the log, /var/log/DocuPrint:

  ...ALERT Job Pool Manager: Unrecoverable Database error...

  The Job Pool Manager automatically recovers by replacing the corrupted database with a new one. After the recovery, execute the Set Tray and Start Queueing commands, even if the Show Status command indicates the tray setting is normal.

If the Job Pool Manager cannot successfully recover, you can follow these steps to recover the database:

1. At the PS-admin> prompt in the DocuPrint Print Service window, enter **Configure.**
2. Enter the superuser password when prompted.
3. Select Option 6.
4. Enter **n** when prompted so as not to initialize all values.
5. Enter **jpm** when prompted for which package.
6. Enter **Y** when prompted “Are you sure you want to re-initialize ’jpm’.”
7. Enter **restart system**.

Enabling and disabling remote service

If your site is set up to use the external modem for service by remote technicians, you need to enable the modem so that the technician can dial into your system. Prior to enabling the modem, be sure to use the Stop All command so that printing and queueing are stopped during the remote service session.

When the remote service session is complete, you can disable the modem and enter the Start All command to resume printing and queueing.

If security is a concern, the modem can be turned off and the cable can be physically disconnected from the system when it is not being used.

Note: Depending on the commands used by the technician, the printer may start up during the remote service session. You should not attempt to operate the system or perform any tasks at the printer during the remote service session. Ensure that everyone working in the printer area knows that the system is undergoing service and that they should not attempt to work with the printer.

Enable modem

After you use the Stop All command to stop printing and queueing, use the Enable Modem command so that the technician can dial into your system.

Note: You may need to physically connect the modem cable and power on the modem prior to enabling it. Connect the modem cable to the A port on the back of the processor.

Ensure that the telephone line is connected to the modem and to the telephone jack.

The modem power cable must be connected to a power outlet and the modem must be powered on.

Access level Administrator

Syntax Enable modem

You will be prompted to enter the Unix root password.

Arguments None

Modem switch settings

On the bottom of the modem are DIP switches that must be properly set for the modem to function. The recommended settings for the US Robotics Courier V.Everything modem are:

Table 2-4. **Modem DIP switch settings**

Switch	Setting	Position
1	OFF	UP
2	OFF	UP
3	ON	DOWN
4	OFF	UP
5	OFF	UP
6	OFF	UP
7	OFF	UP
8	ON	DOWN
9	ON	DOWN
10	OFF	UP

Disable modem

Use the Disable Modem command to disable Port A for incoming calls. This command terminates the existing modem connection and refuses any future connection. After you use the Disable Modem command, use the Start All command to start printing and queueing.

Access level Administrator

Syntax Disable Modem

You will be prompted to enter the Unix root password.

Arguments None

Note: If it is the policy at your site to disconnect the modem for security reasons, power off the modem and, if required, physically disconnect the modem cable from your system once the remote session is complete.

Enable Remote Shell

If the Xerox service technician requires access to the UNIX shell on your printer controller while servicing it via the modem, you will need to enter this command.

Access level Administrator

Syntax Enable Remote Shell

You will be prompted to enter the Unix root password.

Arguments None

Disable Remote Shell

Use this command to disable access to the UNIX shell once the Xerox service technician has completed the remote service session.

Access level Administrator

Syntax Disable Remote Shell

You will be prompted to enter the Unix root password.

Arguments None

Print Documents from Floppy

Use the Print Documents from Floppy command to print a PCL, PostScript, or ASCII file stored on a DOS-formatted diskette.

Access level Administrator

Syntax Print Documents from Floppy <file(s)> <copies> <plex> <media> <VP>

Arguments <file(s)>

Specifies the name of the document you want to print.

<copies>

Specifies the number of copies to print.

<plex>

Specifies simplex, duplex, or tumbleduplex.

<media>

Specifies the media in the format size:type:color:weight.

<VP>

Specifies the name of the virtual printer to use.

Note: This command cannot be used to print a document that was copied to the diskette with the Copy Document to Floppy command.

3. Starting and stopping the system

This chapter describes how to start and stop your DocuPrint printing system. It addresses the proper methods of powering the system on and off, starting and stopping print jobs, shutting down the system, and dealing with power failures. It also describes how to switch between IPS and NPS for dual mode configurations.

Powering on the system

Before you power on the system, ensure the following:

- The Printer Controller and monitor are connected to dedicated power receptacles.
- The printer cable is connected securely to the connector on the back of the Printer Controller. If the cable is not connected, make sure the printer and Printer Controller are powered off. Then connect the cable.

Caution: Do not connect the printer cable to the Printer Controller when either the Printer Controller or the printer is powered on; you could destroy the interface card in the Printer Controller.

To power on the Printer Controller:

1. Power on the monitor.
2. Power on the Printer Controller switch located on the back of the CPU.

The Power On Self Test (POST) runs. The keyboard LEDs flash, and then the boot process begins.

If the printer power switch is in the on position, the printer controller will control when the printer is powered on during the boot process.

After the boot process is complete, the DocuPrint user interface (UI) appears.

Caution: Do not perform any actions at the printer until the boot process completes and the DocuPrint Print Service window is displayed.

Powering off the system

Power off the system by using the Halt System command in the DocuPrint Print Service window or by selecting Shutdown from the background menu.

Caution: Do not power off the Printer Controller without following one of the procedures below to halt the system first. Failure to follow the proper procedures may result in damage to the software and hardware.

Using the Halt System command to stop the system

1. In the DocuPrint Print Service window, at the PS> prompt, enter **privilege operator**.
2. Enter **stop queueing**.
3. Enter **list documents**.

   Wait for any documents currently pending or being printed to complete.
4. Enter **halt system**.
5. Once the OK prompt is displayed, switch off the power using the power switch located on the back of the Printer Controller CPU unit.

Using the background menu to stop the system

1. In the DocuPrint Print Service window, at the PS> prompt, enter **privilege operator**.
2. Enter **stop queueing** to stop queueing.
3. Enter **list documents**.

   Wait for any documents that are pending or being printed to complete.
4. Move the cursor to the background area outside any open windows.
5. Press and hold the right mouse button.
6. Select [Shutdown] in the pop-up menu, and release the right mouse button.
7. Select [Confirm].
8. Select [Continue].

Once the OK prompt is displayed, switch off the power using the power switch located on the back of the Printer Controller CPU unit..

Powering off and on the system after a power failure

When a power failure occurs, power off all of the DocuPrint system components.

Caution: If you do not power off all components, a power surge may damage them when power is restored.

Power them back on only after power has been restored. To restart your printer after a power failure, see “Powering on the system.”

Stopping and starting job processing

Use the Stop and Start commands to control printing and queueing.

Note: The very first job to print after a restart or a diagnostics session may take up to 30 to 60 seconds longer than usual. Subsequent jobs will print without delay.

Stop

The Stop command stops printing, queueing, or both.

Access Administrator or operator

Syntax Stop <printing | queueing | all>

Arguments <printing>

Disables the printing of jobs. This command does not affect jobs that are currently printing. Jobs currently being processed can be cancelled, but not stopped. If a job is finished decomposing, see the Restart Sequencer command to change an active job status to “Held.”

<queueing>

Stops the Printer Controller from receiving new jobs from clients.

<all>

Stops both printing and queueing.

Example The following example stops queueing:

```
PS-op>stop queueing
Queueing Stopped.
```

Start

The Start command starts printing, queueing, or both.

Access Administrator or operator

Syntax Start <printing | queueing | all>

Arguments <printing>

Enables the printing of jobs.

<queueing>

Allows the Printer Controller to receive jobs from clients.

<all>

Starts both printing and queueing.

Example The following example starts both printing and queueing:

```
PS-op>start all

Queueing Started.
Printing Started.
```

Restarting the sequencer and the system

If your printer is unresponsive, use the Restart Sequencer or Restart System commands. Use the Restart Sequencer command before using the Restart System command because the Restart Sequencer command restarts the system sequencer without restarting the entire system.

Restart Sequencer

Use the Restart Sequencer command to restart the system sequencer without restarting the entire system. This command aborts jobs currently being processed. Depending on the value of the "sequencer.attempts" in your configuration, you may need to repeat the command to change the job status to "Held."

Access Administrator or operator

Syntax Restart Sequencer <restart option>

Argument <restart option>

To terminate the Sequencer before the restart, specify "kill."

Restart System

Use the Restart System command to reboot and restart the Printer Controller. A confirmation is required before this command will execute. The monitor will display the prompt, “Do you really want to restart the system? (Y/N).” Jobs remain in the queue and are processed when the system is fully booted.

Caution: Restarting the system completely shuts down and reboots the Printer Controller.

Access Administrator or operator

Syntax Restart System

Arguments None

Dual mode switching

The dual mode printing option lets you switch back and forth between IPS and NPS modes on your Printer Controller. This allows your system to accept IPDS data (IPS mode), as well as PostScript and PCL data streams (NPS mode).

When the system is in IPS mode, it can spool PostScript and PCL data streams in the background; however, it can print these jobs only when you switch to NPS mode. When the system is in NPS mode, it cannot spool IPDS data streams in the background; it can print them only in IPS mode.

NPS mode to IPS mode

Follow these steps to switch from NPS mode to IPS mode:

1. While the printer is idle, key in List documents at the PS> prompt and verify that no print jobs are pending or being received.
2. Place the cursor on the background area of the screen (not in a window or on an icon) and click the right mouse button.
3. From the workspace pulldown menu that appears, select Start IPS Printing. A confirmation prompt window appears.

Caution: Do not select Restart and do not turn the controller or the printer off and on.

4. Click on Confirm on the confirmation prompt message window.

   If printing from the channel, when the screen is blank, turn the HCU off, wait a few seconds, then turn it back on.

   The Printer Controller reboots and after a few minutes, switches to IPS mode and is online.

5. Put the printer online at the host.
6. Start the printer at the host.

IPS mode to NPS mode

Follow these steps to switch the printer controller from IPS mode to NPS mode:

1. Check the Control Unit Status field on the IPS Main window to verify that the printer is Idle (not printing or receiving data).
2. Drain the printer at the host to stop the host from sending jobs from the queue. (Follow procedures for your own host system.)
3. At the host, take the printer offline.
4. Place the cursor on the background area of the screen (not in a window or on an icon), and click the right mouse button.
5. From the workspace pulldown menu that appears, select Start Network Printer. A confirmation prompt window appears with the message, “Do you really want to restart the printer?”
6. Click on Confirm on the message window.

Caution: Do not select Restart and do not turn the controller or the printer off and on. ⃠

7. The printer controller reboots and, after a few minutes, switches to NPS mode.

3. Starting and stopping the system

This chapter describes how to start and stop your DocuPrint printing system. It addresses the proper methods of powering the system on and off, starting and stopping print jobs, shutting down the system, and dealing with power failures. It also describes how to switch between IPS and NPS for dual mode configurations.

Powering on the system

Before you power on the system, ensure the following:

- The Printer Controller and monitor are connected to dedicated power receptacles.
- The printer cable is connected securely to the connector on the back of the Printer Controller. If the cable is not connected, make sure the printer and Printer Controller are powered off. Then connect the cable.

Caution: Do not connect the printer cable to the Printer Controller when either the Printer Controller or the printer is powered on; you could destroy the interface card in the Printer Controller.

To power on the Printer Controller:

1. Power on the monitor.
2. Power on the Printer Controller switch located on the back of the CPU.

The Power On Self Test (POST) runs. The keyboard LEDs flash, and then the boot process begins.

If the printer power switch is in the on position, the printer controller will control when the printer is powered on during the boot process.

After the boot process is complete, the DocuPrint user interface (UI) appears.

Caution: Do not perform any actions at the printer until the boot process completes and the DocuPrint Print Service window is displayed.

Powering off the system

Power off the system by using the Halt System command in the DocuPrint Print Service window or by selecting Shutdown from the background menu.

Caution: Do not power off the Printer Controller without following one of the procedures below to halt the system first. Failure to follow the proper procedures may result in damage to the software and hardware.

Using the Halt System command to stop the system

1. In the DocuPrint Print Service window, at the PS> prompt, enter **privilege operator**.
2. Enter **stop queueing**.
3. Enter **list documents**.

   Wait for any documents currently pending or being printed to complete.
4. Enter **halt system**.
5. Once the OK prompt is displayed, switch off the power using the power switch located on the back of the Printer Controller CPU unit.

Using the background menu to stop the system

1. In the DocuPrint Print Service window, at the PS> prompt, enter **privilege operator**.
2. Enter **stop queueing** to stop queueing.
3. Enter **list documents**.

   Wait for any documents that are pending or being printed to complete.
4. Move the cursor to the background area outside any open windows.
5. Press and hold the right mouse button.
6. Select [Shutdown] in the pop-up menu, and release the right mouse button.
7. Select [Confirm].
8. Select [Continue].

Once the OK prompt is displayed, switch off the power using the power switch located on the back of the Printer Controller CPU unit..

Powering off and on the system after a power failure

When a power failure occurs, power off all of the DocuPrint system components.

Caution: If you do not power off all components, a power surge may damage them when power is restored.

Power them back on only after power has been restored. To restart your printer after a power failure, see “Powering on the system.”

Stopping and starting job processing

Use the Stop and Start commands to control printing and queueing.

Note: The very first job to print after a restart or a diagnostics session may take up to 30 to 60 seconds longer than usual. Subsequent jobs will print without delay.

Stop

The Stop command stops printing, queueing, or both.

Access Administrator or operator

Syntax Stop <printing | queueing | all>

Arguments <printing>

Disables the printing of jobs. This command does not affect jobs that are currently printing. Jobs currently being processed can be cancelled, but not stopped. If a job is finished decomposing, see the Restart Sequencer command to change an active job status to “Held.”

<queueing>

Stops the Printer Controller from receiving new jobs from clients.

<all>

Stops both printing and queueing.

Example The following example stops queueing:

```
PS-op>stop queueing
Queueing Stopped.
```

Start

The Start command starts printing, queueing, or both.

Access Administrator or operator

Syntax Start <printing | queueing | all>

Arguments <printing>

Enables the printing of jobs.

<queueing>

Allows the Printer Controller to receive jobs from clients.

<all>

Starts both printing and queueing.

Example The following example starts both printing and queueing:

```
PS-op>start all

Queueing Started.
Printing Started.
```

Restarting the sequencer and the system

If your printer is unresponsive, use the Restart Sequencer or Restart System commands. Use the Restart Sequencer command before using the Restart System command because the Restart Sequencer command restarts the system sequencer without restarting the entire system.

Restart Sequencer

Use the Restart Sequencer command to restart the system sequencer without restarting the entire system. This command aborts jobs currently being processed. Depending on the value of the "sequencer.attempts" in your configuration, you may need to repeat the command to change the job status to "Held."

Access Administrator or operator

Syntax Restart Sequencer <restart option>

Argument <restart option>

To terminate the Sequencer before the restart, specify "kill."

Restart System

Use the Restart System command to reboot and restart the Printer Controller. A confirmation is required before this command will execute. The monitor will display the prompt, “Do you really want to restart the system? (Y/N).” Jobs remain in the queue and are processed when the system is fully booted.

Caution: Restarting the system completely shuts down and reboots the Printer Controller.

Access Administrator or operator

Syntax Restart System

Arguments None

Dual mode switching

The dual mode printing option lets you switch back and forth between IPS and NPS modes on your Printer Controller. This allows your system to accept IPDS data (IPS mode), as well as PostScript and PCL data streams (NPS mode).

When the system is in IPS mode, it can spool PostScript and PCL data streams in the background; however, it can print these jobs only when you switch to NPS mode. When the system is in NPS mode, it cannot spool IPDS data streams in the background; it can print them only in IPS mode.

NPS mode to IPS mode

Follow these steps to switch from NPS mode to IPS mode:

1. While the printer is idle, key in List documents at the PS> prompt and verify that no print jobs are pending or being received.
2. Place the cursor on the background area of the screen (not in a window or on an icon) and click the right mouse button.
3. From the workspace pulldown menu that appears, select Start IPS Printing. A confirmation prompt window appears.

Caution: Do not select Restart and do not turn the controller or the printer off and on.

4. Click on Confirm on the confirmation prompt message window.

   If printing from the channel, when the screen is blank, turn the HCU off, wait a few seconds, then turn it back on.

   The Printer Controller reboots and after a few minutes, switches to IPS mode and is online.

5. Put the printer online at the host.
6. Start the printer at the host.

IPS mode to NPS mode

Follow these steps to switch the printer controller from IPS mode to NPS mode:

1. Check the Control Unit Status field on the IPS Main window to verify that the printer is Idle (not printing or receiving data).
2. Drain the printer at the host to stop the host from sending jobs from the queue. (Follow procedures for your own host system.)
3. At the host, take the printer offline.
4. Place the cursor on the background area of the screen (not in a window or on an icon), and click the right mouse button.
5. From the workspace pulldown menu that appears, select Start Network Printer. A confirmation prompt window appears with the message, “Do you really want to restart the printer?”
6. Click on Confirm on the message window.

Caution: Do not select Restart and do not turn the controller or the printer off and on. ⃠

7. The printer controller reboots and, after a few minutes, switches to NPS mode.

4. DocuPrint NPS on a Novell network

This chapter describes how to prepare your system for use on a Novell network, and identifies some of the things you must consider before the service representative configures DocuPrint NPS for a Novell network.

Before configuring DocuPrint NPS on a Novell network, first determine whether you want the DocuPrint NPS to function as a Print Server, a Remote Printer, or both.

Choosing a Print Server or Remote Printer configuration

The following contrasts the Print Server (PSERVER) configuration with the Remote Printer (RPRINTER) configuration for your DocuPrint NPS.

- The PSERVER configuration uses a licensed connection to a File Server. The RPRINTER configuration connects to a Print Server, and does not require a regular client connection.
- Using the PSERVER configuration, DocuPrint NPS can obtain job attributes from the Novell queue.

  The RPRINTER configuration can not do this, and this leads to some irregularities such as no job and submitter names, as well as an inability to select duplex through the submission interface.
- The setting of the Novell banner pages switch operates successfully using PSERVER (this toggles the ElideHeader attribute).

  If Banner Page is requested with RPRINTER, DocuPrint NPS prints a Novell-generated ASCII banner page as the first page of a job, and will print the entire job as an ASCII file (500 pages could be generated when requesting a banner page regardless of the actual file contents.)
- With PSERVER, multiple copies are requested as a job attribute; DocuPrint NPS receives only one copy and prints multiple copies.

  With RPRINTER, because most remote printers can not understand a request for multiple copies, the Print Server will send the job multiple times to print multiple copies, tying up network and DocuPrint NPS resources as the file is processed.

- With PSERVER, a DocuPrint NPS can receive jobs from only one print queue on one File Server, but users can submit jobs to different DocuPrint NPS virtual printers using Novell forms. The administrator uses the PRINTDEF program to create forms with the same name as DocuPrint NPS virtual printers. Users then select a virtual printer by selecting a form with the same name using the User Tools program in the NetWare Tools folder of Windows, or the -F option in the DOS CAPTURE command.

  With RPRINTER, the Print Server can direct jobs to different virtual printers, from multiple queues, possibly on multiple file servers.

- The PSERVER configuration allows the submitter to determine when printing is complete. Jobs are retained in the Novell queue until DocuPrint NPS completes printing them. This may fill up the queue in some environments.

  The RPRINTER configuration informs the submitter only when the job has been submitted, even though it may print days later.

- PSERVER requires that unencrypted login is enabled on the Novell File Server to which PSERVER connects. Regular Novell clients will still use encrypted passwords.

  RPRINTER does not require that unencrypted logins be permitted.

The following table lists the differences between DocuPrint NPS as a Print Server or as a Remote Printer.

Table 4-1. **Print Server and Remote Printer differences**

DocuPrint NPS as a PSERVER	DocuPrint NPS as an RPRINTER
1. Functions like a Novell print server.	1. Functions like a Novell remote printer.
2. Connects to a Novell file server and consumes a licensed connection.	2. Connects to a Novell print server without consuming a licensed connection.
3. Reads the Novell print queue directly and obtains all the job parameters.	3. Cannot read the Novell print queue; receives only the job data, not the data from the queue entry.
4. Not necessary for the user to disable the print job banner.	4. User must disable the banner for each print job. If not disabled, the job prints incorrectly.
5. No unusual delays in output of print jobs.	5. May be delays in output of print jobs when jobs are not sent back-to-back. The system views the start of a print job as the end of a previous job.
6. Services only one queue on one file server.	6. May service multiple print queues through the Novell print server.
7. Supports user notification of the end of a print job (completion of printing).	7. Notifies user only when job submission completes (does not notify user of print completion).

Table 4-1. **Print Server and Remote Printer differences** (continued)

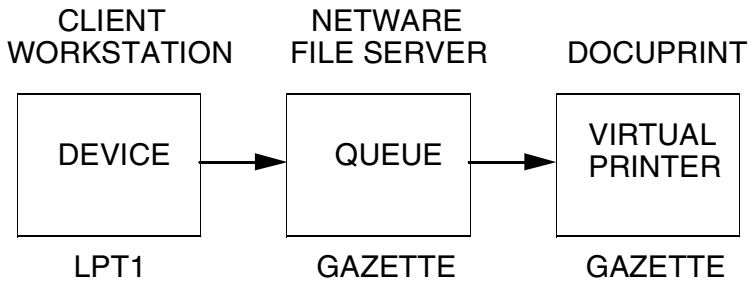
DocuPrint NPS as a PSERVER	DocuPrint NPS as an RPRINTER
8. Can send a job ticket that references one file on the Novell file server to which the DocuPrint NPS is connected.	8. Cannot reference files on a Novell file server.

Configuring DocuPrint as a PSERVER

If you configure the DocuPrint NPS as a PSERVER:

1. Using PCONSOLE, define a print server with a name and password (optional).
2. Using PCONSOLE, create a queue.
3. Using PCONSOLE, define one printer as Remote Other/ Unknown for the print server, and define the printer to service the print queue. Printer name is not important, but it is best to use the same name for both the printer and the queue.
4. Create a virtual printer that matches the queue name as a default virtual printer. (This supports the use of form names that do not match the name of a virtual printer.)
5. Create form names in PRINTDEF and create a virtual printer with the same name as each form.
6. Optionally define a list of users to notify when you enter the Stop Queueing command, which disables print job submission. This list must be associated with the single printer defined above.
7. Supply the service representative with the required installation parameters, as identified in the checklist provided in the DocuPrint NPS Installation Planning Guide.

In the following illustration, the queue, virtual printer, and specified form are configured with the same name. The user sends a print job that specifies a form named Gazette through the LPT1 port to the Gazette queue. This job is assigned to the Gazette virtual printer.

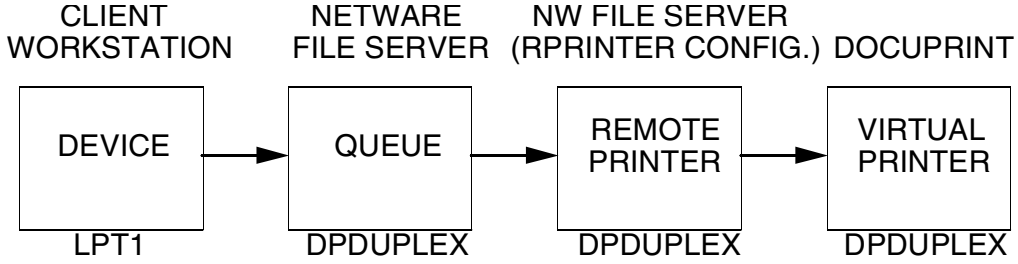


Configuring DocuPrint as an RPRINTER

If you configure the DocuPrint NPS as an RPRINTER:

1. Ask users to submit print jobs using the job ticket client software and to disable the banner for each print job, so that the jobs print correctly and so that attributes such as SenderName are set correctly.
2. Match virtual printer names to the Novell-defined printer names. There must be at least one virtual printer defined with the same name as a defined remote printer.
3. Define the print queue to remote printer mapping using PCONSOLE. Select printer type to be Remote Other/ Unknown for DocuPrint NPS. It is best to use the same name for the print queue, the remote printer, and the virtual printer.
4. Supply the service representative with the required installation parameters, as identified in the checklist provided in the DocuPrint NPS Installation Planning Guide.

In the following illustration, the queue, remote printer, and virtual printer are configured with the same name, and the specified printer is set to print duplex. The user sends a print job through the LPT1 port to a queue named DPDuplex that is sent to the DPDuplex, and assigned to DPDuplex virtual printer.



Supporting DocuPrint NPS on the Novell file server

There are a number of tasks you perform on the Novell file server to support the DocuPrint NPS as either a print server or a remote printer:

- With DocuPrint as a PSERVER you must allow unencrypted password login on the file server. Enter the following command at the file server console prompt and in the AUTOEXEC.NCF file:

  set allow unencrypted passwords=on

  Note: Set this command even if you do not establish a print server password. Novell clients that use encrypted passwords are unaffected by this change and will continue to use encrypted passwords.

- Do not configure the file server to support IPX checksums or NCP packet signatures. Set these options to 0 or 1 so that the

server performs these options only when the client requests them. The default value is 1.

- Do not set the watchdog interval to less than one minute. Longer intervals may cause the DocuPrint NPS to be logged out.
- If the print queue contains 250 jobs on a regular basis, set the Maximum File Locks Per Connection to a value greater than 250. The default value is 250.
- If DocuPrint NPS is configured as an RPRINTER, define forms using PRINTDEF with names matching virtual printer names.

Note: DocuPrint NPS supports native connection to Novell 3.12 file servers. However, to run DocuPrint NPS with Novell 4.X servers, the Novell Server must be configured to run Bindery Emulation.

4. DocuPrint NPS on a Novell network

This chapter describes how to prepare your system for use on a Novell network, and identifies some of the things you must consider before the service representative configures DocuPrint NPS for a Novell network.

Before configuring DocuPrint NPS on a Novell network, first determine whether you want the DocuPrint NPS to function as a Print Server, a Remote Printer, or both.

Choosing a Print Server or Remote Printer configuration

The following contrasts the Print Server (PSERVER) configuration with the Remote Printer (RPRINTER) configuration for your DocuPrint NPS.

- The PSERVER configuration uses a licensed connection to a File Server. The RPRINTER configuration connects to a Print Server, and does not require a regular client connection.
- Using the PSERVER configuration, DocuPrint NPS can obtain job attributes from the Novell queue.

  The RPRINTER configuration can not do this, and this leads to some irregularities such as no job and submitter names, as well as an inability to select duplex through the submission interface.
- The setting of the Novell banner pages switch operates successfully using PSERVER (this toggles the ElideHeader attribute).

  If Banner Page is requested with RPRINTER, DocuPrint NPS prints a Novell-generated ASCII banner page as the first page of a job, and will print the entire job as an ASCII file (500 pages could be generated when requesting a banner page regardless of the actual file contents.)
- With PSERVER, multiple copies are requested as a job attribute; DocuPrint NPS receives only one copy and prints multiple copies.

  With RPRINTER, because most remote printers can not understand a request for multiple copies, the Print Server will send the job multiple times to print multiple copies, tying up network and DocuPrint NPS resources as the file is processed.

- With PSERVER, a DocuPrint NPS can receive jobs from only one print queue on one File Server, but users can submit jobs to different DocuPrint NPS virtual printers using Novell forms. The administrator uses the PRINTDEF program to create forms with the same name as DocuPrint NPS virtual printers. Users then select a virtual printer by selecting a form with the same name using the User Tools program in the NetWare Tools folder of Windows, or the -F option in the DOS CAPTURE command.

  With RPRINTER, the Print Server can direct jobs to different virtual printers, from multiple queues, possibly on multiple file servers.

- The PSERVER configuration allows the submitter to determine when printing is complete. Jobs are retained in the Novell queue until DocuPrint NPS completes printing them. This may fill up the queue in some environments.

  The RPRINTER configuration informs the submitter only when the job has been submitted, even though it may print days later.

- PSERVER requires that unencrypted login is enabled on the Novell File Server to which PSERVER connects. Regular Novell clients will still use encrypted passwords.

  RPRINTER does not require that unencrypted logins be permitted.

The following table lists the differences between DocuPrint NPS as a Print Server or as a Remote Printer.

Table 4-1. **Print Server and Remote Printer differences**

DocuPrint NPS as a PSERVER	DocuPrint NPS as an RPRINTER
1. Functions like a Novell print server.	1. Functions like a Novell remote printer.
2. Connects to a Novell file server and consumes a licensed connection.	2. Connects to a Novell print server without consuming a licensed connection.
3. Reads the Novell print queue directly and obtains all the job parameters.	3. Cannot read the Novell print queue; receives only the job data, not the data from the queue entry.
4. Not necessary for the user to disable the print job banner.	4. User must disable the banner for each print job. If not disabled, the job prints incorrectly.
5. No unusual delays in output of print jobs.	5. May be delays in output of print jobs when jobs are not sent back-to-back. The system views the start of a print job as the end of a previous job.
6. Services only one queue on one file server.	6. May service multiple print queues through the Novell print server.
7. Supports user notification of the end of a print job (completion of printing).	7. Notifies user only when job submission completes (does not notify user of print completion).

Table 4-1. **Print Server and Remote Printer differences** (continued)

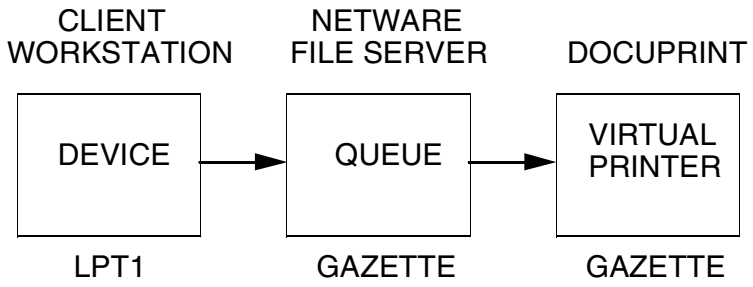
DocuPrint NPS as a PSERVER	DocuPrint NPS as an RPRINTER
8. Can send a job ticket that references one file on the Novell file server to which the DocuPrint NPS is connected.	8. Cannot reference files on a Novell file server.

Configuring DocuPrint as a PSERVER

If you configure the DocuPrint NPS as a PSERVER:

1. Using PCONSOLE, define a print server with a name and password (optional).
2. Using PCONSOLE, create a queue.
3. Using PCONSOLE, define one printer as Remote Other/ Unknown for the print server, and define the printer to service the print queue. Printer name is not important, but it is best to use the same name for both the printer and the queue.
4. Create a virtual printer that matches the queue name as a default virtual printer. (This supports the use of form names that do not match the name of a virtual printer.)
5. Create form names in PRINTDEF and create a virtual printer with the same name as each form.
6. Optionally define a list of users to notify when you enter the Stop Queueing command, which disables print job submission. This list must be associated with the single printer defined above.
7. Supply the service representative with the required installation parameters, as identified in the checklist provided in the DocuPrint NPS Installation Planning Guide.

In the following illustration, the queue, virtual printer, and specified form are configured with the same name. The user sends a print job that specifies a form named Gazette through the LPT1 port to the Gazette queue. This job is assigned to the Gazette virtual printer.

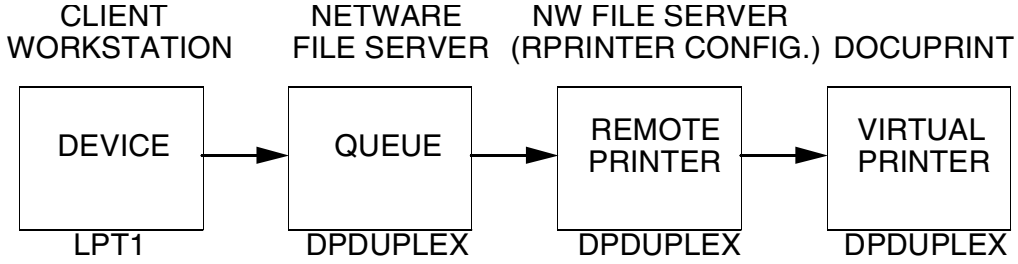


Configuring DocuPrint as an RPRINTER

If you configure the DocuPrint NPS as an RPRINTER:

1. Ask users to submit print jobs using the job ticket client software and to disable the banner for each print job, so that the jobs print correctly and so that attributes such as SenderName are set correctly.
2. Match virtual printer names to the Novell-defined printer names. There must be at least one virtual printer defined with the same name as a defined remote printer.
3. Define the print queue to remote printer mapping using PCONSOLE. Select printer type to be Remote Other/ Unknown for DocuPrint NPS. It is best to use the same name for the print queue, the remote printer, and the virtual printer.
4. Supply the service representative with the required installation parameters, as identified in the checklist provided in the DocuPrint NPS Installation Planning Guide.

In the following illustration, the queue, remote printer, and virtual printer are configured with the same name, and the specified printer is set to print duplex. The user sends a print job through the LPT1 port to a queue named DPDuplex that is sent to the DPDuplex, and assigned to DPDuplex virtual printer.



Supporting DocuPrint NPS on the Novell file server

There are a number of tasks you perform on the Novell file server to support the DocuPrint NPS as either a print server or a remote printer:

- With DocuPrint as a PSERVER you must allow unencrypted password login on the file server. Enter the following command at the file server console prompt and in the AUTOEXEC.NCF file:

  set allow unencrypted passwords=on

  Note: Set this command even if you do not establish a print server password. Novell clients that use encrypted passwords are unaffected by this change and will continue to use encrypted passwords.

- Do not configure the file server to support IPX checksums or NCP packet signatures. Set these options to 0 or 1 so that the

server performs these options only when the client requests them. The default value is 1.

- Do not set the watchdog interval to less than one minute. Longer intervals may cause the DocuPrint NPS to be logged out.
- If the print queue contains 250 jobs on a regular basis, set the Maximum File Locks Per Connection to a value greater than 250. The default value is 250.
- If DocuPrint NPS is configured as an RPRINTER, define forms using PRINTDEF with names matching virtual printer names.

Note: DocuPrint NPS supports native connection to Novell 3.12 file servers. However, to run DocuPrint NPS with Novell 4.X servers, the Novell Server must be configured to run Bindery Emulation.

5. Setting system defaults

This chapter describes the process for setting defaults for print features and system configuration. These default settings allow you to customize the way the system accepts information from host or network, displays information to the user, and handles print jobs without specific overriding instructions.

Before sending print jobs to your DocuPrint NPS, you need to set system defaults for the various document parameters associated with print jobs. DocuPrint NPS provides the following commands for this purpose, including:

- Set Default Media defines the default media size, type, color, and weight. Show Default Media lists the currently defined default media.
- Set Tray allows you to specify what type of media is loaded in your printer feeder trays.
- Set Option sets the values of various printing options. You can view the current setting of these options with the List Options command and print them with the Print Options command.
- Change Imager Parameters and Change PCL Imager Parameters adjust the imaging level of print jobs. You can show the current values and restore the defaults.
- Change PCL Parameters allows you to define the environment for PCL printing.

The following sections provide the syntax and arguments for these commands.

Setting default media

The Set Default Media command (administrator or operator level) defines the default media size, type, color, and weight.

The Show Default Media command (administrator, operator, or user level) lists the default media for the printer.

These default settings are applied to media trays by invoking the **Set Tray n Default** command.

Set Default Media

Use the Set Default Media command to define the default media size, type, color, and weight for jobs submitted without media specifications. This command may not take effect immediately on jobs already being processed. A Restart Sequencer command is the recommended method for insuring that media has been changed.

Access level Administrator or operator

Syntax Set Default Media <size> <type> <color> <weight>

Arguments <size>

Sets the size of the default media.

Acceptable size values for the models 4050, 4090, 4850, 4890, or 92C are: “USLetter,” “USLegal,” “A4,” or “nxn,”. Acceptable custom paper sizes (nxn specified in millimeters) range from 8 x 10" (203 x 254mm) to 8.5 x 14" (216 x 356mm).

Acceptable size values for the models 96, 4635, or 180 are: “USLetter,” “USLegal,” “USLedger,” “Tabloid,” “A3,” “A4,” or “nxn.” Acceptable custom paper sizes (nxn specified in millimeters) range from 7 x 10" (178 x 254mm) to 17 x 14" (432 x 356mm).

<type>

Sets the default media type. Use a text string to specify the media type. Enter double quotation marks (" ") to leave the string empty. Valid types for all DocuPrint NPS systems include “transparency,” “plain,” “drilled.”

Note: “Plain” cannot be used by Xerox clients utilizing job tickets.

Additional valid types for the 96, 4635 and 180 include “precut,” “drilled-precut,” “#hole,” and “ordered#.” The symbol # is replaced by a number to indicate either the number of holes or the number of items in the ordered set.

<color>

Sets the color of the default media. Use a text string to specify the color.

<weight>

Sets the weight of the default media. Specify the weight in grams per square meter (gsm). “0” indicates no preference.

Example This example sets the default media to USLetter, white:

```
PS-op>set default media usletter "" white 0
Site default medium is USLetter::white
```

Show Default Media

Use the Show Default Media command to show size, type, color, and weight for the default media.

Access level Administrator, operator, user

Syntax Show Default Media

Arguments None

Example This example shows the output of the Show Default Media command:

```
PS-op>show default media
Site default medium is USLetter::white:75
```

Setting feeder tray attributes

The Set Tray command (administrator or operator level) allows you to specify what type of media is loaded in your printer feeder trays. You must use the Set Tray command whenever you change the media in a tray. You can also match the attributes of one tray to those of another tray.

Note: The Set Tray command and related commands cannot be used for a tray that is being used by the current job, or while the IOT is warming up.

For instructions on loading feeder trays, see “Loading paper” in the *Guide to Performing Routine Maintenance*.

Set Tray and Set Tray Default

Use the Set Tray command to specify what type of media is loaded in your printer feeder trays.

Before using this command ensure that all trays are in the feed position.

Note: If you do not indicate the color or weight, the system uses the values of the default media.

Access level Administrator or operator

Syntax Set Tray <n> <size> <type> <color> <weight>

Set Tray <n> Default

Arguments <n>

Indicates the number of the paper tray, for example “1” or “2.”

<size>

Indicates the size of the media. If you specify “default,” the type, color, and weight are set to the default media, and the size matches the tray setting.

Acceptable size values for the models 4050, 4090, 4850, 4890, or 92C are: “USLetter,” “USLegal,” “A4,” or “nxn”. Acceptable custom paper sizes (nxn specified in millimeters) range from 8 x 10" (203 x 254mm) to 8.5 x 14" (216 x 356mm).

Acceptable size values for the models 96, 4635, or 180 are: “USLetter,” “USLegal,” “USLedger,” “Tabloid,” “A3,” “A4,” or “nxn.” Acceptable custom paper sizes (nxn specified in millimeters) range from 7 x 10" (178 x 254mm) to 17 x 14" (432 x 356mm).

<type>

Sets the media type. Use a text string to specify the media type. Enter double quotation marks (" ") to leave the string empty. Valid types for DocuPrint NPS systems include “transparency,” “plain,” “drilled” and any custom type defined by a text string.

Note: When you specify a media type from a client, and you use the prefinish value, the word “plain” is equivalent to a blank media type.

Additional valid types for the 96, 4635 and 180 include “precut,” “drilled-precuttab,” “#hole,” and “ordered#.” The symbol # is replaced by a number to indicate either the number of holes or the number of items in the ordered set.

<color>

Indicates the color of the media. Use a text string to specify the color.

<weight>

Indicates the weight of the media in grams per square meter (gsm). “0” indicates no preference.

Default

Sets tray n to the appropriate size (USLetter, Legal, etc.) to match the way the hardware has been set. The type, color and weight will be set to match the values of the default media.

Example This example sets feeder tray 1 to USLetter, white, no type indicated, no weight preference:

```
PS-op>set tray 1 usletter "" white 0
Tray 1 set to USLetter::white
```

Set Tray <n> Tray <m>

Use the Set Tray <n> Tray <m> command to set the attributes of tray <n> the same as those for tray <m>.

Access level Administrator or operator

Syntax Set Tray <n> Tray <m>

Arguments <n> <m>

Assigns the attributes of tray <m> to tray <n>

Example This example sets the attributes of tray 1 to be the same as those of tray 2:

```
PS-op>set tray 1 tray 2
Tray 1 set to match Tray 2
```

Set Tray <n> Position <m>

Note: This command is generally not required for ordered stock applications.

Use the Set Tray <n> Position <m> command to specify the position, in an ordered set, of the piece of stock at the top of the tray.

Before using this command ensure all trays are in the feed position.

Note: This command applies only to ordered sets on the 96, 4635, and 180.

Access level Administrator or operator

Syntax Set Tray <n> Position <m>

Arguments <n>

Indicates the number of the paper tray. The tray must already have paper type set to "<*anything*>-ordered#," where # is the total number of items in a complete set.

<m>

Sets the item at the top of tray n to the appropriate order number in the ordered set. The value <m> must not be greater than the number (#) specified in the "ordered#" field of the paper type specified for the tray.

Example This example sets the item at the top of feeder tray 1 to number 3 in the current ordered set:

```
PS-op>set tray 1 position 3
Tray 1 set to Position 3
```

Unset Tray <n>

If you want the system to ignore a tray, use the Unset Tray command. To restore the tray to active status, use the Set Tray command.

Access level Administrator or operator

Syntax Unset Tray <n>

Arguments <n>

Indicates the number of the paper tray.

Setting printer options

The following commands control the printing options for your DocuPrint (some options may not apply to your printer configuration). Use Set Option Help to display the available printing options and the information you need to specify values.

Set Option

The Set Option command assigns values to the printing options you specify. It may take a few minutes for an option to be set after you enter the command. A Restart Sequencer command is the recommended method for insuring that an option has been changed.

Access level Administrator

Syntax Set Option <name> <value>

Arguments <name> <value>

Specifies the name and value of the option you want to set. Choose from the following:

AdjustX <offset> <units>

Sets the horizontal image shift from the edge of the paper closest to the front of the printer as it is fed. “X” is the physical slow scan direction. For example, for letter or A4 paper, “X” is parallel to the short edge of the paper. For Ledger or A3, “X” is parallel to the long edge of the paper.

<offset> is the amount of the horizontal image shift. The default is 0. This value should normally be zero (0), but can be changed to temporarily compensate for printer misalignments until a service technician can adjust the printer.

<units> refers to the unit of measure used to specify the offset value. The default setting is “mm.”

- pt (points=72.27 to 1 inch)
- bp (big point=72 to 1 inch)
- pi (pica=12 points)
- el (elite=10 points)
- in (inches)
- pu (pixel units =1/300 inch, not pixels)
- fu (furlongs)
- mm (millimeters)

AdjustY <offset> <units>

Sets the vertical image shift from the edge of the paper closest to the front of the printer as it is fed. “Y” is the physical fast scan direction. For example, for letter or A4 paper, “Y” is parallel to the long edge of the paper. For Ledger or A3, “Y” is parallel to the short edge of the paper.

<offset> is the amount of the vertical image shift. The default is 0. This value should normally be zero (0), but can be changed to temporarily compensate for printer misalignments until a service technician can adjust the printer.

<units> refers to the unit of measure used to specify the offset value. The default setting is “mm.”

- pt (points=72.27 to 1 inch)
- bp (big point=72 to 1 inch)
- pi (pica=12 points)
- el (elite=10 points)
- in (inches)
- pu (pixel units =1/300 inch, not pixels)
- fu (furlongs)
- mm (millimeters)

AllowElideHeaders <“TRUE” | “FALSE”>

Refers to the suppression of header pages within a group of documents with the same sender name. The default setting is “TRUE.”

AttributeNameForListDocs <attribute>

Refers to the text attribute to use for the List Documents command. The default setting is “SenderName.”

BlueHighlight <RGB value for blue>

Refers to the RGB value for blue highlight color. The default setting is “R: 0.0, G: 0.0, B: 0.8820001.”

For blue highlight color to print correctly, the default RGB (print) value for this option should not be modified.

BrownHighlight <RGB value for brown>

Refers to the RGB value for brown highlight color. The default setting is “R: 0.65, G: 0.1, B: 0.1.”

For brown highlight color to map correctly, the default RGB value for this option should not be modified.

CardinalHighlight <RGB value for cardinal>

Refers to the RGB value for cardinal highlight color. The default setting is “R: 0.7000001, G: 0.03, B: 0.1.”

For cardinal highlight color to print correctly, the default RGB value for this option should not be modified.

CentsPerHeader <cost per sheet>

Refers to cost per header page. If you enter a value, the cost information appears on the trailer sheet that prints at the end of a job. The default setting is “0.0.”

CentsPerNormal <cost per sheet>

Refers to cost per document page. If you enter a value, the cost information appears on the trailer sheet that prints at the end of a job. The default setting is “0.0.”

CentsPerSecond <cost per second>

Refers to cost per document decomposition time. If you enter a value, the cost information appears on the trailer sheet that prints at the end of a job. The default setting is “0.0.”

CentsPerTrailer <cost per sheet>

Refers to cost per trailer sheet. If you enter a value, the cost information appears on the trailer sheet that prints at the end of a job. The default setting is “0.0.”

CyanHighlight <RGB value for cyan>

Refers to the RGB value for cyan highlight color. The default setting is “R: 0.0, G: 0.8820001, B: 0.8820001.”

For cyan highlight color to print correctly, the default RGB value for this option should not be modified.

DefaultCopies <number of copies>

Refers to the number of copies of a document printed when one of the following commands is entered: Print Sample Document, Print Form Sample, Print Form List, Print Options, Print PCLFont Sample, Print Font Sample, and Print Font List. The default setting is “1.”

DefaultHighlightColorRendering <“pictorial” | “presentation” | “colorToHighlight” | “colorTables”| “automatic”>

Refers to the mapping of a three-dimensional color application (such as RGB) to the two-dimensional color application provided with highlight color printing. The default setting is “automatic.”

pictorial

Use this attribute to avoid color saturation problems with Decomposition Forms.

- Colors with a hue matching the map color are not changed.
- Colors with a hue close to the map color are rendered with color, but with a saturation level that decreases as the hue shifts away from the map color.
- Colors with a hue complementary to the map color are produced in shades of gray.

presentation

Refers to the ability to distinguish between different colors. This attribute is a good choice for charts and diagrams, as they typically use distinctly different colors. Colors with a hue that matches the map color will not be changed. There will be discontinuities that may produce undesirable results in pictorial material.

colorToHighlight

This mapping attribute discards the hue information and preserves the saturation and value of the color application. Fully-saturated colors will turn into a solid highlight color

despite which map color is in effect. This is useful for documents that only use spot color for emphasis.

colorTables

This mapping attribute uses preset color tables to perform the mapping and is provided for compatibility reasons. This is used only for red, green, or blue highlight color toners.

automatic

This attribute chooses a mapping method on an object-by-object basis; for example, it applies the pictorial mapping for pictures and the presentation mapping for other objects (filled areas, strokes, and text). This is the default.

DefaultPaperTray <paper tray number>

Refers to the paper tray used for printing test patterns when the Print Test Pattern command is entered. The Print Test Pattern is available only in service mode. The default setting is “1.”

DefaultPlex <“simplex” | “duplex” | “tumble duplex”>

Refers to whether documents, including test patterns and sample documents, print simplex, duplex, or tumble duplex. The default setting is “simplex.”

DefaultPlexChangesDynamic <“TRUE” | “FALSE”>

Refers to whether the system will honor the plex changes specified in the job’s PostScript or PCL code. Set to “True” to honor plex changes within the job. Set to “False” when you want to ignore the plex changes specified in the job’s PostScript or PCL.

DefaultPCLLanguageLevel <“PCL5e” | “PCL5c”>

Refers to the default PCL language level to be used for the system. For monochrome printers the setting is PCL 5e. For highlight color printers, use PCL 5c if you want to use the PCL 5c interpreter for printing PCL 5c jobs that specify highlight color. The default is PCL5e.

DefaultPSLanguageLevel <“1” | “2”>

Refers to which PostScript Language Level to use. The default setting is “2.”

DefaultRecoveryOffset <“TRUE” | “FALSE”>

When “True,” a single page is offset from the rest of the job after the jam. When “False,” no sheets are offset. The default is “False.”

DefaultResolution <“240” | “300” | “600”>

Refers to the printing resolution used for documents, including test patterns and sample documents. 240 dpi is available for Model 180 only; 600 dpi is available for Models 92C, 96, 4635 and 180 only.

The default setting is “300” for all printers except the 92C; its default setting is 600.

On the 96, 4635, 180, and 92C NPS, output resolution is always 600 dpi regardless of the resolution of the input. For these models, if the specified value for the resolution attributes is 300 dpi, the data is decomposed by the controller at 300 dpi, and the print engine interpolates the data to 600 dpi; this provides the

fastest processing. When the specified value for the resolution attribute is 600 dpi, the data is decomposed by the controller at 600 dpi; this provides the best quality image.

DefaultStacker <“0” | “1” | “2”>

Refers to the stacker group used.
0 = top tray
1 = stacker group 1
2 = stacker group 2

The default setting is “1.”

DefaultStitch <“TRUE” | “FALSE”>

Refers to whether test patterns or sample documents are stitched when the Print Test Pattern or Print Sample Document command is entered. The default setting is “FALSE.”

EarlyStaple <“TRUE” | “FALSE”>

Refers to whether stapled jobs printed in ascending page order and exceeding the stapler limit (50 sheets) are delivered early. The default setting is “FALSE.” Used only for systems with stitchers.

ExportVPsToAppleTalk <“TRUE” | “FALSE”>

Refers to whether newly created virtual printers are automatically exported to AppleTalk for viewing in the users’ Chooser. If “TRUE”, all new virtual printers will be made available for AppleTalk. If “FALSE”, the new virtual printers will not be automatically made available. Selected virtual printers can be exported to AppleTalk by using the Set Virtual Printer Flags command. Refer to the *Guide to Managing Print Jobs* chapter “Managing Virtual Printers.”

ExtraMessage <message>

Refers to any message that appears in the middle of the header page that prints with the job.

ForceBlackOnly <“TRUE” | “FALSE”>

Refers to whether black-only printing is used with highlight color printers. The default setting is “FALSE.”

ForceHeaderAlt <“TRUE” | “FALSE”>

Refers to forcing header and trailer sheets to an alternate destination for printers with the bypass transport. The default setting is “FALSE,” meaning that the header and trailer sheets are sent to the bypass transport. When set to “TRUE,” header and trailer pages are sent to the Stacker Group that is not the top tray and not the bypass transport. On 4050, 4090, 4850, 4090, 92C, and 180 systems, header and trailer pages are sent to stacker group 2. On 4635 and 96 systems header and trailer pages are sent to stacker group 1.

ForceReport <“TRUE” | “FALSE”>

Refers to whether a trailer sheet prints at the end of a job. The default setting is “FALSE.”

When the default setting is used, a trailer sheet prints only if there are printing errors or a PostScript file writes to stdout.

GreenHighlight <RGB value for green>

Refers to the RGB value for green highlight color. The default setting is “R: 0.0, G: 0.8820001, B: 0.0.”

For green highlight color to print correctly, the default RGB value for this option should not be modified.

HeaderMedia <size:type:color:weight>

Refers to the media used for printing the header page.

- If the size specified in the HeaderMedia differs from the first media specified for the job, then the sequencer will attempt to match the size of the job’s first media, but match the type, color, and weight of the HeaderMedia option.
- If no tray is set that matches the job’s first media size and type, color, and weight of the HeaderMedia, then use the HeaderMedia option without modification.
- If the HeaderMedia option matches no tray setting, then use the job’s first media (without modification) for the header media.

<size>

Indicates the size of the media.

Acceptable size values for the models 4050, 4090, 4850, or 4890 are: “USLetter,” “USLegal,” “A4,” or “nxn,”. Acceptable custom paper sizes (nxn specified in millimeters) range from 8 x 10" (203 x 254mm) to 8.5 x 14" (216 x 356mm).

Acceptable size values for the models 96, 4635, or 180 are: “USLetter,” “USLegal,” “USLedger,” “Tabloid,” “A3,” “A4,” or “nxn.” Acceptable custom paper sizes (nxn specified in millimeters) range from 7 x 10" (178 x 254mm) to 17 x 14" (432 x 356mm).

<type>

Sets the media type. Use a text string to specify the media type. Enter double quotation marks (" ") to leave the string empty. Valid types for all systems include “transparency,” “drilled.”

Additional valid types for the 96, 4635 and 180 include “precut,” “drilled-precut,” “#hole,” and “ordered#.” The symbol # is replaced by a number to indicate either the number of holes or the number of items in the ordered set.

<color>

Indicates the color of the media. Use a text string to specify the color.

<weight>

Indicates the weight of the media in grams per square meter (gsm). “0” indicates no preference.

HeapLimit <limit in MB>

Refers to the heap limit in MB. The default setting is “100.”

The default value for this option should not normally be modified.

Help

Displays all available printing options and the information you need to specify values. This command may scroll off the screen when used in some telnet sessions. This is due to line wrap caused by excessively long lines.

LocalConsoleHeight <number of lines>

Refers to the number of lines prior to “(More)” that display on the Printer Controller. The default setting is “45,” and the range of allowable integer values is 20-100.

MagentaHighlight <RGB value for magenta>

Refers to the RGB value for magenta highlight color. The default setting is “R: 0.8820001, G: 0.0, B: 0.8820001.”

For magenta highlight color to print correctly, the default RGB value for this option should not be modified.

MaxCopies <number of copies>

Refers to the maximum number of copies of a document that can be printed. The default setting is “1,000.”

MaxSecondsPerPage <seconds per page>

Refers to how long the Printer Controller is allowed to decompose a page. The time is measured in CPU seconds, and is approximate. This option only applies to PostScript jobs. The default setting is “600.”

MinDSC <version number>

Refers to the minimum acceptable DSC (PostScript Document Structuring Convention) version. The default is 2.1.

NoSaveOutput <“TRUE” | “FALSE”>

Refers to inhibiting paper output for Decomposition Service forms creation. If true, trailer sheets will only be produced in the event of any errors during decomposition. The default setting is “FALSE.”

OffsetPerCopy <“TRUE” | “FALSE”>

Refers to whether the stacker offsets documents per copy when the OffsetPerCopy attribute is not specified. The default setting is “FALSE.”

OffSetPerJob < “TRUE” | “FALSE”>

Refers to controlling job offsetting. Selecting “FALSE” disables job offsetting if the OffsetPerCopy option and attribute are also False and if the OffsetPerCopy attribute is not set and the jobs do not request offsetting.

OtherHighlight <RGB value for other highlight color>

Refers to the color for the other highlight. The default setting is “R: 0.8820001, G: 0.0, B: 0.0.”

PQAStacker <number>

Refers to the stacker group where PQA pages are delivered (4850, 4890, and 92C only).

PrinterName <printer name>

Refers to the name of the printer.

QuotaPages <number>

Refers to the maximum number of pages (not including header and trailer) that a document can print before the document is canceled by the system. The default is 10,000,000 pages. This number is an approximation.

QuotaSeconds <number>

Refers to the maximum number of seconds of CPU time that may be used in decomposing a document before the document is cancelled by the system. The default is 86400 seconds. This is an approximation.

RedHighlight <RGB value for red>

Refers to the RGB value for red highlight color. The default setting is “R: 0.8820001, G: 0.0, B: 0.0.”

For red highlight color to print correctly, the default RGB value for this option should not be modified.

RemoteConsoleHeight <number of lines>

Refers to the number of lines prior to “(More)” that display on the remote console during a telnet session. Lines that have wrapped are not counted. The default setting is “24,” and the range of allowable integer values is 20-100.

ReportCopies <format for copies>

Refers to the format in which the number of copies printed per document appears on the trailer sheet that prints at the end of a job. You use numbers and predefined characters to indicate the format. The predefined characters are replaced by the actual numbers on the trailer sheet when the document is printed. The predefined characters are as follows:

%g

Indicates that numbers appear as a string.

ReportCost <format for cost in dollars>

Refers to the format in which the estimated cost per document appears on the trailer sheet that prints at the end of a job. You use numbers and predefined characters to indicate the format. The predefined characters are replaced by the actual numbers on the trailer sheet when the document is printed. The predefined characters are as follows:

%g

Indicates that numbers appear as a string.

%<number>f

Indicates numbers appear with a floating point. For example, “%3.2f” indicates you want the number to appear as a three digit floating point number with two decimal places, such as 2.10.

%<number>d

Indicates numbers appear as integers. For example, “%2d” indicates you want the number to appear as a two digit integer, such as 32.

ReportSheets <format for sheets>

Refers to the format in which the number of pages per document appears on the trailer sheet that prints at the end of a job. You use numbers and predefined characters to indicate the format. The predefined characters are replaced by the actual numbers on the trailer sheet when the document is printed. The predefined characters are as follows:

%g

Indicates that numbers appear as a string.

ReportTime <format for time in seconds>

Refers to the format in which the document decomposition time appears on the trailer sheet that prints at the end of a job. You use numbers and predefined characters to indicate the format. The predefined characters are replaced by the actual numbers on the trailer sheet when the document is printed. The predefined characters are as follows:

%g

Indicates that numbers appear as a string.

%<number>f

Indicates numbers appear with a floating point. For example, “%3.2f” indicates you want the number to appear as a three-digit floating-point number with two decimal places, such as 2.10.

%<number>d

Indicates numbers appear as integers. For example, “%2d” indicates you want the number to appear as a two-digit integer, such as 32.

RoyalBlueHighlight <RGB value for royal blue>

Refers to the RGB value for royal blue highlight color. The default setting is “R: 0.074, G: 0.0, B: 0.878”.

For royal blue highlight color to print correctly, the default RGB value for this option should not be modified.

RubyHighlight <RGB value for ruby>

Refers to the RGB value for ruby highlight color. The default setting is “R: 0.878, G: 0.0, B: 0.3”.

For ruby highlight color to print correctly, the default RGB value for this option should not be modified.

SiteFontSize <font size in points>

Refers to the size of font you want to use for text that appears on the header page. The default setting is 18 points.

SiteHeader <message>

Refers to any one line message you want to appear on the upper right corner of the header page. The message may contain approximately 40 to 60 characters using the default SiteFontSize (18 pt text). Anything over that length will be truncated starting at the beginning of the text string. If the default SiteFontSize is changed, the number of characters displayed will change accordingly.

TrailerMedia <size:type:color:weight>

Refers to the media used for printing the trailer page.

- If the size specified in the TrailerMedia differs from the first media specified for the job, then the sequencer will attempt to match the size of the job's first media, but match the type, color, and weight of the TrailerMedia option.
- If no tray is set that matches the job's first media size and type, color, and weight of the TrailerMedia, then use the TrailerMedia option without modification.
- If the TrailerMedia option matches no tray setting, then use the job's first media (without modification) for the trailer media.

<size>

Indicates the size of the media.

Acceptable size values for the models 4050, 4090, 4850, or 4890 are: "USLetter," "USLegal," "A4," or "nxn,". Acceptable custom paper sizes (nxn specified in millimeters) range from 8 x 10" (203 x 254mm) to 8.5 x 14" (216 x 356mm).

Acceptable size values for the models 96, 4635, or 180 are: "USLetter," "USLegal," "USLedger," "Tabloid," "A3," "A4," or "nxn." Acceptable custom paper sizes (nxn specified in millimeters) range from 7 x 10" (178 x 254mm) to 17 x 14" (432 x 356mm).

<type>

Sets the media type. Use a text string to specify the media type. Enter double quotation marks (" ") to leave the string empty. Valid types for all systems include "transparency," "drilled."

Additional valid types for the 96, 4635 and 180 include "precut," "drilled-precut," "#hole," and "ordered#."

<color>

Indicates the color of the media. Use a text string to specify the color.

<weight>

Indicates the weight of the media in grams per square meter (gsm). "0" indicates no preference.

UserFontSize <font size in points>

Refers to the font size you want to use for the user name that appears on the header page. The default setting is 18 points, and the range of allowable integer values is 10-60.

UseTitlePage <"TRUE" | "FALSE">

Refers to whether a header page prints with each job. The default setting is "TRUE."

VioletHighlight <RGB value for violet>

Refers to the RGB value for violet highlight color. The default setting is "R: 0.302, G: 0.0, B: 0.8".

For violet highlight color to print correctly, the default RGB value for this option should not be modified.

YellowHighlight <RGB value for yellow>

Refers to the RGB value for yellow highlight color. The default setting is “R: 0.8820001, G: 0.8820001, B: 0.0”.

For yellow highlight color to map correctly, the default RGB value for this option should not be modified.

Example This example sets the name of the printer to “PS1:”

```
PS-admin>set option printername ps1
```

This example sets the font size of text on the header page to 14 points:

```
PS-admin>set option sitefontsize 14
```

List Options

Use the List Options command to show the current settings for default printing options.

Access level Administrator

Syntax List Options

Arguments None

Print Options

Use the Print Options command to print the default printing options.

Access level Administrator

Syntax Print Options <copies> <plex>

Arguments <copies>

indicates the number of copies you want to print

<plex>

indicates whether you want to print the copies in simplex, duplex, or tumble duplex.

Example This example prints five copies of the default print options in simplex mode:

```
PS-admin>print options 5 simplex
Print Options at January 7, 1999
 3:31:54 pm PDT submitted as document number 598
```

Setting imager parameters

Imager Parameter commands adjust the imaging level of PostScript and ASCII print jobs only. They control the rendering of lines, fonts, tints, and fine features.

- The Show Imager Parameters command displays the current values of the imager parameters.
- The Change Imager Parameters command changes the current values of the imager parameters for PostScript and ASCII only.
- The Restore Default Imager Parameters command resets the imager parameters to the default values.

You must enter the **Restart Sequencer** command after you change or restore default imager parameters for the values to take effect.

Note: The imager parameters do not affect the quality of bitmap graphics and bitmap fonts.

Show Imager Parameters

Use the Show Imager Parameters command to display the values of the imager parameters.

Access level Administrator

Syntax Show Imager Parameters

Arguments None

Example This example shows the results of the Show Imager Parameters command:

```
PS-admin> show imager parameters

LineThicken: 0.3
FontThicken: 0.0
Tint: 1.0
SampledBlackSnap: 0.0001
FatScanConversion: FALSE
```

Change Imager Parameters

Use the Change Imager Parameters command to change the values of the imager parameters for PostScript and ASCII only.

Access level Administrator

Syntax Change Imager Parameters

Arguments None. The system prompts you for the value of each parameter as follows:

LineThicken

Indicates the amount in pixels of thickening you want applied to the lines in a print job. The value for this parameter must be between 0.0 and 100.0.

Recommended values for darkening levels are as follows:

- Slight darkening 1.0
- Medium darkening 2.0
- Heavy darkening 3.5

Note: Specifying the 3.5 value for heavy darkening has approximately the same effect as using the thicken document attribute.

FontThicken

Indicates the amount in pixels of thickening you want applied to the strokes within a font for PostScript and ASCII only. The value for this parameter must be between 0.0 and 100.0.

If you change the FontThicken parameter, examine the output carefully to ensure that the thickening level, as well as the overall image quality, is acceptable. Depending on the font and printer you are using, changing the FontThicken parameter may cause some characters to appear distorted.

Recommended values for darkening levels are as follows:

- Slight darkening 2.0
- Medium darkening 5.0
- Heavy darkening 7.0

Note: Specifying the 7.0 value for heavy darkening has approximately the same effect as using the thicken document attribute.

Tint

Indicates a value between 0.5 and 1.0, where the smaller the number, the darker the tints become. This parameter only affects the imaging of PostScript jobs.

Recommended values for darkening levels are as follows:

- Slight darkening 0.9
- Medium darkening 0.75
- Heavy darkening 0.5

SampledBlackSnap

Indicates a fractional value by which the printer adjusts the scale factor of sampled blacks in Interpress jobs. The value for this parameter must be between 0 and 1. You may need to adjust this value for printing Interpress masters created for earlier versions of Interpress that do not rescale sampled blacks. This parameter only affects the imaging of Interpress jobs.

Using a small fraction for this value is recommended. For example, 0.06 allows the scale factor to be adjusted upward or downward by approximately 6%.

FatScanConversion

Indicates whether or not PostScript fine features will be enhanced. The default selection is FALSE.

Example This example shows the results of the Change Imager Parameters command:

```
PS-admin> change imager parameters

Enter the line thickening value: 1.0
Enter the font thickening value: 2.0
Enter the tint value: 0.9
Enter snap value for sampled blacks: 0.06
Use Fat Scan Conversion: Yes
```

Restore Default Imager Parameters

Use the Restore Default Imager Parameters command to restore the default values of the imager parameters.

Access level Administrator

Syntax Restore Default Imager Parameters

Arguments None

Example This example restores the default values of the imager parameters:

```
PS-admin>restore default imager parameters
Do you want to restore default parameters?  yes
```

Note: Default values are:

LineThicken:	0.3
FontThicken:	0.0
Tint:	1.0
SampledBlackSnap:	0.0001
FatScanConversion:	FALSE

Setting PCL imager parameters

PCL Imager Parameter commands adjust the imaging level of PCL print jobs only. They control the rendering of lines, fonts, tints, and fine features.

- The Show PCL Imager Parameters command displays the current values of the imager parameters.
- The Change PCL Imager Parameters command changes the current values of the imager parameters for PCL only.
- The Restore Default PCL Imager Parameters command resets the imager parameters to the default values.

You must enter the **Restart Sequencer** command after you change or restore default PCL imager parameters for the values to take effect.

Show PCL Imager Parameters

Use the Show PCL Imager Parameters command to display the values of the PCL imager parameters.

Access level Administrator

Syntax Show PCL Imager Parameters

Arguments None

Example This example shows the results of the Show PCL Imager Parameters command:

```
PS-admin> show pcl imager parameters
PCL 5e
Enhance Graphics: FALSE
Enhance Built-in Pattern: FALSE
Enhance Strokes: 0
Enhance User-defined pattern: 0
Enhance Bitmap Font: FALSE
```

Change PCL Imager Parameters

Use the Change PCL Imager Parameters command to change the values of the imager parameters for PCL only.

Access level Administrator

Syntax Change PCL Imager Parameters

Arguments None. The system prompts you for the value of each parameter as follows:

Resolution

For the 96, 4635, 180 printer models only, enter the dpi value 300 or 600 at the prompt.

Raster Graphics enhancement value

Indicates whether you want thickening for raster graphics. Acceptable values are “TRUE” or “FALSE”.

Built-in pattern enhancement value

Indicates whether you want thickening for patterns. Acceptable values are “TRUE” or “FALSE”.

HPGL minimum stroke enhancement value

Indicates whether you want to thicken the minimum stroke for HPGL. The value must be a positive integer (from 0 to 255). “0” and “1” indicate that no enhancement is required. Other integers indicate the desired width of the stroke in pixels.

HPGL user-defined pattern enhancement value

Indicates whether you want thickening for HPGL user-defined patterns. The values are:

"0"=no enhancement

"1="1D overstrike (shift & OR on X axis)

"2"=2D overstrike (shift & OR on both X and Y axes)

"3"=2X scaling (double pixeling)

Bitmap font enhancement value

Indicates whether or not you want thickening for bitmap fonts. Acceptable values are "TRUE" or "FALSE".

On the 92C, 4850, and 4890 models, the system will prompt you to change parameters for both PCL 5e and PCL 5c.

On the 96, 4635, and 180 models, the system will prompt you to enter the resolutions for which you want to change the parameters. When finished with that resolution, the system asks if you want to change another set of PCL 5e parameters.

Restore Default PCL Imager Parameters

Use the Restore Default PCL Imager Parameters command to restore the default values of the imager parameters.

Access level Administrator

Syntax Restore Default PCL Imager Parameters

Arguments None

Example This example restores the default values of the PCL imager parameters:

```
PS-admin>restore pcl default imager parameters
Do you want to restore default PCL parameters?
yes
```

Default values vary based on model, resolution, and version of PCL.

Table 5-1. **Default PCL Imager Parameters**

	4050/4090 (300 dpi)	**4850/4890/92C (300 dpi)**		**92C (600 dpi)**		**96/4635/180 (300 dpi)**	**96/4635/180 (600 dpi)**
	PCL 5e	PCL 5c	PCL 5e	PCL 5c	PCL 5e	PCL 5e	PCL 5e
Enhance Graphics	True	False	False	False	False	False	True
Built-in Pattern	True	False	False	False	False	True	True
Enhance Strokes	2	0	0	0	0	1	2
User-defined pattern	1	2	0	2	0	1	1
Bitmap Font	True	False	False	False	False	False	True

Setting PCL parameters

The Change PCL Parameters command allows you to define the environment for PCL 5 printing.

The Restore Default PCL Parameters command allows you to reset the parameters to the defaults.

The Show PCL Parameters command allows you to view the current settings.

Changing PCL parameters

Use the Change PCL Parameters command to define the settings you require for PCL 5 printing. Do this before you begin printing your PCL jobs. You can define parameters for:

- Saving the environment—whether you want permanent macros and fonts that you download to be saved to disk for use with PCL jobs.
- Specifying edge-to-edge printing—whether you want your PCL jobs to use edge-to-edge printing.
- Automatically adding a carriage return (CR) or line feed (LF) to all line endings.
- Specifying a symbol set.

Change PCL Parameters

Note: You must use the Restart Sequencer command after using the Change PCL Parameters command.

Access level Administrator

Syntax Change PCL Parameters <AutoCR value> <AutoLF value> <Edge to edge value> <Environment save value> <Language> <Symbol set value>

Arguments <AutoCR value>

Acceptable values are TRUE or FALSE. If TRUE, the system will automatically add a Carriage Return to all line endings. Generally, it should be set to TRUE when printing from UNIX systems. It can also be used if lines are printing in a stair-step pattern. If printing primarily from PCs with DOS or Windows, it should be set to FALSE. The default is FALSE.

<AutoLF value>

Acceptable values are TRUE or FALSE. If TRUE, the system will automatically add an ASCII line feed (or new line) to all line endings. Generally, it should be set to TRUE when printing from Macintosh systems. It can also be used if lines are printing on top of each other. If printing primarily from PCs with DOS or Windows, it should be set to FALSE. The default is FALSE.

<Edge to edge value>

Acceptable values are TRUE or FALSE. An entry of TRUE will set the system to use edge to edge printing for PCL jobs. An entry of FALSE means that edge to edge printing will not be used. The value FALSE emulates the HP LaserJet 4, which has default margins on all four edges. The default is FALSE.

<Environment save value>

Acceptable values are TRUE or FALSE. An entry of TRUE will set the system to save downloaded permanent PCL fonts and macros to disk. An entry of FALSE means that downloaded permanent PCL fonts and macros will not be saved to disk. They will be used with the job in which they are downloaded, and will persist until there is a system or sequencer restart. The default is FALSE.

Note: There are several important things to be aware of when saving permanent PCL fonts and macros to disk:

- The fonts and macros saved to disk will be retained even after a system or sequencer restart. This is not like an HP LaserJet where the resources would be lost after a restart because they are stored in memory, not on the disk.
- If a font or macro with the same ID as one saved to disk is downloaded (and the EnvironmentSave value is TRUE), it will overwrite the one already on disk. In a network environment, it is important for users who download fonts and macros to be aware of this so that they do not inadvertently overwrite each others' resources.

- When using the commands to list or print fonts, fonts that have been downloaded will not be listed. Only those that have been installed at the printer controller will be listed.

<Language>

Specify the language value you wish to use. Valid language values are: ENGLISH, FRENCH, ITALIAN, GERMAN, SPANISH, PORTUGUESE, NORWEGIAN, DUTCH, FINNISH, DANISH, and SWEDISH.

<Symbol set value>

Specify a default value from the supported symbols sets. This is the default symbol set that will be used if one is not included with the job. The default is 8U (symbol set ID for Roman-8). You can use either kind1 or symbol set ID numbers when specifying the value. Refer to the section on "PCL symbol sets."

Example This example shows the usage of the Change PCL Parameters command:

```
PS-admin> change pcl parameters

Enter the auto CR value (TRUE, FALSE): TRUE
Enter the auto LF value (TRUE, FALSE): TRUE
Enter the edge to edge value (TRUE,FALSE): TRUE
Enter the environment save value (TRUE,FALSE): FALSE
Enter the language value:  ENGLISH
Enter value for symbol set: 8U
Sequencer needs to be restarted:use "Restart Sequencer"
command.
```

You can also enter the command on one line as shown below.

Example This example sets the values to the same ones shown above:

```
PS-admin>change pcl parameters true true true false english 8u
```

PCL symbol sets

In most cases, a PCL job will specify a symbol set. For jobs that do not include a symbol set, you can specify a default. The list of valid symbol sets follows. For more detailed information regarding the use of PCL symbol sets, see the HP PCL documentation.

Table 5-2. **PCL 5e symbol sets**

Kind 1	Symbol Set ID	Symbol Set Name
4	0D	ISO 60: Danish/Norwegian
9	0I	ISO 15: Italian
14	0N	ISO 8859/1 Latin 1
19	0S	ISO 11: Swedish
21	0U	ISO 6: ASCII
37	1E	ISO 4: UK
38	1F	ISO 69: French
39	1G	ISO 21: German
53	1U	Legal
78	2N	ISO 8859/2 Latin 2
83	2S	ISO 17: Spanish
173	5M	PS Math
174	5N	ISO 8859/9 Latin 5
180	5T	Windows 3.1 Latin 5
202	6J	Microsoft Publishing
205	6M	Ventura Math
234	7J	DeskTop
269	8M	Math-8
277	8U	Roman-8
293	9E	Windows 3.1 Latin 2
308	9T	PC-8 Turkish
309	9U	Windows 3.0 Latin 1
330	10J	PS Text
341	10U	PC-8
373	11U	PC-8 Danish/Norwegian
394	12J	MC Text
405	12U	PC-850 Multilingual
426	13J	Ventura International
458	14J	Ventura US
501	15U	Pi Font
565	17U	PC-852, Latin 2

Table 5-2. **PCL 5e symbol sets**

Kind 1	Symbol Set ID	Symbol Set Name
621	19M	Symbol
629	19U	Windows 3.1 Latin 1
18540	579L	Wingdings

Restore Default PCL Parameters

Note: You must use the **Restart Sequencer** command after using the Restore Default PCL Parameters command.

Access level Administrator

Syntax Restore PCL Parameters

Use the Restore Default PCL Parameters command to restore the PCL settings to the defaults. If the PCL5 defaults file has been modified on your system, the defaults may be different from those listed here.

- AutoCR: FALSE
- AutoLF: FALSE
- EdgeToEdge: FALSE
- EnvironmentSave: FALSE
- Language: ENGLISH
- SymbolSet: 8U

Show PCL Parameters

Access level Administrator

Syntax Show PCL Parameters

Use the Show PCL Parameters command to display the current PCL settings:

- AutoCR: TRUE|FALSE
- AutoLF: TRUE|FALSE
- EdgeToEdge: TRUE|FALSE
- EnvironmentSave: TRUE|FALSE
- Language: <LANGUAGE>
- SymbolSet: <value>

Note: Even though you can enter a symbol set value using either kind1 or symbol set ID numbers, when you use Show PCL Parameters, only the symbol set ID number is displayed.

Example This example shows the usage of the Show PCL Parameters command:

```
PS-admin> show pcl parameters

AutoCR:  FALSE
AutoLF:  FALSE
EdgeToEdge: TRUE
EnvironmentSave: FALSE
Language:  ENGLISH
SymbolSet: 8U
```

5. Setting system defaults

This chapter describes the process for setting defaults for print features and system configuration. These default settings allow you to customize the way the system accepts information from host or network, displays information to the user, and handles print jobs without specific overriding instructions.

Before sending print jobs to your DocuPrint NPS, you need to set system defaults for the various document parameters associated with print jobs. DocuPrint NPS provides the following commands for this purpose, including:

- Set Default Media defines the default media size, type, color, and weight. Show Default Media lists the currently defined default media.
- Set Tray allows you to specify what type of media is loaded in your printer feeder trays.
- Set Option sets the values of various printing options. You can view the current setting of these options with the List Options command and print them with the Print Options command.
- Change Imager Parameters and Change PCL Imager Parameters adjust the imaging level of print jobs. You can show the current values and restore the defaults.
- Change PCL Parameters allows you to define the environment for PCL printing.

The following sections provide the syntax and arguments for these commands.

Setting default media

The Set Default Media command (administrator or operator level) defines the default media size, type, color, and weight.

The Show Default Media command (administrator, operator, or user level) lists the default media for the printer.

These default settings are applied to media trays by invoking the **Set Tray n Default** command.

Set Default Media

Use the Set Default Media command to define the default media size, type, color, and weight for jobs submitted without media specifications. This command may not take effect immediately on jobs already being processed. A Restart Sequencer command is the recommended method for insuring that media has been changed.

Access level Administrator or operator

Syntax Set Default Media <size> <type> <color> <weight>

Arguments <size>

Sets the size of the default media.

Acceptable size values for the models 4050, 4090, 4850, 4890, or 92C are: “USLetter,” “USLegal,” “A4,” or “nxn,”. Acceptable custom paper sizes (nxn specified in millimeters) range from 8 x 10" (203 x 254mm) to 8.5 x 14" (216 x 356mm).

Acceptable size values for the models 96, 4635, or 180 are: “USLetter,” “USLegal,” “USLedger,” “Tabloid,” “A3,” “A4,” or “nxn.” Acceptable custom paper sizes (nxn specified in millimeters) range from 7 x 10" (178 x 254mm) to 17 x 14" (432 x 356mm).

<type>

Sets the default media type. Use a text string to specify the media type. Enter double quotation marks (" ") to leave the string empty. Valid types for all DocuPrint NPS systems include “transparency,” “plain,” “drilled.”

Note: “Plain” cannot be used by Xerox clients utilizing job tickets.

Additional valid types for the 96, 4635 and 180 include “precut,” “drilled-precut,” “#hole,” and “ordered#.” The symbol # is replaced by a number to indicate either the number of holes or the number of items in the ordered set.

<color>

Sets the color of the default media. Use a text string to specify the color.

<weight>

Sets the weight of the default media. Specify the weight in grams per square meter (gsm). “0” indicates no preference.

Example This example sets the default media to USLetter, white:

```
PS-op>set default media usletter "" white 0
Site default medium is USLetter::white
```

Show Default Media

Use the Show Default Media command to show size, type, color, and weight for the default media.

Access level Administrator, operator, user

Syntax Show Default Media

Arguments None

Example This example shows the output of the Show Default Media command:

```
PS-op>show default media
Site default medium is USLetter::white:75
```

Setting feeder tray attributes

The Set Tray command (administrator or operator level) allows you to specify what type of media is loaded in your printer feeder trays. You must use the Set Tray command whenever you change the media in a tray. You can also match the attributes of one tray to those of another tray.

Note: The Set Tray command and related commands cannot be used for a tray that is being used by the current job, or while the IOT is warming up.

For instructions on loading feeder trays, see “Loading paper” in the *Guide to Performing Routine Maintenance*.

Set Tray and Set Tray Default

Use the Set Tray command to specify what type of media is loaded in your printer feeder trays.

Before using this command ensure that all trays are in the feed position.

Note: If you do not indicate the color or weight, the system uses the values of the default media.

Access level Administrator or operator

Syntax Set Tray <n> <size> <type> <color> <weight>

Set Tray <n> Default

Arguments <n>

Indicates the number of the paper tray, for example “1” or “2.”

<size>

Indicates the size of the media. If you specify “default,” the type, color, and weight are set to the default media, and the size matches the tray setting.

Acceptable size values for the models 4050, 4090, 4850, 4890, or 92C are: “USLetter,” “USLegal,” “A4,” or “nxn”. Acceptable custom paper sizes (nxn specified in millimeters) range from 8 x 10" (203 x 254mm) to 8.5 x 14" (216 x 356mm).

Acceptable size values for the models 96, 4635, or 180 are: “USLetter,” “USLegal,” “USLedger,” “Tabloid,” “A3,” “A4,” or “nxn.” Acceptable custom paper sizes (nxn specified in millimeters) range from 7 x 10" (178 x 254mm) to 17 x 14" (432 x 356mm).

<type>

Sets the media type. Use a text string to specify the media type. Enter double quotation marks (" ") to leave the string empty. Valid types for DocuPrint NPS systems include “transparency,” “plain,” “drilled” and any custom type defined by a text string.

Note: When you specify a media type from a client, and you use the prefinish value, the word “plain” is equivalent to a blank media type.

Additional valid types for the 96, 4635 and 180 include “precut,” “drilled-precuttab,” “#hole,” and “ordered#.” The symbol # is replaced by a number to indicate either the number of holes or the number of items in the ordered set.

<color>

Indicates the color of the media. Use a text string to specify the color.

<weight>

Indicates the weight of the media in grams per square meter (gsm). “0” indicates no preference.

Default

Sets tray n to the appropriate size (USLetter, Legal, etc.) to match the way the hardware has been set. The type, color and weight will be set to match the values of the default media.

Example This example sets feeder tray 1 to USLetter, white, no type indicated, no weight preference:

```
PS-op>set tray 1 usletter "" white 0
Tray 1 set to USLetter::white
```

Set Tray <n> Tray <m>

Use the Set Tray <n> Tray <m> command to set the attributes of tray <n> the same as those for tray <m>.

Access level Administrator or operator

Syntax Set Tray <n> Tray <m>

Arguments <n> <m>

Assigns the attributes of tray <m> to tray <n>

Example This example sets the attributes of tray 1 to be the same as those of tray 2:

```
PS-op>set tray 1 tray 2
Tray 1 set to match Tray 2
```

Set Tray <n> Position <m>

Note: This command is generally not required for ordered stock applications.

Use the Set Tray <n> Position <m> command to specify the position, in an ordered set, of the piece of stock at the top of the tray.

Before using this command ensure all trays are in the feed position.

Note: This command applies only to ordered sets on the 96, 4635, and 180.

Access level Administrator or operator

Syntax Set Tray <n> Position <m>

Arguments <n>

Indicates the number of the paper tray. The tray must already have paper type set to "<*anything*>-ordered#," where # is the total number of items in a complete set.

<m>

Sets the item at the top of tray n to the appropriate order number in the ordered set. The value <m> must not be greater than the number (#) specified in the "ordered#" field of the paper type specified for the tray.

Example This example sets the item at the top of feeder tray 1 to number 3 in the current ordered set:

```
PS-op>set tray 1 position 3
Tray 1 set to Position 3
```

Unset Tray <n>

If you want the system to ignore a tray, use the Unset Tray command. To restore the tray to active status, use the Set Tray command.

Access level Administrator or operator

Syntax Unset Tray <n>

Arguments <n>

Indicates the number of the paper tray.

Setting printer options

The following commands control the printing options for your DocuPrint (some options may not apply to your printer configuration). Use Set Option Help to display the available printing options and the information you need to specify values.

Set Option

The Set Option command assigns values to the printing options you specify. It may take a few minutes for an option to be set after you enter the command. A Restart Sequencer command is the recommended method for insuring that an option has been changed.

Access level Administrator

Syntax Set Option <name> <value>

Arguments <name> <value>

Specifies the name and value of the option you want to set. Choose from the following:

AdjustX <offset> <units>

Sets the horizontal image shift from the edge of the paper closest to the front of the printer as it is fed. “X” is the physical slow scan direction. For example, for letter or A4 paper, “X” is parallel to the short edge of the paper. For Ledger or A3, “X” is parallel to the long edge of the paper.

<offset> is the amount of the horizontal image shift. The default is 0. This value should normally be zero (0), but can be changed to temporarily compensate for printer misalignments until a service technician can adjust the printer.

<units> refers to the unit of measure used to specify the offset value. The default setting is “mm.”

- pt (points=72.27 to 1 inch)
- bp (big point=72 to 1 inch)
- pi (pica=12 points)
- el (elite=10 points)
- in (inches)
- pu (pixel units =1/300 inch, not pixels)
- fu (furlongs)
- mm (millimeters)

AdjustY <offset> <units>

Sets the vertical image shift from the edge of the paper closest to the front of the printer as it is fed. “Y” is the physical fast scan direction. For example, for letter or A4 paper, “Y” is parallel to the long edge of the paper. For Ledger or A3, “Y” is parallel to the short edge of the paper.

<offset> is the amount of the vertical image shift. The default is 0. This value should normally be zero (0), but can be changed to temporarily compensate for printer misalignments until a service technician can adjust the printer.

<units> refers to the unit of measure used to specify the offset value. The default setting is “mm.”

- pt (points=72.27 to 1 inch)
- bp (big point=72 to 1 inch)
- pi (pica=12 points)
- el (elite=10 points)
- in (inches)
- pu (pixel units =1/300 inch, not pixels)
- fu (furlongs)
- mm (millimeters)

AllowElideHeaders <“TRUE” | “FALSE”>

Refers to the suppression of header pages within a group of documents with the same sender name. The default setting is “TRUE.”

AttributeNameForListDocs <attribute>

Refers to the text attribute to use for the List Documents command. The default setting is “SenderName.”

BlueHighlight <RGB value for blue>

Refers to the RGB value for blue highlight color. The default setting is “R: 0.0, G: 0.0, B: 0.8820001.”

For blue highlight color to print correctly, the default RGB (print) value for this option should not be modified.

BrownHighlight <RGB value for brown>

Refers to the RGB value for brown highlight color. The default setting is “R: 0.65, G: 0.1, B: 0.1.”

For brown highlight color to map correctly, the default RGB value for this option should not be modified.

CardinalHighlight <RGB value for cardinal>

Refers to the RGB value for cardinal highlight color. The default setting is “R: 0.7000001, G: 0.03, B: 0.1.”

For cardinal highlight color to print correctly, the default RGB value for this option should not be modified.

CentsPerHeader <cost per sheet>

Refers to cost per header page. If you enter a value, the cost information appears on the trailer sheet that prints at the end of a job. The default setting is “0.0.”

CentsPerNormal <cost per sheet>

Refers to cost per document page. If you enter a value, the cost information appears on the trailer sheet that prints at the end of a job. The default setting is “0.0.”

CentsPerSecond <cost per second>

Refers to cost per document decomposition time. If you enter a value, the cost information appears on the trailer sheet that prints at the end of a job. The default setting is “0.0.”

CentsPerTrailer <cost per sheet>

Refers to cost per trailer sheet. If you enter a value, the cost information appears on the trailer sheet that prints at the end of a job. The default setting is “0.0.”

CyanHighlight <RGB value for cyan>

Refers to the RGB value for cyan highlight color. The default setting is “R: 0.0, G: 0.8820001, B: 0.8820001.”

For cyan highlight color to print correctly, the default RGB value for this option should not be modified.

DefaultCopies <number of copies>

Refers to the number of copies of a document printed when one of the following commands is entered: Print Sample Document, Print Form Sample, Print Form List, Print Options, Print PCLFont Sample, Print Font Sample, and Print Font List. The default setting is “1.”

DefaultHighlightColorRendering <“pictorial” | “presentation” | “colorToHighlight” | “colorTables”| “automatic”>

Refers to the mapping of a three-dimensional color application (such as RGB) to the two-dimensional color application provided with highlight color printing. The default setting is “automatic.”

pictorial

Use this attribute to avoid color saturation problems with Decomposition Forms.

- Colors with a hue matching the map color are not changed.
- Colors with a hue close to the map color are rendered with color, but with a saturation level that decreases as the hue shifts away from the map color.
- Colors with a hue complementary to the map color are produced in shades of gray.

presentation

Refers to the ability to distinguish between different colors. This attribute is a good choice for charts and diagrams, as they typically use distinctly different colors. Colors with a hue that matches the map color will not be changed. There will be discontinuities that may produce undesirable results in pictorial material.

colorToHighlight

This mapping attribute discards the hue information and preserves the saturation and value of the color application. Fully-saturated colors will turn into a solid highlight color

despite which map color is in effect. This is useful for documents that only use spot color for emphasis.

colorTables

This mapping attribute uses preset color tables to perform the mapping and is provided for compatibility reasons. This is used only for red, green, or blue highlight color toners.

automatic

This attribute chooses a mapping method on an object-by-object basis; for example, it applies the pictorial mapping for pictures and the presentation mapping for other objects (filled areas, strokes, and text). This is the default.

DefaultPaperTray <paper tray number>

Refers to the paper tray used for printing test patterns when the Print Test Pattern command is entered. The Print Test Pattern is available only in service mode. The default setting is “1.”

DefaultPlex <“simplex” | “duplex” | “tumble duplex”>

Refers to whether documents, including test patterns and sample documents, print simplex, duplex, or tumble duplex. The default setting is “simplex.”

DefaultPlexChangesDynamic <“TRUE” | “FALSE”>

Refers to whether the system will honor the plex changes specified in the job’s PostScript or PCL code. Set to “True” to honor plex changes within the job. Set to “False” when you want to ignore the plex changes specified in the job’s PostScript or PCL.

DefaultPCLLanguageLevel <“PCL5e” | “PCL5c”>

Refers to the default PCL language level to be used for the system. For monochrome printers the setting is PCL 5e. For highlight color printers, use PCL 5c if you want to use the PCL 5c interpreter for printing PCL 5c jobs that specify highlight color. The default is PCL5e.

DefaultPSLanguageLevel <“1” | “2”>

Refers to which PostScript Language Level to use. The default setting is “2.”

DefaultRecoveryOffset <“TRUE” | “FALSE”>

When “True,” a single page is offset from the rest of the job after the jam. When “False,” no sheets are offset. The default is “False.”

DefaultResolution <“240” | “300” | “600”>

Refers to the printing resolution used for documents, including test patterns and sample documents. 240 dpi is available for Model 180 only; 600 dpi is available for Models 92C, 96, 4635 and 180 only.

The default setting is “300” for all printers except the 92C; its default setting is 600.

On the 96, 4635, 180, and 92C NPS, output resolution is always 600 dpi regardless of the resolution of the input. For these models, if the specified value for the resolution attributes is 300 dpi, the data is decomposed by the controller at 300 dpi, and the print engine interpolates the data to 600 dpi; this provides the

fastest processing. When the specified value for the resolution attribute is 600 dpi, the data is decomposed by the controller at 600 dpi; this provides the best quality image.

DefaultStacker <“0” | “1” | “2”>

Refers to the stacker group used.
0 = top tray
1 = stacker group 1
2 = stacker group 2

The default setting is “1.”

DefaultStitch <“TRUE” | “FALSE”>

Refers to whether test patterns or sample documents are stitched when the Print Test Pattern or Print Sample Document command is entered. The default setting is “FALSE.”

EarlyStaple <“TRUE” | “FALSE”>

Refers to whether stapled jobs printed in ascending page order and exceeding the stapler limit (50 sheets) are delivered early. The default setting is “FALSE.” Used only for systems with stitchers.

ExportVPsToAppleTalk <“TRUE” | “FALSE”>

Refers to whether newly created virtual printers are automatically exported to AppleTalk for viewing in the users’ Chooser. If “TRUE”, all new virtual printers will be made available for AppleTalk. If “FALSE”, the new virtual printers will not be automatically made available. Selected virtual printers can be exported to AppleTalk by using the Set Virtual Printer Flags command. Refer to the *Guide to Managing Print Jobs* chapter “Managing Virtual Printers.”

ExtraMessage <message>

Refers to any message that appears in the middle of the header page that prints with the job.

ForceBlackOnly <“TRUE” | “FALSE”>

Refers to whether black-only printing is used with highlight color printers. The default setting is “FALSE.”

ForceHeaderAlt <“TRUE” | “FALSE”>

Refers to forcing header and trailer sheets to an alternate destination for printers with the bypass transport. The default setting is “FALSE,” meaning that the header and trailer sheets are sent to the bypass transport. When set to “TRUE,” header and trailer pages are sent to the Stacker Group that is not the top tray and not the bypass transport. On 4050, 4090, 4850, 4090, 92C, and 180 systems, header and trailer pages are sent to stacker group 2. On 4635 and 96 systems header and trailer pages are sent to stacker group 1.

ForceReport <“TRUE” | “FALSE”>

Refers to whether a trailer sheet prints at the end of a job. The default setting is “FALSE.”

When the default setting is used, a trailer sheet prints only if there are printing errors or a PostScript file writes to stdout.

GreenHighlight <RGB value for green>

Refers to the RGB value for green highlight color. The default setting is “R: 0.0, G: 0.8820001, B: 0.0.”

For green highlight color to print correctly, the default RGB value for this option should not be modified.

HeaderMedia <size:type:color:weight>

Refers to the media used for printing the header page.

- If the size specified in the HeaderMedia differs from the first media specified for the job, then the sequencer will attempt to match the size of the job’s first media, but match the type, color, and weight of the HeaderMedia option.
- If no tray is set that matches the job’s first media size and type, color, and weight of the HeaderMedia, then use the HeaderMedia option without modification.
- If the HeaderMedia option matches no tray setting, then use the job’s first media (without modification) for the header media.

<size>

Indicates the size of the media.

Acceptable size values for the models 4050, 4090, 4850, or 4890 are: “USLetter,” “USLegal,” “A4,” or “nxn,”. Acceptable custom paper sizes (nxn specified in millimeters) range from 8 x 10" (203 x 254mm) to 8.5 x 14" (216 x 356mm).

Acceptable size values for the models 96, 4635, or 180 are: “USLetter,” “USLegal,” “USLedger,” “Tabloid,” “A3,” “A4,” or “nxn.” Acceptable custom paper sizes (nxn specified in millimeters) range from 7 x 10" (178 x 254mm) to 17 x 14" (432 x 356mm).

<type>

Sets the media type. Use a text string to specify the media type. Enter double quotation marks (" ") to leave the string empty. Valid types for all systems include “transparency,” “drilled.”

Additional valid types for the 96, 4635 and 180 include “precut,” “drilled-precut,” “#hole,” and “ordered#.” The symbol # is replaced by a number to indicate either the number of holes or the number of items in the ordered set.

<color>

Indicates the color of the media. Use a text string to specify the color.

<weight>

Indicates the weight of the media in grams per square meter (gsm). “0” indicates no preference.

HeapLimit <limit in MB>

Refers to the heap limit in MB. The default setting is “100.”

The default value for this option should not normally be modified.

Help

Displays all available printing options and the information you need to specify values. This command may scroll off the screen when used in some telnet sessions. This is due to line wrap caused by excessively long lines.

LocalConsoleHeight <number of lines>

Refers to the number of lines prior to “(More)” that display on the Printer Controller. The default setting is “45,” and the range of allowable integer values is 20-100.

MagentaHighlight <RGB value for magenta>

Refers to the RGB value for magenta highlight color. The default setting is “R: 0.8820001, G: 0.0, B: 0.8820001.”

For magenta highlight color to print correctly, the default RGB value for this option should not be modified.

MaxCopies <number of copies>

Refers to the maximum number of copies of a document that can be printed. The default setting is “1,000.”

MaxSecondsPerPage <seconds per page>

Refers to how long the Printer Controller is allowed to decompose a page. The time is measured in CPU seconds, and is approximate. This option only applies to PostScript jobs. The default setting is “600.”

MinDSC <version number>

Refers to the minimum acceptable DSC (PostScript Document Structuring Convention) version. The default is 2.1.

NoSaveOutput <“TRUE” | “FALSE”>

Refers to inhibiting paper output for Decomposition Service forms creation. If true, trailer sheets will only be produced in the event of any errors during decomposition. The default setting is “FALSE.”

OffsetPerCopy <“TRUE” | “FALSE”>

Refers to whether the stacker offsets documents per copy when the OffsetPerCopy attribute is not specified. The default setting is “FALSE.”

OffSetPerJob < “TRUE” | “FALSE”>

Refers to controlling job offsetting. Selecting “FALSE” disables job offsetting if the OffsetPerCopy option and attribute are also False and if the OffsetPerCopy attribute is not set and the jobs do not request offsetting.

OtherHighlight <RGB value for other highlight color>

Refers to the color for the other highlight. The default setting is “R: 0.8820001, G: 0.0, B: 0.0.”

PQAStacker <number>

Refers to the stacker group where PQA pages are delivered (4850, 4890, and 92C only).

PrinterName <printer name>

Refers to the name of the printer.

QuotaPages <number>

Refers to the maximum number of pages (not including header and trailer) that a document can print before the document is canceled by the system. The default is 10,000,000 pages. This number is an approximation.

QuotaSeconds <number>

Refers to the maximum number of seconds of CPU time that may be used in decomposing a document before the document is cancelled by the system. The default is 86400 seconds. This is an approximation.

RedHighlight <RGB value for red>

Refers to the RGB value for red highlight color. The default setting is “R: 0.8820001, G: 0.0, B: 0.0.”

For red highlight color to print correctly, the default RGB value for this option should not be modified.

RemoteConsoleHeight <number of lines>

Refers to the number of lines prior to “(More)” that display on the remote console during a telnet session. Lines that have wrapped are not counted. The default setting is “24,” and the range of allowable integer values is 20-100.

ReportCopies <format for copies>

Refers to the format in which the number of copies printed per document appears on the trailer sheet that prints at the end of a job. You use numbers and predefined characters to indicate the format. The predefined characters are replaced by the actual numbers on the trailer sheet when the document is printed. The predefined characters are as follows:

%g

Indicates that numbers appear as a string.

ReportCost <format for cost in dollars>

Refers to the format in which the estimated cost per document appears on the trailer sheet that prints at the end of a job. You use numbers and predefined characters to indicate the format. The predefined characters are replaced by the actual numbers on the trailer sheet when the document is printed. The predefined characters are as follows:

%g

Indicates that numbers appear as a string.

%<number>f

Indicates numbers appear with a floating point. For example, “%3.2f” indicates you want the number to appear as a three digit floating point number with two decimal places, such as 2.10.

%<number>d

Indicates numbers appear as integers. For example, “%2d” indicates you want the number to appear as a two digit integer, such as 32.

ReportSheets <format for sheets>

Refers to the format in which the number of pages per document appears on the trailer sheet that prints at the end of a job. You use numbers and predefined characters to indicate the format. The predefined characters are replaced by the actual numbers on the trailer sheet when the document is printed. The predefined characters are as follows:

%g

Indicates that numbers appear as a string.

ReportTime <format for time in seconds>

Refers to the format in which the document decomposition time appears on the trailer sheet that prints at the end of a job. You use numbers and predefined characters to indicate the format. The predefined characters are replaced by the actual numbers on the trailer sheet when the document is printed. The predefined characters are as follows:

%g

Indicates that numbers appear as a string.

%<number>f

Indicates numbers appear with a floating point. For example, “%3.2f” indicates you want the number to appear as a three-digit floating-point number with two decimal places, such as 2.10.

%<number>d

Indicates numbers appear as integers. For example, “%2d” indicates you want the number to appear as a two-digit integer, such as 32.

RoyalBlueHighlight <RGB value for royal blue>

Refers to the RGB value for royal blue highlight color. The default setting is “R: 0.074, G: 0.0, B: 0.878”.

For royal blue highlight color to print correctly, the default RGB value for this option should not be modified.

RubyHighlight <RGB value for ruby>

Refers to the RGB value for ruby highlight color. The default setting is “R: 0.878, G: 0.0, B: 0.3”.

For ruby highlight color to print correctly, the default RGB value for this option should not be modified.

SiteFontSize <font size in points>

Refers to the size of font you want to use for text that appears on the header page. The default setting is 18 points.

SiteHeader <message>

Refers to any one line message you want to appear on the upper right corner of the header page. The message may contain approximately 40 to 60 characters using the default SiteFontSize (18 pt text). Anything over that length will be truncated starting at the beginning of the text string. If the default SiteFontSize is changed, the number of characters displayed will change accordingly.

TrailerMedia <size:type:color:weight>

Refers to the media used for printing the trailer page.

- If the size specified in the TrailerMedia differs from the first media specified for the job, then the sequencer will attempt to match the size of the job's first media, but match the type, color, and weight of the TrailerMedia option.
- If no tray is set that matches the job's first media size and type, color, and weight of the TrailerMedia, then use the TrailerMedia option without modification.
- If the TrailerMedia option matches no tray setting, then use the job's first media (without modification) for the trailer media.

<size>

Indicates the size of the media.

Acceptable size values for the models 4050, 4090, 4850, or 4890 are: "USLetter," "USLegal," "A4," or "nxn,". Acceptable custom paper sizes (nxn specified in millimeters) range from 8 x 10" (203 x 254mm) to 8.5 x 14" (216 x 356mm).

Acceptable size values for the models 96, 4635, or 180 are: "USLetter," "USLegal," "USLedger," "Tabloid," "A3," "A4," or "nxn." Acceptable custom paper sizes (nxn specified in millimeters) range from 7 x 10" (178 x 254mm) to 17 x 14" (432 x 356mm).

<type>

Sets the media type. Use a text string to specify the media type. Enter double quotation marks (" ") to leave the string empty. Valid types for all systems include "transparency," "drilled."

Additional valid types for the 96, 4635 and 180 include "precut," "drilled-precut," "#hole," and "ordered#."

<color>

Indicates the color of the media. Use a text string to specify the color.

<weight>

Indicates the weight of the media in grams per square meter (gsm). "0" indicates no preference.

UserFontSize <font size in points>

Refers to the font size you want to use for the user name that appears on the header page. The default setting is 18 points, and the range of allowable integer values is 10-60.

UseTitlePage <"TRUE" | "FALSE">

Refers to whether a header page prints with each job. The default setting is "TRUE."

VioletHighlight <RGB value for violet>

Refers to the RGB value for violet highlight color. The default setting is "R: 0.302, G: 0.0, B: 0.8".

For violet highlight color to print correctly, the default RGB value for this option should not be modified.

YellowHighlight <RGB value for yellow>

Refers to the RGB value for yellow highlight color. The default setting is “R: 0.8820001, G: 0.8820001, B: 0.0”.

For yellow highlight color to map correctly, the default RGB value for this option should not be modified.

Example This example sets the name of the printer to “PS1:”

```
PS-admin>set option printername ps1
```

This example sets the font size of text on the header page to 14 points:

```
PS-admin>set option sitefontsize 14
```

List Options

Use the List Options command to show the current settings for default printing options.

Access level Administrator

Syntax List Options

Arguments None

Print Options

Use the Print Options command to print the default printing options.

Access level Administrator

Syntax Print Options <copies> <plex>

Arguments <copies>

indicates the number of copies you want to print

<plex>

indicates whether you want to print the copies in simplex, duplex, or tumble duplex.

Example This example prints five copies of the default print options in simplex mode:

```
PS-admin>print options 5 simplex
Print Options at January 7, 1999
 3:31:54 pm PDT submitted as document number 598
```

Setting imager parameters

Imager Parameter commands adjust the imaging level of PostScript and ASCII print jobs only. They control the rendering of lines, fonts, tints, and fine features.

- The Show Imager Parameters command displays the current values of the imager parameters.
- The Change Imager Parameters command changes the current values of the imager parameters for PostScript and ASCII only.
- The Restore Default Imager Parameters command resets the imager parameters to the default values.

You must enter the **Restart Sequencer** command after you change or restore default imager parameters for the values to take effect.

Note: The imager parameters do not affect the quality of bitmap graphics and bitmap fonts.

Show Imager Parameters

Use the Show Imager Parameters command to display the values of the imager parameters.

Access level Administrator

Syntax Show Imager Parameters

Arguments None

Example This example shows the results of the Show Imager Parameters command:

```
PS-admin> show imager parameters

LineThicken: 0.3
FontThicken: 0.0
Tint: 1.0
SampledBlackSnap: 0.0001
FatScanConversion: FALSE
```

Change Imager Parameters

Use the Change Imager Parameters command to change the values of the imager parameters for PostScript and ASCII only.

Access level Administrator

Syntax Change Imager Parameters

Arguments None. The system prompts you for the value of each parameter as follows:

LineThicken

Indicates the amount in pixels of thickening you want applied to the lines in a print job. The value for this parameter must be between 0.0 and 100.0.

Recommended values for darkening levels are as follows:

- Slight darkening 1.0
- Medium darkening 2.0
- Heavy darkening 3.5

Note: Specifying the 3.5 value for heavy darkening has approximately the same effect as using the thicken document attribute.

FontThicken

Indicates the amount in pixels of thickening you want applied to the strokes within a font for PostScript and ASCII only. The value for this parameter must be between 0.0 and 100.0.

If you change the FontThicken parameter, examine the output carefully to ensure that the thickening level, as well as the overall image quality, is acceptable. Depending on the font and printer you are using, changing the FontThicken parameter may cause some characters to appear distorted.

Recommended values for darkening levels are as follows:

- Slight darkening 2.0
- Medium darkening 5.0
- Heavy darkening 7.0

Note: Specifying the 7.0 value for heavy darkening has approximately the same effect as using the thicken document attribute.

Tint

Indicates a value between 0.5 and 1.0, where the smaller the number, the darker the tints become. This parameter only affects the imaging of PostScript jobs.

Recommended values for darkening levels are as follows:

- Slight darkening 0.9
- Medium darkening 0.75
- Heavy darkening 0.5

SampledBlackSnap

Indicates a fractional value by which the printer adjusts the scale factor of sampled blacks in Interpress jobs. The value for this parameter must be between 0 and 1. You may need to adjust this value for printing Interpress masters created for earlier versions of Interpress that do not rescale sampled blacks. This parameter only affects the imaging of Interpress jobs.

Using a small fraction for this value is recommended. For example, 0.06 allows the scale factor to be adjusted upward or downward by approximately 6%.

FatScanConversion

Indicates whether or not PostScript fine features will be enhanced. The default selection is FALSE.

Example This example shows the results of the Change Imager Parameters command:

```
PS-admin> change imager parameters

Enter the line thickening value: 1.0
Enter the font thickening value: 2.0
Enter the tint value: 0.9
Enter snap value for sampled blacks: 0.06
Use Fat Scan Conversion: Yes
```

Restore Default Imager Parameters

Use the Restore Default Imager Parameters command to restore the default values of the imager parameters.

Access level Administrator

Syntax Restore Default Imager Parameters

Arguments None

Example This example restores the default values of the imager parameters:

```
PS-admin>restore default imager parameters
Do you want to restore default parameters?  yes
```

Note: Default values are:

LineThicken:	0.3
FontThicken:	0.0
Tint:	1.0
SampledBlackSnap:	0.0001
FatScanConversion:	FALSE

Setting PCL imager parameters

PCL Imager Parameter commands adjust the imaging level of PCL print jobs only. They control the rendering of lines, fonts, tints, and fine features.

- The Show PCL Imager Parameters command displays the current values of the imager parameters.
- The Change PCL Imager Parameters command changes the current values of the imager parameters for PCL only.
- The Restore Default PCL Imager Parameters command resets the imager parameters to the default values.

You must enter the **Restart Sequencer** command after you change or restore default PCL imager parameters for the values to take effect.

Show PCL Imager Parameters

Use the Show PCL Imager Parameters command to display the values of the PCL imager parameters.

Access level Administrator

Syntax Show PCL Imager Parameters

Arguments None

Example This example shows the results of the Show PCL Imager Parameters command:

```
PS-admin> show pcl imager parameters
PCL 5e
Enhance Graphics: FALSE
Enhance Built-in Pattern: FALSE
Enhance Strokes: 0
Enhance User-defined pattern: 0
Enhance Bitmap Font: FALSE
```

Change PCL Imager Parameters

Use the Change PCL Imager Parameters command to change the values of the imager parameters for PCL only.

Access level Administrator

Syntax Change PCL Imager Parameters

Arguments None. The system prompts you for the value of each parameter as follows:

Resolution

For the 96, 4635, 180 printer models only, enter the dpi value 300 or 600 at the prompt.

Raster Graphics enhancement value

Indicates whether you want thickening for raster graphics. Acceptable values are “TRUE” or “FALSE”.

Built-in pattern enhancement value

Indicates whether you want thickening for patterns. Acceptable values are “TRUE” or “FALSE”.

HPGL minimum stroke enhancement value

Indicates whether you want to thicken the minimum stroke for HPGL. The value must be a positive integer (from 0 to 255). “0” and “1” indicate that no enhancement is required. Other integers indicate the desired width of the stroke in pixels.

HPGL user-defined pattern enhancement value

Indicates whether you want thickening for HPGL user-defined patterns. The values are:

"0"=no enhancement

"1="1D overstrike (shift & OR on X axis)

"2"=2D overstrike (shift & OR on both X and Y axes)

"3"=2X scaling (double pixeling)

Bitmap font enhancement value

Indicates whether or not you want thickening for bitmap fonts. Acceptable values are "TRUE" or "FALSE".

On the 92C, 4850, and 4890 models, the system will prompt you to change parameters for both PCL 5e and PCL 5c.

On the 96, 4635, and 180 models, the system will prompt you to enter the resolutions for which you want to change the parameters. When finished with that resolution, the system asks if you want to change another set of PCL 5e parameters.

Restore Default PCL Imager Parameters

Use the Restore Default PCL Imager Parameters command to restore the default values of the imager parameters.

Access level Administrator

Syntax Restore Default PCL Imager Parameters

Arguments None

Example This example restores the default values of the PCL imager parameters:

```
PS-admin>restore pcl default imager parameters
Do you want to restore default PCL parameters?
yes
```

Default values vary based on model, resolution, and version of PCL.

Table 5-1. **Default PCL Imager Parameters**

	4050/4090 (300 dpi)	**4850/4890/92C (300 dpi)**		**92C (600 dpi)**		**96/4635/180 (300 dpi)**	**96/4635/180 (600 dpi)**
	PCL 5e	PCL 5c	PCL 5e	PCL 5c	PCL 5e	PCL 5e	PCL 5e
Enhance Graphics	True	False	False	False	False	False	True
Built-in Pattern	True	False	False	False	False	True	True
Enhance Strokes	2	0	0	0	0	1	2
User-defined pattern	1	2	0	2	0	1	1
Bitmap Font	True	False	False	False	False	False	True

Setting PCL parameters

The Change PCL Parameters command allows you to define the environment for PCL 5 printing.

The Restore Default PCL Parameters command allows you to reset the parameters to the defaults.

The Show PCL Parameters command allows you to view the current settings.

Changing PCL parameters

Use the Change PCL Parameters command to define the settings you require for PCL 5 printing. Do this before you begin printing your PCL jobs. You can define parameters for:

- Saving the environment—whether you want permanent macros and fonts that you download to be saved to disk for use with PCL jobs.
- Specifying edge-to-edge printing—whether you want your PCL jobs to use edge-to-edge printing.
- Automatically adding a carriage return (CR) or line feed (LF) to all line endings.
- Specifying a symbol set.

Change PCL Parameters

Note: You must use the Restart Sequencer command after using the Change PCL Parameters command.

Access level Administrator

Syntax Change PCL Parameters <AutoCR value> <AutoLF value> <Edge to edge value> <Environment save value> <Language> <Symbol set value>

Arguments <AutoCR value>

Acceptable values are TRUE or FALSE. If TRUE, the system will automatically add a Carriage Return to all line endings. Generally, it should be set to TRUE when printing from UNIX systems. It can also be used if lines are printing in a stair-step pattern. If printing primarily from PCs with DOS or Windows, it should be set to FALSE. The default is FALSE.

<AutoLF value>

Acceptable values are TRUE or FALSE. If TRUE, the system will automatically add an ASCII line feed (or new line) to all line endings. Generally, it should be set to TRUE when printing from Macintosh systems. It can also be used if lines are printing on top of each other. If printing primarily from PCs with DOS or Windows, it should be set to FALSE. The default is FALSE.

<Edge to edge value>

Acceptable values are TRUE or FALSE. An entry of TRUE will set the system to use edge to edge printing for PCL jobs. An entry of FALSE means that edge to edge printing will not be used. The value FALSE emulates the HP LaserJet 4, which has default margins on all four edges. The default is FALSE.

<Environment save value>

Acceptable values are TRUE or FALSE. An entry of TRUE will set the system to save downloaded permanent PCL fonts and macros to disk. An entry of FALSE means that downloaded permanent PCL fonts and macros will not be saved to disk. They will be used with the job in which they are downloaded, and will persist until there is a system or sequencer restart. The default is FALSE.

Note: There are several important things to be aware of when saving permanent PCL fonts and macros to disk:

- The fonts and macros saved to disk will be retained even after a system or sequencer restart. This is not like an HP LaserJet where the resources would be lost after a restart because they are stored in memory, not on the disk.
- If a font or macro with the same ID as one saved to disk is downloaded (and the EnvironmentSave value is TRUE), it will overwrite the one already on disk. In a network environment, it is important for users who download fonts and macros to be aware of this so that they do not inadvertently overwrite each others' resources.

- When using the commands to list or print fonts, fonts that have been downloaded will not be listed. Only those that have been installed at the printer controller will be listed.

<Language>

Specify the language value you wish to use. Valid language values are: ENGLISH, FRENCH, ITALIAN, GERMAN, SPANISH, PORTUGUESE, NORWEGIAN, DUTCH, FINNISH, DANISH, and SWEDISH.

<Symbol set value>

Specify a default value from the supported symbols sets. This is the default symbol set that will be used if one is not included with the job. The default is 8U (symbol set ID for Roman-8). You can use either kind1 or symbol set ID numbers when specifying the value. Refer to the section on "PCL symbol sets."

Example This example shows the usage of the Change PCL Parameters command:

```
PS-admin> change pcl parameters

Enter the auto CR value (TRUE, FALSE): TRUE
Enter the auto LF value (TRUE, FALSE): TRUE
Enter the edge to edge value (TRUE,FALSE): TRUE
Enter the environment save value (TRUE,FALSE): FALSE
Enter the language value:  ENGLISH
Enter value for symbol set: 8U
Sequencer needs to be restarted:use "Restart Sequencer"
command.
```

You can also enter the command on one line as shown below.

Example This example sets the values to the same ones shown above:

```
PS-admin>change pcl parameters true true true false english 8u
```

PCL symbol sets

In most cases, a PCL job will specify a symbol set. For jobs that do not include a symbol set, you can specify a default. The list of valid symbol sets follows. For more detailed information regarding the use of PCL symbol sets, see the HP PCL documentation.

Table 5-2. **PCL 5e symbol sets**

Kind 1	Symbol Set ID	Symbol Set Name
4	0D	ISO 60: Danish/Norwegian
9	0I	ISO 15: Italian
14	0N	ISO 8859/1 Latin 1
19	0S	ISO 11: Swedish
21	0U	ISO 6: ASCII
37	1E	ISO 4: UK
38	1F	ISO 69: French
39	1G	ISO 21: German
53	1U	Legal
78	2N	ISO 8859/2 Latin 2
83	2S	ISO 17: Spanish
173	5M	PS Math
174	5N	ISO 8859/9 Latin 5
180	5T	Windows 3.1 Latin 5
202	6J	Microsoft Publishing
205	6M	Ventura Math
234	7J	DeskTop
269	8M	Math-8
277	8U	Roman-8
293	9E	Windows 3.1 Latin 2
308	9T	PC-8 Turkish
309	9U	Windows 3.0 Latin 1
330	10J	PS Text
341	10U	PC-8
373	11U	PC-8 Danish/Norwegian
394	12J	MC Text
405	12U	PC-850 Multilingual
426	13J	Ventura International
458	14J	Ventura US
501	15U	Pi Font
565	17U	PC-852, Latin 2

Table 5-2. **PCL 5e symbol sets**

Kind 1	Symbol Set ID	Symbol Set Name
621	19M	Symbol
629	19U	Windows 3.1 Latin 1
18540	579L	Wingdings

Restore Default PCL Parameters

Note: You must use the **Restart Sequencer** command after using the Restore Default PCL Parameters command.

Access level Administrator

Syntax Restore PCL Parameters

Use the Restore Default PCL Parameters command to restore the PCL settings to the defaults. If the PCL5 defaults file has been modified on your system, the defaults may be different from those listed here.

- AutoCR: FALSE
- AutoLF: FALSE
- EdgeToEdge: FALSE
- EnvironmentSave: FALSE
- Language: ENGLISH
- SymbolSet: 8U

Show PCL Parameters

Access level Administrator

Syntax Show PCL Parameters

Use the Show PCL Parameters command to display the current PCL settings:

- AutoCR: TRUE|FALSE
- AutoLF: TRUE|FALSE
- EdgeToEdge: TRUE|FALSE
- EnvironmentSave: TRUE|FALSE
- Language: <LANGUAGE>
- SymbolSet: <value>

Note: Even though you can enter a symbol set value using either kind1 or symbol set ID numbers, when you use Show PCL Parameters, only the symbol set ID number is displayed.

Example This example shows the usage of the Show PCL Parameters command:

```
PS-admin> show pcl parameters

AutoCR:  FALSE
AutoLF:  FALSE
EdgeToEdge: TRUE
EnvironmentSave: FALSE
Language:  ENGLISH
SymbolSet: 8U
```

6. Input and Output profiles

The Profile commands show, create, and set input and output profiles. You use these commands only if your printer is configured with an optional third party input or output device. (Optional input devices are available only for Model 96, 4635, and 180 NPS printers.)

- The Show Profiles command lists the profiles that have been set for your optional input and output devices.
- The Create Profile command creates a profile for your optional input or output device.
- The Set Profile command sets a profile you've created for your optional input or output device.

Note: You must create a profile before you can set it**.**

Personality Profile parameters for your output devices are set during the initial installation of your DocuPrint NPS, but you can create profiles for optional input and output devices as required using **setoutputdevice** parameters.

The rest of this chapter provides the syntax and arguments for these commands.

Show Profiles

Use the Show Profiles command to show profiles for optional input and output devices.

Access level Administrator

Syntax Show <"Input" |"Output"> Profiles

Arguments <"Input" |"Output">

Specifies that the profile is for an input or output device.

Create Profile

Use the Create Profile command to create a profile for an optional input or output device.

Access level Administrator

Syntax Create <“Input” | “Output”> Profile <name> <P1>...<P12>

Arguments <“Input” |“Output”>

Specifies whether the profile is for an input or output device.

<name>

Refers to the name (usually 6–8 characters) you apply to the device

<P1> ... <P12>

Refers to values for the profiles obtained from your Xerox representative or third-party vendor. These values are set in the printer and saved in a file. The system prompts you for 12 values for the output profile.

Set Profile

Use the Set Profile command to set a profile you’ve created for an optional input or output device.

Access level Administrator

Syntax Set < “Input” |“Output”> Profile <name>

Arguments <“Input” | “Output”>

Specifies whether the profile is for an input or output device

<name>

Refers to the name you applied to the device when you created a profile for it.

Profile parameters

Create, then set Profile parameters for optional input and output devices as required using the following setoutputdevice parameters. Set output device parameters for optional output devices. Typically, all values are zero except those for p7, p10, p11, and p12.

Parameters

<name>

The name (usually 6–8 characters) you assign to the device Profile.

<p1>

Specifies the minimum time that the printer waits between sheets when delivering them out of the bypass transport. Acceptable values range from 0 to 65535 ms.

<p2>

Specifies the acceptable time interval between the SHEET EXIT signal and SHEET DELIVERED signal. Acceptable values range from 0 to 12999 ms. (See also <p7>.)

<p3a>

Specifies the time between sending last page of one set and first page of next set. Acceptable values range from 0 to 65535 ms.

<p3b>

Specifies the minimum time between two consecutive ends of sets.

<p4>

Specifies the maximum time between the printer sending an END OF SET signal and the output device responding with a SET DELIVERED signal. Acceptable values range from 0 to 12999 ms.

<p5>

Specifies the time between the printer sending a CYCLE UP signal and the output device being ready to accept sheets. Acceptable values range from 0 to 65535 ms.

<p6>

Specifies the mode of operation for the DFA device:

0=automatic
1=Finishing Funtion 1 ALWAYS
2=Finishing Funtion 1 NEVER
4=Finishing Funtion 2 ALWAYS
8=Finishing Funtion 2 NEVER
4096=always recover to sheet boundaries for failures involving the DFA device
8192=always recover to set boundaries for failures involving the DFA device
16384=auto restart after DFA full (not currently implemented)
32768=1-N (face-down) output—If you use a DFA connected finishing device on a Model 96, 4635, or 180, and you wish to specify 1-N output, add 32768 to the P6 value, and enter the sum of the two numbers.

Note: To set more than one function for <p6>, add the appropriate numbers together.

<p7>

Specifies the status signals supported in the form of a sum of binary values (in parentheses below) specifying which status signals from the output device are used by the printer; for example, 5 specifies that the printer should use the ONLINE and FULL signals (1+4) and ignore the rest.

- ONLINE (1): output device is connected and available
- FAULTED (2): output device has an error and printer must stop delivering sheets to output device immediately (hard stop)
- FULL (4): printer must stop delivering sheets to output device as soon as possible (soft stop)
- SHEET DELIVERED (8): output device has accepted the printed sheet
- SET DELIVERED (16): output device has accepted the entire set

<p8>

Specifies the sheet exit signal type:

0=signal starts on leading edge of sheet

1=signal starts on trailing edge of set

<p9> sheet exit start adjust

Sets the time that the printer waits to send SHEET EXIT and END OF SET signals to the output device. Acceptable values range from -100 to +300 ms.

<p10>

Sets the pulse width of the SHEET EXIT signal. Acceptable values range from 30 to 110 ms.

<p11>

Specifies the end of set offset time. Acceptable values range from 0 to 255 ms, with a usual value of 10 ms.

<p12>

Specifies dead-cycle time before IOT (printer) shutdown. Allows time for an operator to unload the finisher without IOT shutdown. Acceptable values range from 5 to 60 seconds.

6. Input and Output profiles

The Profile commands show, create, and set input and output profiles. You use these commands only if your printer is configured with an optional third party input or output device. (Optional input devices are available only for Model 96, 4635, and 180 NPS printers.)

- The Show Profiles command lists the profiles that have been set for your optional input and output devices.
- The Create Profile command creates a profile for your optional input or output device.
- The Set Profile command sets a profile you've created for your optional input or output device.

Note: You must create a profile before you can set it**.**

Personality Profile parameters for your output devices are set during the initial installation of your DocuPrint NPS, but you can create profiles for optional input and output devices as required using **setoutputdevice** parameters.

The rest of this chapter provides the syntax and arguments for these commands.

Show Profiles

Use the Show Profiles command to show profiles for optional input and output devices.

Access level Administrator

Syntax Show <"Input" |"Output"> Profiles

Arguments <"Input" |"Output">

Specifies that the profile is for an input or output device.

Create Profile

Use the Create Profile command to create a profile for an optional input or output device.

Access level Administrator

Syntax Create <“Input” | “Output”> Profile <name> <P1>...<P12>

Arguments <“Input” |“Output”>

Specifies whether the profile is for an input or output device.

<name>

Refers to the name (usually 6–8 characters) you apply to the device

<P1> ... <P12>

Refers to values for the profiles obtained from your Xerox representative or third-party vendor. These values are set in the printer and saved in a file. The system prompts you for 12 values for the output profile.

Set Profile

Use the Set Profile command to set a profile you’ve created for an optional input or output device.

Access level Administrator

Syntax Set < “Input” |“Output”> Profile <name>

Arguments <“Input” | “Output”>

Specifies whether the profile is for an input or output device

<name>

Refers to the name you applied to the device when you created a profile for it.

Profile parameters

Create, then set Profile parameters for optional input and output devices as required using the following setoutputdevice parameters. Set output device parameters for optional output devices. Typically, all values are zero except those for p7, p10, p11, and p12.

Parameters

<name>

The name (usually 6–8 characters) you assign to the device Profile.

<p1>

Specifies the minimum time that the printer waits between sheets when delivering them out of the bypass transport. Acceptable values range from 0 to 65535 ms.

<p2>

Specifies the acceptable time interval between the SHEET EXIT signal and SHEET DELIVERED signal. Acceptable values range from 0 to 12999 ms. (See also <p7>.)

<p3a>

Specifies the time between sending last page of one set and first page of next set. Acceptable values range from 0 to 65535 ms.

<p3b>

Specifies the minimum time between two consecutive ends of sets.

<p4>

Specifies the maximum time between the printer sending an END OF SET signal and the output device responding with a SET DELIVERED signal. Acceptable values range from 0 to 12999 ms.

<p5>

Specifies the time between the printer sending a CYCLE UP signal and the output device being ready to accept sheets. Acceptable values range from 0 to 65535 ms.

<p6>

Specifies the mode of operation for the DFA device:

0=automatic
1=Finishing Funtion 1 ALWAYS
2=Finishing Funtion 1 NEVER
4=Finishing Funtion 2 ALWAYS
8=Finishing Funtion 2 NEVER
4096=always recover to sheet boundaries for failures involving the DFA device
8192=always recover to set boundaries for failures involving the DFA device
16384=auto restart after DFA full (not currently implemented)
32768=1-N (face-down) output—If you use a DFA connected finishing device on a Model 96, 4635, or 180, and you wish to specify 1-N output, add 32768 to the P6 value, and enter the sum of the two numbers.

Note: To set more than one function for <p6>, add the appropriate numbers together.

<p7>

Specifies the status signals supported in the form of a sum of binary values (in parentheses below) specifying which status signals from the output device are used by the printer; for example, 5 specifies that the printer should use the ONLINE and FULL signals (1+4) and ignore the rest.

- ONLINE (1): output device is connected and available
- FAULTED (2): output device has an error and printer must stop delivering sheets to output device immediately (hard stop)
- FULL (4): printer must stop delivering sheets to output device as soon as possible (soft stop)
- SHEET DELIVERED (8): output device has accepted the printed sheet
- SET DELIVERED (16): output device has accepted the entire set

<p8>

Specifies the sheet exit signal type:

0=signal starts on leading edge of sheet

1=signal starts on trailing edge of set

<p9> sheet exit start adjust

Sets the time that the printer waits to send SHEET EXIT and END OF SET signals to the output device. Acceptable values range from -100 to +300 ms.

<p10>

Sets the pulse width of the SHEET EXIT signal. Acceptable values range from 30 to 110 ms.

<p11>

Specifies the end of set offset time. Acceptable values range from 0 to 255 ms, with a usual value of 10 ms.

<p12>

Specifies dead-cycle time before IOT (printer) shutdown. Allows time for an operator to unload the finisher without IOT shutdown. Acceptable values range from 5 to 60 seconds.

7. Setting the Printer Controller date and time

The Show Time command displays the date and time, and the offset from Greenwich Mean Time. The Set Time command sets the date and time on the Printer Controller.

DocuPrint NPS system software release 1.5.4 and higher is Year 2000 compliant.

Caution: This is the only method you should use to change the date. Do not use Unix date commands.

Show Time

Use the Show Time command to display the date and time, and the offset from Greenwich Mean Time.

Access level Administrator, operator, or user

Syntax Show Time

Arguments None

Set Time

Use the Set Time command to set the date and time on the Printer Controller.

Caution: Setting the time and date causes the system to reboot.

Access level Administrator or operator

Syntax Set Time <Time | Remote Host Name | IPAddress>

Arguments <Time>

Date and time entered from the keyboard using the format mm/dd/yyyy hh:mm:ss, where:

mm—month, entered in digits from 1 to 12

dd—day, entered in digits from 1 to 31

yyyy—any year in the 20th century or later

hh—hour of the day

mm—minutes within the current hour

ss—seconds within the current minute (optional)

<Remote Host Name>

A remote host from which to acquire the time

<IPAddress>

An Internet Protocol (IP) address of a remote host from which to acquire the time

Example This example sets the time to 10:31:25 on June 26, 1999:

```
PS-op>Set Time 06/26/1999 10:31:25

Upon confirmation, local time will be set to June
26, 1999 10:31:25 am PDT.

Do you really want to set the time?  Y
```

7. Setting the Printer Controller date and time

The Show Time command displays the date and time, and the offset from Greenwich Mean Time. The Set Time command sets the date and time on the Printer Controller.

DocuPrint NPS system software release 1.5.4 and higher is Year 2000 compliant.

Caution: This is the only method you should use to change the date. Do not use Unix date commands.

Show Time

Use the Show Time command to display the date and time, and the offset from Greenwich Mean Time.

Access level Administrator, operator, or user

Syntax Show Time

Arguments None

Set Time

Use the Set Time command to set the date and time on the Printer Controller.

Caution: Setting the time and date causes the system to reboot.

Access level Administrator or operator

Syntax Set Time <Time | Remote Host Name | IPAddress>

Arguments <Time>

Date and time entered from the keyboard using the format mm/dd/yyyy hh:mm:ss, where:

mm—month, entered in digits from 1 to 12

dd—day, entered in digits from 1 to 31

yyyy—any year in the 20th century or later

hh—hour of the day

mm—minutes within the current hour

ss—seconds within the current minute (optional)

<Remote Host Name>

A remote host from which to acquire the time

<IPAddress>

An Internet Protocol (IP) address of a remote host from which to acquire the time

Example This example sets the time to 10:31:25 on June 26, 1999:

```
PS-op>Set Time 06/26/1999 10:31:25

Upon confirmation, local time will be set to June
26, 1999 10:31:25 am PDT.

Do you really want to set the time?  Y
```

8. Checking system status and displaying billing meters

This chapter describes commands that let you monitor various aspects of printer status, including billing meters.

- The List Volumes command lists the amount of disk space available for each partition of the disk.
- The Show Status command shows the status of the printer. The amount of detail shown depends on the access level from which you issue the command.
- The List Executives command lets you determine which clients are connected to your DocuPrint NPS as remote operators. This command also lists current local sessions.
- The Display Billing Meters command displays the available billing meters.
- The Print Billing Report command prints billing meter data.

The sections in this chapter provide the syntax and arguments for these commands.

List Volumes

Use the List Volumes command to list the amount of disk space available for each partition of the disk.

Note: When the hard disk partition used for spooling is full, it no longer accepts jobs from clients. Use this command to check the partitions frequently; when it approaches 80 percent, delete jobs, release held jobs, or dump accounting logs.

Access level Administrator or operator

Syntax List Volumes

Arguments None

Example This example shows the information provided with the List Volumes command:

```
PS-op>list volumes

Filesystem          kbytes    used       avail    capacity  Mounted on
/dev/dsk/c0t0d0s0     16231    12621      1990     87%       /
/dev/dsk/c0t0d0s6    135415   108626      3249     90%       /usr
/dev/dsk/c0t0d0s7   3547492   469542   2723210     15%       /var
/dev/dsk/c0t0d0s5    114847    80328     23039     78%       /opt
```

Show Status

Use the Show Status command to show the status of the printer.

Note: If multiple problems occur at the printer, the Show Status command shows only the most recent system problem. You may need to check other parts of the system after correcting the problem displayed.

The user privilege mode shows less status information than the operator mode.

Access level Administrator, operator, or user

Syntax Show Status

Arguments None

Example The following example shows the information provided by the Show Status command. There are differences in the information provided based on the printer model and configuration.

```
PS-op>Show Status

Printer Type: Xerox/4850, Duplex & Highlight Color capable
Media Loaded:
    A4::white: Tray 4
    UsLetter::blue: Tray 3
    USLegal::white: Tray 2
    USLetter::white: Tray 1
Paper Trays:
    1: OK (can feed: standard, transparencies, drilled)
    2: OK (can feed: standard, transparencies, drilled)
    3: OK (can feed: standard, transparencies, drilled)
    4: OK (can feed: standard, transparencies, drilled)
Stackers:
    Top: OK, No Offset (can stack: standard, transparencies, drilled)
    1:  OK, Offset (can stack: standard, drilled)
    2:  OK, Offset (can stack: standard, drilled)
Stacker Groups:
    0:  Top Tray
    1:  Stacker 1
    2:  Stacker 2
Message:
    L035 - IOT in power saver mode.
Housings:
    State: OK, Color:Black
    State: OK, Color:Green
Spooler status: Available
Formatter status: Available
Printer status: Available
Printing is Started.
Queuing is Started.
SchedulingPolicy:resourceMatch
```

List Executives

Use the List Executives command at the Printer Controller, or at the Client when logged on as a remote operator, to determine which clients are connected to your DocuPrint NPS as remote operators and to list current local sessions. Refer to “Using remote access” in the chapter “Using the system interface” for more information.

Access level Administrator or operator

Syntax List Executives

Arguments None

Note: An asterisk indicates the client from which you issued the command. IP addresses for all clients logged on as remote operators are listed. If DNS is enabled on the network, host names are also listed.

Display Billing Meters

Use the Display Billing Meters command to display the available billing meters. As the printer processes print jobs, it maintains usage data to be displayed on the billing meters. Billing meters are numbers (up to 8 digits) used to track printer activity, such as the number of pages printed.

Access level Administrator or operator

Syntax Display Billing Meters <All>

Note: There are different arguments for this command depending on the printer model you have.

Billing meters for models 96, 4635, and 180 NPS

Arguments <All>

Displays all the billing meters.

<none>

If no argument is entered, only billing meter A is displayed.

Billing Meter A

The total number of good prints delivered.

Billing Meter C

The total number of good 3-pitch prints delivered, divided by 100.

Billing Meter E

The total number of good 4-pitch prints delivered, divided by 100.

Billing Meter F

The total number of purge sheets delivered, divided by 100.

Billing Meter H

The total number of good duplex sheets delivered, divided by 100.

Billing Meter J

The total number of good service prints delivered, divided by 100.

Billing Meter K

The total number of good prints delivered, divided by 100.

Billing Meter S1

The total number of good 5-pitch prints delivered, divided by 100.

Billing Meter S2

The total number of good 6-pitch prints delivered, divided by 100.

Billing Meter S3

The total number of good 7-pitch prints delivered, divided by 100.

Billing meters for models 4050, 4090, 4850, 4890, and 92C NPS

Arguments

<All>

Displays all the billing meters.

<none>

If no argument is entered, only billing meter A is displayed.

Billing Meter A

Counts the number of successfully completed sheets through the paper path. Duplex sheets count as two sheets.

Billing Meter C

Counts all the sheets fed into the paper path from Tray 1,2,3, or 4.

Billing Meter E

Counts all the successfully completed sheets delivered to the intended output destination.

Billing Meter F

Same function as Billing Meter A except that it can be cleared by the system.

Billing Meter H

Counts all the successfully completed duplex sheets delivered to the intended output destination.

Billing Meter J

Same function as Billing Meter A except that it counts sheets printed while the printer is in diagnostic mode.

Billing Meter L

Counts the total number of successfully completed color sheets printed in highlight color. Sheets using black only are recorded by this meter. (Used only for highlight color printers.)

Billing Meter T

Same function as Billing Meter A.

Print Billing Report

Use the Print Billing Report command to print billing meter data. You can report meter readings on a monthly or quarterly basis, or you can estimate monthly or quarterly usage and reconcile your estimates with meter readings taken by your service representative during regular maintenance or service calls. If you report readings, you must review the billing-meter data during the last five days of each month (when the system is idle) and transmit the data to Xerox.

Access level Administrator or operator

Syntax Print Billing Report

Arguments None. However, if the service representative did not enter the System ID and Customer ID during installation, the system prompts you to enter the information before you can print the billing report.

```
System ID has not been set. Enter system ID to use
for the report:

<printer serial number>

Customer ID has not been set. Enter customer ID
to use for the report:

<customer ID>
```

Ask your service representative to enter the System ID and Customer ID.

Example The examples show sample billing reports:

```
Xerox DocuPrint 4850
Customer Billing Report

Date: 01/07/97
Time: 19:50
CUSTOMER ID: dptest
MACHINE ID: 11W030919

***Base System Configuration
Machine type - 4850

Printer Characteristics

- Speed: 50 ppm
- Paper path: duplex
- Resolution: 300 spi
- Finisher: 2-tray Normal
- Default Order:1 to N
- Feeders:

- Feeder 1: UsLetter::white
- Feeder 2: UsLetter::white
- Feeder 3: UsLetter::white
- Feeder 4: UsLetter::white

- Dry Ink Housings: 2

GOOD IMPRESSIONS SUCCESSFULLY DELIVERED: 120182
BLK XEROGRAPHIC MODE IMPRESSIONS:  19215
H/L XEROGRAPHIC MODE IMPRESSIONS:  100967
SHEETS PRINTED IN IOT DIAGNOSTIC MODE:  29306
GOOD IMPRESSIONS SUCCESSFULLY DELIVERED IN NORMAL/
DIAGNOSTIC MODES: 120182
```

```
Xerox DocuPrint 4090
Customer Billing Report

Date: 01/07/97
Time: 05:31
CUSTOMER ID: dptest
MACHINE ID: 64N023792

***Base System Configuration
Machine type - 4090

Printer Characteristics

- Speed: 92 ppm
- Paper path: duplex
- Resolution: 300 spi
- Finisher: 1-tray Stitcher
- Default; Order:1 to N,Finisher, N to 1
- Feeders:

- Feeder 1: UsLetter::white:75
- Feeder 2: UsLetter::pink
- Feeder 3: UsLetter::blue
- Feeder 4: UsLetter::green

GOOD IMPRESSIONS SUCCESSFULLY DELIVERED: 221324

SHEETS PRINTED IN IOT DIAGNOSTIC MODE: 1458
```

```
Xerox DocuPrint 4635
Customer Billing Report

Date: 01/07/97
Time: 18:54
CUSTOMER ID: dptest
MACHINE ID: 6D5002013

***Base System Configuration
Machine type - 4635

Printer Characteristics

- Speed: 135 ppm
- Paper path: duplex
- Resolution: 600, 300 spi
- Finisher: 2-tray Normal
- Default; Order:1 to N
- Feeders:

- Feeder 1: UsLetter::white:75
- Feeder 2: A4::white:75
- Feeder 3: 420x297::white:75
- Feeder 4: UsLedger::white

GOOD IMPRESSIONS SUCCESSFULLY DELIVERED: 2478635

SHEETS PRINTED IN IOT DIAGNOSTIC MODE: 362
```

8. Checking system status and displaying billing meters

This chapter describes commands that let you monitor various aspects of printer status, including billing meters.

- The List Volumes command lists the amount of disk space available for each partition of the disk.
- The Show Status command shows the status of the printer. The amount of detail shown depends on the access level from which you issue the command.
- The List Executives command lets you determine which clients are connected to your DocuPrint NPS as remote operators. This command also lists current local sessions.
- The Display Billing Meters command displays the available billing meters.
- The Print Billing Report command prints billing meter data.

The sections in this chapter provide the syntax and arguments for these commands.

List Volumes

Use the List Volumes command to list the amount of disk space available for each partition of the disk.

Note: When the hard disk partition used for spooling is full, it no longer accepts jobs from clients. Use this command to check the partitions frequently; when it approaches 80 percent, delete jobs, release held jobs, or dump accounting logs.

Access level Administrator or operator

Syntax List Volumes

Arguments None

Example This example shows the information provided with the List Volumes command:

```
PS-op>list volumes

Filesystem          kbytes    used       avail    capacity  Mounted on
/dev/dsk/c0t0d0s0     16231    12621      1990     87%       /
/dev/dsk/c0t0d0s6    135415   108626      3249     90%       /usr
/dev/dsk/c0t0d0s7   3547492   469542   2723210     15%       /var
/dev/dsk/c0t0d0s5    114847    80328     23039     78%       /opt
```

Show Status

Use the Show Status command to show the status of the printer.

Note: If multiple problems occur at the printer, the Show Status command shows only the most recent system problem. You may need to check other parts of the system after correcting the problem displayed.

The user privilege mode shows less status information than the operator mode.

Access level Administrator, operator, or user

Syntax Show Status

Arguments None

Example The following example shows the information provided by the Show Status command. There are differences in the information provided based on the printer model and configuration.

```
PS-op>Show Status

Printer Type: Xerox/4850, Duplex & Highlight Color capable
Media Loaded:
    A4::white: Tray 4
    UsLetter::blue: Tray 3
    USLegal::white: Tray 2
    USLetter::white: Tray 1
Paper Trays:
    1: OK (can feed: standard, transparencies, drilled)
    2: OK (can feed: standard, transparencies, drilled)
    3: OK (can feed: standard, transparencies, drilled)
    4: OK (can feed: standard, transparencies, drilled)
Stackers:
    Top: OK, No Offset (can stack: standard, transparencies, drilled)
    1:  OK, Offset (can stack: standard, drilled)
    2:  OK, Offset (can stack: standard, drilled)
Stacker Groups:
    0:  Top Tray
    1:  Stacker 1
    2:  Stacker 2
Message:
    L035 - IOT in power saver mode.
Housings:
    State: OK, Color:Black
    State: OK, Color:Green
Spooler status: Available
Formatter status: Available
Printer status: Available
Printing is Started.
Queuing is Started.
SchedulingPolicy:resourceMatch
```

List Executives

Use the List Executives command at the Printer Controller, or at the Client when logged on as a remote operator, to determine which clients are connected to your DocuPrint NPS as remote operators and to list current local sessions. Refer to “Using remote access” in the chapter “Using the system interface” for more information.

Access level Administrator or operator

Syntax List Executives

Arguments None

Note: An asterisk indicates the client from which you issued the command. IP addresses for all clients logged on as remote operators are listed. If DNS is enabled on the network, host names are also listed.

Display Billing Meters

Use the Display Billing Meters command to display the available billing meters. As the printer processes print jobs, it maintains usage data to be displayed on the billing meters. Billing meters are numbers (up to 8 digits) used to track printer activity, such as the number of pages printed.

Access level Administrator or operator

Syntax Display Billing Meters <All>

Note: There are different arguments for this command depending on the printer model you have.

Billing meters for models 96, 4635, and 180 NPS

Arguments <All>

Displays all the billing meters.

<none>

If no argument is entered, only billing meter A is displayed.

Billing Meter A

The total number of good prints delivered.

Billing Meter C

The total number of good 3-pitch prints delivered, divided by 100.

Billing Meter E

The total number of good 4-pitch prints delivered, divided by 100.

Billing Meter F

The total number of purge sheets delivered, divided by 100.

Billing Meter H

The total number of good duplex sheets delivered, divided by 100.

Billing Meter J

The total number of good service prints delivered, divided by 100.

Billing Meter K

The total number of good prints delivered, divided by 100.

Billing Meter S1

The total number of good 5-pitch prints delivered, divided by 100.

Billing Meter S2

The total number of good 6-pitch prints delivered, divided by 100.

Billing Meter S3

The total number of good 7-pitch prints delivered, divided by 100.

Billing meters for models 4050, 4090, 4850, 4890, and 92C NPS

Arguments

<All>

Displays all the billing meters.

<none>

If no argument is entered, only billing meter A is displayed.

Billing Meter A

Counts the number of successfully completed sheets through the paper path. Duplex sheets count as two sheets.

Billing Meter C

Counts all the sheets fed into the paper path from Tray 1,2,3, or 4.

Billing Meter E

Counts all the successfully completed sheets delivered to the intended output destination.

Billing Meter F

Same function as Billing Meter A except that it can be cleared by the system.

Billing Meter H

Counts all the successfully completed duplex sheets delivered to the intended output destination.

Billing Meter J

Same function as Billing Meter A except that it counts sheets printed while the printer is in diagnostic mode.

Billing Meter L

Counts the total number of successfully completed color sheets printed in highlight color. Sheets using black only are recorded by this meter. (Used only for highlight color printers.)

Billing Meter T

Same function as Billing Meter A.

Print Billing Report

Use the Print Billing Report command to print billing meter data. You can report meter readings on a monthly or quarterly basis, or you can estimate monthly or quarterly usage and reconcile your estimates with meter readings taken by your service representative during regular maintenance or service calls. If you report readings, you must review the billing-meter data during the last five days of each month (when the system is idle) and transmit the data to Xerox.

Access level Administrator or operator

Syntax Print Billing Report

Arguments None. However, if the service representative did not enter the System ID and Customer ID during installation, the system prompts you to enter the information before you can print the billing report.

```
System ID has not been set. Enter system ID to use
for the report:

<printer serial number>

Customer ID has not been set. Enter customer ID
to use for the report:

<customer ID>
```

Ask your service representative to enter the System ID and Customer ID.

Example The examples show sample billing reports:

```
Xerox DocuPrint 4850
Customer Billing Report

Date: 01/07/97
Time: 19:50
CUSTOMER ID: dptest
MACHINE ID: 11W030919

***Base System Configuration
Machine type - 4850

Printer Characteristics

- Speed: 50 ppm
- Paper path: duplex
- Resolution: 300 spi
- Finisher: 2-tray Normal
- Default Order:1 to N
- Feeders:

- Feeder 1: UsLetter::white
- Feeder 2: UsLetter::white
- Feeder 3: UsLetter::white
- Feeder 4: UsLetter::white

- Dry Ink Housings: 2

GOOD IMPRESSIONS SUCCESSFULLY DELIVERED: 120182
BLK XEROGRAPHIC MODE IMPRESSIONS:  19215
H/L XEROGRAPHIC MODE IMPRESSIONS:  100967
SHEETS PRINTED IN IOT DIAGNOSTIC MODE:  29306
GOOD IMPRESSIONS SUCCESSFULLY DELIVERED IN NORMAL/
DIAGNOSTIC MODES: 120182
```

```
Xerox DocuPrint 4090
Customer Billing Report

Date: 01/07/97
Time: 05:31
CUSTOMER ID: dptest
MACHINE ID: 64N023792

***Base System Configuration
Machine type - 4090

Printer Characteristics

- Speed: 92 ppm
- Paper path: duplex
- Resolution: 300 spi
- Finisher: 1-tray Stitcher
- Default; Order:1 to N,Finisher, N to 1
- Feeders:

- Feeder 1: UsLetter::white:75
- Feeder 2: UsLetter::pink
- Feeder 3: UsLetter::blue
- Feeder 4: UsLetter::green

GOOD IMPRESSIONS SUCCESSFULLY DELIVERED: 221324

SHEETS PRINTED IN IOT DIAGNOSTIC MODE: 1458
```

```
Xerox DocuPrint 4635
Customer Billing Report

Date: 01/07/97
Time: 18:54
CUSTOMER ID: dptest
MACHINE ID: 6D5002013

***Base System Configuration
Machine type - 4635

Printer Characteristics

- Speed: 135 ppm
- Paper path: duplex
- Resolution: 600, 300 spi
- Finisher: 2-tray Normal
- Default; Order:1 to N
- Feeders:

- Feeder 1: UsLetter::white:75
- Feeder 2: A4::white:75
- Feeder 3: 420x297::white:75
- Feeder 4: UsLedger::white

GOOD IMPRESSIONS SUCCESSFULLY DELIVERED: 2478635

SHEETS PRINTED IN IOT DIAGNOSTIC MODE: 362
```

9. Managing accounting files and logs

The DocuPrint Printer Controller maintains both Job Pool Manager accounting files and log files to help you in system administration. You should periodically review these files and delete those you do not need. The sections in this chapter provide the commands necessary for these tasks.

Maintaining accounting files

Accounting files consist of a list of records of printed jobs. You can use these files for statistical analysis or billing.

Note: Basic accounting information (such as the date of job submission, the number of pages printed, and the time it took to print them) is in the lower-left corner of the Job Messages sheet that prints at the end of a job.

For billing purposes, the accounting file maintains the sender name (user name); the name is shown both in the accounting log and on the banner page.

When the recipient name attribute is present, the recipient name string is placed both in the “large print” user name field and in the recipient name field on the banner page (the sender name is placed in the “small print” user name field). When the recipient name attribute is not present, only the sender name is shown (in large print) on the banner page.

The following example shows a portion of an accounting file (version 2).

```
2   "146"  "devans"  ".login"  "<absent>"  "ASCII"
"<absent>"  "1"  "<absent>"  "<absent>"  "<absent>"
"<absent>"  "<absent>"  "<absent>"  "<absent>"  "rushmore"
"720224170"  "720224187"  "1160"  "2"  "<absent>"
"216,279,,white,0"  "birdie"  "<absent>"  "0"  "0"
<absent>"  "<absent>"  "Unix lpr"  "<absent>"  "<absent>"
2   "145"  "mullen"  "28-8-2.ps"  "<absent>"  "PS"
"<absent>"  "1"  "<absent>"  "<absent>"  "<absent>"
"<absent>"  "<absent>"  "<absent>"  "<absent>"  "rushmore"
"720223319"  "720223340"  "3050"  "6"  "<absent>"
"216,279,,white,0"  "durango"  "<absent>"  "0"  "0"
"<absent>"  "<absent>"  "Unix lpr"  "<absent>"  "<absent>"
```

Each job record consists of the version number and the values for various fields associated with the job. Each field is surrounded by quotes. Fields for which no values have been set are shown as “<absent>”.

There are two versions, referred to as “version 2” and “version 3.” They are the same, except that version 3 has an additional 13 attributes logged, and it displays multiple media. Version 2 is the default format that has been used on all NPS systems prior to release 1.6.1. The version is selected during installation or by using the Configure utility to change the jpm.accounting.format parameter. The version your system is using is indicated by the number “2” or “3” at the beginning of a line.

The order and meaning of the fields in a job record for both versions 2 and 3 is shown below. They are the same except for the media attribute.

JobID=<job ID number>
Refers to the job ID number

SenderName=<sender name>
Refers to the job sender name that appears on the header page that prints with the document.

DocumentName=<document name>
Refers to the document name that appears on the header page that prints with the job.

DocumentDate=<document date>
Refers to the document date that appears on the header page that prints with the job.

DocumentFormat=<“PS” | “PS2” | “ASCII” | “PCL”>
Refers to whether the format of the document is PostScript level 1, PostScript level 2, ASCII,or PCL

CopyCount=<number of copies>
Refers to how many copies of the document were printed.

Priority=<priority number>
Refers to the job priority.

PageRange=<first page number, last page number>
Refers to the range of pages of the document that were printed.

Plex=<number>
Refers to whether the document printed simplex (on one side of each page) or duplex (on both sides of each page).

- “1” =simplex
- “2” =duplex
- “3” =tumble duplex

Orientation=<number>
Refers to whether the orientation of the document is portrait or landscape.

- “0” =portrait
- “1” =landscape
- “2” =inversePortrait
- “3” =inverseLandscape

Resolution=<“240” | “300” | “600”>
Refers to the printing resolution

OutputBin=<“256” | “257” | “258”>
Refers to the output bin used for the document.

- “256” =Sample Tray (top tray)
- “257” =Stacker group 1
- “258” =Stacker group 2

HighlightColor=<number>
Refers to the highlight color used in the document.

- "0" =no highlight color
- "2" =red
- "3" =green
- "4" =blue
- "5" =cyan
- "6" =magenta
- "7" =yellow
- "8" =cardinal
- "9" =royalblue
- "10" =ruby
- "11" =violet
- "12" =brown
- "13" =other
- "14" =dontcare

AccountInfo
Refers to any account identification information that appears on the header page that prints with the job.

PrinterName=<printer name>
Refers to the name of the printer used to print the document.

Submission Date=<job submission date>
Refers to the date and time of job submission in UNIX time. UNIX time is the number of seconds elapsed since January 1, 1970 at 12:00 a.m. (midnight).

CompletionDate=<job completion date>
Refers to the date and time the job was completed in UNIX time. UNIX time is the number of seconds elapsed since January 1, 1970 at 12:00 a.m. (midnight).

CPUTime=<time in milliseconds>
Refers to job decomposition time.

PagesPrinted=<number of pages>
Refers to the number of pages printed in the job, not including images printed on either side of any header and trailer pages delivered with the job. Therefore, the sum of the values in this field alone will not match the total number of images printed by the print engine as reported in billing meter A.

Staple=<"0" | "1">
Refers to the value for the staple attribute.

- "0" =no stapling
- "1" =singlePortrait.

Media=(version 2)<x size, y size, type, color, weight>
Refers to the media used for printing the document. The size is specified in millimeters. A text string indicates the media type and color. The weight is specified in grams per square meter (gsm).

Media=(version 3) multiple entries (if applicable)
Each entry is enclosed in square brackets [<media1 width in mm>,<media1 height in mm>,<media1 type>,<media1 color>,<media1 weight>], [<media2 width in mm>,<media2 height in mm>,<media2 type>,<media2 color>,<media2 weight>]

Example: "[216,279,MAIN,white,75], [216,279,AUX,white,75]"

HostName=<host name>
Refers to the host name that appears on the header page that prints with the job.

Category=<text>
Refers to a user defined category. Otherwise it is shown as "<absent>."

CancelRequest=<"0" | "1" | "2">
Refers to whether the job was canceled.
- "0" =noCancelRequest
- "1" =cancelRequestedByOperator
- "2" =cancelRequestedByUser.

CompletionStatus=<"0" | "1" | "2" | "3" | "4" | "5" | "6">
Refers to how the print job completed.
- "0" =completed
- "1" =cancelledByOperator
- "2" =cancelledByUser
- "3" =completedWithWarnings
- "4" =completedWithErrors
- "5" =rejected
- "6" =aborted

Message=<message>
Refers to any message that appears on the header page that prints with the job.

ObjectSize=<size in bytes>
Refers to the size of the document file in bytes.

Submitter=<"Unix lpr" | "absent">
Indicates if the job was submitted using lpr print utilities. Otherwise, the field is shown as "<absent>."

DocEndMessage=<message>
Refers to any message that appears on the Job Message sheet that prints at the end of a job.

MapColor=<number>
Refers to the map color used in the document.
- "0" =no highlight color
- "2" =red
- "3" =green
- "4" =blue
- "5" =cyan
- "6" =magenta
- "7" =yellow
- "8" =cardinal
- "9" =royalblue
- "10" =ruby
- "11" =violet
- "12" =brown
- "13" =other
- "14" =dontcare

The order and meaning of the additional fields in a job record for version 3 is as follows:

ASCIIFontName=<text>
Refers to the name of the font used for ASCII jobs.

ASCIIFontSize=<number>
Refers to the size of the font used for ASCII jobs.

Disposition=<text>
Refers to the disposition type used for Decomposition Service jobs.

HighlightColorRendering=<number>
Refers to the type of HighlightColorRendering algorithm used.
"0"=Pictorial
"1"=Presentation
"2"=ColorToHighlight
"3"=ColorTables
"4"=Automatic
"5"=defaultRendering

ExceptionPages=multiple entries
Each entry is enclosed in square brackets [<start page>-<end page>, <media1 width in mm>, <media1 height in mm>, <media1 type>, <media1 color>, <media1 weight>], [<start page>-<end page>, <media2 width in mm>, <media2 height in mm>, <media2 type>, <media2 color>, <media2 weight>], etc.

Example: "[1-2,216, 279,MAIN,white,75], [3-4,216,279,AUX,white,75]"

ElideHeader=number
Refers to the use of the ElideHeader attribute.

"0"=False
"1"=True

BackgroundForm=text
Refers to the use of a background form.

ForwardedTo=[IP address] (DocID)
Refers to jobs forwarded from one NPS system to another.

ForwardedFrom=[IP address] (DocID)
Refers to jobs forwarded from one NPS system to another.

CycleForms=number
Refers to the cycling of background forms for Decomposition Service.

AutoTabShift=number
Refers to the use of the AutoTabShift attribute.

"0"=False
"1"=True

MICR mode=number
Refers to MICR printing.

"0"=False
"1"=True

Halftone=number
Refers to the use of the Halftone attribute.

"0"=defaultHalftone
"1"=Course
"2"=Medium
"3"=Fine
"4"=ExtraFine

The following example shows a portion of an accounting file (version 3).

```
3 "131" "Administrator" "worm" "<absent>" "PS2" "1"
"500" "<absent>" "1" "<absent>" "600" "257" "<absent>"
"<absent>" "wishbone" "929572975" "929573201" "390" "1"
"0" "[216,279,,white,75]" "<absent>" "<absent>" "0" "0"
"<absent>" "22765" "<absent>" "<absent>" "<absent>"
"<absent>" "<absent>" "<absent>" "3" "<absent>" "1"
"<absent>" "[13.240.113.61] (docID: 91)" "<absent>"
"<absent>" "0" "<absent>" "1"

3 "130" "prtcon" "docuprint_accounting" "<absent>"
"ASCII" "1" "500" "<absent>" "1" "1" "<absent>"
"<absent>" "1" "<absent>" "wishbone" "929571514"
"929571584" "960" "6" "0" "[216,279,,white,75]"
"<absent>" "<absent>" "0" "0" "<absent>" "50041"
"<absent>" "<absent>" "<absent>" "terminal" "7"
"<absent>" "<absent>" "<absent>" "<absent>" "<absent>"
"<absent>" "<absent>" "<absent>" "<absent>" "<absent>"
"<absent>"
```

To keep your system running at optimum speed and to keep the system disk from exceeding its storage limits, you should periodically purge accounting data. If you did not set the system during installation to purge accounting information automatically, you must purge it manually. The following commands will help you in this task.

Dump Accounting

The Dump Accounting command creates accounting files by copying the files to the system directory (/var/log/docuprint__accounting). You can then delete the files or copy them to a diskette. You should use the Dump Accounting command periodically to purge the Job Pool Manager database.

If the /var/log/docuprint__accounting file already exists when you enter the Dump Accounting command, any new job accounting information will be appended to the existing file, and job ID numbers will not necessarily be in chronological order. If you want an entirely new file, use the Delete Accounting command, and then use the Dump Accounting command again.

Access level Administrator

Syntax Dump Accounting

Arguments None

Example This example copies and purges print-job data. Note that you must enter y to confirm the command.

```
PS-admin>Dump Accounting
Are you sure? Y
Dumping accounting data. This may take a while. .
. . . . . dump complete.
```

Copy Accounting to Floppy

Use the Copy Accounting to Floppy command to copy accounting files to a floppy diskette. Be sure to use the Dump Accounting command first.

Note: The Copy Accounting To Floppy command copies accounting data to a diskette in compressed bar format. To list the contents of the diskette after using the command, enter **bar -tfZ /dev/fd0c** in a UNIX shell window. Names listed are in absolute paths. To copy the data from the diskette to a hard drive for further processing, enter **bar -xvfZ /dev/fd0c**. The destinations of these data files are the paths as stored on the diskette.

Access level Administrator

Syntax Copy Accounting to Floppy

Arguments None

Example This example copies accounting data to a floppy diskette. Note that you must enter yes to confirm that a diskette is inserted.

```
PS-admin>copy accounting to floppy
Floppy disk inserted? ("No" to quit):yes
Copying accounting data. This may take a while. . .
. . . . copy complete.
```

Delete Accounting

Use the Delete Accounting command to delete accounting data.

Access level Administrator

Syntax Delete Accounting

Arguments None

Example This example deletes accounting data. Note that you must Enter y to confirm the command.

```
PS-admin>Delete Accounting

Accounting file is dated January 7, 1998 3:32:58 pm
PST
Do you really want to delete the accounting data? y
Accounting data deleted
```

Managing DocuPrint NPS log files

The DocuPrint NPS Printer Controller maintains logs containing SunOS, Diagnostic, as well as Xerox Client and Printer Controller activity messages. Each log is copied to a file in the system directory (/var/log); an extension indicates the day (for example, .Mon). The directory holds logs for one week.

DocuPrint NPS Printer Controller software enables you to list, display, delete, or copy one or all of the logs to a diskette as described in the following commands.

Note: The "DocuPrint" log is limited to 256 KB to prevent it from possibly filling the disk.

Note: A nightly cron job automatically copies the logs and deletes logs older than a week. If you prefer to power down the NPS controller overnight, then you will need to change the time at which the cron job is run.

Note: The availability of the logs depends on how long the system has been running.

List Logs

Use the List Logs command to list all logs in the system directory (/var/log) for the past week.

Access level Administrator or operator

Syntax List Logs

Arguments None

Example This example shows the results of the List Logs command:

```
PS-op>list logs

Log name                    Size            Last Update
/var/log/DocuPrint          3196  Jan 2, 1998 9:49:10 am PST
/var/log/DocuPrint.Fri      998   Jan 2, 1998 5:01:30 pm PST
/var/log/DocuPrint.Mon      140   Jan 5, 1998 5:36:48 pm PST
/var/log/DocuPrint.Thu      0     Jan 8, 1998 4:58:45 pm PST
/var/log/DocuPrint.Tue      20    Jan 6, 1998 9:26:21 pm PST
/var/log/syslog             0     Jan 2, 1998 9:51:15 pm PST
/var/adm/messages           6534  Jan 8, 1998 9:43:24 pm PST
/var/adm/messages.0         1808  Jan 3, 1998 3:10:24 pm PST
```

Show Log

Use the Show Log command to display all or part of the log you specify.

Access level Administrator, operator, or user

Syntax Show Log

Arguments None. You are prompted to enter the number of the log you want to display and then the number of lines you want to see.

Example This example shows the last two lines of log 2:

```
PS-admin>Show Log
         1     Quit
         2     /var/log/DocuPrint
         3     /var/log/DocuPrint.sequencer
         4     /var/log/DocuPrint.sequencer.Thu
         5     /var/log/DocuPrint.Thu
         6     /var/log/syslog
         7     /var/adm/messages
         8     /usr/spool/xerox/log/nps/.log.Thu

Enter choice number:      2

Enter number of lines from the end to show (or "All"): 2

Wed Jan 28 10:29:10 1997 INFO    AppleTalk:         Shutting down
rushmore-duplex: LaserWriter@*

Wed Jan 28 10:29:10 1997 INFO    Job Pool Manager:  Database
closed
```

Copy Logs to Floppy

Use the Copy Logs To Floppy command to copy the log you select—or all the logs—to a floppy diskette.

Note: Copying logs to a diskette does not delete them from the system.

Note: The Copy Logs To Floppy command copies logs in UNIX compressed bar format. To list the content of the diskette after using the command, enter **bar -tfZ /dev/fd0c** in a UNIX shell window. Names listed are in absolute paths. To copy the data from the diskette to a hard drive for further processing, enter **bar -xvfZ /dev/fd0c.** The destinations of these data files are the paths as stored on the diskette.

Access level Administrator

Syntax Copy Logs to Floppy

Arguments None. You are prompted to select the log you want to copy.

Example This example copies all logs to a floppy diskette:

```
PS-admin>copy logs to floppy
Floppy disk inserted?  ("No" to quit):
/var/log/DocuPrint
        2       /var/log/DocuPrint.Fri
        3       /var/log/DocuPrint.Mon
        4       /var/log/DocuPrint.Thu
        5       /var/log/syslog
        6       /var/adm/messages
        7       /var/adm/messages.)
        8       /usr/spool/xerox/log/nps.log
        9       All
      Enter choice number: 9

Copying logs.  This may take a while. . . . . .
copy complete.
```

Delete Logs

Use the Delete Logs command to delete the log you specify.

Access level Administrator

Syntax Delete Logs

Arguments None. You are prompted to select the log you want to delete.

Example This example deletes log 5. Note that you must enter **yes** to confirm the command:

```
 PS-admin>delete logs
          1     Quit
          2     /var/log/DocuPrint
          3     /var/log/DocuPrint.sequencer
          4     /var/log/DocuPrint.sequencer.Thu
          5     /var/log/DocuPrint.Thu
          6     /var/log/syslog
          7     /var/adm/messages
          8     /usr/spool/xerox/log/nps/.log.Thu
          9     All
       Enter choice number: 5
Do you really want to delete /var/log
DocuPrint.Thu? yes
Log deleted
```

Print Log

Use the Print Log command to print all of the log you specify.

Access level Administrator or operator

Syntax Print Log

Arguments None. You are prompted to select the log you want to print and then the number of copies and plex of the document.

Example This example prints one copy of log 6 in simplex mode

```
PS-admin>print log
         1     Quit
         2     /var/log/DocuPrint
         3     /var/log/DocuPrint.sequencer
         4     /var/log/DocuPrint.sequencer.Thu
         5     /var/log/DocuPrint.Thu
         6     /var/log/syslog
         7     /var/adm/messages
         8     /usr/spool/xerox/log/nps/.log.Tue
Enter choice number: 6
Enter the number of copies to print: 1
Enter plex (Simplex, Duplex, Tumble): simplex
  /var/log/syslog submitted as document number 594
```

9. Managing accounting files and logs

The DocuPrint Printer Controller maintains both Job Pool Manager accounting files and log files to help you in system administration. You should periodically review these files and delete those you do not need. The sections in this chapter provide the commands necessary for these tasks.

Maintaining accounting files

Accounting files consist of a list of records of printed jobs. You can use these files for statistical analysis or billing.

Note: Basic accounting information (such as the date of job submission, the number of pages printed, and the time it took to print them) is in the lower-left corner of the Job Messages sheet that prints at the end of a job.

For billing purposes, the accounting file maintains the sender name (user name); the name is shown both in the accounting log and on the banner page.

When the recipient name attribute is present, the recipient name string is placed both in the “large print” user name field and in the recipient name field on the banner page (the sender name is placed in the “small print” user name field). When the recipient name attribute is not present, only the sender name is shown (in large print) on the banner page.

The following example shows a portion of an accounting file (version 2).

```
2   "146"  "devans"  ".login"  "<absent>"  "ASCII"
"<absent>"  "1"  "<absent>"  "<absent>"  "<absent>"
"<absent>"  "<absent>"  "<absent>"  "<absent>"  "rushmore"
"720224170"  "720224187"  "1160"  "2"  "<absent>"
"216,279,,white,0"  "birdie"  "<absent>"  "0"  "0"
<absent>"  "<absent>"  "Unix lpr"  "<absent>"  "<absent>"
2   "145"  "mullen"  "28-8-2.ps"  "<absent>"  "PS"
"<absent>"  "1"  "<absent>"  "<absent>"  "<absent>"
"<absent>"  "<absent>"  "<absent>"  "<absent>"  "rushmore"
"720223319"  "720223340"  "3050"  "6"  "<absent>"
"216,279,,white,0"  "durango"  "<absent>"  "0"  "0"
"<absent>"  "<absent>"  "Unix lpr"  "<absent>"  "<absent>"
```

Each job record consists of the version number and the values for various fields associated with the job. Each field is surrounded by quotes. Fields for which no values have been set are shown as “<absent>”.

There are two versions, referred to as “version 2” and “version 3.” They are the same, except that version 3 has an additional 13 attributes logged, and it displays multiple media. Version 2 is the default format that has been used on all NPS systems prior to release 1.6.1. The version is selected during installation or by using the Configure utility to change the jpm.accounting.format parameter. The version your system is using is indicated by the number “2” or “3” at the beginning of a line.

The order and meaning of the fields in a job record for both versions 2 and 3 is shown below. They are the same except for the media attribute.

JobID=<job ID number>
Refers to the job ID number

SenderName=<sender name>
Refers to the job sender name that appears on the header page that prints with the document.

DocumentName=<document name>
Refers to the document name that appears on the header page that prints with the job.

DocumentDate=<document date>
Refers to the document date that appears on the header page that prints with the job.

DocumentFormat=<“PS” | “PS2” | “ASCII” | “PCL”>
Refers to whether the format of the document is PostScript level 1, PostScript level 2, ASCII,or PCL

CopyCount=<number of copies>
Refers to how many copies of the document were printed.

Priority=<priority number>
Refers to the job priority.

PageRange=<first page number, last page number>
Refers to the range of pages of the document that were printed.

Plex=<number>
Refers to whether the document printed simplex (on one side of each page) or duplex (on both sides of each page).

- “1” =simplex
- “2” =duplex
- “3” =tumble duplex

Orientation=<number>
Refers to whether the orientation of the document is portrait or landscape.

- “0” =portrait
- “1” =landscape
- “2” =inversePortrait
- “3” =inverseLandscape

Resolution=<“240” | “300” | “600”>
Refers to the printing resolution

OutputBin=<“256” | “257” | “258”>
Refers to the output bin used for the document.

- “256” =Sample Tray (top tray)
- “257” =Stacker group 1
- “258” =Stacker group 2

HighlightColor=<number>
Refers to the highlight color used in the document.

- "0" =no highlight color
- "2" =red
- "3" =green
- "4" =blue
- "5" =cyan
- "6" =magenta
- "7" =yellow
- "8" =cardinal
- "9" =royalblue
- "10" =ruby
- "11" =violet
- "12" =brown
- "13" =other
- "14" =dontcare

AccountInfo
Refers to any account identification information that appears on the header page that prints with the job.

PrinterName=<printer name>
Refers to the name of the printer used to print the document.

Submission Date=<job submission date>
Refers to the date and time of job submission in UNIX time. UNIX time is the number of seconds elapsed since January 1, 1970 at 12:00 a.m. (midnight).

CompletionDate=<job completion date>
Refers to the date and time the job was completed in UNIX time. UNIX time is the number of seconds elapsed since January 1, 1970 at 12:00 a.m. (midnight).

CPUTime=<time in milliseconds>
Refers to job decomposition time.

PagesPrinted=<number of pages>
Refers to the number of pages printed in the job, not including images printed on either side of any header and trailer pages delivered with the job. Therefore, the sum of the values in this field alone will not match the total number of images printed by the print engine as reported in billing meter A.

Staple=<"0" | "1">
Refers to the value for the staple attribute.

- "0" =no stapling
- "1" =singlePortrait.

Media=(version 2)<x size, y size, type, color, weight>
Refers to the media used for printing the document. The size is specified in millimeters. A text string indicates the media type and color. The weight is specified in grams per square meter (gsm).

Media=(version 3) multiple entries (if applicable)
Each entry is enclosed in square brackets [<media1 width in mm>,<media1 height in mm>,<media1 type>,<media1 color>,<media1 weight>], [<media2 width in mm>,<media2 height in mm>,<media2 type>,<media2 color>,<media2 weight>]

Example: "[216,279,MAIN,white,75], [216,279,AUX,white,75]"

HostName=<host name>
Refers to the host name that appears on the header page that prints with the job.

Category=<text>
Refers to a user defined category. Otherwise it is shown as "<absent>."

CancelRequest=<"0" | "1" | "2">
Refers to whether the job was canceled.
- "0" =noCancelRequest
- "1" =cancelRequestedByOperator
- "2" =cancelRequestedByUser.

CompletionStatus=<"0" | "1" | "2" | "3" | "4" | "5" | "6">
Refers to how the print job completed.
- "0" =completed
- "1" =cancelledByOperator
- "2" =cancelledByUser
- "3" =completedWithWarnings
- "4" =completedWithErrors
- "5" =rejected
- "6" =aborted

Message=<message>
Refers to any message that appears on the header page that prints with the job.

ObjectSize=<size in bytes>
Refers to the size of the document file in bytes.

Submitter=<"Unix lpr" | "absent">
Indicates if the job was submitted using lpr print utilities. Otherwise, the field is shown as "<absent>."

DocEndMessage=<message>
Refers to any message that appears on the Job Message sheet that prints at the end of a job.

MapColor=<number>
Refers to the map color used in the document.
- "0" =no highlight color
- "2" =red
- "3" =green
- "4" =blue
- "5" =cyan
- "6" =magenta
- "7" =yellow
- "8" =cardinal
- "9" =royalblue
- "10" =ruby
- "11" =violet
- "12" =brown
- "13" =other
- "14" =dontcare

The order and meaning of the additional fields in a job record for version 3 is as follows:

ASCIIFontName=<text>
Refers to the name of the font used for ASCII jobs.

ASCIIFontSize=<number>
Refers to the size of the font used for ASCII jobs.

Disposition=<text>
Refers to the disposition type used for Decomposition Service jobs.

HighlightColorRendering=<number>
Refers to the type of HighlightColorRendering algorithm used.
"0"=Pictorial
"1"=Presentation
"2"=ColorToHighlight
"3"=ColorTables
"4"=Automatic
"5"=defaultRendering

ExceptionPages=multiple entries
Each entry is enclosed in square brackets [<start page>-<end page>, <media1 width in mm>, <media1 height in mm>, <media1 type>, <media1 color>, <media1 weight>], [<start page>-<end page>, <media2 width in mm>, <media2 height in mm>, <media2 type>, <media2 color>, <media2 weight>], etc.

Example: "[1-2,216, 279,MAIN,white,75], [3-4,216,279,AUX,white,75]"

ElideHeader=number
Refers to the use of the ElideHeader attribute.

"0"=False
"1"=True

BackgroundForm=text
Refers to the use of a background form.

ForwardedTo=[IP address] (DocID)
Refers to jobs forwarded from one NPS system to another.

ForwardedFrom=[IP address] (DocID)
Refers to jobs forwarded from one NPS system to another.

CycleForms=number
Refers to the cycling of background forms for Decomposition Service.

AutoTabShift=number
Refers to the use of the AutoTabShift attribute.

"0"=False
"1"=True

MICR mode=number
Refers to MICR printing.

"0"=False
"1"=True

Halftone=number
Refers to the use of the Halftone attribute.

"0"=defaultHalftone
"1"=Course
"2"=Medium
"3"=Fine
"4"=ExtraFine

The following example shows a portion of an accounting file (version 3).

```
3 "131" "Administrator" "worm" "<absent>" "PS2" "1"
"500" "<absent>" "1" "<absent>" "600" "257" "<absent>"
"<absent>" "wishbone" "929572975" "929573201" "390" "1"
"0" "[216,279,,white,75]" "<absent>" "<absent>" "0" "0"
"<absent>" "22765" "<absent>" "<absent>" "<absent>"
"<absent>" "<absent>" "<absent>" "3" "<absent>" "1"
"<absent>" "[13.240.113.61] (docID: 91)" "<absent>"
"<absent>" "0" "<absent>" "1"

3 "130" "prtcon" "docuprint_accounting" "<absent>"
"ASCII" "1" "500" "<absent>" "1" "1" "<absent>"
"<absent>" "1" "<absent>" "wishbone" "929571514"
"929571584" "960" "6" "0" "[216,279,,white,75]"
"<absent>" "<absent>" "0" "0" "<absent>" "50041"
"<absent>" "<absent>" "<absent>" "terminal" "7"
"<absent>" "<absent>" "<absent>" "<absent>" "<absent>"
"<absent>" "<absent>" "<absent>" "<absent>" "<absent>"
"<absent>"
```

To keep your system running at optimum speed and to keep the system disk from exceeding its storage limits, you should periodically purge accounting data. If you did not set the system during installation to purge accounting information automatically, you must purge it manually. The following commands will help you in this task.

Dump Accounting

The Dump Accounting command creates accounting files by copying the files to the system directory (/var/log/docuprint__accounting). You can then delete the files or copy them to a diskette. You should use the Dump Accounting command periodically to purge the Job Pool Manager database.

If the /var/log/docuprint__accounting file already exists when you enter the Dump Accounting command, any new job accounting information will be appended to the existing file, and job ID numbers will not necessarily be in chronological order. If you want an entirely new file, use the Delete Accounting command, and then use the Dump Accounting command again.

Access level Administrator

Syntax Dump Accounting

Arguments None

Example This example copies and purges print-job data. Note that you must enter y to confirm the command.

```
PS-admin>Dump Accounting
Are you sure? Y
Dumping accounting data. This may take a while. .
. . . . . dump complete.
```

Copy Accounting to Floppy

Use the Copy Accounting to Floppy command to copy accounting files to a floppy diskette. Be sure to use the Dump Accounting command first.

Note: The Copy Accounting To Floppy command copies accounting data to a diskette in compressed bar format. To list the contents of the diskette after using the command, enter **bar -tfZ /dev/fd0c** in a UNIX shell window. Names listed are in absolute paths. To copy the data from the diskette to a hard drive for further processing, enter **bar -xvfZ /dev/fd0c**. The destinations of these data files are the paths as stored on the diskette.

Access level Administrator

Syntax Copy Accounting to Floppy

Arguments None

Example This example copies accounting data to a floppy diskette. Note that you must enter yes to confirm that a diskette is inserted.

```
PS-admin>copy accounting to floppy
Floppy disk inserted? ("No" to quit):yes
Copying accounting data. This may take a while. . .
. . . . copy complete.
```

Delete Accounting

Use the Delete Accounting command to delete accounting data.

Access level Administrator

Syntax Delete Accounting

Arguments None

Example This example deletes accounting data. Note that you must Enter y to confirm the command.

```
PS-admin>Delete Accounting

Accounting file is dated January 7, 1998 3:32:58 pm
PST
Do you really want to delete the accounting data? y
Accounting data deleted
```

Managing DocuPrint NPS log files

The DocuPrint NPS Printer Controller maintains logs containing SunOS, Diagnostic, as well as Xerox Client and Printer Controller activity messages. Each log is copied to a file in the system directory (/var/log); an extension indicates the day (for example, .Mon). The directory holds logs for one week.

DocuPrint NPS Printer Controller software enables you to list, display, delete, or copy one or all of the logs to a diskette as described in the following commands.

Note: The "DocuPrint" log is limited to 256 KB to prevent it from possibly filling the disk.

Note: A nightly cron job automatically copies the logs and deletes logs older than a week. If you prefer to power down the NPS controller overnight, then you will need to change the time at which the cron job is run.

Note: The availability of the logs depends on how long the system has been running.

List Logs

Use the List Logs command to list all logs in the system directory (/var/log) for the past week.

Access level Administrator or operator

Syntax List Logs

Arguments None

Example This example shows the results of the List Logs command:

```
PS-op>list logs

Log name                    Size            Last Update
/var/log/DocuPrint          3196  Jan 2, 1998 9:49:10 am PST
/var/log/DocuPrint.Fri      998   Jan 2, 1998 5:01:30 pm PST
/var/log/DocuPrint.Mon      140   Jan 5, 1998 5:36:48 pm PST
/var/log/DocuPrint.Thu      0     Jan 8, 1998 4:58:45 pm PST
/var/log/DocuPrint.Tue      20    Jan 6, 1998 9:26:21 pm PST
/var/log/syslog             0     Jan 2, 1998 9:51:15 pm PST
/var/adm/messages           6534  Jan 8, 1998 9:43:24 pm PST
/var/adm/messages.0         1808  Jan 3, 1998 3:10:24 pm PST
```

Show Log

Use the Show Log command to display all or part of the log you specify.

Access level Administrator, operator, or user

Syntax Show Log

Arguments None. You are prompted to enter the number of the log you want to display and then the number of lines you want to see.

Example This example shows the last two lines of log 2:

```
PS-admin>Show Log
         1     Quit
         2     /var/log/DocuPrint
         3     /var/log/DocuPrint.sequencer
         4     /var/log/DocuPrint.sequencer.Thu
         5     /var/log/DocuPrint.Thu
         6     /var/log/syslog
         7     /var/adm/messages
         8     /usr/spool/xerox/log/nps/.log.Thu

Enter choice number:      2

Enter number of lines from the end to show (or "All"): 2

Wed Jan 28 10:29:10 1997 INFO    AppleTalk:         Shutting down
rushmore-duplex: LaserWriter@*

Wed Jan 28 10:29:10 1997 INFO    Job Pool Manager:  Database
closed
```

Copy Logs to Floppy

Use the Copy Logs To Floppy command to copy the log you select—or all the logs—to a floppy diskette.

Note: Copying logs to a diskette does not delete them from the system.

Note: The Copy Logs To Floppy command copies logs in UNIX compressed bar format. To list the content of the diskette after using the command, enter **bar -tfZ /dev/fd0c** in a UNIX shell window. Names listed are in absolute paths. To copy the data from the diskette to a hard drive for further processing, enter **bar -xvfZ /dev/fd0c.** The destinations of these data files are the paths as stored on the diskette.

Access level Administrator

Syntax Copy Logs to Floppy

Arguments None. You are prompted to select the log you want to copy.

Example This example copies all logs to a floppy diskette:

```
PS-admin>copy logs to floppy
Floppy disk inserted?  ("No" to quit):
/var/log/DocuPrint
        2       /var/log/DocuPrint.Fri
        3       /var/log/DocuPrint.Mon
        4       /var/log/DocuPrint.Thu
        5       /var/log/syslog
        6       /var/adm/messages
        7       /var/adm/messages.)
        8       /usr/spool/xerox/log/nps.log
        9       All
      Enter choice number: 9

Copying logs.  This may take a while. . . . . .
copy complete.
```

Delete Logs

Use the Delete Logs command to delete the log you specify.

Access level Administrator

Syntax Delete Logs

Arguments None. You are prompted to select the log you want to delete.

Example This example deletes log 5. Note that you must enter **yes** to confirm the command:

```
 PS-admin>delete logs
          1     Quit
          2     /var/log/DocuPrint
          3     /var/log/DocuPrint.sequencer
          4     /var/log/DocuPrint.sequencer.Thu
          5     /var/log/DocuPrint.Thu
          6     /var/log/syslog
          7     /var/adm/messages
          8     /usr/spool/xerox/log/nps/.log.Thu
          9     All
       Enter choice number: 5
Do you really want to delete /var/log
DocuPrint.Thu? yes
Log deleted
```

Print Log

Use the Print Log command to print all of the log you specify.

Access level Administrator or operator

Syntax Print Log

Arguments None. You are prompted to select the log you want to print and then the number of copies and plex of the document.

Example This example prints one copy of log 6 in simplex mode

```
PS-admin>print log
         1     Quit
         2     /var/log/DocuPrint
         3     /var/log/DocuPrint.sequencer
         4     /var/log/DocuPrint.sequencer.Thu
         5     /var/log/DocuPrint.Thu
         6     /var/log/syslog
         7     /var/adm/messages
         8     /usr/spool/xerox/log/nps/.log.Tue
Enter choice number: 6
Enter the number of copies to print: 1
Enter plex (Simplex, Duplex, Tumble): simplex
  /var/log/syslog submitted as document number 594
```

10. Managing fonts

You can install fonts on the Printer Controller from a CD-ROM or a floppy diskette, and you can delete installed PostScript and PCL fonts from the Printer Controller.

You can list the fonts on a CD-ROM or floppy diskette (for example, before you install them). You can also list the fonts on the Printer Controller. You can print any of these lists of fonts, and you can print samples of the fonts installed on the Printer Controller.

You can terminate the commands for installing and listing fonts by pressing the Control-C or DEL keys.

Note: For more information about fonts, refer to the *Xerox DocuPrint Network Printer Series Guide to Using PDL*. For information regarding MICR fonts, see the *Generic MICR Fundamentals Guide.*

Installing fonts

Before you install fonts, enter the Stop Printing command and then enter the List Documents command to ensure that there are no jobs being processed. Use the following commands to install fonts, as appropriate:

- Install Fonts from CDROM
- Install Fonts from Floppy
- Install PCL Fonts from Floppy

After you install the fonts, enter the Restart Sequencer and Start Printing commands.

Install Fonts from CDROM

Use the Install Fonts from CDROM command to install PostScript fonts on the Printer Controller from a CD-ROM.

Note: To ensure that Type 0 fonts install properly on your DocuPrint NPS, the CD-ROM containing the fonts you wish to install must either be purchased from Xerox, or must conform to a specification available from Xerox.

Access level Administrator

Syntax Install Fonts From CDROM <pattern>

Argument <pattern>

Indicates the pattern of fonts you want to install. The asterisk (*) character matches any string of characters. You can enter * to install all fonts, or <pattern> to install all font files of the specified pattern.

Example Installing all fonts from a CD-ROM:

```
PS-admin>Install Fonts From CDROM *
Do you want a confirmation prompt for each file? n
Searching the entire CDROM, please wait...
```

Note: If a package number and format is unknown, the following message is displayed:

```
Cannot install a numbered package <pkgnum> from this CDROM
```

Install Fonts from Floppy

Use the Install Fonts from Floppy command to install PostScript fonts onto the Printer Controller from a floppy diskette.

Access level Administrator

Syntax Install Fonts From Floppy

Argument None

Example Installing PostScript fonts from a floppy diskette:

```
PS-admin>Install Fonts From Floppy
Floppy disk inserted? ("No" to quit): y
Do you want a confirmation prompt for each file? y
Copying files from floppy - please wait ...
```

Note: If the diskette differs in density from the previous diskette or from the default format, the following messages may appear:

fd0: read failed (40 1 0)
fd0: bad format
fd0: read failed (40 0 1)
fd0: bad format

The operating system eventually determines the correct format unless the format is unrecognizable or the diskette is damaged.

Note: The message “No font files found on floppy” appears if no appropriate fonts are found on the diskette. “READ FAILED [nn nn nn]” and “fd0:CRC error blk nnn” messages may indicate that the diskette is damaged.

Install PCLFonts from Floppy

Use the Install PCLFonts from Floppy command to install HP PCL fonts onto the Printer Controller from a floppy diskette.

Access level Administrator

Syntax Install PCLFonts From Floppy

Argument None

Example Installing PCL fonts from a floppy diskette:

```
PS-admin>Install PCLFonts From Floppy
Floppy disk inserted? ("No" to quit): y
Do you want a confirmation prompt for each file? y
Copying files from floppy - please wait ...
```

Note: If the diskette differs in density from the previous diskette or from the default format, the following messages may appear:

fd0: read failed (40 1 0)
fd0: bad format
fd0: read failed (40 0 1)
fd0: bad format

The operating system eventually determines the correct format unless the format is unrecognizable or the diskette is damaged.

Note: The message “No font files found on floppy” appears if no appropriate fonts are found on the diskette. “READ FAILED [nn nn nn]” and “fd0:CRC error blk nnn” messages may indicate that the diskette is damaged.

Deleting fonts

You can use the Delete Fonts command to delete all installed PostScript or PCL fonts, a specific pattern of installed fonts, or a specific installed font file on the Printer Controller.

Before you delete fonts, enter the Stop Printing command and then enter the List Documents command to ensure that there are no jobs being processed.

After you delete fonts, enter the Restart Sequencer and Start Printing commands.

Note: If you are using a MICR system, you should be sure to use the Restart Sequencer command after deleting MICR fonts. This procedure clears MICR fonts from system memory.

Note: For PCL fonts, you can only delete the fonts that you install. Fonts that are loaded with the system software cannot be deleted using this command

Access level Administrator

Syntax Delete Fonts <path>/<fontname>

Argument <path>
Indicate the path for the fonts you want to delete. For PostScript fonts, specify ps/<fontname> or xerox/ps/<fontname>. For PCL fonts, specify pcl/<fontname> or xerox/pcl/<fontname>.

<fontname>
You can specify a specific font name or use the asterisk (*) character to match any string of characters. You can enter * to delete all fonts, or * as part of a name to delete all font files of the specified pattern.

Example Deleting all PostScript fonts on the Printer Controller—confirming each deletion:

```
PS-admin>delete fonts ps/*
Deleting ALL fonts!   Hold <CONTROL> and press <C> to cancel
Do you want a confirmation prompt for each file?  yes
Delete xerox/ps/palatino-roman?   no
Delete xerox/ps/palatino-bold?  yes
Delete xerox/ps/palatino-italic?   no
Delete xerox/ps/palatino-bolditalic?   yes
```

Example Deleting all PostScript fonts on the Printer Controller without confirming each deletion:

```
Do you want a confirmation prompt for each file?  no
Deleting xerox/ps/palatino-roman
Deleting xerox/ps/palatino-bold
Deleting xerox/ps/palatino-italic
Deleting xerox/ps/palatino-bolditalic
Deleting xerox/ps/avantgarde-book
Deleting xerox/ps/avantgarde-bookoblique
Deleting xerox/ps/avantgarde-demi
Deleting xerox/ps/avantgarde-demioblique
```

Example Deleting PostScript fonts of the avantgarde pattern:

```
Ps-admin>Delete Fonts xerox/ps/*avantgarde*
Deleting xerox/ps/avantgarde-book
Deleting xerox/ps/avantgarde-bookoblique
Deleting xerox/ps/avantgarde-demi
Deleting xerox/ps/avantgarde-demioblique
```

Example Deleting the PostScript avantgarde-demi font file:

```
Ps-admin>Delete Fonts xerox/ps/avantgarde-demi
Deleting xerox/ps/avantgarde-demi
```

Note: You need not enter **xerox/** in the path with the font name. This applies to both PostScript and PCL fonts.

Listing fonts

Three commands let you list the fonts on a CD-ROM or floppy diskette or on the Printer Controller. For a CD-ROM or a floppy diskette, you can list all available fonts or a specific pattern of fonts. For the Printer Controller, you can list the fonts in a specific font file as well. You can also print lists and samples of fonts.

List CDROM Fonts

Use the List CDROM Fonts command to list all available fonts or a specific pattern of fonts on a CD-ROM.

Access level Administrator

Syntax List CDROM Fonts <pattern>

Argument <pattern>
Indicates the pattern of fonts you want to list. The asterisk (*) character matches any string of characters. You can enter * to list all fonts, or <pattern> to list all font files of the specified pattern.

Example Listing the fonts on a CD-ROM:

```
PS-admin>List CDROM Fonts <pattern>
```

List Floppy Fonts

Use the List Floppy Fonts command to list all available fonts or a specific pattern of fonts on a floppy diskette.

Access level Administrator

Syntax List Floppy Fonts <pattern>

Argument <pattern>
Indicates the pattern of fonts you want to list. The asterisk (*) character matches any string of characters. You can enter * to list all fonts, or <pattern> to list all font files of the specified pattern.

Example Listing all fonts on a floppy diskette:

```
PS-admin>List floppy fonts
Floppy disk inserted? ("No" to quit):   y
Files On Floppy:
cob___.afm
cob___.inf
cob___.pfb
cobo___.afm
cobo___.inf
cobo___.pfb
com___.afm
com___.inf
com___.pfb
(More)
```

List Fonts

Use the List Fonts command to list all available fonts, a specific pattern of fonts, or a specific font file on the Printer Controller.

Access level Administrator, operator, and user

Syntax List Fonts <path> <pattern>

Argument

<pattern>
Indicates the pattern of fonts you want to list. The asterisk (*) character matches any string of characters. You can enter * to list all fonts, or <pattern> to list all font files of the specified pattern.

<path>
Use /ps for PostScript fonts or /pcl for PCL fonts.

Example Listing all fonts currently installed on the Printer Controller:

```
PS-admin>list fonts/ps/ *
xerox/ps/palatino-roman
xerox/ps/palatino-bold
xerox/ps/palatino-italic
xerox/ps/palatino-bolditalic
xerox/ps/avantgarde-book
xerox/ps/avantgarde-bookoblique
xerox/ps/avantgarde-demi
xerox/ps/avantgarde-demioblique
(More)
```

Example Listing all fonts of the avantgarde pattern:

```
PS-admin>list fonts ps/avantgarde*
xerox/ps/avantgarde-book
xerox/ps/avantgarde-bookoblique
xerox/ps/avantgarde-demi
xerox/ps/avantgarde-demioblique
```

Example Listing all fonts in the xerox/ps/avantgarde-demi file:

```
PS-admin>list fonts xerox/ps/avantgarde-demi
xerox/ps/avantgarde-demi
```

Print Font List

Use the Print Font List command to print a list of specific fonts or of all available fonts on the Printer Controller.

Access level Administrator or operator

Syntax Print Font List <pattern> <copies> <plex>

Argument

<pattern>
Indicates the pattern of fonts you want to print. The asterisk (*) character matches any string of characters. You can enter * to print all fonts, or <pattern> to print all font files of the specified pattern.

<copies>
Specifies how many copies of the list you want to print

<plex>
Specifies simplex, duplex, or tumbleduplex

Example Printing 17 copies of a list of avantgarde fonts in simplex mode:

```
PS-admin>print font list ps/avantgarde* 17 simplex
```

Print Font Sample

Use the Print Font Sample command to print samples of the PostScript fonts installed on the Printer Controller.

Access level Administrator or operator

Syntax Print Font Sample <name> <pointSize> <numChars> <copies>

Argument

<name>
Specifies the name of the font.

<point size>
Specifies the point size of the font you want to sample. Use a number between 6.0 and 24.0.

<numChars>
Specifies the number of characters to print (“128” or “256”).

<copies>
Specifies how many copies of the sample you want to print.

Example Printing one copy of a sample of 256 12-point Helvetica characters (PostScript font):

```
PS-op>print font sample helv* 12 256 1
Print Fonts Sample xerox/ps/helv* at November 26,
1999 2:03:49 pm PDT
submitted as document number 651
```

Print PCLFont Sample

Use the Print PCLFont Sample command to print samples of the PCL fonts installed on the Printer Controller.

Access level Administrator or operator

Syntax Print PCLFont Sample <name> <SymSet> <Height> <NumChars> <Copies>

Argument

<name>
Specifies the name of the font.

<symSet>
Specifies the symbol set of the font (for example, 8U). You can also enter “default” to specify the default symbol set.

<height>
Specifies the size of characters to print, between 6.0 and 24.0. For bitmap fonts, the height entry is ignored, and the correct height of the bitmap font is printed.

<numChars>
Specifies the number of characters to print (“128” or “256”).

<copies>
Specifies how many copies of the sample you want to print.

Example Printing one copy of a sample PCL font:

```
PS-op>print pclfont sample
Enter a short name for the font: E13B
Enter the SymSet: 0U
Enter the height [0.0 ..24.0]: 9.0
Number of Characters (128 or 256): 256
Enter the number of copies to print: 1
Print PCLFontSample xerox/pcl/E13B at July 8, 1999
10:08:38 am PDT
submitted as document number 65
```

10. Managing fonts

You can install fonts on the Printer Controller from a CD-ROM or a floppy diskette, and you can delete installed PostScript and PCL fonts from the Printer Controller.

You can list the fonts on a CD-ROM or floppy diskette (for example, before you install them). You can also list the fonts on the Printer Controller. You can print any of these lists of fonts, and you can print samples of the fonts installed on the Printer Controller.

You can terminate the commands for installing and listing fonts by pressing the Control-C or DEL keys.

Note: For more information about fonts, refer to the *Xerox DocuPrint Network Printer Series Guide to Using PDL*. For information regarding MICR fonts, see the *Generic MICR Fundamentals Guide.*

Installing fonts

Before you install fonts, enter the Stop Printing command and then enter the List Documents command to ensure that there are no jobs being processed. Use the following commands to install fonts, as appropriate:

- Install Fonts from CDROM
- Install Fonts from Floppy
- Install PCL Fonts from Floppy

After you install the fonts, enter the Restart Sequencer and Start Printing commands.

Install Fonts from CDROM

Use the Install Fonts from CDROM command to install PostScript fonts on the Printer Controller from a CD-ROM.

Note: To ensure that Type 0 fonts install properly on your DocuPrint NPS, the CD-ROM containing the fonts you wish to install must either be purchased from Xerox, or must conform to a specification available from Xerox.

Access level Administrator

Syntax Install Fonts From CDROM <pattern>

Argument <pattern>

Indicates the pattern of fonts you want to install. The asterisk (*) character matches any string of characters. You can enter * to install all fonts, or <pattern> to install all font files of the specified pattern.

Example Installing all fonts from a CD-ROM:

```
PS-admin>Install Fonts From CDROM *
Do you want a confirmation prompt for each file? n
Searching the entire CDROM, please wait...
```

Note: If a package number and format is unknown, the following message is displayed:

```
Cannot install a numbered package <pkgnum> from this CDROM
```

Install Fonts from Floppy

Use the Install Fonts from Floppy command to install PostScript fonts onto the Printer Controller from a floppy diskette.

Access level Administrator

Syntax Install Fonts From Floppy

Argument None

Example Installing PostScript fonts from a floppy diskette:

```
PS-admin>Install Fonts From Floppy
Floppy disk inserted? ("No" to quit): y
Do you want a confirmation prompt for each file? y
Copying files from floppy - please wait ...
```

Note: If the diskette differs in density from the previous diskette or from the default format, the following messages may appear:

fd0: read failed (40 1 0)
fd0: bad format
fd0: read failed (40 0 1)
fd0: bad format

The operating system eventually determines the correct format unless the format is unrecognizable or the diskette is damaged.

Note: The message “No font files found on floppy” appears if no appropriate fonts are found on the diskette. “READ FAILED [nn nn nn]” and “fd0:CRC error blk nnn” messages may indicate that the diskette is damaged.

Install PCLFonts from Floppy

Use the Install PCLFonts from Floppy command to install HP PCL fonts onto the Printer Controller from a floppy diskette.

Access level Administrator

Syntax Install PCLFonts From Floppy

Argument None

Example Installing PCL fonts from a floppy diskette:

```
PS-admin>Install PCLFonts From Floppy
Floppy disk inserted? ("No" to quit): y
Do you want a confirmation prompt for each file? y
Copying files from floppy - please wait ...
```

Note: If the diskette differs in density from the previous diskette or from the default format, the following messages may appear:

fd0: read failed (40 1 0)
fd0: bad format
fd0: read failed (40 0 1)
fd0: bad format

The operating system eventually determines the correct format unless the format is unrecognizable or the diskette is damaged.

Note: The message “No font files found on floppy” appears if no appropriate fonts are found on the diskette. “READ FAILED [nn nn nn]” and “fd0:CRC error blk nnn” messages may indicate that the diskette is damaged.

Deleting fonts

You can use the Delete Fonts command to delete all installed PostScript or PCL fonts, a specific pattern of installed fonts, or a specific installed font file on the Printer Controller.

Before you delete fonts, enter the Stop Printing command and then enter the List Documents command to ensure that there are no jobs being processed.

After you delete fonts, enter the Restart Sequencer and Start Printing commands.

Note: If you are using a MICR system, you should be sure to use the Restart Sequencer command after deleting MICR fonts. This procedure clears MICR fonts from system memory.

Note: For PCL fonts, you can only delete the fonts that you install. Fonts that are loaded with the system software cannot be deleted using this command

Access level Administrator

Syntax Delete Fonts <path>/<fontname>

Argument <path>
Indicate the path for the fonts you want to delete. For PostScript fonts, specify ps/<fontname> or xerox/ps/<fontname>. For PCL fonts, specify pcl/<fontname> or xerox/pcl/<fontname>.

<fontname>
You can specify a specific font name or use the asterisk (*) character to match any string of characters. You can enter * to delete all fonts, or * as part of a name to delete all font files of the specified pattern.

Example Deleting all PostScript fonts on the Printer Controller—confirming each deletion:

```
PS-admin>delete fonts ps/*
Deleting ALL fonts!   Hold <CONTROL> and press <C> to cancel
Do you want a confirmation prompt for each file?  yes
Delete xerox/ps/palatino-roman?   no
Delete xerox/ps/palatino-bold?  yes
Delete xerox/ps/palatino-italic?   no
Delete xerox/ps/palatino-bolditalic?   yes
```

Example Deleting all PostScript fonts on the Printer Controller without confirming each deletion:

```
Do you want a confirmation prompt for each file?  no
Deleting xerox/ps/palatino-roman
Deleting xerox/ps/palatino-bold
Deleting xerox/ps/palatino-italic
Deleting xerox/ps/palatino-bolditalic
Deleting xerox/ps/avantgarde-book
Deleting xerox/ps/avantgarde-bookoblique
Deleting xerox/ps/avantgarde-demi
Deleting xerox/ps/avantgarde-demioblique
```

Example Deleting PostScript fonts of the avantgarde pattern:

```
Ps-admin>Delete Fonts xerox/ps/*avantgarde*
Deleting xerox/ps/avantgarde-book
Deleting xerox/ps/avantgarde-bookoblique
Deleting xerox/ps/avantgarde-demi
Deleting xerox/ps/avantgarde-demioblique
```

Example Deleting the PostScript avantgarde-demi font file:

```
Ps-admin>Delete Fonts xerox/ps/avantgarde-demi
Deleting xerox/ps/avantgarde-demi
```

Note: You need not enter **xerox/** in the path with the font name. This applies to both PostScript and PCL fonts.

Listing fonts

Three commands let you list the fonts on a CD-ROM or floppy diskette or on the Printer Controller. For a CD-ROM or a floppy diskette, you can list all available fonts or a specific pattern of fonts. For the Printer Controller, you can list the fonts in a specific font file as well. You can also print lists and samples of fonts.

List CDROM Fonts

Use the List CDROM Fonts command to list all available fonts or a specific pattern of fonts on a CD-ROM.

Access level Administrator

Syntax List CDROM Fonts <pattern>

Argument <pattern>
Indicates the pattern of fonts you want to list. The asterisk (*) character matches any string of characters. You can enter * to list all fonts, or <pattern> to list all font files of the specified pattern.

Example Listing the fonts on a CD-ROM:

```
PS-admin>List CDROM Fonts <pattern>
```

List Floppy Fonts

Use the List Floppy Fonts command to list all available fonts or a specific pattern of fonts on a floppy diskette.

Access level Administrator

Syntax List Floppy Fonts <pattern>

Argument <pattern>
Indicates the pattern of fonts you want to list. The asterisk (*) character matches any string of characters. You can enter * to list all fonts, or <pattern> to list all font files of the specified pattern.

Example Listing all fonts on a floppy diskette:

```
PS-admin>List floppy fonts
Floppy disk inserted? ("No" to quit):   y
Files On Floppy:
cob___.afm
cob___.inf
cob___.pfb
cobo___.afm
cobo___.inf
cobo___.pfb
com___.afm
com___.inf
com___.pfb
(More)
```

List Fonts

Use the List Fonts command to list all available fonts, a specific pattern of fonts, or a specific font file on the Printer Controller.

Access level Administrator, operator, and user

Syntax List Fonts <path> <pattern>

Argument

<pattern>
Indicates the pattern of fonts you want to list. The asterisk (*) character matches any string of characters. You can enter * to list all fonts, or <pattern> to list all font files of the specified pattern.

<path>
Use /ps for PostScript fonts or /pcl for PCL fonts.

Example Listing all fonts currently installed on the Printer Controller:

```
PS-admin>list fonts/ps/ *
xerox/ps/palatino-roman
xerox/ps/palatino-bold
xerox/ps/palatino-italic
xerox/ps/palatino-bolditalic
xerox/ps/avantgarde-book
xerox/ps/avantgarde-bookoblique
xerox/ps/avantgarde-demi
xerox/ps/avantgarde-demioblique
(More)
```

Example Listing all fonts of the avantgarde pattern:

```
PS-admin>list fonts ps/avantgarde*
xerox/ps/avantgarde-book
xerox/ps/avantgarde-bookoblique
xerox/ps/avantgarde-demi
xerox/ps/avantgarde-demioblique
```

Example Listing all fonts in the xerox/ps/avantgarde-demi file:

```
PS-admin>list fonts xerox/ps/avantgarde-demi
xerox/ps/avantgarde-demi
```

Print Font List

Use the Print Font List command to print a list of specific fonts or of all available fonts on the Printer Controller.

Access level Administrator or operator

Syntax Print Font List <pattern> <copies> <plex>

Argument

<pattern>
Indicates the pattern of fonts you want to print. The asterisk (*) character matches any string of characters. You can enter * to print all fonts, or <pattern> to print all font files of the specified pattern.

<copies>
Specifies how many copies of the list you want to print

<plex>
Specifies simplex, duplex, or tumbleduplex

Example Printing 17 copies of a list of avantgarde fonts in simplex mode:

```
PS-admin>print font list ps/avantgarde* 17 simplex
```

Print Font Sample

Use the Print Font Sample command to print samples of the PostScript fonts installed on the Printer Controller.

Access level Administrator or operator

Syntax Print Font Sample <name> <pointSize> <numChars> <copies>

Argument

<name>
Specifies the name of the font.

<point size>
Specifies the point size of the font you want to sample. Use a number between 6.0 and 24.0.

<numChars>
Specifies the number of characters to print (“128” or “256”).

<copies>
Specifies how many copies of the sample you want to print.

Example Printing one copy of a sample of 256 12-point Helvetica characters (PostScript font):

```
PS-op>print font sample helv* 12 256 1
Print Fonts Sample xerox/ps/helv* at November 26,
1999 2:03:49 pm PDT
submitted as document number 651
```

Print PCLFont Sample

Use the Print PCLFont Sample command to print samples of the PCL fonts installed on the Printer Controller.

Access level Administrator or operator

Syntax Print PCLFont Sample <name> <SymSet> <Height> <NumChars> <Copies>

Argument

<name>
Specifies the name of the font.

<symSet>
Specifies the symbol set of the font (for example, 8U). You can also enter “default” to specify the default symbol set.

<height>
Specifies the size of characters to print, between 6.0 and 24.0. For bitmap fonts, the height entry is ignored, and the correct height of the bitmap font is printed.

<numChars>
Specifies the number of characters to print (“128” or “256”).

<copies>
Specifies how many copies of the sample you want to print.

Example Printing one copy of a sample PCL font:

```
PS-op>print pclfont sample
Enter a short name for the font: E13B
Enter the SymSet: 0U
Enter the height [0.0 ..24.0]: 9.0
Number of Characters (128 or 256): 256
Enter the number of copies to print: 1
Print PCLFontSample xerox/pcl/E13B at July 8, 1999
10:08:38 am PDT
submitted as document number 65
```

11. Managing forms

A form is a print-ready file that can be printed on demand, and, if desired, merged with variable data. A form may consist of one or more pages that can be used selectively. Forms are created using the Decomposition Service capability. There are various types of forms, each with different characteristics.

This chapter provides the syntax and arguments of these commands:

- Print Form List prints a list of available forms.
- Print Form Sample prints a copy of a specified form.
- Delete Forms removes forms from the system.

For more information on creating and working with forms, refer to the *Decomposition Service and Tools Guide*.

Print Form List

Use the Print Form List command to print a list of available forms.

Access level Administrator, operator

Syntax Print Form List <pattern> <copies> <plex>

Arguments <pattern>

Indicates the pattern of form names you want to list. The asterisk (*) character matches any string of characters. You can enter * to list all forms, or <pattern> to list all form files of the specified pattern.

<copies>

Specifies how many copies of the list you want to print.

<plex>

Specifies the print mode (simplex, duplex, or tumble duplex).

Example This example prints one copy of a list of all forms in simplex mode:

```
PS-op>print form list
Enter the form name pattern: *
Enter the number of copies to print: 1
Enter plex (Simplex, Duplex, Tumble): Simplex
Print Forms List * at January 7, 1998 3:28:11 pm PST
submitted as document number 595
```

List Forms

Use the List Forms command to display a list of available forms.

Access level Administrator, operator

Syntax List Forms <pattern>

Arguments <pattern>

Indicates the pattern of form names you want to list. The asterisk (*) character matches any string of characters. You can enter * to list all forms, or <pattern> to list all form files of the specified pattern.

Example This example lists all the available forms:

```
PS-admin>list forms
Enter the form name pattern: *
Name    Pages   Format      Date Created
sfca     6      SaveMaskG4    June 14, 1998   12:55:39 pm PDT
```

Print Form Sample

Use the Print Form Sample command to print a copy of the specified form(s).

Access level Administrator or operator

Syntax Print Form Sample <pattern> <copies> <plex>

Arguments <pattern>

Indicates the pattern of forms you want to print. The asterisk (*) character matches any string of characters. You can enter * to print all forms, or <pattern> to print all form files of the specified pattern.

<copies>

Specifies how many copies of the forms you want to print.

<plex>

Specifies the print mode (simplex, duplex, or tumble duplex).

<media>

Specifies the media in the format size:type:color:weight.

Note: The media specified for the form must match the size of the form saved.

Example This example prints one copy of all sample forms in simplex mode:

```
PS-op>print form sample
Enter the form name pattern: *
Enter the number of copies to print: 1
Enter plex (Simplex, Duplex, Tumble): Simplex
Enter media specification: USLetter::white
Print Forms Sample * at January 7, 1998 3:28:11 pm PST
submitted as document number 595
```

Delete Forms

Use the Delete Forms command to delete forms installed on the system. The system prompts you with the option of confirming the deletion of each form pattern.

Access level Administrator

Syntax Delete Forms <pattern>

Argument <pattern>

Indicates the pattern of forms you want to delete. The asterisk (*) character matches any string of characters. You can enter * to delete all forms, or <pattern> to delete all form files of the specified pattern.

11. Managing forms

A form is a print-ready file that can be printed on demand, and, if desired, merged with variable data. A form may consist of one or more pages that can be used selectively. Forms are created using the Decomposition Service capability. There are various types of forms, each with different characteristics.

This chapter provides the syntax and arguments of these commands:

- Print Form List prints a list of available forms.
- Print Form Sample prints a copy of a specified form.
- Delete Forms removes forms from the system.

For more information on creating and working with forms, refer to the *Decomposition Service and Tools Guide*.

Print Form List

Use the Print Form List command to print a list of available forms.

Access level Administrator, operator

Syntax Print Form List <pattern> <copies> <plex>

Arguments <pattern>

Indicates the pattern of form names you want to list. The asterisk (*) character matches any string of characters. You can enter * to list all forms, or <pattern> to list all form files of the specified pattern.

<copies>

Specifies how many copies of the list you want to print.

<plex>

Specifies the print mode (simplex, duplex, or tumble duplex).

Example This example prints one copy of a list of all forms in simplex mode:

```
PS-op>print form list
Enter the form name pattern: *
Enter the number of copies to print: 1
Enter plex (Simplex, Duplex, Tumble): Simplex
Print Forms List * at January 7, 1998 3:28:11 pm PST
submitted as document number 595
```

List Forms

Use the List Forms command to display a list of available forms.

Access level Administrator, operator

Syntax List Forms <pattern>

Arguments <pattern>

Indicates the pattern of form names you want to list. The asterisk (*) character matches any string of characters. You can enter * to list all forms, or <pattern> to list all form files of the specified pattern.

Example This example lists all the available forms:

```
PS-admin>list forms
Enter the form name pattern: *
Name    Pages   Format      Date Created
sfca     6      SaveMaskG4    June 14, 1998   12:55:39 pm PDT
```

Print Form Sample

Use the Print Form Sample command to print a copy of the specified form(s).

Access level Administrator or operator

Syntax Print Form Sample <pattern> <copies> <plex>

Arguments <pattern>

Indicates the pattern of forms you want to print. The asterisk (*) character matches any string of characters. You can enter * to print all forms, or <pattern> to print all form files of the specified pattern.

<copies>

Specifies how many copies of the forms you want to print.

<plex>

Specifies the print mode (simplex, duplex, or tumble duplex).

<media>

Specifies the media in the format size:type:color:weight.

Note: The media specified for the form must match the size of the form saved.

Example This example prints one copy of all sample forms in simplex mode:

```
PS-op>print form sample
Enter the form name pattern: *
Enter the number of copies to print: 1
Enter plex (Simplex, Duplex, Tumble): Simplex
Enter media specification: USLetter::white
Print Forms Sample * at January 7, 1998 3:28:11 pm PST
submitted as document number 595
```

Delete Forms

Use the Delete Forms command to delete forms installed on the system. The system prompts you with the option of confirming the deletion of each form pattern.

Access level Administrator

Syntax Delete Forms <pattern>

Argument <pattern>

Indicates the pattern of forms you want to delete. The asterisk (*) character matches any string of characters. You can enter * to delete all forms, or <pattern> to delete all form files of the specified pattern.

12. Using Wizard Mode or UNIX shell

This chapter provides guidelines for working in Wizard Mode and in the UNIX shell from the background menu. It discusses procedures that may be accessed through Wizard Mode or the UNIX shell—setting a telnet greeting for remote access users, enabling the lpr security option, recovering the Job Pool Manager database, and removing orphan data files.

The following procedures discuss possible uses of Wizard Mode; however, it should be noted that Wizard Mode is not recommended on the DocuPrint. Instead, the UNIX Command Tool can be enabled at installation and accessed from the background menu when desired.

Using Wizard Mode

The following are guidelines for working in the Wizard Mode.

- Use the <BACKSPACE> key to delete a character. Do not use the <DEL> key.
- Do not use *vi* commands in Wizard Mode.

  To use the *vi* command at the Printer Controller, you may use either of these two methods:

  — Use the background menu to start a command tool.

  — If the command tool is not available on the background menu:

    1. Enter **Wizard** mode.
    2. Enter **cmdtool &** to start a command tool.
    3. Launch a second command tool from the first, and exit the first command tool. Use the second command tool to execute shell commands.

Note: The DocuPrint NPS user interface may appear to hang until you exit the first command tool.

  You can use the above steps and the **su** command to access root privileges. Do not use the **su** command before starting a command tool, and use the **su** command only when necessary.

- If you are accessing the Printer Controller remotely through Telnet, do not start any window-based tools, such as cmdtool, in Wizard Mode. If you do, the window opens on the Printer Controller not on the client workstation, and the client workstation appears locked up. To restore the prompt at the client workstation, quit the tool from the Printer Controller.

Using the UNIX shell

In most instances, you can use the UNIX shell from the background menu instead of Wizard Mode.

You can select the shell from the background menu when UNIX command tool is enabled during installation.

You can use any available editor (such as **vi** or **textedit**) from the UNIX command tool.

Mount CDROM

Obtain a command tool from the background menu and enter the UNIX superuser password. Enter mount -rF hsfs /dev/sr0 /cdrom. (The UNIX directory /cdrom must exist before running this command.)

Access level UNIX superuser

Syntax mount -rF hsfs /dev/sr0 /cdrom

Arguments None.

Note: This method for mounting the CDROM is not necessary for installing fonts. The font install commands automatically mount the CDROM.

Mount Floppy

This command mounts a DOS-formatted floppy.

Obtain a command tool from the background menu and enter the **su** command, when prompted enter UNIX superuser password. Enter mount /pcfs.

Access level UNIX superuser

Syntax mount /pcfs

mount -r /pcfs if the diskette is write-protected.

Arguments None.

Note: This method for mounting the floppy is not necessary for installing fonts. The font install commands automatically mount the floppy.

Creating a telnet greeting message

An administrator can create an ASCII greeting message that client workstations display when users telnet to the DocuPrint Printer Controller:

1. Use a UNIX editor in a UNIX shell at the Printer Controller to create the message and name the file “greeting”.
2. Add the greeting file to the /var/db directory at the Printer Controller. The greeting file must be resident on the system and not a symbolic link.

The DocuPrint system searches for a file named /var/db/greeting whenever a telnet connection is made to the Printer Controller, and the client workstation displays the greeting message.

Note: The Printer Controller does not display the greeting message.

Following is an example of a greeting message a client workstation can display when a telnet connection is made.

```
>telnet <DocuPrint Printer Controller>
Trying xx.xx.xx.xx. . .
Connected to dpserver
Escape character is'^]' .
DocuPrint System Administration <DocuPrint
Printer Controller>

This system is restricted to legitimate company
business purposes and is subject to audit.  The
unauthorized access, use or modification of this
computer system or the data contained therein or
in transit to or from, is a criminal violation of
federal & state law.

DocuPrint version: 7.1: Mon July 3 12:34:58 PDT
2000 Copyright (C) 1983-2000 by Xerox
Corporation. All rights reserved.
```

Enabling the lpr security option

The lpr security option provides additional security when using the lpr command. The system accepts jobs that are submitted by lpr only if the host sending the job is listed in the hosts.lpd file in the /etc directory. If the hosts.lpd file does not exist, the system accepts jobs from any host on the network.

Follow these steps to create a **hosts.lpd** file and add a host name with an IP network address:

Note: You may obtain the command tool from the background menu, or you may use Wizard Mode.

1. Obtain a command tool from the background menu.
2. Use the **su** command to access root.
3. Enter the superuser password when prompted.
4. Enter **cd /etc**
5. Create a hosts.lpd file using a Unix editor and enter the client names.

```
hosts.lpd file:  sidney
                 troy
                 teddy
```

6. Save the hosts.lpd file you created.
7. Edit the hosts file using a Unix editor and enter the IP network addresses and client names.

```
hosts file:      127.1.98.6    sidney
                 127.1.45.98   troy
                 127.1.67.9    teddy
```

Note: For a PC client running FTP TCP/IP, ensure that the IP address of the PC client is also in the Pctcp driver section of the pctcp.ini file.

8. Save the hosts file you edited.
9. Enter **exit** to exit superuser mode.

Removing orphan data files

Orphan data files are files that do not belong to any existing job. They are left in the /var/spool/xerox/netqreq directory if the Printer Controller crashes or is rebooted while clients are submitting jobs. Remove orphan data files from the directory only if Xerox Client Software is enabled. To remove these files:

Note: You may obtain the command tool from the background menu, or you may use Wizard Mode.

1. At the PS-admin> prompt In the DocuPrint Print Service window, enter **stop queueing**.
2. Obtain a command tool from the background menu.
3. Enter **cd /var/spool/xerox/netqreq** to access the netqreq directory.
4. Enter **ls -lt** to display a list of files sorted by date.
5. Review the list to see if any source files (files that do not start with “X”) are dated earlier than the last reboot.

   If such files exist, use the *grep <sourcefilename>* * command to determine if they are orphan files. If this command does not return any text, remove the files using the *rm <sourcefilename>* command.
6. Enter **exit** if you are in Wizard Mode and return to the Administrator level of commands.
7. Enter **start queueing**.

12. Using Wizard Mode or UNIX shell

This chapter provides guidelines for working in Wizard Mode and in the UNIX shell from the background menu. It discusses procedures that may be accessed through Wizard Mode or the UNIX shell—setting a telnet greeting for remote access users, enabling the lpr security option, recovering the Job Pool Manager database, and removing orphan data files.

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Note: The DocuPrint NPS user interface may appear to hang until you exit the first command tool.

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- If you are accessing the Printer Controller remotely through Telnet, do not start any window-based tools, such as cmdtool, in Wizard Mode. If you do, the window opens on the Printer Controller not on the client workstation, and the client workstation appears locked up. To restore the prompt at the client workstation, quit the tool from the Printer Controller.

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In most instances, you can use the UNIX shell from the background menu instead of Wizard Mode.

You can select the shell from the background menu when UNIX command tool is enabled during installation.

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Obtain a command tool from the background menu and enter the UNIX superuser password. Enter mount -rF hsfs /dev/sr0 /cdrom. (The UNIX directory /cdrom must exist before running this command.)

Access level UNIX superuser

Syntax mount -rF hsfs /dev/sr0 /cdrom

Arguments None.

Note: This method for mounting the CDROM is not necessary for installing fonts. The font install commands automatically mount the CDROM.

Mount Floppy

This command mounts a DOS-formatted floppy.

Obtain a command tool from the background menu and enter the **su** command, when prompted enter UNIX superuser password. Enter mount /pcfs.

Access level UNIX superuser

Syntax mount /pcfs

mount -r /pcfs if the diskette is write-protected.

Arguments None.

Note: This method for mounting the floppy is not necessary for installing fonts. The font install commands automatically mount the floppy.

Creating a telnet greeting message

An administrator can create an ASCII greeting message that client workstations display when users telnet to the DocuPrint Printer Controller:

1. Use a UNIX editor in a UNIX shell at the Printer Controller to create the message and name the file “greeting”.
2. Add the greeting file to the /var/db directory at the Printer Controller. The greeting file must be resident on the system and not a symbolic link.

The DocuPrint system searches for a file named /var/db/greeting whenever a telnet connection is made to the Printer Controller, and the client workstation displays the greeting message.

Note: The Printer Controller does not display the greeting message.

Following is an example of a greeting message a client workstation can display when a telnet connection is made.

```
>telnet <DocuPrint Printer Controller>
Trying xx.xx.xx.xx. . .
Connected to dpserver
Escape character is'^]' .
DocuPrint System Administration <DocuPrint
Printer Controller>

This system is restricted to legitimate company
business purposes and is subject to audit.  The
unauthorized access, use or modification of this
computer system or the data contained therein or
in transit to or from, is a criminal violation of
federal & state law.

DocuPrint version: 7.1: Mon July 3 12:34:58 PDT
2000 Copyright (C) 1983-2000 by Xerox
Corporation. All rights reserved.
```

Enabling the lpr security option

The lpr security option provides additional security when using the lpr command. The system accepts jobs that are submitted by lpr only if the host sending the job is listed in the hosts.lpd file in the /etc directory. If the hosts.lpd file does not exist, the system accepts jobs from any host on the network.

Follow these steps to create a **hosts.lpd** file and add a host name with an IP network address:

Note: You may obtain the command tool from the background menu, or you may use Wizard Mode.

1. Obtain a command tool from the background menu.
2. Use the **su** command to access root.
3. Enter the superuser password when prompted.
4. Enter **cd /etc**
5. Create a hosts.lpd file using a Unix editor and enter the client names.

```
hosts.lpd file:  sidney
                 troy
                 teddy
```

6. Save the hosts.lpd file you created.
7. Edit the hosts file using a Unix editor and enter the IP network addresses and client names.

```
hosts file:      127.1.98.6    sidney
                 127.1.45.98   troy
                 127.1.67.9    teddy
```

Note: For a PC client running FTP TCP/IP, ensure that the IP address of the PC client is also in the Pctcp driver section of the pctcp.ini file.

8. Save the hosts file you edited.
9. Enter **exit** to exit superuser mode.

Removing orphan data files

Orphan data files are files that do not belong to any existing job. They are left in the /var/spool/xerox/netqreq directory if the Printer Controller crashes or is rebooted while clients are submitting jobs. Remove orphan data files from the directory only if Xerox Client Software is enabled. To remove these files:

Note: You may obtain the command tool from the background menu, or you may use Wizard Mode.

1. At the PS-admin> prompt In the DocuPrint Print Service window, enter **stop queueing**.
2. Obtain a command tool from the background menu.
3. Enter **cd /var/spool/xerox/netqreq** to access the netqreq directory.
4. Enter **ls -lt** to display a list of files sorted by date.
5. Review the list to see if any source files (files that do not start with “X”) are dated earlier than the last reboot.

   If such files exist, use the *grep <sourcefilename>* * command to determine if they are orphan files. If this command does not return any text, remove the files using the *rm <sourcefilename>* command.
6. Enter **exit** if you are in Wizard Mode and return to the Administrator level of commands.
7. Enter **start queueing**.

13. Handling XDOD/DigiPath jobs

This chapter describes how to install NFS for DigiPath/XDOD jobs, and provides instructions for handling problems with print jobs from XDOD/DigiPath clients.

Note: The system administrator must enable FTP on the DocuPrint NPS to print from XDOD 4.0. During installation, or using Configure, answer “yes” to “Enable FTP (Required to retrieve print clients with FTP from other machines on the network)?”

Configuring DocuPrint NPS for XDOD/DigiPath

Note: DocuPrint does not support NFS except in conjunction with XDOD/DigiPath products.

To enable some DocuPrint features, you must specify certain options when you install DocuPrint Printer Controller software. During installation, the installation script displays the following prompt:

```
Set up XIPP prescan filter for XDOD clients (Y or
N) [n]:
```

Enter y (or **yes**) at this prompt.

You should also set up a separate subdirectory on DocuPrint for each application that transfers files to it. The name of the subdirectory should match the <appName> used in the pathname to transfer files to DocuPrint, as described in “Importing the DocuPrint directory”.

Use an installation script to create the <appName> subdirectory (or subdirectories). Run this script after normal DocuPrint installation is successfully completed. You cannot use NFS to create these subdirectories on DocuPrint.

Configuring NFS for XDOD 3.1 or earlier

At system start-up, you must start an NFS service and export the appropriate subdirectories.

A daemon, running on the DocuPrint Printer Controller, provides NFS services. You must start this NFS daemon because the standard DocuPrint configuration does not run an NFS daemon for system security reasons. To start the appropriate service:

- If the computer that is transferring files to the DocuPrint Printer Controller over NFS is a UNIX system, use the default NFS daemon. See “Configuring the default NFS daemon” for information on configuring this daemon.
- If the computer transferring files is not a UNIX system, you may need to place an appropriate daemon on the DocuPrint Printer Controller to be started each time the server is restarted. See “Using an alternate NFS daemon” for more information.

Configuring the default NFS daemon

A DocuPrint system acts as an NFS server using a standard Sun NFS daemon. This daemon should operate with client systems that are also running UNIX, unless XDOD third-party daemons are not supported by the client.

In a SunOS system, the /etc/exports file specifies the directory that is being exported; under Solaris, the file is called /etc/dfs/dfstab. As long as the appropriate file exists, the default NFS daemon is started each time the DocuPrint Printer Controller is restarted.

Using an alternate NFS daemon (SunOS only)

The default NFS daemon may not operate with the NFS client software on the machine that must transfer referenced files to the DocuPrint Printer Controller. If this occurs, you should be able to find a supplier of a compatible daemon. The daemon must be able to run under SunOS on a SPARCStation platform. This feature is not supported under Solaris.

Place the daemon software in the /usr/etc directory on the server. It must then be executed and the correct directory exported each time the server is restarted. Ensure that these steps are performed by creating a script that runs at system start-up.

You can automate these steps by creating an appropriate Bourne shell script. It should contain the commands that are needed to start the NFS daemon that was placed in the /usr/etc directory. Store the script on the DocuPrint Printer Controller as /etc/rc.NFS, and set the permissions on the file with the command **chmod 600 /etc/rc.NFS**.

Add the following statement to the end of the /etc/rc.local file:

```
sh /etc/rc.NFS > /dev/console
```

Be sure to include a space after the “sh” and a return at the end of the statement. This statement executes the script that contains the commands in the rc.NFS file at the correct point in the booting procedure. Take care when altering the rc.local file: changing lines other than those described may cause DocuPrint start-up problems.

The NFS daemon may rely on a configuration file to specify the directory or directories that should be exported. The default daemon uses a file called /etc/exports. When using an alternate daemon, remove the /etc/exports file to ensure that the default daemon is not started.

You need to do this step only once, and you should not include it in the rc.NFS script. However, if the alternate daemon also relies on /etc/exports, you need to disable start-up of the default daemon by editing the /etc/rc.local file. In this file, find the line containing the following:

```
if [ -f /etc/exports ]; then
```

Carefully comment out the entire "if" statement (approximately thirteen lines, including the "fi" at the end) by placing a # at the start of each line.

The following example of a Bourne shell start-up script includes only the commands required to start the NFS daemon and to ensure that the exported directories are in the correct state.

```
# Sample script to start an imaginary NFS daemon
# for an imaginary application

#Check the directory
if [ ! -d /var/spool/data/custapp ]; then
echo "Creating directory for Custapp. . ."
mkdir /var/spool/data/custapp
chmod 777 /var/spool/data/custapp

fi
# Start the daemon
echo "Starting NFS daemon for Custapp"
/usr/etc/imaginaryNFSdaemon -e /var/spool/data/
custapp &
```

Verifying correct installation

If resubmitting the job does not resolve your problem with an XDOD job, verify that the system was installed and configured correctly:

- Verify that xipp is enabled for XDOD by performing the following:
  1. At the PS-Admin> prompt, enter **Configure.**
  2. Enter the superuser password.
  3. Select Option 5.
  4. Look for the line that says xipp.enable: "Y".

Caution: Do not add the XDMS subdirectory manually.

- **If you are running SunOS 4.1.x,** verify that the Beame & Whiteside NFS daemon (bwnfsd) is running for XDOD installations prior to 4.0. To do so, obtain a command tool from the background menu and type:
  ps -axc | grep bwnfsd | grep -v grep.
  - If the bwnfsd is running, a line describing the daemon is displayed.
  - If the bwnfsd is not running, restart DocuPrint, then try the verification again. If the daemon is still not running, contact your service representative.

Removing .gfi directories

If a job submitted from an XDOD client was canceled or aborted, the partially complete .gfi directory is not automatically deleted from the /var/spool/data/xdms directory. To remove unwanted .gfi directories:

1. In the DocuPrint Print Service window, at the PS> prompt, enter **privilege administrator**.
2. Enter **stop all** to stop printing and queueing.
3. Obtain a command tool from the background menu.

Note: Using Wizard Mode to delete unwanted .gfi directories is **not** recommended.

4. Enter **cd /var/spool/data/xdms**.
5. Enter **pwd** to verify you are in the /var/spool/data/xdms directory.
6. Use the **su** command to access root.
7. Enter the superuser password.
8. Enter **ls -lt** to display a list of subdirectories sorted by date.
9. Enter **rm -r <name>.gfi** to remove each .gfi directory with a date earlier than the current date.
10. Enter **exit** to exit superuser mode.
11. Select **quit** to close the command tool window.

13. Handling XDOD/DigiPath jobs

This chapter describes how to install NFS for DigiPath/XDOD jobs, and provides instructions for handling problems with print jobs from XDOD/DigiPath clients.

Note: The system administrator must enable FTP on the DocuPrint NPS to print from XDOD 4.0. During installation, or using Configure, answer “yes” to “Enable FTP (Required to retrieve print clients with FTP from other machines on the network)?”

Configuring DocuPrint NPS for XDOD/DigiPath

Note: DocuPrint does not support NFS except in conjunction with XDOD/DigiPath products.

To enable some DocuPrint features, you must specify certain options when you install DocuPrint Printer Controller software. During installation, the installation script displays the following prompt:

```
Set up XIPP prescan filter for XDOD clients (Y or
N) [n]:
```

Enter y (or **yes**) at this prompt.

You should also set up a separate subdirectory on DocuPrint for each application that transfers files to it. The name of the subdirectory should match the <appName> used in the pathname to transfer files to DocuPrint, as described in “Importing the DocuPrint directory”.

Use an installation script to create the <appName> subdirectory (or subdirectories). Run this script after normal DocuPrint installation is successfully completed. You cannot use NFS to create these subdirectories on DocuPrint.

Configuring NFS for XDOD 3.1 or earlier

At system start-up, you must start an NFS service and export the appropriate subdirectories.

A daemon, running on the DocuPrint Printer Controller, provides NFS services. You must start this NFS daemon because the standard DocuPrint configuration does not run an NFS daemon for system security reasons. To start the appropriate service:

- If the computer that is transferring files to the DocuPrint Printer Controller over NFS is a UNIX system, use the default NFS daemon. See “Configuring the default NFS daemon” for information on configuring this daemon.
- If the computer transferring files is not a UNIX system, you may need to place an appropriate daemon on the DocuPrint Printer Controller to be started each time the server is restarted. See “Using an alternate NFS daemon” for more information.

Configuring the default NFS daemon

A DocuPrint system acts as an NFS server using a standard Sun NFS daemon. This daemon should operate with client systems that are also running UNIX, unless XDOD third-party daemons are not supported by the client.

In a SunOS system, the /etc/exports file specifies the directory that is being exported; under Solaris, the file is called /etc/dfs/dfstab. As long as the appropriate file exists, the default NFS daemon is started each time the DocuPrint Printer Controller is restarted.

Using an alternate NFS daemon (SunOS only)

The default NFS daemon may not operate with the NFS client software on the machine that must transfer referenced files to the DocuPrint Printer Controller. If this occurs, you should be able to find a supplier of a compatible daemon. The daemon must be able to run under SunOS on a SPARCStation platform. This feature is not supported under Solaris.

Place the daemon software in the /usr/etc directory on the server. It must then be executed and the correct directory exported each time the server is restarted. Ensure that these steps are performed by creating a script that runs at system start-up.

You can automate these steps by creating an appropriate Bourne shell script. It should contain the commands that are needed to start the NFS daemon that was placed in the /usr/etc directory. Store the script on the DocuPrint Printer Controller as /etc/rc.NFS, and set the permissions on the file with the command **chmod 600 /etc/rc.NFS**.

Add the following statement to the end of the /etc/rc.local file:

```
sh /etc/rc.NFS > /dev/console
```

Be sure to include a space after the “sh” and a return at the end of the statement. This statement executes the script that contains the commands in the rc.NFS file at the correct point in the booting procedure. Take care when altering the rc.local file: changing lines other than those described may cause DocuPrint start-up problems.

The NFS daemon may rely on a configuration file to specify the directory or directories that should be exported. The default daemon uses a file called /etc/exports. When using an alternate daemon, remove the /etc/exports file to ensure that the default daemon is not started.

You need to do this step only once, and you should not include it in the rc.NFS script. However, if the alternate daemon also relies on /etc/exports, you need to disable start-up of the default daemon by editing the /etc/rc.local file. In this file, find the line containing the following:

```
if [ -f /etc/exports ]; then
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Carefully comment out the entire "if" statement (approximately thirteen lines, including the "fi" at the end) by placing a # at the start of each line.

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  ps -axc | grep bwnfsd | grep -v grep.
  - If the bwnfsd is running, a line describing the daemon is displayed.
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1. In the DocuPrint Print Service window, at the PS> prompt, enter **privilege administrator**.
2. Enter **stop all** to stop printing and queueing.
3. Obtain a command tool from the background menu.

Note: Using Wizard Mode to delete unwanted .gfi directories is **not** recommended.

4. Enter **cd /var/spool/data/xdms**.
5. Enter **pwd** to verify you are in the /var/spool/data/xdms directory.
6. Use the **su** command to access root.
7. Enter the superuser password.
8. Enter **ls -lt** to display a list of subdirectories sorted by date.
9. Enter **rm -r <name>.gfi** to remove each .gfi directory with a date earlier than the current date.
10. Enter **exit** to exit superuser mode.
11. Select **quit** to close the command tool window.

14. MICR printing

The DocuPrint 96 MICR NPS, 4635 MICR NPS, and 180 MICR NPS produce a magnetic ink character recognition (MICR) line on negotiable and turnaround documents such as checks and bills. The MICR NPS models print documents using magnetic ink and special fonts to create machine-readable information that allows for quick document processing.

Although, MICR is generally used to print accounting and routing information on blank checks and other negotiable documents, the magnetic encoding capabilities can be used for any printed output.

For more information on creating MICR documents and using MICR tools, refer to the *Generic MICR Fundamentals Guide*, provided with your NPS.

Considerations for MICR printing on NPS models

Font availability

The MICR fonts are supplied with the printer. PostScript and PCL versions of the fonts are provided on a 3.5 inch floppy diskette.

MICR font description

Xerox provides a set of 300 dpi E13B MICR fonts for use on the DocuPrint MICR NPS models. These fonts can be loaded onto a DocuPrint NPS system using the font installation commands described in the *Guide to Configuring and Managing the System*.

It is critical that the MICR font character raster patterns and metrics not be modified in any way and that no new characters are added. The MICR fonts supplied with the NPS must be used in order for the Xerox MICR Guarantee to be valid. The Xerox supplied MICR fonts are required to optimize the quality of the MICR line and to ensure excellent performance.

PostScript font

The PostScript version of the E13B font is:

- PostScriptFont file name: e13b.ps (internal name, E13B)
- Point size: 9.12
- Font type: Type 3

The internal name E13B and point size, 9.12, is used to select the Xerox PostScript MICR fonts.

PCL font

The HP PCL escape sequences used to select the Xerox E13B MICR fonts are:

E13B:

ESC >&100<ESC > (0U < Esc >(s0p8.00h9.00v0s0b0T

Security issues

NPS MICR printers do not offer the same security or audit features found on printers like the 4635 MX LPS.

To enhance security, you will need to delete MICR fonts after use, and install them before the next use.

See the *Generic MICR Fundamentals Guide* for more information.

Clearing memory

After all MICR jobs have been printed and the MICR fonts have been deleted off of the DocuPrint NPS disk, if there is concern related to access of residual contents of MICR fonts in memory on the DocuPrint NPS system, the sequencer should be restarted.

although it is extremely difficult to retrieve contents in memory, using the Restart Sequencer command will clear all fonts in memory and force the PostScript and PCL interpreters to reload fonts into memory for the next job.

Clearing jobs

To confirm that there are no MICR jobs left on the DocuPrint NPS system, use the List Documents command to list “Held” and “Ineligible” documents to check for MICR documents waiting to be printed. If these documents have already been successfully printed and are duplicate jobs, they should be deleted by using the Cancel Documents command. If the document still needs to be printed, use the appropriate procedures to determine the cause of the problem and take the actions to correct the problem. Though the MICR jobs will still be listed when the List Documents command is used to list all or completed jobs, as long as the document status is “Complete”, only the attributes of the jobs have been kept, the job itself has been deleted from the spool area.

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