

Xerox DocuPrint NPS/ IPS

Guide to Submitting Jobs from the Client

721P90350
Version 8.0
October 2002

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

©2002 by Xerox Corporation. All rights reserved.

Copyright protection claimed includes all forms and matters of copyrightable material and information now allowed by statutory or judicial law or hereinafter granted, including without limitation, material generated from the software programs which are displayed on the screen, such as icons, screen displays, looks, etc.

Printed in the United States of America.

Publication number: 721P90350

Xerox® and all Xerox products mentioned in this publication are trademarks of Xerox Corporation. Products and trademarks of other companies are also acknowledged.

Changes are periodically made to this document. Changes, technical inaccuracies, and typographic errors will be corrected in subsequent editions.

Table of contents

Safety	ix
Laser safety	ix
Ozone information: U. S. only	x
Operation safety: U. S.	x
Operation safety: Europe	xi
Warning markings	xi
Electrical supply	xii
Ventilation	xii
Operator accessible areas	xii
Maintenance	xiii
Before cleaning your product	xiii
CE mark: Europe only	xiii
Radio and telecommunications equipment directive (Europe only)	xiv
For further information	xv
 Introduction	 xvii
About this guide	xvii
Contents	xviii
Conventions	xix
Related publications	xx
 1. DocuPrint and DocuColor 2060 NPS/IPS client overview	 1-1
Document attributes	1-2
Virtual printers	1-3
Submitting print jobs	1-3
Communicating with the network	1-5
Receiving job status feedback	1-6
 2. Setting up workstations	 2-1
Setting up PC-DOS workstations	2-2
Installing Xerox Client Software for DOS	2-2
Installing the PPD file	2-5
Installing the Decomposition Service DOS Tools on the PC	2-6
Removing DOS client software	2-6
Setting up Macintosh workstations	2-7
Preparing for installation	2-7
Installing the Document Submission Client Software	2-8
Verifying your installation	2-8

Installing Xerox Client Software on UNIX workstations	2-9
Installing Xerox Client Software for UNIX	2-10
Verifying your installation	2-12
Installing Xerox Client Software man pages	2-12
Removing UNIX client software	2-14
Installing the PPD file for UNIX	2-15
Installing the Decomposition Service UNIX Tools	2-15
Enabling lpr print utilities for UNIX workstations	2-17
SunOS 4.0 and 4.1x	2-17
Solaris	2-18
TCP/IP socket printing	2-19
Color calibration for the DocuColor 2060 NPS/IPS	2-21
 3. Printing using Xerox utilities and lpr utilities (DOS and UNIX) . .	3-1
Printing using the Xerox utilities software	3-1
print command	3-2
Listjob command	3-13
Listq command	3-16
Printing using lpr utilities	3-18
lpr command	3-19
lpq command in DOS	3-31
lpq command in UNIX	3-32
lprm command	3-33
lpc command (UNIX only)	3-35
Color mismatch	3-37
 4. Submitting print jobs using Macintosh drivers	4-1
Selecting a driver	4-1
Selecting a LaserWriter driver, version 7.x	4-2
Selecting a LaserWriter driver, version 8.x	4-3
Selecting an AdobePS driver, version 8.5.1	4-6
Submitting a print job	4-9
Submitting a print job using the LaserWriter 7.x driver	4-9
Submitting a print job using the LaserWriter 8.x driver	4-10
Setting general print options	4-12
Setting application-specific print options	4-13
Setting background printing options	4-14
Setting cover page options	4-15
Setting color matching options (models 4850/4890/92C only)	4-16
Setting layout options	4-17
Setting error handling options	4-18
Setting "Save as File" options	4-19
Setting printer-specific options	4-20

Submitting a print job using the AdobePS 8.5.1 driver	4-22
Setting general print options	4-24
Setting application-specific print options	4-25
Setting background printing options	4-26
Setting cover page options	4-27
Setting color matching options (models 4850/4890/92C only)	
4-28	
Setting layout options	4-29
Setting error handling options	4-30
Setting "Save as File" options	4-31
Setting printer-specific options	4-32
Setting Xerox Job Ticket options	4-34
Monitoring and controlling printing	4-39
Highlight color printing	4-39
Image quality considerations	4-40

5. Submitting print jobs using Windows NT 4.0 drivers.5-1

Installing and configuring the system	5-1
Printing from Windows NT 4.0	5-7
Printing from your Windows application	5-9
Opening, saving, and resetting job tickets	5-11
Opening a job ticket	5-11
Saving a job ticket	5-13
Resetting a job ticket	5-15
Setting up a job ticket	5-16
Specifying the number of copies to print	5-17
Specifying which pages to print	5-17
Specifying page orientation	5-17
Specifying sides to image	5-17
Setting the image shift	5-18
Specifying the paper weight	5-18
Programming the Main Stock (Stock 1)	5-18
Selecting the finishing features	5-19
Creating job notes	5-19
Specifying paper stocks	5-21
Selecting the paper stock size	5-23
Selecting the paper stock type	5-23
Selecting the paper stock color	5-24
Selecting drilled stock	5-24
Specifying Special Pages	5-25
Adding Special Pages	5-25
Changing Special Pages	5-27
Deleting Special Pages	5-27

Specifying highlight color options	5-27
Selecting the highlight color	5-28
Selecting the color mismatch action	5-29
Selecting the extraction color	5-29
Selecting the rendering algorithm	5-30
Setting advanced PostScript options	5-31
Compressing graphics	5-32
Printing graphics in color	5-33
Printing PostScript error information	5-33
Printing negative or mirror images of your documents	5-33
Printing with printer fonts in place of TrueType fonts	5-34
Specifying halftoning options	5-35
Specifying printing resolution	5-35
Specifying the format for sending TrueType fonts to your printer	5-36
Setting the preferences	5-36
Redirecting printing to a Xerox network print queue	5-38

6. Submitting print jobs from Quick Print for Windows NT 4.0 6-1

Accessing Quick Print and selecting a printer	6-2
Opening, saving, and resetting job tickets	6-4
Opening a job ticket	6-4
Saving a job ticket	6-6
Saving job ticket information into a document	6-7
Resetting a job ticket	6-8
Setting up a job ticket	6-9
Setting imaging and job setup options	6-10
Specifying the number of copies to print	6-11
Specifying which pages to print	6-12
Specifying sides to image	6-12
Positioning the image on the paper	6-12
Specifying finishing options	6-13
Creating job notes	6-13
Creating summary information to save with the job ticket	6-14
Creating delivery instructions to print with the job	6-14
Adding a banner page message	6-14
Specifying paper stock	6-15
Specifying paper stock for the document	6-15
Specifying tab stock	6-16
Specifying custom paper stock	6-17
Specifying highlight color options	6-18
Specifying color for a highlight color document	6-19
Changing a full color document to a highlight color document	6-19

Creating special pages	6-21
Creating special page(s)	6-22
Changing paper stock within a document	6-22
Modifying selected page definitions	6-22
Setting print preferences	6-23
Using the document name as the job name	6-24
Writing Account information when saving the job ticket	6-24
Specifying a generic job ticket	6-24
Specifying the unit of measurement for paper size	6-24
Specifying the unit of measurement for image shift units	6-24
Customizing or masking dialog box options	6-25
Customizing your printer queue list	6-25
Adding a new TCP/IP-attached printer to the print queue list	6-27
Adding a new Novell NetWare-attached printer to the print queue list	6-29
Setting the default printer	6-36
Removing a printer from the setup	6-37
7. Printing using the Internet Printing Protocol	7-1
8. Using remote access to the printer	8-1
Using telnet	8-1
Using the Web-based user interface	8-1
Accessing the Web-based user interface from the client	8-2
Information on the Web-based user interface	8-3

Safety

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.

DANGER

**LASER RADIATION WHEN OPEN
AVOID DIRECT EXPOSURE TO BEAM**

Ozone information: U. S. only

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: U. S.

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.

WARNING

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

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

1-800-828-6571

For customers outside the United States, contact your local Xerox representative or operating company.

Operation safety: Europe

This Xerox product and supplies are manufactured, tested and certified to strict safety regulations, electromagnetic regulations and established environmental standards.

Any unauthorised alteration, which may include the addition of new functions or connection of external devices, may impact the product certification.

Please contact your Xerox representative for more information.

Warning markings

All warning instructions marked on or supplied with the product should be followed.



This WARNING alerts users to areas of the product where there is the possibility of personal damage.



This WARNING alerts users to areas of the product where there are heated surfaces, which should not be touched.

Electrical supply

This product shall be operated from the type of electrical supply indicated on the product's data plate label. If you are not sure that your electrical supply meets the requirements, please consult your local power company for advice.



WARNING

This product must be connected to a protective earth circuit. This product is supplied with a plug that has a protective earth pin. This plug will fit only into an earthed electrical outlet. This is a safety feature. Always connect equipment to a properly grounded electrical outlet. If in doubt, have the outlet checked by a qualified electrician.

To disconnect all electrical power to the product, the disconnect device is the power cord. Remove the plug from the electrical outlet.

Ventilation

Slots and opening in the enclosure of the product are provided for ventilation. Do not block or cover the ventilation vents, as this could result in the product overheating.

This product should not be placed in a built-in installation unless proper ventilation is provided, please contact your Xerox representative for advice.

Never push objects of any kind into the ventilation vents of the product.

Operator accessible areas

This product has been designed to restrict operator access to safe areas only. Operator access to hazardous areas is restricted with covers or guards, which would require a tool to remove. Never remove these covers or guards.

Maintenance

Any operator product maintenance procedures will be described in the user documentation supplied with the product. Do not carry out any maintenance on the product, which is not described in the customer documentation.

Before cleaning your product

Before cleaning this product, unplug the product from the electrical outlet. Always use materials specifically designated for this product, the use of other materials may result in poor performance and may create a hazardous situation. Do not use aerosol cleaners, they may be flammable under certain circumstances.

CE mark: Europe only



January 1, 1995: Council Directive 73/23/EEC, amended by Council Directive 93/68/EEC, approximation of the laws of the member states related to low voltage equipment.

January 1, 1996: Council Directive 89/336/EEC, approximation of the laws of the member states related to electromagnetic compatibility.

March 9, 1999: Council Directive 99/5/EC, on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity.

A full declaration of conformity, defining the relevant directives and referenced standards, can be obtained from your Xerox representative.

In order to allow this equipment to operate in proximity to Industrial, Scientific and Medical (ISM) equipment, the external radiation for the ISM equipment may have to be limited or special mitigation measures taken.

This is a Class A product. In a domestic environment this product may cause radio frequency interference, in which case the user may be required to take adequate measures.

Shielded interface cables must be used with this product to maintain compliance with Council Directive 89/36/EEC.

Radio and telecommunications equipment directive (Europe only)

Certification to 1999/5/EC Radio Equipment and Telecommunications Terminal Equipment Directive:

This Xerox product has been self-certified by Xerox for pan-European single terminal connection to the analog public switched telephone network (PSTN) in accordance with Directive 1999/5/EC.

The product has been designed to work with the national PSTNs and compatible PBXs of the following countries:

Austria	Germany	Luxembourg	Sweden
Belgium	Greece	Netherlands	Switzerland
Denmark	Iceland	Norway	United Kingdom
Finland	Ireland	Portugal	
France	Italy	Spain	

In the event of problems, contact your local Xerox representative in the first instance.

This product has been tested to, and is compliant with, TBR21, a specification for terminal equipment for use on analog switched telephone networks in the European Economic area.

The product may be configured to be compatible with other country networks. Please contact your Xerox representative if your product needs to be reconnected to a network in another country. This product has no user-adjustable settings.

NOTE: Although this product can use either loop disconnect (pulse) or DTMF (tone) signaling, it should be set to use DTMF signaling. DTMF signaling provides reliable and faster call setup.

Modification or connection to external control software, or to external control apparatus not authorized by Xerox, invalidates its certification.

For further information

For more information on Environment, Health and Safety in relation to this Xerox product and supplies, please contact the following customer help lines:

Europe:+44 1707 353434

USA:1 800 8286571

Canada:1 800 8286571

Introduction

This guide describes how to print documents from the platforms supported by this system.

The NPS/IPS printers support the processing and printing of PDL and ASCII jobs from network workstations, as well as IPDS jobs from an IBM host. Supported PDL formats are PostScript levels 1 and 2, HP PCL 5e, and TIFF.

NOTE: You may be using the DocuPrint NPS/IPS software extension on a DocuPrint 2000 EPS system. The 2000 Series printer models are the 100, 135, 155, and 180. These printers are comparable in capabilities to the DocuPrint NPS/IPS models 96, 4635, and 180.

About this guide

This guide provides the information you need to submit documents to the Xerox DocuPrint or DocuColor 2060 NPS/IPS printers from your client workstation. It is a companion guide to the following Xerox Production Print Services publications:

- *Guide to Job Submission for Windows and Guide to Job Submission for Macintosh*

These guides contain the installation procedures and instructions on how to use the Xerox Production Print Services (XPPS) software to set up and print jobs.

- *Guide to Job Submission Using XDS Plus*

This guide contains the installation procedures and instructions on how to use the Xerox Document Submission Plus (XDS Plus) software to set up and print jobs.

You should be familiar with your workstation operations, and any application you are using to generate print jobs.

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

Contents

This section lists the contents of this guide:

- Chapter 1, “DocuPrint and DocuColor 2060 NPS/IPS client overview,” provides a brief overview of document attributes and virtual printers. It also provides information on how client workstations interact with the entire printer.
- Chapter 2, “Setting up workstations,” describes how to prepare your DOS, Macintosh, and UNIX workstations to work with the printer. It includes procedures for installing and removing Xerox Client Software (print command).
- Chapter 3, “Printing using Xerox utilities and lpr utilities (DOS and UNIX),” contains the information you need to submit print jobs, obtain print queue status, delete print jobs, and control printer operations using Xerox utilities software. This chapter also provides information you need to submit print jobs and obtain print job and queue status using the lpr print utilities.

A table in this chapter shows the status at the printer controller and the results of the printout when using the *lpr* or *print* command highlight color, map color, and color mismatch options.

- Chapter 4, “Submitting print jobs using Macintosh drivers,” contains procedures for accessing the job ticket and submitting print jobs using your Macintosh drivers.
- Chapter 5, “Submitting print jobs using Windows NT 4.0 drivers,” contains procedures for installing printer drivers (applications) on Windows NT 4.0, and procedures for accessing the job ticket and submitting print jobs from your Windows NT 4.0 drivers.
- Chapter 6, “Submitting print jobs from Quick Print for Windows NT 4.0,” contains procedures for accessing the Quick Print windows and dialog boxes to set up a job ticket and submit print jobs from a Windows NT environment.
- Chapter 7, “Printing using the Internet Printing Protocol,” explains how the Internet Printing Protocol (IPP) is supported and can be used with the printer.
- Chapter 8, “Using the web-based user interface,” explains how to access the Web-based user interface and lists the type of information available through the Web about your printer and documents.

An index is provided at the back of the guide.

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 <ENTER>).
- **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**).
- **The word “enter” within procedures:** The two-step process of keying in data and pressing <ENTER> (for example, enter **y**).
- **Italics:** Document and library names are shown in italics (for example, the *Xerox DocuPrint NPS/IPS Guide to Managing Print Jobs*).
- **Quotation marks:** 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 DocuColor NPS/IPS documentation set includes the documents listed below.

NOTE: For a list of IMB reference manuals for IPDS printing, refer to the Solutions Guide for IPDS Printing.

- *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*
- *Troubleshooting Guide*
- *Solutions Guide for IPDS Printing*
- *Decomposition Service and Tools Guide*
- *Glossary*
- *Master Index*
- *Generic MICR Fundamentals Guide*
- *Customer Information Quick Reference Card*
- *Printer Controller Commands Quick Reference Card*
- *Operator Quick Reference Card*
- *Submitting your Jobs from Macintosh Quick Reference Card*
- *Submitting your Jobs from UNIX & DOS Quick Reference Card*
- *Submitting your Jobs from Windows NT 4.0 (QuickPrint) Quick Reference Card*
- *Submitting your Jobs Using Windows NT 4.0 Drivers Quick Reference Card*

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

1. DocuPrint and DocuColor 2060 NPS/IPS client overview

Print data originates with a document created by the user at a client workstation using an application software package, or at a mainframe or minicomputer. The application allows users to create and format a document according to their exact specifications.

The application software provides the capability to print the document using a page description language (PDL). The application produces print data in one of the supported page description language formats, for example PostScript level 2.

NOTE: For information on Xerox drivers, refer to the following web site: <http://www.xerox.com/drivers>.

NOTE: Northlake Software, Inc. develops printer interface software that provides access from Digital Equipment Corporation Open VMS systems to network printers. For more information on this software, refer to the following web site: <http://www.nls.com>.

Document attributes

When submitting jobs to a DocuPrint or DocuColor 2060 NPS/IPS, you need to know how the system handles jobs so that you can be sure to get the expected output.

The NPS/IPS processes jobs based on document attributes. An attribute is a piece of information about a job, such as printing requirements. Examples of document attributes are number of copies or type of paper.

Each job has an associated set of attributes, some of which are required, while others are optional. If a required attribute is missing for a given job, a system default setting is used.

Attribute values can be assigned by:

- A job ticket from Xerox client software, set by an end user at a workstation
- A job submission protocol, such as *lpr* options, set by an end user at a workstation
- Virtual printers, set by the printer controller
- DSC, set in the job by a driver from an end user workstation
- System defaults, set at the printer controller as defined by an administrator.

Conflicting values set by the different sources are resolved through an order of precedence. The list above is from the highest to the lowest level of precedence. For example, if the job ticket and the default attributes conflict, the job ticket attributes will take precedence.

NOTE: Attributes may be called different names, depending on the source used to assign them. For example, "map color" is an NPS/IPS attribute name, but you assign this attribute using the "extraction color" command in the Xerox client software. In both cases, it is the attribute that is used to specify the colored parts of the document that convert to the available highlight color.

Users, operators, and administrators may view document attributes at the printer controller or by using remote access. The amount of information available about job attributes depends on the access level.

Once an attribute is assigned to a job, it cannot be removed. However, in some cases, its value may be changed. For example, the operator can change the value of the plex attribute from simplex to duplex.

For detailed information on attributes, refer to the *Guide to Managing Print Jobs*.

Virtual printers

A virtual printer is a “logical” printer that applies sets of attributes to jobs submitted to it.

Each virtual printer has a different name, and one physical printer can have numerous virtual printers set up on it.

Users can override virtual printer attributes by using the appropriate job submission option.

NOTE: If the virtual printer has the attribute SkipJTPrescan set to “true,” then all attributes set in a job ticket are ignored.

For detailed information on virtual printers and their management, refer to the *Guide to Managing Print Jobs*.

Submitting print jobs

You can send print data directly from the application to the printer, or you can create a PDL data (pc-centric) file on the workstation, then use a print job submission program to print. The method you choose depends on your workstation configuration and your job submission requirements.

Regardless of the job submission method, keep in mind the following regarding the job size:

- While the maximum number of sheets in a job is not limited, it is strongly recommended that a large job be broken up into smaller jobs.
- The NPS/IPS has a file size limit of 1,999,999,000 bytes. When attempting to submit a job larger than this limit, a message is posted to /var/log/DocuPrint stating the job could not be queued due to its size. Break up large jobs into smaller jobs.

**Printing directly
from the
application**

Printing directly from the application (or driver, also known as transparent printing) is easier than using a print job submission program. However, depending on the application, this method may not support all available print options such as number of copies, simplex or duplex printing, and stitching. (Transparent printing is done using one of the Xerox printer drivers, or by using third-party drivers with the Xerox PPD file for your printer.)

Also, this method is available through some, but not all, platform and application software configurations.

Print drivers for all NPS/IPS printers are included in the Xerox Production Print Services (XPPS) software. For information on XPPS drivers, refer to *the Guide to Job Submission for Windows* and *Guide to Job Submission for Macintosh*. These documents are part of the Xerox Production Print Service series.

**Using a print job
submission
program**

Using a print job submission program requires a two-step printing process. The user prints from the application to a PDL file, then uses one of the following methods to submit the job and specify print options:

- The **lpr** command provides options for submitting print jobs. The functionality of the **lpr** command is dependent on the TCP/IP software installed on the workstation.
- Xerox Client Software provides a print command for submitting jobs and specifying print options. The functionality of the print command is dependent on the TCP/IP software installed on the workstation.
- Xerox Document Submission (XDS) software for the Macintosh provides a graphical user interface for submitting jobs and specifying print options.

For information on XDS software for the Macintosh, refer to the *Guide to Job Submission for Macintosh*. This guide is part of the Xerox Production Print Services series.

- Xerox Document Submission (XDS) software for ME, Windows 2000, Macintosh operating system 8.6 or above, and Windows 95 provides a graphical user interface for submitting jobs and specifying print options.

For information on XDS software for Windows, refer to the *Guide to Job Submission for Windows*. This document is part of the Xerox Production Print Services series.

- XDS Plus software for Windows and Solaris 2.6 and 2.8 provides a Java-based graphical user interface for submitting jobs and specifying print options via the Internet.

For information on XDS Plus software, refer to the *Guide to Job Submission Using XDS Plus*. This document is part of the Xerox Production Print Services series.

- Xerox DigiPath Quick Print software for Windows NT 4.0 provides a series of dialog boxes that you use to select a document, set up a job ticket, and submit your print job.

In some cases, the workstation can be set up for more than one method of job submission.

Communicating with the network

After the print data has been prepared for printing and combined with print options data—either by the application software or by a print job submission utility—the data is sent over the network.

DocuPrint supports TCP/IP, AppleTalk, and Novell NetWare network communications protocols.

The following table lists the client workstations supported by DocuPrint NPS/IPS, and the networking options and job submission methods available for each client.

Table 1-1. Workstation reference

Client workstation hardware	Operating system	Ethernet connection	Protocol; Translation requirements	Job submission method
Sun Microsystems	Solaris **	Standard	TCP/IP; none	Print to file, then send using the lpr command or Xerox Client Software, provided that the remote printer is configured as a Berkeley spooler
PC	MS-DOS	Optional Ethernet interface card (for example 3Com 3C503)	TCP/IP; network communication software is required *	Print to file, then send using the lpr command
PC	Windows 95, 98, NT 4.0, 2000, ME	Optional Ethernet interface	TCP/IP or Novell NetWare 3.1x; <i>network communication software is required with TCP/IP (3.1x) *</i>	Print directly from Xerox driver, or use Xerox Document Submission (XDS) or Quick Print software for Windows. May be configured to use the lpr command in some cases.

Table 1-1. Workstation reference (Continued)

Client workstation hardware	Operating system	Ethernet connection	Protocol; Translation requirements	Job submission method
Digital Equipment Corporation DECStation	Digital UNIX 4.0	Optional Ethernet interface	TCP/IP; <i>none</i>	Print directly from application, or print to file and use the <code>lpr</code> command or Xerox Client Software
Apple Macintosh	Apple OS 8.6 or above	Optional Ethernet interface	AppleTalk using EtherTalk Phase I or II; <i>none</i>	Print directly from Xerox driver, or print to file and use Xerox Document Submission (XDS) software for the Macintosh
IBM RS/6000	IBM AIX	Standard	TCP/IP; <i>none</i>	Print to file and submit using Xerox Client Software
HP/Apollo	HP-UX	Standard	TCP/IP; <i>none</i>	Print to file and submit using Xerox Client Software
<p>* An additional software utility that prepares data for submission to the network in TCP/IP network protocol is required. This software utility is referred to as a network communications utility. While this software must be installed and running for jobs to be submitted successfully to the printer, once installed, its operation is transparent to the user.</p> <p>** NPS/IPS running on a Sun Microsystems client is based on the standard Sun operating system (OS); however, the Sun OS has been customized for use with the Xerox printer controller. Therefore, not all standards Sun OS features are available.</p>				

Receiving job status feedback

Client workstations display fault messages and other information, such as the status of feeder trays and output bins. If properly configured, the workstations may be able to display job status, as described in the following list.

- To determine the status of jobs submitted using the `lpr` command, you must issue an `lpq` command at the command line. With some UNIX systems jobs can be submitted using the `lp` command and status can be determined using the `lpstat` command. Some application software packages may provide a simplified means of obtaining job status, perhaps using icons. Job status is also available by establishing a telnet connection to the printer controller to access the user interface from your workstation. Printer and additional status information is also available.

The job status command (*lpq*) is available at client workstations unless your TCP/IP network communications utilities do not support it.

- Xerox Client Software provides commands for listing the status of the job (*listjob*) and for listing the queue (*listq*). These commands are available for jobs submitted using Xerox Client Software.
- AppleTalk provides job status information at the client workstation through the print monitor function. Workstation users can also determine the status of a queue.

The following table describes the job status capabilities of the various workstations.

Table 1-2. Job status reference

Platform	Job status capability
Sun Workstation	<ul style="list-style-type: none">• Job status is available by issuing the appropriate command at the command line.• Job status information is available for jobs submitted using Xerox Client Software.
PC	<ul style="list-style-type: none">• Job status is available depending on the TCP/IP software installed on the workstation. You must issue the appropriate command at the command line.• Job status information is available for jobs submitted using Xerox Client Software (via DOS).• Job status information is available using the Novell PCONSOLE utility if the printer is configured as a remote printer or print server.
Apple Macintosh	Job status information is available at the workstation through AppleTalk.
IBM RS/6000, HP/Apollo and DEC Alpha UNIX	Job status information is available for jobs submitted using Xerox Client Software and by using the <i>lpstat</i> command for jobs submitted using the <i>lp</i> command.

2. Setting up workstations

This chapter describes how to prepare your DOS, Macintosh, and UNIX workstations to work with the printer. It includes procedures for installing and removing Xerox Client Software (print command).

Before you complete the tasks in this chapter, do the following at your workstation:

- Verify that at least 850 KB of disk space is available on the client workstation. The Xerox Client Software package requires approximately 450 to 550 KB, and temporary files and the directory structure require another 200 to 300 KB.
- Verify the connections between the printer controller and the client workstation.
- Ensure that the networking communication package for your client platform is properly installed and running.

At the printer controller, ensure that the following tasks have been performed:

- Set the default media for the printer.
- Set the printer paper trays.
- Start printing and queueing on the printer controller.

Setting up PC-DOS workstations

This section describes the steps for installing the Xerox Document Submission Client Software, the appropriate PPD (PostScript Printer Description) file, and the Decomposition Service Tools on a networked PC-DOS workstation.

In order for jobs submitted by Xerox Client software to print, Xerox job ticket processing must be enabled. This is specified during installation or by using the Configure utility. Also, in order to download the client software, FTP capability must be enabled on the controller. This is specified during installation or via the Configure utility. If security is a concern, FTP capability can be disabled after the software is downloaded by using Configure. For more information, see the chapter “Using utility commands” in your *Guide to Configuring and Managing the System*.

Installing Xerox Client Software for DOS

You install Xerox Client Software on client workstations using the ftp command to log on to the printer controller, retrieve an installation command file, and execute it. This procedure automatically downloads the software.

Xerox Client Software works only for the drive on which it is installed. You must be running Wollongong Pathway Access release 3.1, FTP PC/TCP, or Sun PC-NFS V5.1 software.

NOTE: Version 3.0 of FTP's PC/TCP is recommended because of a change FTP made to the 4.0 version of their software. If you are using version 4.0, you can copy the 3.0 version of the FTP.EXE file to the PCTCP directory and use it for this procedure.

NOTE: The Wollongong TCP/IP communication packages for some versions of PC-DOS may not support 16-bit Ethernet communication cards from 3Com and Western Digital Corporation. It may also intermittently hang up if you use a batch file to transmit a large number of print jobs back to back.

To install Xerox Client Software, complete the following steps at the client:

1. Ensure that the network software is installed and running.
2. If the host table file does not exist, create it.
3. Verify that the names and corresponding TCP/IP addresses of the printer controller and the PC client itself are in the host table file.
 - For Pathway Access clients, this filename is “hosts,” and it resides in the \pathway directory or in the directory where the Pathway Access software resides.
 - For FTP PC/TCP clients, this filename is “hosts.txt” and it may reside in the \etc directory.
 - For PC-NFS clients, this filename is “hosts,” and it resides in the \nfs directory.

NOTE: If the network configuration file does not define the location of the host table absolutely to include the drive specification, the user will be unable to print from other drives.

4. Verify that the PC can communicate with the printer controller, by entering one of the following:
 - **ping <printer controller name>**
 - **ftp <printer controller name>**

If the response is “unknown host,” go back to step 2.

5. Change the current directory to the \ directory.
6. Find the client directory and command file for your client platform in the table below:

Client platform	Client directory	Command file
MS-DOS Sun PC-NFS	MS__DOS__NFS	instnfs.bat
MS-DOS FTP	MS__DOS__FTP	instftp.bat
MS-DOS Wollongong Pathway Access	MS__DOS__PATHWAY	instpat.bat

7. Using the appropriate client directory and command file, enter the following to access the printer controller using the ftp guest account.

```
>ftp <printer controller name>
Name: <printer controller name:username>:ftp
Password: <RETURN>
ftp> ls
ftp>cd <client directory>
ftp>get <command file>
ftp>quit
>
```

For FTP PC/TCP client installation, enter any character string and <RETURN> at the “Password” prompt. Include the local filename with the command file (for example, enter **get** <command file> <local filename>).

8. Execute the batch file. Provide the name of the printer controller to install from, as follows:

```
>(command file) <printer controller name>
```

9. Verify that line 1 of the \usr\xerox\NPS\IPS\client\cconf file has the name of the printer controller. If it does not, edit line 1 to include the printer controller name.
10. Make sure that your path environment variable contains directories for the Xerox client .exe files and for the networking software \usr\xerox\NPS\IPS\client\bin.
11. Change the PATH statement so that the directory \usr\xerox\NPS\IPS\client\bin containing Xerox Client Software commands precedes other directories that may include identical commands. If this is not done, the client user must explicitly specify the Xerox Client directory whenever typing “print,” “listq,” or “listjob.”
12. Set the default sender name for the client by adding the following statement to the autoexec.bat file:

```
set UNAME = <sender name>
```

This statement adds the UNAME environment variable. If the default sender name is not set, the client software uses “???” in the sender name field.

13. Reboot the PC so that the changes in the autoexec.bat file take effect.

Verifying your installation

To verify that the software installation was successful:

1. Enter `listq` to display the status of available queues.
2. Go to the directory containing Golden Print Job masters (`\usr\xerox\NPS\IPS\client\gpj`) or any directory that contains a sample file.
3. Enter **`print -p`** <queue name> <sample file name>. The system should respond with "Print request forwarded."
4. Enter **`listjob`** to make sure your job is being printed.

NOTE: "Print" is a common command name for printing, and you might accidentally execute a different print command. For this reason, you may wish to verify that the installed Xerox print command is in use. You can verify that the DocuPrint NPS/IPS print command is being executed by typing `print` <Enter> at the command line. The DocuPrint command always gives a usage statement describing its syntax.

Installing the PPD file

You need to install the PostScript Printer Description (PPD) file for your specific printer model. Because different software applications require the PPD file to reside in different locations, first determine the appropriate directory for installing the PPD file by referring to your application software documentation. Then enter the following:

```
cd <DOS directory for PPD files>
ftp <DocuPrint printer controller>
Name: ftp
Password: <RETURN>
ftp> ls
ftp> cd PPD
ftp> get <PPDfile>
ftp> quit
```

In the example above, <PPDfile> is the file for your printer model. The files are stored in the PPD directory and named `XDP####.PPD`, where #### is your printer model number; for example, `XDP4890.PPD` or `XDP4635.PPD`.

NOTE: For the DocuColor 2060 NPs/IPS, use the Xerox driver for the DocuPrint 180 NPS/IPS, and use the 2060 PPD.

For FTP PC/TCP client installation, enter any character string and <RETURN> at the "Password" prompt.

Installing the Decomposition Service DOS Tools on the PC

To install the Decomposition Service Tools, insert the diskette for DOS workstations. Create a directory and copy the tools from the diskette as shown:

```
mkdir c:\dptools
cd c:\dptools
copy a:*.*
```

The example shows how to copy all tools. However, you may need to install only some of the available tools. Copy only the needed files to your drive.

NOTE: If you also install Windows Decomposition tools ensure that they are not installed to the same directory as the DOS tools.

Refer to the Decomposition Service and Tools Guide for more information on using Decomposition Service.

Removing DOS client software

This section describes the procedure for removing the print command client software. You may need to perform this procedure prior to updating software, or to correct corrupted file installation on the platform. The steps are shown below.

```
C:/> cd \usr\xerox\NPS\IPS\client
C:/> del cconf
C:/> cd \usr\xerox\NPS\IPS\client\bin
C:/> del listq.exe
C:/> del print.exe
C:/> del listjob.exe
C:/> cd ..\man
C:/> del listq
C:/> del listjob
C:/> del print
C:/> cd ..\gpj
C:/> del xrxgpj1.ps
C:/> del xrxgpj2.ps
```

NOTE: If the wrong software has been loaded on the client, the executable files may have the wrong extension. If this is the case, delete everything under the above directories.

*If there are any files named **print**, **listq**, or **listjob** in the directories, **/bin**, or **/usr/bin**, delete them also.*

*Make sure that the DOS print command is not accidentally removed instead of the DocuPrint NPS/IPS print command. If you are not sure which command it is, type **print** <Enter>. The NPS/IPS command will always give a usage statement.*

Setting up Macintosh workstations

This section describes the steps for installing the Xerox Document Submission Client Software.

Preparing for installation

Before installing the software, make sure your computer has the following hardware and software:

- 2 MB of Random Access Memory (RAM)
- A properly configured network card, or a bridge from LocalTalk to the network
- A 3.5-inch, 1.4-MB diskette drive
- A hard drive
- AppleShare version 2.0 or above
- System 8.6 or greater
- EtherTalk, version 1.0 or above
- Ethernet software that is associated with your Ethernet card
- Apple LaserWriter Driver, version 7.11 or higher. Version 8.0 or higher is recommended for use with PPD files, since earlier versions do not recognize PPD files.

NOTE: You cannot run the print job submission utility if you have the QuickDraw GX environment installed.

Installing the Document Submission Client Software

To install a new version of Xerox Document Submission Client Software:

1. Move any existing Xerox Document Submission Client icon from your desktop to the trash.
2. Select Empty Trash from the Special menu.
3. Make a backup copy of the software diskette. See your Macintosh reference manual for this procedure.
4. Create a new folder on the hard disk entitled "DP Mac Client."
5. Insert the Client Software diskette in the diskette drive.
6. Open the diskette icon and drag the DocuPrint icon into the new DP Mac Client folder.
7. Drag the Golden Print Job PostScript Sample Test file XRXGPJ1.ps into the folder.
8. Drag the PPD File for your DocuPrint or DocuColor NPS/IPS printer model to the System Folder: Extensions:Printer Descriptions.

If there is no folder with this name, create one.

The files are named XDP####.PPD, where #### is your DocuPrint model number; for example, XDP 4635.PPD.

9. Eject the diskette.

Verifying your installation

Assuming your printer is directly connected to the network, perform the following steps to verify that your installation was successful:

CAUTION

To avoid conflict with UNIX regular expressions used on the printer controller, ensure that "&" is not in the zone name. If the "&" must be used in the zone name, have your Network Administrator enter "\\&" instead.

1. Open the Mac Control Panel and select the Network icon.
2. Select the EtherTalk Phase icon for the type of AppleTalk connection on the network, and then close the Mac Control Panel.

3. If your network is configured to include AppleTalk print zones, open the Chooser and select the AppleTalk Zone where the printer is installed.
4. Select the LaserWriter icon.
The AppleTalk printer name for the printer appears in the window.
5. Select the AppleTalk printer name and close the Chooser.
6. In the DP Mac Client folder, double-click the DocuPrint icon to start the client software.
7. Select Choose Printer Type and select your printer model.
8. In the printer queue, select Use Chooser Setting.
9. Click Select File and choose the Golden Job PostScript Sample Test file XRXGPJ1.ps.
10. Click Print and then click OK.

The job XRXGPJ1.ps has been dispatched to the printer.

Installing Xerox Client Software on UNIX workstations

This section describes the steps for installing the Xerox Client Software.

Xerox Client Software can be installed on the following platforms:

- SPARCstation running SunOS 4.1.X
- SPARCstation running Sun Solaris
- DECStation 5000/200 running OS ULTRIX 4.3
- HP/Apollo running HP-UX, version 10.01
- IBM RS 6000 running IBM AIX, version 4.1.

NOTE: The files inside the IBM_AIX3.2 directory are supplied as a courtesy to customers who have not yet updated their IBM AIX operating system to version 4.1 or higher. These files were compiled for DocuPrint 1.2 systems, and do not include support for many of the highlight colors and exception pages. For supported files for IBM AIX version 4.1 or higher, use the files in the directory titled IBM_AIX.

Users are encouraged to upgrade to 4.2, and retrieve from ftp://home/IBM AIX 4.2, if they want to incorporate the software updates and new features.

Installing Xerox Client Software for UNIX

You install Xerox Client Software on client workstations using the ftp command to log on to the printer controller, retrieve an installation command file, and execute it. This procedure automatically downloads the software.

NOTE: In order for jobs submitted by Xerox Client software to print, Xerox job ticket processing must be enabled. This is specified during NPS/IPS installation or by using the Configure utility.

Also, in order to download the client software, FTP capability must be enabled on the controller. This is specified during NPS/IPS installation or via the Configure utility. If security is a concern, FTP capability can be disabled after the software is downloaded by using Configure. For more information, see the chapter “Using utility commands” in your Guide to Configuring and Managing the System.

At the client workstation, log on to the client as root and perform the following steps:

1. Verify that the printer controller name and TCP/IP address are located in the /etc/hosts file.
2. If an entry containing the printer controller name and TCP/IP address does not exist, add it unless you are using an NIS or DNS name service.
3. To verify that the client workstation can communicate with the printer controller, enter one of the following utility commands at the > prompt:
 - **ping <printer controller name>**
 - **ftp <printer controller name>**

If the response to these commands is “unknown host,” go back to step 1.

4. Change directories to the user home directory.

NOTE: You can use any directory to execute the command file, but using the home directory is preferred.

5. Find the client directory and command file for your client platform in the table below.

Client platform	Client directory	Command file
SunOS 4.1.x and 4.0	SUN4	instsun4
Sun Solaris	SOLARIS	instsolaris
DEC ULTRIX 4.3 (MIPS)	DEC__ULT	instult
HP 9000 HP-UX 10.01	HP__UX	insthpux
RS 6000 IBM AIX 4.1	IBM__AIX	instibmaix
MS-DOS Sun PC-NFS	MS__DOS__NFS	instnfs.bat
MS-DOS FTP	MS__DOS__FTP	instftp.bat
MS-DOS Wollongong Pathway Access	MS__DOS__PATH WAY	instpat.bat

6. Using the appropriate client directory and command file, enter the following to access the printer controller using the ftp guest account.

```
# ftp <printer controller name>
Name: <printer controller name:username>:ftp
Password: <RETURN>
ftp> ls
ftp> bin
ftp> cd <client directory>
ftp> get <command file>
ftp> quit
#
```

7. Change the mode and run the command file to perform the installation. Enter the name of the printer controller to install from, as follows:

```
#chmod +x <command file>
#<command file> <printer controller name>
```

8. Verify that line 1 of the /usr/xerox/NPS/IPS/client/cconf file has the name of the printer controller. If it does not, edit line 1 to include the printer controller name (default).
9. In order to use the client commands (print, listq, and listjob) verify that your path environment contains the directory /usr/xerox/NPS/IPS/client/bin for the client commands. This directory should precede all other directories in the path. The installation script will also copy these three commands to /usr/bin. In order to use the commands:

- csh users should enter **source .cshrc** or log off and log on, after modifying the “Set path” command in their .cshrc file.
- Bourne shell users should modify and export the PATH variable.

Verifying your installation

To verify that the software installation was successful:

1. Enter `listq` to display the status of available queues.
2. Go to the directory containing Golden Print Job masters (`/usr/xerox/NPS/IPS/client/gpj`) or any directory that contains a sample file.
3. Enter `print -p <queue name> <sample file name>`.

The system should respond with “Print request forwarded.”

4. Enter `listjob` to make sure the printer is printing your job.

*NOTE: “Print” is a common command name for printing, and you might accidentally execute a different print command. For this reason, you may wish to verify that the installed Xerox print command is in use. You can verify that the DocuPrint NPS/IPS print command is being executed by typing **print** <Enter> at the command line. The DocuPrint command always gives a usage statement describing its syntax.*

Installing Xerox Client Software man pages

Xerox preinstalls the Client Software man pages in the `/usr/xerox/NPS/IPS/client/man` directory. However you may want to access these man pages from the `/usr/man` directory, with the UNIX man pages. Consider the following options:

- Install them under `/usr/share` on the public server.
- C shell users:

Create a separate man page directory and modify your MANPATH environment variable to point to them. If you do so, however, all users who want to use these man pages must modify their .cshrc files as follows:

1. Create the following directories:
 - `/usr/xerox/man`
 - `/usr/xerox/man/man1`

2. Copy the contents of the `/usr/xerox/NPS/IPS/client/man` directory into `/usr/xerox/man/man1`.
3. Edit the `.cshrc` file in the home directory to include the following line:

```
setenv MANPATH /usr/xerox/man:/usr/man
```

4. Reinitialize the shell environment by entering **source .cshrc**

- **Korn shell users:**

1. Create the directories `/usr/xerox/man` and `/usr/xerox/man/man1`.
2. Copy the contents of the `/usr/xerox/NPS/IPS/client/man` directory into `/usr/xerox/man/man1`.
3. Add the following lines to the `.profile` file in the home directory to allow access to the man pages:

```
MANPATH = /usr/xerox/man:/usr/man
export MANPATH
```

- On a DEC ULTRIX client workstation, do one of the following:
 - Copy `print.1`, `listjob.1`, and `listq.1` to the `/usr/man/man1` directory. Replace the ULTRIX `print.1` file that already exists in this directory.
 - If you do not want to replace the ULTRIX `print.1` file, install the Xerox `print.1` file in the `/usr/man/man1` or `/usr/man/mann` directory. Then rename the file `print.l` or `print.n` respectively. To access the man pages, enter `man local print` or `man new print`.
 - Copy the man pages to the `/usr/xerox/man/man1` directory. To access the man pages for a specific command, include the directory in your entry. For example, to access the man pages for the `listjob` command, enter `man -p /usr/xerox/man/man1/listjob`.

Removing UNIX client software

This section describes the procedure for removing the print command client software. You may need to perform this procedure prior to updating software, or to correct corrupted file installation on the platform. The steps are shown below.

```
# cd /usr/xerox/NPS/IPS/client
# rm cconf
# cd /usr/xerox/NPS/IPS/client/bin
# rm listq
# rm print
# rm listjob
# cd ../man
# rm listq.1
# rm listjob.1
# rm print.1
# cd ../gpj
# rm XRXGPJ1.ps
# rm XRXGPJ2.ps
```

NOTE: If the wrong software has been loaded on the client, the executable files may have the wrong extension. If this is the case, delete everything under the above directories.

*If there are any files named **print**, **listq**, or **listjob** in the directories, **/bin**, or **/usr/bin**, delete them also.*

Installing the PPD file for UNIX

You need to install the PostScript Printer Description (PPD) file for your specific printer model. Because different software applications require the PPD file to reside in different locations, first determine the appropriate directory for installing the PPD file by referring to your application software documentation. Then enter the following:

```
cd <UNIX directory for PPD files>
ftp <DocuPrint printer controller>
Name: ftp
Password: <RETURN>
ftp> ls
ftp> bin
ftp> cd PPD <PPD file directory on controller>
ftp> get <PPDfile>
ftp> quit
```

In the example above, <PPDfile> is the file for your printer model. The files are stored in the PPD directory and named XDP####.PPD, where #### is your printer model number; for example XDP4890.PPD or XDP4635.PPD.

NOTE: For the DocuColor 2060 NPs/IPS, use the Xerox driver for the DocuPrint 180 NPS/IPS, and use the 2060 PPD.

For FTP PC/TCP client installation, enter any character string and <RETURN> at the “Password” prompt.

Installing the Decomposition Service UNIX Tools

Installation of the Decomposition Tools on a Sun workstation is identical for the Solaris and SunOS operating environments. Installation on an Apollo workstation may be done similarly.

The UNIX and Solaris versions are compressed and tared. The commands to install the tools require Superuser privilege to create a directory. Subsequent steps require appropriate access rights, depending on the directory permissions.

NOTE: Some older daemons may need to be killed before attempting to install the Decomposition Service Tools.

To install the Decomposition Service Tools:

1. Insert the diskette for Solaris or for SunOS workstations. You may need to install some or all of the tools.
2. Enter the following commands:

NOTE: The directory in the example is called xmerge; the actual directory name or path is unimportant.

```
warlockws% pwd
/export/home/bwarlock/xmerge
warlockws% tar xvf /dev/fd0c

x XMerge, 27560 bytes, 54 tape blocks
x formmerge, 13304 bytes, 26 tape blocks
x getg4, 32768 bytes, 64 tape blocks
x reprint, 10452 bytes, 21 tape blocks
x tiff2ps, 645032 bytes, 1260 tape blocks
x xcat, 17832 bytes, 35 tape blocks

warlockws% warlockws% eject
warlockws% ls -l
total 741
```

Table 2-1.

-r-xr-xr-	1		Mar 8	199	XMerge*
x	bwarlock	27560	Jan	5	formmerge*
-r-xr-xr-	1		30	199	getg4*
x	bwarlock	13304	Mar	5	reprint*
-r-xr-xr-	1		17	199	tiff2ps*
x	bwarlock	32768	Jan	5	xcat*
-r-xr-xr-	1		30	199	
x	bwarlock	10452	Mar	5	
-r-xr-xr-	1	64503	17	199	
x	bwarlock	2	Mar 8	5	
-r-xr-xr-	1			199	
x	bwarlock	17832		5	

```
warlockws% ls -l
```

Refer to the Decomposition Service and Tools Guide for more information on using Decomposition Service.

Enabling lpr print utilities for UNIX workstations

The following section provides information specific to Sun OS 4.0 and 4.1x, and Solaris environments.

SunOS 4.0 and 4.1x

To enable lpr print utilities, you need to edit the `/etc/printcap` file. Each entry in a printcap file describes a printer; each entry is a line consisting of a number of fields separated by colons (:). The first entry for each printer gives the names that are known for the printer, separated by vertical bars (|). You can continue entries onto multiple lines by making a backslash (\) the last character of a line, and you can include empty fields for readability.

The parameters required to enable lpr utilities on UNIX systems that support lpr to submit jobs to DocuPrint are as follows:

- **rp**—virtual printer name. By default, when a printing system is installed, a single virtual printer is created with the name of the printer.
- **rm**—machine name for the printer controller (from the `/etc/hosts` file, NIS, or domain name service).
- **sd**—spool directory. Choose a spool directory with sufficient free space to accommodate the largest document you want to print.
- **mx**—maximum file size. Enter 0 (zero) for unlimited file size to avoid truncating files being sent to the printer.
- **lp**—device name. Use an empty string (`lp=:`).

NOTE: To define multiple DocuPrint or DocuColor NPS/IPS printers on a network, “rm” must have an “sd” assigned for each printer. Otherwise, the status commands will report all jobs sent to one printer only.

The following example shows printcap entries for a printer named “Perfector.” The printer controller is registered as “perfector.” An additional virtual printer, “Perfector-duplex,” is defined for duplex printing.

```
Perfector|docuprint in 2301:\
:rp=perfector:rm=perfector:\
:sd=/var/spool/perfector:mx#0:lp=:
Perfector-duplex|docuprint in 2301duplex:\
:rp=perfector-duplex:rm=perfector:\
:sd=/var/spool/perfector:mx#0:lp=
```

Solaris

The following instructions are specific to the operation of Solaris lp for submission to the printer. Submission using lp on the DocuPrint controller is **NOT** supported.

NOTE: The printer controller Sun operating system is based on the standard Sun operating system; however, it has been customized for use with the Xerox printer controller. Therefore, not all standard Sun operating system features are available.

While the instructions for editing the /etc/printcap file are generic for SunOS 4.x UNIX systems using lpr, the systems that use lp operate differently on each UNIX platform. Solaris administrators should consult their man pages or the Solaris Answerbook for more information on the commands used below. Solaris Admintool is **NOT** recommended, because the “remote system type” option is not supported.

At the client, login as *root* (except lpstat).

- To start the print service:
/etc/init.d/lp start
- To stop the print service:
/etc/init.d/lp stop
- To identify the DocuPrint and its type:
lpssystem -t bsd -T 1 -R 1 -y “description of printer” NPS/
IPS_hostname
where:
 - -t bsd defines the DocuPrint system as a berkeley spooler
 - -T 1 defines the timeout parameter
 - -R 1 defines the retry parameter
 - -y ascii field for “description of printer” must be in quotes

- To identify the virtual printer on the DocuPrint to use:
`lpadmin -p que_name -s NPS/
IPS_name\!virtual_printer_name -l any`
where:
 - `-p que_name` defines the printer name on the client
 - `que_name` can be the same name as the `virtual_printer_name`
 - `-l` defines the content type
- To allow the client to send print requests to the DocuPrint:
`accept que_name`
`enable que_name`
- To submit a job:
`lp -d que_name filename`
- To list the status of the printer:
`lpstat -p que_name`
- To list the status of all printers:
`lpstat -t`
- To remove the DocuPrint NPS/IPS printer:
`disable que_name`
`reject que_name`
`lpadmin -x que_name`
`lpsystem -r NPS/IPS_hostname`

TCP/IP socket printing

You can set up your system to support TCP/IP socket printing. Once the printer controller is configured to support socket printing, you can set up your workstation. The administrator can set up three separate ports on the printer controller (for example, 9100, 9101, and 9102). Each port can be configured to submit jobs to the default printer, or to a specific virtual printer.

For more information on how to configure your printer to support TCP/IP socket printing, refer to the *Guide to Configuring and Managing the System*, “Using utility commands” chapter.

You can use any of the following methods for print submissions to socket printing:

- Windows 2000 Network printing
- A port 9100 submission tool

- Telnet session
- Another method that complies with the Port 9100 / socket printing TCP standards.

Setting up a new printer on Windows 2000

To set up a new printer on Windows 2000:

1. Obtain a driver for the printer to be used.
2. Access the Add Printer Wizard by selecting **Add Printer** from the Control Panel / Settings / Printer folder.
3. Select **Local Printer** and disable **Automatically detect and install my plug and play printer**. Click **Next**.

4. Select **Create a raw port**. The Type will automatically be set to Standard TCP/IP Port. This is port 9100. Click **Next**.

5. The Add Standard TCP/IP Port Wizard window displays. Click **Next**.

6. Enter the Printer Name (the name used for NSF lookups) or the IP address. Windows will automatically create a port name. The port may be renamed to one that best fits the printer name and the assigned virtual printer.

NOTE: You may want to add the port number or the virtual printer name to the end of the address, to help separate other ports on the same NPS/IPS system.

Click **Next**.

7. The Additional Port Information Required window displays. Select **Custom** and click **Settings**. Click **OK**.
8. The Configure Standard TCP/IP Port Monitor window displays, listing the Port Name and the Printer Name/IP Address you set up. Select **Raw** and choose the **Port Number** to match the NPS/IPS setup for the virtual printer selected.

NOTE: If more than one port is setup on the NPS/IPS system, a separate printer may be set up in windows 2000 for each.

Click **OK**.

9. The Add Printer Wizard screen displays. Select the appropriate driver for the NPS/IPS system.
10. Follow and complete the rest of the Wizard screens as appropriate. The system will display a summary of your selections. If they are correct, click **Finish**.

Color calibration for the DocuColor 2060 NPS/IPS

Color calibration is essential to insuring good color quality. The purpose of calibration is to measure how the DocuColor 2060 NPS/IPS is printing the requested colors and to then make any corrections that are required.

The operator calibrates the printer when color output begins to drift. One calibration procedure uses a BuildProfile option to build an International Color Consortium (ICC) profile and a Color Rendering Dictionary (CRD) file.

Following a calibration at the printer, which uses the BuildProfile option, the system constructs an ICC profile that describes the response of the printer using the current calibration. For PostScript documents, the system also produces a PostScript CRD file. The CRD file on the printer controller is used if your PostScript file does not have one included.

ICC profile In order to allow consistency between your workstation and the printer, you can transfer the ICC profile to your workstation using an ftp utility. Refer to your workstation documentation or administrator for information on using ftp.

The ICC profiles are located in the controller directory `/var/db/colortables`.

The profile filename displays as: `ICC-#####-#`, where the first eight digits represent the date `YYYYMMDD`; the remaining digit is an index. For example: `ICC-20010823-2`.

There may be more than one ICC profile. For example, an operator may create different profiles for different paper stocks. In case of multiple ICC profiles, ask your operator or administrator about the one to use for your document.

Refer to your application document for information on using the ICC profile.

For more information on color calibration for the printer, refer to the *Guide to Configuring and Managing the System*, “Setting system defaults” chapter, “Setting color calibrations” section.

3. Printing using Xerox utilities and lpr utilities (DOS and UNIX)

This chapter explains how to print a document from DOS or UNIX using the Xerox utilities software, and how to list jobs and queues. It also explains how to print a document from DOS or UNIX using lpr utilities.

NOTE: Unless otherwise specified, the information in this chapter applies to both DOS and UNIX environments.

For information on installation, refer to the *Guide to Configuring and Managing the System*, the chapter “Setting up workstations.”

Printing using the Xerox utilities software

To print a document or to list jobs and queues from DOS or UNIX with Xerox utilities software, use the following print commands:

- print
- listjob
- listq

The following sections show the syntax, required arguments, and options for each command.

print command

Use the **print** command to send a document to a specific print queue and to specify printing options you want to apply to your document.

*NOTE: Users of korn shell on UNIX must alias the Xerox **print** command, since ksh has a built-in **print** command.*

To submit a print job, enter the **print** command and its options on the command line using the following syntax:

Syntax `print -prINTERNAME <vpNAME> [<options>] <filenames>`
OR

`print -p <vpNAME> [<options>] <filenames>`

NOTE: The syntax above only works when printing to the default NPS/IPS printer controller. Users with more than one NPS/IPS printer controller must specify the hostname for the controller using the “-ser” or “-server” option.

When using the “-ser” or “-server” option, the virtual printer must exist on the alternate server.

Required arguments

The following arguments are required for the **print** command:

- `-prINTERNAME <vpNAME>` OR `-p <vpNAME>`

The virtual printer that you want to use. To determine which virtual printers are available, use the **listq** command. Refer to “Listq” in this chapter for more information.

- `<filenames>`

The name of the file that you want to print, including any filename extension.

NOTE: In UNIX, when you specify the name of the file, make sure that it does not include the following characters: & ! ” ‘ ’ \$ - ; ? These characters in filenames may conflict with other UNIX commands and expressions.

If you specify more than one file, the banner page displays the name of the first file. If you use the **listjob** command, the name of the first file appears as the job name.

Options In addition to the required arguments, you can use any of the following options to specify print characteristics. You may enter more than one option at a time.

When entering options, you only need to enter as many characters as is necessary to differentiate one option from others. The characters underlined in the option name make the options unique.

When entering the arbitrary text after the print options, shown in angle brackets below, make sure the text string does not contain any spaces. If you enter text that contains spaces, enclose the text with double quotation marks.

- -@ <filename>

An “argsFile,” which is a text file containing command line options. You may specify multiple options on one or more lines of the file, with the same effect as if they had been entered in the command line. You may use this option in conjunction with other options on the command line.

When using the *print* -@ option, the specified argsFile cannot contain the -@ option. However, it can contain the -listFile option.

- -account <text>

Specifies the print account number (up to 12 characters) on the banner page.

- -autoTabShift <true>

Shifts the image onto the area of the tab outside of the standard paper boundary. This option is for PostScript emitters that are unable to switch paper sizes from the standard paper size used.

- -bkform <backgroundFormName>

Specifies the background form to be merged with the job to be printed. The form must have been saved using the ByteCode format. “FormName” must match the name listed by the **List Forms** command. Refer to the *Decomposition Service and Tools Guide* for more details. Background forms can be stored on the server using the -disposition SaveMaskBC or SaveFormBC option.

- -cma <action> (for models 4850/4890/92C only)
Specifies the action to take when there is a mismatch between the color you specify as the highlight color (either using the -colorOverride option or using the virtual printer highlight color attribute) and the dry ink color loaded in the printer. The possible actions are as follows (include quotation marks):
 - “intervention”
Requests that the operator intervene and load the dry ink color you indicate.
 - “abort”
Aborts the print job.
 - “selectCurrent”
Requests the job to be printed in the currently loaded dry color ink.
- -colorOverride <color> (for models 4850/4890/92C only)
Specifies the highlight color to use. The options available are “red,” “green,” “blue,” “cyan,” “magenta,” “cardinal,” “royal blue,” “ruby,” “violet,” or “black.” (Specifying black allows printing in gray scale.)
- -copyCount <number of copies>
Specifies the number of copies you want to print (up to 9999).
- -disposition <disposition>
Indicates whether to print the job, or how each page of the job is to be saved. If disposition is not specified, the job is printed. Options are:
 - print
 - SaveMaskG4
This option saves each page of the job as separate 1-bit per pixel CCITT Group 4 compressed TIFF files, white pixels are transparent.
 - SaveFormG4
This option saves each page of the job as separate 1-bit per pixel CCITT Group 4 compressed TIFF files, white pixels are opaque.
 - SaveMaskBC
This option saves each page of the job as a single image file in the ByteCode Xerox proprietary format, white pixels are transparent.

– SaveFormBC

This option saves each page of the job as a single image file in the ByteCode Xerox proprietary format, white pixels are opaque.

- -font <text>

Specifies the font to use. You can specify any of the Adobe Type1 PostScript fonts installed on the printer controller. Specify the font size by adding /<n> to the option. For example, to specify the use of 18 point Helvetica, enter -font Helvetica/18. This option is valid for ASCII jobs only.

- -halftone <text>

Specifies the halftone value to use with the job. Valid values are: “defaultHalftone,” “coarse,” “medium,” “fine,” and “extraFine.” The value “defaultHalftone” is equivalent to the absence of the halftone attribute.

NOTE: Screen frequencies for the halftone attribute and the default value vary depending on whether the job is black and white or color, and on the resolution (300 or 600 dpi).

- -help

Displays a usage statement for the **print** command and options. All other command line option entries are ignored.

- -hma <algorithm>

Specifies the highlight color mapping algorithm to be used. Valid values are: “automatic,” “colorToHighlight,” “pictorial,” and “presentation.”

- -listFile <filename>

Specifies a text file containing a list of document filenames to print. Enter one filename per line, with no leading or trailing spaces.

Documents contained in the list do not necessarily print in order.

NOTE: All jobs that are referenced in the list have their DocumentName attributes set to the name of the first file in the list.

- `-mapColor <color>` (for models 4850/4890/92C only)

Specifies the colored parts of the document that convert to the available highlight color. The map color option determines which parts of the document print in color and which in shades of gray. Acceptable values are "red," "green," "blue," "cardinal," "brown," "yellow," "royalblue," "ruby," "violet," "cyan," "magenta," and "black."

For example, if you specify the map color as red, all the red parts of your document (including portions of composite colors such as purple depending on the rendering algorithm) are printed in the available highlight color. The other colored parts of the document are printed in shades of gray.

NOTE: Black can be used for the map color option when the entire document is in black, and you wish the content to be mapped into the highlight color. If you use this option for documents containing color, results are unpredictable and likely to be unacceptable.

Refer "Color mismatch" for further information on how the highlight color options work together.

- `-message <text>`

Specifies the job message you want to print on the banner page (up to 100 characters). If the message contains spaces, enclose the message in quotes ("").

- `-opacity transparency`

Sets the document paper type to "transparency." To use this option, set the paper type at the printer controller to "transparency." To use this option with the `-preFinish drilled` option, set the paper tray media to "transparency-drilled" at the printer controller. To avoid a "media wait" condition at the printer controller, set the paper tray to "transparency drilled" as well.

- `-orientation <orientation>`

Specifies the page orientation you want to use. Accepted values are "portrait" and "landscape." This option is valid for ASCII jobs only.

- `-pageException <#> <#> <papersize> <color> [<opacity> <prefinish> <#> <#> <weight>]`

Specifies the range of pages using different paper size, paper color, paper opacity, paper prefinish, and medium paper weight. To use this option, enter the beginning page, ending page, paper size, and paper color.

Entering paper opacity, paper prefinish and paper weight are optional. However, when paper weight is specified, opacity and prefinish values must also be specified in their correct positional order.

NOTE: Mixed paper sizes are currently supported using pageExceptions.

- Values for opacity: “opaque,” “transparency”
- Values for the prefinish option with their corresponding default values for holes and tab orders are as follows:

plain	0,0
drilled	0,5
precutTab	0,5
fullcutTab	0,0
drilledPrecutTab	3,5
drilledFullcutTab	3,0

NOTE: The value “plain” for prefinish causes the “type” portion of the Media to be blank.

The value “opaque” for opacity causes the “type” portion of the Media to be blank.

- Default values for opacity and prefinish are “opaque” and “plain,” respectively.

Sample usage for this option:

-pageException 2 4 letter pink opaque drilled 3 5 40

where:

2 = beginning page

4 = ending page

letter = papersize

pink = color

opaque = opacity

drilled = prefinish

3 = with holes

5 = tab order

40 = weight

- -pagesToPrint <#> <#>

Specifies the starting and ending page numbers to print. You cannot enter 0, and the second number must be greater than or equal to the first number.

- -paperColor <color>

Specifies the paper color. Acceptable values are “white,” “yellow,” “blue,” “green,” “pink,” “clear,” and “custom.” If you specify “custom,” include a text string indicating the color in the syntax. For example, “-paperColor custom purple.”

NOTE: Colors with an embedded dot “.” are invalid.

- -pdl <pdl>

Specifies the page description language (PDL) type of your document. Valid PDL values are “ps” for PostScript, “ps1” for PostScript level 1, “ps2” for PostScript level 2, “ascii,” “hppcl,” “pcl5c,” and “pcl5e.”

NOTE: The DocuColor 2060 does not support printing of color PCL jobs.

- -pePlex <#> <#> <plex>

Specifies the page range to be printed using the given plex type. To use this option, enter the beginning page, ending page, and the desired plex value. Valid plex values are “simplex,” “duplex,” and “tumble.”

- -peXShift <#> <#> <#> <sides>

Specifies the page range to be printed with a horizontal image shift, the amount of shift (in millimeters), and whether the shift is to be applied to front sides, back sides, or both. To use this option, enter the beginning page, ending page, the amount of shift in millimeters, and “even,” “odd,” or “all” for the sides.

- -peYShift <#> <#> <#> <sides>

Specifies the page range to be printed with a vertical image shift, the amount of shift (in millimeters), and whether the shift is to be applied to front sides, back sides, or both. To use this option, enter the beginning page, ending page, the amount of shift in millimeters, and “even,” “odd,” or “all” for the sides.

- -plex <plex>

Specifies the print mode (simplex, duplex, or tumble) for the print job. Tumble duplex printing rotates the image 180 degrees on alternate pages. Both sides of page are printed but the position of the image is reversed (from top to bottom) on every other page.

NOTE: The use of tumble duplex is restricted by certain characteristics of the PostScript mask. If you have difficulty using this option, contact your Xerox representative for assistance.

- **-plexDynamic <true>**

Specifies that plex changes indicated in the job data stream are honored.

- **-preFinish <prefinish> <#> <#>**

Sets the paper type to the selected preFinish value.

NOTE: The value "plain" for prefinish causes the "type" portion of the Media to be blank.

Refer to "-pageException" for the preFinish values and their corresponding holes and tab order.

To avoid a "media wait" condition at the printer controller, papertray should also be set to the selected preFinish value.

- **-recipient <text>**

Specifies the information in the recipient field on the banner sheet of the printed output. This string cannot exceed 40 characters. If the text string includes spaces, enclose it in quotes ("").

- **-resolution <#>**

Specifies the resolution in dots per inch (dpi). Valid resolutions are "240," "300," "400," and "600," depending on the specific printer.

- **-senderName <text>**

Replaces the userName variable on the banner page of the printed output. This string cannot exceed 40 characters. If the name contains spaces, enclose it in quotes (" ").

*NOTE: If you use the **List Documents** command at the printer controller, a maximum of 25 characters is displayed under the Sender Name field.*

- **-server <printer controller name>**

Sends the print request to the specified printer controller. The default setting sends the print request to the printer controller indicated in the /usr/xerox/nps/client/cconf file. Use the name, not the IP address.

- **-size <paper size>**

Specifies the paper size.

- Acceptable standard values for models 4050/4090/4850/4890/92C and 2060 are “USLetter,” “USLegal,” “A4,” or “n×n.” Custom paper sizes must be specified in millimeters, and must range from 8x10" (203x254 mm) to 8.5x14" (216x356 mm).
- Acceptable standard values for models 96/4635/180 are “USLetter,” “USLegal,” “A3,” “A4,” “n×n,” “USLedger,” and “Tabloid.” Acceptable custom paper sizes (n×n, specified in millimeters) range from 7x10" (178x254 mm) to 14.33x17" (364x432 mm).
- When using standard values for size (for example, “USLegal” or “USLetter”) use the above format. For custom paper size, use the format: **-size custom <n> <m>**, where “n” and “m” are the paper width and length in millimeters. The keyword “custom” is required.

- **-stitching <stitch value>**

Specifies stitched (stapled) output. Accepted values are “none” or “singlePortrait.” The only acceptable value if you are stapling is singlePortrait. This option is available only with a third-party finishing device installed, when using a 96/4635/180 NPS/IPS.

If you use the print -stitching option and specify more than one file in the command line, all the files are stapled individually at the printer.

- **-title <text>**

Specifies the job title for this print request on the banner sheet. The default is the name of the first document file or source file. This string cannot exceed 40 characters. If the text string includes spaces, enclose it in quotes (“”).

- **-uncollated <true>**

Specifies that the job is to be uncollated. When this option is not specified, the job is collated. This option is supported only on the 96/4635/180 NPS/IPS.

When using this option, keep in mind:

- Copies of individual pages are collated or uncollated when using the PCL **copy** command within the job, but copies of the entire job are collated.

- OffsetPerCopy does not apply when copies are uncollated.
- When stapling is requested, copies are not stapled when they are uncollated, though the job still prints face-up.
- -verbose
Causes the filename of each submitted document to display on the workstation as it is sent to the printer controller.
- -weight <gsm>
Specifies the paper weight in grams per square meter (gsm).
- -x2ImageShift <#>
Specifies the x (horizontal for portrait page) image shift from the lower right corner towards the left of the portrait page (in millimeters), to be applied to back sides of pages only. Values may be positive (+) or negative (-).
- -xImageShift <#>
Specifies the x (horizontal for portrait page) image shift from the lower left corner towards the right of the portrait page (in millimeters). Values may be positive (+) or negative (-).
NOTE: The specified image shift is applied to both front and back sides of pages unless -x2ImageShift <#> is also specified, in which case the specified image shift is applied to odd pages only.
- -y2ImageShift <#>
Specifies the y (vertical for portrait page) image shift from the lower right corner towards the top of the portrait page (in millimeters), to be applied to back sides of pages only. Values may be positive (+) or negative (-).
- -yImageShift <#>
Specifies the y (vertical for portrait page) image shift from the lower left corner towards the top of the portrait page (in millimeters). Values may be positive (+) or negative (-).
NOTE: The specified image shift is applied to both front and back sides of pages unless -y2ImageShift <#> is also specified, in which case the specified image shift is applied to odd pages only.

Examples The following example shows the command line for printing a Postscript level 2 document “test.ps” on the docuq virtual printer:

```
print -p docuq test.ps
```

The following example shows the command line for printing three copies of the document “test.ps” on the docuq virtual printer:

```
print - p docuq -copyCount 3 test.ps
```

The following example shows the command line for printing one copy of a color document “color.ps.” Assuming that red dry ink is currently loaded, the command requests that the operator intervene and change the dry ink to blue. (This example applies to models 4850/4890/92C only.)

```
print -p docuq -cma intervention -colorOverride blue color.ps
```

Listjob command

To display the status of a print job, enter the **listjob** command and its options on the command line using the following syntax:

Syntax listjob <options>

Options You may enter more than one option at a time. If you do not specify an option, this command displays the sender name, job name, job identifier, and status fields for up to 40 jobs. The options are not case sensitive.

NOTE: In UNIX, the single character options are not case sensitive, but the text enclosed in angle brackets below is case sensitive.

- -\?
Displays the usage statement.
- -aIA <age>
Displays all jobs that have been in the system less than the specified number of minutes. Displays jobs in chronological order.
- -eIE
Displays information for every job in the database.
- -ill <job identifier>
Displays information about the job you specify. You must specify the identifier for a single job; you cannot use a range of numbers or a series of numbers separated by commas.
- -jIJ <job name>
Displays information for all jobs with the job name you specify. You must specify the job name exactly as it was specified in the original print request. You cannot use wildcard characters.
- -IIL
Displays the sender name, job name, number of copies, priority, file size, submission time, job id, and job status.
- -nIN <number>
Overrides the default number of records for a request.

- -pIP <virtual printer name>
Displays information for all jobs that have been submitted to the virtual printer you specify. You cannot use wildcard characters.
- -server <printer controller name>
Displays information from the printer controller you specify. The default displays information from the printer controller listed in the /usr/xerox/nps/client/cconf file.
- -slS <status>
Displays the Job Pool Manager (JPM) status. (The JPM status is not the same as the status displayed on the UI.) Values for this option are not case sensitive and must be entered completely. The status values are as follows:
 - “Complete”
The job was completed. One of the following messages appears:
Complete
CancelledByOperator
CancelledByUser
CompleteWithWarning
CompleteWithErrors
Rejected
Aborted
 - “Process”
The job is currently printing.
 - “Queued”
The job may have been prescanned and is queued for printing.
 - “Submitting”
The job is being submitted.
 - “Undefined”
No status is currently assigned to the job. This may occur at the beginning of submission.
- -v|V
Displays information in verbose mode. Each job record displays in its entirety, up to the default number of records specified with the -n option, or the entire database if the -e option is specified.

Example The following example shows a sample record for the **listjob** command:

Sender Name	Job Name	Job ID	Job Status
Bob Balzak	Resume	491	Queued
Bob Balzak	Resume	492	Queued
Sue Jones	Important	493	Queued
Joe Young	Term Paper	487	Queued
Joe Young	Term Paper		Queued
		488	
Bob Balzak	Resume	489	Queued
Bob Balzak	Resume	486	CancelledbyUser
Sue Jones	Important	485	CancelledbyUser
Joe Young	Term Paper	484	Complete
Bob Balzak	Resume	483	Complete
Bob Balzak	Resume	482	Complete
Sue Jones	Important	481	Queued
Sue Jones	Important	480	Complete
Joe Young	Term Paper	479	Complete
14 records out of 14 total matches			

Listq command

To display the status of a print queue for a specific virtual printer, enter the **listq** command and its options on the command line using the following syntax:

Syntax listq <options>

Options The options are not case sensitive. You may enter more than one option at a time.

- -\?
Displays the usage statement.
- -lL
Displays the virtual printer name, status, printer controller name, and job attributes for each virtual printer.
- -pIP <virtual printer name>
Displays information for only the queue you specify.
- -server <printer controller name>
Displays information from the printer controller you specify. The default displays information from the printer controller listed in the /usr/xerox/nps/client/cconf file.

Examples The following example shows a sample record for the **listq** command.

```
Printer Queue Name : worf-duplex
                  Status : Enabled
                  Printer Type : 4850
                  Server Name : worf

Printer Queue Name : blue
                  Status : Enabled
                  Printer Type : 4850
                  Server Name : payol
```

The following example shows the queue status displayed when the queue is specified by entering **listq -pIP worf-duplex**:

```
Printer Queue Name : worf-duplex
                  Status : Enabled
                  Printer Type : 4050
                  Server Name : worf
```

Printing using lpr utilities

You may print a document using the following lpr utilities:

- lpr (DOS and UNIX)
- lpq (DOS and UNIX)
- lprm (DOS and UNIX)
- lpc (UNIX only)

Using lpr utilities in DOS

To use these lpr utilities in DOS:

- If you are using FTP PC-TCP/IP software, these commands are available. Refer to your software documentation for a description of all the options available.
- If you are using the Wollongong Pathway Access network communication package, you can use the **lpr** command to print jobs, but the -C options are not available. Refer to the documentation you received with your Wollongong software for complete information.
- If you are using Sun PC-NFS, you may be able to submit jobs to your printer, as long as your system administrator configured the printer to do so. For complete information on setting up the print capability, refer to your PC-NFS software documentation.
- To check status of jobs, use the telnet utility.

Using lpr utilities in UNIX

To use these lpr utilities in UNIX:

- If you are using Sun PC-NFS, you may be able to submit jobs to your printer, as long as your system administrator configured the printer to do so. For complete information on setting up the print capability, refer to your PC-NFS software documentation.
- All UNIX commands and options are case-sensitive.
- To check status of jobs, use the telnet utility.

The following sections provide the syntax, required options, and options for the lpr utilities commands **lpr**, **lpq**, **lprm**, and **lpc**.

lpr command

Use the **lpr** command to send a document to a specific printer or to specify print options for the job you are submitting. To do so, enter the **lpr** command and its options on the command line using the following syntax:

Syntax (DOS) `lpr -S <printer controller name> -P <printer> <options>
 <filenames>`

Syntax (UNIX) `lpr -P <printer> <options> <filenames>`

Required arguments

The following arguments are required for the **lpr** command:

- **-S <printer controller name>**
Sends the specified files to the printer controller that you specify in the <printer controller name> option (DOS only).
- **-P <printer>**
The virtual printer that you want to use. If your UNIX environment is set up to specify your printer as the default printer, you may not need to enter -P.
- **<filenames>**
The names of the files that you want to print including any filename extension.

NOTE:

- **For DOS:** If you specify a wildcard (*) as the filename on a PC running DOS and Pathway Access 2.1/Wollongong WIN TCP/IP version 5.1 to submit print jobs, the correct sender name is not displayed with all jobs. When you enter the list document command at the printer controller, the sender name is correct for the first job. All subsequent jobs list the IP address of the client as the sender name.
- **For DOS:** If you are running FTP TCP/IP software and submitting a PCL job, add an -f to the **lpr** command line. For example, `lpr -S <printer controller name> <options> -f <filenames>`. An -f interprets the first character of each line as a standard Fortran carriage control character.
- **For UNIX:** If you submit two files to the printer and the first file is nonexistent, the second file prints but the filename is replaced by the name of the first file.

Optional arguments

In addition to the required arguments, you can use the options listed below. You may enter multiple options separated by commas within the parentheses. Use the following syntax:

`lpr -P <printer> -C"(<options>)" <filenames>`

You must enter uppercase -C and -J, but the other options are not case sensitive. Use the lpr command man page for more information.

If the text that you enter after the print options (shown in angle brackets below) contains spaces, enclose the text with double quotation marks.

NOTE: The quotation marks prevent the parentheses and any spaces from passing to UNIX as separate entities. UNIX interprets spaces as the end of a command line and acts on them if they are not enclosed in quotation marks.

NOTE: To use any of the -C options described below, you must enclose the entire -C option in double quotation marks with everything except the recipient's name in parentheses. For example, if you enter `lpr -P<printer controller name> -C "Jones (drilled)"`, the document is printed on drilled paper with the user id "Jones". If you use an lpr -C option with quotes but not parentheses, whatever is specified in quotes replaces the recipient name. For example, if you enter `lpr -P<printer controller name> -C "drilled" <filename>` with the user id "Jones", the recipient name is "drilled" instead of "Jones."

The -C options are not available if you are using Wollongong Pathway Access or Sun PC-NFS.

- `-# <number of copies>`

The number of copies you want to print of each file you specify.

- `-C"(1ton)"`

Asserts that the document is in ascending order, regardless of the number specified for the first or last page. This is the default page ordering.

- `-C"(acct=<account number or text string>)"`

Specifies the accounting string for the **Dump Accounting** command.

- `-C"(ascii)"`

Specifies ASCII for the job.

- -C“(bf=<background form>)”
Specifies the name of saved G4 form(s) created using decomposition services.
- -C“(cf=<n>)”
For a single multi-page Background Form associated with a document, allows you to specify how to cycle through pages when you run out of background images before the end of a document.

The Background Form that will be cycled can be specified in the same command line: -C“(bf=<formname>,cf=<n>)”.
- -C“(collated)”
Specifies that copies of the job are printed collated. This is the default behavior.
- -C“(copies=n)”
Specifies the number of copies of each file you want to print.
- -C“(disposition=<savemaskG4 | savemaskBC | saveformG4 | saveformBC>)”
Sets a virtual printer for decomposition services.
- -C“(drilled)”
Sets the paper type to “drilled.” To use this option, the paper type at the printer controller must be set to “drilled” using the **Set Tray** command.
- -C“(eh)”
Sets the ElideHeader attribute to TRUE.

NOTE: This option acts the same as the -h lpr switch. However, for some implementations the -C flag interferes with the -h flag, therefore a -C option is needed.
- -C“(flip)”
Specifies that sheets are to be turned (flipped) over by the printer before delivering the sheets to the stacker.
- -C“(font=)”
Specifies the font you want to use. You can specify any of the fonts installed on the printer controller. This option is valid for ASCII jobs only.

- -C“(format=<pdl>)”

Specifies the page description language (PDL) type of your document. Accepted values are “ps” for PostScript, “ps1” for PostScript level 1, “ps2” for PostScript level 2, “pcl,” “pcl5c,” “pcl5e,” “ascii,” or “XGF/<ini-file>” for VIPP line-mode initialization.

This option is necessary only if you want to force the printer to interpret your document according to a specified PDL; for example, you may want to print a PostScript document in ASCII format.

NOTE: The DocuColor 2060 does not support printing of color PCL jobs.

- -C“(halftone=<halftone>)”

Specifies the density of the halftone screen. Accepted values are “defaultHalftone,” “coarse,” “medium,” “fine,” or “extrafine.” The value “defaultHalftone” is equivalent to the absence of the halftone attribute.

NOTE: Screen frequencies for the halftone attribute and the default value vary depending on whether the job is black and white or color, and on the resolution (300 or 600 dpi).

- -C“(hc=<color>)” (for models 4850/4890/92C only)

Specifies the highlight color. Valid options are “red,” “green,” “blue,” “cyan,” “magenta,” “cardinal,” “royalblue,” “ruby,” “violet,” or “black.” (Specifying black allows printing in gray scale.)

If you want to change the highlight color used to print your document, set the hc option to the color you want and set the hcm option to “operator.”

If you set the hc option to a color other than the color loaded at the printer and leave the default setting for hcm (“ignore”), the hc option has no effect and the document prints using the available dry ink.

See “Color mismatch” for more information on how the hcm, hc, and mc options work together.

- -C“(hcm=<action>)”

Specifies the action to take when there is a mismatch between the highlight color you specify and the dry ink color loaded in the printer. The default for the hcm option is “ignore.” The optional actions are as follows:

- “abort”

Requests that your job abort if the highlight color you specify is not loaded at the printer.

- “ignore”

Requests that the available dry ink color be used to print your job, regardless of whether you specify that color.

- “operator”

Suspends the job in an “ineligible” state while the operator loads the color dry ink you specify.

If you specify “operator,” the job prints automatically after the operator loads the correct dry ink; however, the job does not print until this task is completed. The job shows in the list of documents at the printer controller, with “Ineligible” listed as the job status.

- -C(hcr=<option>) (for models 4850/4890/92C only)

Specifies mapping a three-dimensional color application (such as RGB) to the two-dimensional color application provided with highlight color printing.

Since some information is lost in mapping, the color rendering options allow you to determine what qualities are the most important to preserve:

- pictorial

Maintains the pictorial quality as follows:

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

Distinguishes between different colors. This attribute is a good choice for charts and diagrams, because they typically use distinctly different colors. Colors that have a hue that matches the map color are not changed. (Changing these colors would cause discontinuities that might produce undesirable results in pictorial material.)

- colorToHighlight

Discards the hue information and preserves the saturation and value of the color application. Fully-saturated input colors turn into a solid highlight color regardless of the map color that is in effect. This option is useful for documents that use highlight color only for emphasis.

- colorTables

Uses preset color tables to perform the mapping and is provided for compatibility reasons. This attribute applies only to red, blue, and green.

- automatic

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).

- -C“(hold)”

Prevents immediate printing, until the job is released at the UI.

- -C“(mc=<color>)” (for models 4850/4890/92C only)

Specifies the parts of the document that convert to the available highlight color. Acceptable values are “red,” “green,” “blue,” “brown,” “yellow,” “cyan,” and “magenta,” “cardinal,” “royalblue,” “ruby,” and “violet.”

For example, if you specify the map color as red, all the red parts of your document (including portions of composite colors such as purple, depending on the rendering algorithm) are printed in the available highlight color. The other colored parts of the document are printed in shades of gray.

Use this option only if you want the mc and hc values to differ. By default, the map color is assumed to be the same as the highlight color.

- -C“(media=<mediaDef>)”

Allows you to define the following options in order:

- <Paper size>:<paper type>:<paper color>:<weight>

Paper size for models 4850/4890/92C and 2060 =
<“USLetter” | “USLegal” | “A4” | “nxn”>

Acceptable custom paper sizes (*nxn* specified in millimeters) range from 8 by 10 inches / 203 by 254 mm to 8.5 by 14 inches / 216 by 356 mm.

Paper size for 96/4635/180 NPS/IPS = <“USLetter” | “USLegal” | “USLedger” | “Tabloid” | “A3” | “A4” | “nxn”>

Acceptable custom paper sizes (*nxn*, specified in millimeters) range from 7 by 10 inches / 178 by 254 mm to 14.33 by 17 inches 364 by 432 mm.

- Paper type = <transparency | drilled | arbitrary text string excluding colon and comma>
- Paper color = <arbitrary text string excluding colon and comma>
- Weight = gsm (grams per square meter).

You may omit a value for any of these options by entering a colon (:) to separate the fields but leaving the field value empty. You may also specify multiple media for your document. The first value is the default used if no media selection is specified for the document.

If you indicate the paper color or weight you want but the paper tray setting on the printer controller omits these values, the document is printed from the tray regardless of what you specified. For example, if you define USLetter::green, but the tray setting on the printer controller is USLetter::white, the document is printed from the tray (regardless of the paper color loaded) even though you specified green as the paper color.

- -C“(<nostitch | nostaple>)” (for models 4050/4090/4850/4890/92C only)

Specifies that the document is not stapled after it is printed.

- -C“(nto1)”

Asserts that the document is in descending order, regardless of the number specified for the first or last page.

- -C“(<orientation>)”
Specifies the page orientation you want to use. Accepted values are “portrait,” “landscape,” “inverseportrait” (“iportrait”), or “inverselandscape” (“ilandscape”). This option is valid for ASCII jobs only.
- -C“(<paper size>)”
Specifies the paper size. Acceptable values are “USLetter,” “USLegal,” or “A4.”
- -C“(<pcd>)”
Specifies that plex changes that are specified in the PCL or PostScript code will take effect.
- -C“(<pcl>)”
Specifies PCL for the job.
- -C“(<pcl5c>)” (for models 4850/4890/92C and 2060 only)
Specifies PCL5c for color PCL5 jobs.
- -C“(<pcl5e>)”
Specifies PCL5e for monochrome PCL5 jobs.
- -C“(<pr=<n>-<m>)>”
Specifies the page range to print of the job. Starting page is <n>. Ending page is <m>.
Example: lpr -P locust -C“(<pr=3-5>)” test.ps
- -C“(<ps>)”
Uses the language level specified in the Default PS Language Level option.
- -C“(<ps1>)”
Specifies PostScript level 1 for the job.
- -C“(<ps2>)”
Specifies PostScript level 2 for the job.
- -C“(<reprocessforcopies>)”
Specifies that page images already processed for the first copy do not get stored as reserve-pages to be used for subsequent copies. Instead, the interpreter “reprocesses” the job for subsequent copies.

- -C“(res=300)” for models 4050/4090/4850/4890/92C and 2060 only
-C“(res=600)” for 92C NPS/IPS
-C“(res=300)” or -C“(res=600)” for 96/4635/180 NPS/IPS
Specifies the resolution in dots per inch (dpi).

- -C“(sg=<n>)”
Sets the OutputBin attribute to the integer value.
 - sg=0 selects stacker group 0 (top tray).
 - sg=1 selects stacker group 1.
 - sg=2 selects stacker group 2.

NOTE: For more information on the OutputBin attribute, refer to the Guide to Managing Print Jobs, “Document attributes” chapter, “Attributes and values” section.

- -C“((<simplex|duplex|tumble>)”
Specifies simplex, duplex, or tumble duplex for the print job. The default is “simplex.”
Tumble duplex rotates the image 180 degrees on alternate pages. Both sides of the page are printed but the position of the image is reversed (from top to bottom) on every other page.
NOTE: The use of tumble duplex is restricted by certain characteristics of the PostScript master. If you have difficulty using this option, contact your Xerox representative for assistance.

- -C“(size = <n>)”
Specifies the font size in points. This option is valid for ASCII jobs only.
- -C“((<stitch|staple>)” (for models 4050/4090/4850/4890/92C only)
Staples the document after it is printed. You can enter either “stitch” or “staple” to indicate the document is stapled.
Before using this option, verify that the printer to which you send your document has a stitcher/stacker installed.

- -C“(<thick=0 | thick=1 | thick=10 | thick=11>)”

Specifies the thicken attribute as follows:

- 0 = do not darken
- 1 = darken all text and images
- 10 = darken bitmaps but not the text/graphics
- 11 = darken all text and images.

- -C“(uncollated)”

Specifies that copies of the job are printed uncollated.

Example: For a three page job with three copies requested, the output in the stacker would be 1,1,1,2,2,3,3,3.

*NOTE: If this option is used with PCL **copy** commands, the copies of specific pages are uncollated, but copies of the entire job is collated. Similarly, with PostScript jobs that specify copies of sets or runs, only the pages in the specific sets and runs are uncollated, but copies of the entire job is collated.*

- -C“(xshift=<#>)”

Specifies the x (horizontal for portrait USLetter or A4 page) image shift from the lower left corner of the page towards the right (in millimeters). Values may be positive (+) or negative (-).

NOTE: The specified image shift is applied to both front and back sides of sheets unless -C“(xshiftback=<#>)” is also specified, in which case the specified image shift is applied to front sides of sheets only.

- -C“(xshiftback=<#>)”

Specifies the x (horizontal for portrait USLetter or A4 page) image shift from the lower right corner of pages imaged towards the left (in millimeters), to be applied to the back sides of sheets only. Values may be positive (+) or negative (-).

- -C“(yshift=<#>)”
Specifies the y (vertical for portrait USLetter or A4 page) image shift from the lower left corner of the page towards the top (in millimeters). Values may be positive(+) or negative (-).
NOTE: The specified image shift is applied to both front and back sides of sheets unless -C“(yshiftback=<#>)” is also specified, in which case the specified image shift is applied to front sides of sheets only.
- -C“(yshiftback=<#>)”
Specifies the y (vertical for portrait USLetter or A4 page) image shift from the lower right corner of pages imaged towards the top (in millimeters), to be applied to the back sides of sheets only. Values may be positive (+) or negative (-).
- -f (DOS only)
Overrides any “Control-” characters in your document that could interrupt printing. Use this option with the FTP software package. Refer to the documentation you received with your software to confirm support of this option.
- -h
Allows suppression of banner pages within a group of documents sent by the same userid. This feature does not work if the printer cycles down between jobs.
- -J<documentname>
Replaces the filename you specified with a new document name on the cover sheet.
- -P<virtual printer name>
Specifies the virtual printer to which jobs will be submitted on the specified printer controller.

Examples Following are several examples of using the **lpr** command.

NOTE: You may enter one or more -C options. You must enclose these options in quotation marks and parentheses, and separate them with commas and spaces.

The following example shows how to specify the paper size and color, omitting other options:

```
lpr -Pps1 -C“(media=a4::blue)” test.ps
```

The following example shows how to specify multiple media:

```
lpr -Pps1  
-C“(media=a4::white, media=a4::blue)”test.ps
```

NOTE: The remaining examples in this section apply only to FTP software.

The following example shows the command line for printing five duplex, stapled copies of a PostScript test document “test.ps” at the printer “rushmore” on letter size paper:

```
lpr -S rushmore -#5  
-C “(duplex, stitch, USLetter)” test.ps
```

NOTE: The following examples apply to models 4850/4890/92C only.

The following example shows the command line for printing one copy of a PostScript document “color.ps” containing red, blue, and green components. The dry ink color loaded at the printer is red. If you don’t set the mc option to a color other than red, only the red parts of the document are printed in red; the green and blue parts are printed in shades of gray.

```
lpr -S rushmore color.ps
```


In the following example, the map color is changed to blue; therefore, the blue parts of the “color.ps” document are printed in the available highlight color of red.

```
lpr -S rushmore -C“(mc=blue)” color.ps
```

The following example shows how to send a document with red, green, and blue components to a printer currently loaded with green dry ink. The operator is instructed to change the dry ink to blue, and since the map color is red, the red parts of the document are printed in blue.

```
lpr -S rushmore  
-C“(mc=red, hc=blue, hcm=operator)” color.ps
```

lpq command in DOS

Use the **lpq** command to show the contents of the printer queue for a specific virtual printer. This option is available only if you are using FTP software. To display the status of a print queue, enter the **lpq** command and its options on the command line using the following syntax:

Syntax *lpq* <options>

Options You may enter more than one option at a time.

- -\?
Displays the usage statement for **lpq**.
- -q
Prevents the printing of certain information about the files comprising the print job.
- -S <printer controller>
Specifies the queue associated with a particular printer. The -S option is case sensitive.
- -version
Displays the version number and patch level of the **lpq** program you are running. You can use this information if you need to report operation problems to your support staff.

For information about other options that you may use with this command, refer to the documentation you received with your software. See the **lpq** command man page for more information.

Example The following example shows the command for displaying the contents of the print queue submitted to the printer controller “rushmore”:

`lpq -S rushmore`

lpq command in UNIX

Use the **lpq** command to show the content of the printer queue for a specific virtual printer, including the printer status, the status of the UNIX print daemon, and the name of the host from which the job originated.

If you do not use options to specify a particular job number or user name, the system displays information on all jobs in the default print queue. Refer to the **lpq** command man page for more information.

To display the status of a print queue, enter the **lpq** command and its options on the command line using the following syntax:

Syntax `lpq <options>`

Options The options are case sensitive. You may enter more than one option at a time.

- **-Pprinter**
Specifies the queue you want to view. If you do not enter this option, the system displays information from the queue of the printer specified in the UNIX printer variable. If the printer variable is not set, the system uses the queue for the default printer.
- **job #**
Displays information on a specific job.
- **username**
Displays only jobs submitted by a particular user.
- **-l**
Displays the queue information in long format, including the stapling and plex options.

- +(interval)

Specifies that the system periodically display the contents of the print queue until it is empty. If you supply a value in seconds for the interval, the workstation waits the specified time before displaying the queue contents.

Example The example below shows the command to display at ten-second intervals the contents of the print queue submitted by Susan to the printer “rushmore.”

`lpr -Prushmore +10 susan`

lprm command

Use the **lprm** command to remove jobs from the print queue of a specific virtual printer.

CAUTION

Caution: If you do not specify any options, the lprm command removes all active jobs with your user name.

*NOTE: This command is available only if you are using FTP software and with standard UNIX lpr on a Sun workstation. See the **lprm** command man page for more information.*

To remove a print job from a queue, enter the **lprm** command and its options on the command line using the following syntax:

Syntax `lprm <options>`

Options in DOS Options are case sensitive. You can enter more than one option at a time.

- -\?

Displays the usage statement for **lprm**.

- -S <printer controller>

Specifies that the request to delete be sent to the printer controller you specify.

- <job ID number>

Removes the job you specify as referred to in the job id number specified by the **lpq** command and not the job id number on the printer controller.

- username

Specifies that only jobs submitted by a particular user be removed. This option is available only to a user with root privileges. If you do not have root privileges, you cannot remove a job that was sent by another user.

Example (DOS) The following example shows how to remove all jobs submitted by Susan to the printer controller “rushmore”:

```
lprm -S rushmore susan
```

Options in UNIX Options are case sensitive. You can enter more than one option at a time.

- -P <printer>

Specifies the virtual printer from which you want to remove a job.

- -

Removes all jobs you submitted, if you enter the option before the job reaches the printer controller. You cannot use the - option with the username option.

- <job ID number>

Specifies the job to remove as referred to in the job ID number specified by the lpq and not the job ID number on the printer controller.

- username

Specifies that only jobs submitted by a particular user be removed. This option is available only to a user with root privileges. If you do not have root privileges, you cannot remove a job that was sent by another user.

Example (UNIX) The following example shows how to remove all jobs submitted by Susan to the printer controller “rushmore”:

```
lprm -P rushmore susan
```

lpc command (UNIX only)

Use the **lpc** command to control the flow of jobs from your workstation to the virtual printers at the printer controller. Refer to the **lpc** command man page for more information.

To control printer operation, enter the **lpc** command and its options on the command line using the following syntax:

Syntax *lpc* <options>

Options The options are case sensitive. You may enter more than one option at a time. All the **lpc** options except help, status, and exit | quit require root privileges.

Enter the option, then specify whether the option applies to all printers, or just to the printer you name (the machine that executes the **lpc** command, not the printer controller).

To use **lpc** options, enter **lpc** without options. An *lpc>* prompt displays. At this prompt you can enter the following options:

- **disable** <all | printername>
Turns off the specified printer queues.
- **enable** <all | printername>
Enables spooling on the local queue for the printers listed.
- **exit** | **quit**
Allows you to leave the *lpc>* mode and return to the system prompt.
- **help** <command>
Displays a brief description of each command you specify. If you do not enter any, a list of the recognized commands displays.
- **start** <all | printername>
Enables printing and starts spooling for the printers listed.
- **status** <all | printername>
Displays the status of the printers specified.
- **stop** <all | printername>
Stops spooling after the current job completes and disables printing.

- `topq printer <job#><user>`
Moves the print jobs specified by job ID# or user name to the top of the printer queue. This option is available only if the job has not already been sent to the printer.
- `up <all | printername>`
Enables all printing processes. This option is not available if you are using Digital UNIX.

Example The example below shows starting the printer “rushmore.”

```
lpc start rushmore
```

Color mismatch

NOTE: The information in this section applies to models 4850/4890/92C only.

The following table shows the status at the printer controller and the results of the printout when using the **lpr** and the **print** commands.

Table 3-1. Color match/mismatch results

HighlightColor attribute	MapColor attribute	Mismatch Action attribute	Result
Same as color loaded in printer	Matches HighlightColor attribute	Abort, Operator, Ignore/UseLoadedColor	Document prints in loaded color.
Same as color loaded in printer	Does no match HighlightColor attribute	Abort, Operator, Ignore/UseLoadedColor	Document prints MapColor portions of document in loaded color.
Not the same as color loaded in printer	Matches HighlightColor attribute	Ignore/UseLoadedColor	Document prints in loaded color.
Not the same as color loaded in printer	Does not match HighlightColor attribute	Ignore/UseLoadedColor	Document prints MapColor portions of document in loaded color.
Not the same as color loaded in printer	Does not matter	Abort	Job is cancelled.
Not the same as color loaded in printer	Matches HighlightColor attribute	Operator	Job is Ineligible until Operator changes color loaded in printer to the HighlightColor requested. Document then prints in new loaded color.
Not the same as color loaded in printer	Does not match HighlightColor attribute	Operator	Job is Ineligible until Operator changes color loaded in printer to the Highlightcolor requested. Document then prints MapColor portion of document in new loaded color.

4. Submitting print jobs using Macintosh drivers

You can send documents to your DocuPrint NPS/IPS printer from your Macintosh in two ways:

- From your Macintosh drivers

DocuPrint allows you to transparently send ASCII files and page description layout (PDL) files written in PostScript level 2 from your Macintosh to the printer. This capability is provided by AppleTalk, which enables you to print directly to network printers.
- From Xerox Document Submission (XDS) client software

XDS client software is intended for users of Apple Macintosh computers running System 8.6 or greater. Your Macintosh must be connected to the Ethernet network communication utility using AppleTalk through EtherTalk Phase 2.

This chapter explains how to print from your Macintosh drivers. For information on printing through the XDS software, refer to the *Guide to Job Submission for Macintosh*. This guide is part of the Xerox Production Print Services series.

For information on installation, refer to the “Setting up workstations” chapter in this document.

To print a document from a Macintosh, you must first create or set up a LaserWriter printer or an AdobePS printer, then you can submit the job. You can also monitor or control printing from your Macintosh. The following sections outline these procedures.

Selecting a driver

You may select the following drivers:

- LaserWriter driver, version 7.x
- LaserWriter driver, version 8.x
- AdobePS driver, version 8.5.1.

Selecting a LaserWriter driver, version 7.x

Before you perform this procedure, ask your network administrator in what EtherTalk Phase and AppleTalk zone your printer is located, if any, and the name of your DocuPrint printer or virtual printer queue.

1. From the Apple menu, click [Chooser].
2. Click the LaserWriter icon from the printer icons in the upper left box of the Chooser dialog box.
3. If your network is configured to include AppleTalk print zones, click the zone in which your DocuPrint printer is located.

NOTE: Depending on the operating system version you are using, you may or may not see the AppleTalk zones listed on the Chooser dialog. If the zones are not listed, skip this step.

4. Click the name of the DocuPrint printer or virtual printer you want to use.
5. Because you use AppleTalk to print to the DocuPrint printer, make sure the AppleTalk option is set to [Active].
6. If you want to perform operations during printing, set the Background Printing option to [On].

NOTE: Once background printing is on, it remains in effect whenever you print until it is turned off. You may notice that some operations are slower with Background Printing set to [On].

7. Close the Chooser dialog box by clicking the box in the upper left corner of the menu window.
8. If you changed your destination printer, click [OK] when you see the following message:

“You have changed your current printer. Please choose “Page Setup...” in all of the open applications.”

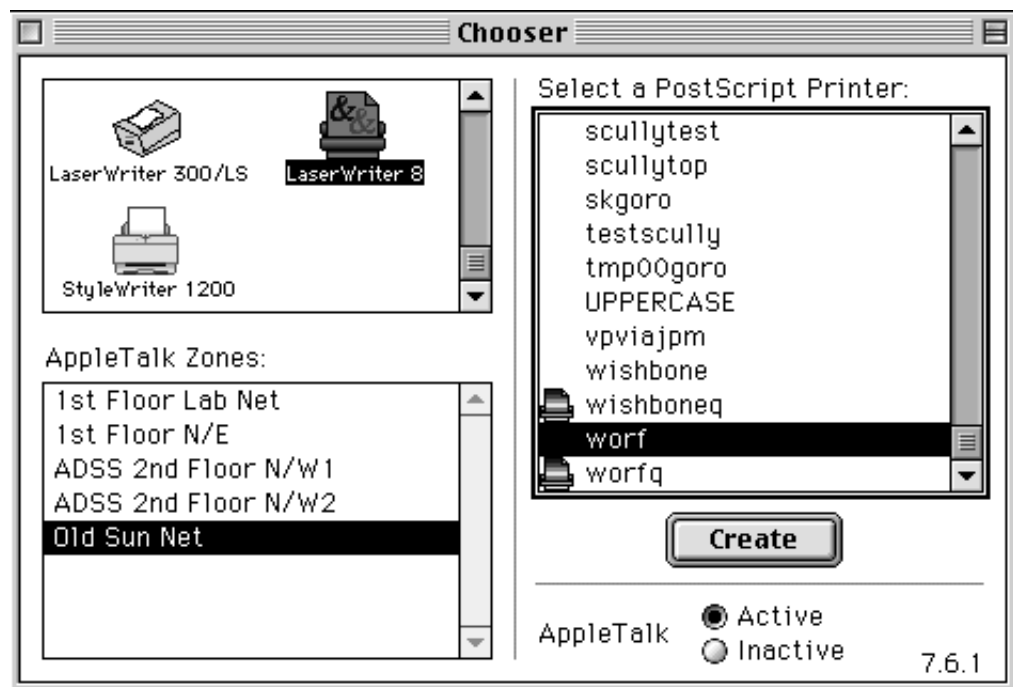
You are now ready to send documents to the DocuPrint printer.

Selecting a LaserWriter driver, version 8.x

Before you perform this procedure, ask your Network Administrator what EtherTalk Phase and AppleTalk zone your printer is located in, if any, and the name of your DocuPrint printer or virtual printer queue.

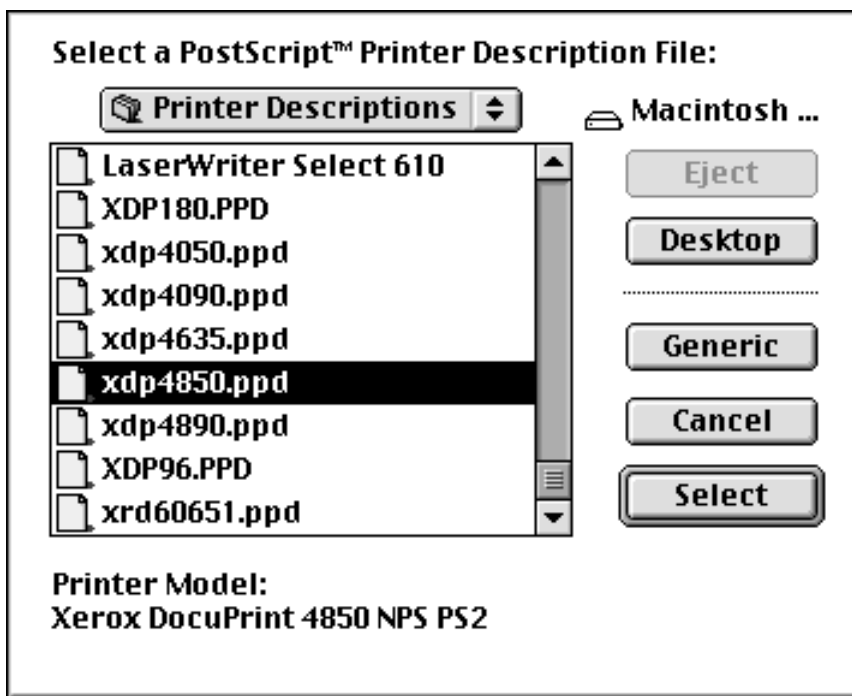
1. From the Apple menu, click [Chooser].
2. Click the LaserWriter icon from the printer icons in the upper left box of the Chooser dialog box.
3. If your network is configured to include AppleTalk print zones, click the zone in which your DocuPrint printer is located.

NOTE: Depending on the operating system version you are using, you may or may not see the AppleTalk zones listed on the Chooser dialog. If the zones are not listed, skip this step.



4. Click the name of the DocuPrint printer or virtual printer you want to use.
5. Because you use AppleTalk to print to the DocuPrint printer, make sure the AppleTalk option is set to [Active].
6. Click [Create].

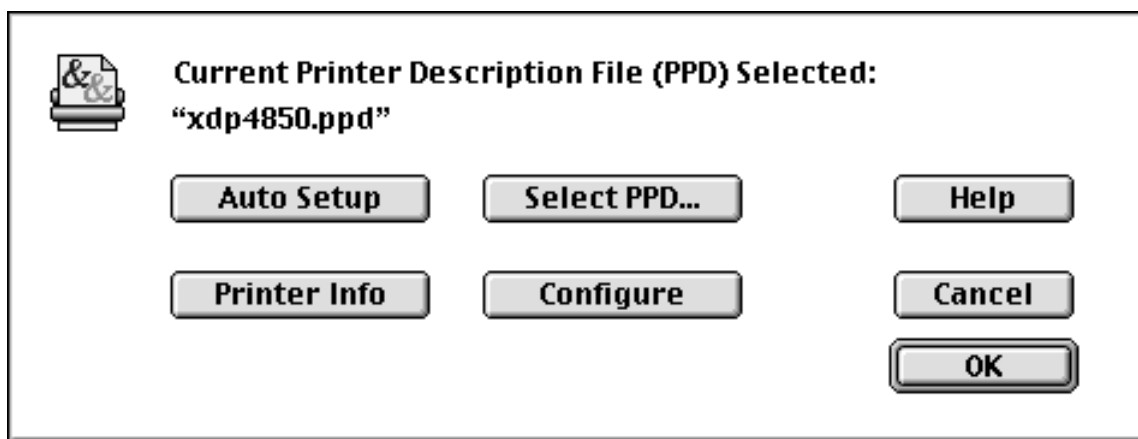
7. At the “Current Printer Description File (PPD) Selected” window, click [Select PPD...].



8. Click a PostScript Printer Description (PPD) that is appropriate for the DocuPrint model you are using and click [Select].

NOTE: Make sure to use the latest available PPD file. Refer to the following web site: <http://www.xerox.com/drivers>.

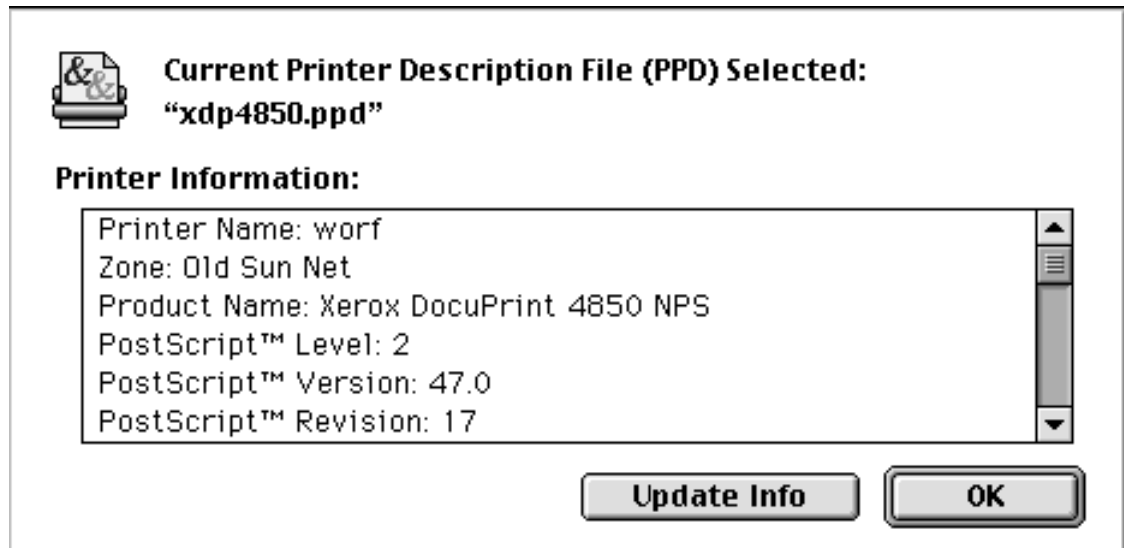
The selected PPD displays.



9. Click [Printer Info] to view the printer driver information.

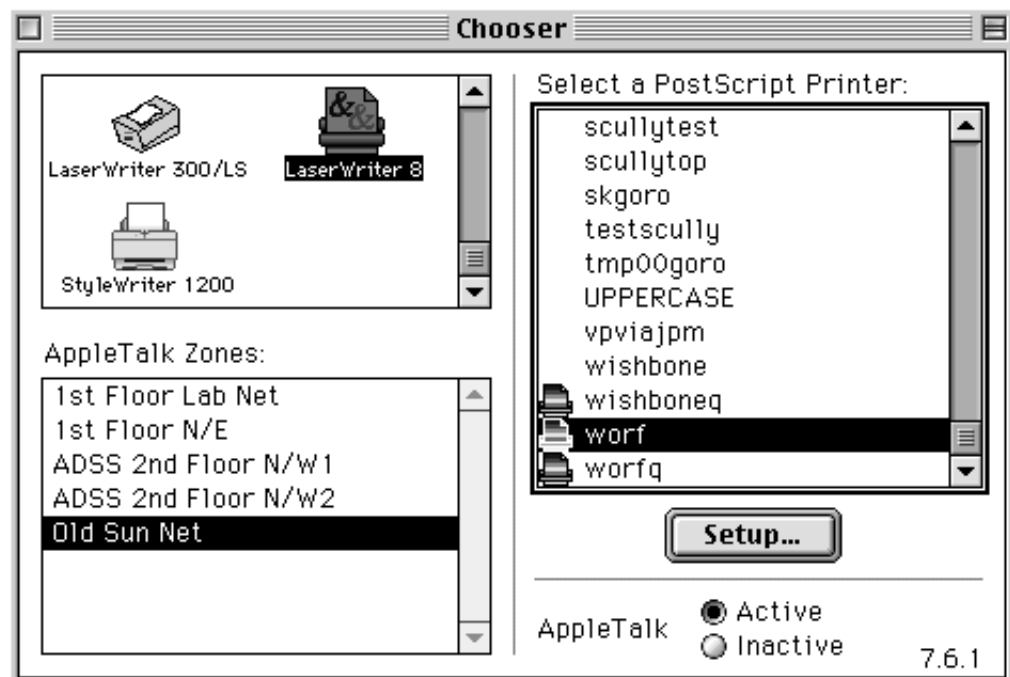
10. If question marks are displayed, click [Update Info] to update all information on the screen, then click [OK].

If no question marks are displayed, click [OK].



11. Back at the "Current Printer Description File (PPD) Selected" window, click [OK].

12. Close the Chooser dialog box.



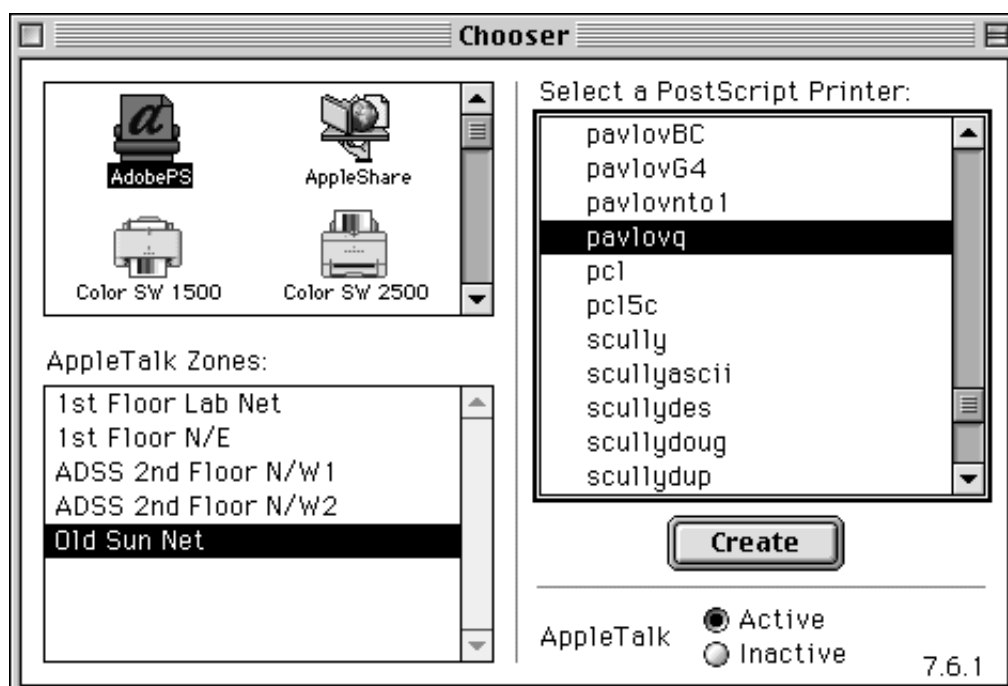
The selected DocuPrint printer icon appears on your desktop, and you are now ready to send documents to the printer.

Selecting an AdobePS driver, version 8.5.1

Before you perform this procedure, ask your Network Administrator what EtherTalk Phase and AppleTalk zone your printer is located in, if any, and the name of your DocuPrint printer or virtual printer queue.

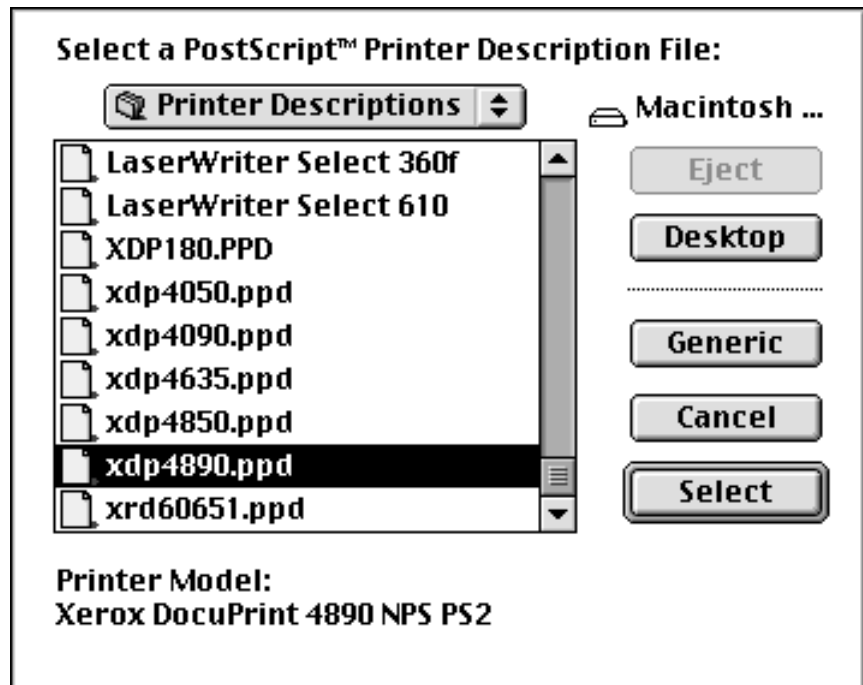
1. From the Apple menu, click [Chooser].
2. Click the AdobePS icon from the printer icons in the upper left box of the Chooser dialog box.
3. If your network is configured to include AppleTalk print zones, click the zone in which your DocuPrint printer is located.

NOTE: Depending on the operating system version you are using, you may or may not see the AppleTalk zones listed on the Chooser dialog box. If the zones are not listed, skip this step.



4. Click the name of the DocuPrint NPS/IPS printer or virtual printer that you want to use.

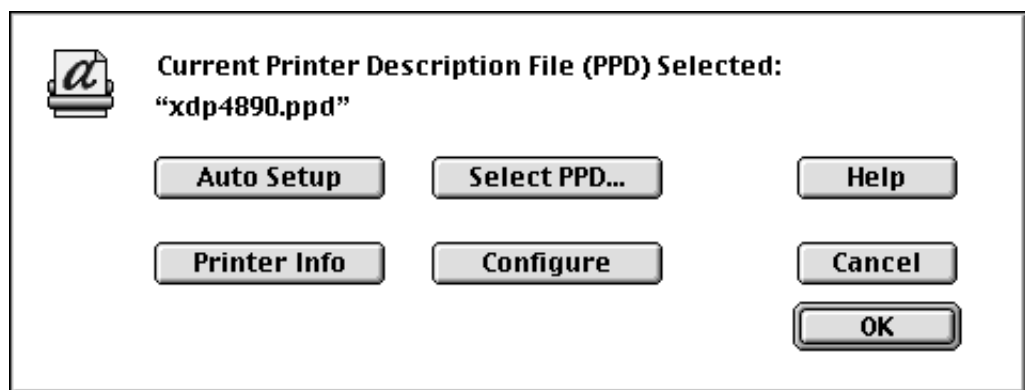
5. Because you use AppleTalk to print to the NPS/IPS printer, make sure the AppleTalk option is set to [Active].
6. Click [Create].
7. At the “Current Printer Description File (PPD) Selected” window, click [Select PPD...].



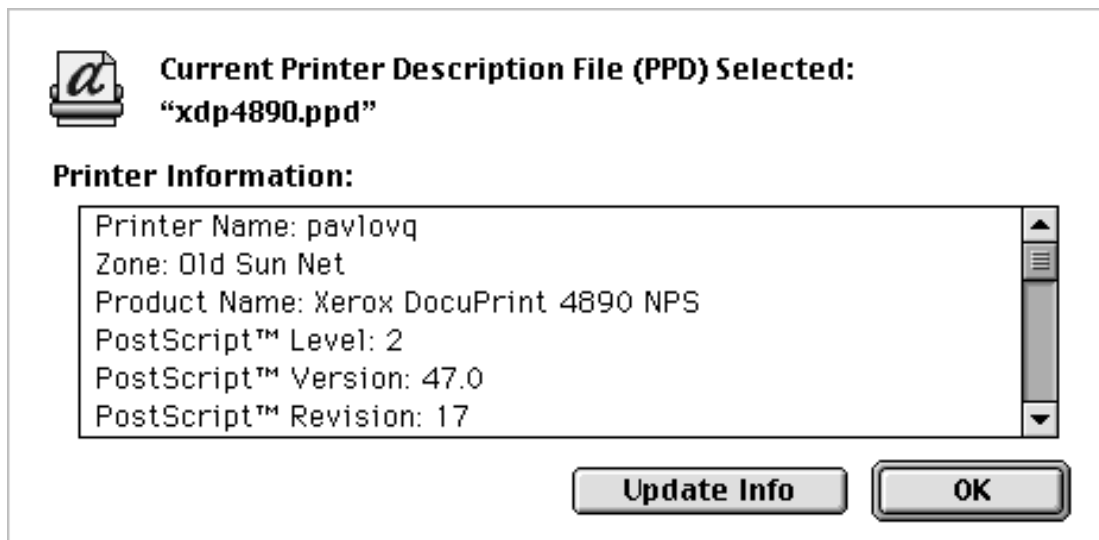
8. Click a PostScript Printer Description (PPD) that is appropriate for the DocuPrint model you are using and click [Select].

NOTE: Make sure to use the latest available PPD file. Refer to the following web site: <http://www.xerox.com/drivers>.

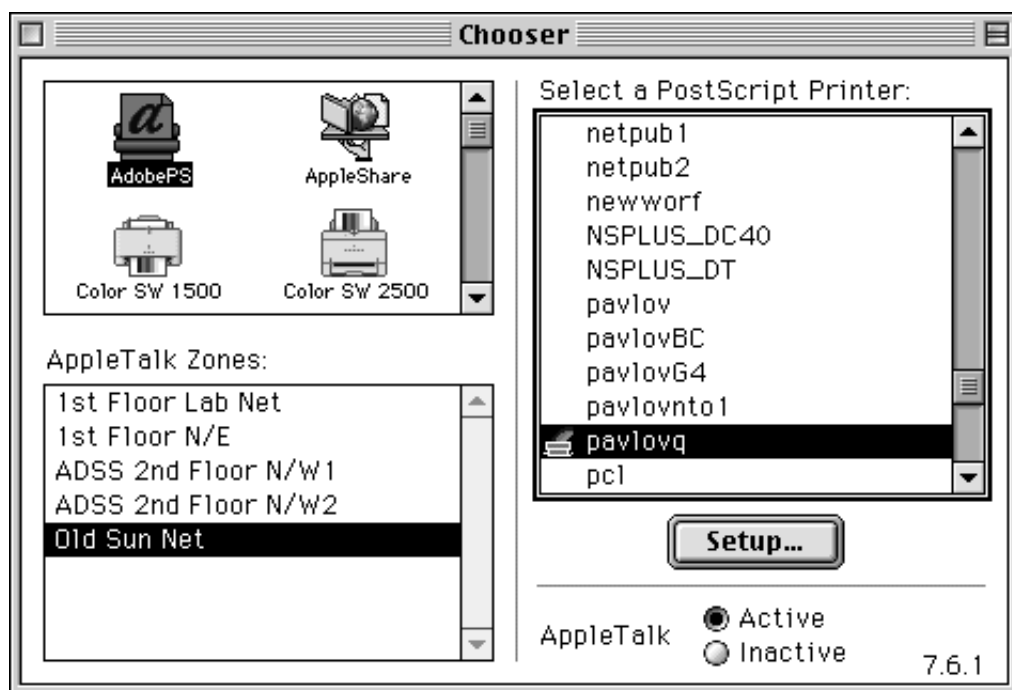
The selected PPD displays.



9. Click [Printer Info] to verify the printer driver information.
10. Click [Update Info] to update all information on the screen, then click [OK].



11. Click [OK].
12. Back at the "Current Printer Description File (PPD) Selected" screen, click [OK].
13. At the Chooser dialog, click [Setup...].



The selected DocuPrint NPS/IPS printer icon appears on your desktop, and you are now ready to send documents to the printer.

Submitting a print job

The following section explains how to submit a print job using each of the following drivers:

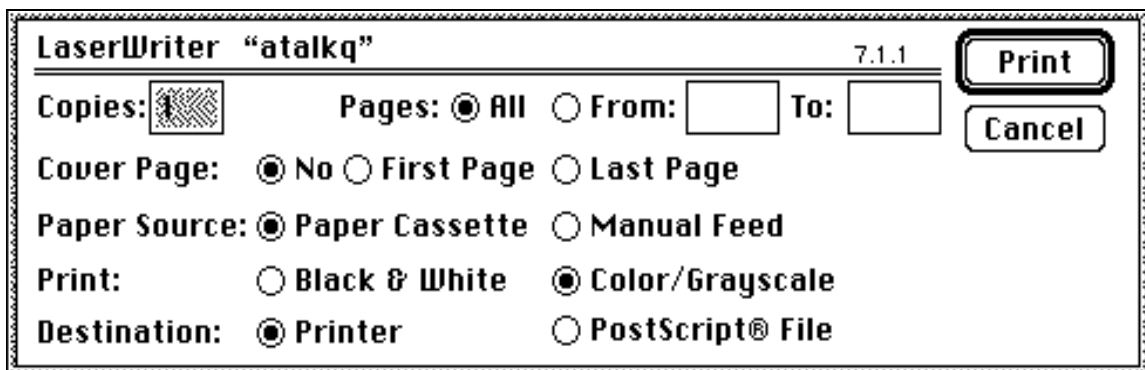
- LaserWriter driver, version 7.x
- LaserWriter driver, version 8.x
- AdobePS driver, version 8.5.1.

Submitting a print job using the LaserWriter 7.x driver

You can submit print jobs directly from within your Macintosh driver. When you submit a job this way, <Unknown> appears as the sender name on the banner page if an owner name is not registered for the Macintosh computer. You can use Sharing Setup in the Control Panel to assign a name to your Macintosh.

To submit a job using the driver:

1. Open your document.
2. Click [Print] from the File menu.
3. Set the print options you want to change in the Print menu option box.



- To print more than one copy of the document, enter the new number in the copies box.

- To print all pages of the document, click [All]. To print a range, click [From] and specify the range in the From and To boxes.
- To print a cover page with your document, click [First Page] to print it before your document or [Last Page] to print it after your document.

NOTE: When you specify to print more than one copy of a document, and you set the [Cover Page] option to "First Page," only one copy prints.

- To identify the paper source for your job, click [Paper Cassette].
 - To specify shading, click [Black & White] or [Color/ Grayscale].
 - To print a job now, click [Printer]. To create a file you can print later, click [PostScript File].
4. To print your document, click [Print]. To close the print option menu and cancel any changes you made to the print options, click [Cancel].

Submitting a print job using the LaserWriter 8.x driver

You can submit print jobs directly from within your Macintosh driver. When you submit a job this way, <Unknown> appears as the sender name on the banner page if an owner name is not registered for the Macintosh computer. You can use Sharing Setup in the Control Panel to assign a name to your Macintosh.

To submit a job using the driver:

1. Open your document.
2. Click [Print] from the File menu.

The setup window displays.

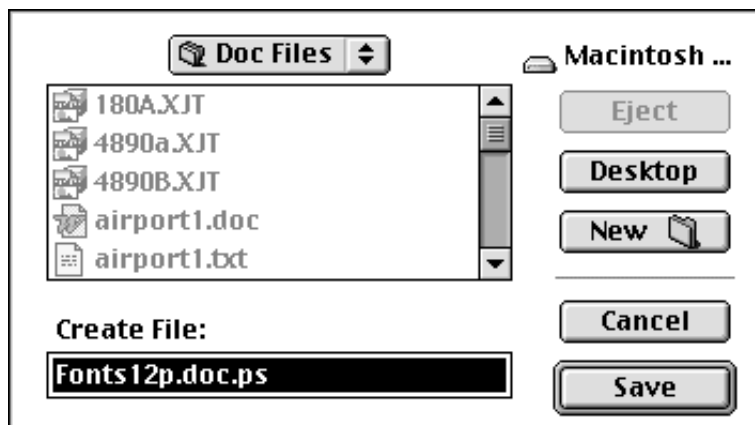
3. Set the print options you want to change (refer to the following sections).

The screenshot shows a Macintosh print dialog box with the following elements:

- Printer:** A pull-down menu showing "wishboneq".
- Destination:** A pull-down menu showing "Printer".
- General:** A pull-down menu showing "General".
- Copies:** A numeric field set to "1" and a checkbox for "Collated" which is unchecked.
- Pages:** Radio buttons for "All" (selected), "From:" (with an empty field), and "To:" (with an empty field).
- Paper Source:** Radio buttons for "All pages from:" (selected) and "First page from:". The "All pages from:" option has a pull-down menu showing "Cassette".
- Remaining from:** A pull-down menu showing "Cassette".
- Buttons:** "Save Settings", "Cancel", and "Print".

4. To save the print options you set, click [Save Settings]. To return to the default print options, click [Cancel].
5. To print to a printer:
 - a. From the Printer pull down menu, select the printer of your choice.
 - b. From the Destination pull down menu, select [Printer].
 - c. Click [Print].
6. To print to a file:
 - a. From the Destination pull down menu, select [File].
 - b. Click [Save].

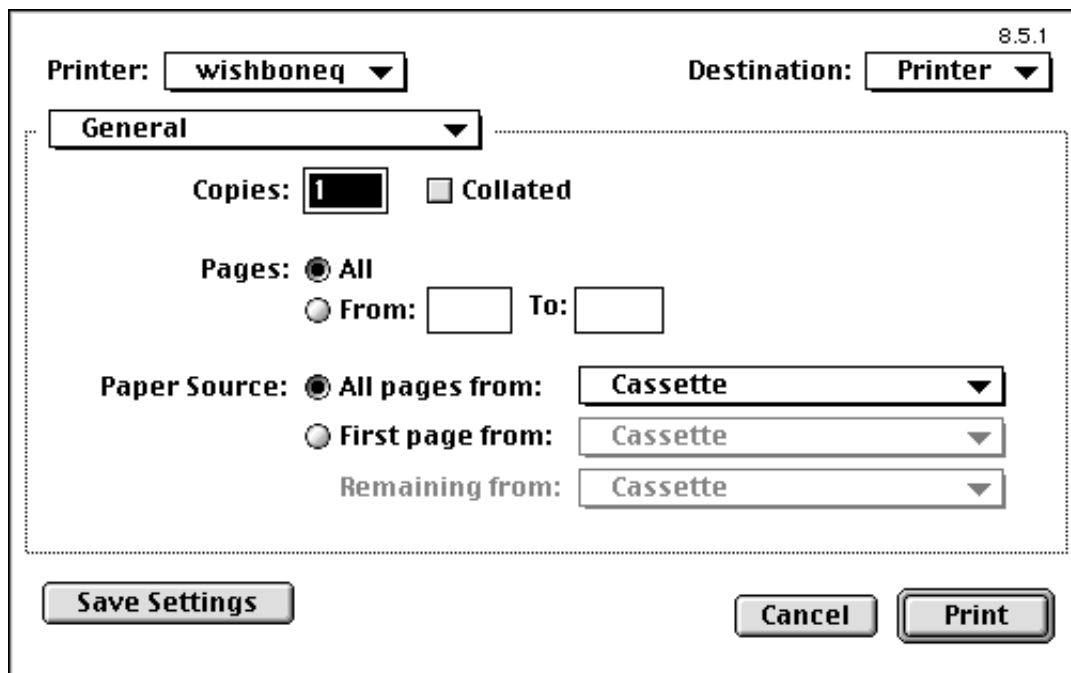
The following window displays:



- c. In the Create File box, name the file and specify where you want to store it.
- d. Click [Save].

Setting general print options

Select [General] from the pull down menu under the printer name.



Specify the following:

- Number of copies
- Collated vs. non-collated copies
- All pages or a specific range of pages
- Paper source.

Setting application-specific print options

Select the application name (e.g., Microsoft Word) from the pull down menu under the printer name.

The screenshot shows a print options dialog box for a Macintosh. At the top, there are two pull-down menus: 'Printer:' set to 'wishboneq' and 'Destination:' set to 'File'. To the right of the 'Destination:' menu is the version number '8.5.1'. Below these is a pull-down menu for the application, currently set to 'Microsoft Word'. The main area of the dialog is titled 'Print:' and contains several options: a 'Document' pull-down menu, a 'Word Options' button, a 'Print Selection Only' checkbox (unchecked), and a 'Collate Copies' checkbox (checked). There are also buttons for 'All pages in range' and 'Range...'. At the bottom of the dialog are three buttons: 'Save Settings', 'Cancel', and 'Save'.

Select the print options as applicable.

NOTE: The screen above shows the options for a Microsoft Word document. However, print options vary from one application to the next.

Setting background printing options

Select [Background Printing] from the pull down menu under the printer name.

The screenshot shows a Macintosh printer settings dialog box. At the top right, the version number '8.5.1' is displayed. The 'Printer:' field shows 'wishboneq' with a dropdown arrow. The 'Destination:' field shows 'File' with a dropdown arrow. Below these, a 'Background Printing' dropdown menu is open, showing 'Background' as the selected option. The 'Print in:' section has two radio buttons: 'Foreground (no spool file)' and 'Background', with 'Background' selected. The 'Print Time:' section has three radio buttons: 'Urgent', 'Normal', and 'Put Document on Hold', with 'Normal' selected. Below the radio buttons, there are two date and time fields: '12:55 PM' and '11/24/1998', each with up and down arrows. At the bottom, there are three buttons: 'Save Settings', 'Cancel', and 'Save'.

Specify the following:

- Foreground or background printing
- Print time.

Setting cover page options

Select [Cover Page] from the pull down menu under the printer name.

The screenshot shows a Macintosh printer settings dialog box. At the top right, the version number '8.5.1' is displayed. The 'Printer:' field shows 'pavlovq 2' with a dropdown arrow. The 'Destination:' field shows 'Printer' with a dropdown arrow. Below these, a 'Cover Page' dropdown menu is set to 'Cover Page'. Underneath, the 'Print Cover Page:' section has three radio button options: 'None', 'Before Document' (which is selected), and 'After Document'. Below the radio buttons, the 'Cover Page Paper Source:' field is set to 'AutoSelect' with a dropdown arrow. At the bottom of the dialog are three buttons: 'Save Settings', 'Cancel', and 'Print'.

Specify the following:

- The cover page location
- The paper source you want to use for the cover page (e.g., Cassette, Manual Feed).

Setting color matching options (models 4850/4890/92C only)

Select [Color Matching] from the pull down menu under the printer name.

NOTE: This option varies, based on the specific printer selected.

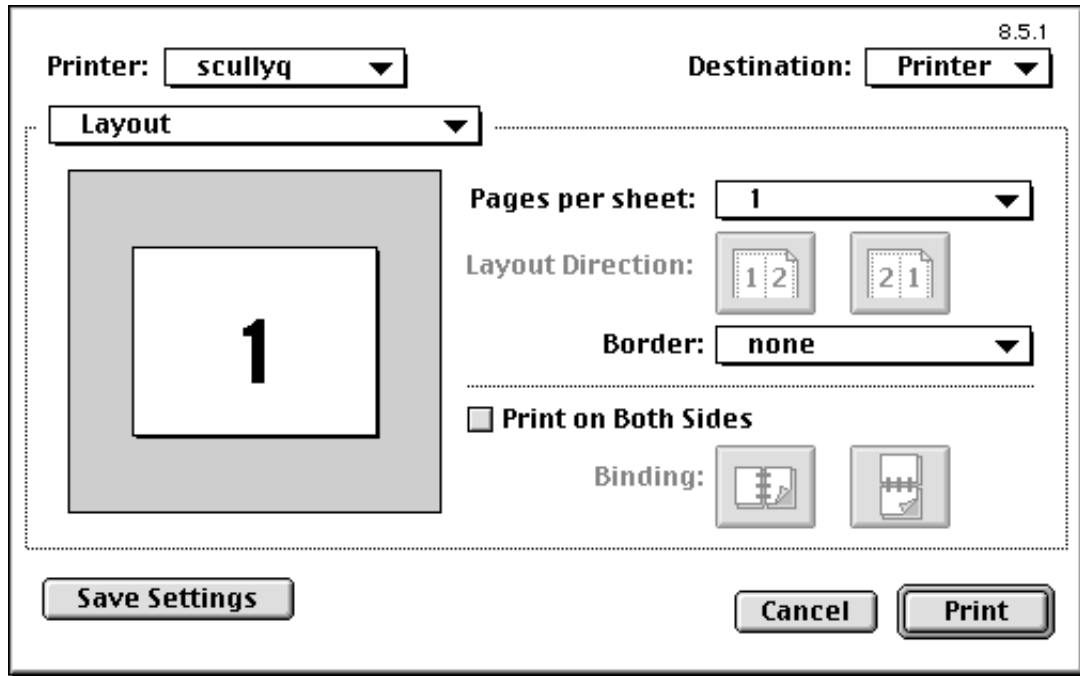
The screenshot shows a Macintosh print dialog box. At the top right, the version number '8.5.1' is displayed. The 'Printer:' field is set to 'wishboneq' with a dropdown arrow. The 'Destination:' field is set to 'File' with a dropdown arrow. Below these, a 'Color Matching' dropdown menu is open, showing a list of options. Inside this menu, three settings are visible: 'Print Color:' set to 'Color/Grayscale', 'Intent:' set to 'Auto selection', and 'Printer Profile:' set to 'Printer's Default'. At the bottom of the dialog, there are three buttons: 'Save Settings', 'Cancel', and 'Save'.

Specify the following:

- Print color (e.g., Black and White, Grayscale, Color/Grayscale)
- Intent (e.g., Perceptual matching, Saturation matching)
- Printer profile

Setting layout options

Select [Layout] from the pull down menu under the printer name.



Specify the following:

- Number of pages per sheet
- Border
- Simplex vs. duplex (both sides) printing

Setting error handling options

Select [Error Handling] from the pull down menu under the printer name.

The screenshot shows a Macintosh-style dialog box titled "8.5.1" in the top right corner. It contains the following elements:

- Printer:** A pull-down menu showing "scullyq" with a downward arrow.
- Destination:** A pull-down menu showing "Printer" with a downward arrow.
- Error Handling:** A pull-down menu showing "Error Handling" with a downward arrow.
- If there is a PostScript™ error:** A section containing three radio button options:
 - ☒ No special reporting
 - ☐ Summarize on screen
 - ☐ Print detailed report
- Buttons:** At the bottom, there are three buttons: "Save Settings", "Cancel", and "Print".

Specify the action to take when a PostScript error occurs.

Setting “Save as File” options

Select [Save as File] from the pull down menu under the printer name.

Printer: **scullyq** Destination: **Printer** 8.5.1

Save as File

Format: **PostScript Job**

PostScript Level: ☒ Level 1 Compatible
☐ Level 2 and 3

Data Format: ☒ ASCII
☐ Binary

Font inclusion: **None**

Save Settings **Cancel** **Print**

Specify the following:

- File format
- PostScript level
- Data format
- Font inclusion: This option specifies the fonts to be included in the file (i.e., None, All, All But Fonts in the PPD File).

Setting printer-specific options

Select [Printer Specific Options] from the pull down menu under the printer name.

NOTE: This option varies, based on the specific printer selected. Following are two screen samples, from two different printers.

8.5.1

Printer: **scullyq 2** ▼

Destination: **Printer** ▼

Printer Specific Options ▼

Resolution: **300dpi** ▼

MediaType: **Plain** ▼

MediaColor: **white** ▼

StapleWhen: **None** ▼

Save Settings **Cancel** **Print**

Printer: **pavlovq** Destination: **Printer** 8.5.1

Printer Specific Options

MediaColor: **white**

StapleWhen: **None**

HighlightPrintingColor: **None**

HighlightMappingColor: **None**

HighlightMappingAlgorithm: **None**

MismatchedHighlightPrintingColor: **None**

Save Settings **Cancel** **Print**

Specify the following:

- Resolution: Select the resolution in dots per inch (dpi) you want to use.
- MediaType: Select the type of media you want to use (e.g., Plain, Drilled, Transparency).
- MediaColor: Select the color of the stock you want to use.
- StapleWhen: Select the stapling option you want to use (e.g., None, EndOfSet).
- HighlightPrintingColor: Select the highlight color you want to use.
- HighlightMappingColor: Select the mapping color you want to use.
- HighlightMappingAlgorithm: Select the algorithm you want to use (None, Monochrome, Pictorial, Presentation).
Because some information is lost in mapping, the algorithm option allows you to determine what qualities are the most important to preserve.
- MismatchedHighlightPrintingColor: Select the action you want to use (e.g., None, Use Loaded Color, Operator Intervention, Abort).

Submitting a print job using the AdobePS 8.5.1 driver

You can submit print jobs directly from within your Macintosh driver. When you submit a job this way, <Unknown> appears as the sender name on the banner page if an owner name is not registered for the Macintosh computer. You can use Sharing Setup in the Control Panel to assign a name to your Macintosh.

To submit a job using the driver:

1. Open your document.
2. Click [Print] from the File menu.

The setup window displays.

3. Set the print options you want to change (refer to the following sections).

Printer: pavlovq 2 Destination: Printer 8.5.1

General

Copies: 1

Pages: ☒ All ☐ From: To:

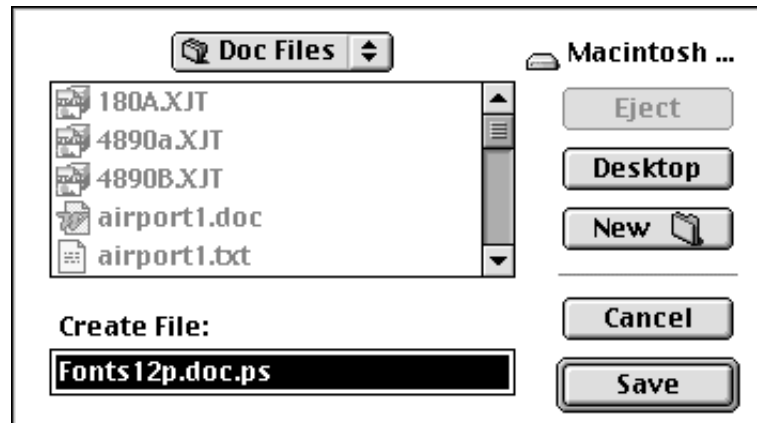
Paper Source: ☒ All pages from: AutoSelect ☐ First page from: AutoSelect ☐ Remaining from: AutoSelect

Save Settings Cancel Print

4. To save the print options you set, click [Save Settings]. To return to the default print options, click [Cancel].
5. To print to a printer:
 - a. From the Printer pull down menu, select the printer of your choice.
 - b. From the Destination pull down menu, select [Printer].
 - c. Click [Print].

6. To print to a file:
 - a. From the Destination pull down menu, select [File].
 - b. Click [Save].

The following window displays:



- c. In the Create File box, name the file and specify where you want to store it.
 - d. Click [Save].

Setting general print options

Select [General] from the pull down menu under the printer name.

The screenshot shows a Macintosh-style printer settings dialog box. At the top right, the version number '8.5.1' is displayed. The 'Printer:' field shows 'pavlovq 2' with a dropdown arrow. The 'Destination:' field shows 'Printer' with a dropdown arrow. Below these, a 'General' tab is selected from a pull-down menu. The 'Copies:' field is set to '1'. The 'Pages:' section has three options: 'All' (selected with a radio button), 'From:' (with an empty text box), and 'To:' (with an empty text box). The 'Paper Source:' section has three options: 'All pages from:' (selected with a radio button), 'First page from:', and 'Remaining from:'. Each of these three options has a corresponding 'AutoSelect' dropdown menu. The Adobe logo is visible on the left side of the dialog. At the bottom, there are three buttons: 'Save Settings', 'Cancel', and 'Print'.

Specify the following:

- Number of copies
- Collated vs. non-collated copies
- All pages or a specific range of pages
- Paper source.

Setting application-specific print options

Select the application name (e.g., Microsoft Word) from the pull down menu under the printer name.

The screenshot shows a print dialog box with the following elements:

- Printer:** A pull-down menu showing "wishboneq".
- Destination:** A pull-down menu showing "File".
- Application:** A pull-down menu showing "Microsoft Word".
- Print:** A section containing:
 - A pull-down menu showing "Document".
 - A pull-down menu showing "All pages in range".
 - A button labeled "Word Options".
 - A button labeled "Range...".
 - A checkbox labeled "Print Selection Only" (unchecked).
 - A checkbox labeled "Collate Copies" (checked).
- Buttons:** "Save Settings", "Cancel", and "Save" at the bottom.
- Version:** "8.5.1" in the top right corner.

Select the print options as applicable.

NOTE: The screen above shows the options for a Microsoft Word document. However, print options vary from one application to the next.

Setting background printing options

Select [Background Printing] from the pull down menu under the printer name.

The screenshot shows a Macintosh printer settings dialog box. At the top right, the version number '8.5.1' is displayed. The 'Printer:' field shows 'wishboneq' with a dropdown arrow. The 'Destination:' field shows 'File' with a dropdown arrow. Below these, a 'Background Printing' dropdown menu is open, showing 'Background' as the selected option. The 'Print in:' section has two radio buttons: 'Foreground (no spool file)' and 'Background', with 'Background' being selected. The 'Print Time:' section has three radio buttons: 'Urgent', 'Normal', and 'Put Document on Hold', with 'Normal' being selected. Next to 'Print at:' are two date and time fields: '12:55 PM' and '11/24/1998', each with up and down arrows. At the bottom, there are three buttons: 'Save Settings', 'Cancel', and 'Save'.

Specify the following:

- Foreground or background printing
- Print time.

Setting cover page options

Select [Cover Page] from the pull down menu under the printer name.

The screenshot shows a Macintosh-style dialog box for printer settings. At the top right, the version number '8.5.1' is displayed. The 'Printer:' field contains 'pavlovq 2' with a downward arrow. The 'Destination:' field contains 'Printer' with a downward arrow. Below these, a pull-down menu is set to 'Cover Page'. Underneath, the 'Print Cover Page:' section has three radio button options: 'None', 'Before Document' (which is selected), and 'After Document'. Below that, the 'Cover Page Paper Source:' field is set to 'AutoSelect' with a downward arrow. At the bottom, there are three buttons: 'Save Settings', 'Cancel', and 'Print'.

Specify the following:

- The cover page location
- The paper source you want to use for the cover page (e.g., Cassette, Manual Feed).

Setting color matching options (models 4850/4890/92C only)

Select [Color Matching] from the pull down menu under the printer name.

8.5.1

Printer: **wishboneq** ▼ Destination: **File** ▼

Color Matching ▼

Print Color: **Color/Grayscale** ▼

Intent: **Auto selection** ▼

Printer Profile: **Printer's Default** ▼

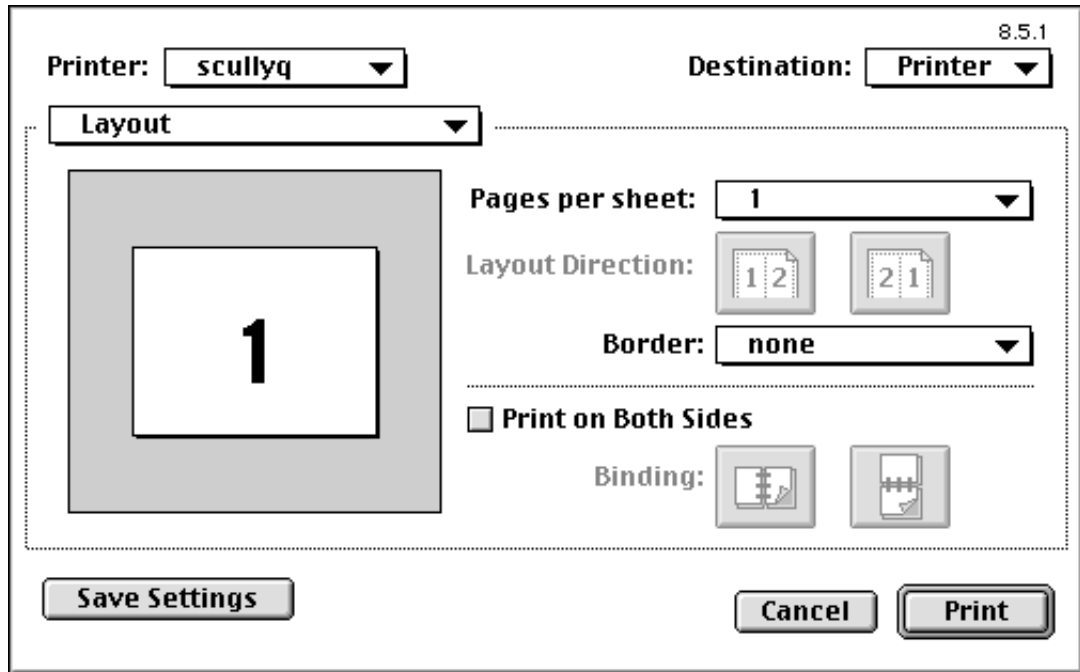
Save Settings **Cancel** **Save**

Specify the following:

- Print color (for example, Black and White, Grayscale, Color/Grayscale)
- Intent (for example, Perceptual matching, Saturation matching)
- Printer profile.

Setting layout options

Select [Layout] from the pull down menu under the printer name.



Specify the following:

- Number of pages per sheet
- Border
- Simplex vs. duplex (both sides) printing.

Setting error handling options

Select [Error Handling] from the pull down menu under the printer name.

The screenshot shows a Macintosh print dialog box. At the top right, the version number '8.5.1' is displayed. Below it, there are two pull-down menus: 'Printer:' with 'scullyq' selected, and 'Destination:' with 'Printer' selected. Below these is a third pull-down menu labeled 'Error Handling'. A dashed line separates this menu from the options below. The options are under the heading 'If there is a PostScript™ error:'. There are three radio buttons: 'No special reporting' (which is selected), 'Summarize on screen', and 'Print detailed report'. At the bottom of the dialog, there are three buttons: 'Save Settings', 'Cancel', and 'Print'.

Specify the action to take when a PostScript error occurs.

Setting “Save as File” options

Select [Save as File] from the pull down menu under the printer name.

8.5.1

Printer: **scullyq** Destination: **Printer**

Save as File

Format: **PostScript Job**

PostScript Level: ☒ Level 1 Compatible
☐ Level 2 and 3

Data Format: ☒ ASCII
☐ Binary

Font inclusion: **None**

Save Settings **Cancel** **Print**

Specify the following:

- File format
- PostScript level
- Data format
- Font inclusion: This option specifies the fonts to be included in the file (that is, None, All, All But Fonts in the PPD File).

Setting printer-specific options

Select [Printer Specific Options] from the pull down menu under the printer name.

NOTE: This option varies, based on the specific printer selected. Following are two screen samples, from two different printers.

8.5.1

Printer: **scullyq 2** ▼

Destination: **Printer** ▼

Printer Specific Options ▼

Resolution: **300dpi** ▼

MediaType: **Plain** ▼

MediaColor: **white** ▼

StapleWhen: **None** ▼

Save Settings **Cancel** **Print**

Printer: **pavlovq** Destination: **Printer** 8.5.1

Printer Specific Options

MediaColor: **white**

StapleWhen: **None**

HighlightPrintingColor: **None**

HighlightMappingColor: **None**

HighlightMappingAlgorithm: **None**

MismatchedHighlightPrintingColor: **None**

Save Settings **Cancel** **Print**

Specify the following:

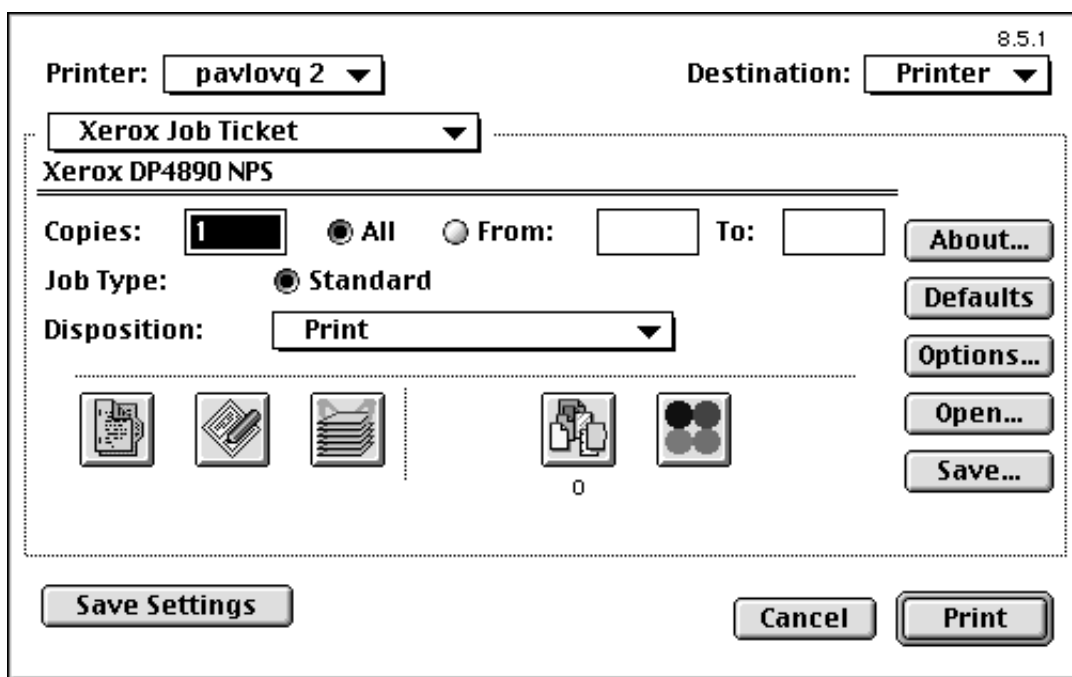
- Resolution: Select the resolution in dots per inch (dpi) you want to use.
- MediaType: Select the type of media you want to use (e.g., Plain, Drilled, Transparency).
- MediaColor: Select the color of the stock you want to use.
- StapleWhen: Select the stapling option you want to use (e.g., None, EndOfSet).
- HighlightPrintingColor: Select the highlight color you want to use.
- HighlightMappingColor: Select the mapping color you want to use.
- HighlightMappingAlgorithm: Select the algorithm you want to use (None, Monochrome, Pictorial, Presentation).

Because some information is lost in mapping, the algorithm option allows you to determine what qualities are the most important to preserve.

- MismatchedHighlightPrintingColor: Select the action you want to use (for example, None, Use Loaded Color, Operator Intervention, Abort).

Setting Xerox Job Ticket options

Select [Xerox Job Ticket] from the pull down menu under the printer name.



NOTE: This window varies slightly, depending on the NPS/IPS printer model selected.

NOTE: Most of the options available through this window are covered in detail in the following sections:

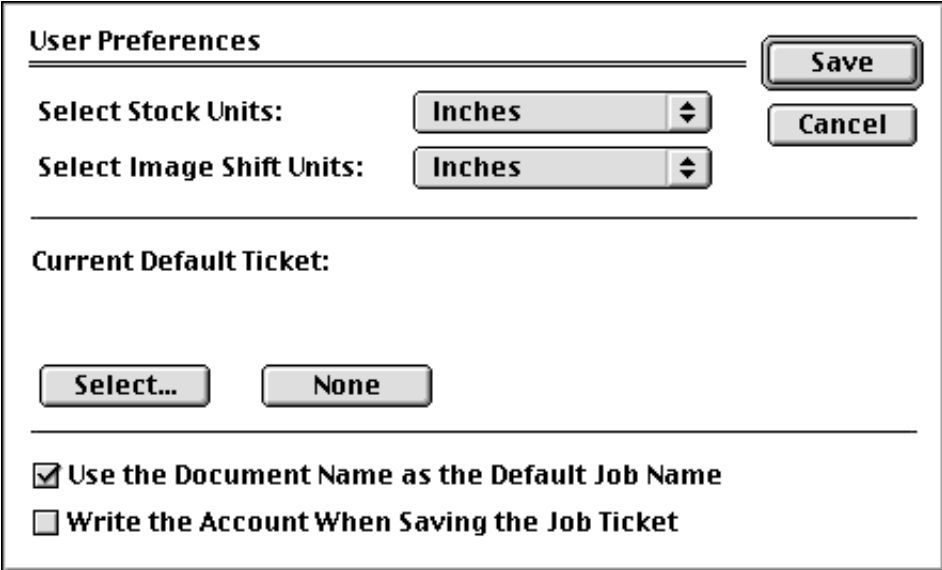
- Chapter: "Submitting print jobs using Windows NT 4.0 drivers"
Section: "Setting up job tickets"
- Chapter: "Submitting print jobs from Quick Print for Windows NT 4.0"
Section: "Setting up job tickets"

You may set the following job ticket options from this window:

- Number of copies
- All pages or a specific range of pages
- To overwrite the current job ticket with the defaults, click [Defaults], then confirm your choice.

- To select user preferences, click [Options...].

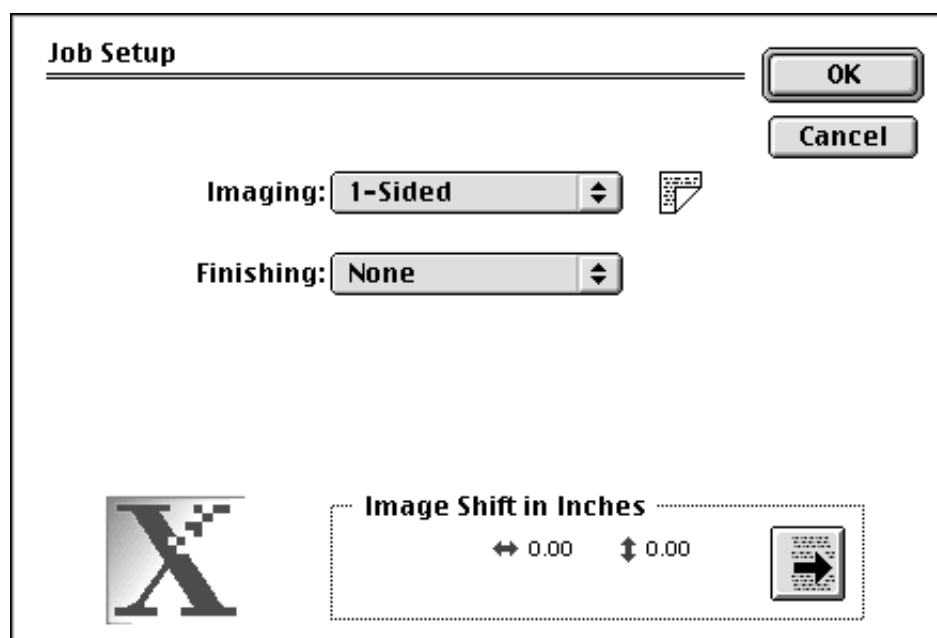
The following window displays:

A screenshot of a 'User Preferences' dialog box. The title bar says 'User Preferences'. Inside, there are two dropdown menus: 'Select Stock Units:' and 'Select Image Shift Units:', both currently set to 'Inches'. To the right of these are 'Save' and 'Cancel' buttons. Below these is a section titled 'Current Default Ticket:' with two buttons: 'Select...' and 'None'. At the bottom, there are two checkboxes: 'Use the Document Name as the Default Job Name' (which is checked) and 'Write the Account When Saving the Job Ticket' (which is unchecked).

- To select an existing job ticket, click [Open...], then select the job ticket of your choice.
- To save a job ticket, click [Save...].
- To specify imaging, finishing, and image shift options, click the [Job Setup...] icon:



The following window displays:



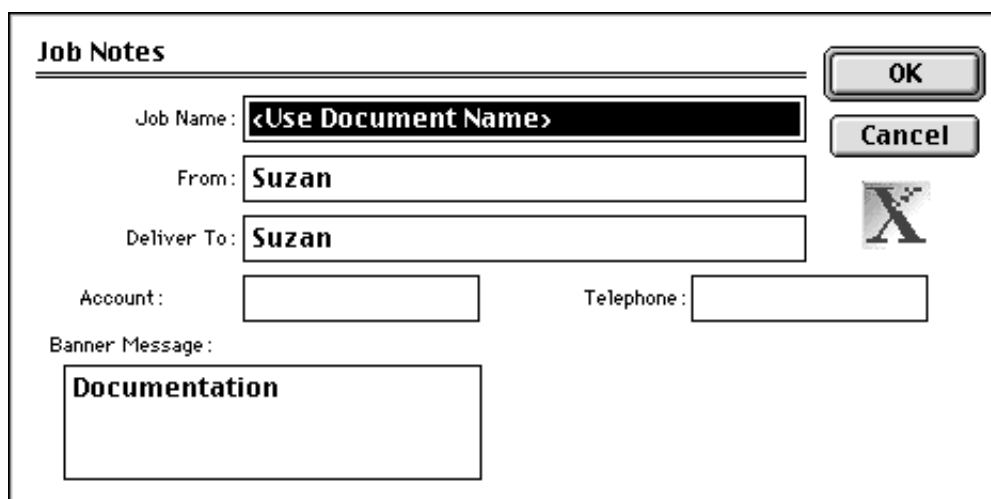
The **Job Setup** dialog box contains the following elements:

- Imaging:** A dropdown menu set to **1-Sided**. To its right is a small icon of a document with a folded corner.
- Finishing:** A dropdown menu set to **None**.
- Image Shift in Inches:** A section with a dashed border containing:
 - A large 'X' icon with a pixelated pattern.
 - Horizontal and vertical shift controls, both set to **0.00**.
 - A small icon of a document with an arrow pointing right.
- Buttons:** **OK** and **Cancel** buttons in the top right corner.

- To specify job notes, click the [Job Notes...] icon:



The following window displays:



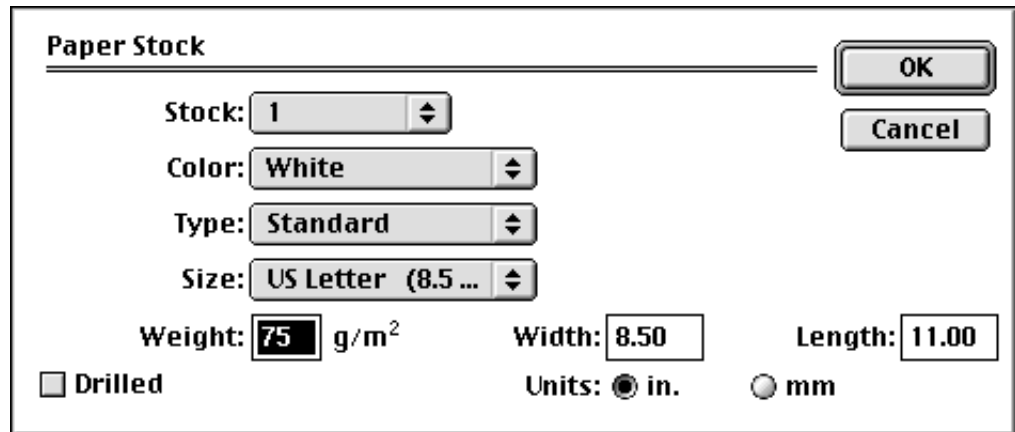
The **Job Notes** dialog box contains the following elements:

- Job Name:** A text field containing **<Use Document Name>**.
- From:** A text field containing **Suzan**.
- Deliver To:** A text field containing **Suzan**.
- Account:** An empty text field.
- Telephone:** An empty text field.
- Banner Message:** A text area containing the word **Documentation**.
- Buttons:** **OK** and **Cancel** buttons in the top right corner, and a large 'X' icon below them.

- To specify paper stocks, click the [Paper Stocks...] icon:



The following window displays:



The 'Paper Stock' dialog box contains the following fields and controls:

- Stock:** A dropdown menu with '1' selected.
- Color:** A dropdown menu with 'White' selected.
- Type:** A dropdown menu with 'Standard' selected.
- Size:** A dropdown menu with 'US Letter (8.5 ...)' selected.
- Weight:** A text field with '75' and a unit label 'g/m²'.
- Width:** A text field with '8.50'.
- Length:** A text field with '11.00'.
- Drilled:** A checkbox that is currently unchecked.
- Units:** Radio buttons for 'in.' (selected) and 'mm'.
- Buttons:** 'OK' and 'Cancel' buttons in the top right corner.

NOTE: Specifying "plain" as a custom paper type results in a blank Media Type on the NPS/IPS controller.

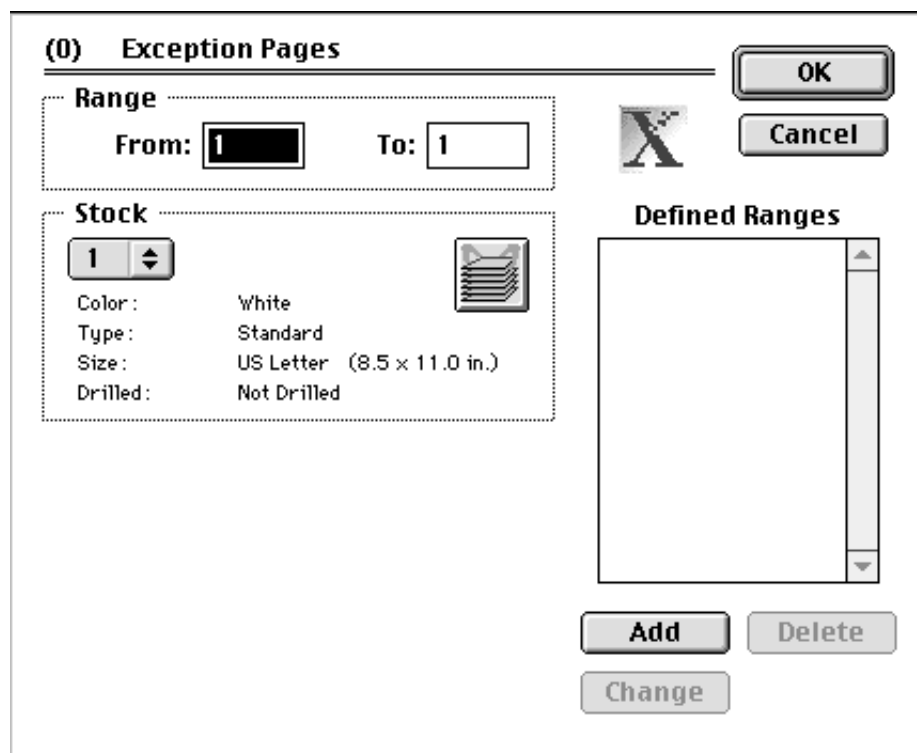
- To specify exception pages, click the [Exception Pages...] icon:



0

NOTE: The number below the icon indicates the number of exception pages.

The following window displays:

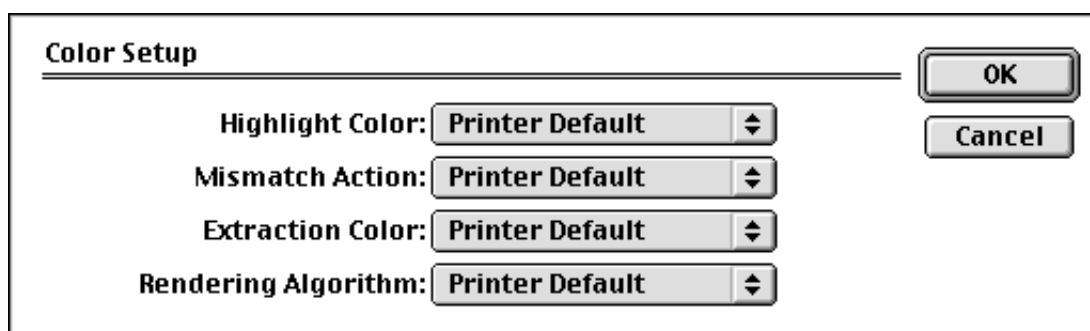


NOTE: Specifying "plain" as a custom paper type results in a blank Media Type on the NPS/IPS controller.

- To specify the highlight color options for your document (models 4850/4890/92C only), click the [Highlight Color...] icon:



The following window displays:



Monitoring and controlling printing

You can monitor and control printing from the Print Monitor application, which shows:

- Documents printing and the printer name
- Documents waiting to print
- Documents scheduled to print at a specified time
- Documents that will print when you schedule them.

When you begin printing, the PrintMonitor becomes active and its icon blinks, alternating with the Applications icon. To monitor print jobs, open the print monitor by double-clicking the PrintMonitor, or by clicking the PrintMonitor option from the Applications icon pull-down menu.

Highlight color printing

NOTE: This section applies to models 4850/4890/92C only.

The system allows you to print text and graphics using black and color dry ink. The highlight color print process combines pixels of black, white, and the highlight primary color, resulting in an image that resembles a halftone. Because the process requires only one pass, so it is faster than print processes that mix three or more colors. This process produces high-quality images without distorting line thicknesses.

DocuPrint NPS/IPS software provides conversion of full-color documents to highlight color. When you send a full-color document to the DocuPrint NPS/IPS, the printer “reads” any pigments corresponding to the highlight color and prints them in shades of that color. The other colors print in shades of gray.

Image quality considerations

Before submitting documents to the DocuPrint NPS/IPS, review the following quality considerations:

Graphic borders

Graphic objects that contain borders with a repeating line pattern (for example, in FrameMaker, a pen pattern) may print in either of the following ways:

- Missing lines or additional lines at the top or bottom of the frame.
- Using several different patterns in the same area.

You can correct missing or additional lines by stretching the frame slightly at the location of the missing or additional lines before converting the document into a PostScript file.

The printer driver uses a device-dependent operation to generate the image of a border using a repeating line pattern (pen pattern) within the graphic object. The device-dependent operation can lead to inconsistencies in output from various printers.

Such image quality problems are especially noticeable when you are using FrameMaker and combining drawing tools (rectangle, round rectangle, oval, or text frames) with any of the non-solid pen patterns from the Tools palette. If these graphic objects are copied through a screen capture to other applications, image quality problems may appear in the output from these applications as well.

Edge deletion

If you are using QuarkXPress software with a color driver (such as the QMS Colorscript or TekPhaser series), there is a zone of 1-1/4 inch at the top and 1/2 inch at the bottom of the page that does not print as a result of the driver limitation.

5. Submitting print jobs using Windows NT 4.0 drivers

This chapter explains how to install the PostScript printer drivers, and procedures for accessing the job ticket and submitting print jobs using the NT 4.0 drivers that were shipped with NPS/IPS.

NOTE: Screen captures in this chapter are representative of what you are likely to see on your system. Variations may occur, depending on the software version and on the specific product used (for example, 4850 NPS/IPS).

Installing and configuring the system

You can install the PostScript level 2 printer driver (transparent client) on your Windows NT 4.0 system.

The PostScript driver for your Windows NT 4.0 system is delivered with the NPS/IPS ship kit. If, however, you need to obtain a driver, you have the following options:

- Contact your local Xerox representative, who can source the driver for you.
- Download the driver through the following web site:
<http://www.xerox.com/drivers>

NOTE: NT 4.0 PostScript level 2 driver requires NPS/IPS version 1.5 or later.

NOTE: If you have any previously installed printer icons for the NT 4.0 transparent client, delete these icons and reboot your system before starting a new installation.

To install the printer driver from the DocuPrint Network Server software disks, follow these steps:

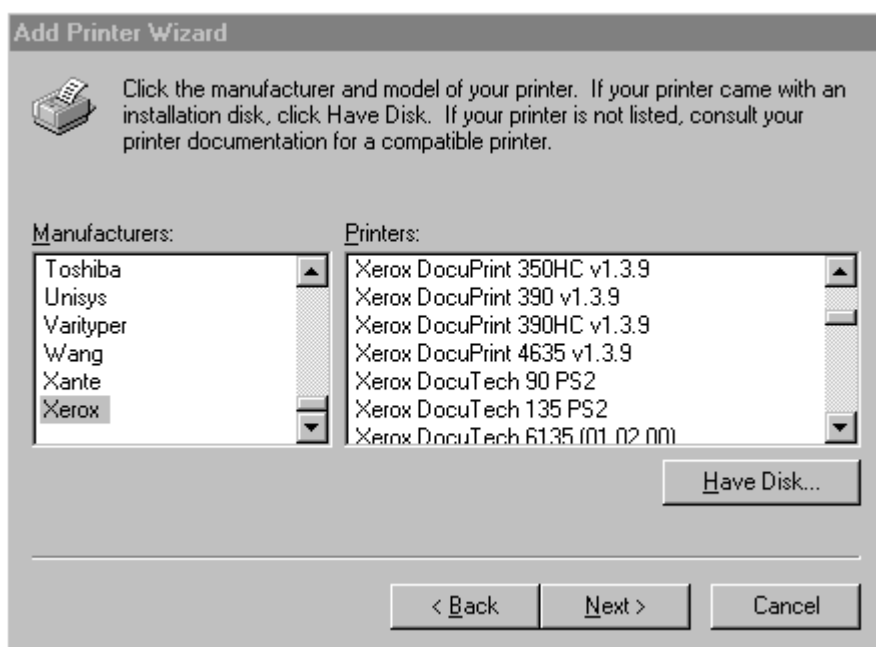
CAUTION

If you select a file server from the printer port and are not logged onto the server, NT 4.0 does the following:

- *Not display the job ticket properties dialog box from an application; and*
- *Give the following error message once you select Properties for the printer icon from the Printers folder:*

You don't have access to this printer

You can log onto the selected file server any time following the NT 4.0 PS2 transparent client installation, using the Network Neighborhood icon.



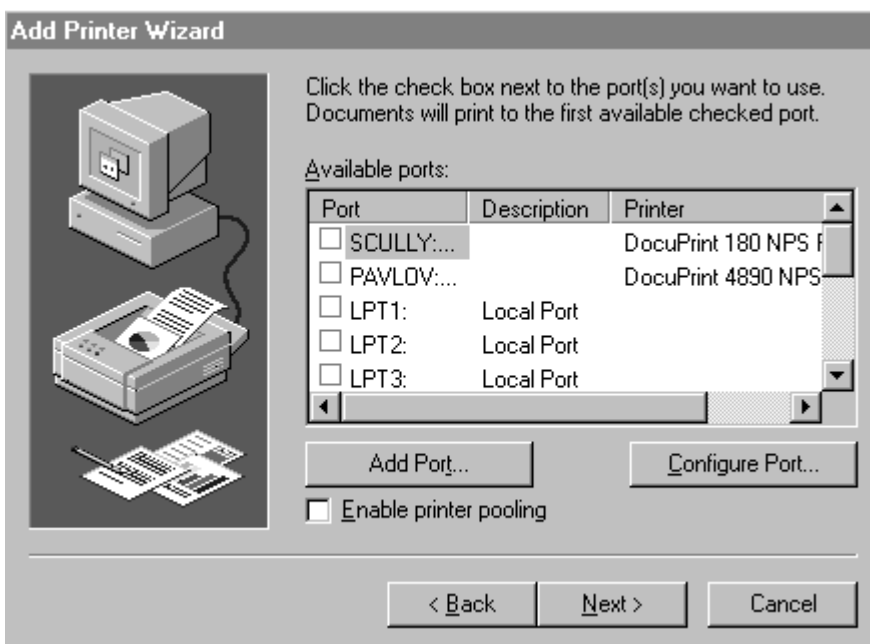
1. Double click the My Computer icon.
2. Double click the Printers icon.
3. Double click the Add Printer icon.

The following screen displays:



4. Click [Next>].

The following screen displays:

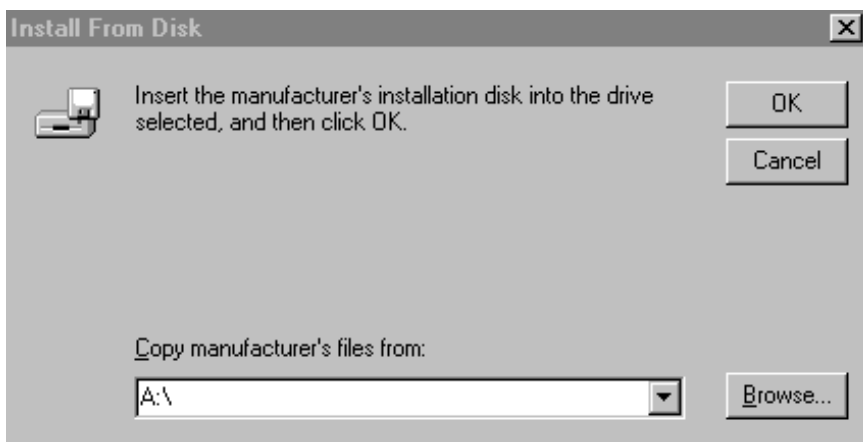


5. Click the port your printer is connected to, then click [Next>].

6. Click [Have Disk...].

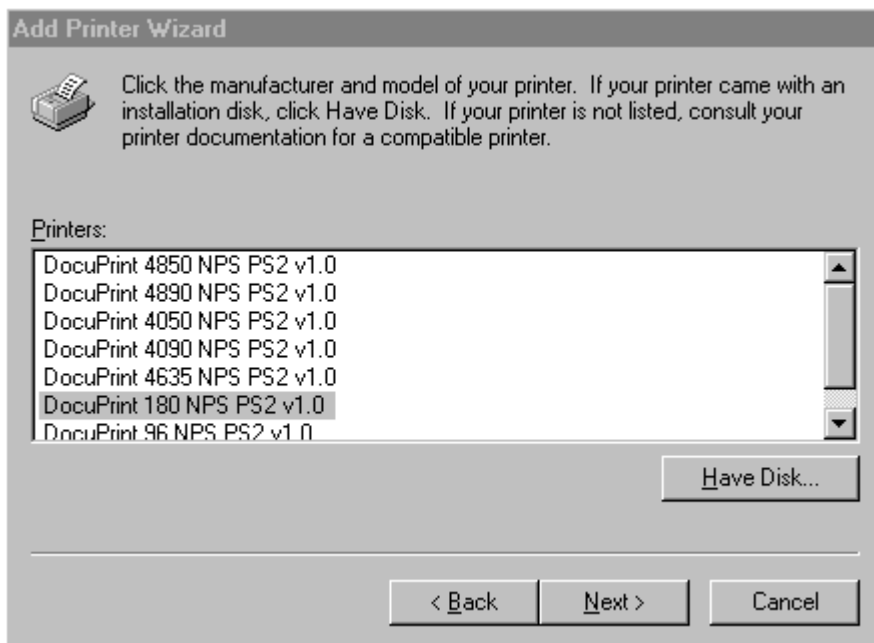
NOTE: Do NOT select any of the listed Manufacturers or Printers.

The following screen displays:



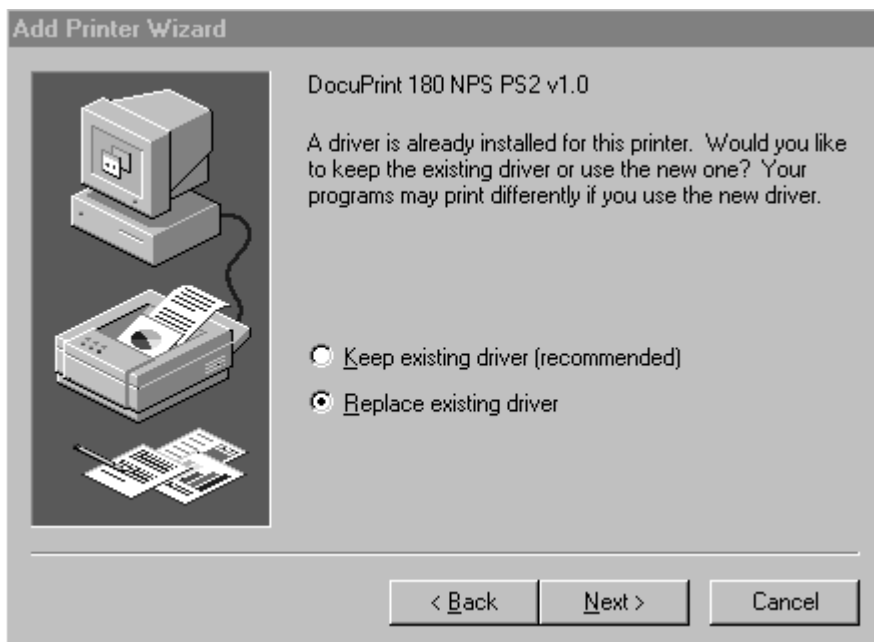
7. Insert the NT 4.0 PS2 Transparent Client disk into the 3.5" disk drive of your PC, then click [OK].

A list of printers displays on the screen.



8. Click the model of your printer, then click [Next>].

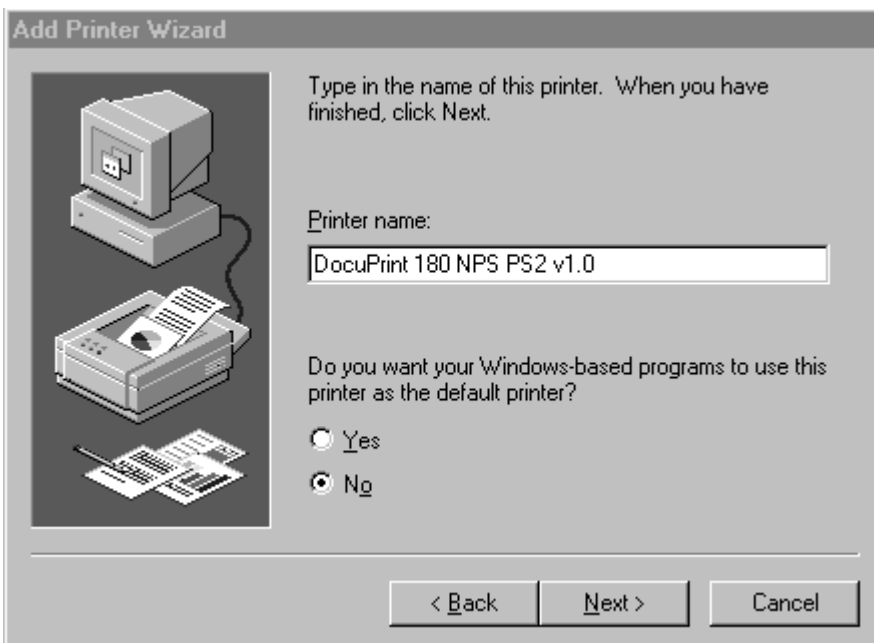
The following screen displays:



9. Click [Next>] again.

NOTE: Always choose the option, "Replace existing driver."

The following screen displays:

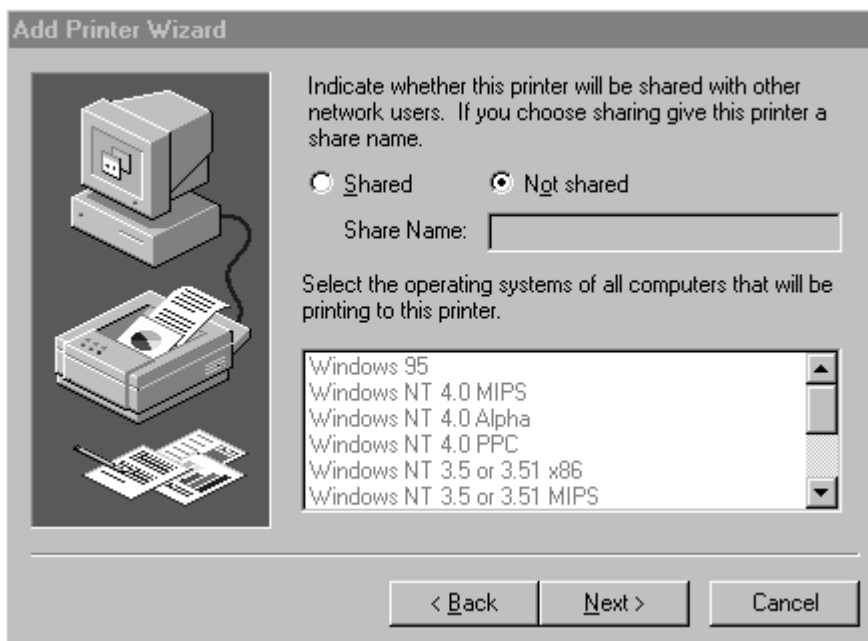


10. Type the name of the printer, or accept the default.

NOTE: This will be the printer icon name.

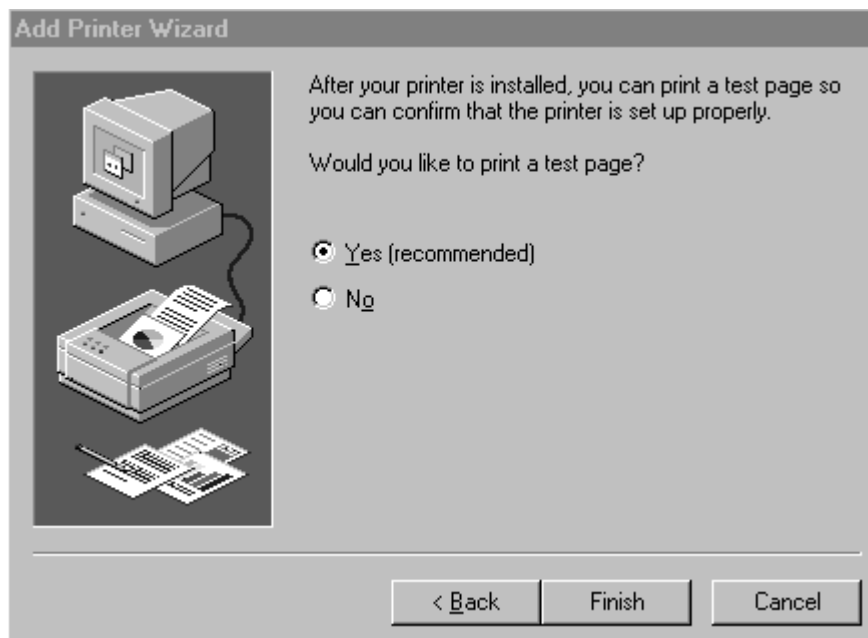
11. If this is the first printer installed, click [Next>]. Otherwise, click [Yes] to use this printer as the default printer for all Windows applications, then click [Next>].

The following screen displays:



12. If the printer will be shared with other network users, click [Shared] and type in the shared printer name, then click [Next>]. Otherwise, leave it as the default, and click [Next>].

The following screen displays:



13. Click [Yes] to print a test page, or [No] to skip this option, then click [Finish].

The selected printer is now installed, and a new printer icon appears in the Printers folder. The test page prints to the designated printer.

Printing from Windows NT 4.0

You can send documents to your DocuPrint printers from Windows NT 4.0 in several ways:

- From within your Windows applications, using the Xerox DocuPrint PostScript level 2 printer driver.
- From within your Windows applications, using the Windows NT native printer driver and the appropriate DocuPrint NPS/IPS PPD file (see list below).
- From within your Windows applications, using a third-party PostScript or PCL printer driver.

NOTE: If you use a third-party PostScript printer driver, some drivers provide access to Xerox printer-specific features by using the following Xerox PPD files:

- *XDP4850.PPD*
- *XDP4890.PPD*
- *XDP92C.PPD*
- *XDP4050.PPD*
- *XDP4090.PPD*
- *XDP4635.PPD*
- *XDP180.PPD*
- *XDP96.PPD*
- From the Xerox Document Submission (XDS) software.
- From the Xerox Quick Print software.

CAUTION

Third-party printer drivers have not been tested with DocuPrint NPS/IPS. Make sure to test any third-party driver for compatibility with your system.

Both XDS and Quick Print provide a series of dialog boxes you use to select a document (PDL or print ready file), set up a job ticket, and submit your print job.

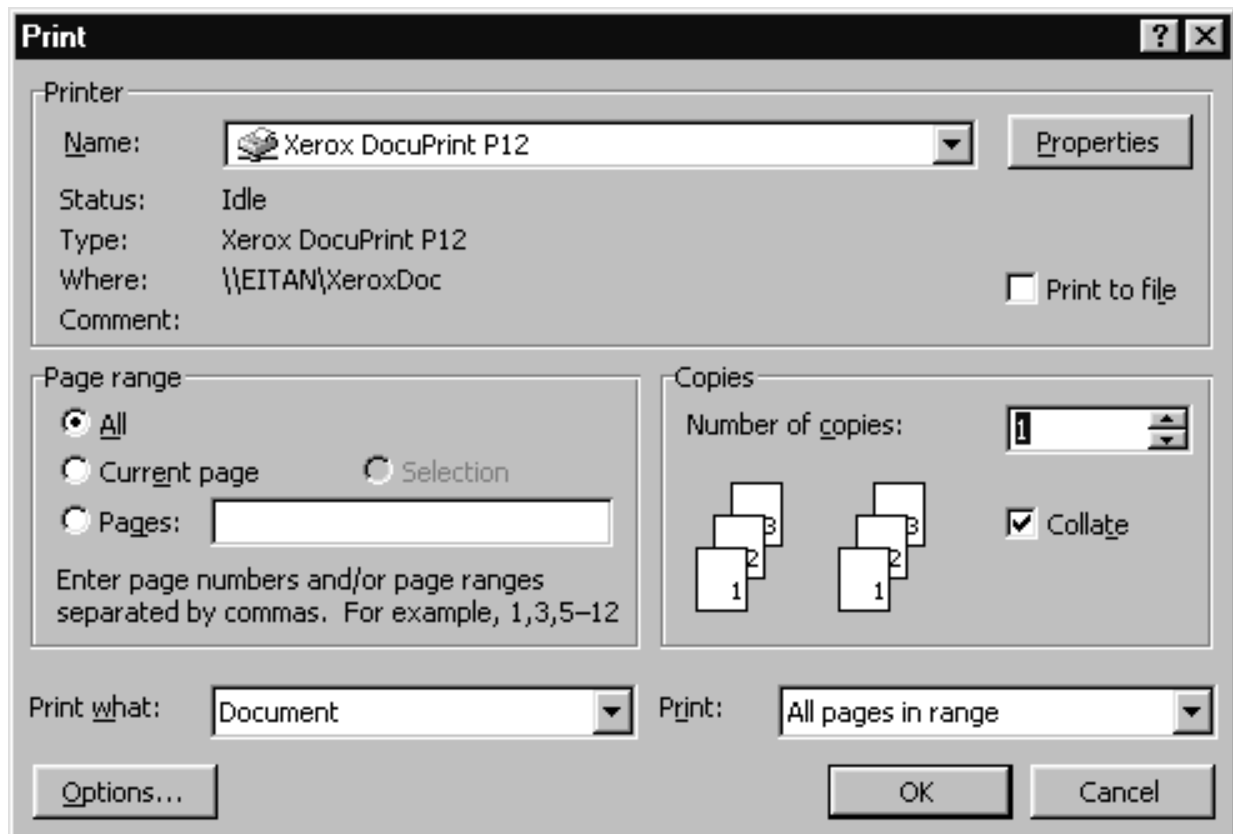
The following sections explain how to print using your Windows NT 4.0 drivers. For information on printing through the XDS software, refer to the *Guide to Job Submission for Windows*. For information on printing through the Quick Print software, refer to the chapter “Submitting print jobs from Quick Print for Windows NT 4.0” in this guide.

Printing from your Windows application

To print from a Windows application, complete the following steps:

1. Access your application software.
2. Open the document you want to print.
3. From the File menu of the document, click [Print...].

The Print window displays.



NOTE: The application examples used in this document are illustrated using Microsoft Word 97. Accessing the Xerox Job Ticket Properties/Setup window may require different or additional steps, depending on the document application used. Refer to your specific application documentation for more information.

Also, some features on the application screen are not supported by NPS/IPS, such as collate. Refer to your System Overview Guide for information on the supported features.

*For multiple **collated** copies, do not specify the number of copies on this screen. Rather, enter the number of copies in the job ticket.*

4. On the Print window, pull down the Printer name list. Click the printer driver you intend to use, then click [Properties].

The Setup window displays.

DocuPrint 4635 NPS Setup: <No Job Ticket>

Ticket Settings Options Help Testing

Copies: 1 ☒ All Pages From: 1 To: 9999

Image Description

Orientation: Portrait

Sides Imaged: 1-Sided

Image Shift: X: 0.00 in. Y: 0.00 in.

Paper Stock 1

8.5 x 11.0 inches [US Letter]

Standard

White

Drilled

Finishing

No Finishing

Paper Weight

Weight: 75 g/m²

About Help Default All Cancel OK

Open a Job Ticket...

NOTE: This window varies slightly, depending on the NPS/IPS printer model selected.

5. Set up the job ticket for your desired print options (see "Setting up a job ticket"), then click [OK].
6. At the Print window, click [OK] to send your job to a printer (print queue) or to a file, depending on the connection you made in the Printer dialog box. To cancel a print job you have sent, click [Cancel] in the screen message and the print job is removed from the queue.

NOTE: Specifying "plain" as a paper type results in a blank Media Type on the printer controller.

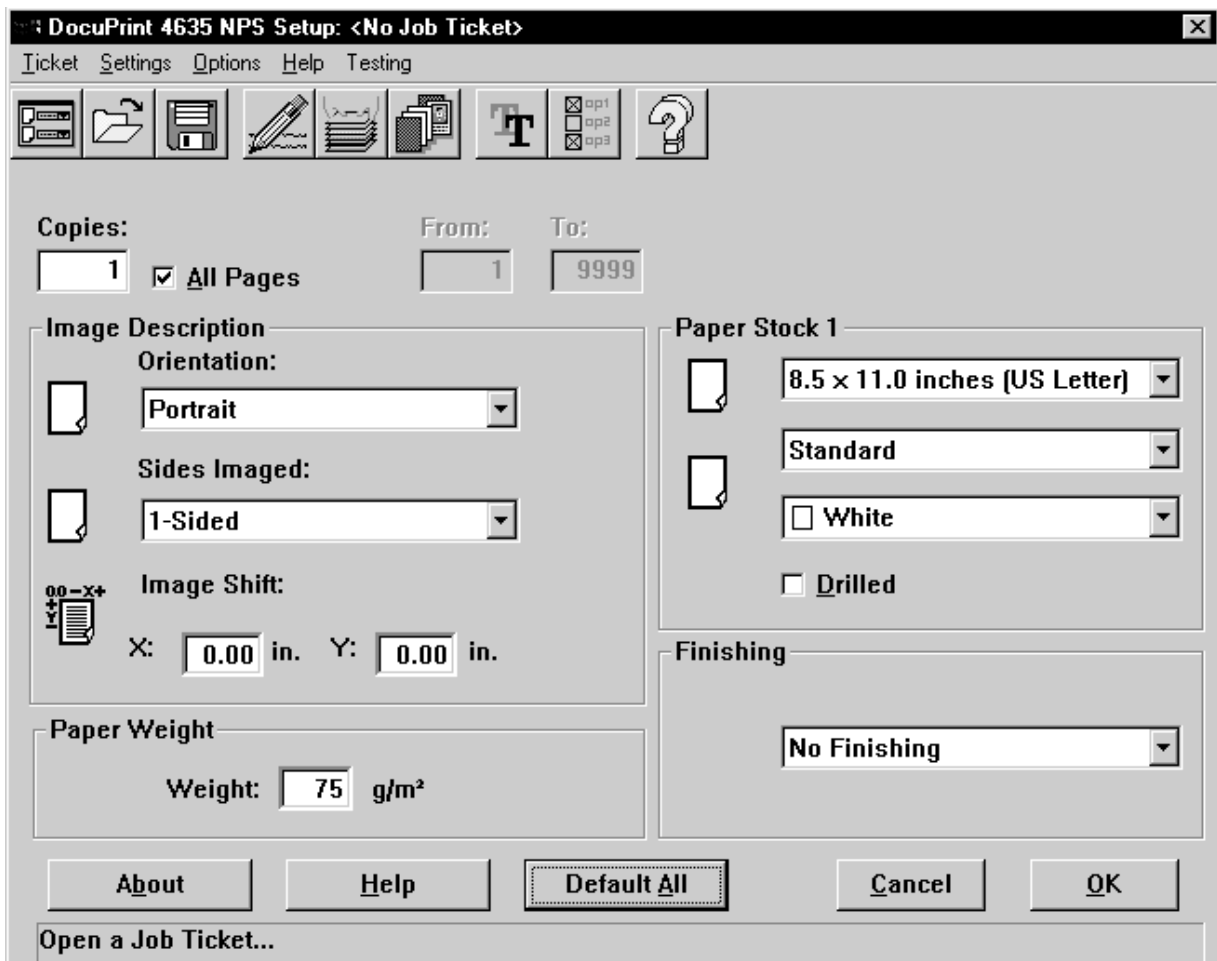
Opening, saving, and resetting job tickets

A job ticket is an electronic record that specifies printing and finishing options. You can use an existing job ticket, or set up a new one, then save it for future documents.

Opening a job ticket

To open an existing job ticket, follow these steps:

1. Access the Setup window (see "Printing from your Windows application").



DocuPrint 4635 NPS Setup: <No Job Ticket>

Ticket Settings Options Help Testing

Copies: 1 ☒ All Pages From: 1 To: 9999

Image Description

Orientation: Portrait

Sides Imaged: 1-Sided

Image Shift: X: 0.00 in. Y: 0.00 in.

Paper Stock 1

8.5 x 11.0 inches (US Letter)

Standard

☐ White

☐ Drilled

Finishing

No Finishing

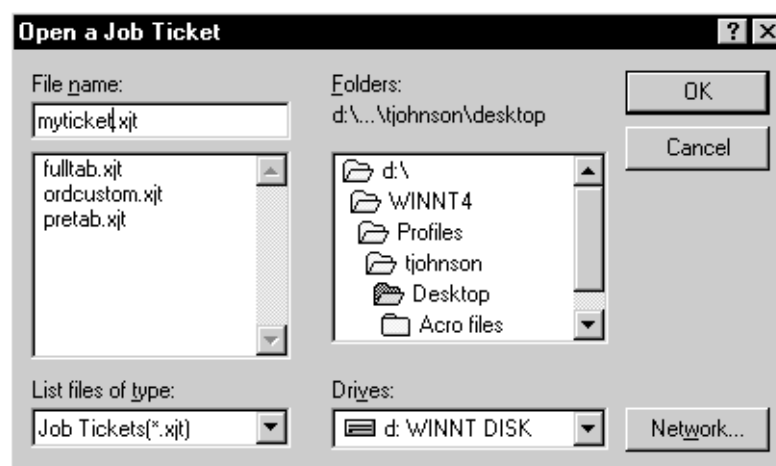
About Help Default All Cancel OK

Open a Job Ticket...

2. From the Setup window, click the Open a Job Ticket... icon.



3. Select the folder, then the file name in the File name text box.



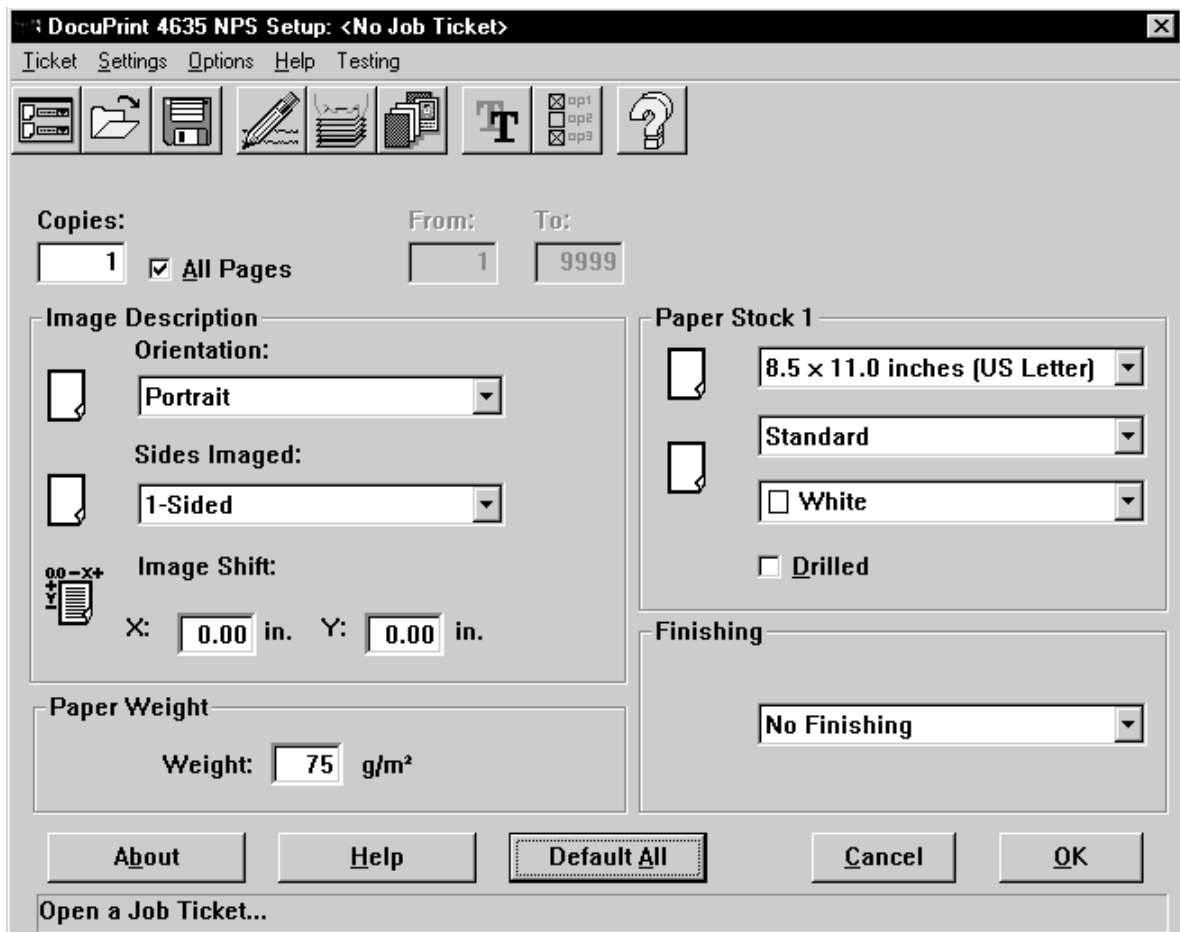
4. Click [OK].

Saving a job ticket

Once you save a job ticket, you can reuse the job ticket for different documents without having to reenter the job ticket settings.

To save a job ticket to a file:

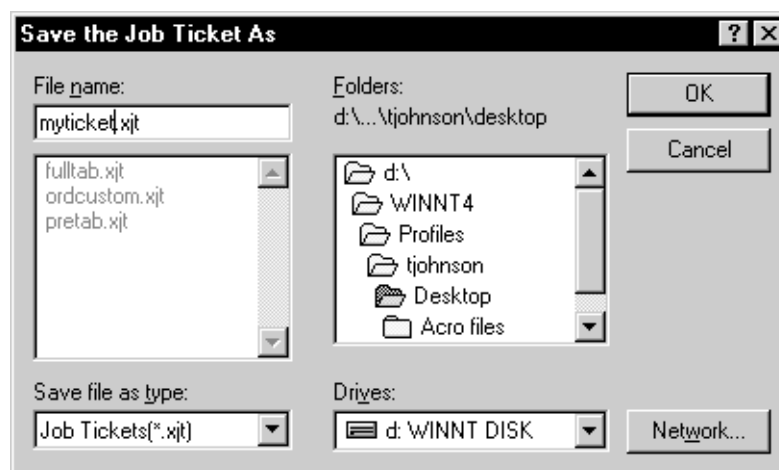
1. Access the Setup window. Refer to “Setting up a job ticket” if required.



2. From the Setup window, click the Save Job Ticket As... icon.



3. Type a unique name in the File name text box.

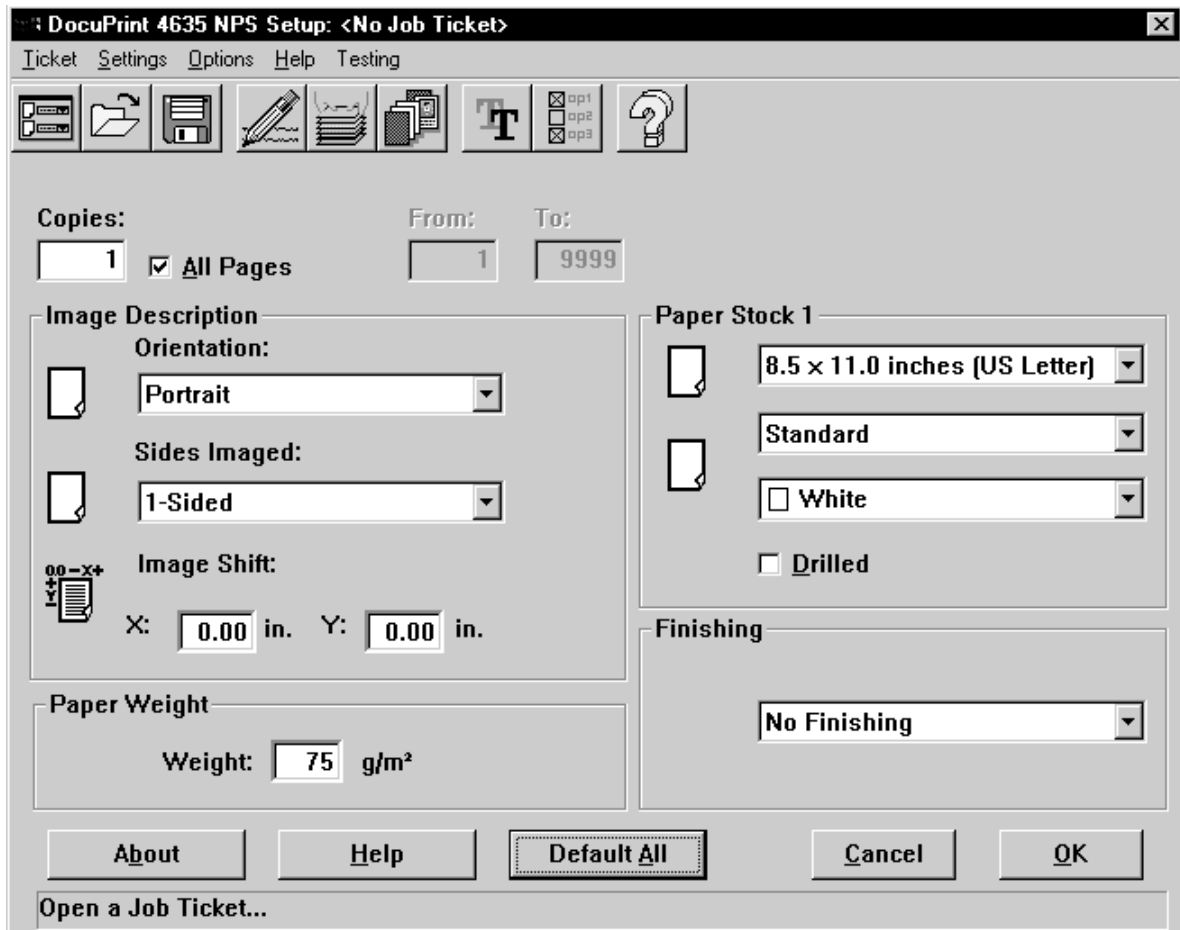


4. Click [OK].

Resetting a job ticket

To reset print parameters to the default job ticket parameters:

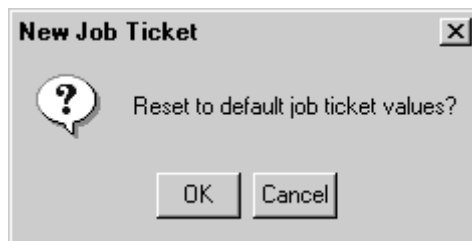
1. Access the Setup window. Refer to “Setting up a job ticket” if required.



2. From the Setup window, click the Reset with Default Job Ticket Values icon.



3. Click [OK] to confirm.



Setting up a job ticket

Settings are performed through the Setup window. It contains a row of icons that allow you to specify print and finishing options. The icons are organized by printer features and functions.

NOTE: Many functions may be set up both through the application and through the job ticket. It is recommended that, whenever possible, you set up the desired functions through the job ticket.

NOTE: The features that appear in the list boxes vary, depending on the Xerox DocuPrint printer you are using. Other features may not be selectable due to conflicts among the job ticket settings you selected.

1. Set the parameters you want to change (Refer to the following sections.)
2. To save the information and return to the Print window, click [OK]. To return to the Print window without saving any changes, click [Cancel].

NOTE: The Highlight Color... icon is available only when the 4850/4890/92C model is selected.

Specifying the number of copies to print

Follow these steps:

1. From the Setup window, click the Copies text box to highlight the number of copies in it.
2. Enter the number of copies you want to print, between 1 and 9,999.

Specifying which pages to print

From the Setup window, enter the range of pages to print:

- Click [All Pages] to print the entire document, or
- Deselect [All pages], then type the starting page in the From text box and the last page in the To text box.

Specifying page orientation

From the Setup window, indicate the page orientation:

- Portrait
- Landscape

Specifying sides to image

You can use the Sides Imaged option to specify whether to print on one or both sides of the paper.

1. From the Setup window, click the [Sides Imaged] list box.
2. Select the imaging option you want to use.
 - Click [1-sided] to print the document on one side of each sheet of paper (simplex printing).
 - Click [2-sided] to print the document on both sides of each sheet of paper (duplex printing).
 - Click [Head-to-Toe] to print the document in calendar format. Both sides of the page are printed but the position of the image is reversed (from top to bottom) on every other page. Head-to-Toe is also known as tumble duplex printing.

Setting the image shift

You can use the Image Shift option to offset the printed image from the edges of the page. This is particularly useful for bound or drilled jobs. The image shift setting is applied automatically to both sides of the print for two-sided printing. When the Image Shift option is set

at 0 (zero), the image is not shifted in any direction.

1. From the Setup window, set the unit of measure by selecting the Preferences icon. Refer to the section “Setting the preferences” for more information.
2. To specify a horizontal image shift, enter the number of units to shift the image from the left edge of the page in the X text box. A positive number shifts the image to the right, and a negative number shifts the image to the left.
3. To specify a vertical image shift, enter the number of units to shift the image from the top edge of the page in the Y text box. A positive number shifts the image up, and a negative number shifts the image down.

NOTE: An image shift set with the Image Shift option may interfere with any binding offset set in the document file by the application.

Specifying the paper weight

On the Paper Stocks window, enter the number of grams per square meter (gsm) in the [Weight] box. You can enter a number in the range 60 to 413. The default is 75 gsm.

Programming the Main Stock (Stock 1)

This area allows you to specify the paper type, size and color. Refer to the section “Specifying paper stocks” for detail.

Selecting the finishing features

The finishing features that are available on your printer determine the format of the completed print job. DocuPrint always collates the pages of a document in sequential order unless “no collating” options are selected.

1. From the Setup window, click the [Finishing] list box.
2. Click the option you want to use.

NOTE: [No Finishing] indicates that the document is not bound or stapled.

NOTE: Depending on the printer configuration, some finishing options is not available.

Creating job notes

You can use the Job Notes dialog to enter information about the print job. You must supply the job name and sender's name. All other job information is optional.

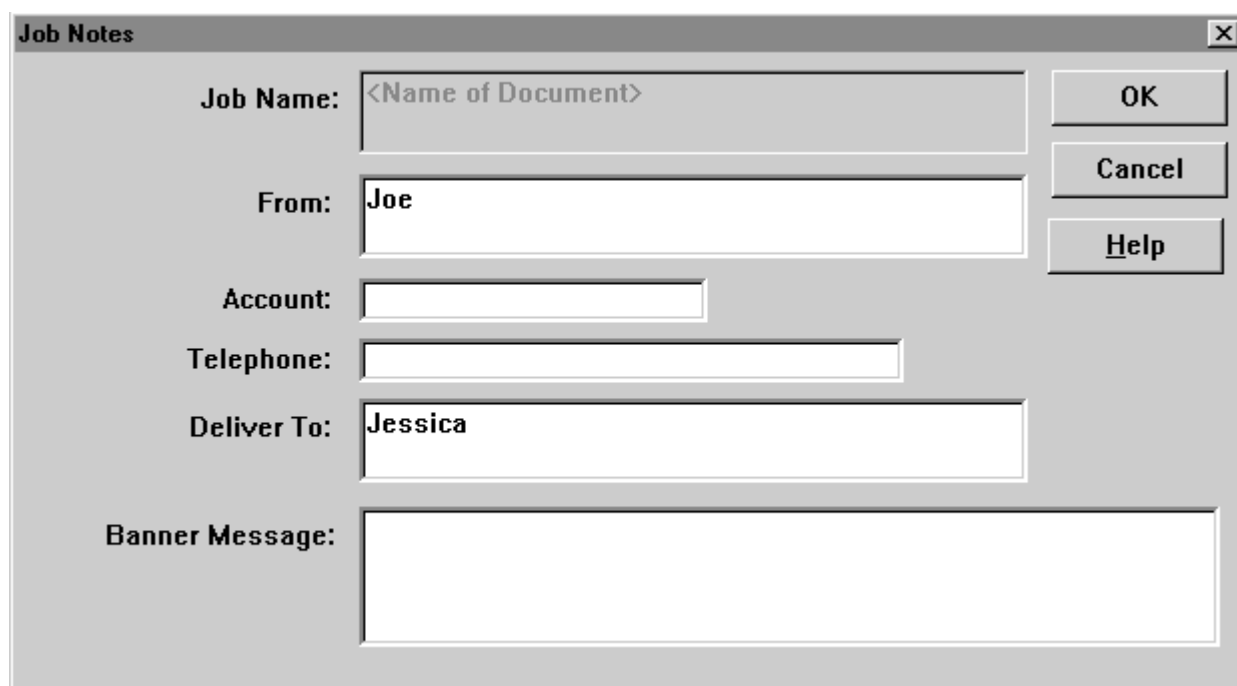
You can also place the document's file name in the Job Name field automatically using the Preferences dialog. See “Setting the preferences” for more information.

1. On the Setup window, click the Job Notes... icon.



2. You may change the name of a job if the words “Default Job” appear in the [Job Name] box.

To change the name of the job, type over the current setting from the [Job Name] box (up to 40 characters).



The image shows a 'Job Notes' dialog box with a title bar containing a close button (X). The dialog contains several text input fields and three buttons on the right. The fields are labeled 'Job Name:', 'From:', 'Account:', 'Telephone:', 'Deliver To:', and 'Banner Message:'. The 'Job Name' field contains the text '<Name of Document>'. The 'From' field contains 'Joe'. The 'Deliver To' field contains 'Jessica'. The 'Banner Message' field is a larger text area. The buttons are 'OK', 'Cancel', and 'Help'.

Field Label	Field Content
Job Name:	<Name of Document>
From:	Joe
Account:	
Telephone:	
Deliver To:	Jessica
Banner Message:	

NOTE: You can change the job name only if [Use the Document Name] as the Job Name is not selected in the Preferences dialog. See "Setting the preferences" for more information.

3. To change the name of the job sender, delete the current setting in the [From] text box. Then enter another name in the [From] text box (up to 40 characters).
4. In the [Account] text box, enter the billing account number (up to 12 characters).

In the [Account] text box, you can use only the following characters:

- The capital letters A through Z
- The numbers 0 through 9
- number sign (#)
- plus sign (+)
- hyphen (-)
- slash(/)
- asterisk (*)
- period (.)
- the space character.

NOTE: The first character in the account field cannot be a space character.

5. In the [Telephone] text box, enter your telephone number (up to 19 characters). The telephone number that you entered appears as part of the Banner Message on the Header Page when the job is printed.
6. To change the name of the job receiver, delete the current setting from the [Deliver To] text box. Then enter another name in the [Deliver To] text box (up to 40 characters).
7. In the [Banner Message] text box, enter any message you want to appear on the banner sheet (up to 100 characters).
8. To save changes made in the Job Notes, click [OK]. Otherwise, click [Cancel].

Specifying paper stocks

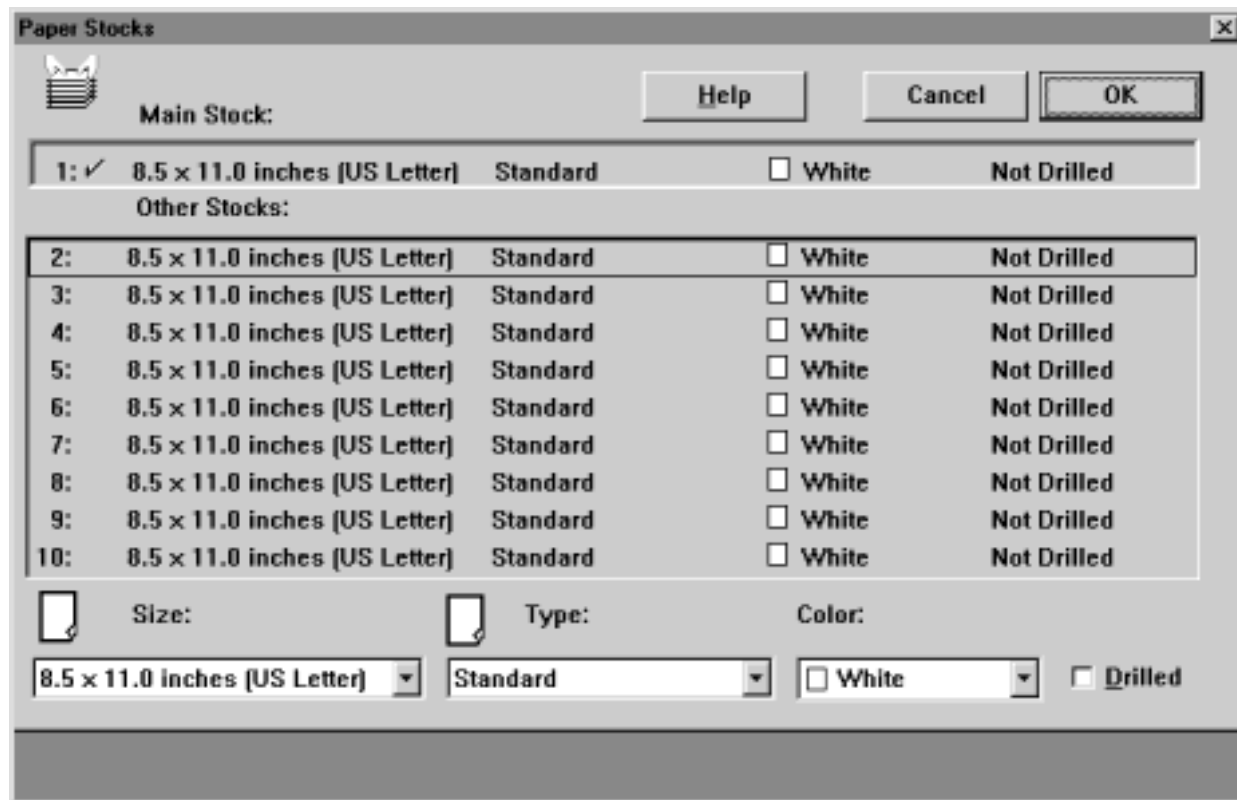
You can use the Paper Stocks dialog to specify the size, type, and color for up to ten paper stocks. The default paper stock is Paper Stock 1. Other stocks may be specified for use through the Special Pages dialog (refer to the section “Specifying Special Pages”).

To select the paper stock you want to configure, complete the following steps:

1. On the Setup window, click the Paper Stocks... icon.



2. Click the stock number you want to change.



The 'Paper Stocks' dialog box is shown. It has a title bar with a close button. Below the title bar is a 'Main Stock:' section with a paper icon, a 'Help' button, a 'Cancel' button, and an 'OK' button. Below this is a table of stocks. The first row is selected, indicated by a checkmark in the first column. The table has five columns: Stock Number, Size, Type, Color, and Drilled. Below the table are three sections: 'Size:' with a paper icon and a dropdown menu, 'Type:' with a paper icon and a dropdown menu, and 'Color:' with a dropdown menu and a 'Drilled' checkbox.

Main Stock:				
1: ✓	8.5 × 11.0 inches (US Letter)	Standard	<input type="checkbox"/> White	Not Drilled
Other Stocks:				
2:	8.5 × 11.0 inches (US Letter)	Standard	<input type="checkbox"/> White	Not Drilled
3:	8.5 × 11.0 inches (US Letter)	Standard	<input type="checkbox"/> White	Not Drilled
4:	8.5 × 11.0 inches (US Letter)	Standard	<input type="checkbox"/> White	Not Drilled
5:	8.5 × 11.0 inches (US Letter)	Standard	<input type="checkbox"/> White	Not Drilled
6:	8.5 × 11.0 inches (US Letter)	Standard	<input type="checkbox"/> White	Not Drilled
7:	8.5 × 11.0 inches (US Letter)	Standard	<input type="checkbox"/> White	Not Drilled
8:	8.5 × 11.0 inches (US Letter)	Standard	<input type="checkbox"/> White	Not Drilled
9:	8.5 × 11.0 inches (US Letter)	Standard	<input type="checkbox"/> White	Not Drilled
10:	8.5 × 11.0 inches (US Letter)	Standard	<input type="checkbox"/> White	Not Drilled

Size: Type: Color: ☐ Drilled

NOTE: The check mark next to the stock number indicates the stock currently in use by the job.

3. Define the Size, Type, and Color of the paper stock, and whether to use drilled paper (refer to the sections that follow).
4. To save the parameters, click [OK]. To cancel your changes, click [Cancel].

NOTE: Main stock (Stock #1) programming is performed on the Setup window.

Selecting the paper stock size

NOTE: Unless you explicitly want to print a smaller image on a larger sheet of paper, or a larger image on a smaller sheet of paper, make sure that the paper size in the application matches the paper size in the job ticket.

Follow these steps to select the paper stock size:

1. On the Paper Stocks window, click the [Size] list box.
2. Select the size you want to use.

If you click [Custom], enter the required size in the [Width] and [Length] text boxes, or use the spin button to increase or decrease the value in the text box. The size you specify must fall within the ranges indicated below.

For 4850/4890/92C or 2060 models:

- Width ranges from 8.0 to 8.5 inches / 203 to 216 mm
- Length ranges from 10.0 to 14.33 inches / 254 to 364 mm

For 96/4635/180 models:

- Width ranges from 7.00 to 18.25 inches / 178 to 464 mm
- Length ranges from 10.0 to 14.33 inches / 254 to 364 mm

You can change the unit of measure using the Preferences... icon. See "Setting the preferences" for more information.

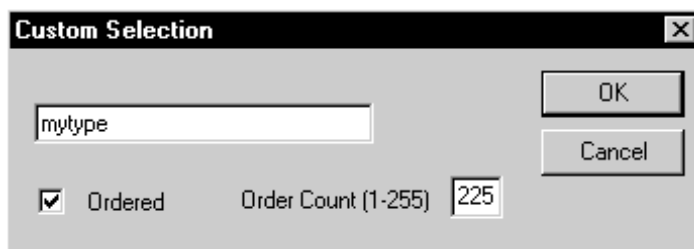
Selecting the paper stock type

Follow these steps to select the paper stock type:

1. On the Paper Stocks window, click the [Type] list box.
2. Click the type you want to use:
 - [Standard] selects opaque, medium-weight paper.
 - [Transparency] selects plastic sheets (up to 9 inches wide).
 - [Custom] selects any special paper type that is not listed. Enter the name of the paper type in the Custom Selection dialog (up to 27 characters).

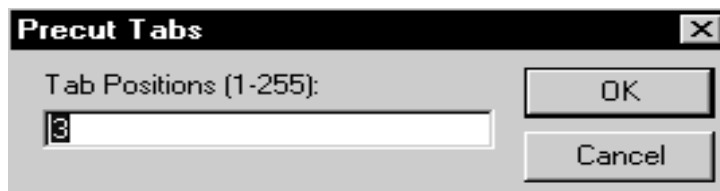
NOTE: Specifying "plain" as a custom paper type results in a blank Media Type on the printer controller.

With the 96, 4635 and 180 models, you may utilize ordered stocks, by clicking [Ordered], then specifying up to 255 items.



For 96, 4635 and 180 models:

- [Precut Tab] selects the number of tabs per set. The default is a 3-cut tab.



- [Full Cut Tab] selects one tab per set, which runs down along the side edge.

Selecting the paper stock color

Follow these steps to select the paper stock color:

1. On the Paper Stocks window, click the [Color] list box.
2. Click the color you want to use.

If you click [Custom], enter the custom color name of the stock in the text box (up to 27 characters).

Selecting drilled stock

To use drilled paper for your print jobs, click the [Drilled] check box in the Paper Stocks window.



Specifying Special Pages

You can use the Special Pages dialog to specify paper stock for any pages or range of pages in the print job. For example, you may want to print a page or range of pages on transparency stock.

If you specify overlapping page ranges, the system automatically consolidates the information for you. For example, you may have specified blue stock for pages 1 through 50 of a document. If you later define a page range of 5 through 10 using green stock, the system shows the following information in the Special Pages List:

Pages			
	Stock		
1:	4	1	(for blue stock)
5:	10	2	(for green stock)
11:	50	1	(for blue stock)

The Special Pages dialog includes a Stocks... icon that provides access to the Paper Stocks dialog. This dialog can remain open while you are programming the Special Pages, and you can toggle back and forth between the dialogs. See “Specifying paper stocks” for more information about using the Paper Stocks dialog.

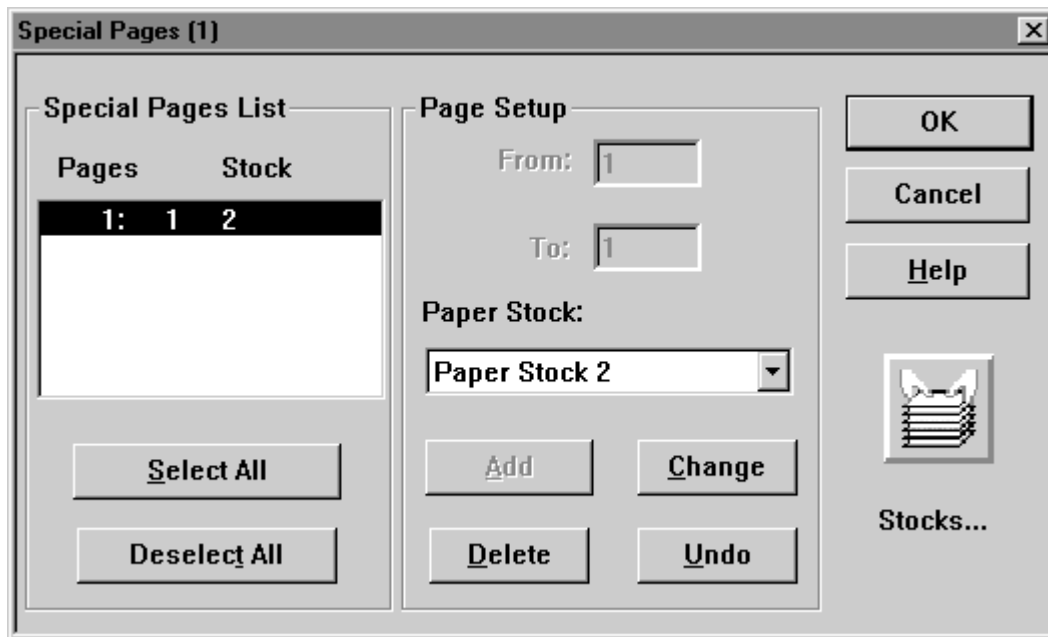
Adding Special Pages

Follow these steps to add special pages:

1. From the Setup window, click the Special Pages... icon.



2. From the Special Pages dialog box perform the following:



- a. In the [From] text box, enter the number of the first page in the range of Special Pages.
 - b. In the [To] text box, enter the number of the last page in the range of Special Pages.
 - c. Click the [Paper Stock] list box, or click the [Stocks...] icon on the right and refer to the section “Specifying paper stocks” for details.
 - d. Click the paper stock you want to use for the Special Pages.
3. Click [Add].
 4. Continue adding Special Pages until you have added all that you want. You can define a maximum of 250 Special Pages entries/items.
 5. To save the parameters you specified and return to the Setup window, click [OK]. To return to the Setup window without saving any changes, click [Cancel].

Changing Special Pages

Follow these steps to change Special Pages:

1. Locate and select the range you want to change in the Special Pages List.
2. Make any necessary changes, and click [Change].
3. To save the parameters you specified and return to the Setup window, click [OK]. To return to the Setup window without saving any changes, click [Cancel].

Deleting Special Pages

Follow these steps to delete Special Pages:

1. Locate and select the range or ranges you want to delete in the Special Pages list.
2. Click [Delete].
3. To delete the specified Special Pages and return to the Setup window, click [OK]. To return to the Setup window without saving any changes, click [Cancel].

Specifying highlight color options

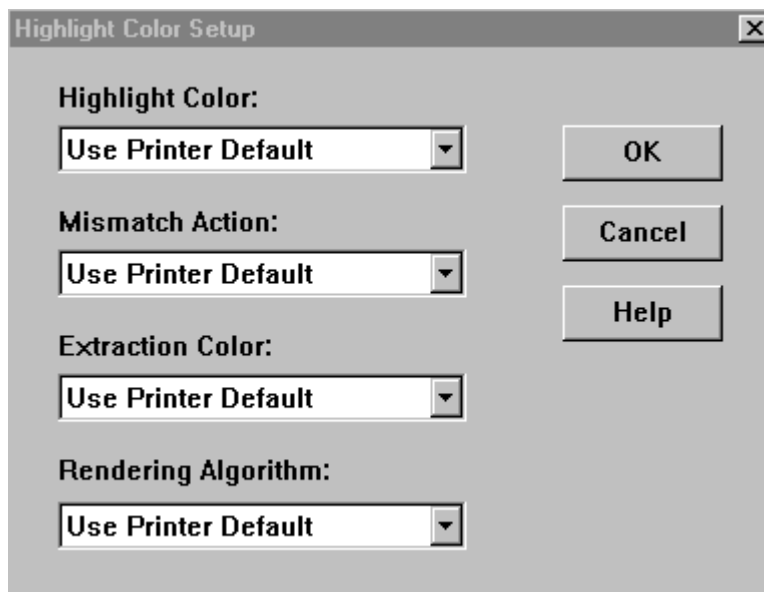
NOTE: Highlight color options are only available with highlight color printers (4850/4890/92C models).

You can use the Highlight Color Setup dialog box to specify the highlight color options for your document.

1. On the Setup window select the Highlight Color... icon.



2. The Highlight Color Setup dialog box displays:



3. Select the highlight color options for your document (refer to the sections that follow).
4. To save the parameters, click [OK]. To cancel your changes, click [Cancel].

Selecting the highlight color

You can select a specific highlight color to use in your document or you can click [Printer default] as the highlight color choice.

To select the highlight color to use in your document:

1. From the Highlight Color Setup dialog box, select the [Highlight Color] list box.
2. Select the color you want to use.

NOTE: To use the executive black option, which allows printing in black and white gray scale, select black.

3. Click [OK].

Selecting the color mismatch action

You can use the Mismatch Action setting to control the action the system takes if there is a mismatch between the color installed at the printer and the color selected as the highlight color. In this situation, you have the following choices:

- **Use Printer Default**
This option overrides all job settings and uses the printer default settings.
- **Hold Job**
This option retains a job in print queue until the highlight color at the printer matches the color specified in the job.
- **Cancel Job**
This option deletes the job from the print queue if highlight color at the printer does NOT match the color specified for the job.
- **Use Loaded Color**
This option overrides the highlight color job setting and prints using the loaded highlight color on the printer.

To select a color mismatch action:

1. From the Highlight Color Setup dialog box, select the [Mismatch Action] list box.
2. Select the color mismatch action you want to use.
3. Click [OK].

Selecting the extraction color

You can use the Extraction Color to specify the parts of a color document to print in the loaded color and the parts to print in shades of the loaded color. You can also click [Printer default] as the color choice.

In a multi-color document, this option may be set differently from the Highlight Color setting. This enables the system to print in varying shades of the loaded color.

If you do not specify the Extraction Color for a job, the system uses the color specified for the Highlight Color.

1. From the Highlight Color Setup dialog box, select the [Extraction Color] list box.
2. Select the Extraction Color you want to use.
3. Click [OK].

Selecting the rendering algorithm

You can use Mapping Mode to specify which qualities are the most important to preserve, since some information is lost in mapping from a three-dimensional color application (such as RGB) to a two-dimensional color application provided with highlight color printing.

The following mapping mode options are available:

- **Use Printer Default**
This option overrides job settings and uses printer default settings.
- **Monochrome**
This option specifies black and white printing only.
- **Pictorial**
This option is for use with photographic images. It uses luminance information to map full color to highlight colors. The color portions of an image that are the same color as the specified extraction color are printed in a shade of the highlight color.
- **Presentation**
This option is for use with presentation graphics. It uses hue information to map full color to highlight colors. Any color element in the graphic is printed in a shade of highlight color. Non-color elements (black, white and gray) are printed in black, white and shades of gray. This option distinguishes between different colors and is a good choice for charts and diagrams because they typically use distinctly different colors.
- **Automatic**
This option chooses a mapping method on an object-by-object basis. For example, this option applies the pictorial mapping for pictures and the presentation mapping for other objects (filled areas, strokes, and text).
- **ColorToHighlight**
This option discards the hue information and preserves the saturation and value of the color application.
- **Color Tables**
This option uses preset color tables to perform the mapping. It is provided for compatibility and has no effect with cyan.

To select a rendering algorithm:

1. From the Highlight Color Setup dialog box, select the [Rendering Algorithm] list box.

2. Select the Rendering Algorithm you want to use.
3. Click [OK].

Setting advanced PostScript options

NOTE: Advanced PostScript options are only available with PostScript printers.

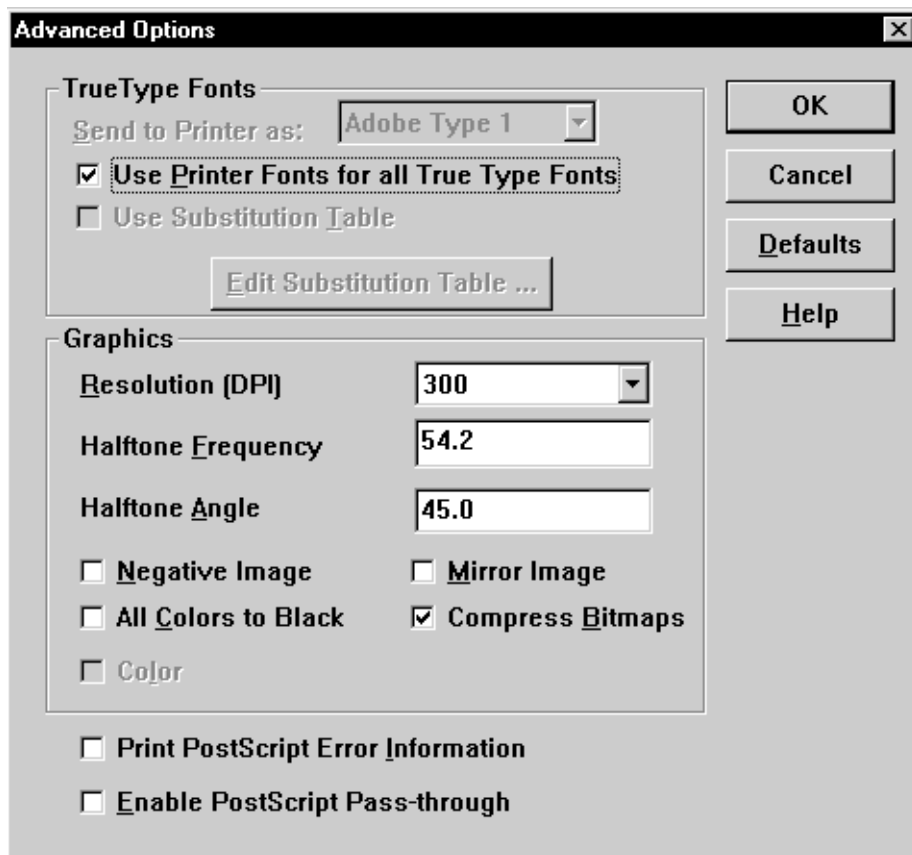
Advanced PostScript options allow you to specify how your documents print on a PostScript printer. The following advanced PostScript options are available:

- Compress graphics
- Print graphics in color (for 4850/4890/92C or 2060 models only)
- Print PostScript error information
- Print negative or mirror images of your documents
- Print with printer fonts in place of TrueType fonts
- Specify halftoning options
- Specify printing resolution
- Specify the format for sending TrueType fonts to your printer.

To access the advanced PostScript options, from the Setup window, select the Advanced PostScript Options... icon.



The following screen displays:



Compressing graphics

Use this function to compress graphics in your document before sending it to the printer. This frees up applications sooner for other tasks, but your documents may take longer to print.

1. From the Advanced Options dialog box, click the Compress Bitmap check box.
2. Specify any other options you want.
3. Click [OK].

Printing graphics in color

NOTE: This function is available for 4850/4890/92C or 2060 models only.

To print in color:

1. From the Advanced Options dialog box, click the Color check box.
2. Specify any other options you want.
3. Click [OK].

To print in black and white only:

1. From the Advanced Options dialog box, click the All Colors To Black check box.
2. Click [OK].

Printing PostScript error information

The PostScript printer driver can detect certain errors that Print Manager cannot detect. You can print information about these errors after your document has finished printing. This information may help in determining what caused the error.

To print PostScript error information:

1. From the Advanced Options dialog box, click the Print PostScript Error Information check box.
2. Specify any other options you want.
3. Click [OK].

Printing negative or mirror images of your documents

To print negative or mirror images of your document:

1. From the Advanced Options dialog box, click the Mirror check box to print a mirror image, or the Negative Image check box to print a negative image.
2. Specify any other options you want.
3. Click [OK].

Printing with printer fonts in place of TrueType fonts

The TrueType fonts are treated as downloaded fonts by the PostScript driver. If you are using a printer that does not support downloaded fonts, you must use printer fonts to print any TrueType fonts that are in your documents. There are two ways to do this:

- You can have the PostScript driver print with the printer fonts that most closely match the TrueType fonts in your document, or
- You can use the substitution table. This table enables you to individually select the printer fonts you want to use for the TrueType fonts in your document.

Using the closest matching printer fonts

Follow these steps:

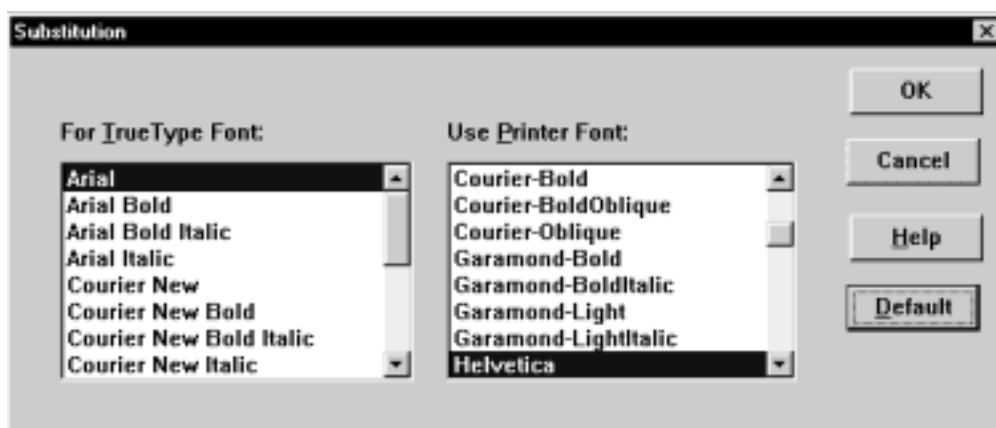
1. From the Advanced Options dialog box, click [Use Printer Fonts For All TrueType Fonts].
2. Specify any other options you want.
3. Click [OK].

Using the substitution table

Follow these steps:

1. Deselect [Use Printer Fonts For All TrueType Fonts].
2. Click [Use Substitution Table].
3. From the Advanced Options dialog box, click [Edit Substitution Table].

The following Substitution dialog box displays:



4. In the Substitution dialog box, click the TrueType font you want to replace from the For TrueType Font list.

5. From the Use Printer Font list, click the printer font you want to use instead of the selected TrueType font.
6. Repeat steps 2 and 3 until you have selected a printer font to use in place of all the TrueType fonts in your document.
7. Click [OK].

NOTE: If neither [Use Printer Fonts For All TrueType Fonts] nor [Edit Substitution Table] options are selected, all fonts for the document are downloaded.

Specifying halftoning options

If you are printing complex graphics such as photographs or detailed images, you can specify values for halftone frequency and halftone angle. The default values should work in most cases.

CAUTION

Unless you are experienced with using halftones, you should not change these values.

To specify halftoning options:

1. From the Advanced Options dialog box, click the number of lines per inch that you want to use for halftone screens in the Halftone Frequency box, and a value for the angle of the pattern you want to use in the Halftone Angle box.
2. Specify any other options you want.
3. Click [OK].

Specifying printing resolution

To specify the resolution at which you want to print graphic images:

1. From the Advanced Options dialog box, open the Resolution (DPI) list and click the resolution you want to use.
2. Specify any other options you want.
3. Click [OK].

NOTE: The halftone frequency and halftone angle settings can be set and saved with the corresponding resolution in a multi-resolution printer such as the 96, 4635 or 180 NPS/IPS.

Specifying the format for sending TrueType fonts to your printer

If you are using TrueType fonts in your documents and your printer supports downloaded fonts, you can specify the format for downloading TrueType fonts as follows:

1. From the Advanced Options dialog box, open the Send To Printer As list and select the method you want to use.
2. Specify any other options you want.
3. Click [OK].

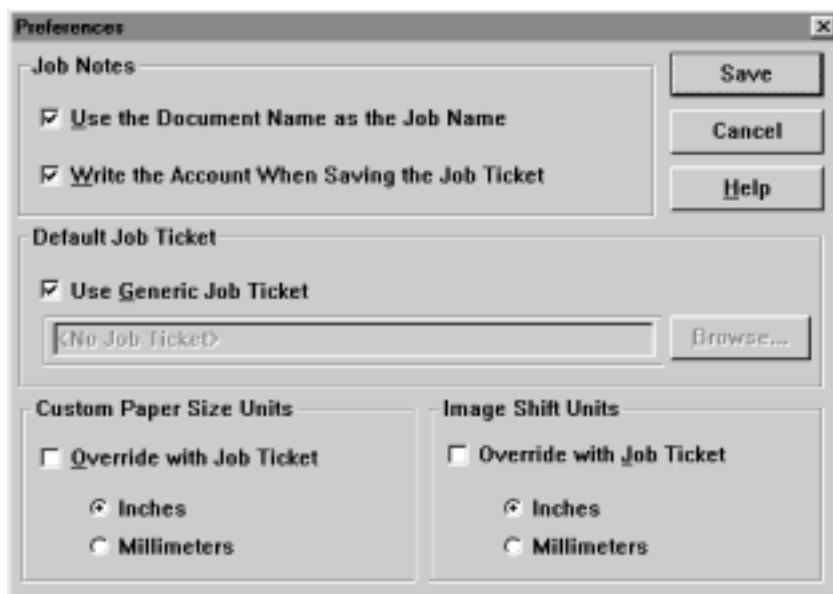
Setting the preferences

You can use the Preferences dialog to change the unit of measurement for the custom paper stock size and the image shift options, to determine whether to use the document's name as the job name in Job Notes, whether to write the account when saving the job ticket, and to set the default job ticket name and pathname.

1. On the Setup window, click the Preferences... icon.



The preference dialog box displays:



2. Set the parameters you want to change:
 - To set the document file name as the job name in Job Notes, click the check box next to the option, Use the Document Name as the Job Name.
 - To save the account number in the job ticket, click the check box next to the option, Write the Account When Saving the Job Ticket.
 - To select a default job ticket to use when resetting the job ticket defaults, first deselect the check box next to the option Use Generic Job Ticket. Then, enter a default job ticket name by typing it in, or through the Browse option.
 - To set the Custom paper size units, click Inches or Millimeters. To enable a job ticket to determine settings, click the Override with Job Ticket check box.
 - To set the Image shift units, click Inches or Millimeters. To enable a job ticket to determine settings, click the Override with Job Ticket check box.
3. To save your changes, click [Save]. To exit the dialog without saving any changes, click [Cancel].

Redirecting printing to a Xerox network print queue

There are several ways to redirect printing to a Xerox network print queue, depending on the type of network and software you are running. Refer to the documentation for your local area network software or to your system administrator for more information.

Following is an example of one way to redirect printing to a Novell NetWare 3.12 Xerox network print queue using Windows NT 4.0.

NOTE: This example assumes that a NetWare 3.12 print queue is being forwarded to a DocuPrint server for Windows NT 4.0.

1. From Start, select Settings, then Printers.
2. Click a printer, then click the right mouse button.
3. Click [Properties].
4. Click the Ports tab.
5. Click [Add Port].
6. Double click the printer/port of your choice.
7. Close all windows.

6. Submitting print jobs from Quick Print for Windows NT 4.0

You can send documents to your DocuPrint printer from Windows NT 4.0 using the Xerox DigiPath Quick Print software. This software provides a series of dialog boxes you use to select a document, set up a job ticket, and submit your print job.

The following sections describe how to print from Quick Print software, and how to configure it to meet your printer needs.

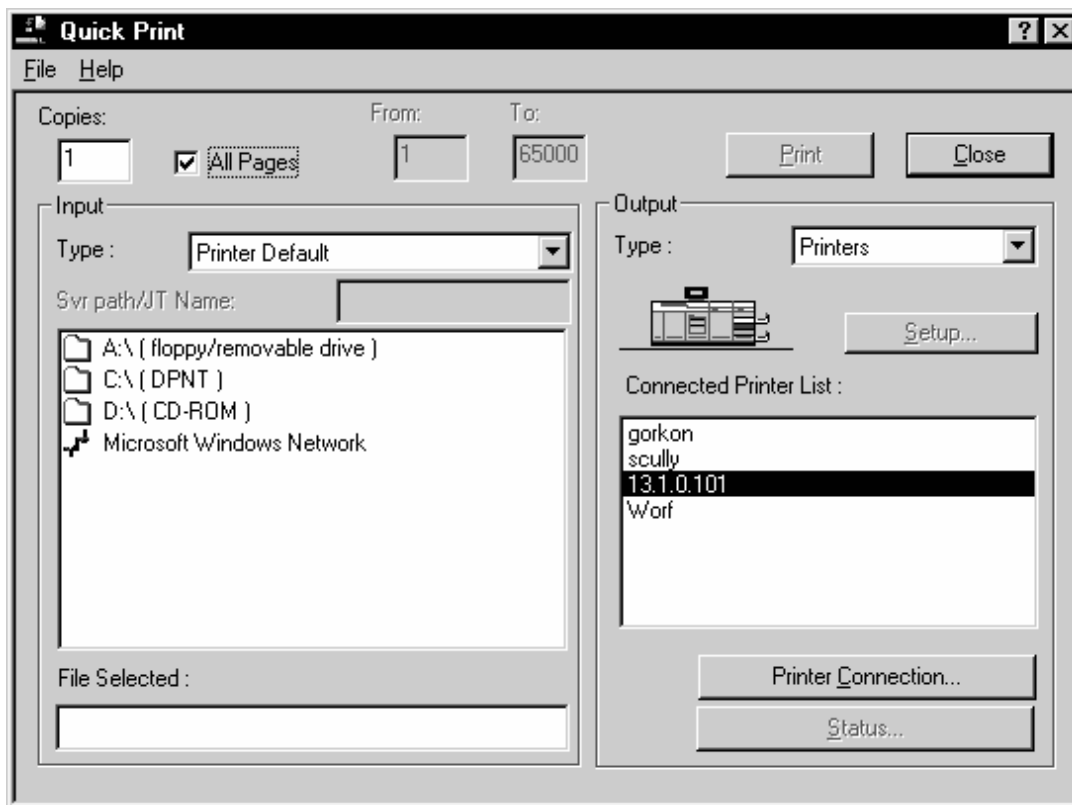
NOTE: Screen captures in this chapter are representative of what you are likely to see on your system. Variations may occur, depending on the software version and on the specific product used (for example, 4850 NPS/IPS).

Accessing Quick Print and selecting a printer

Follow these steps to access Quick Print:

1. From the task bar, click Start.
2. From the menu, click Programs > Quick Print.

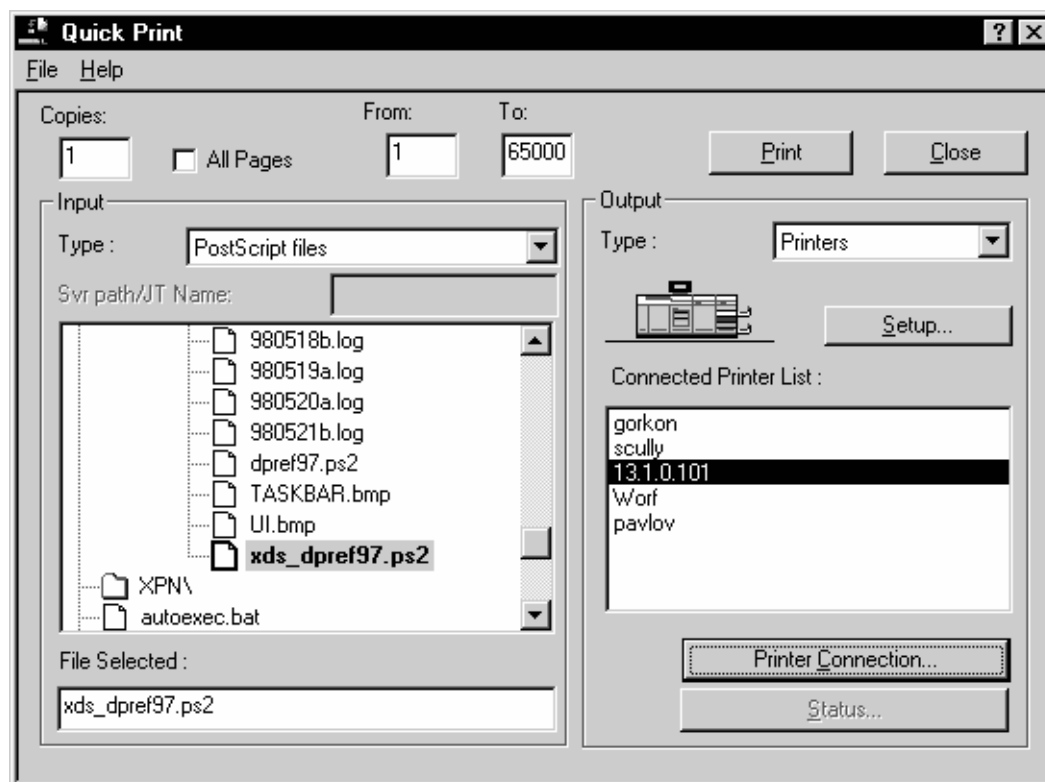
The Quick Print window displays.



After you have accessed the Quick Print screen, follow these steps to print a document:

1. Locate the document file you want to print in the list of files.
2. Click the document file.

The name of the document file you selected displays in the File Selected field in the lower left area of the Quick Print window.



3. Make sure the appropriate Input (PDL) Type that matches the selected file is selected, or select Printer Default.
4. Set up the job ticket for your desired print option. Refer to the "Setting up a job ticket" section.
5. Send your job to the printer by selecting [Print] in the upper right area of the window.

To cancel a print job, click [Cancel] in the screen message. The job is then removed from the print queue.

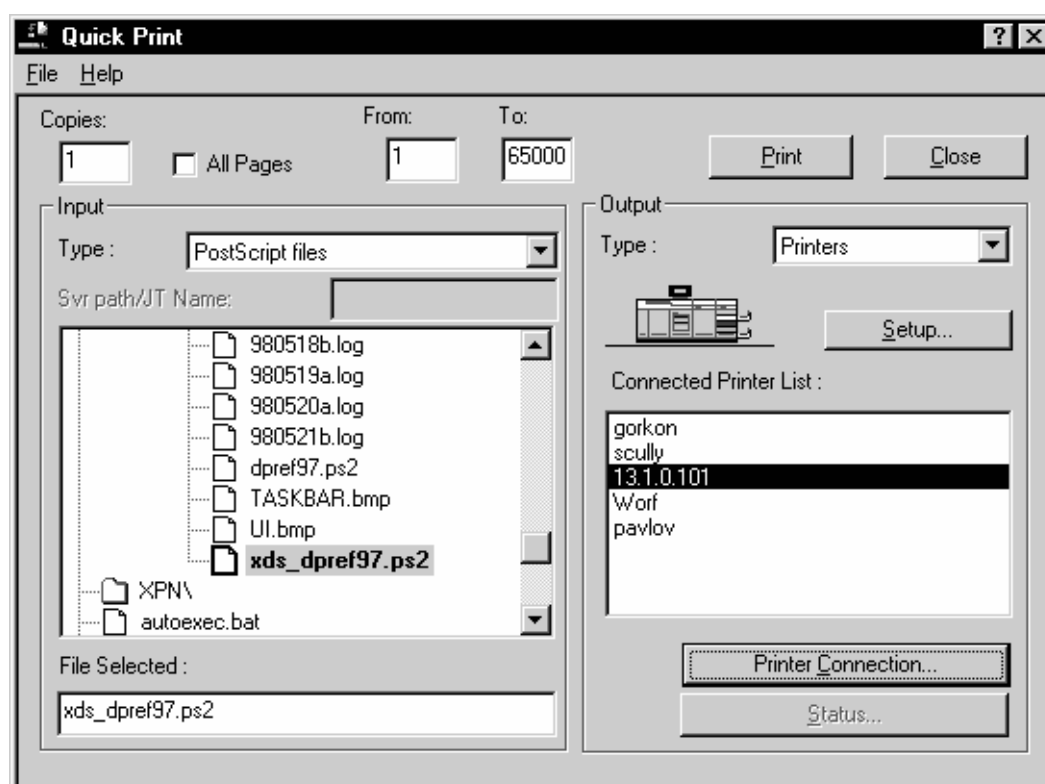
Opening, saving, and resetting job tickets

A job ticket is an electronic record that specifies print and finishing options. You can use an existing job ticket, or set up a new one, then save it for future documents.

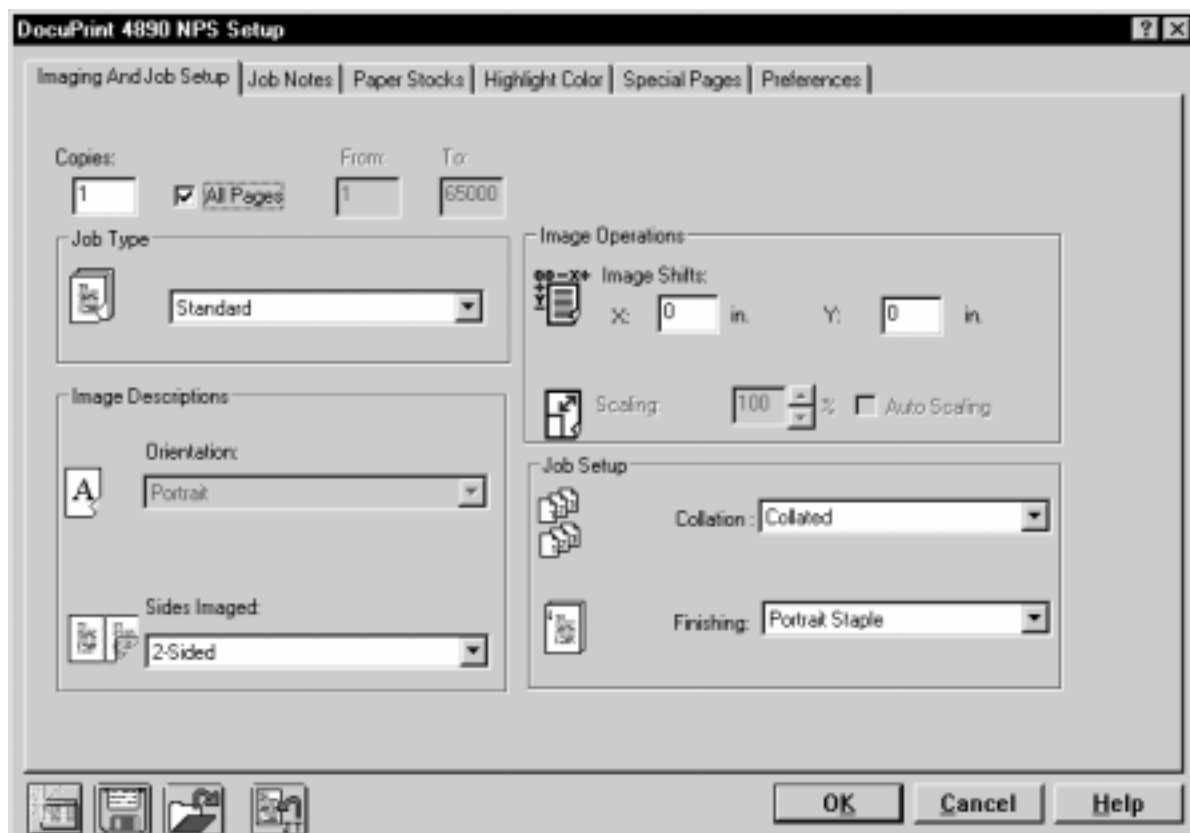
Opening a job ticket

To open an existing job ticket:

1. From the Quick Print window, select the printer you want to use from the Connected Printer List. Refer to “Customizing the printer queue list” if required.



2. Click [Setup...].



3. From the Setup window, click the Open Job Ticket... icon on the bottom left side of the window.



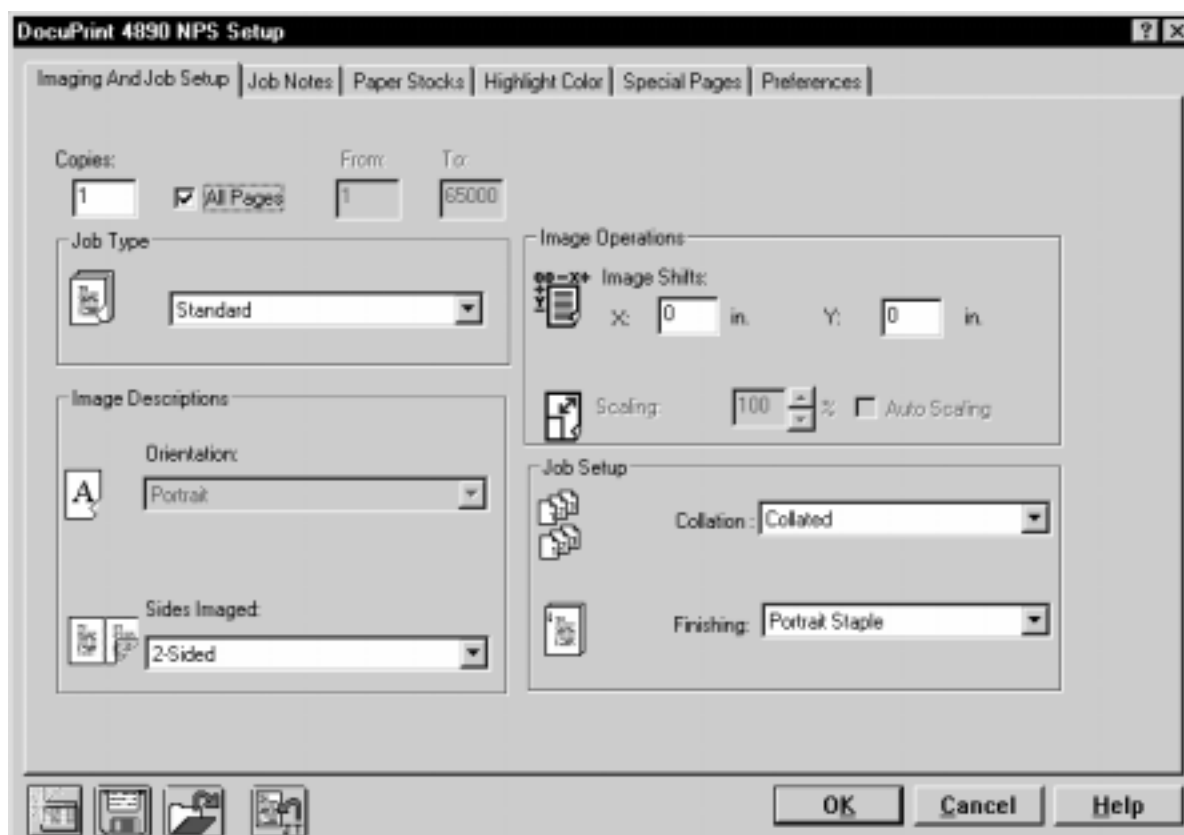
4. Select the file name in the File name text box.
5. Click [Open].

Saving a job ticket

Once you save a job ticket, you can reuse the job ticket for different documents without having to reenter the job ticket settings.

To save a job ticket to a file:

1. Access the Setup window. Refer to “Setting up a job ticket” if required.



2. From the Setup window, click the Save Job Ticket As... icon on the bottom left side of the window.

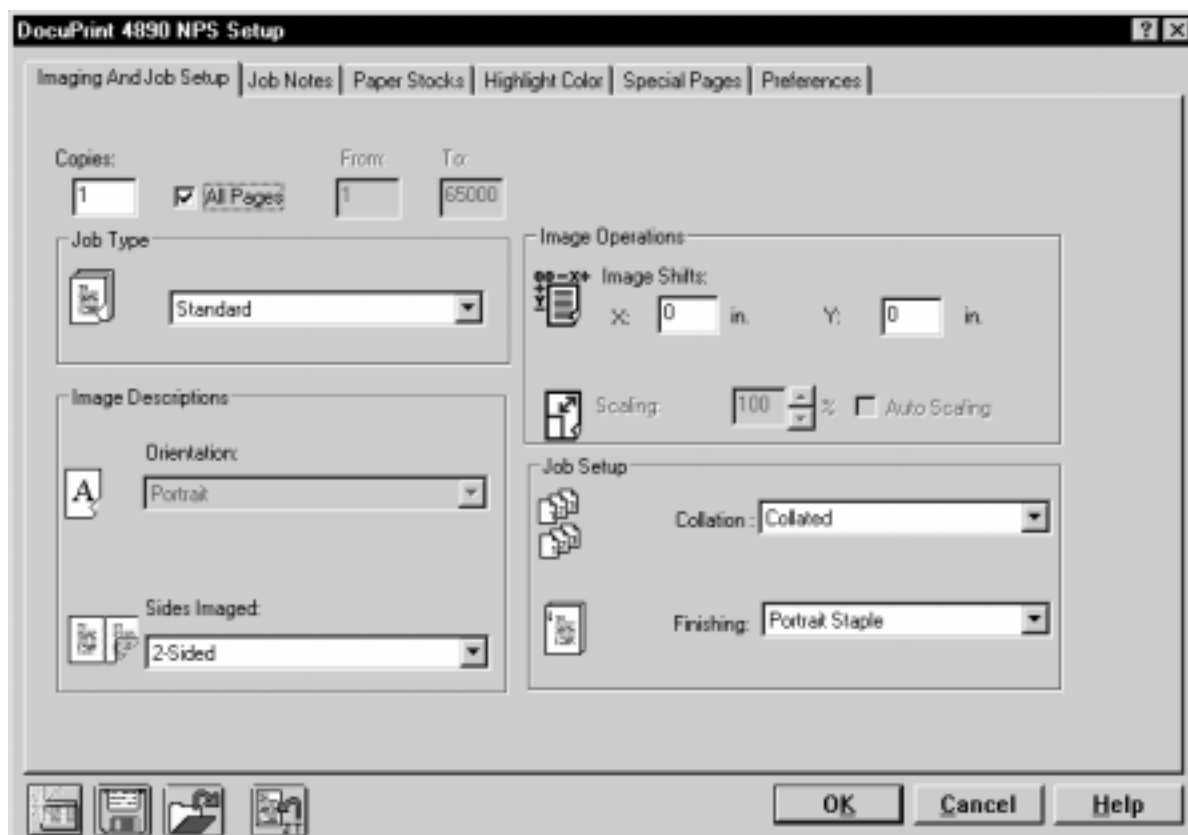


3. Type a unique name in the File name text box.
4. Click [Save].

Saving job ticket information into a document

You can save job ticket information with the document following these steps:

1. Access the Setup window. Refer to “Setting up a job ticket” if required.



2. From the Setup window, click the Save Job Ticket information into the documents icon on the bottom left side of the window.

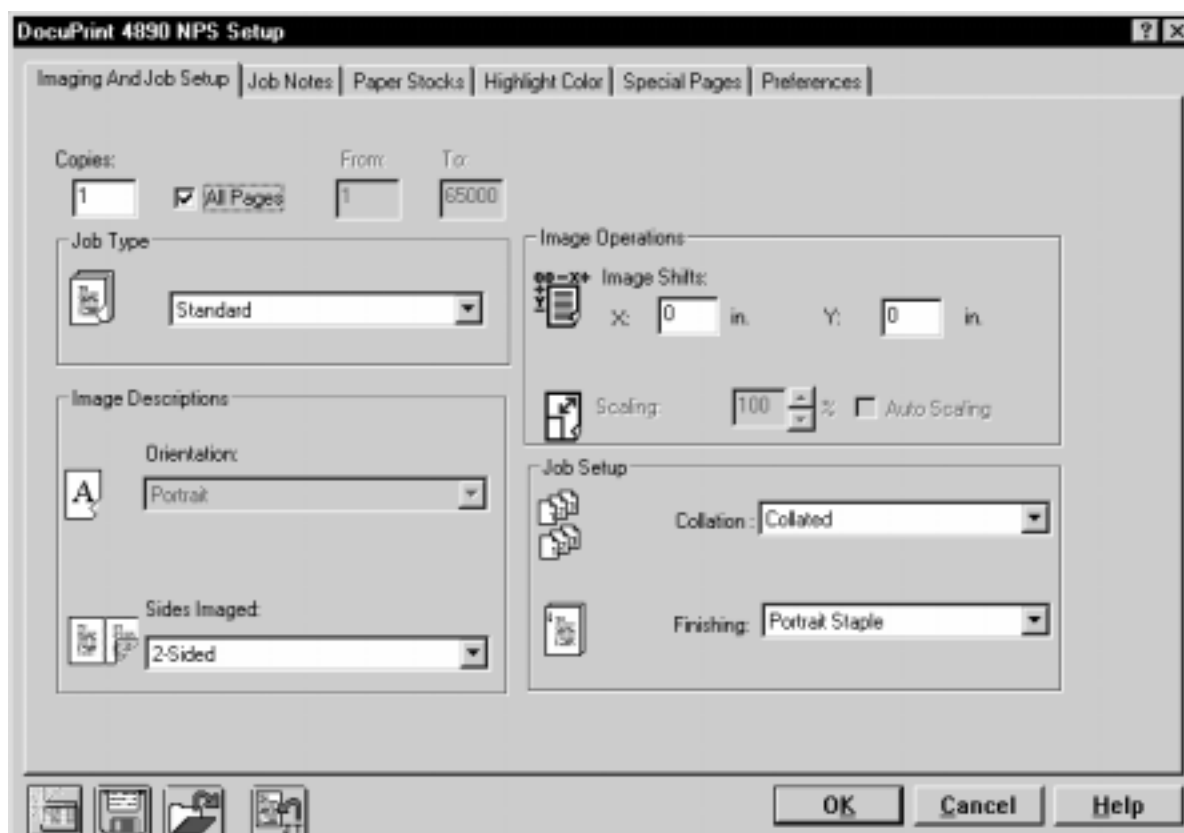


3. On the confirmation window, click [OK].

Resetting a job ticket

To reset print parameters to the default job ticket parameters:

1. Access the Setup window. Refer to “Setting up a job ticket” if required.



2. From the Setup window, click the Reset with default job ticket icon on the bottom left side of the window.



3. Click [OK] to change the printing and finishing options back to their default values, or click [Cancel] to leave the print and finishing options as they are currently displayed.

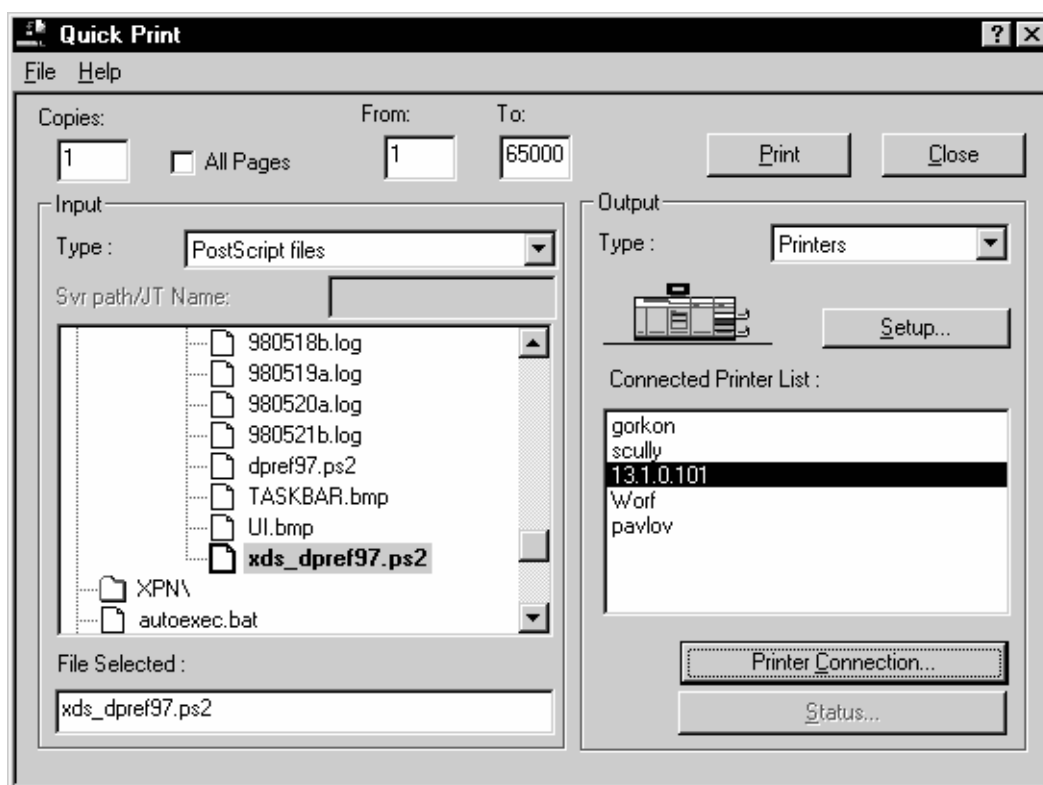
NOTE: The default ticket values are those identified in the Preference tab. Refer to the “Setting print preferences” section.

Setting up a job ticket

Most settings are performed through the Setup window. It contains a tab dialog box that allows you to specify print and finishing options. The tabs are organized by printer features and functions.

To access the Setup window:

1. From the Quick Print window, select the printer you want to use from the Connected Printer List.



2. Click [Setup...].



NOTE: The features that appear in the list boxes may vary, depending on the features that have been disabled by your system administrator, those that are unavailable due to conflicts among the job ticket settings you selected, or those that are unavailable on the Xerox DocuPrint printer you are using.

3. Set the parameters you want to change (Refer to the following sections.)
4. To save the information and return to the Quick Print window, click [OK]. To return to the Quick Print window without saving any changes, click [Cancel].

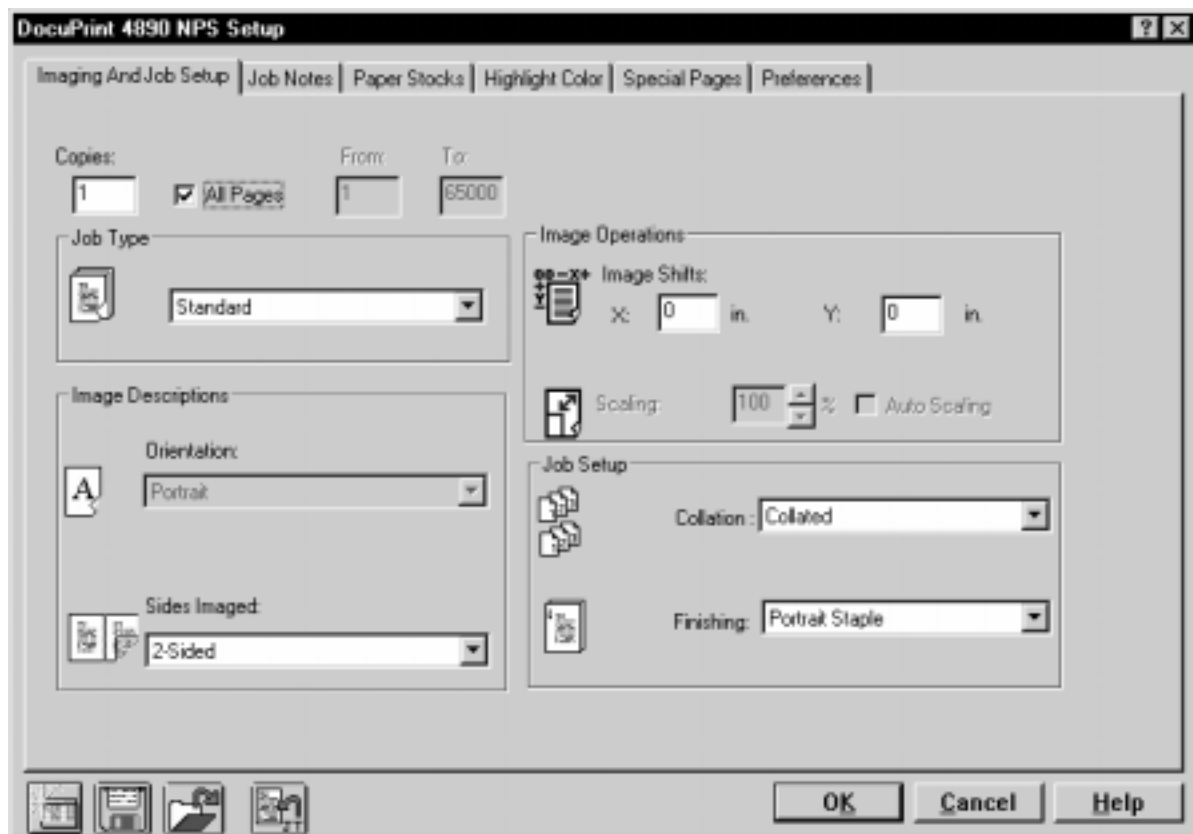
NOTE: The [Highlight Color] tab is available only when the 4850/4890/92C model is selected.

Setting imaging and job setup options

The Imaging And Job Setup tab allows you to:

- Specify the number of copies to print
- Specify which pages to print
- Specify sides to image
- Position the image on the paper
- Specify finishing options.

The following figure illustrates the Setup window with the Imaging and Job Setup tab selected.



Specifying the number of copies to print

Follow these steps:

1. From the Setup window, click the [Imaging and Job Setup] tab.
2. Enter the number of copies you want to print (between 1 and 65000) in the Copies text box.

Specifying which pages to print

Follow these steps:

1. From the Setup window, click the [Imaging and Job Setup] tab.
2. Enter the range of pages to print:
 - Click [All Pages] to print the entire document, or
 - Type the starting page in the From text box and the last page in the To text box.

Specifying sides to image

Follow these steps:

1. From the Setup window, click the [Imaging and Job Setup] tab.
2. Select the Sides Imaged:
 - Click [1-Sided] to print the document on one side of each page.
 - Click [2-Sided] to print the document on both sides of each page.
 - Click [Head-to-Toe] to print the document in calendar format. Both sides of the page are printed but the position of the image is reversed (from top to bottom) on every other page. Head-to-Toe is also known as tumble printing.

NOTE: Any image shift set with the [Image Shift] option may interfere with binding offsets set in the document file by the application.

Positioning the image on the paper

Follow these steps:

1. From the Setup window, click the [Imaging and Job Setup] tab.
2. Alter the page shift for the front page or the front and back page depending on the Sides Imaged selection.
Enter a number for the x and y image shifts.

Specifying finishing options

Follow these steps:

1. From the Setup window, click the [Imaging and Job Setup] tab.
2. Click the Finishing option.

NOTE: Finishing options listed vary by printer model.

Creating job notes

You can use the Job Notes tab to enter information about the print job. Specifically, the Job Notes tab allows you to:

- Create summary information to save with the job ticket
- Create delivery instructions to print with the job
- Add a banner page message

The following figure illustrates the Setup window with the Job Notes tab selected.

The screenshot shows the 'DocuPrint 4890 NPS Setup' window with the 'Job Notes' tab selected. The window has a title bar with a question mark and close button. Below the title bar is a tabbed interface with tabs for 'Imaging And Job Setup', 'Job Notes', 'Paper Stocks', 'Highlight Color', 'Special Pages', and 'Preferences'. The 'Job Notes' tab is active, displaying several input fields: 'Job Name:' with the value '102PAGES.PS', 'From:' with the value 'CChu', 'Account:' (empty), 'Telephone:' (empty), 'Deliver To:' with the value 'CChu', and 'Banner Message:' (empty). At the bottom of the window is a toolbar with four icons (printer, folder, document, and a small printer icon) and three buttons: 'OK', 'Cancel', and 'Help'.

Creating summary information to save with the job ticket

Follow these steps:

1. From the Setup window, click the [Job Notes] tab.
2. In the Job Name field, type a new job name up to 40 characters. If the field cannot be modified, click the Preferences tab and clear the Use Document name as the Job Name check box.
3. In the From field, type a user identification name up to 40 characters.
4. In the Account field, type an account name for the print job, up to 12 characters.
5. In the Telephone field, type a user telephone number up to 19 characters.

Creating delivery instructions to print with the job

Follow these steps:

1. From the Setup window, click the [Job Notes] tab.
2. Type delivery instructions in the Deliver To field. This field accepts up to 40 characters.

Adding a banner page message

Follow these steps:

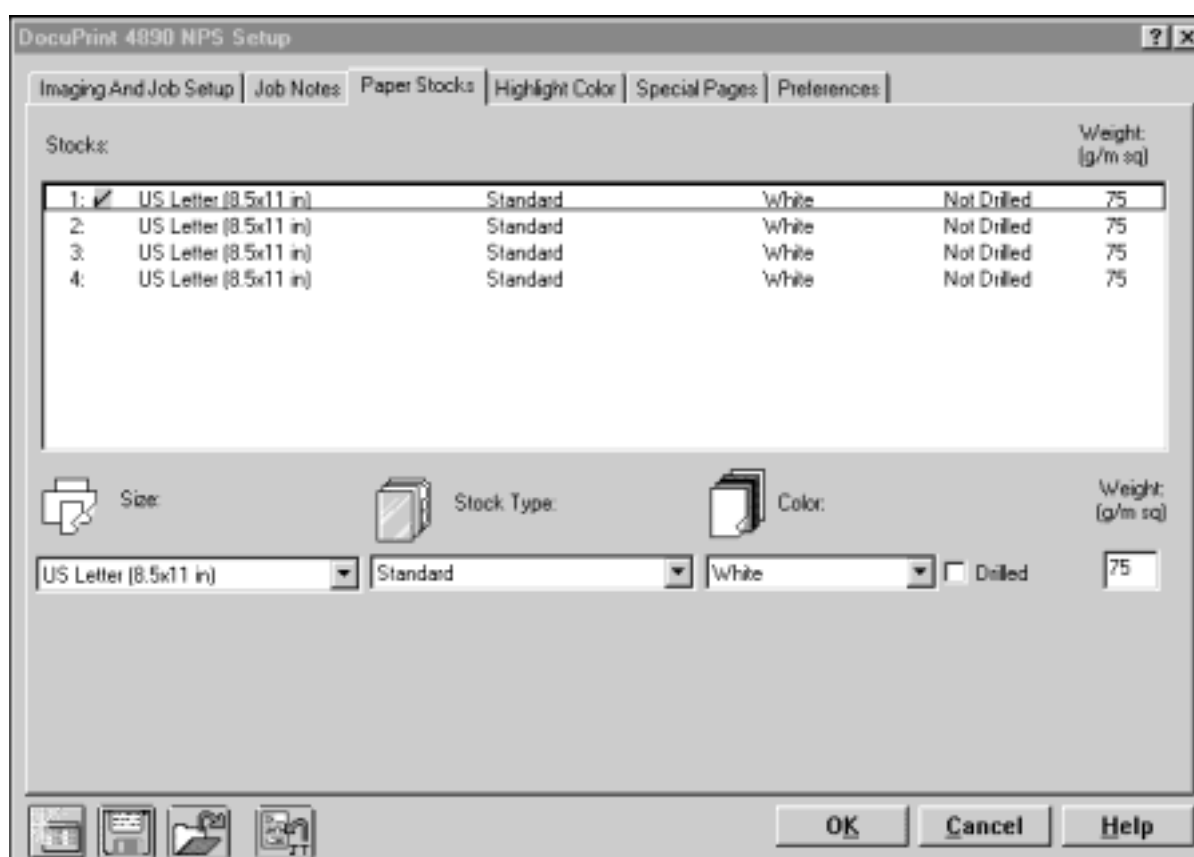
1. From the Setup window, click the [Job Notes] tab.
2. Type banner text in the Banner Message field. This field accepts up to 80 characters.

Specifying paper stock

The Paper Stocks tab allows you to:

- Specify paper stock for the document
- Specify tab stock (for 96/4635/180 models only)
- Specify custom paper stock

The following figure illustrates the Setup window with the Paper Stocks tab selected.



Specifying paper stock for the document

Follow these steps:

1. From the Setup window, click the [Paper Stocks] tab.
2. Click a stock entry from the Stocks list box.
3. Click the appropriate paper size from the Size list box. If you click Custom, type in the paper width and length and click [OK]. The maximum and minimum values for width and length are displayed in the dialog box.

4. Click the appropriate paper type from the Stock Type list box. The available types may vary with printer model. If you click Custom, type in a type name up to 30 characters and click [OK].
5. Click the appropriate color from the Color list box. If you click Custom, type in a color name up to 30 characters and click [OK].
6. Click the check box if the paper stock is drilled.
7. If displayed, type the paper weight value from 60 to 413. If Weight is not displayed, enable it through the Masks options under the Preference tab. Refer to the “Setting print preferences” section, “Customizing or masking dialog box options” subsection if required.

NOTE: You may define up to six paper stocks for 96/4635/180 models, and up to four paper stocks for 4050/4090/4850/4890/92C or 2060 models.

The paper stock defined as Stock 1 is the default stock for the entire document. You may specify the use of alternative stocks for selected pages under the Special Pages tab.

Specifying tab stock

NOTE: This option is available with 96/4635/180 models only.

Follow these steps:

1. From the Setup window, click the [Paper Stocks] tab.
2. Click a stock entry from the Stocks list box.
3. Click the appropriate paper size from the Size list box. If you click Custom, type in the paper width and length and click [OK]. The maximum and minimum values for width and length are displayed in the dialog box.
4. Click Full Cut Tab or Precut Tab from the Stock Type list box.
5. For a Precut Tab, type the number of tabs per set (from 1 to 255). The default is a 3-cut tab. Click [OK].
6. Click the appropriate color from the Color list box. If you click Custom, type in a color name up to 30 characters and click [OK].
7. Click the check box if the paper stock is drilled.
8. If displayed, type the paper weight (from 60 to 413).

Specifying custom paper stock

Follow these steps:

1. From the Setup window, click the [Paper Stocks] tab.
2. Click a stock entry from the Stocks list box.
3. Click the appropriate paper size from the Size list box. If you click Custom, type in the paper width and length and click [OK]. The maximum and minimum values for width and length are displayed in the dialog box.
4. Click Custom from the Stock Type list box.
5. Type a custom identification name up to 30 characters in the Type text box.

NOTE: Specifying "plain" as a custom paper type will result in a blank Media Type on the printer controller.

6. Click the appropriate color from the Color list box. If you click Custom, type in a color name up to 30 characters and click [OK].
7. Click the check box if the paper stock is drilled.
8. If displayed, type the paper weight.

Specifying highlight color options

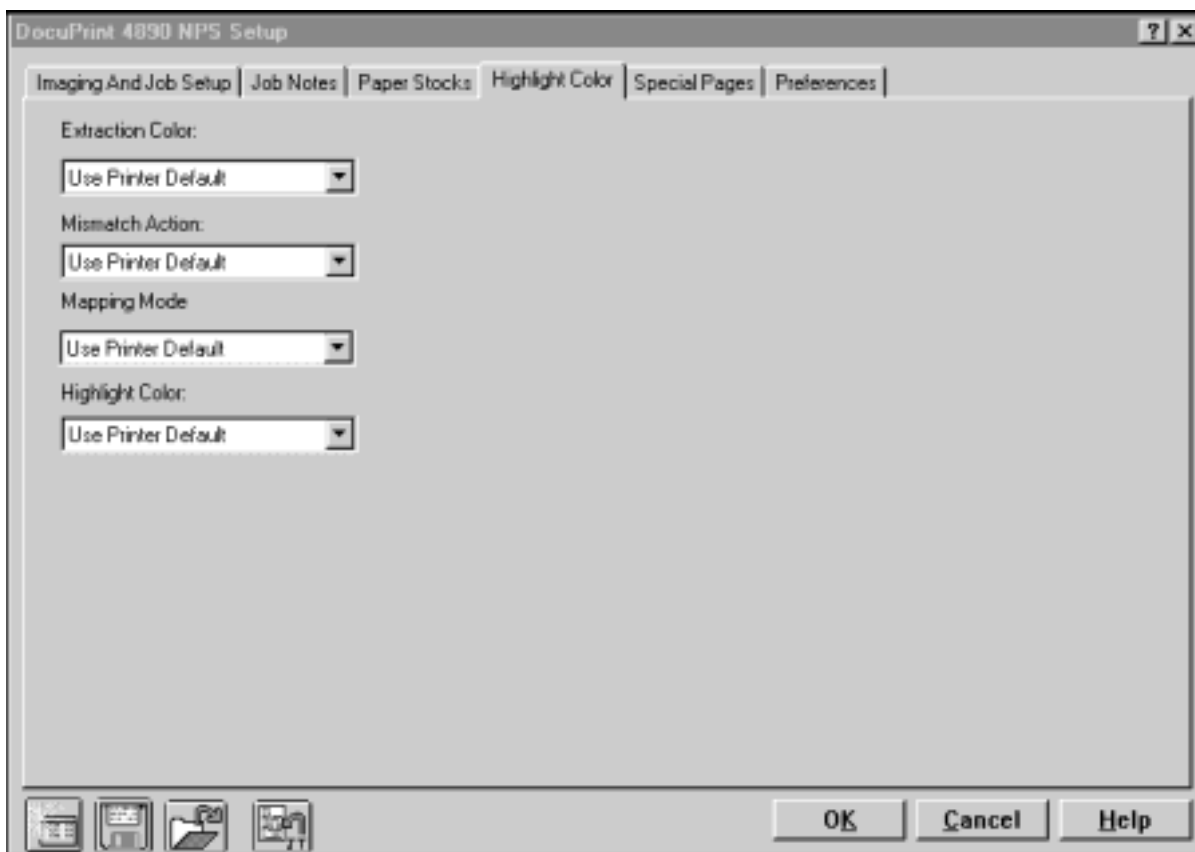
NOTE: Highlight color options are only available with highlight color printers (4850/4890/92C models).

The Highlight Color tab allows you to:

- Specify color for a highlight color document
- Change a full color document to a highlight color document

The following figure illustrates the Setup window with the Highlight Color tab selected.

NOTE: The Highlight Color tab is displayed only when a highlight color printer is selected.



Specifying color for a highlight color document

Follow these steps:

1. From the Setup window, click the [Highlight Color] tab.
2. From the Extraction Color list box, select the color to extract from the document, or select Printer Default to use the specified extraction color from the setup file at the printer.
3. From the Highlight Color list box, select the desired highlight color toner to use in printing the document. Select one of the highlight colors, or select Use Printer Default to use the highlight color loaded on the printer.
4. Optional: Specify how the printer handles a highlight color mismatch. From the mismatch list box, select one of the following options:
 - Use Printer Default
This option overrides all job settings and uses printer default settings.
 - Hold Job
This option retains the job in the print queue until highlight color at the printer matches the color specified for the job.
 - Cancel Job
This option deletes the job in the print queue if highlight color at the printer does not match the color specified for the job
 - Use Loaded Color
This option overrides highlight color job setting and prints using the loaded highlight color on the printer.

Changing a full color document to a highlight color document

Follow these steps:

1. From the Setup window, click the [Highlight Color] tab.
2. From the Mapping Mode list box, select one of the following:
 - Use Printer Default
This option overrides job settings and uses printer default settings.

- Pictorial

This option is for use with photographic images. It uses luminance information to map full color to highlight colors. The color portions of an image that are the same color as the specified extraction color are printed in a shade of the highlight color.
 - Presentation

This option is for use with presentation graphics. It uses hue information to map full color to highlight colors. Any color element in the graphic is printed in a shade of highlight color. Non-color elements (black, white, and gray) are printed in black, white, and shades of gray.
 - Color Table

This option specifies color table to use for color mappings.
 - Monochrome

This option specifies no highlight color. It specifies black and white printing only.
3. From the Highlight Color list box, select the desired highlight color toner to use in printing the document. Select one of the highlight colors, or select Use Printer Default to use the highlight color loaded on the printer.
4. Optional: Specify how the printer handles a highlight color mismatch. From the Mismatch Action list box, select one of the following options:
- Use Printer Default

This option overrides all job settings and uses printer default settings.
 - Hold Job

This option retains the job in the print queue until highlight color at the printer matches the color specified for the job.
 - Cancel Job

This option deletes the job in the print queue if highlight color at the printer does not match the color specified for the job
 - Use Loaded Color

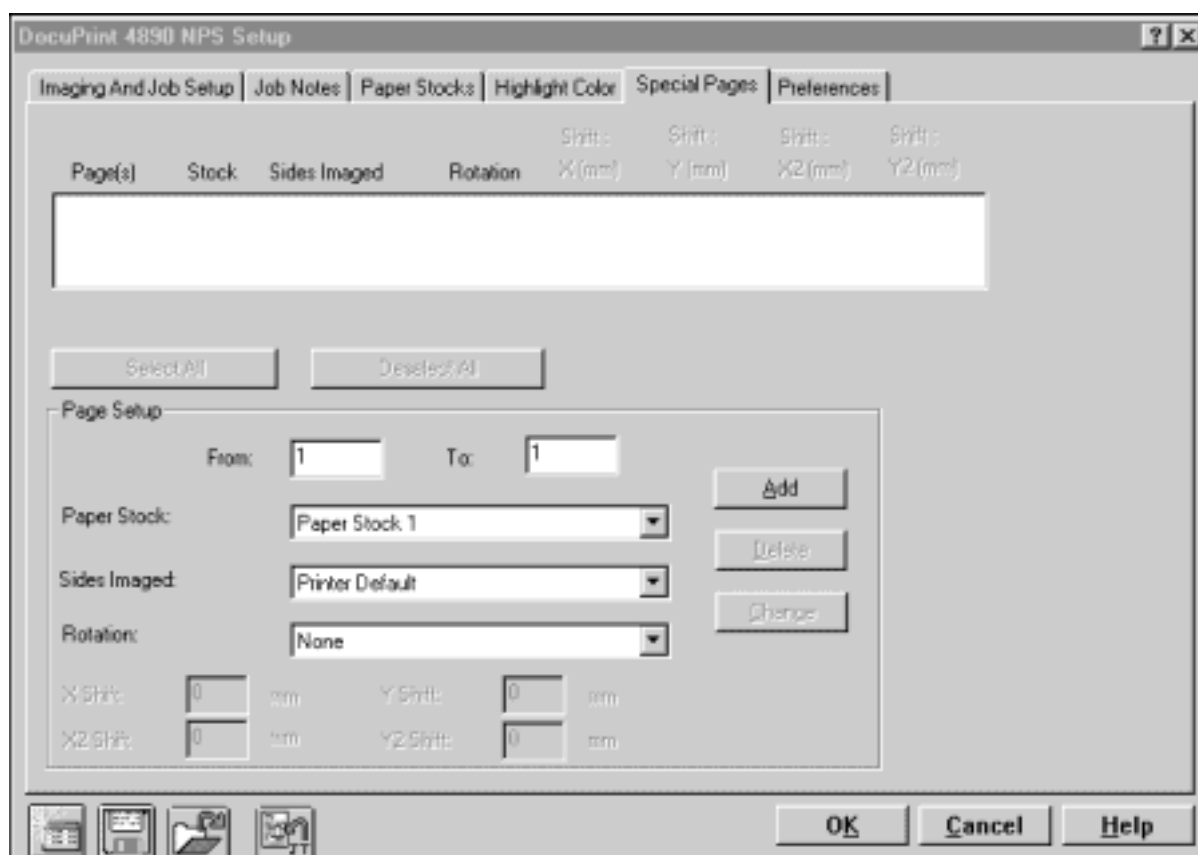
This option overrides highlight color job setting and prints using the loaded highlight color on the printer.

Creating special pages

The Special Pages tab allows you to:

- Create special page(s)
- Change paper stock within a document
- Modify selected page definitions

The following figure illustrates the Setup window with the Special Pages tab selected.



Creating special page(s)

Follow these steps:

1. From the Setup window, click the [Special Pages] tab.
2. Under Page Setup, enter a single page number or range of page numbers in the From and To text box.
3. Modify the page options enabled in the dialog box.
4. To add the entry to the list, click [Add].

NOTE: Verify that options have not been disabled using the Masks options under the Preference tab.

Changing paper stock within a document

Follow these steps:

1. From the Setup window, click the [Special Pages] tab.
2. In the Page Setup area, select the page range by entering a number in the From text box, and a larger number in the To text box.
3. Click the desired stock from the Paper Stock list box. The stocks listed in this dialog are taken from the paper stock definitions specified under the Paper Stocks tab.
4. Click [Add]. The paper stock selected is added to the list at the top of the dialog box. The number of stocks in a document cannot exceed the number of print drawers available for the selected printer model.

Modifying selected page definitions

Follow these steps:

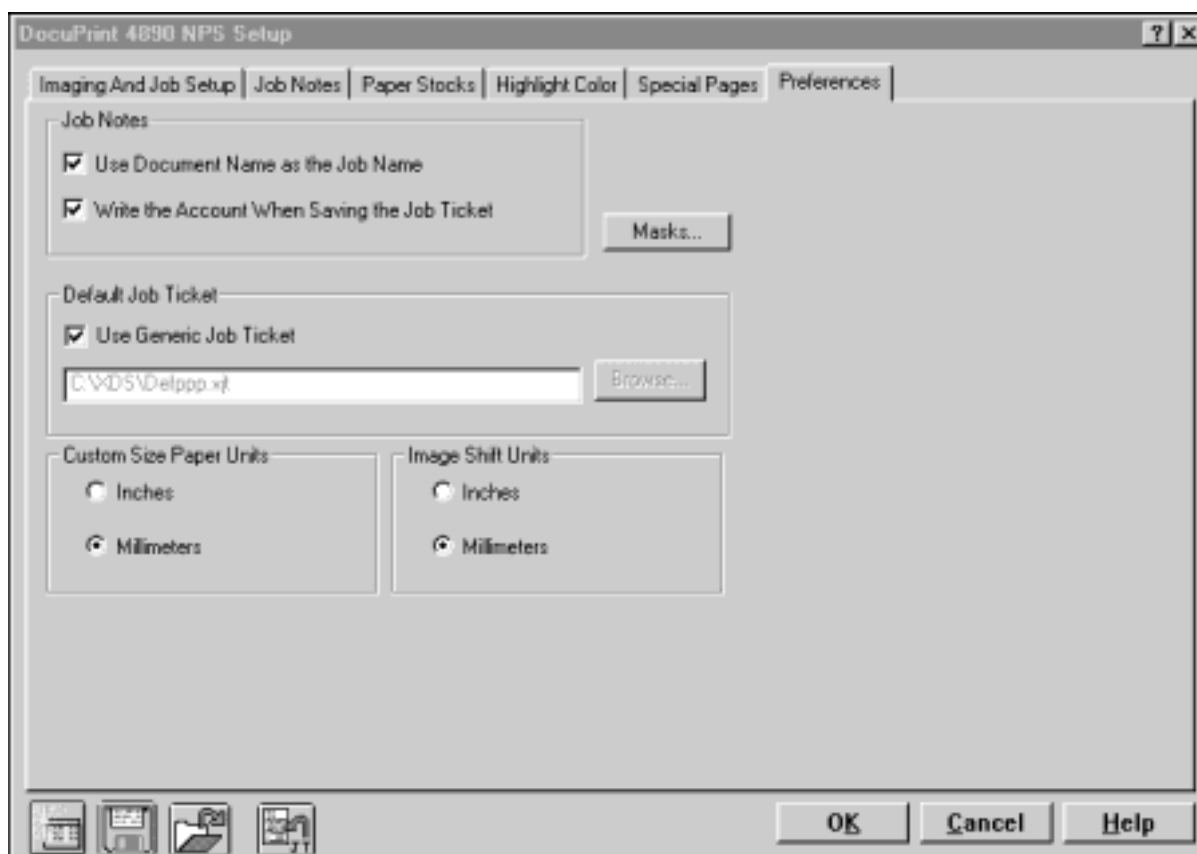
1. From the Setup window, click the [Special Pages] tab.
2. To modify the selected page definitions, enter a new definition and click [Add]. The listing in the dialog box is modified.
3. To change all the entries in the list, click [Select All], then enter new parameter values and click [Change].
4. To remove all entries from the list, click [Select All], then click Delete.

Setting print preferences

The Preferences tab allows you to:

- Use the document name as the job name
- Write Account information when saving the job ticket
- Specify a generic job ticket
- Specify the unit of measurement for paper size
- Specify the unit of measurement for image shift units
- Customize or mask dialog box options

The following figure illustrates the Setup window with the Preferences tab selected.



Using the document name as the job name

Follow these steps:

1. From the Setup window, click the [Preferences] tab.
2. Click to check the Use Document Name as the Job Name check box.

NOTE: With this option selected, the Job Name field under the job Notes tab cannot be modified.

Writing Account information when saving the job ticket

Follow these steps:

1. From the Setup window, click the [Preferences] tab.
2. Click to check the Write the Account When Saving the Job Ticket check box.

NOTE: With this option selected, Account information is saved with the job ticket when saving the job ticket (1) to a file; and (2) with the active document.

Clear the check box if you do not want Account information to be saved with the job ticket.

Specifying a generic job ticket

Follow these steps:

1. From the Setup window, click the [Preferences] tab.
2. Click to check the Use Generic Job Ticket check box. This gets all parameters to their default settings for the selected printer model.

Specifying the unit of measurement for paper size

Follow these steps:

1. From the Setup window, click the [Preferences] tab.
2. Click Inches or Millimeters under Custom Size Paper Units.

Specifying the unit of measurement for image shift units

Follow these steps:

1. From the Setup window, click the [Preferences] tab.
2. Click Inches or Millimeters under Image Shift Units.

Customizing or masking dialog box options

Follow these steps:

1. From the Setup window, click the [Preferences] tab.
2. Click [Masks].
3. Clear the check boxes to hide the options from being displayed in the associated tab dialog.
4. To save changes, click [Save].

Customizing your printer queue list

You can use the Servers and Connections dialog box to set up a customized printer list that contains the names of the virtual printers you use most often. The names must be available to you on the file server. You can select virtual printers from more than one server.

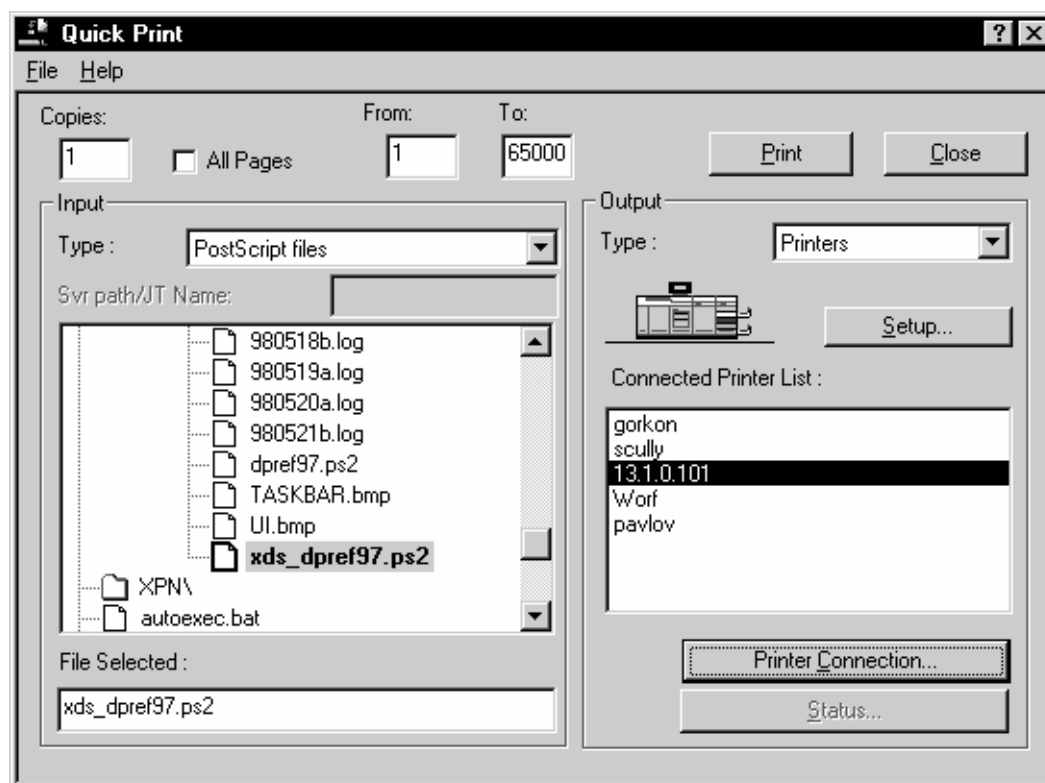
For each virtual printer in the list, you must assign a unique name. The name you assign may indicate the location or purpose of the printer.

If you are using TCP/IP, you must locate the following information before you begin this procedure:

- The File Server name: The name you specify is the same as the host name of the DocuPrint server. The hosts file on your PC provides the mapping between the IP address and the host name.
- The Print Queue: The name of the virtual printer on the DocuPrint server. To avoid confusion, use the same name for the virtual printer and the printer.

To access the Servers and Connections dialog box, click [Printer Connection...] from the Quick Print window, or from the File menu.

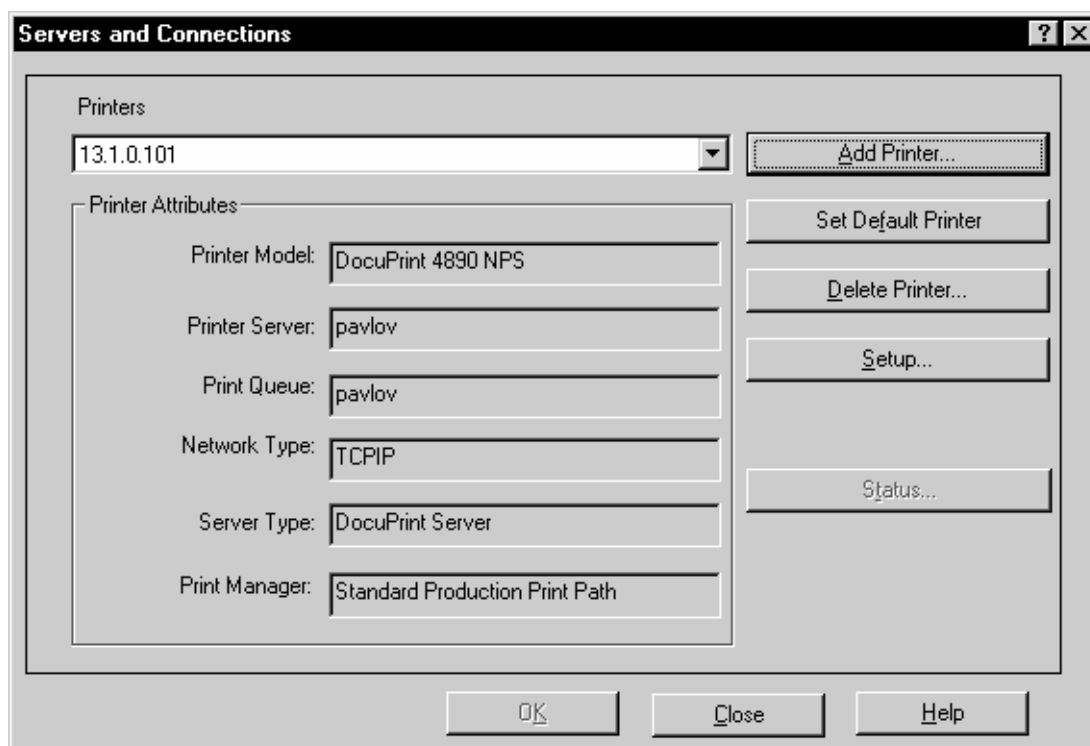
Printer information about any selected virtual printer appears in the Printers area of the dialog box.



Adding a new TCP/IP-attached printer to the print queue list

Follow these steps:

1. From the Servers and Connections dialog box, click [Add Printer].



2. In the Printer Name text box, type a descriptive name up to 80 characters long.

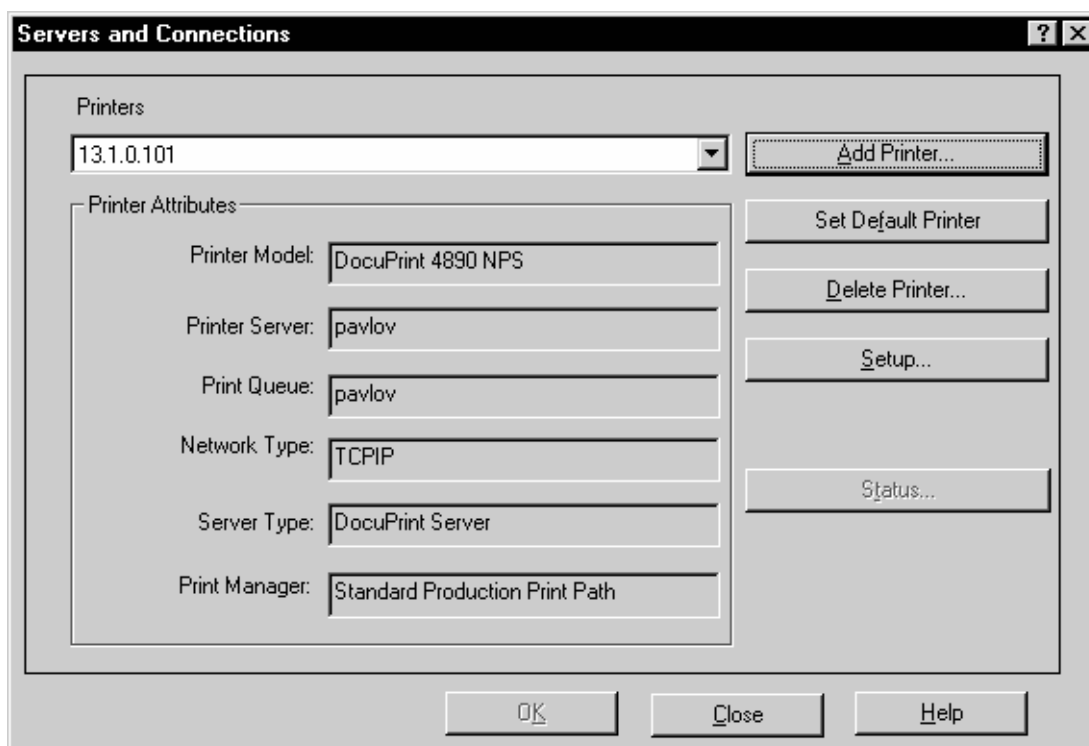
The screenshot shows the 'Add Printer' dialog box. It has a title bar with the text 'Add Printer' and standard window controls. The main area contains several fields and a list box. On the left side, there are three text boxes labeled 'Printer Name:', 'Print Server:', and 'Print Queue:'. To the right of the 'Printer Name' box is a 'Browse...' button. Below the 'Print Server' box is a 'Network Type' section with two radio buttons: 'TCP/IP' and 'Novell NetWare'. Below the 'Print Queue' box is a 'Printer Model: Server Type' section with a list box showing 'DocuTech 135: DocuTech Network Server'. Below the list box is a 'Print Manager:' section with a list box showing 'Standard Production Print Path'. At the bottom are three buttons: 'OK', 'Cancel', and 'Help'.

3. In the Print Server text box, type the correct print server name. Contact your System Administrator for this information.
4. In the Print Queue text box, type the correct print queue name. Contact your System Administrator for this information.
5. From the Printer Model: Server Type list box, select the appropriate printer model and server type.
6. From the Print Manager: list box, select the appropriate print manager.
7. In the Network Type area, select TCP/IP.
8. Click [OK].

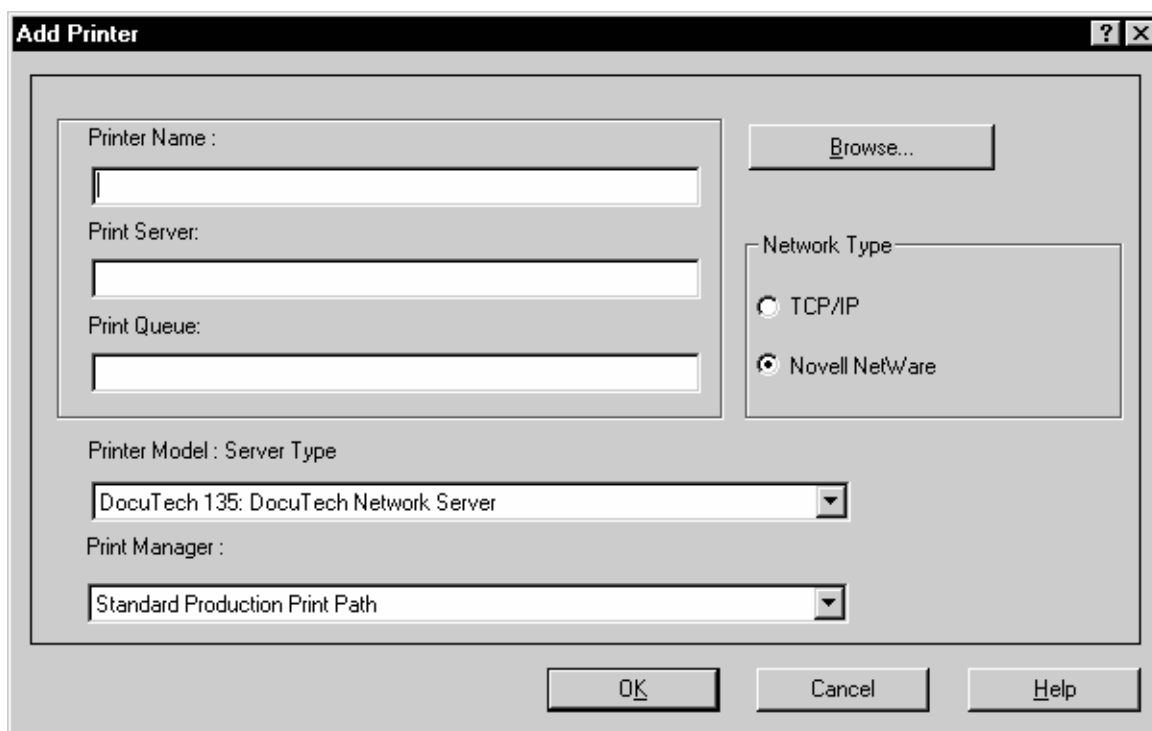
Adding a new Novell NetWare-attached printer to the print queue list

Follow these steps:

1. From the Servers and Connections dialog box, click [Add Printer].

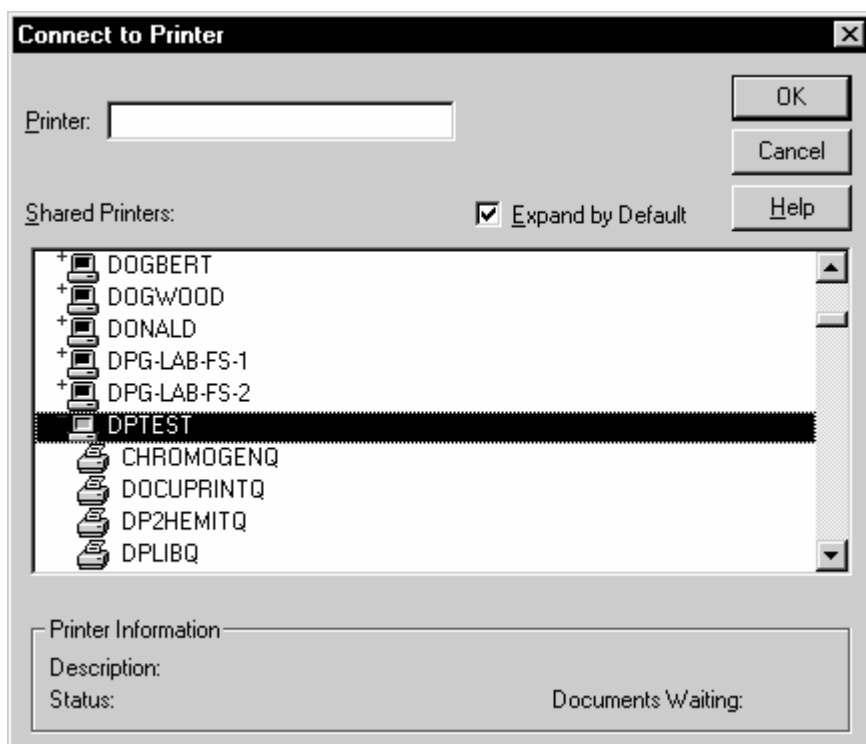


2. Make sure that Novell NetWare is selected under Network Type.

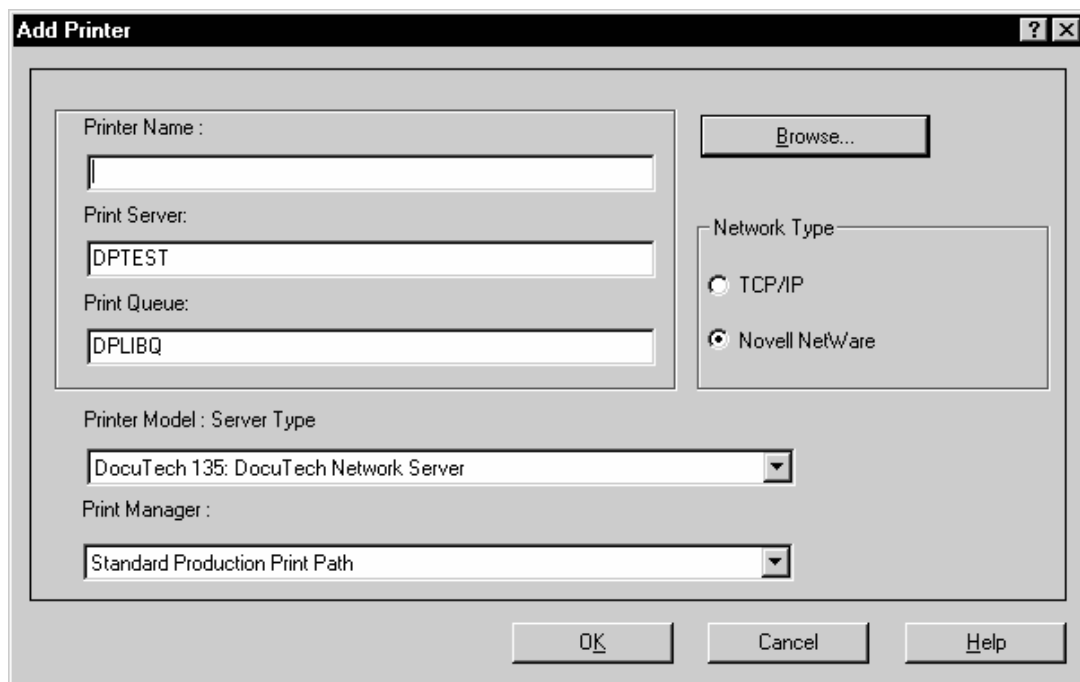


3. Select [Browse...].
4. Scroll down to the appropriate server under the listed shared printers.
5. Select the server of your choice, then select [OK].

6. Select the queue of your choice, then select [OK].



The Add Printer window displays the Print Server and Print Queue of your choice.



NOTE: You may be asked to install a printer driver for the selected queue.

7. From the Printer Model: Server Type list box, select the appropriate printer model and server type.

The screenshot shows the 'Add Printer' dialog box. The 'Printer Name' field is empty. The 'Print Server' field contains 'DPTTEST'. The 'Print Queue' field contains 'DPLIBQ'. To the right of these fields is a 'Browse...' button. Below the 'Print Queue' field is a 'Printer Model: Server Type' list box showing 'DocuPrint 4050 NPS: DocuPrint Server'. Below that is a 'Print Manager' list box showing 'Standard Production Print Path'. To the right of the 'Print Manager' list box is a 'Network Type' section with two radio buttons: 'TCP/IP' (selected) and 'Novell NetWare'. At the bottom are 'OK', 'Cancel', and 'Help' buttons.

8. In the Network Type area, select Novell NetWare.

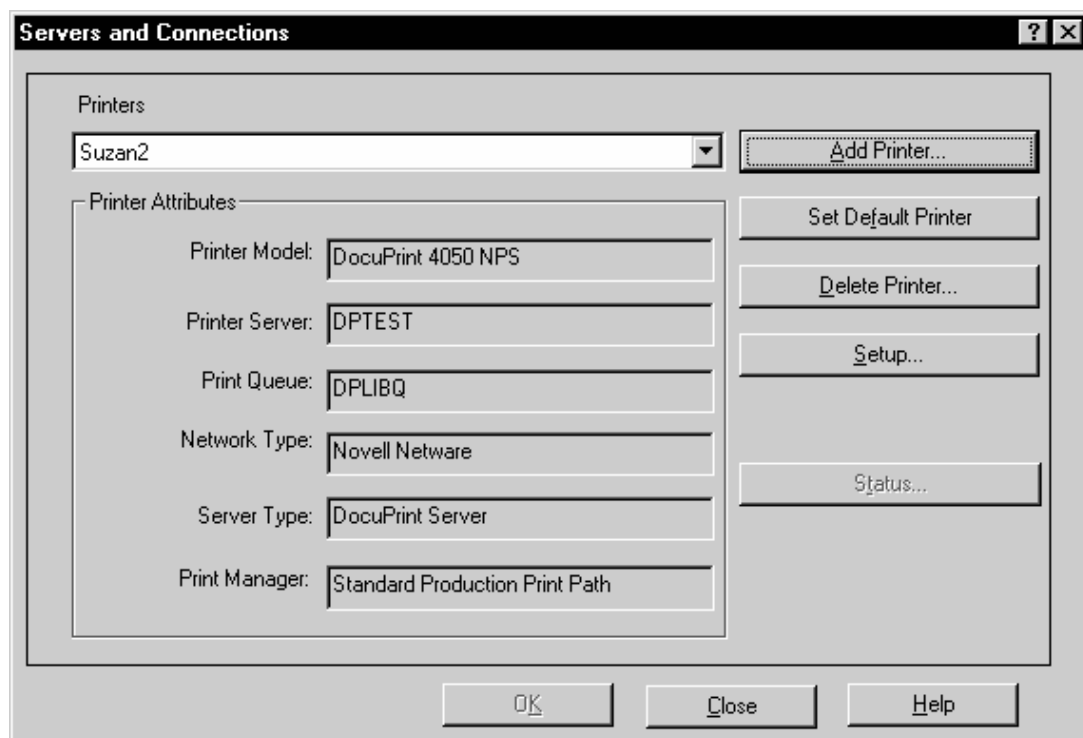
9. In the Printer Name text box, type a descriptive name up to 80 characters long.

The screenshot shows the 'Add Printer' dialog box. The 'Printer Name' field contains 'Suzan2'. The 'Print Server' field contains 'DPTTEST'. The 'Print Queue' field contains 'DPLIBQ'. The 'Printer Model : Server Type' dropdown menu is set to 'DocuPrint 4050 NPS: DocuPrint Server'. The 'Print Manager' dropdown menu is set to 'Standard Production Print Path'. The 'Network Type' section has 'Novell NetWare' selected. The 'Browse...' button is located to the right of the 'Printer Name' field. The 'OK', 'Cancel', and 'Help' buttons are at the bottom.

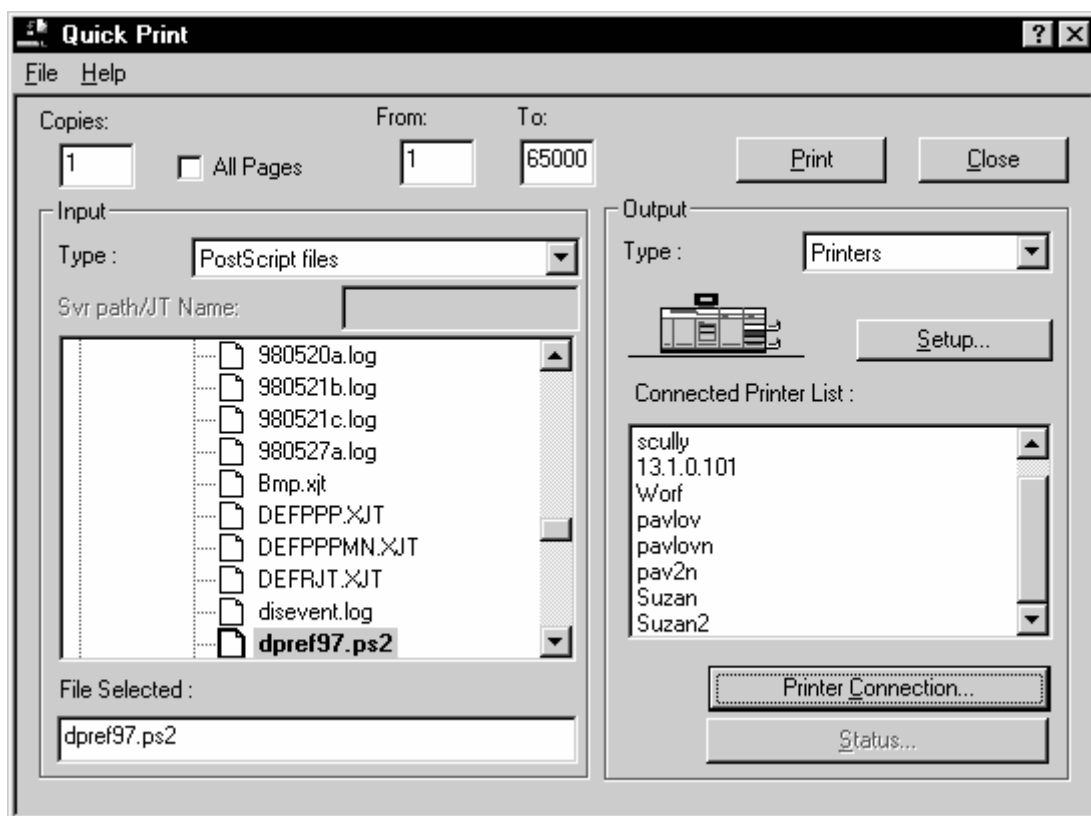
10. Click [OK].

11. The Servers and Connections window displays your selections.

Select [Close].



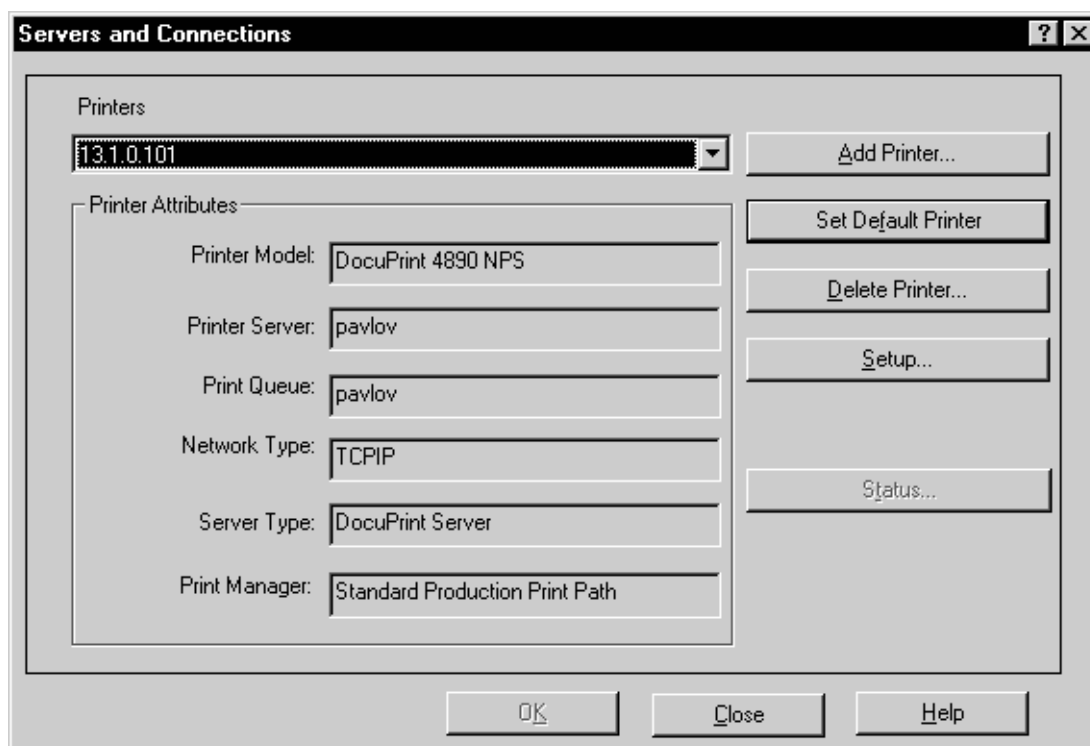
The newly added printer displays in the Printers area of the dialog box.



Setting the default printer

Follow these steps:

1. From the Servers and Connections dialog box, select a printer from the Printers list box.

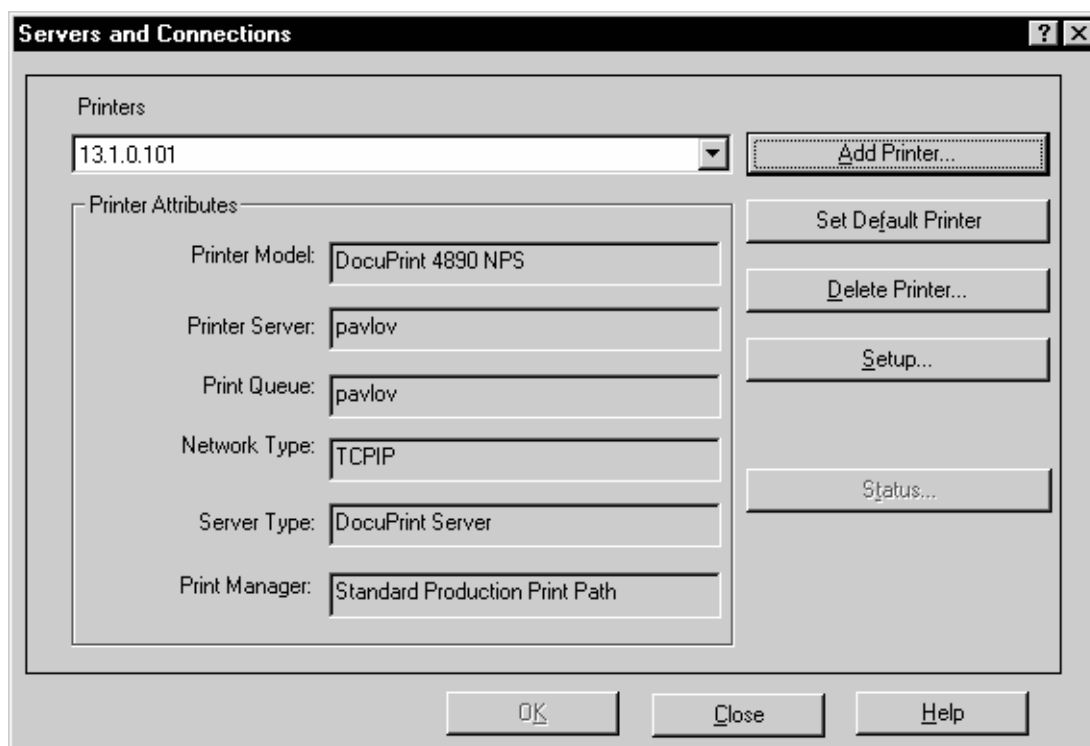


2. Click [Set Default Printer].

Removing a printer from the setup

Follow these steps:

1. From the Servers and Connections dialog box, select a printer from the Printers list box.



2. Click [Delete Printer].
3. At the confirmation window, click [OK].

7. Printing using the Internet Printing Protocol

Internet Printing Protocol (IPP) is an application level protocol that can be used for distributed printing using Internet tools and technologies. The protocol defines interactions between a client and a server, which allows your printer to print documents submitted through the Internet.

Windows 2000 supports IPP version 1.1. With this support, Windows 2000 users can connect NPS/IPS printers to the Internet and send documents directly from a Web browser to be printed.

Refer to your Windows 2000 documentation for printing via IPP.

8. Using remote access to the printer

You can access the printer remotely from the client using one of two methods:

- telnet
- Web-based user interface

Using telnet

You can access the printer controller remotely from any client computer that supports the telnet protocol. To establish a telnet connection, refer to your workstation documentation.

Once established a telnet connection, you can use most user interface commands that do not require physical interaction with the system such as loading media.

To log off the remote connection, enter **Quit Connection** or **q**.

Using the Web-based user interface

You can use a Web-based user interface to display information about the printer and your jobs. The Web-based interface is accessible through a Web browser on any client computer that has network access to the printer.

Accessing the Web-based user interface from the client

To display a printer home page, enter the printer name or IP address in the Web browser.

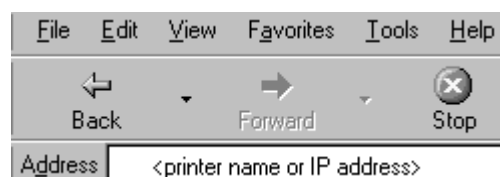


Figure 8-1. Accessing a printer home page in the Web browser (Internet Explorer)



Figure 8-2. Accessing a printer home page in the Web browser (Netscape Communicator)

Information on the Web-based user interface

The printer's home page displays detailed status and configuration information about the printer.

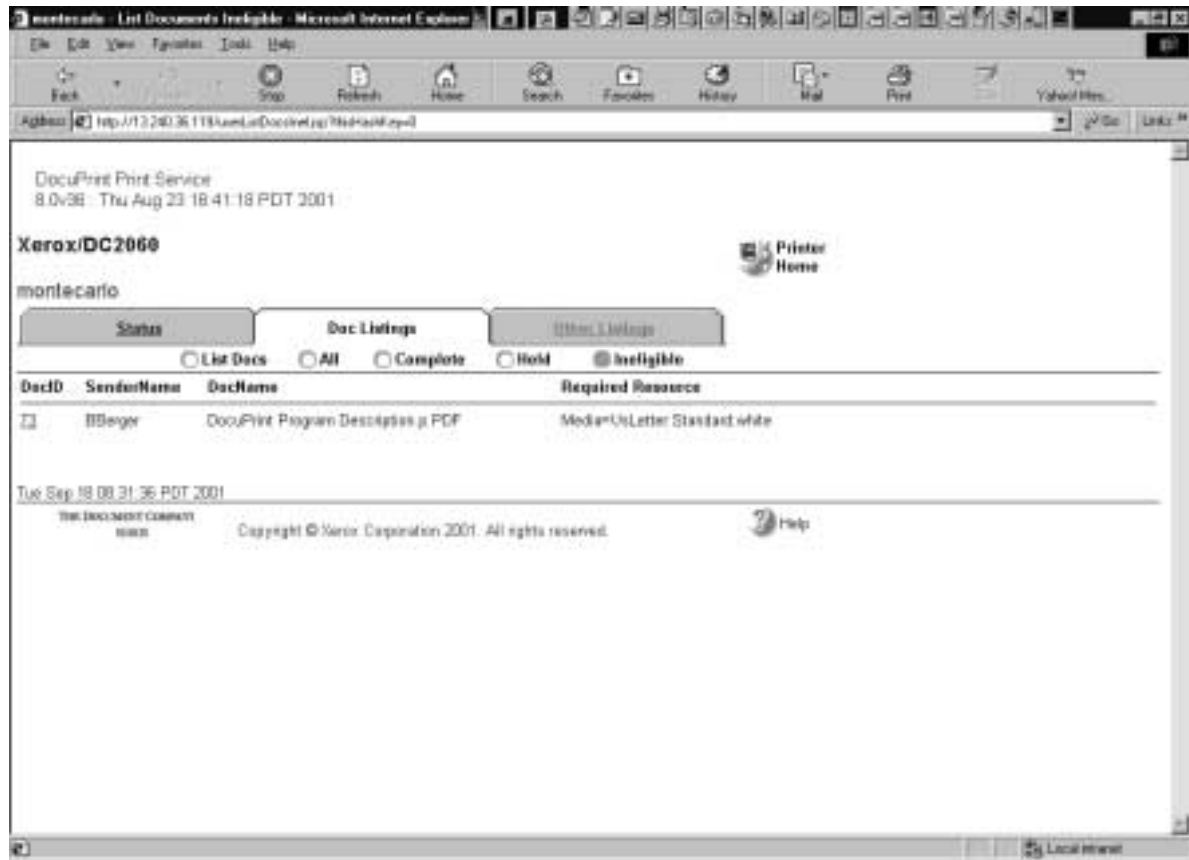


Figure 8-3. Printer's home page

The printer's home page also provides access to further pages, which allow you to:

- List documents by all the criteria available through the command-line user interface (UI) on the printer console
 - **List Docs** displays all documents that are currently active on the printer including Pending, Printing, and Ineligible documents. The screen does not display documents with a status of Complete, Cancelled, or Held, but displays the number of Held documents.
 - **All** displays all documents that have not yet had accounting dumped including Completed, Cancelled, Held, and Ineligible documents.

- **Complete** displays all documents that have the status of Complete or Cancelled.
- **Held** displays all documents that have the status of Held, along with the hold reason.
- **Ineligible** displays all documents that have the status of Ineligible, along with the ineligibility reason.
- Show details of any document that you select from the listing
- List available forms, fonts, sample documents, and virtual printers

A

- access to printer, remotely
 - telnet 8-1
 - Web-based 8-1
- Account information, Quick Print for Windows NT 4.0 6-24
- AdobePS drivers
 - selecting 4-6
 - submitting print jobs 4-22–4-38
- advanced PostScript options
 - Windows NT 4.0 (transparent)
 - compressing graphics 5-32
 - overview 5-31–5-36
 - printing error information 5-33
 - printing graphics in color 5-33
 - printing mirror images 5-33
 - printing negative images 5-33
 - printing with printer fonts 5-34
 - specifying format 5-36
 - specifying halftoning options 5-35
 - specifying printing resolution 5-35
 - using substitution table 5-34
 - using TrueType fonts 5-36
- Apollo workstation 2-15
- attributes, overview 1-2

B

- background printing, Macintosh
 - AdobePS driver 4-26
 - LaserWriter driver version 7.x 4-2
 - LaserWriter version 8.x 4-14
- banner page
 - job message
 - Quick Print for Windows NT 4.0 6-13, 6-14
 - Windows NT 4.0 (transparent) 5-21
 - sender name
 - Macintosh drivers (transparent) 4-9
- BuildProfile option 2-21

C

- CE mark xiii
- client workstations
 - communicating with network 1-5–1-6
 - overview 1-1
- color calibration 2-21
- color driver, Macintosh LaserWriter driver 8.x 4-40
- commands
 - listjob 3-13
 - listq 3-16
 - lpc (UNIX) 3-35
 - lpq (DOS) 3-31
 - lpq (UNIX) 3-32
 - lpr 3-19
 - lprm 3-33
 - print 3-2
- conventions xix
- copy count
 - Macintosh drivers
 - AdobePS 4-24
 - LaserWriter 7.x 4-9
 - LaserWriter 8.x 4-13
 - Quick Print for Windows NT 4.0 6-11
 - Windows NT 4.0 (transparent) 5-17
- cover page
 - AdobePS driver 4-27
 - Macintosh, LaserWriter 7.x driver 4-10
 - Macintosh, LaserWriter 8.x driver 4-15

D

- Decomposition Service Tools, installing 2-6, 2-15
- default settings
 - resetting job ticket
 - Quick Print for Windows NT 4.0 6-8
 - Windows NT 4.0 (transparent) 5-15
- delivery instructions, print job 6-14
- dialog box options, customizing Quick Print for Windows NT 4.0 6-25
- disk space, installation requirements 2-1
- documentation xx

documents

- changing full color to highlight color 6-19

DocuPrint NPS Setup window

- Quick Print for Windows NT 4.0

- accessing 6-9

- image shift 6-12

- imaging and job setup options 6-10–6-13

- job notes 6-13–6-14

- paper stocks 6-15–6-17

- Windows NT 4.0 (transparent)

- advanced PostScript options 5-31–5-36

- copy count 5-17

- finishing features 5-19

- highlight color 5-27–5-31

- image shift 5-18

- job notes 5-19–5-21

- overview 5-16

- page orientation 5-17

- page range 5-17

- paper stocks 5-21–5-24

- paper weight 5-18

- preferences 5-36

- programming, Main Stock 5-18

- sides to image 5-17

- special pages 5-25–5-27

DOS client software

- installing 2-2

- removing 2-6

drilled paper

- Quick Print for Windows NT 4.0 6-16

- Windows NT 4.0 5-24

drivers, Xerox 1-1

duplex printing

- specifying

- Windows NT 4.0 (transparent) 5-17

E

- edge deletion 4-40

- error handling 4-18, 4-30

exception pages

- Quick Print for Windows NT 4.0 6-21–6-22

F

files

- specifying for printing

- Macintosh LaserWriter driver 8.x 4-10, 4-22

finishing features

- Windows NT 4.0 (transparent) 5-19

- FrameMaker software, image quality 4-40

- FTP PC/TCP 2-2

G

- Golden Print Job masters 2-5

- graphic borders 4-40

- graphics, Windows NT 4.0

- compressing 5-32

- printing in color 5-33

H

highlight color

- matching options

- Macintosh AdobePS driver 4-28

- Macintosh LaserWriter 8.x driver 4-16

- mismatch with loaded ink color

- Quick Print for Windows NT 4.0 6-19, 6-20

- results compared 3-37

- Windows NT 4.0 (transparent) 5-29

- process, Macintosh LaserWriter driver 8.x 4-39

- Quick Print for Windows NT 4.0

- changing full color to highlight color 6-19

- overview 6-18–6-20

- selecting color mismatch action 6-19, 6-20

- specifying color 6-19

- Windows NT 4.0 (transparent)

- overview 5-27–5-31

- selecting 5-28

- selecting color mismatch action 5-29

- selecting extraction color 5-29

- selecting rendering algorithm 5-30

-
- I**
- ICC profile 2-21
 - image shift
 - horizontal
 - Quick Print for Windows NT 4.0 6-12
 - Windows NT 4.0 (transparent) 5-18
 - vertical
 - Quick Print for Windows NT 4.0 6-12
 - Windows NT 4.0 (transparent) 5-18
 - images
 - positioning (Quick Print for Windows NT 4.0) 6-12
 - quality considerations
 - Macintosh LaserWriter driver 8.x 4-40
 - installing
 - Decomposition Service Tools 2-6, 2-15
 - PostScript drivers
 - Windows NT 4.0 (transparent) 5-1–5-7
 - PPD file 2-5, 2-15
 - system, Windows NT 4.0 5-1–5-7
 - verifying
 - PC-DOS 2-5
 - UNIX 2-12
 - Xerox Client Software 2-10
 - Internet Printing Protocol (IPP) 7-1
 - IPP, *see* Internet Printing Protocol
- J**
- job message, banner page
 - Quick Print for Windows NT 4.0 6-13–6-15
 - Windows NT 4.0 (transparent) 5-21
 - job names, Quick Print for Windows NT 4.0 6-24
 - job notes
 - Quick Print for Windows NT 4.0 6-13–6-14
 - Windows NT 4.0 (transparent) 5-19–5-21
 - job status
 - determining, platforms compared 1-7
 - methods 1-6
 - telnet connections 1-6
 - job tickets
 - Macintosh, AdobePS driver 4-34
 - Quick Print for Windows NT 4.0
 - generic 6-24
 - job note summary information 6-14
 - loading 6-4–6-5
 - resetting to defaults 6-8
 - saving 6-6
 - Windows NT 4.0 (transparent)
 - opening 5-11–5-12
 - resetting 5-15–5-16
 - saving 5-13–5-14
- L**
- laser safety ix
 - LaserWriter drivers
 - version 7.x
 - selecting 4-2
 - submitting print jobs 4-9–4-10
 - version 8.x
 - selecting 4-3
 - submitting print jobs 4-10–4-40
 - listjob command 1-7, 3-13
 - listq command 1-7, 3-16
 - loading job tickets
 - Quick Print for Windows NT 4.0 6-4–6-5
 - lpc command (UNIX) 3-35
 - lpq command
 - determining job status 1-7
 - DOS 3-31
 - UNIX 3-32
 - lpr
 - print utilities, enabling 2-17–2-19
 - Solaris 2-18
 - SunOS 2-17
 - lpr command 3-19
 - color mismatch results 3-37
 - overview 1-4
 - lprm command 3-33
 - lpstat command 1-6
- M**
- Macintosh client software 2-7
 - Macintosh drivers
 - highlight color printing 4-39
 - image quality 4-40
 - monitoring and controlling printing 4-39
 - selecting AdobePS driver 4-6–4-9
 - selecting LaserWriter driver
 - version 7.x 4-1–4-2
 - version 8.x 4-3–4-6
 - submitting print jobs
 - AdobePS driver 4-22–4-38
 - Laser 7.x driver 4-9–4-10
 - LaserWriter 8.x driver 4-10–4-40

man pages 2-12–2-13

map color

highlight color algorithm 4-16, 4-28

print and lpr command color match/
mismatch results 3-37

monitoring printing, LaserWriter version 8.x
4-39

N

NetWare servers, Novell, attaching printers

Quick Print for Windows NT 4.0 6-29–
6-35

networks, communicating 1-5–1-6

O

opening job tickets

Windows NT 4.0 (transparent) 5-11–5-12

operation safety, Europe xi, xiii

operation safety, U. S. x, xi

ozone production information x

P

page definitions, modifying Quick Print for
Windows NT 4.0 6-22

page orientation, specifying

Windows NT 4.0 (transparent) 5-17

page ranges, specifying

Quick Print for Windows NT 4.0 6-12

Windows NT 4.0 (transparent) 5-17

paper color

Quick Print for Windows NT 4.0 6-16,
6-17

Windows NT 4.0 (transparent) 5-24

paper size

Quick Print for Windows NT 4.0 6-24

Windows NT 4.0 (transparent) 5-23

paper source

Macintosh LaserWriter driver 7.x 4-10

paper stock

specifying

Quick Print for Windows NT 4.0 6-15–
6-17

Windows NT 4.0 (transparent) 5-21–
5-24

paper type

Quick Print for Windows NT 4.0 6-16

Windows NT 4.0 (transparent) 5-23

paper weight

Quick Print for Windows NT 4.0 6-16

Windows NT 4.0 (transparent) 5-18

paper, drilled

Quick Print for Windows NT 4.0 6-16

Windows NT 4.0 (transparent) 5-24

PC-DOS workstations, setting up 2-2–2-6
platforms

job status capability 1-7

job submission requirements 1-5–1-6

PostScript Printer Description file, *see* PPD
file

PPD file, installing 2-5, 2-15

preferences

Quick Print for Windows NT 4.0

print 6-23–6-25

Windows NT 4.0 (transparent) 5-36

print command 3-1, 3-2

color mismatch results 3-37

print job submission programs 1-4

print jobs

changing job name

Windows NT 4.0 (transparent) 5-19

delivery instructions 6-14

Print Monitor Application, LaserWriter

version 8.x 4-39

print options

"Save as File" 4-19, 4-31

application specific 4-13, 4-25

background printing 4-14, 4-26

color matching 4-16, 4-28

cover page 4-15, 4-27

error handling 4-18, 4-30

general 4-12, 4-24

layout 4-17, 4-29

printer specific 4-20, 4-32

Xerox Job Ticket (Macintosh AdobePS
driver) 4-34

print queue

Quick Print for Windows NT 4.0 6-25–
6-36

Windows NT 4.0 5-38

printer controller

results of print command color mismatch
3-37

printer drivers

installing and configuring

Windows NT 4.0 (transparent) 5-1–
5-7

printers

- adding Novell NetWare-attached printer to print queue list
 - Quick Print for Windows NT 4.0 6-29–6-35
- adding TCP/IP-attached printer to print queue list
 - Quick Print for Windows NT 4.0 6-27–6-28
- removing from setup, Quick Print for Windows NT 4.0 6-37
- selecting
 - Macintosh transparent printing 4-2
 - Quick Print for Windows NT 4.0 6-2–6-3
- setting defaults, Quick Print for Windows NT 4.0 6-36

printing

- using
 - Macintosh (transparent) 4-1–4-40
 - Windows NT 4.0 (transparent) 5-7, 5-9–5-10
- using lpr utilities 3-18
- using Xerox utilities software 3-1

procedures

- Xerox Client Software, installing
 - PC-DOS 2-3–2-4
 - UNIX workstations 2-10–2-12

programming, Main Stock

- Windows NT 4.0 (transparent) 5-18

publications xx

Q

QuarkXPress software, image quality 4-40

Quick Print for Windows NT 4.0

- accessing Quick Print 6-2–6-3
- customizing print queue list 6-25–6-37
- job tickets
 - loading 6-4–6-5
 - resetting to defaults 6-8
 - saving 6-6
 - setting up 6-9–6-25
- overview 6-1
- selecting printer 6-2–6-3

R

remote access

- telnet 8-1
- Web-based 8-1

resetting job tickets

- Windows NT 4.0 (transparent) 5-15–5-16

S

safety

- hotline numbers xi
- laser ix
- operation x–xiii

saving job tickets

- Quick Print for Windows NT 4.0 6-6
- Windows NT 4.0 (transparent) 5-13–5-14

sender name

- unknown
 - Macintosh AdobePS driver 4-22
 - Macintosh LaserWriter 8.x driver 4-10
 - Macintosh LaserWriter driver 7.x 4-9

shading

- Macintosh LaserWriter driver 7.x 4-10

simplex printing

- specifying
 - Windows NT 4.0 (transparent) 5-17

socket printing 2-19

Solaris clients, lpr 2-18

special pages

- Windows NT 4.0 (transparent)
 - adding 5-25
 - changing 5-27
 - deleting 5-27
 - overview 5-25–5-27

stitching

- specifying
 - Quick Print for Windows NT 4.0 6-13
 - Windows NT 4.0 (transparent) 5-19
- specifying none
 - Windows NT 4.0 (transparent) 5-19

submitting print jobs

- Macintosh drivers (transparent) 4-1–4-40
- methods 1-4
- workstation reference 1-5–1-6

Sun PC-NFS V5.1 2-2

SunOS clients, lpr 2-17

System V UNIX clients, lpr 2-17

T

- tab stock, Quick Print for Windows NT 4.0 6-16
- TCP/IP servers
 - Quick Print for Windows NT 4.0 6-27
- TCP/IP socket printing 2-19
- telnet 8-1
- telnet connections, determining job status 1-6
- tumble duplex printing
 - specifying Windows NT 4.0 (transparent) 5-17

U

- UNIX client software
 - installing 2-9
 - removing 2-14
- user interface, web-based 8-1

V

- virtual printers, overview 1-3
- VMS systems 1-1

W

- Web-based user interface 8-1
- Windows 2000, setting up a new printer 2-20
- Windows NT 4.0 (transparent)
 - installing and configuring system 5-1–5-7
 - job tickets
 - opening 5-11–5-12
 - resetting 5-15–5-16
 - saving 5-13–5-14
 - setting up 5-16–5-37
- Wollongong Pathway Access release 3.1 2-2
- workstations
 - disk space requirements 2-1

X

- XDS for Macintosh
 - system requirements 4-1
- Xerox Client Software
 - installing
 - man pages 2-12–2-13
 - PC-DOS workstations 2-2–2-4
 - UNIX workstations 2-9–2-12
 - package, general requirements 2-1

- removing
 - DOS 2-6
 - UNIX 2-14
- Xerox drivers 1-1
- Xerox network print queue
 - Windows NT 4.0, printing to 5-38
- Xerox PPD files required with third-party drivers
 - Windows NT 4.0 (transparent) 5-7
- Xerox utilities software 3-1