IBM Infoprint Manager for AIX

User's and Operator's Guide

Version 3 Release 2

IBM Infoprint Manager for AIX

User's and Operator's Guide

Version 3 Release 2

Third Edition (October 2000)

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About This Publication

This publication describes how to use IBM Infoprint Manager for AIX (Infoprint) to print, manage, and archive jobs.

Who Should Use This Publication

This publication is for Infoprint end users and operators.

About the Documentation for Infoprint

Infoprint provides the following types of documentation:
- Infoprint library in portable document format (PDF) or hard copy
- Infoprint documentation on the World Wide Web
- Online help for Infoprint Submit, Infoprint Scan, the Infoprint Manager Operations GUI, the Infoprint Manager Administration GUI, the Infoprint VSM administrator's GUI, the Infoprint SMIT administrator's interface, and the Infoprint SMIT operator's GUI
- Manual (man) pages
- Infoprint online message catalog
- **readme** files

The Infoprint Publication Library

Infoprint provides the following publications in PDF format on a CD-ROM supplied with the product. Unless otherwise specified, you can order printed copies of these publications from IBM by requesting the form number for the publication:

- *IBM Infoprint Manager for AIX: Administrator's Guide*, S544-5595. This publication describes the primary administrator tasks necessary for setting up an Infoprint environment.

- *IBM Infoprint Manager for AIX: User's and Operator's Guide*, S544-5596. This publication describes submitting jobs from Infoprint Submit, Infoprint Scan, Infoprint Select, and the Infoprint AIX client, scheduling jobs, and managing the print environment.

- *Infoprint Manager: Reference*, S544-5475. For administrators, operators, and application programmers with the need to perform command-line functions, this publication describes the commands, utilities, transforms, attributes, and attribute values associated with Infoprint.

  Note: This publication is available only in PDF format.

- *PSF Direct Network Configuration Guide for System/370*, S544-5486. For system administrators or network specialists responsible for configuring a system for Print Services Facility (PSF) Direct. PSF Direct is a function of IBM Infoprint Manager for AIX that allows another PSF program (PSF/VM, PSF/MVS, or PSF/VSE) to print remotely, using the SNA LU 6.2 protocol, on printers supported by Infoprint. The PSF program sends the print data stream directly to the Infoprint printer.

- *IBM PSF for AIX: AFP Upload Configuration Guide Using SNA Server/6000*, S544-5422. For system administrators, this publication describes how to configure AFP Upload on both AIX (client) and MVS (server) to send files to the JES spool on the MVS server using a SNA Server/6000 protocol.

- *IBM PSF for AIX: AFP Upload Configuration Guide Using TCP/IP*, S544-5423. For system administrators, this publication describes how to configure AFP Upload on both AIX (client) and MVS (server) to send files to the JES spool on the MVS server using a TCP/IP protocol.

Other Publications Related to Infoprint

The following publications contain information you might find useful while installing, administrating, and using Infoprint:

- *AIX Version 4 Release 1 Commands Reference*, SBOF-1851, or *AIX Version 4 Release 3 Commands Reference*, SBOF-1877. For administrators, operators, and end users, these publications provide complete information about AIX commands.

  Note: Infoprint requires AIX Version 4.2.1 or 4.3. Users of AIX Version 4.2.1 should refer to *AIX Version 4 Release 1 Commands Reference*.

- *PSF/MVS MVS Download Guide*, G544-5294. For administrators and job submitters, this publication provides instructions for setting up the MVS Download support on PSF/MVS so that data can be transmitted from the Job Entry Subsystem (JES) spool on MVS for printing on an Infoprint system.

- *Printing for Fun and Profit under AIX*, GG24-3570. For administrators and systems engineers, this publication provides instructions for installing printer devices and configuring AIX print queues.

- *IBM Page Printer Formatting Aid: User's Guide*, S544-5284. For administrators and job submitters, this publication provides instructions for creating form definitions and page definitions with Page Printer Formatting Aid for AIX (PPFA).

  Note: This is an optional feature of Infoprint.

- *Font Summary for AFP Font Collection*, G544-5633. For administrators and job submitters, this publication provides information on IBM fonts.

- *Advanced Function Presentation: Printer Information*, G544-3290. For administrators and job submitters, this publication provides information on IBM printer devices.

- *IBM Data Stream and Object Architectures: Bar Code Object Content Architecture Reference*, S544-3766. For administrators and job submitters, this publication provides information on bar codes.

- *IBM Data Stream and Object Architectures: Font Object Content Architecture Reference*, S544-3285. For administrators, this publication provides information on coded fonts.

- *IBM Data Stream and Object Architectures: Graphics Object Content Architecture Reference*, S544-5498. For administrators and job submitters, this publication provides information on printing graphics.

- *IBM Data Stream and Object Architectures: Image Object Content Architecture Reference*, SC31-6805. For administrators and job submitters, this publication provides information on the IOCA data stream.

- *IBM Data Stream and Object Architectures: Mixed Object Document Content Architecture Reference*, SC31-6802. For administrators and job submitters, this publication provides information on the MOD:CA data stream.

- *TCP/IP Tutorial and Technical Overview*, GG24-3376. For networking specialists, this publication provides an overview of the Transmission Control Protocol/Internet Protocol (TCP/IP) and its uses in heterogeneous networks.

Manual (man) Pages for Infoprint Commands, Utilities, and Transforms

Online information, in manual (man) page format, is available for all Infoprint commands and utilities. You can use the AIX **man** command to view man pages for the following Infoprint commands:

lprafp	**pdpr**
mkfntmap	**pdpromote**
pdaccount	**pdq**
pdclean	**pdreorder**
pdcreate	**pdresubmit**
pddelete	**pdresume**
pddisable	**pdrm**
pdenable	**pdset**
pdls	**pdshutdown**
pdmod	**pdspace**
pdpause	**psfstat**

For example, to view online information for the **pdpr** command, enter:

```
man pdpr
```

You can use the AIX **man** command to view the following man page for the **-o** flag, which is used to pass information to Infoprint on AIX print commands:

oflag

You can use the AIX **man** command to view man pages for the following Infoprint utilities:

admingui	**pdinitports**
afpsplit	**pdmigpp**
ainupod1	**pdmincfg**
ainupod2	**pdmsg**
ainupod3	**pdnetifspri**
ainurpt1	**rc.iprsap**
ainurpt2	**rc.pd**
ainurpt3	**sense**
ainurpt4	**setup**
ainurpt5	**startcbd**
ainurpt6	**startnotd**
cfu	**startppo**
ipguiadv	**start_server**
ipguibasic	**startsrv**
ipguidist	**stopcbd**
jsmigr	**stopnotd**
opergui	**stop_server**
pdadmin	**tdump**
pdcrcds	**tlist**
pdcrdflt	**t2file**
pdcrmed	

You can use the AIX **man** command to view man pages for the following Infoprint daemon utilities:

mvsprsd	**ps2afpd**
pcl2afpd	

You can use the AIX **man** command to view man pages for the following Infoprint transform commands:

db2afp	**pcl2afp**
d2afp	**pdf2afp**
gif2afp	**ps2afp**
jpeg2afp	**sap2afp**
line2afp	**tiff2afp**

For information about the flags that you can use with the **man** command, refer to the **man** man page or to the AIX Version 4.2 *Commands Reference*.

Manual (man) Pages for Infoprint Attributes

Infoprint also provides you with online information about the attributes that each object supports. To view the various attributes, enter the following command:

man pd_att

A list displays containing file names of attribute man pages. You can then display the desired file and view the information about specific attributes.

Use the AIX **man** command to view the following Infoprint man pages for attributes:

pd_att_act_dest	**pd_att_medium**
pd_att_aux_sheet	**pd_att_queue**
pd_att_document	**pd_att_res_context**
pd_att_job	**pd_att_server**
pd_att_log	**pd_att_transform**
pd_att_log_dest	

Infoprint Online Message Catalog

Infoprint supplies a message catalog for the messages that are issued during its operation. For each message, the message catalog includes the text of the message, an explanation, a system action, and a response. You can view all information for a specific Infoprint error message by issuing the Infoprint **pdmsg** utility followed by the message number.

For example, from the command line enter:

pdmsg 5010-096

Messages issued by Infoprint have the following prefixes:

0420	**0424**
0421	**0425**
0422	**5010**
0423	

See the Infoprint **pdmsg** man page for a complete description of the **pdmsg** utility.

To view information about an AIX message, issue the AIX **info** command with the **-h** flag, followed by the message number. For example, from the command line enter:

```
info -h MessageNumber
```

where *MessageNumber* is the number of the AIX message.

readme Files

The **readme** files on the Infoprint product CD-ROM contain last-minute information about Infoprint that the hardcopy publications or the online information do not contain. You can use the AIX **more** command or a text editor, such as **dtpad** or **vi** on AIX, EPM on OS/2, or Notepad on Windows, to view the contents of the **readme** files.

Viewing PDF Publications

Infoprint provides software publications in PDF files on the publications CD-ROM. To view or print these publications:

1. Log in to AIX as **root** or as a member of the **system** group.
2. Insert the Infoprint publications CD-ROM into the drive.
3. To determine the identifier of your CD-ROM drive, enter on the AIX command line:
   ```
   lsdev -C -c cdrom
   ```
4. Then enter:
   ```
   mount -v cdrfs -r /dev/cdn /cdrom
   ```

   where *cdn* is the identifier of your CD-ROM drive, and */cdrom* is the file system that was created to install Infoprint.
5. Read the **readme.txt** file in the **/cdrom** directory.
6. If your AIX server or Windows system has an internet browser, such as Netscape or Internet Explorer, select the **aixindex.html** file in the appropriate language directory and click on the descriptions to view the appropriate PDF file.

   For example, if you use English, access the **/cdrom/english/aixindex.html** file.

   If your AIX server or Windows system does not have an internet browser, move to the appropriate language directory and slect the appropriate PDF file from the following choices:

   Installing Infoprint Manager

Title	PDF file name
Getting up and running in no time with IBM installation services	inscf798.pdf
Installing and Configuring Infoprint Library	library.pdf
Installing Infoprint Manager Control on your AIX Server	aixinsr32.pdf
Installing Optional Features	insoptf32.pdf

   Using Infoprint Manager

Title	PDF file name
IPDS Printer Operator Commands	refip798232.pdf
IPDS Error Recovery	ipdserrecov32.pdf
Performing Optional Configuration	optcfg32.pdf

Printing Variable Data	VariData.pdf
Submitting a Job to a DocuTech 135 Printer	prdocu39932.pdf
Using Enhanced Grab and Move to Shift Page Images	prnpgoff39932.pdf
Using Infoprint Scan	g5445722.pdf

Infoprint Publications

Title	PDF file name
Administrator's Guide	iprf1mst.pdf
User's and Operator's Guide	ipro1mst.pdf
Infoprint Manager Reference	iprr2mst.pdf
IBM PSF for AIX: AFP Upload Configuration Guide Using SNA Server/6000	S5445422.pdf
IBM PSF for AIX: AFP Upload Configuration Guide Using TCP/IP	S5445423.pdf
SAP R/3 Support: Configuration and Printing Tasks	sapr332.pdf.pdf

7. To use the Adobe Acrobat Viewer, enter:

```
cd /usr/lpp/Acrobat3/bin
./acroexch
```

Click on the **Help** button to learn how to view or print a publication.

8. If you have installed Infoprint Submit or the Adobe Acrobat Viewer on Windows, you can print or view the Infoprint PDF publications from your Windows system. On Windows, the publications directory is called *d:***cdrom****books***language*, where *d:* is the identifier of your CD-ROM drive and *language* is the appropriate language for the books.

The Organization of This Publication

This publication describes job submission from workstation clients to Infoprint, Infoprint operator tasks performed either at the workstation or on the AIX server, and archiving Infoprint jobs. It contains the following parts:

Part 1. Submitting Jobs to Infoprint

This part describes how to submit jobs to Infoprint. It describes how to create a job ticket with Infoprint Submit and how to include scanned images and variable data in the job ticket. It also describes how to use Infoprint Select to submit jobs from workstation applications or from the Disk Operating System (DOS) command line. Finally, it describes how to use the Infoprint AIX client to submit jobs from the AIX command line.

Part 2. Operator Tasks

This part describes the two graphical user interfaces (GUIs) that operators use for most tasks: the Infoprint Manager Operations GUI and the Infoprint VSM administrator's GUI. It gives detailed instructions for using the Infoprint VSM administrator's GUI to manage queues, actual destinations, and jobs.

Part 3. Archiving Jobs

This part describes how to use Infoprint Library to archive jobs.

An appendix describes the Infoprint SMIT operator's GUI. Some Infoprint installations use this interface for specialized tasks.

This publication also contains a glossary and an index.

About the Documentation for Infoprint

Infoprint provides the following types of documentation:
- Infoprint library in portable document format (PDF) or hard copy
- Infoprint documentation on the World Wide Web
- Online help for Infoprint Submit, Infoprint Scan, the Infoprint Manager Operations GUI, the Infoprint Manager Administration GUI, the Infoprint VSM administrator's GUI, the Infoprint SMIT administrator's interface, and the Infoprint SMIT operator's GUI
- Manual (man) pages
- Infoprint online message catalog
- **readme** files

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- *PSF Direct Network Configuration Guide for System/370*, S544-5486. For system administrators or network specialists responsible for configuring a system for Print Services Facility (PSF) Direct. PSF Direct is a function of IBM Infoprint Manager for AIX that allows another PSF program (PSF/VM, PSF/MVS, or PSF/VSE) to print remotely, using the SNA LU 6.2 protocol, on printers supported by Infoprint. The PSF program sends the print data stream directly to the Infoprint printer.

- *IBM PSF for AIX: AFP Upload Configuration Guide Using SNA Server/6000*, S544-5422. For system administrators, this publication describes how to configure AFP Upload on both AIX (client) and MVS (server) to send files to the JES spool on the MVS server using a SNA Server/6000 protocol.

- *IBM PSF for AIX: AFP Upload Configuration Guide Using TCP/IP*, S544-5423. For system administrators, this publication describes how to configure AFP Upload on both AIX (client) and MVS (server) to send files to the JES spool on the MVS server using a TCP/IP protocol.

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- *AIX Version 4 Release 1 Commands Reference*, SBOF-1851, or *AIX Version 4 Release 3 Commands Reference*, SBOF-1877. For administrators, operators, and end users, these publications provide complete information about AIX commands.

   Note: Infoprint requires AIX Version 4.2.1 or 4.3. Users of AIX Version 4.2.1 should refer to *AIX Version 4 Release 1 Commands Reference*.

- *PSF/MVS MVS Download Guide*, G544-5294. For administrators and job submitters, this publication provides instructions for setting up the MVS Download support on PSF/MVS so that data can be transmitted from the Job Entry Subsystem (JES) spool on MVS for printing on an Infoprint system.

- *Printing for Fun and Profit under AIX*, GG24-3570. For administrators and systems engineers, this publication provides instructions for installing printer devices and configuring AIX print queues.

- *IBM Page Printer Formatting Aid: User's Guide*, S544-5284. For administrators and job submitters, this publication provides instructions for creating form definitions and page definitions with Page Printer Formatting Aid for AIX (PPFA).

   Note: This is an optional feature of Infoprint.

- *Font Summary for AFP Font Collection*, G544-5633. For administrators and job submitters, this publication provides information on IBM fonts.

- *Advanced Function Presentation: Printer Information*, G544-3290. For administrators and job submitters, this publication provides information on IBM printer devices.

- *IBM Data Stream and Object Architectures: Bar Code Object Content Architecture Reference*, S544-3766. For administrators and job submitters, this publication provides information on bar codes.

- *IBM Data Stream and Object Architectures: Font Object Content Architecture Reference*, S544-3285. For administrators, this publication provides information on coded fonts.

- *IBM Data Stream and Object Architectures: Graphics Object Content Architecture Reference*, S544-5498. For administrators and job submitters, this publication provides information on printing graphics.

- *IBM Data Stream and Object Architectures: Image Object Content Architecture Reference*, SC31-6805. For administrators and job submitters, this publication provides information on the IOCA data stream.

- *IBM Data Stream and Object Architectures: Mixed Object Document Content Architecture Reference*, SC31-6802. For administrators and job submitters, this publication provides information on the MOD:CA data stream.

- *TCP/IP Tutorial and Technical Overview*, GG24-3376. For networking specialists, this publication provides an overview of the Transmission Control Protocol/Internet Protocol (TCP/IP) and its uses in heterogeneous networks.

Manual (man) Pages for Infoprint Commands, Utilities, and Transforms

Online information, in manual (man) page format, is available for all Infoprint commands and utilities. You can use the AIX **man** command to view man pages for the following Infoprint commands:

lprafp	pdpr
mkfntmap	pdpromote
pdaccount	pdq
pdclean	pdreorder
pdcreate	pdresubmit
pddelete	pdresume
pddisable	pdrm
pdenable	pdset
pdls	pdshutdown
pdmod	pdspace
pdpause	psfstat

For example, to view online information for the **pdpr** command, enter:

```
man pdpr
```

You can use the AIX **man** command to view the following man page for the **-o** flag, which is used to pass information to Infoprint on AIX print commands:

oflag

You can use the AIX **man** command to view man pages for the following Infoprint utilities:

admingui	pdinitports
afpsplit	pdmigpp
ainupod1	pdmincfg
ainupod2	pdmsg
ainupod3	pdnetifspri
ainurpt1	rc.iprsap
ainurpt2	rc.pd
ainurpt3	sense
ainurpt4	setup
ainurpt5	startcbd
ainurpt6	startnotd
cfu	startppo
ipguiadv	start_server
ipguibasic	startsrv
ipguidist	stopcbd
jsmigr	stopnotd
opergui	stop_server
pdadmin	tdump
pdcrcds	tlist
pdcrdflt	t2file
pdcrmed	

You can use the AIX **man** command to view man pages for the following Infoprint daemon utilities:

mvsprsd	ps2afpd
pcl2afpd	

You can use the AIX **man** command to view man pages for the following Infoprint transform commands:

db2afp	**pcl2afp**
d2afp	**pdf2afp**
gif2afp	**ps2afp**
jpeg2afp	**sap2afp**
line2afp	**tiff2afp**

For information about the flags that you can use with the **man** command, refer to the **man** man page or to the AIX Version 4.2 *Commands Reference*.

Manual (man) Pages for Infoprint Attributes

Note: The Manual Pages for Infoprint Attributes are no longer being revised. For the most current information on Infoprint Attributes, consult Chapter 7 in the Infoprint Manager: Reference.

Infoprint provided you with online information about the attributes that each object supports at general availability for Infoprint Manager for AIX, Version 3 Release 2 Modification 0. To view the various attributes, enter the following command:

```
man pd_att
```

A list displays containing file names of attribute man pages. You can then display the desired file and view the information about specific attributes.

Use the AIX **man** command to view the following Infoprint man pages for attributes:

pd_att_act_dest	**pd_att_medium**
pd_att_aux_sheet	**pd_att_queue**
pd_att_document	**pd_att_res_context**
pd_att_job	**pd_att_server**
pd_att_log	**pd_att_transform**
pd_att_log_dest	

Infoprint Online Message Catalog

Infoprint supplies a message catalog for the messages that are issued during its operation. For each message, the message catalog includes the text of the message, an explanation, a system action, and a response. You can view all information for a specific Infoprint error message by issuing the Infoprint **pdmsg** utility followed by the message number.

For example, from the command line enter:

```
pdmsg 5010-096
```

Messages issued by Infoprint have the following prefixes:

0420	**0424**
0421	**0425**
0422	**5010**
0423	

See the Infoprint **pdmsg** man page for a complete description of the **pdmsg** utility.

To view information about an AIX message, issue the AIX **info** command with the **-h** flag, followed by the message number. For example, from the command line enter:

```
info -h MessageNumber
```

where *MessageNumber* is the number of the AIX message.

readme Files

The **readme** files on the Infoprint product CD-ROM contain last-minute information about Infoprint that the hardcopy publications or the online information do not contain. You can use the AIX **more** command or a text editor, such as **dtpad** or **vi** on AIX, EPM on OS/2, or Notepad on Windows, to view the contents of the **readme** files.

Viewing PDF Publications

Infoprint provides software publications in PDF files on the publications CD-ROM. To view or print these publications:

1. Log in to AIX as **root** or as a member of the **system** group.
2. Insert the Infoprint publications CD-ROM into the drive.
3. To determine the identifier of your CD-ROM drive, enter on the AIX command line:

   ```
   lsdev -C -c cdrom
   ```
4. Then enter:

   ```
   mount -v cdrfs -r /dev/cdn /cdrom
   ```

   where *cdn* is the identifier of your CD-ROM drive, and */cdrom* is the file system that was created to install Infoprint.
5. Read the **readme.txt** file in the **/cdrom** directory.
6. If your AIX server or Windows system has an internet browser, such as Netscape or Internet Explorer, select the **aixindex.html** file in the appropriate language directory and click on the descriptions to view the appropriate PDF file.

   For example, if you use English, access the **/cdrom/english/aixindex.html** file.

   If your AIX server or Windows system does not have an internet browser, move to the appropriate language directory and slect the appropriate PDF file from the following choices:

   Installing Infoprint Manager

Title	PDF file name
Getting up and running in no time with IBM installation services	inscf798.pdf
Installing and Configuring Infoprint Library	library.pdf
Installing Infoprint Manager Control on your AIX Server	aixinsr32.pdf
Installing Optional Features	insoptf32.pdf

   Using Infoprint Manager

Title	PDF file name
IPDS Printer Operator Commands	refip798232.pdf

IPDS Error Recovery	ipdserrecov32.pdf
Performing Optional Configuration	optcfg32.pdf
Printing Variable Data	VariData.pdf
Submitting a Job to a DocuTech 135 Printer	prdocu39932.pdf
Using Enhanced Grab and Move to Shift Page Images	prnpgoff39932.pdf
Using Infoprint Scan	g5445722.pdf

Infoprint Publications

Title	PDF file name
Administrator's Guide	iprf1mst.pdf
User's and Operator's Guide	ipro1mst.pdf
Infoprint Manager Reference	iprr2mst.pdf
IBM PSF for AIX: AFP Upload Configuration Guide Using SNA Server/6000	S5445422.pdf
IBM PSF for AIX: AFP Upload Configuration Guide Using TCP/IP	S5445423.pdf
SAP R/3 Support: Configuration and Printing Tasks	sapr332.pdf.pdf

7. To use the Adobe Acrobat Viewer, enter:

```
cd /usr/lpp/Acrobat3/bin
./acroexch
```

Click on the **Help** button to learn how to view or print a publication.

8. If you have installed Infoprint Submit or the Adobe Acrobat Viewer on Windows, you can print or view the Infoprint PDF publications from your Windows system. On Windows, the publications directory is called *d:***cdrom****books***language*, where *d:* is the identifier of your CD-ROM drive and *language* is the appropriate language for the books.

Part 1. Submitting Jobs to Infoprint

Chapter 1. Using Infoprint Submit to Process a Job

IBM Infoprint Submit is used through the life cycle of a job. A print shop uses Infoprint Submit on a Windows 95, Windows NT, or Macintosh system to create a job ticket for the job, submit the job to the Infoprint server on AIX for printing, and track and archive the job.

This chapter describes the following:
- Job tickets
- Working with jobs

Job Tickets

An Infoprint job consists of a job ticket and all the files that are associated with that job.A job ticket contains all the specifications for a job. You can create a job ticket by using Infoprint Submit. Infoprint creates the job ticket in electronic format, but you can print a hard copy if you need one. The job ticket refers to the customer's job data and resources and pulls them together in a job bundle.

You can print any part of the data by submitting a print job.

Working with Print Jobs

When using Infoprint Submit to create the job ticket, you must consider a number of things as you work with a job to prepare it for printing. Primarily, however, during this phase of the process, you will identify and organize the printable files and other resources that make up the job. As you complete the job ticket, Infoprint Submit provides a format in which you can specify the details necessary to process a job effectively.

Creating Files for Printing

You generate the printable files that you submit to Infoprint, file by file, from the application that you use for authoring. You can use the Adobe PostScript driver and IBM Infoprint PostScript Printer Description (PPDs) to convert files to PostScript. You can use Infoprint Scan to create printable files from hardcopy.

Creating a Job Ticket

Once you have installed the Infoprint Submit application on your Windows 95, Windows NT, or Macintosh system, you can begin creating job tickets that support the orders you receive from customers.
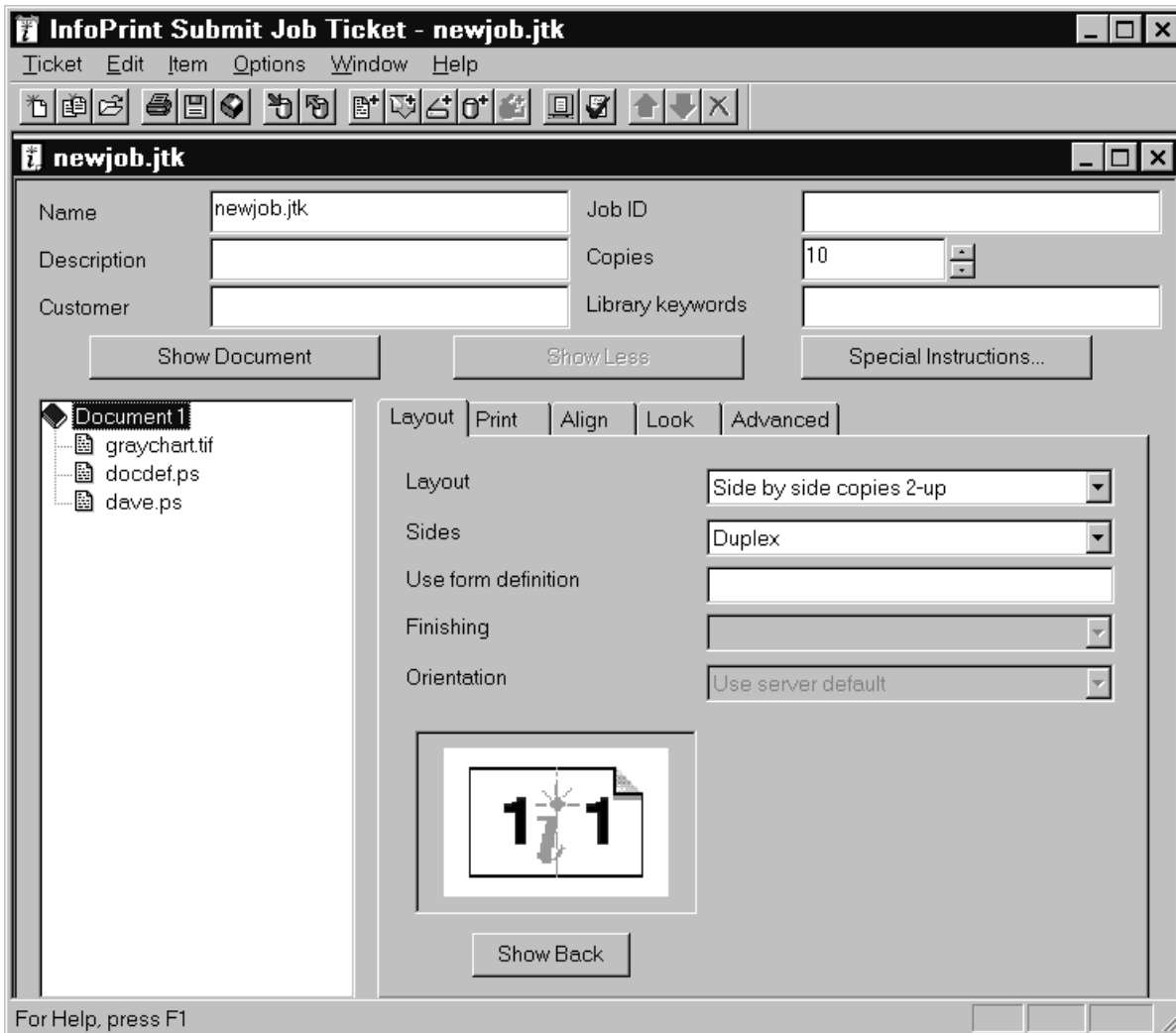
Figure 1. An Example of an Infoprint Submit Job Ticket

Figure 1 shows an InfoPrint job ticket.

To begin working on a new ticket, you start Infoprint Submit and the Job Ticket window displays.

As you create the job ticket, use the **Help** menu from the Job Ticket window or the **Help** button on the dialogs to guide you.

You can create a new job ticket or use a previously created job ticket as a template (using **New Like...**) for your new job ticket. You can print the job as represented by your job ticket, any of the items or files listed in the ticket, or just the ticket itself.
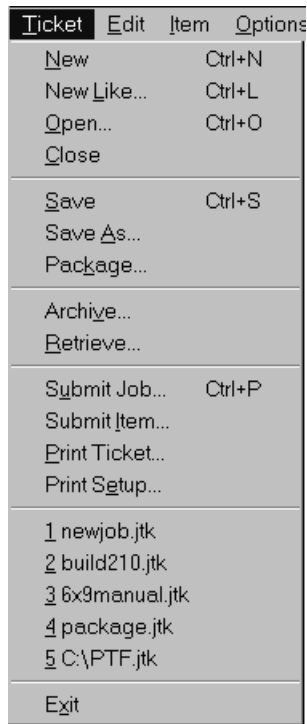
Figure 2. Infoprint Submit Job Ticket List

Figure 2 shows the `Ticket` menu, which contains general tasks that you can perform as you work with job tickets. Notice that you can access the most recently edited tickets from this menu.

Describing Your Job

Using an Infoprint Submit `Job Ticket` window, you can describe your job. The description can include a job name, an ID, the customer name, special instructions, and other information that will assist you as you refer to the job ticket.

Specifying How You Want the Job to Print

You can describe the layout of your document and specify alignment values, instantly viewing a graphical representation of the alignments and layouts you select. You can dynamically adjust characteristics such as the front to back alignment of your document without having to print the job to verify the page placement.
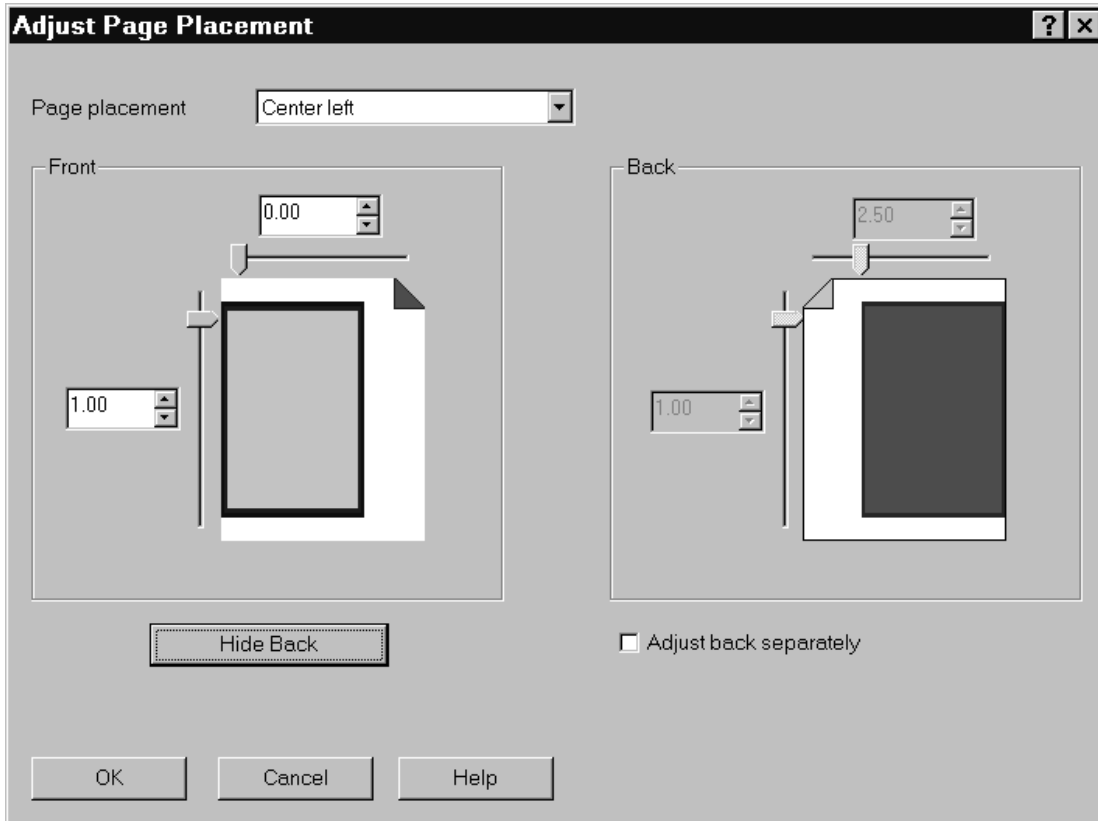
Figure 3. The Adjust Page Placement Window

Figure 3 shows the `Adjust Page Placement` window. If the image is smaller than the page, you use this window to adjust the position of the image on the page.

Working with Files in a Job Ticket

You build job tickets by adding items in the correct order that refer to the files that you are printing. The files you print may be variable data definition files, printable text files, or graphic files, or variable data definition files. Graphic files may include printable files that were created from hard copy by using the optional Infoprint Scan feature. Files may reside on your hard disk or in a shared directory on another system; or they may be archived in the optional Infoprint Library system.

Working with Scanned Items in Job Tickets

InfoPrint Scan is integrated with the ticket creation process of Infoprint Submit. With the InfoPrint scanner and software, you can create source files and include them in your job ticket while you are building the job ticket.
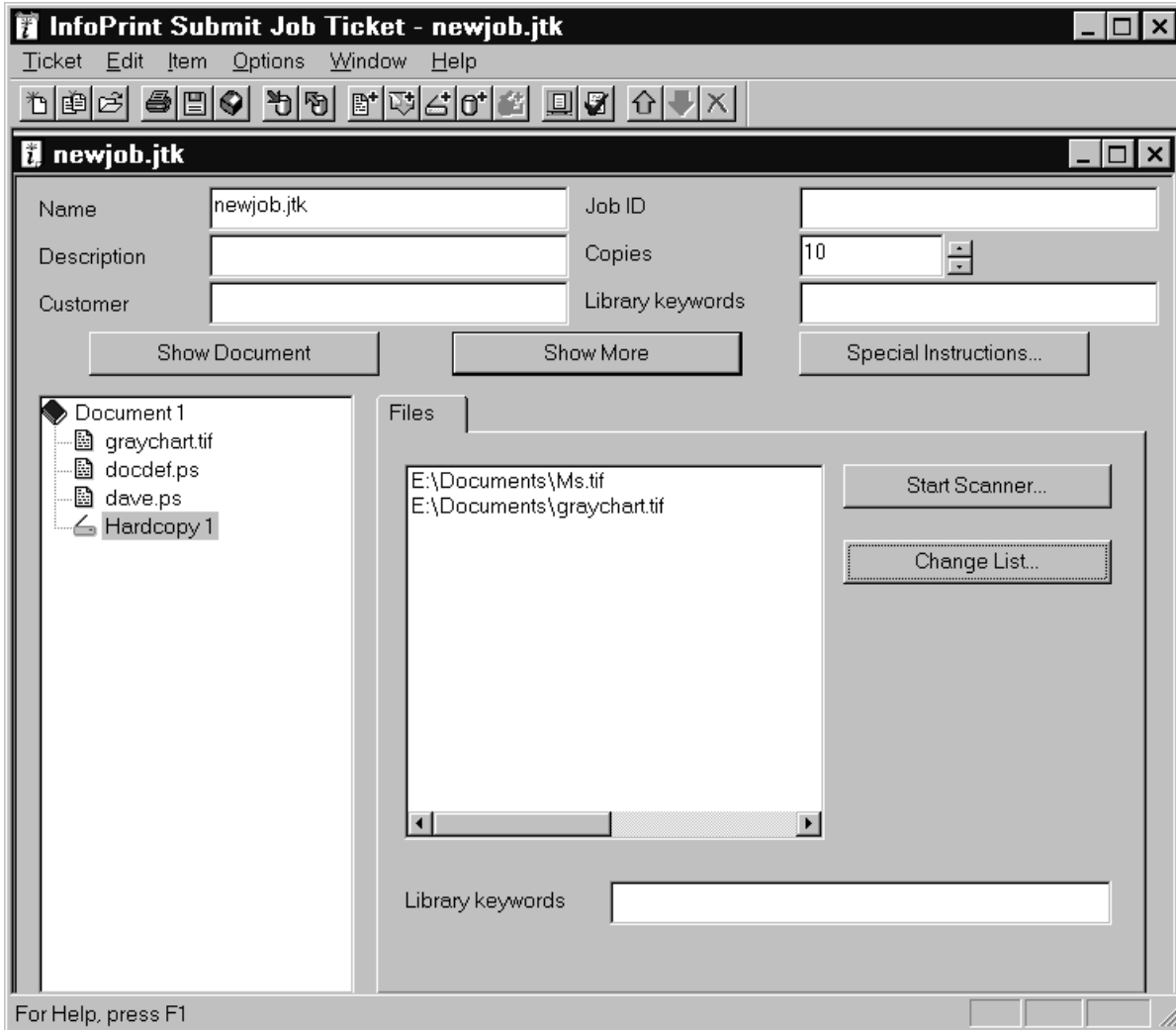
Figure 4. InfoPrint Submit Job Ticket

Figure 4 shows a hardcopy item that is selected in a job ticket and its associated scanned files. You can start the scan application and create additional files to add to the job from this screen. See "Chapter 2. Using Infoprint Scan" on page 15 for an overview of Infoprint Scan and refer to the Infoprint Scan online help for instructions for scanning files.

Adding Variable Data Items to Job Tickets

Variable Data is another item that you can add as you build the job ticket. This feature gives you the ability to customize information in a PostScript file so that each copy of the file that you print is unique.
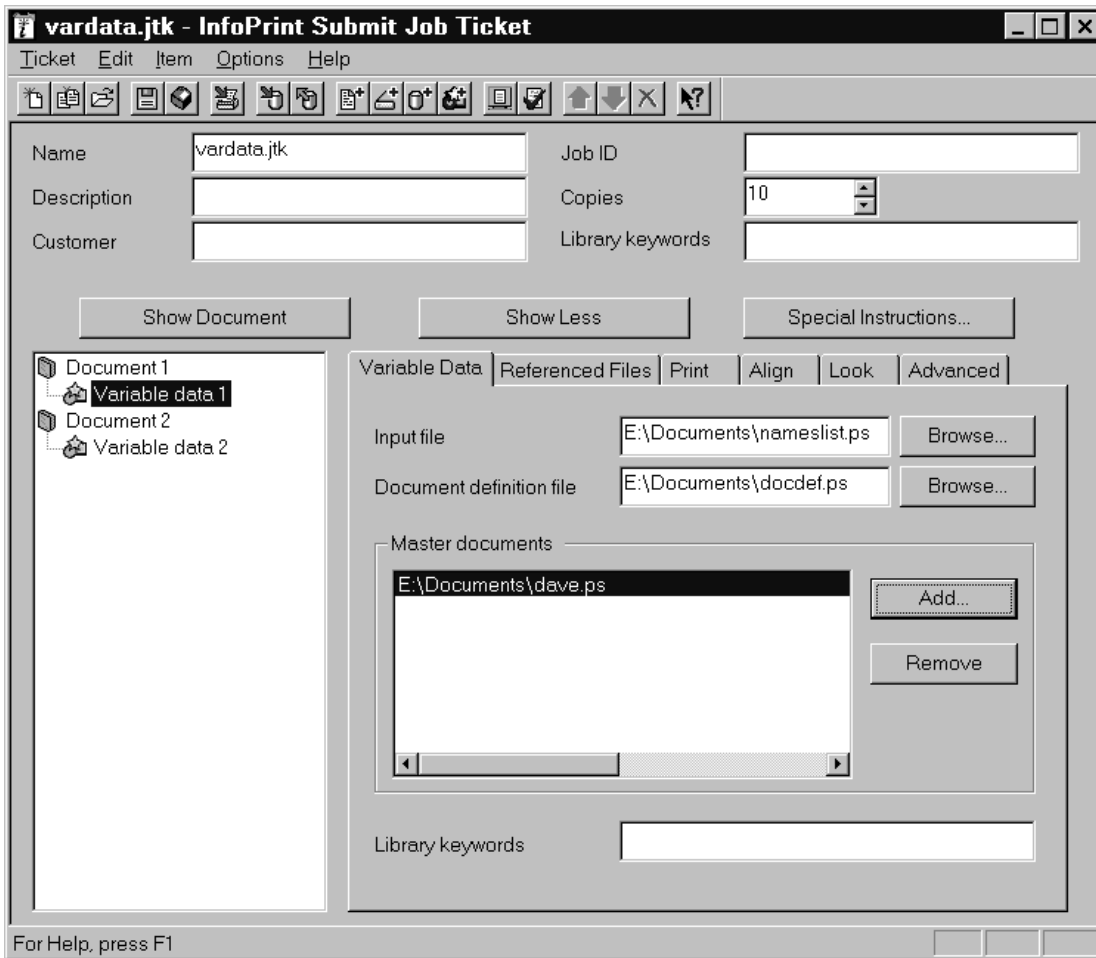
Figure 5. The Variable Data Tab of a Job Ticket

Figure 5 shows a selected variable data item in a job ticket and its associated master file, input file, and document definition file. Notice that the input file `nameslist.ps` is a list of names that will be inserted into the `dave.ps` master file as specified by the document definition file, `docdef.ps`.

Viewing and Preflighting Your Files

If the appropriate viewers are installed, you can preview the printable files that you are adding to your job ticket. By default, Infoprint Submit uses the Adobe Acrobat Reader, which you can use to preview PostScript, PDF. and TIFF files. If you select the AFP Workbench viewer as your RIPped file viewer, you can view AFP, GIF, and JPEG RIP files before printing them as well.

Submitting a Print Job

When you select **Submit Job** from the `Ticket` menu, you can indicate which files to print and how to schedule and process your job.

From the **Files** tab, you can choose the printer from a list of printers on your servers. You can specify what to print, how many copies to print, and whether to use a previously processed (RIPped) file or RIP the source file for printing (re-RIP).
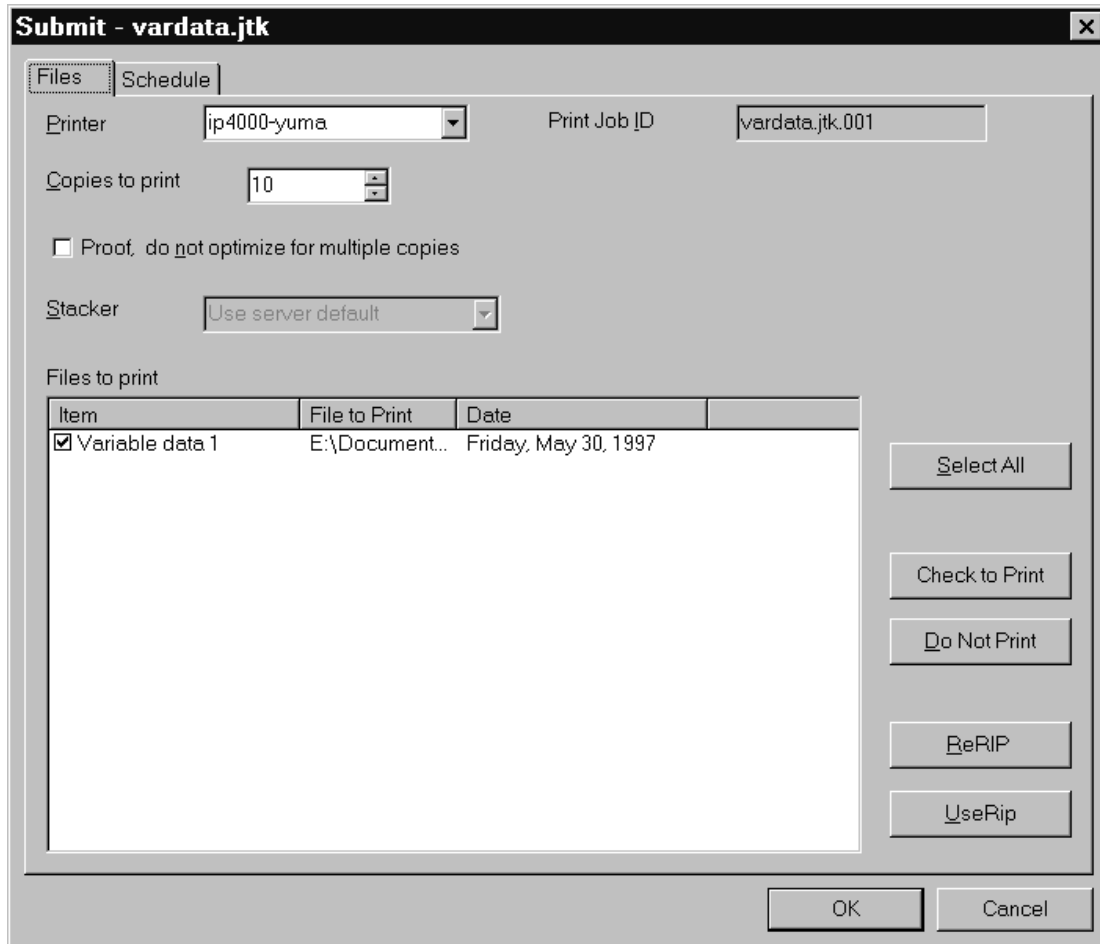
Figure 6. The Files Tab for Job Submission

Figure 6 shows the **Files** tab that displays when you choose to submit a job. In this case, a variable data item has been selected for printing on a logical printer named `ip-4000-yuma`.

Figure 7 on page 10 shows the **Schedule** tab, where you indicate when and how you want your job to be processed. Because the time it takes to print a job includes both the processing (RIPping) and the actual printing, you may want to control these activities separately to optimize the flow of paper through your printers. You may want your job to be held in the print queue before being RIPped and printed. You may want to RIP it now, but print it later. You can specify how long you would like your job to be retained on the AIX server so that it can be printed again. And, you can choose to specify a time by which the job should be printed.
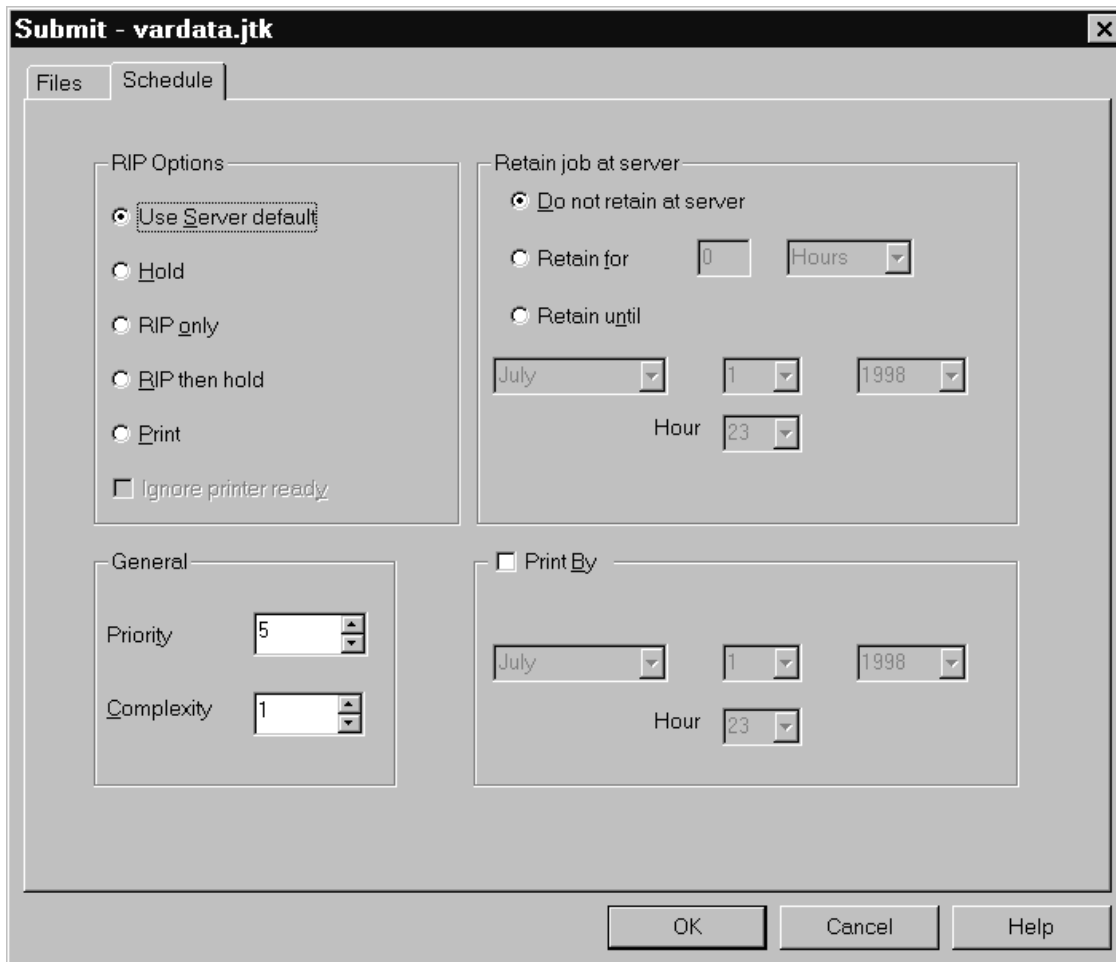
Figure 7. The Scheduling Tab for Job Submission

If you select **Print** in the **RIP Options** box on the **Schedule** tab, the job will be added to the print queue and will RIP and print automatically. An AIX operator will not have to release the job.

Retrieving a Job from the Library

With an installed Infoprint Library system, users can access customer jobs and specific files that have been archived on an external tape storage device. Here, InfoPrint lets you use your PC and Macintosh systems that have been set up to communicate with the Infoprint server on AIX and an attached tape storage device system to gain fast access to large quantities of archived jobs and their files.

Before you can use Infoprint Library, you must connect to the AIX system where the Infoprint server is running. To connect, follow this procedure:

1. Ask your Infoprint administrator for the following information:
   - The name of the AIX system
   - If the AIX system is in a different domain from your workstation, the domain name
   - Your AIX user ID and password
2. Double-click on the **Network Neighborhood** icon on your Windows desktop.

3. If the AIX system is in a different domain, double-click on the **Entire Network** icon, then on the icon for the domain.
4. Double-click on the icon for the AIX system.
5. When prompted, enter your AIX user ID and password.
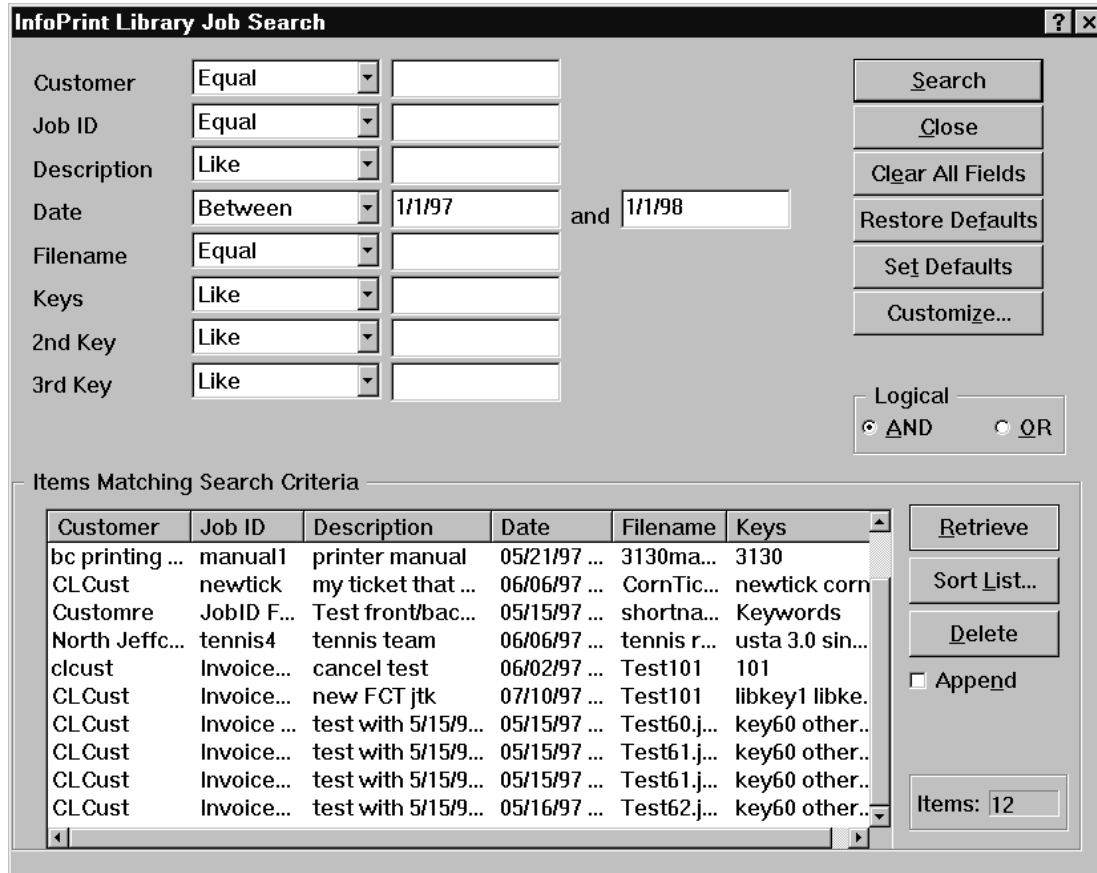
Figure 8. A Library Job Search

Figure 8 shows an Infoprint Library job search screen, in this case, a list displaying all customer jobs created between 1/1/97 and 1/1/98. From this list, a user can retrieve selected files.

Saving the RIP Output

The raster image processor (RIP) file is generated during the print process. Because PostScript to RIP processing can be costly, you may want to save your RIP files for re-printing jobs to avoid having to RIP them again. To set up the RIP directory, use the following directions.

The RIP file can be saved in the **/ipdata** file system, which is shared by the AIX system and an Infoprint Submit machine.

When you add a file to your job ticket, you use the **Save RIPed files** check box option on the **Print** tab.

Verifying that PostScript Jobs are Ready to Print

If your Infoprint system receives a PostScript job from a personal computer system, you must ensure that the Type 1 fonts required to print are either:
- Contained within the job (inline)
- Available on AIX

If the fonts are contained inline, you should have no problem in printing the output. However, if the fonts are not available on AIX, by default a job will be cancelled.

To verify that all fonts are available on AIX and contain the **.pfa** or **.pfb** extensions necessary for printing PostScript, preflight the job before sending it to the printer. To preflight the job from Infoprint Submit, refer to the "Viewing and preflighting files" help topic.

Note: For preflighting to work correctly, you must have enabled font substitution on the AIX server. To perform this task, add the following lines to the **/var/psf/ps2afp/UserInit** file:

```
%!
turnFontSubstitutionOn
```

Missing Fonts in PostScript Jobs

If a PostScript job is missing fonts, you can correct the problem in these ways:
- Add those fonts to IBM Infoprint Control (refer to *IBM Infoprint Manager for AIX: Administrator's Guide*)
- Use the following procedure to create a font conversion table for the PostScript print driver. The font conversion table maps the True Type fonts used on PC programs to the Type I PostScript fonts required on the AIX server.

Note: The options might differ slightly on other PostScript drivers. This selection can come from the Acrobat Exchange 2.0 window or an equivalent panel for Adobe PageMaker, Quark Xpress, or a similar application.

1. Select the **Print Setup** option.
2. From the `Print Setup` window, select the appropriate IBM Infoprint driver.
3. From the Options pane on this same window, select **Advanced...**.
4. From the `Advanced...` window, select **Use Substitution Table**.
5. From the `Substitution` window, identify the TrueType font in the PostScript job from the list on the left. Identify an appropriate Adobe Type I font for conversion from the list on the right.

    For example, you might create the following mappings:

    TrueType
    > **Adobe Type I**

    Arial   AvantGarde

    WingDings
    > ZapfDingbats

6. From the `Advanced...` window, select **OK**.
7. From the `Advanced...` window, avoid potential storage concerns by specifying the **Clear memory per page** field.

This value ensures that the PostScript driver does not exceed the memory units available on your PostScript interpreter.

8. From the Graphics pane on the `Advanced...` window, specify **600** in the **Resolution (DPI)** field. This provides the correct resolution for all Infoprint jobs.

9. From the Graphics pane on the `Advanced...` window, specify the **Print PostScript Error Information** value. This option ensures that you receive a record of any font problems or fonts that still do not convert to Adobe Type I.

   You can take the default for all other fields.

10. From the `Print` window, specify the correct level of PostScript under the PostScript Options panel.

    If you are not sure, specify **level 2**, which contains both level 1 and level 2 PostScript.

11. From the `Print` window, specify **600** in the **Print Quality** field.

    This value should correspond to the **Resolution (DPI)** field on the `Advanced...` window. If a discrepancy exists, the driver uses the value on the **Print Quality** field.

12. From the `Print` window, select **Options**.

13. From the `Print to File` window, specify the output file for the PostScript job:

    `c:\data\`*sample.ps*

    where *sample.ps* is the PostScript file with which you are working.

If you receive any font errors, PostScript fonts might be resident on your PostScript driver but not supplied with the AIX system and IBM printer.

Note: Do not attempt to change PostScript data files unless you have a thorough knowledge of the PostScript language.

Chapter 2. Using Infoprint Scan

For information on IBM Infoprint Scan, visit the IBM Printing Systems Web Site at
http://www.ibm.com/printers and do the following:

1. Click on the IBM Infoprint Manager for AIX sitelet on the lower, right-hand
    corner.
2. Click on Site Map in the left-hand navigation bar.
3. Click on Adobe Acrobat PDFs of these Web Pages.
4. Click on Procedures: Using Infoprint Scan.

Chapter 3. Creating and Printing Variable Data Jobs

For information on creating and printing variable data jobs, visit the IBM Printing Systems Web Site at http://www.ibm.com/printers and do the following:

1. Click on the IBM Infoprint Manager for AIX sitelet on the lower, right-hand corner.
2. Click on Reference Information in the left-hand navigation bar.
3. Click on Procedures.
4. Click on *Using Infoprint Manager in a Reprographics Environment*.
5. Click on the paragraph within this procedure to get a PDF of *Printing Variable Data*.

Chapter 4. Using Infoprint Select to Submit a Job

Infoprint Select allows you to submit jobs from an IBM Operating System/2 (OS/2) or Windows workstation to a printer that is managed by Infoprint. You can print from applications or from the DOS command line.

Adding a New Printer

Before you can use Infoprint Select to submit a job to a printer, you must define the printer to your operating system.

OS/2

To define a new printer to OS/2, follow these steps:

1. Click on the **Infoprint Manager Client** icon on the desktop.
2. Select **Infoprint Connections**.
3. From the **Connection** menu, select **Add...**.
4. Fill in the **Host Name** and **Socket** fields and click on the **Add** button.
5. Close the **Infoprint Connections** window.
6. In the **Infoprint Manager Client** window, select **Network**.
7. Select **Infoprint** to open a window that shows server icons.
8. Select a server icon to open a window that shows printer icons.
9. Drag and drop a printer icon onto the desktop. The printer definition is complete.

Windows 3.1.1 or WIN-OS/2

To define a new printer to Windows 3.1.1 or WIN-OS/2, follow these steps:

1. Start Infoprint Select.
2. From the **Edit** menu, select **Settings**.
3. On the **Connection** tab, fill in the **Host Name** and **Port Number** fields.
4. On the **Printers** tab, select **Infoprint Manager** in the **Server Name** field and click on the **OK** button.
5. In the Infoprint Select window, click on the button with a plus sign in the toolbar; or select the **Printer** menu, then **Add**.
6. Select a printer and click on the **Install** button. The printer definition is complete.

Windows 95

To define a new printer to Windows 95, follow these steps:

1. From the **Start** menu, select **Settings**, then **Printers**.
2. Click on the **Add Printer** icon.
3. Select **Local Printer** and click on the **Next** button.
4. Click on the **Have Disk** button.
5. Select the directory where Infoprint Select is installed and click on the **OK** button.
6. Select a printer model from the list and click on the **Next** button.

7. In the list of available ports, select **Infoprint** and click on the **Configure Port** button.
8. Fill in the **Host Name** and **Host Port** fields.
9. In the **Print Server** field, select **Infoprint Manager**; then click on the **Refresh Printer List** button.

   Note: Windows 95 saves your entries in the **Host Name**, **Host Port**, and **Print Server** fields for future printer definitions.
10. Select a printer from the list and click on the **OK** button.
11. Click on the **Next** button.
12. Either accept the default name for the printer or enter a name of your choice. This name will appear under the printer icon.
13. If you want applications to use this printer as the default printer, select **Yes**. Otherwise, select **No**.
14. Refer to the Microsoft documentation to help you select the **Share** or **Not Share** option.
15. When you are prompted to print a test page, select **No**.
16. Click on the **Finish** button.
17. Open the `Properties` dialog for the new printer.
18. On the **Details** tab, click on the **Spool Settings...** button.
19. Select **Disable bi-directional support for this printer**, then click on the **OK** button. The printer definition is complete.

Windows NT

To define a new printer to Windows NT, follow these steps:
1. From the **Start** menu, select **Settings**, then **Printers**.
2. Click on the **Add Printer** icon.
3. Select **My Computer** and click on the **Next** button.
4. In the list of available ports, select **Infoprint** and click on the **Configure Port** button.
5. Fill in the **Host Name** and **Host Port** fields.
6. In the **Print Server** field, select **Infoprint Manager**; then click on the **Refresh Printer List** button.

   Note: Windows NT saves your entries in the **Host Name**, **Host Port**, and **Print Server** fields for future printer definitions.
7. Select a printer from the list and click on the **OK** button.
8. Click on the **Next** button.
9. Click on the **Have Disk** button.
10. Select the directory where Infoprint Select is installed and click on the **OK** button.
11. Select a printer model from the list and click on the **Next** button.
12. Either accept the default name for the printer or enter a name of your choice. This name will appear under the printer icon.
13. If you want applications to use this printer as the default printer, select **Yes**. Otherwise, select **No**.
14. Refer to the Microsoft documentation to help you select the **Share** or **Not Share** option.
15. When you are prompted to print a test page, select **No**.

16. Click on the **Finish** button. The printer definition is complete.

Printing from Applications

Infoprint Select works with the print facility of each application, so printing from every program is a little different. A typical application may allow you to specify a printer other than the default, the number of copies, or a range of pages. For example, Figure 9 shows the File Print dialog for Lotus Notes.
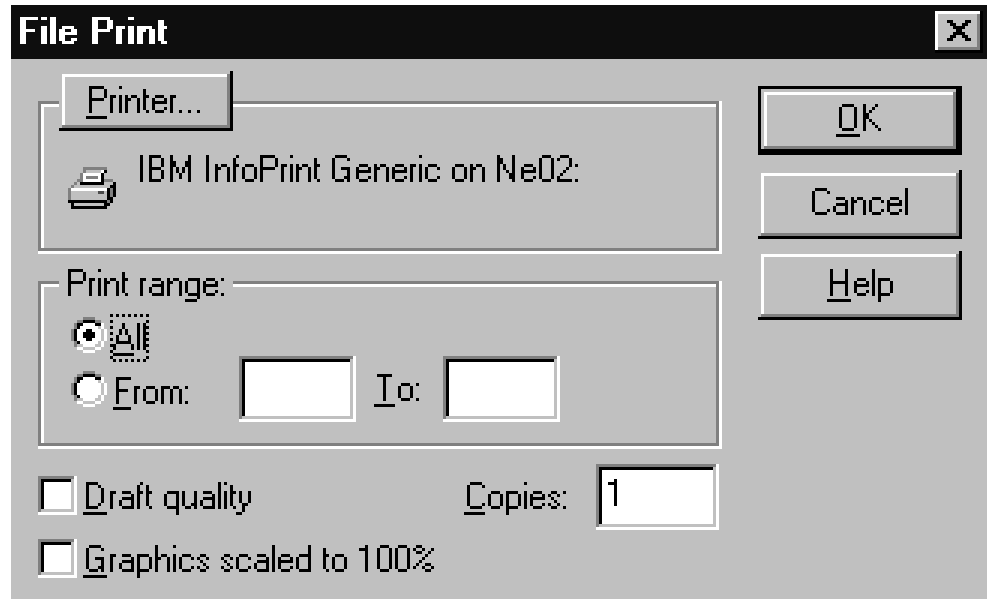
Figure 9. Printing from Lotus Notes

Printing from the Command Line

Infoprint Select allows you to enter the following Infoprint commands on the DOS command line:

pdls Lists selected attribute values for a job, destination, or other Infoprint object

pdpr Submits a job to a logical destination

pdq Queries the status of selected jobs, of all jobs that have been submitted to a logical destination, or of all jobs that have been assigned to an actual destination

The *Infoprint Manager: Reference* provides information about Infoprint commands and attributes and shows several examples of each command that you can issue from Infoprint Select. This section contains examples using the commands to perform some common tasks.

Querying Destination Attributes

To determine whether the logical destination london is ready to receive jobs, enter:

```
pdls -c destination -r "destination-state" london
```

Submitting a Job

To submit the file `myjob.ps` to the logical destination `london` and request two-sided printing, enter:

```
pdpr -d london -x "sides=2" myjob.ps
```

Querying Jobs

To query all the jobs that you submitted to logical destination `london`, enter:

```
pdq -d london
```

Infoprint returns information similar to the following:

```
                                Intervening Destination Destination
Job ID                Name      State    Jobs        Requested   Assigned
--- ---------------- --------- -------- ----------- ----------- -----------
13  Serv1:1104221000 report.ps printing 0           london      caxton
14  Serv1:1104221023 myjob.ps  pending  8           london      morris
```

Chapter 5. Using the Infoprint AIX Client to Submit a Job

The Infoprint AIX client allows you to enter Infoprint commands on the AIX command line. It has no graphical user interface.

Commands You Can Use from the Infoprint AIX Client

On any AIX system, the Infoprint AIX client allows authorized users (normally all users) to use the following Infoprint commands:

pdls   Lists selected attribute values for a job, destination, or other Infoprintobject

pdpr   Submits a job to a logical destination

pdq   Queries the status of selected jobs, of all jobs submitted to a logical destination, or of all jobs assigned to an actual destination

If the Infoprint AIX client and server are in the same namespace, or if the value of the server **security-level** attribute is **none**, authorized users can also use other Infoprint commands. By default, all users are authorized to use the following commands:

pdmod
     Modifies the attributes of submitted jobs or of the documents in them

pdrm   Deletes jobs

Note: For more information about Infoprint commands and attributes, refer to *Infoprint Manager: Reference* or to the man pages. Command man pages have the same name as the command. For a list of attribute man pages, enter:

```
man pd_att
```

Examples Using the Infoprint AIX Client

The *Infoprint Manager: Reference* and the command man pages show several examples of each command that you can issue from the Infoprint AIX client. This section contains examples using the commands to perform some common user tasks.

Filtering Destinations

To find a destination near you that can print two-sided PostScript jobs, enter:

```
pdls -c destination -f "destination-realization==actual
   document-format-supported==postscript sides-supported==2"
   -r "destination-location" \*:
```

The **-f** flag specifies that you want to list only actual destinations that support PostScript format and two-sided printing. The **-r** flag specifies that you want to know where the actual destinations are. The asterisk means that you want to check every server. The blank after the colon means that you want to check every destination in every server. The backslash prevents the shell from interpreting the asterisk as a special character.

Infoprint returns information similar to the following:


```
caxton:  destination-location = 3rd floor E
elzevir: destination-location =
morris:  destination-location = 1st floor W
```

You decide to print your job on morris. To determine a logical destination that routes jobs to morris, enter:

```
pdls -c destination -f "destination-associated-destinations==morris" \*:
```

Querying Destination Attributes

To determine whether morris is ready to receive jobs, enter:

```
pdls -c destination -r "destination-state" morris
```

Submitting a Print Job

To submit the file myjob to the logical destination london, requesting two-sided printing on the actual destination morris, enter:

```
pdpr -d london -x "destination-name-requested=morris sides=2" myjob
```

Submitting a Fax Job

To submit the cover sheet faxcover and the file Memo1 to the logical destination faxout for transmission to fax number 1–709–123–4567, enter:

```
pdpr -d faxout -x "fax-number=17091234567 document-type=cover-sheet"
   -f faxcover -x "document-type=printable" Memo1
```

Querying Jobs

To query all the jobs that you submitted to logical destination london, enter:

```
pdq -d london
```

Infoprint returns information similar to the following:

```
                                 Intervening Destination Destination
    Job ID            Name   State    Jobs       Requested   Assigned
    --- ---------------- ------ -------- ----------- ----------- -----------
    13  Serv1:1104221000 report printing 0          london      caxton
    14  Serv1:1104221023 myjob  pending  8          london      morris
```

Modifying Job Attributes

After submitting myjob, you decide that you want to print two copies and that you want to retain it for one hour after it prints. When you queried the jobs that you submitted to london, you saw that the local job ID is 14. You also saw that the job is still pending, so it can still be modified. Enter:

```
pdmod -n 2 -x "job-retention-period=1:00" 14
```

Part 2. Operator Tasks

Chapter 6. Using the Infoprint Manager Operations GUI

The Infoprint Manager Operations GUI is an operator interface for managing Infoprint jobs and actual destinations, such as printers. It runs on multiple platforms, so you can use it either from a workstation or directly on an Infoprint Manager server console. This chapter describes the following:

- "Tasks You Can Do with the Infoprint Manager Operations GUI"
- "Three Views of the Infoprint Manager Operations GUI" on page 28
- "Starting the Infoprint Manager Operations GUI from the Windows Desktop" on page 28
- "Starting the Infoprint Manager Operations GUI from the AIX Desktop in a Basic Environment" on page 30
- "Starting the Infoprint Manager Operations GUI from the AIX Desktop in an Advanced Environment" on page 31
- "Starting the Infoprint Manager Operations GUI from the AIX Desktop in a Distributed Environment" on page 31
- "Starting the Infoprint Manager Operations GUI from the Command Line" on page 31

Tasks You Can Do with the Infoprint Manager Operations GUI

You can use the Infoprint Manager Operations GUI to perform a wide range of printer operator tasks. From the server or from remote work stations, operators can use this interface to monitor all jobs and printers in the system and to route jobs appropriately to increase enterprise wide printing productivity. With the GUI, you can:

- Support hundreds of jobs and printers
- Customize your view of jobs and printers
- Check printer status
- Recover from printer errors
- Change the media that is loaded on the printer
- Enable or disable a physical printer
- Show Simple Network Management Protocol (SNMP) printers status
- Check job status
- Recover from printer device errors
- Recover from job errors
- Resubmit retained jobs
- Hold/release jobs, move jobs, search for jobs, and retain jobs
- Refresh job view automatically
- Change media for a job
- Change media supported by printer
- Space printer
- Change number of job copies
- Enable/disable all printers in the server
- Stop/resume printer

While the Infoprint Manager Operations GUI allows you to perform the most common operator tasks, it does not allow you to perform every task you may need to do. You must use the Infoprint VSM administrator's GUI, which runs only on AIX, to perform the following operator tasks:

- Work with fax and email destinations

- Interrupt the job printing on a physical printer
- View job tickets (basic Infoprint VSM administrator's GUI only)
- View job logs

You must use the Infoprint VSM administrator's GUI to shut down servers (advanced Infoprint VSM administrator's GUI only).

Three Views of the Infoprint Manager Operations GUI

The Infoprint Manager Operations GUI offers three different views: basic, advanced, and distributed. Although you can display any view, each one is most suitable for a particular situation.

- Use the *basic* view if your Infoprint server is configured to support:
  - Print on Demand (commercial) printing
  - Assignment of jobs to actual destinations when they are submitted
  - PostScript, TIFF, and variable data jobs
  - Jobs submitted from Infoprint Submit, Infoprint Scan, or Infoprint Library
- Use the *advanced* view if your Infoprint server is configured to support:
  - Data center (production) or distributed mission printing
  - Printer pooling for workload balancing
  - Jobs submitted from the command line, from workstation applications through Infoprint Select, or from other application programs
- Use the *distributed* view if you are a customer service representative at a help desk who needs to locate jobs and assist customers with printing problems.

Starting the Infoprint Manager Operations GUI

How you start the Infoprint Manager Operations GUI depends on:
- The platform you are running on
- On AIX, the way the server is configured
- Whether you start the Infoprint Manager Operations GUI from the desktop or the command line

Starting the Infoprint Manager Operations GUI from the Windows Desktop

To open the Infoprint Manager Operations GUI from the Windows desktop, select one of the Infoprint icons.

- Select **Basic Infoprint** icon to open a view similar to the following:

- Select **Advanced Infoprint** icon to open a view similar to the following:

- Select **Distributed Infoprint** icon to open a view similar to the following:

Starting the Infoprint Manager Operations GUI from the AIX Desktop in a Basic Environment

> **Note:** If the **Infoprint** icon does not appear on the front panel of the desktop, you have an advanced environment. See "Starting the Infoprint Manager Operations GUI from the AIX Desktop in an Advanced Environment" on page 31

page 31 or "Starting the Infoprint Manager Operations GUI from the AIX Desktop in a Distributed Environment".

To start a view of the Infoprint Manager Operations GUI from the AIX desktop in a basic environment:

1. Select the arrow over the **Infoprint** icon to display the IBM Infoprint popup.
2. Select the Basic Operations GUI view.

Starting the Infoprint Manager Operations GUI from the AIX Desktop in an Advanced Environment

Note: If the Infoprint icon appears on the front panel of the desktop, you have a basic environment. See "Starting the Infoprint Manager Operations GUI from the AIX Desktop in a Basic Environment" on page 30.

To start the Infoprint Manager Operations GUI from the AIX desktop in an advanced environment:

1. Click on the **Application Manager** icon, which looks like an open file drawer with a calculator, to open the Application Manager window. Among the application icons, there is a folder icon for the Infoprint application group.
2. Double-click on the **Infoprint** folder to open the Infoprint Application Group window. This window displays icons representing different parts of the Infoprint GUIs.
3. Double-click the icon for the Advanced Operations GUI view.

Starting the Infoprint Manager Operations GUI from the AIX Desktop in a Distributed Environment

Note: If the Infoprint icon appears on the front panel of the desktop, you have a basic environment. See "Starting the Infoprint Manager Operations GUI from the AIX Desktop in a Basic Environment" on page 30.

To start the Infoprint Manager Operations GUI from the AIX desktop in a distributed environment:

1. Click on the **Application Manager** icon, which looks like an open file drawer with a calculator, to open the Application Manager window. Among the application icons, there is a folder icon for the Infoprint application group.
2. Double-click on the **Infoprint** folder to open the Infoprint Application Group window. This window displays icons representing different parts of the Infoprint GUIs.
3. Double-click the icon for the Distributed Operations GUI view.

Starting the Infoprint Manager Operations GUI from the Command Line

You can start the Infoprint Manager Operations GUI from an aixterm window.

- To open a basic view, enter:

  ipguibasic

- To open an advanced view, enter:

  ipguiadv

- To open a distributed view, enter:

  ipguidist

Chapter 7. Using the Infoprint VSM Administrator's GUI

The Infoprint Visual Systems Management (VSM) graphical user interface (GUI) gives you the ability to perform Infoprint administrator and operator tasks from a GUI rather than from a command line. The GUI displays objects and actions as icons that you use to monitor the status of your Infoprint system and to perform Infoprint tasks. Through the GUI, you can expand your Infoprint system. You can monitor Infoprint servers, queues, logical destinations, actual destinations, media, jobs, and documents. You can also control default attribute values for jobs and documents.

This chapter presents an overview of the most important features of the GUI. After reading this information, you should start the GUI and then browse through the online help. The online help contains detailed information about all the features of the GUI and how to use them to perform system management tasks.

The Basic Infoprint VSM Administrator's GUI and the Advanced Infoprint VSM Administrator's GUI

There are two versions of the Infoprint VSM administrator's GUI: basic and advanced. You can install either version when you install Infoprint.

The basic Infoprint VSM administrator's GUI gives you a simpler view of your Infoprint system than the advanced Infoprint VSM administrator's GUI. Although it offers fewer functions than the advanced Infoprint VSM administrator's GUI, it has some functions that the advanced Infoprint VSM administrator's GUI does not. For example, the basic Infoprint VSM administrator's GUI allows you to view the contents of a job ticket.

Using the advanced Infoprint VSM administrator's GUI in a basic environment allows you to perform some functions not available in the basic Infoprint VSM administrator's GUI. For example, you can work with queue objects. Keep in mind, though, that the basic environment makes certain assumptions about the names and attributes of some objects. If you use the advanced Infoprint VSM administrator's GUI to change the values of certain attributes that are not visible in the basic Infoprint VSM administrator's GUI, you may cause errors.

Table 1 lists the differences between the two versions.

Table 1. Differences between the Basic and Advanced Infoprint VSM Administrator's GUIs

Basic Infoprint VSM Administrator's GUI	Advanced Infoprint VSM Administrator's GUI
General	
Normally used in basic environment, but can also be used in advanced environment	Normally used in advanced environment, but can also be used in basic environment
Defaults and designed to work with early binding	Defaults and designed to work with late binding
Hourglass destination configuration; but by default behaves like a desktop destination configuration	Any destination configuration
Windows and Views	

Basic Infoprint VSM Administrator's GUI	Advanced Infoprint VSM Administrator's GUI
Three application windows	Seven application windows
Job log and job ticket windows; no event log window	Event log and job log windows; no job ticket window
Assigned jobs appear in the `Print Queue` window for each actual destination	Assigned jobs appear in the `Queue/Jobs` window and are not sorted by actual destination
Unassigned jobs appear in the unassigned jobs area until they are scheduled to an actual destination, then disappear and reappear in the `Print Queue` window for the actual destination	No unassigned jobs area; unassigned jobs appear in the `Queue/Jobs` window with other queued jobs
Job Details view of `Print Queue` window shows different attributes from advanced `Queue/Jobs` window	Job Details view of `Queue/Jobs` window shows different attributes from basic `Print Queue` window
Objects and Attributes	
Displays logical destinations, actual destinations, media, jobs, documents, default jobs, and default documents	Displays servers, logical destinations, queues, actual destinations, media, jobs, documents, default jobs, and default documents
Allows you to configure important object attributes	Allows you to configure all object attributes except a few used primarily in basic installations, for example, the **print-quality** document or default document attribute
Objects: Servers	
Does not allow you to see, modify, or perform actions on servers	Allows you to see, modify, and perform actions on servers
Monitors objects in all servers in namespace	Monitors all servers in namespace or selected servers
Objects: Actual Destinations	
Full support of 3170 actual destinations	Displays 3170 actual destinations as AIX actual destinations; does not allow you to create or modify them
Red icons represent actual destinations that need attention or key operator attention	Black icons represent actual destinations that need attention or key operator attention
Does not allow you to pause or resume actual destinations	Allows you to pause and resume actual destinations
Objects: Queues	
Does not allow you to create, see, modify, or perform actions on queues.	Allows you to create, see, modify, and perform actions on queues.
All logical destinations that you create in the same server send jobs to the same default queue. All actual destinations that you create in the same server receive jobs from that queue. You cannot change this queue.	Allows you to change the queue to which a logical destination sends jobs or from which an actual destination receives jobs
Objects: Logical Destinations	

Table 1. Differences between the Basic and Advanced Infoprint VSM Administrator's GUIs (continued)

Basic Infoprint VSM Administrator's GUI	Advanced Infoprint VSM Administrator's GUI
Does not allow you to identify orphan logical destinations or associate them with queues	Allows you to identify orphan logical destinations and associate them with queues
Objects: Jobs	
Normal job icons represent unassigned jobs, regardless of state	Black job icons represent paused, held, and cancelled jobs, even if unassigned
Red job icons represent jobs that require resources that are not ready or not supported, or jobs that are in danger of not printing before the deadline	Normal job icons represent jobs that require resources that are not ready or not supported, or jobs that are in danger of not printing before the deadline
Does not allow you to promote a job to the head of the queue, but allows you to reorder it relative to another job	Does not allow you to reorder a job relative to another job; but allows you to promote it to the head of the queue
Does not allow you to resubmit a job to a logical destination; but allows you to reorder it to an actual destination, server, or the unassigned jobs area	Does not allow you to reorder a job to an actual destination, server, or the unassigned jobs area; but allows you to resubmit it to a logical destination
To hold or release a job, drag and drop the **Interrupt** or **Resume** action onto the job	To hold or release a job, select **Yes** or **No** in the **Hold** field of the Job attributes notebook
Objects: Media	
Allows you to create, see, modify, and perform actions on medium objects	Allows you to create, see, modify, or perform actions on medium objects

Throughout this publication, references to "the Infoprint VSM administrator's GUI" that do not specify "basic" or "advanced" apply to either version.

Prerequisites for Using the Infoprint VSM Administrator's GUI

Before you can start and use the Infoprint VSM administrator's GUI, you must complete the following prerequisite tasks:

- You must install Infoprint.
- You must be running at least a minimum Infoprint configuration, which consists of a server, one logical destination, one queue, and one actual destination.
- You must be logged into AIX as a user with administrator permissions, for example, **root**.
- You must set your **DISPLAY** environment variable by using a standard command, such as:

  `export DISPLAY=hostname:0`
- You must be running the Common Desktop Environment (CDE). If the desktop does not start automatically, start it using a standard command, such as:

  `startx -x /usr/dt/bin/Xsession -d hostname:0`

Starting and Stopping the Infoprint VSM Administrator's GUI

How you start the Infoprint VSM administrator's GUI depends on:

- Whether you installed a basic or advanced Infoprint system. In basic installations, the front panel of the desktop is customized for Infoprint.

- Whether you want to start the basic or advanced Infoprint VSM administrator's GUI. Normally the basic Infoprint VSM administrator's GUI runs in basic installations and the advanced Infoprint VSM administrator's GUI runs in advanced installations, but you can use either Infoprint VSM administrator's GUI in either Infoprint environment.

To stop either the basic or the advanced Infoprint VSM administrator's GUI, click on the **Exit** button in the bottom left corner of each open application window.

Starting the Basic Infoprint VSM Administrator's GUI in a Basic Environment

> **Note:** If the **Infoprint** icon does not appear on the front panel of the desktop, you have an advanced environment. See "Starting the Basic Infoprint VSM Administrator's GUI in an Advanced Environment" or "Starting the Advanced Infoprint VSM Administrator's GUI".

To open the basic Infoprint VSM administrator's GUI in a basic environment:
1. Select the arrow over the **Infoprint** icon to display the IBM Infoprint popup.
2. Select **Infoprint Administration** to open a Infoprint Administration window or select **Infoprint Management** to open a Infoprint Management window.

Starting the Basic Infoprint VSM Administrator's GUI in an Advanced Environment

> **Note:** If the Infoprint icon appears on the front panel of the desktop, you have a basic environment. See "Starting the Basic Infoprint VSM Administrator's GUI in a Basic Environment".

To open the basic Infoprint VSM administrator's GUI in an advanced environment, you must use the AIX command line. Enter:
```
admingui
```

to open a Infoprint Administration window; or enter:
```
opergui
```

to open a Print Management window.

Starting the Advanced Infoprint VSM Administrator's GUI

> **Note:** If the Infoprint icon appears on the front panel of the desktop, you have a basic environment. If you still want to start the advanced Infoprint VSM administrator's GUI, this section applies. To start the basic Infoprint VSM administrator's GUI, see "Starting the Basic Infoprint VSM Administrator's GUI in a Basic Environment".

To start the advanced Infoprint VSM administrator's GUI from either an advanced or a basic environment:
1. Click on the **Application Manager** icon, which looks like an open file drawer with a calculator, to open the Application Manager window. Among the application icons, there is a folder icon for the Infoprint application group.

2. Double-click on the **Infoprint** folder to open the Infoprint Application Group window. This window displays icons representing different parts of the Infoprint GUIs.

3. Double-click on the **Administration GUI** icon to open an Infoprint Servers window similar to Figure 10.

Figure 10. Infoprint Servers Window (Advanced Infoprint VSM Administrator's GUI)

Understanding the Infoprint VSM Administrator's GUI Windows

The Infoprint VSM administrator's GUI uses application windows, dialog windows, and message windows to display and receive information. Also, the GUI uses notebooks and templates to group related types of information.

The Basic Infoprint VSM Administrator's GUI Application Windows

The application windows of the basic Infoprint VSM administrator's GUI let you monitor and work with icons that represent the Infoprint objects in your print

environment. The Infoprint object icons represent logical destinations, actual destinations, media, default job objects, jobs, default document objects, and documents.

The organization of the basic application windows corresponds to the organization of tasks. The `Print Adminstration` window displays all the objects that administrators work with. From it, you can open the `Print Management` window, which displays objects that either administrators or operators work with. From a selected actual destination in the `Print Management` window, you can open a `Print Queue` window that displays the jobs assigned to that actual destination.

Figure 11 shows the basic Infoprint VSM administrator's GUI application windows hierarchy and lists the objects displayed in each window.
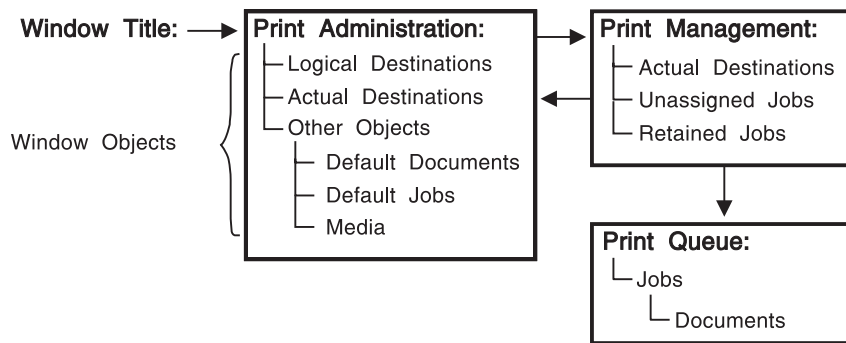
Figure 11. Basic Infoprint VSM Administrator's GUI Application Windows Hierarchy

The Advanced Infoprint VSM Administrator's GUI Application Windows

The application windows of the advanced Infoprint VSM administrator's GUI let you monitor and work with icons that represent the Infoprint objects in your print environment. The Infoprint object icons represent servers, queues, logical destinations, actual destinations, media default job objects, jobs, default document objects, and documents.

The organization of the advanced application windows corresponds to the hierarchy of Infoprint objects. From a selected object in one window, you can open another window that contains objects that are related to the selected object.

Figure 12 on page 39 shows the advanced Infoprint VSM administrator's GUI application windows hierarchy and lists the objects that are displayed in each window.

```
Window  Title: ─────▶   InfoPrint  Servers:
                              └─Servers
         Window  Objects  {         ├─Queues
                                    └─Actual  Destinations


Server/Objects:                          Server/Actual  Destinations:
 ├─Queues                                  └─Actual  Destinations
 │  ├─ Jobs
 │  ├─Logical  Destinations
 │  └─Actual  Destinations
 └─Other  Objects
     ├─Orphan  Logical  Destinations
     ├─Retained  Jobs
     ├─Default  Jobs
     └─Default  Documents


     Queue/Jobs:
       └─Jobs
           └─Documents


     Queue/Destinations
        ├─Logical  Destinations
        └─Actual  Destinations


     Server/Orphan  Logical  Destinations:
        └─Orphan  Logical  Destinations


     Server/Retained  Jobs:
        └─Jobs
```

Figure 12. Advanced Infoprint VSM Administrator's GUI Application Windows Hierarchy

The Format and Icons Used in Infoprint VSM Administrator's GUI Application Windows

The application windows all have the same format. An application window contains an Actions area, a Work Area, and an Information Area. If you can create objects from the window, it also contains a Template Area. Both the `Infoprint Administration` window of the basic Infoprint VSM administrator's GUI and the `Servers` window of the advanced Infoprint VSM administrator's GUI contain each of these areas.

The Template Area

The Template Area contains icons that you use to create new objects. All advanced application windows except the `Queue/Jobs:` and the `Server/Retained Jobs:` windows, and the basic `Infoprint Administration` window, contain Template Areas. Depending on the window, templates are available for the following objects:

- Default document objects
- Default job objects
- Logical destinations
- Queues
- Actual destinations
- Media

The name of the template appears below the template icon.

The Actions Area

The Actions area contains icons that you use to perform specific actions on objects in the window. Which of the following action icons are available depends on the window and, in the basic Infoprint VSM administrator's GUI, on your selections in the User Preferences dialog.
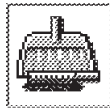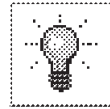
Clean	Disable (Hold)	Enable (Release)	Global Change
Help	Interrupt	Manage	Notebook
Open Printers Window	Open Window	Pause	Promote
Reorder First	Reorder Last	Resume	Show
Shut Down	Space	Unmanage	
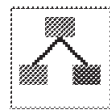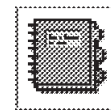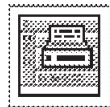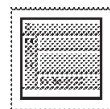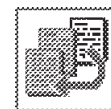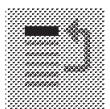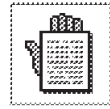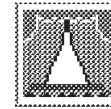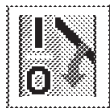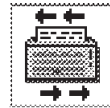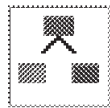
Action names do not appear below the icons. If you are not familiar with an icon, position your mouse pointer over the icon and read its description in the Information Area.

The Work Area

The Work Area contains icons that represent objects in your Infoprint system.It also contains controls that you use to change how and which icons display. Depending on the window, object icons are available for the following objects and folders:

- Actual destinations
- Default document folders
- Default document objects
- Default job folders
- Default job objects
- Logical destinations
- Documents
- Jobs
- Media
- Medium folders
- Queues (advanced Infoprint VSM administrator's GUI only)
- Orphan logical destination folders (advanced Infoprint VSM administrator's GUI only)
- Orphan logical destinations (advanced Infoprint VSM administrator's GUI only)
- Retained job folders (advanced Infoprint VSM administrator's GUI only)
- Retained jobs
- Servers (advanced Infoprint VSM administrator's GUI only)
- Unassigned jobs (basic Infoprint VSM administrator's GUI only; in the advanced Infoprint VSM administrator's GUI jobs are unassigned before processing by default, so unassigned jobs are not distinguished from other jobs)

The name of the object appears below the icon.

The Work Area may be split into *panes* that contain different classes of objects. Figure 10 on page 37 shows a pane for servers in the Work Area.

When an object in a pane has related objects, you can open a new space within the pane that is called a *well*. A well is connected to the object and displays its related objects. Figure 10 shows a well for queues. The online help describes the various ways to open and close wells.

You use the View Controls in the Work Area to control the size of icons in the Work Area.

You use the Display Controls to open panes and wells in the Work Area, find specific Infoprint objects, and filter the objects displayed.

The Information Area

The Information Area, at the bottom of an application window, displays context-sensitive help according to the position of the mouse pointer. The context-sensitive help provides high-level instructions for performing tasks.

Dialog Windows

Dialog windows appear when InfoPrint displays information that you can modify or when InfoPrint requires information from you for completing a task.

The dialog window used most frequently is the notebook dialog, which you use for viewing and changing the attribute values of an object or template. Tabs organize the attributes in the notebook. When you open the notebook by dragging the **Notebook** icon and dropping it on an object icon, the **Summary** tab displays. To view a different tab, click on the **Summary** application group button to display a list of all the tabs, and then select a new tab from the list.

Figure 13 shows a dialog window that displays the **Summary** tab of the notebook for a queue.
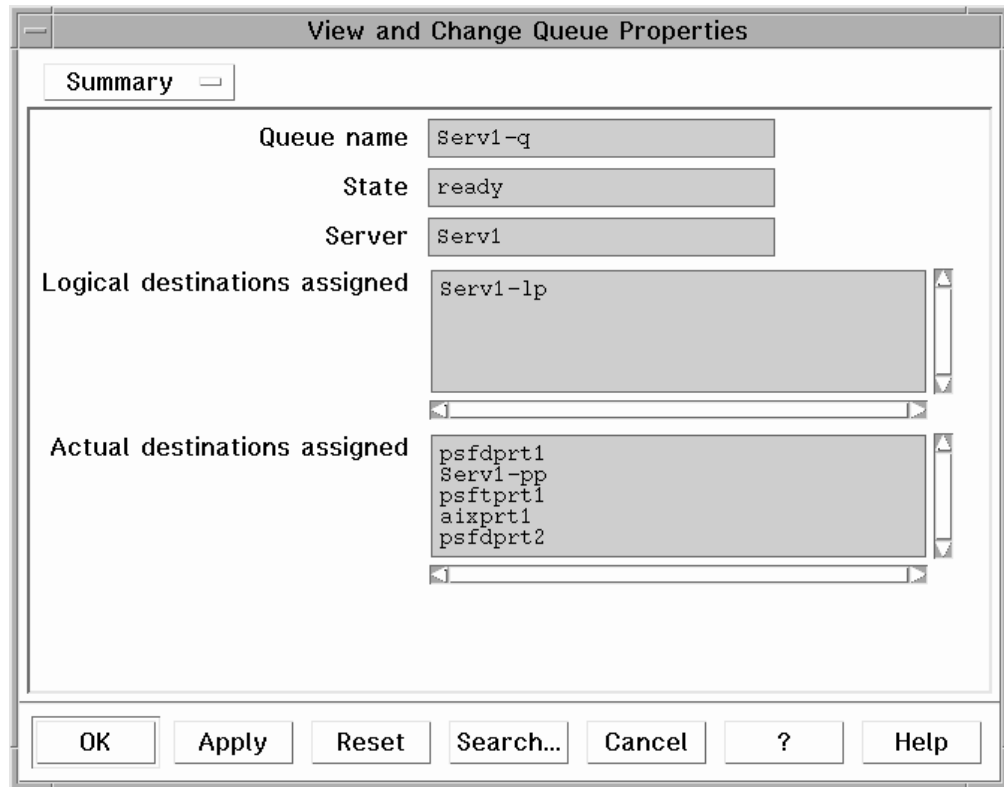
Figure 13. A Queue Attributes Notebook Dialog Window

Dialog windows also contain buttons at the bottom that you use to perform tasks, such as searching for attributes and applying changes. Two of the buttons, one labeled with a question mark (**?**) and one labeled **Help**, provide help information on performing tasks through the dialog window.

Message Windows

Message windows present information that you need to know or request information from you that Infoprint needs to continue processing. For example, if you delete a group of objects, you see a message window that lists the objects selected for deletion and asks you to confirm your action.
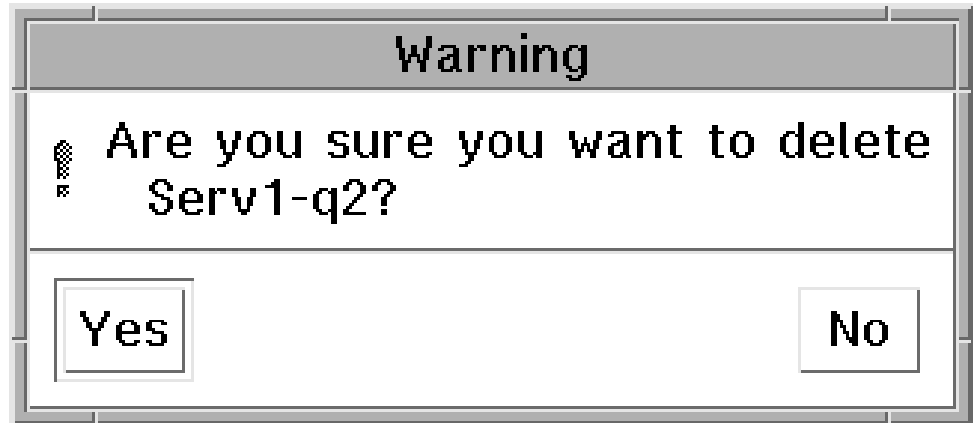
Figure 14. A Message Window

Completing Tasks from the Infoprint VSM Administrator's GUI
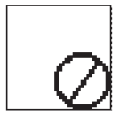
International No
Symbol

You can use the template, action, object, view control, and display control icons in an application window in a variety of ways to perform administrative tasks with the GUI. The phrase *drag and drop* describes the procedure by which you use the icons to perform the actions and complete the tasks in application windows. Using the mouse, you drag (move) an action or object icon to a new position over another icon or into an area where you want the action or task to occur. If the action is valid, a box appears around the two icons. If the action is not valid, no box appears and an international no symbol (a circle with a diagonal line), displays stays within the icon you dragged.

Following are several examples of performing tasks with the GUI.

Dragging and Dropping Actions onto Objects

Figure 15 on page 44 shows an example of performing a task by dragging and dropping an action onto an object. For example, to open the Server/Objects window for a server, use the middle mouse button to drag the Open Window action and drop it onto the server icon. The Server/Objects window displays the queues and the Retained Jobs, Orphan Logical Destinations, Default Documents, and Default Jobs folders for the server.
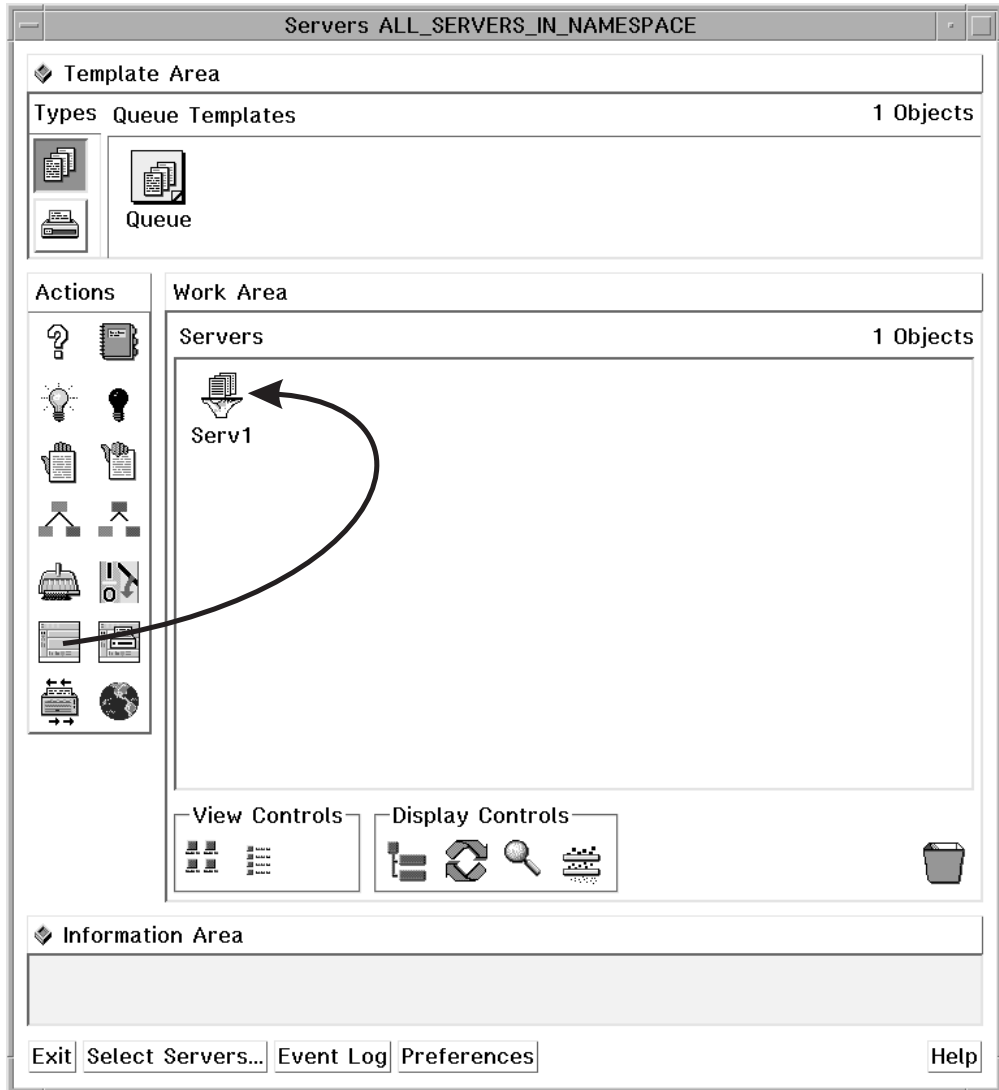
Figure 15. Opening the Server/Objects Window

Dragging and Dropping Objects onto Objects

Figure 16 on page 45 shows an example of performing a task by dragging and dropping one object onto another object. For example, to assign an actual destination to a new queue, use the middle mouse button to drag the actual destination and drop it onto another queue. This removes the actual destination icon from its old queue and adds it to the new queue.
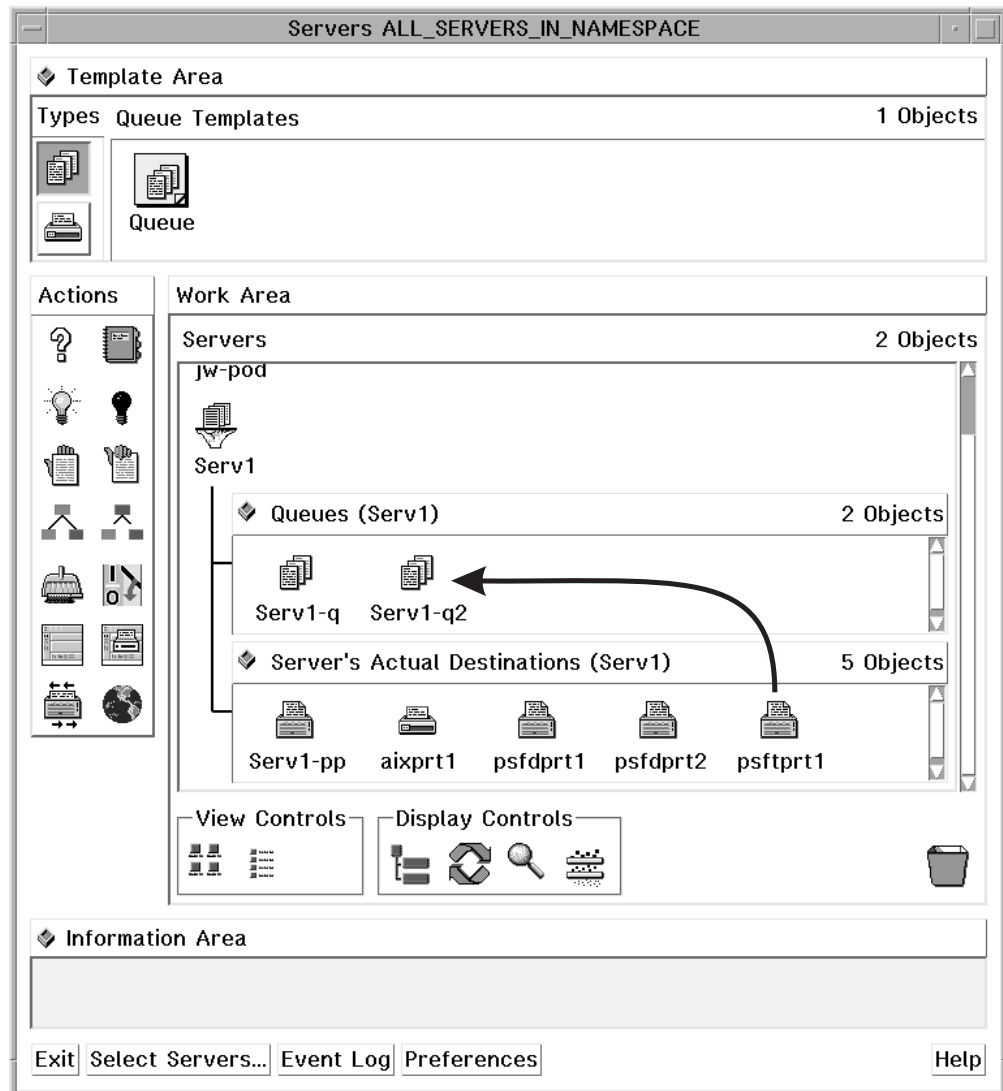
Figure 16. Assigning an Actual Destination to a New Queue

Dragging and Dropping a Template onto a Work Area

Figure 17 on page 46 shows an example of performing a task by dragging and dropping a template into an area. For example, to create a new queue, use the middle mouse button to drag a queue template and drop it into the Queues well of the Servers window. A dialog window displays where you enter the name for the new queue. Enter a name and click on the **OK** button in the dialog window. This action creates a new queue that has the same values for its attributes as the values of the queue template you used. An icon for the new queue displays in the well.
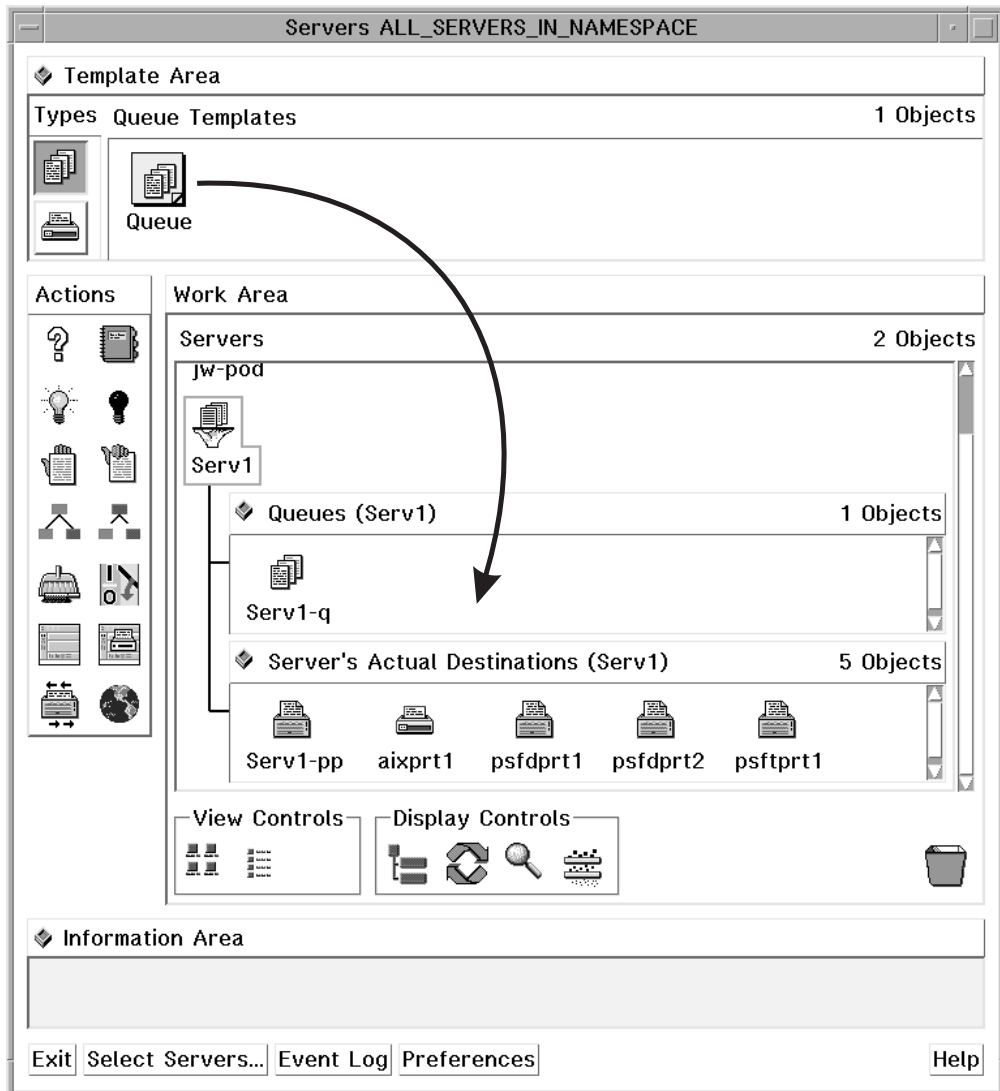
Figure 17. Creating a New Queue

Performing the Same Task on Multiple Objects at the Same Time

Figure 18 on page 47 shows an example of performing a task on multiple objects by selecting the objects and dragging and dropping one of them onto an action. For example, to disable multiple actual destinations, select multiple actual destinations and then use the middle mouse button to drag and drop one of them onto the Disable action. You select multiple objects by using the mouse to draw a box around multiple icons, or by holding down the **Shift** key and clicking on two or more icons.

Note that dragging one of the selected objects to a target is the same as dragging all of the objects. However, dragging an action to a group of selected objects only affects the object in the group on which you drop the action. A group of selected objects cannot act as one target.
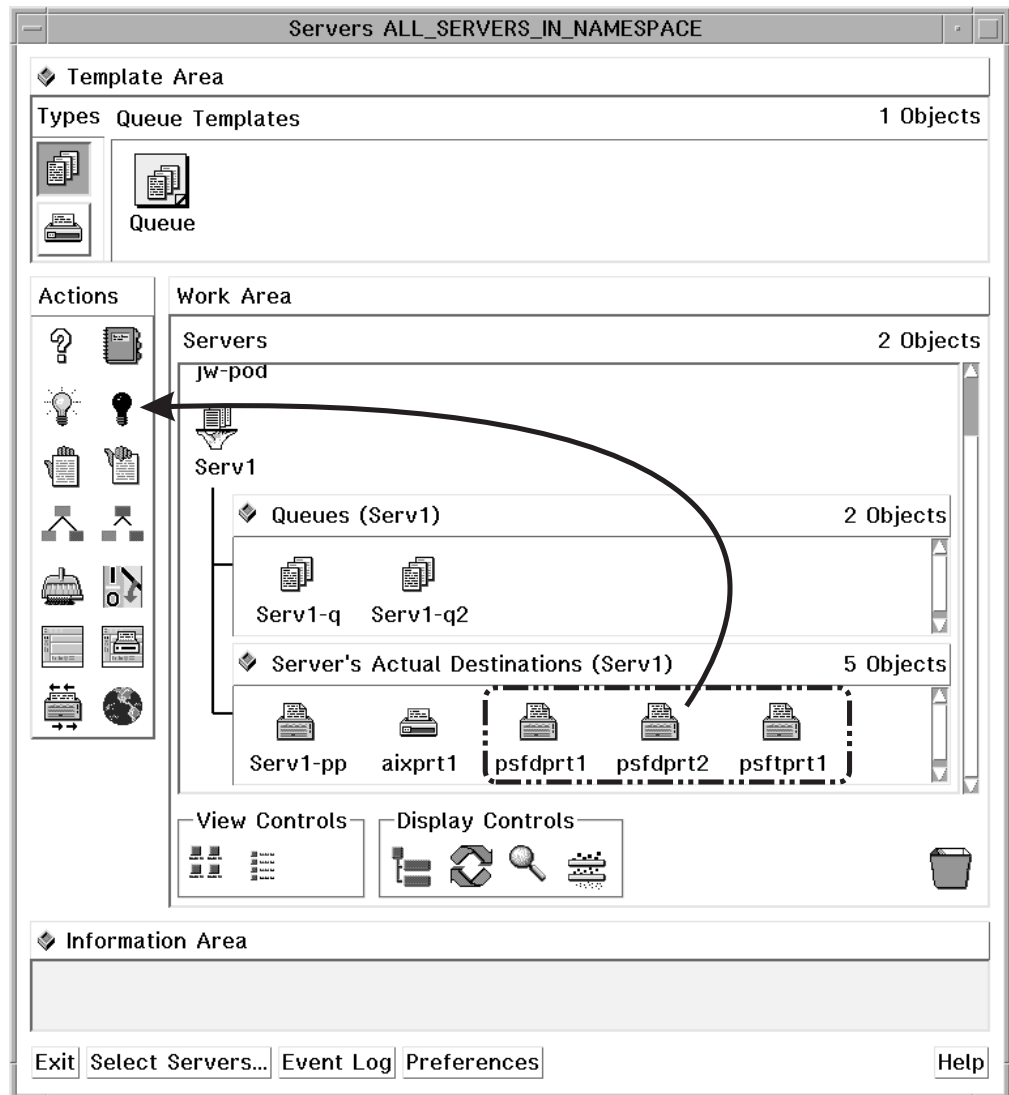
Figure 18. Disabling Multiple Actual Destinations

Other Methods of Performing Tasks

The preceding figures display the drag and drop method for performing tasks within a single window. However, you can also drag and drop some objects across windows, and you can also use methods other than drag and drop. You can select an object and then select an action, double-click on an object, or choose an item from a pop-up menu. You can access pop-up menus by positioning the mouse pointer over an object or area and holding down the right mouse button.

Refer to the online help for additional information about tasks and the methods for performing them. See "Using Online Help".

Using Online Help

Extensive information about using the Infoprint VSM administrator's GUI and the tasks you can perform with it is available online. This section describes the different types of online help available and how to access them.

The Information Area

The Information Area in an application or dialog window provides context-sensitive help according to the position of the cursor. To display brief information about a title, template, object, area, or button, move your cursor over the item or area. The information area is helpful for learning the application or for refreshing your memory.

The Information Area automatically appears in each application window. To close the Information Area in an application window, click on the area control button in the upper left corner of the Information Area.

In a dialog window the Information Area opens when you click on the **?** button at the bottom of the window. To close the Information Area in a dialog window, click on the **OK** button at the bottom of the Information Area.

The Help Button

Clicking on the **Help** button in the lower right corner of an application window or a dialog window opens a new window that displays online help for Infoprint.

Figure 19 on page 49 shows the help window that displays when you click on the **Help** button in a `Server/Objects` window. The specific information displayed is about the application window. However, once you have opened an online help window, you can browse the help information and view information about any window, area, template, object, action, button, or task.

Clicking on the **Help** button in a dialog window opens a help window that displays information about each field and button in that dialog. The help also provides a way to view more general information about using dialog windows.

Use any of the following methods to browse through the information:
- Select hypertext links (underscored words) within the help text.
- Select a topic from the topic hierarchy.
- Use the **Navigate** menu options.
- Use the **Search** facility.
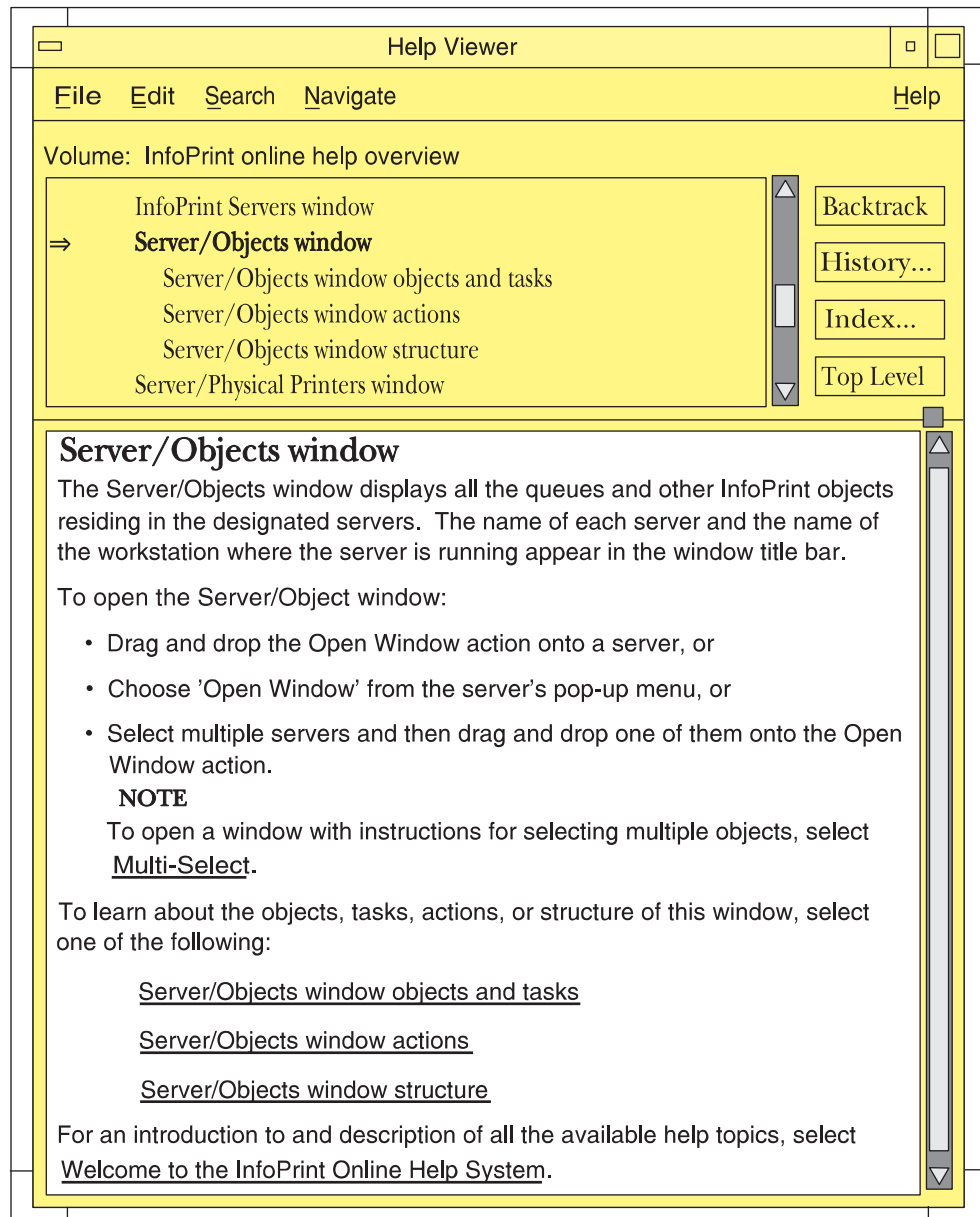
Figure 19. Introductory Topic for the Server/Objects Window Online Help

The following is an example of one way you could navigate through the online help system. You can use this as a tutorial any time that you run the Infoprint VSM administrator's GUI.

Finding Information in the Online Help Volumes

You can find information about a given subject by viewing the help information with or without using the help index. Using the help index can take a long time, because sometimes you may need to search all the Help Volumes.

The primary Help Volume contains some information and a list of main subjects from which you can select. Selecting a main subject will bring up a new list, which contains secondary level subjects. This list is also selectable. When you select the secondary level subject, the window displays the help on that subject; or a new Help Volume for a special subject opens. You can also access help about an icon by

dragging the **?** (Help) icon from the Action area and dropping it on the other icon, such as an actual destination icon. You can access help about a dialog window by clicking on the **Help** button in that window.

Example of Using Help Volumes to Locate Information

You might use a procedure similar to this if you know where the information you want is located:

1. Select the **Help** button on a GUI application window.

   The `Help Viewer` window opens.

2. Scroll to the top of the selection list or select the **Navigate** menu choice and select **Home Topic**.

   If you scrolled to the top of the selection list, select **Welcome to the Infoprint Online Help System**.

3. Read the information in the window. To find information about a given subject, you can look at the Infoprint Help Volumes that are available.

   a. Select **Infoprint Help Volumes** from the list or select the underlined text in the help information section of the window.

      This brings up the primary (first) list of Help Volumes. Select the one that contains the information you are looking for.

   b. In this example, select **Help for Actual Destination Attributes and Task**.

      This brings up a new window that contains a list of secondary Help Volumes. These volumes contain information about the attributes of actual destinations and the windows where you set those attributes.

   c. In this example, select **PSF Physical Printer Template Attribute Notebook**. Read the information provided. After the help information is the secondary list that contains a list of tabs for that notebook. These tabs contain attributes and other data fields where you can set values. Selecting one of these tabs brings up a list of those items that the system sets or that you can change.

   d. In this example, select **Summary Tab**.

      This brings up a list of the subjects and attributes on this tab. Selecting one of those items brings up the help information for that item. Select several of the subjects and read the help information.

Note: If you know the attribute you are looking for, but not which tab contains the attribute, you can use the help index to find the information.

Using the Help Index

Currently, you have the **PSF Physical Printer Template Attribute Notebook** selected. You want to know information about the **port number** and which tab it appears on.

1. Select the **Index...** button.

   This brings up the `Help - Index Search` window.

2. Select **Current** in the `Search` menu and **Entries with** in the `Show` menu.

3. Enter **port number** in the entry field.

4. Select the **Start Search** button.

   A list of entries with **Port Number** appears in the `Help - Index Search` window.

5. In this example, select **Postscript server port number**.

The help information for this subject is displayed in the Help Viewer window. If you want to know which tab contains this attribute, scroll up in the select list until you see the tab name.

The Help (?) Action

The Help action, whose icon is the question mark (**?**) in the Actions area of an application window, provides another way to access information in online help for Infoprint.

To open the online help and display the help information about a specific template, object, action, control, area or button in an application window, drag and drop the Help action onto the icon or into the area for which you want help. The Help Viewer window opens, displaying the help information.

Task Help

In addition to information about the objects, actions and areas in a window, the online help contains directions for using the GUI template, object, and action icons to perform administrative tasks. To locate the help information about how to perform a task related to an object, do the following steps:

1. Drag and drop the Help action onto an object. This opens the online help and displays the information about that object.
2. Select the underlined **Tasks** phrase to display the list of tasks associated with that object.
3. Select a task from the list. This displays the help topic that describes how to perform that task.

For example, to find the task help on how to clean a queue, drag and drop the Help action onto a queue. The online help opens at the information about the queue object. Select the underlined **Queue Tasks** topic in the help window. This displays the list of queue tasks, as shown in Figure 20 on page 52.

Help Viewer

File　Edit　Search　Navigate　　　　　　　　　　　　Help

Volume: InfoPrint online help overview

Queue
⇒　**Queue tasks**
　　Alleviating a backlog in a queue
　　Cleaning a queue
　　Creating a queue

Backtrack

History...

Index...

Top Level

Queue tasks

To learn about queues, select Queue.

To learn about the tasks you can do with queues, select one of the following topics:

Alleviating a backlog in a queue

Cleaning a queue

Creating a queue

Creating a queue template

Deleting a queue

Determining the jobs in a queue

Determining the printers associated with a queue

Determining the queue from which a physical printer receives jobs

Determining the queue to which a logical printer sends jobs

Determining the queues in a server

Disabling all logical printers sending jobs to a queue

Figure 20. Task List for Queues

From the list of queue tasks, select the task labeled **Cleaning a queue**. This displays the task instructions, as shown in Figure 21 on page 53.
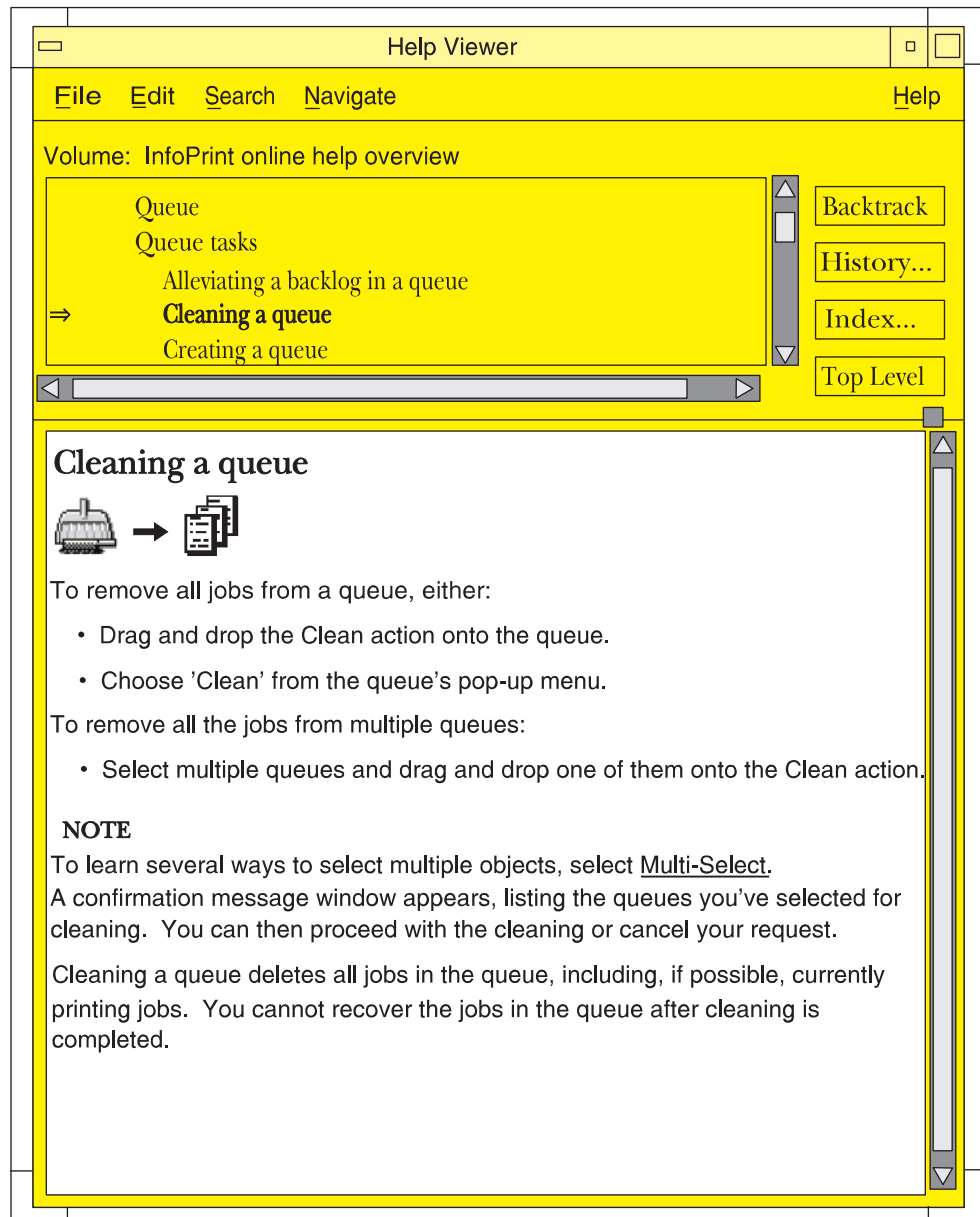
Figure 21. Cleaning a Queue Task

Monitoring Infoprint Using the Infoprint VSM Administrator's GUI

You can customize the GUI to meet your Infoprint monitoring needs. You can select which servers to monitor and which GUI windows to open or close. Changes to icons represent changes in your Infoprint environment. However, you can control whether changes to some objects cause icon changes. The choices you make affect the performance and response time of your system.

Presentation of Events

You initiate an operation by dragging and dropping an icon, selecting a button, or selecting a menu item. Infoprint responds to your request by performing the task and delivering event notifications to your GUI as it processes your request. When

someone else completes an operation or when an event of interest to someone occurs in Infoprint, your GUI receives asynchronous notification about the event. Asynchronous notifications occur without a regular or predictable time relationship to your actions. As events occur, Infoprint provides notifications about them in two ways.

Changes to Icon Appearance

When possible, Infoprint presents notifications as icon appearance changes. For example:

- When you or someone else creates an actual destination, Infoprint adds its icon to the Work Area.
- When you or someone else deletes an actual destination, Infoprint removes its icon from the Work Area.
- When you disable an actual destination, Infoprint blacks out its icon.
- When a queue becomes backlogged, part of its icon changes color to red.

Entries in an Event Log

If you open an Infoprint `Event Log` window from the advanced Infoprint VSM administrator's GUI, Infoprint presents all events as entries in the event log. For example:

- When you modify the attributes of an actual destination, its icon does not change, but Infoprint makes an entry in the event log.
- When you clean a printer, its icon does not change, but Infoprint makes an entry in the event log.
- When Infoprint assigns a job to a queue, it makes an entry in the event log, as shown in Figure 22. The job icon appears in the well for the queue and in the `Queue/Jobs` window. As Infoprint processes the job, it makes an entry in the event log, and the job icon changes to a job processing icon. When the job completes, Infoprint makes an entry in the event log. Infoprint deletes the icon for the job or moves the icon to the retained jobs folder if the job has a non-zero retention period.
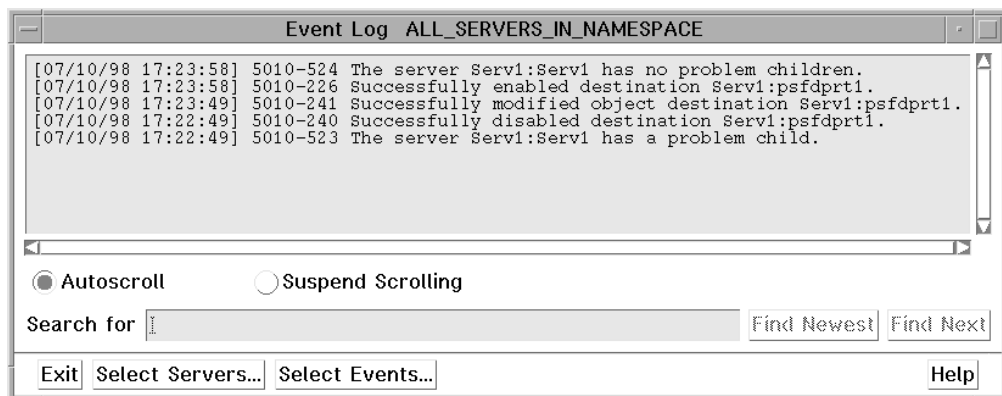
Figure 22. The Event Log Window

The `Event Log` window can function and log events with or without the other Infoprint VSM administrator's GUI application windows being open. You can open the `Event Log` window from the Desktop in the same way you open the `Servers` window (see "Starting the Advanced Infoprint VSM Administrator's GUI" on page 36). If an Infoprint VSM administrator's GUI application window is already open, click on the **Event Log** button at the bottom of that window.

Most objects have a notification profile attribute that Infoprint uses to send messages about specific events to designated people. The notification profile attribute, however, does not control the notifications you receive at the GUI.

System Performance and Response Time

The number of application windows that are open and the number of objects that are represented in those windows have a direct correlation to system performance and response time. Following are some hints for improving performance when working with the GUI interface.

Monitoring Selected Servers

Reduce network traffic by using the advanced Infoprint VSM administrator's GUI to monitor only selected servers. To select a subset of servers, click on the **Select Servers...** button in the Servers window. This action displays a list of all the existing servers in your namespace. Select the servers from the list that you want the Servers window to monitor. Event notifications will come across the network only for those selected servers.

Closing Job Windows and Wells

Jobs change status often as they are queued, assigned to actual destinations, and processed. There is overhead associated with the icon changes representing these status change. Because a server sends job events only when you open wells or windows that show jobs, you should close job windows and wells when you finish using them.

Note: A queue has wells for logical destinations, actual destinations, and jobs. Whenever you open one of these wells, the others also open. Even if you minimize the jobs well, Infoprint still sends notifications about job events to that well. If you want to monitor the printers associated with a queue, but not the jobs in the queue, then open the Queue/Printers window, or set your user preferences for the Infoprint VSM administrator's GUI to exclude queued jobs.

Part 3. Archiving Jobs

Chapter 8. Using Infoprint Library

For information on using the Infoprint Library, visit the IBM Printing Systems Web Site at http://www.ibm.com/printers and do the following:

1. Click on the IBM Infoprint Manager for AIX sitelet on the lower, right-hand corner.
2. Click on Site Map in the left-hand navigation bar.
3. Click on Adobe Acrobat PDFs of these Web Pages.
4. Click on Procedures: Using Infoprint Library.

Part 4. Appendixes

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Appendix. Using the Infoprint SMIT Operator's GUI

You can perform most Infoprint operations tasks and some Infoprint administrative tasks by using the Infoprint SMIT operator's GUI.

This chapter provides information on customizing, starting, and accessing help for the Infoprint SMIT operator's GUI. It also includes a brief description of the tasks you can perform through the interface.

Customizing the Infoprint SMIT Operator's GUI

Before using the Infoprint SMIT operator's GUI, you specify which Infoprint components and attributes you want to monitor by setting environment variables in one or more environment files. Initially, you can use the default environment file that is supplied with Infoprint. During installation, Infoprint adds information about the environment file in the **/etc/environment** file to provide system-wide defaults.

Customizing the Default Infoprint SMIT Operator's GUI Environment File

The default Infoprint SMIT operator's GUI environment file is **ppo.env**, which Infoprint stores in the **/usr/lpp/pd/bin** directory during installation. The **ppo.env** file contains a series of export statements for environment variables that specify information about your Infoprint system. Infoprint bases the setting of some environment-variable values on objects that are created during installation. Other environment variables have no values; you can update them as you expand your Infoprint system. Figure 23 on page 64 shows the default environment file.

```
# Set up the PPO environment variables

if [ "$PPO_BIN" = "" ] ; then
    export PPO_BIN=/usr/lpp/pd/bin"
fi

if [ "$PPO_QUEUE_INFO_FILE" = "" ] ; then
   export PPO_QUEUE_INFO_FILE="$PPO_BIN/queue_info"
fi

export PPO_JOB_DETAILS_ATTRS="\
job-identifier,\
job-name,\
current-job-state,\
job-state-reasons,\
required-resources-not-ready\
intervening-jobs,\
job-priority,\
actual-destination-requested,\
destinations-assigned,\
submission-time,\
started-printing-time,\
pages-completed,\
default-medium"
export PPO_QUEUE_ATTRS="queue-name,queue-state,\
actual-destinations-ready,actual-destinations-assigned"
export PPO_PP_ATTRS="destination-name,destination-state,enabled,\
assoc-queue,problem-message,media-ready,job-batches-ready"
export PPO_FORM=""
export PPO_RETENTION="48:00"
export PPO_SERVER=`hostname`
export PPO_LP=LP-NAME
export PPO_LPS="LP-NAME"
export PPO_QUEUE=Q-NAME
export PPO_PPS="PP-NAME"
export PPO_JOB_BATCH=""
export PPO_CANCEL_ALL_OPTION="1"
```

Figure 23. Default Environment File - Infoprint SMIT Operator's GUI

You can make copies of the default Infoprint SMIT operator's GUI environment file
and customize the copies to match your Infoprint system. You should create an
environment file for each queue you have. Refer to *Infoprint Manager: Reference* for
a table of environment variables that affect the Infoprint SMIT operator's GUI.
Then use an AIX editor to make changes to the environment file.

Customizing the Queue Information File

While you are using the Infoprint SMIT operator's GUI, you can change the queue
you are monitoring if you previously set up a queue information file. A queue
information file maps queue names to their corresponding environment files.
Figure 24 shows the contents of the default queue information file,
/usr/lpp/pd/bin/queue_info.

```
queue_name_1 pathname-of-the-corresponding-ppo.env-file
queue_name_2 pathname-of-the-corresponding-ppo.env-file
```

Figure 24. Queue Information File - Infoprint SMIT Operator's GUI

To set up and use a queue information file, complete the following steps:

1. Create an environment file for each queue that you want to monitor through
   the Infoprint SMIT operator's GUI. Specify the appropriate values for the

environment variables. Store the environment files in either the directory represented by the **PDBASE** environment variable or the directory represented by the **PDNAMESP** environment variable. If operators on different AIX systems will share the files, store them in the directory represented by the **PDNAMESP** environment variable. For more information, see "Customizing the Default Infoprint SMIT Operator's GUI Environment File" on page 63.

2. Update the **queue_info** file in the **/usr/lpp/pd/bin** directory. For example, you have two queues, ksrv-q1 and ksrv-q2. Their respective environment files are q1.env and q2.env, located in the **/usr/lpp/pd/bin** directory. Update the **queue_info** file with the following entries:

```
ksrv-q1 /usr/lpp/pd/bin/q1.env
ksrv-q2 /usr/lpp/pd/bin/q2.env
```

Notes:

1. You must include the full path for each environment file you specify.

2. If you create a queue information file with a different name or store it in a different directory, ensure that the **PPO_QUEUE_INFO_FILE** environment variable in all of your environment files specifies the correct directory and file name.

3. To use the queue information file, you must start the Infoprint SMIT operator's GUI with the **startppo** command. For more information, see "Starting the Infoprint SMIT Operator's GUI".

Specifying Your Default Environment File

The **PPO_ENV_FILE** environment variable controls the environment file that the Infoprint SMIT operator's GUI uses when you start the interface. During installation, the following line was added to the **/etc/environment** file:

```
PPO_ENV_FILE=/usr/lpp/pd/bin/ppo.env
```

This statement defines the environment file that is shipped with Infoprint as the default. To use a different environment file, update the statement in the **/etc/environment** file.

For example, if you have a customized environment file that is called master.env located in the /var/pd directory, use the following export statement:

```
PPO_ENV_FILE=/var/pd/master.env
```

Starting the Infoprint SMIT Operator's GUI

There are two methods of starting the Infoprint SMIT operator's GUI:

- If you are at an AIX command prompt, enter one of the following commands:
  - To access the **Production Print Operations** panel in the AIXwindows mode, enter:

    ```
    startppo
    ```

  - To access the **Production Print Operations** panel in the ASCII mode, enter:

    ```
    startppo -t
    ```

    All Infoprint SMIT operator's GUI SMIT panels display in ASCII mode; however, status windows display as graphical motif windows.

- If you are using the Infoprint SMIT administrator's interface, follow these steps:

  1. Return to the main panel titled **Infoprint Production Printing System**.

  2. Select **Production Print Operations**.

Notes:

1. You cannot change queues as specified by the queue information file if you access the Infoprint SMIT operator's GUI through a SMIT session that was not started with the **startppo** command.

2. The **startppo** command also has a **-g** flag that you can use to control the initial size and position of the Infoprint SMIT operator's GUI window. Specify the value for the flag in the form:

   ```
   width×height+xoffset+yoffset
   ```

   For example, if you enter `startppo -g 800×500+100+200`, the window that opens is 800 pels wide, 500 pels high, offset 100 pels from the left edge of the terminal display, and down 200 pels from the top of the display.

3. You cannot start the ASCII mode of the Infoprint SMIT operator's GUI in the background. For example, do not use the following command:

   ```
   startppo -t &
   ```

Accessing the Online Help for the Infoprint SMIT Operator's GUI

The online help for the Infoprint SMIT operator's GUI provides descriptions of panel controls, such as buttons, entry fields, and lists. You can access the help information by using standard AIX SMIT help actions. If you are not familiar with using SMIT help, you can use the **Help** pull-down menu at the upper right corner of any AIXwindows SMIT panel. If you are using SMIT in the ASCII mode, access the main **System Management** panel. Highlight the panel title and press **F1** to access help on using SMIT.

Requesting Help for Menu Selections on a SMIT Panel

The method of accessing help for a SMIT panel depends on whether you are in AIXwindows mode or ASCII mode.

AIXwindows Mode

Complete the following steps to receive contextual help on a menu selection:

1. Press **Ctrl** + **F1**. All the menu selections on the panel are highlighted. The mouse pointer changes to a question mark. A **Help Message** window opens with instructions on how to access help. Figure 25 on page 67 shows an example of the results of pressing **Ctrl** + **F1** for a SMIT panel.
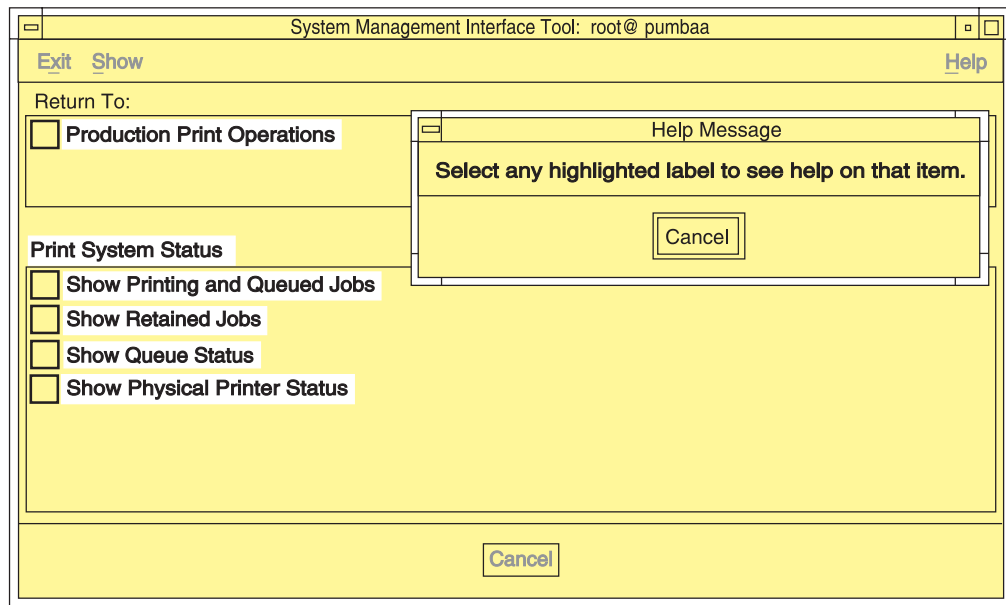
Figure 25. Help for SMIT Panel Menu Selections

2. Select any highlighted menu selection on the panel. An **Informational Message** window opens.
3. Select the **OK** button on the **Information Message** window after you have read the information. All menu selections on the panel remain highlighted.
4. If you want to view the help for another item, select it.
5. When you have completed viewing the information, select the **Cancel** button on the **Help Message** window to remove the highlighting and return to normal SMIT operations.

Note: You can also manually highlight a menu selection by using the Tab and arrow keys to navigate to the selection. Pressing **F1** for a highlighted menu item opens the help window for that item.

ASCII Mode
Complete the following steps to receive contextual help on a menu selection:
1. Use the arrow keys to highlight a menu selection.
2. Press **F1**. A **CONTEXTUAL HELP** window opens.
3. When you have completed viewing the help information, press the **Enter** key. The window closes.

Complete the same steps to view the help for any other menu selections.

Requesting Help for Fields and Buttons on a SMIT Window

The method of accessing help for fields and buttons on a SMIT window depends on whether you are in AIXwindows mode or ASCII mode.

AIXwindows Mode
Complete the following steps to receive help for fields and buttons on a SMIT window that was accessed from a SMIT panel:
1. Select the button labeled with a question mark at the bottom right of the window. A **Help** window displays beneath the SMIT window. Figure 26 on page 68 shows the results of selecting the question mark button.
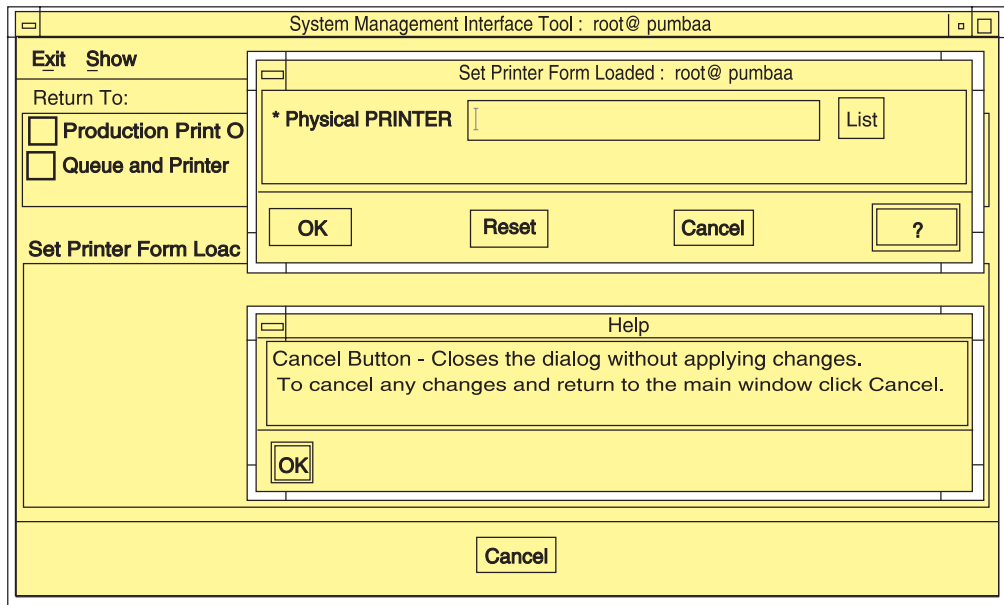
Figure 26. Help for SMIT Window Fields and Buttons

2. Move the mouse pointer over the fields and buttons in the window. The text in the **Help** window changes, displaying help for the field under the mouse pointer.

3. When you have completed viewing all of the information, select the **OK** button on the **Help** window to close it and return to normal SMIT operations.

ASCII Mode

Complete the following steps to receive help for fields on a SMIT panel in which you can enter or list information:

1. Use the arrow keys to highlight a field name.

2. Press **F1**. A **CONTEXTUAL HELP** window opens.

3. When you have completed viewing the help information, press the **Enter** key. The window closes.

Complete the same steps to view the help for any other field selections.

Requesting Help for SMIT Status Windows

The Infoprint SMIT operator's GUI displays separate status windows that show the results of queries you make. The status windows also provide help for the tasks you can perform from them. The status windows are the same for both AIXwindows mode and ASCII mode. Figure 27 on page 69 shows a status window.
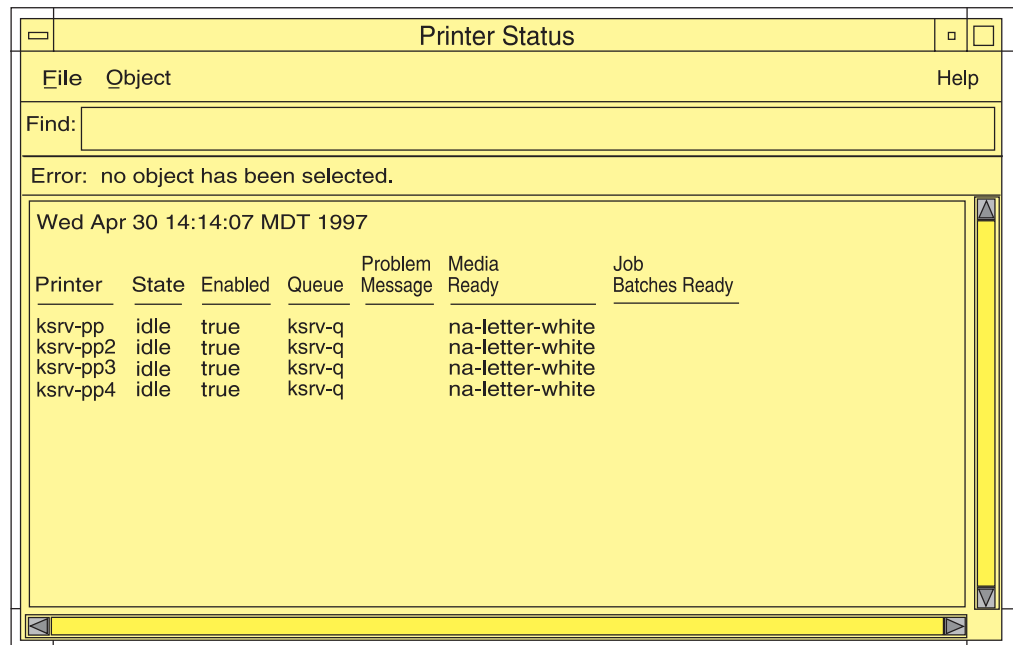
Figure 27. Help for SMIT Status Windows

Complete the following steps to receive help for menu selections on SMIT status windows.

1. Select the **Help** menu at the far right of the menu bar for the status window. A pull-down menu displays with one entry for each of the tasks you can perform from the window.
2. Select an item from the list. A help window displays providing instructions on performing the task.

Tasks You Can Perform Using the Infoprint SMIT Operator's GUI

The following is a brief description of the tasks you can perform using the Infoprint SMIT operator's GUI. Use the online help for more detailed information. You can perform tasks in four major areas: monitoring print system status, controlling jobs, controlling queues, and controlling actual destinations .

Monitoring Print System Status

The Infoprint SMIT operator's GUI menu selections for system status allow you to perform the following tasks:

- List pending, processing, and printing jobs for the queue you are monitoring.
- List retained jobs in the queue.
- Show the status of the queue.
- Show the status of the actual destination or destinations that receive jobs.

You can customize the job, queue, and actual destination information that you receive by editing the environment file for the Infoprint SMIT operator's GUI.

Controlling Jobs

The Infoprint SMIT operator's GUI menu selections for controlling jobs allow you to perform the following tasks:

- Pause and resume jobs.

- Hold and release jobs.
- Cancel active and retained jobs.
- Assign **job-batch** values to jobs.
- Change the priority of jobs.
- Assign jobs to specific actual destinations.
- Specify the forms that jobs require.
- View the status of jobs.
- View summaries of jobs that require specified forms or that belong to specified job batches.

Controlling Queues

The Infoprint SMIT operator's GUI menu selections for controlling queues allow you to perform the following tasks:

- Pause and resume queues. Paused queues continue to receive jobs, but Infoprint does not schedule the jobs to actual destinations.
- Change the queue you are monitoring. You use the queue information file to control the queues that you can switch to, as well as the actual and logical destinations that are associated with the queue.

Controlling Actual Destinations

The Infoprint SMIT operator's GUI menu selections for controlling actual destinations allow you to perform the following tasks:

- Pause and resume actual destinations. Paused actual destinations still accept jobs from their queues, but they do not process and print the jobs.
- Disable and enable actual destinations. Disabled actual destinations process jobs already assigned to them but do not accept new jobs from their associated queues.
- Backspace and forward space actual destinations. You can cause Infoprint to back up or skip forward a specified number of pages in the job currently printing on a specific actual destination.
- Specify the forms that are currently loaded in the printer device. You can specify the type of form that is loaded in each input tray of the printer.
- Specify **job-batches-ready** values for actual destinations. You can set up actual destinations so that they will process jobs that request a specific **job-batch** value.
- Shut down an actual destination so that it no longer processes jobs. You can specify how you want to shut down the actual destination with regards to how the shutdown process saves checkpoint information about the current job.

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Glossary

This glossary provides definitions of specialized terms used by Infoprint. This glossary does not define terms that are defined in non-technical dictionaries or that have no special meaning in information processing.

Sources and References

This glossary includes definitions from the following sources:

- Definitions reprinted from a published section of the International Organization for Standardization's (ISO) *Vocabulary—Information Processing* or from a published section of the ISO *Vocabulary—Office Machines* are identified by the symbol (I) following the definition.
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This glossary uses the following cross-references:

Contrast with.   This refers to a term that has an opposed or substantively different meaning.

Synonym for.   This indicates that the term has the same meaning as a preferred term, which is defined in its proper place in the glossary.

Synonymous with.   This is a backward reference from a defined term to all other terms that have the same meaning.

See.   This refers you to multiple-word terms that have the same last word.

See also.   This refers you to terms that have a related, but not synonymous, meaning.

Special Characters

.Guidefaults file.   A file created by Infoprint in the home directory of a person using the Infoprint GUI. Infoprint uses this file to save and reference information about the servers you are monitoring and the windows you are working in.

A

Access Control List (ACL).   (1) In computer security, a collection of all access rights for one object. (2) In DCE, a list associated with each object in the namespace that specifies the access authorization level for each user or user group.

ACL.   Access Control List.

acl editor.   A command line interface that allows you to view, add, update, and delete access authorization records in an ACL.

action.   In the Infoprint GUI, an icon that represents an operation that you can perform on an Infoprint object. You drag and drop the action onto an object to initiate the operation for that object. For example, using the **Enable** action to enable a disabled actual destination.

actual destination.   In Infoprint, an object that represents the output device that performs the printing or transmission function. See *email destination*, *fax destination*; see also *physical printer*, *printer device*; contrast with *logical destination*.

additive color system.   A system that reproduces an image by mixing (adding) appropriate quantities of red, green, and blue light (the additive primary colors) to create all other colors of light, either direct or transmitted. When the additive primaries are superimposed on one another, they create white light. Contrast with *subtractive color system*.

administrator.   In Infoprint, the person who creates and manages one or more components of a printing system, such as servers and actual destinations. By default, Infoprint gives administrators authorization to

perform some Infoprint operations and to access certain information that is not available to the operators or job submitters.

Adobe Acrobat. An Adobe software program that provides instant access to documents in their original format, independent of computer platform. With the Adobe Reader, you can view, navigate, print, and present any Portable Document Format (.pdf) file.

Adobe PageMaker. A desktop publishing program that produces PostScript documents.

Adobe PostScript Raster to Image Transform (RIP). See *raster image processor (RIP)*.

ADSM/6000. Advanced Distributed Storage Manager.

Advanced Distributed Storage Manager (ADSM/6000). A program that provides storage management for archived files.

Advanced Function Common Control Unit (AFCCU). An IBM RISC-based control unit with code common to all printers that use the AFCCU.

Advanced Function Presentation (AFP). A set of licensed programs, together with user applications, that use the all-points-addressable concept to print data on a wide variety of printers or to display data on a wide variety of display devices. AFP includes creating, formatting, archiving, retrieving, viewing, distributing, and printing information.

Advanced Function Presentation data stream (AFP data stream). (1) The printer data stream used for printing AFP data. The AFP data stream includes composed text, page segments, electronic overlays, form definitions, and fonts downloaded from the operating system to the printer. (2) A presentation data stream that is processed in AFP environments. The AFP data stream includes MO:DCA-P-based data streams.

Advanced Interactive Executive (AIX). An operating system used with RS/6000 computers. The AIX operating system is IBM's implementation of the UNIX operating system.

AFCCU. Advanced Function Common Control Unit.

AFP. Advanced Function Presentation.

AFP data stream. Advanced Function Presentation data stream.

ainbe. The printer input/output backend program used by the PSF DSS to send jobs to printer devices. Depending on the incoming data stream of the job, the PSF DSS may have transformed the data stream of the job prior to the backend program sending it to the printer device.

AIX. Advanced Interactive Executive.

AIX-attached printer. (1) A printer device, attached to an RS/6000 through the network or through a serial or parallel port, that receives jobs from an AIX print queue. (2) In Infoprint, a PSF physical printer that represents an AIX-attached printer device. See also *channel-attached printer*, *direct-attached printer*, *TCP/IP-attached printer*, *upload-SNA-attached printer*, *upload-TCP/IP-attached printer*.

AIX destination support system. In Infoprint, the destination support system that communicates with the standard AIX print backend (**piobe**), or with certain variations of the **rembak** print backend, to print jobs.

AIX physical printer. In Infoprint, the object representing a printer device that uses the AIX destination support system.

aliasing. In a digitized image, the creation of diagonal lines by combining short horizontal and vertical line segments that approximate the path of the desired line.

all-points-addressability (APA). The capability to address, reference, and position text, overlays, and images at any defined point of the printable area of the paper or display medium.

alphameric. Synonym for *alphanumeric*.

alphanumeric. Pertaining to a character set containing letters, digits, and other symbols such as punctuation marks. Synonymous with *alphameric*.

AMPV. Average monthly print volume.

analog. Pertaining to a continuous variable sampling of information between two points that achieves an even, smooth transition of photographic material.

analog color proof. An off-press color proof made from separation films.

anti-aliasing. (1) The rendering of hard-edged objects so that they blend smoothly into the background. PhotoShop offers anti-aliasing when rasterizing an EPS file. (2) Removing the jagged "stairstep" quality in diagonal lines produced on a computer screen by aliasing. This removal is effected by creating less densely shaded fields parallel to the diagonal line.

APA. All-points-addressability.

API. Application Program Interface.

Application Program Interface (API). The call interface between a client program and the procedures that implement the printing system, as defined by the specification. Clients use the API to access servers. (P)

architecture. The set of rules and conventions that govern the creation and control of data types such as text, image, graphics, font, fax, color, audio, bar code, and multimedia.

archiving. The transfer of digital information from an online system onto magnetic tape, floppy disk, compact disc, or other media for offline storage. The original copy is deleted from the online system. See also *retrieval*.

array inkjet. An ordered collection of multiple print heads used in an inkjet printer.

ASCII. American National Standard Code for Information Exchange. The standard code, using a coded character set consisting of 7–bit coded characters (8 bits including a parity check). The ASCII code is used for information exchange among data processing systems, data communications systems, and associated equipment. The ASCII character set includes control charactes and graphic characters.

asynchronous. (1) Pertaining to two or more processes that do not depend upon the occurrence of specific events, such as common timing signals. (T) (2) In Infoprint, occurring without a regular or predictable time relationship to a specified action. Contrast with *synchronous*.

attachment type. Defines the method by which a printer device is attached to the AIX system from which it receives data. See *AIX-attached printer*, *channel-attached printer*, *direct-attached printer*, *TCP/IP-attached printer*, *upload-SNA-attached printer*, and *upload-TCP/IP-attached printer*.

attribute. A defined characteristic of an object, such as the number of copies required of a job, or the document formats accepted by an actual destination.

attribute name. A string that identifies an attribute. Typically, in Infoprint attribute names consist of two or more words separated by hyphens.

attribute value. The element of an attribute that specifies the characteristics relating to the attribute.

authorization. In computer security, verification of the eligibility of a user to access an object.

authorized user. A person with the appropriate permissions to access an object or to issue a command.

automatic recovery. A function of printer logic that permits the printer to reprint a job if the job is misprinted or damaged or if a component has failed.

auxiliary sheet. In Infoprint, an object that represents a particular sheet of paper, blank or otherwise, that can precede a job, separate documents within a job, or follow a job.

auxiliary-sheet selections. A particular combination of start, separator, and end sheets that print with jobs on a particular printer device.

B

backend. In AIX, the program that is invoked by the **qdaemon** process to run a print or batch job. Synonymous with *backend program*.

backend program. Synonym for *backend*.

backlog. In Infoprint, the amount of time calculated by Infoprint that is required to print all of the jobs currently in a queue.

backspace. In Infoprint, the action used to back up and reprint pages in a job.

bar code. (1) A code representing characters by sets of parallel bars of varying thickness and separation that are read optically by transverse scanning. (2) An array of parallel rectangular bars and spaces that together represent data elements or characters in a particular symbology. The bars and spaces are arranged in a predetermined pattern following unambiguous rules defined by the symbology.

BCOCA. Bar code object content architecture.

Bezier curves. A method of defining curves using anchor points, control handles, and tangent lines. The PostScript path passes through anchor points. Its approach direction is along the tangent lines that are controlled by the control handles. Many personal computer programs use this drawing method. Type 1 PostScript fonts are defined using Bezier curves.

binding. (1) The cover and materials that hold a book together. See *edition binding*, *perfect binding*, *spiral binding*, *wire-o binding*. (2) The process of applying the binding to a book. (3) In Infoprint, assigning a job to an actual destination. See *early binding*, *late binding*. (4) In DCE, pointers stored in a DCE cell that are used to connect clients to servers.

bitmapped. Pertaining to an image formed by a rectangular grid of pixels. Each pixel is assigned a value to denote its color. One-bit images are black and white; 8–bit images have 256 colors (or grays); 24–bit images have full color. CMYK images have 32–bits per pixel to encode 256 levels in each of four channels. Bitmapped images are also called raster images.

bleed. An extra amount of printed image that extends beyond the trim edge of the sheet. Bleed ensures that no white gap appears at the edge of the sheet.

boot. To prepare a computer for operating by loading an operating system.

BSD. Berkeley Software Distribution.

BSD destination support system. In Infoprint, the destination support system that generates a print command string that the shell runs to print jobs.

BSD physical printer. In Infoprint, the object representing a printer device that uses the BSD destination support system.

burn. (1) In platemaking, an exposure. Burn is named because of the extremely bright ultraviolet lamps used to transfer images from film to plate. (2) In photography, to lengthen the final exposure time to increase the final density of print.

C

cathode ray tube (CRT). A vacuum tube in which a beam of electrons can be moved to draw lines or form characters or symbols on its luminescent (phosphor-coated) screen. CRTs are the heart of all modern computer display screens. Black and white displays have only one phosphor scanned by one electron beam, while color displays have RGB phosphors scanned by three beams.

CDE. Common Desktop Environment.

cell. Synonym for *DCE cell*.

Cell Directory Service. A DCE component that manages a database of information about resources within a cell.

channel-attached printer. (1) A printer attached to an RS/6000 by cables, rather than through telecommunication lines. (2) In Infoprint, a PSF physical printer that represents a channel-attached printer device. See also *AIX-attached printer*, *direct-attached printer*, *TCP/IP-attached printer*, *upload-SNA-attached printer*, *upload-TCP/IP-attached printer*.

child. See *parent/child relationship*.

choke. In color printing, an area whose dimensions have been reduced to avoid overlapping another color. Contrast with *spread*.

class. Synonym for *object class*.

clean. In Infoprint, an action used to remove all the jobs from specified servers, actual destinations, or queues, or to remove all the jobs submitted to specified logical destinations.

CLI. Command Line Interface.

client. In Infoprint, the component of the print system that assembles a print request and submits the request to a server. The client generates the local ID numbers for each job, submits the jobs to the servers, and keeps track of where each user's jobs have been submitted. IBM Infoprint Control and IBM Infoprint Submit include clients; you can also install the IBM Infoprint Select clients on workstations.

CMY. Cyan, magenta, yellow.

CMYK. Cyan, magenta, yellow, black.

collator. In some printers, for example, the IBM InfoColor 70, a special-purpose hard drive disk array used to store RIPped files and later transfer them to the LED print heads for imaging.

color balance. The relative levels of cyan, magenta, and yellow channels in an image to produce accurate color rendition of an original image.

color correction. The adjustment of the color balance in an image to produce accurate color rendition of an original image. Color correction is used for two- or three-spot-color jobs.

color key. A color proof similar to Cromalin, but typically not laminated and not necessarily accurate in color. Color keys are used to verify that breaks or color assignments and traps have been made accurately.

Command Line Interface (CLI). A type of user interface where commands are specified on the command line. Contrast with *Graphical User Interface*.

Common Desktop Environment (CDE). A graphical user interface running on a UNIX operating system.

complex attribute. In Infoprint, an attribute that can have multiple values with each value containing multiple components.

constant data. Data that does not change between copies of a document and that is merged with variable data to produce personalized documents. For example, a form letter (constant data) can be merged with a customer's name and address (variable data).

contextual help. A type of online help that provides specific information about each selectable object, menu choice, notebook tab, field, control, and pushbutton in a window.

control strip. A strip of information that can be attached to a print job and used to measure registration and density.

Cromalin. The Dupont color proofing system. Four layers (CMYK) of light-sensitive material are exposed through final halftone negative films, then laminated together on an opaque backing to produce a color- and trap-accurate final proof showing actual halftone dot structure. Cromalin is sometimes called an analog proof.

crop. To remove unwanted areas of an image, usually indicated by crop marks on the original.

CRT. Cathode ray tube.

CTS. Cutter-trimmer-stacker.

cutter-trimmer-stacker (CTS). A post-processing device attached to a printer device and used for paper handling.

cyan, magenta, yellow (CMY). The subtractive primary colors.

cyan, magenta, yellow, black (CMYK). The four basic colors used in offset printing, as opposed to the three basic colors of light: red, green, and blue. Magenta, yellow, and cyan are the subtractive primaries. Black is added to provide better density and to produce a true black.

D

daemon. A program that runs unattended to perform a standard service. Some daemons are triggered automatically to perform their tasks; others operate periodically. Daemon processes generally provide a service that must be available at all times to more than one task or user, such as sending data to a printer.

DAT. Digital audio tape.

DataBase 2/6000 (DB2*/6000). The component of the Infoprint Library that indexes data for easy retrieval.

data stream. (1) All information (data and control commands) sent over a data link. (2) A continuous stream of data that has a defined format. (3) In Infoprint, pertaining to the incoming format of the job and the output format required by the printer device. Infoprint transforms the incoming format into the output format, as required. See also *document format*.

DB2*/6000. DataBase 2/6000.

DCE. Distributed Computing Environment.

DCE authority. The permission granted by DCE to access an object.

DCE cell. The basic unit of operation and administration in DCE. A group of DCE machines that work together and are administered as a unit. A cell represents a group of users, systems, and resources that typically have a common purpose and share common DCE services.

DCE login ID. The identifier of a person logging into DCE. DCE uses this ID to determine a user's authenticity and authorization levels for accessing and modifying data in the DCE cell.

DCE ticket. The time-limited DCE authority granted whenever a user logs into DCE. When the DCE ticket expires, the user must log into DCE again in order to access objects protected by DCE.

deadline. In Infoprint, a queuing technique where the next job assigned to the first position in the queue is

the one whose deadline is closest. Contrast with *FIFO (first-in-first-out)*, *job-priority*, *longest-job-first*, and *shortest-job-first*.

default document. In Infoprint, an object that represents default attribute values for a document within a job. Synonymous with *initial value document*.

default job. In Infoprint, an object that represents default attribute values for a job. Synonymous with *initial value job*.

default object. In Infoprint, a general term that refers either to a *default document* or a *default job*. Synonymous with *initial value object*.

default value. A value stored in the system that is used when no other value is specified.

delete. In Infoprint, an action used to delete default objects, jobs, logical destinations, actual destinations, or queues from the server.

desktop publishing. Performing print-related activities on a personal computer, including but not limited to layout, design, photo manipulation, creating fonts, editing text, color separation, scanning, and animation.

destination. See *actual destination*, *logical destination*.

destination support system (DSS). In Infoprint, the programs that an actual destination uses to communicate with the output device. Synonymous with *device support system*. See *AIX destination support system*, *BSD destination support system*, *email destination support system*, *fax destination support system*, *PSF destination support system*, and *3170 destination support system*.

device. An individual piece of equipment (hardware) that attaches to a computer, such as a printer device.

device address. The identification of an input or output device by its channel and unit number.

device driver. A file that communicates with a specific device such as a printer, disk drive, or display. An application that sends output to a device controls the actions of the device through the device driver. See *printer driver*.

device support system (DSS). Synonym for *destination support system*.

DFS. Distributed File Service.

digital. Pertaining to data represented by digits, sometimes with special characters and the space character.

digital audio tape (DAT). A high-capacity, low-cost bulk storage system used for archiving, copying (for

backup purposes), and transferring large files. Typical DAT units store 1.3 GB on inexpensive cassette tapes.

digital color proof. An off-press color proof made from a color printer attached to a computer.

digital printing. A filmless and plateless printing process in which digital data for each page is transferred directly to a light-sensitive drum and then to paper for a final image.

direct-attached printer. (1) A printer device, attached to an RS/6000 through the network or through a serial or parallel port. (2) In Infoprint, a PSF physical printer that represents a direct-attached printer device. See also *AIX-attached printer*, *channel-attached printer*, *TCP/IP-attached printer*, *upload-SNA-attached printer*, and *upload-TCP/IP-attached printer*.

disable. In Infoprint, an action used to stop the acceptance of jobs on destinations, queues, or servers, or to stop writing information to logs.

Distributed Computing Environment (DCE). A software system from the Open Software Foundation (OSF). DCE provides the services that allow a distributed application to interact with a collection of possibly heterogeneous computers, operating systems, and networks as if they were a single system.

Distributed File System (DFS). A DCE component consisting of a single, integrated file system that is shared among all DCE users and host computers in a DCE cell. DFS allows users to access and share files stored in a network, without having to know the physical location of the files. It also prevents users from simultaneously modifying the same information.

distributed print system. A computer system with the ability to interchange print data and controls among different computing environments with the intent of printing the data on a different system from the one where the print request was generated. For example, in host-to-LAN distributed printing, data that resides on the host is printed on printers attached to a local area network.

dithering. A technique of filling the gap between two pixels with another pixel having an average value of the two to minimize the difference or to add detail in order to smooth the result.

document. In Infoprint, an object representing a grouping of data within a job. A job can contain one or more documents. The documents in a job can differ from each other in some ways. For example, they can contain different data and can have different document formats. A document within a job can contain printable data or a resource that is not printable by itself. See *file-reference document*, *printable document*, and *resource document*.

document element. A portion of a document at least a single page in size.

document format. In Infoprint, a document format describes the type of the data and control characters in the document, such as line data or PostScript. The format of the data determines which printer devices are capable of printing the document and whether Infoprint must transform the format.

document identifier. A string that identifies a document within a job. It consists of a job ID followed by a period (.) and a document sequence number. For example, 12.2. Document sequence numbers are integers starting at 1.

Document Printing Application (DPA). An ISO/IEC 10175 standard that addresses those aspects of document processing that enable users in a distributed open systems environment to send electronic documents to shared, possibly geographically-dispersed printers. Infoprint supports the DPA standard.

document transfer method. In Infoprint, the transfer method describes how documents are transferred to, or acquired by, servers. See *pipe-pull* and *with-request*.

document type. In Infoprint, the document type describes the kind of data in the document. A *printable document* can only contain printable data. A *resource document* can only contain data such as fonts or form definitions that are not printable. A *file reference document* can only contain names of files entered on separate lines.

dot. The individual elements of a halftone.

dot gain. An increase in the size of a halftone dot during printing, caused by ink spreading. Generally, this value is known precisely, and the scanning and filming production process is calibrated to compensate for it. The Cromalin proofing system simulates this effect.

dots per inch (dpi). A measure of data density per unit distance. Typical values for desktop publishing range from 200 to 300 dpi. Values for printing with the IBM InfoColor 70 range as high as 600 dpi.

DPA. Document Printing Application.

dpi. Dots per inch.

drag and drop. In graphical user interfaces, a procedure by which you perform actions and tasks. Using the mouse, you drag (move) an action or object icon to a new position where you want the action or task to occur.

DSS. Destination support system.

dummy. A rough paste-up or hand-drawn representation of the anticipated finished product. A dummy is used for basic design and pagination.

duplex printing. (1) Printing on both sides of the paper. Contrast with *simplex printing (1)*. (2) Printing on both sides of the paper, placing output images on the media in a head-to-head format, so that the top of one image is at the same edge as the top of the next image. Contrast with *tumble duplex printing*; see also *simplex printing (2)*.

E

early binding. In Infoprint, assigning a job to an actual destination as soon as it is accepted. Early binding permits Infoprint to estimate the time when the job will be completed. Contrast with *late binding*.

edition binding. A type of book binding in which printed sheets are folded into 16- or 32-page signatures. Four-page endleaves are pasted on the outside of the first and last signature. The signatures are then collated by machine and sewn together using special sewing machines. Contrast with *perfect binding*, *spiral binding*, and *wire-o binding*.

electronic document. A document stored in a computer instead of printed on paper.

electronic mail. Correspondence in the form of messages transmitted between workstations over a network. Synonymous with *email*.

electrophotographic. Pertaining to a type of printer technology that creates an image on paper by uniformly charging the photoconductor, creating an electrostatic image on the photoconductor, attracting negatively charged toner to the discharged areas of the photoconductor, and transferring and fusing the toner to paper.

em. In composition, a unit of measurement exactly as wide and as high as the point size of the font being set. The name is derived from the fact that the letter M in early typefaces was usually cast on a square body.

email. Electronic mail.

email destination. In Infoprint, an actual destination representing an electronic mailing system.

email destination support system. In Infoprint, the destination support system that supports email destinations.

embellishments. Variable data added to all copies of assembled pages to make the unit appear like a whole; for example, headers, footers, a table of contents, and chapter separations.

en. In composition, exactly one-half an em.

enable. In Infoprint, the action that makes a destination, queue, or server able to accept jobs, or a log able to accept information.

end sheet. The sheet of paper, blank or otherwise, that can follow a job. See also *auxiliary sheet*.

Enhanced X-Windows. A tool designed to permit multiple application processes to operate within multiple windows displayed on a virtual terminal. See *X-Windows*.

environment variable. Any one of a number of variables that describe the way an operating system runs and the devices it recognizes.

error log. A data set or file in a product or system where error information is stored for later access.

estimate. The professional cost analysis made by a print shop in response to a customer's request for a price quotation on a print job.

event. In Infoprint, an occurrence in the printing system during an operation; for example, the completion of a command.

event log. In Infoprint, a collection of messages about events that have occurred.

event notification. The notification that is sent by Infoprint for an event.

extensions. An IBM program-provided software component that enables users to incorporate variable data into fixed-text documents to produce personalized or customized documents.

F

fax destination. In Infoprint, an actual destination representing a fax device.

fax destination support system. In Infoprint, the destination support system that supports fax destinations.

FIFO (first-in-first-out). In Infoprint, a queuing technique where the next job assigned to the first position in the queue is the job that has been in the queue for the longest time. Infoprint processes jobs in the order in which they are received. Contrast with *deadline*, *job-priority*, *longest-job-first*, and *shortest-job-first*.

file-reference document. In Infoprint, a file containing the names of other files, each entered on a separate line. Job submitters can specify this file for printing when they specify a document type of **file-reference**; Infoprint prints each file listed in the reference document.

File Transfer Protocol (FTP). In TCP/IP, the application protocol that makes it possible to transfer data to and from host computers and to use foreign hosts indirectly.

finisher. A hardware device attached to a printer that performs such operations as folding or stapling the printed pages.

finishing. In a print shop, the final operations on a printed product, such as stapling, trimming, drilling, folding, embossing, varnishing, gluing, shrink wrapping, perforating, laminating, collating, and so on.

flag. A modifier of a command that specifies the action of the command. A dash usually precedes a flag. Synonymous with *option*. See also *keyword*.

FOCA. Font object content architecture.

folder. In the Infoprint GUI, an object that represents a container for a collection of similar objects. For example, the Retained Jobs folder contains retained jobs.

font. (1) A family of characters of a given size and style; for example, 9-point Helvetica. (2) One size and one typeface in a particular type family, including letters, numerals, punctuation marks, special characters, and ligatures. (3) A paired character set and code page that can be used together for printing a string of text characters. A double-byte font can consist of multiple pairs of character sets and code pages.

form definition. A resource object used by Infoprint that defines the characteristics of the form or printed media, which include: overlays to be used, the paper source (for cut-sheet printers), duplex printing, text suppression, and the position of composed-text data on the form.

forward space. In Infoprint, the action used to move ahead and skip the printing of a specified number of pages in a job.

FPO. Low-quality (sometimes photographic) images placed in a dummy to represent final images. Desktop publishing software produces images as display-screen resolution FPOs.

front panel. In the CDE, a workspace area containing controls that represent various tasks you can perform and workspace switches.

FTP. File Transfer Protocol.

G

GCR. Gray component replacement.

GIF. Graphics Interchange Format.

global change. In the Infoprint GUI, an action used to make changes to one or more attributes of several objects at once. You can also perform the same action on several objects of the same object class at the same time; for example, disabling two or more actual destinations at the same time.

global character. A character or set of characters used to specify an unknown number or set of characters in a search string. In Infoprint, a global character is represented by an asterisk (*).

global ID. Global job identifier.

global job identifier. An unambiguous job identifier. In Infoprint, it is represented as the name of the server managing the job followed by a colon (:) and a generated integer. This ID uniquely identifies the job within the Infoprint server.

glyph. An image, usually of a character, in a font.

GOCA. Graphics object content architecture.

graphic character. A visual representation of a character, other than a control character, that is normally produced by writing, printing, or displaying.

Graphical User Interface (GUI). A type of user interface that takes advantage of a high-resolution monitor and includes a combination of graphics to implement an object-action paradigm, the use of pointing devices, menu bars, overlapping windows, and icons. Contrast with *Command Line Interface*.

Graphics Interchange Format (GIF). A compressed graphics format widely used on the Internet.

gray component replacement (GCR). Synonym for *under color removal (UCR)*.

gray scale. A strip of standard gray tones, ranging from white to black, placed at the side of the original copy during photography to measure the tonal range and contrast obtained.

GUI. Graphical User Interface.

gutter. The blank area or inner margin from the printing area to the binding.

H

halftone. A printing method that simulates continuous-tone shading using dots of varying sizes laid out on a rectangular grid. Larger dots simulate darker tones and smaller dots simulate lighter tones. Typical grid spacings are 85 lines per inch (lpi) (newspaper), 133 lpi (low end), 150 lpi (midrange), and 175+ lpi (high quality).

help. (1) In the Infoprint GUI, an action used to display the online help for a specific template, object,

action, button, control, or area in an application window. (2) The name of a button used to access the online help.

hold. An indication determined by the **job-hold** attribute that is used to keep a job in the queue and prevent Infoprint from scheduling it.

hostname. The name given to an AIX system.

hot folder. A workstation directory where users copy jobs to submit them to print.

hypertext. A way of presenting information online with connections between one piece of information and another. These connections are called hypertext links. See also *hypertext link*.

hypertext link. A connection between one piece of information and another. Selecting a link displays the target piece of information.

I

IBM InfoColor 70. A duplex, process color, web-fed printer with 600-dpi resolution.

IBM Infoprint. A solution of software and hardware products that can supplement or replace the offset presses and copiers in print shops with high-quality, non-impact, black and white or process color printers. Infoprint takes documents from creation to the published, kitted, and shipped product.

IBM Infoprint Control. The administration and management component of IBM Infoprint Manager for AIX. It runs on AIX and provides a complete set of system administrator and operator functions to control all aspects of a print environment, as well as job submitter printing functions to submit and control jobs.

IBM Infoprint Library. A component of IBM Infoprint Manager for AIX. IBM Infoprint Library is a document archival and retrieval system in which job tickets and their associated resource files (graphics, fonts, images, and PostScript data) are stored and from which these data types can be retrieved for reuse.

IBM Infoprint Manager for AIX. The software component of IBM Infoprint. IBM Infoprint Manager for AIX handles the scheduling, archiving, retrieving, and assembly of a print job and its related resource files. It also tracks the finishing and packaging of the printed product.

IBM Infoprint Manager for AIX is based on Palladium technology developed at MIT/Project Athena. It conforms to the ISO DPA and POSIX standards.

IBM Infoprint Network. The local area network running TCP/IP protocol that Infoprint uses to communicate among servers, clients, and output devices.

IBM Infoprint Scan. The component of IBM Infoprint Manager for AIX that allows users to scan images as TIFF files to be included in jobs submitted by Infoprint Submit from a Windows workstation.

IBM Infoprint Select. The component of IBM Infoprint Manager for AIX that allows users to submit jobs from an OS/2 or Windows workstation.

IBM Infoprint Submit. The component of IBM Infoprint Manager for AIX that allows users to submit jobs with a job ticket from a Windows or Macintosh workstation.

Infoprint 20. A black and white, large-format, cut-sheet, workgroup laser printer with optional duplexing and 600-dpi resolution.

IBM Infoprint 60. A duplex, black and white, cut-sheet printer with 600-dpi resolution.

IBM Infoprint 62. A non-impact, continuous-forms printer that runs at a maximum of 62 impressions-per-minute (depending on forms size), and is factory set to run at either 240 or 300 dpi on a maximum paper size of 370.8 mm (14.6 in.).

IBM Infoprint 4000. A duplex, black and white, continuous-forms printer with 600-dpi resolution.

icon. A graphic symbol displayed on a screen that a user can select to invoke a function or software application.

image. Toned and untoned pels arranged in a pattern.

image data. Rectangular arrays of raster information that define an image.

imagesetter. A high resolution (1270–3600+ dpi) printer that uses an Argon (green) laser to write to film using digital imput. Imagesetting is the step before Cromalin proofing and platemaking.

imposition. The process of arranging pages on a press sheet to ensure the correct order during final cutting, folding, and binding. Electronic imposition builds press sheets automatically during the RIP and outputs film formatted for immediate use in platemaking.

InfoPrint. (1) IBM Infoprint. (2) In IBM Infoprint software publications, IBM Infoprint Manager for AIX or any of its components, especially IBM Infoprint Control.

initial value document. Synonym for *default document*.

initial value job. Synonym for *default job*.

initial value object. Synonym for *default object*.

initially settable attribute. An attribute whose value can be established when an object is created but cannot

be subsequently set or modified. See also *resettable attribute*; contrast with *non-settable attribute*.

input focus. The area of a window where user interaction is possible from either the keyboard or the mouse.

input tray. For a printer device, the container that holds the medium upon which the printer prints its output.

Intelligent Printer Data Stream (IPDS). (1) An all-points-addressable data stream that enables users to position text, images, and graphics at any defined point on a printed page. (2) Information that the host sends to IBM IPDS printers. This information generally contains basic formatting, error recovery, and character data and enables the printers to make decisions. (3) An architected host-to-printer data stream that contains both data (text, image, graphics, and bar codes) and controls defining how the data is to be presented. IPDS provides a device-independent interface for controlling and managing all-points-addressable (APA) printers.

International Organization for Standardization (ISO). An organization of national standards bodies from various countries established to promote development standards to facilitate international exchange of goods and services, and develop cooperation in intellectual, scientific, technological, and economic activity.

Internet. A wide area network connecting thousands of disparate networks in industry, education, government, and research. The Internet network uses TCP/IP as the protocol for transmitting information.

Internet Protocol. The set of rules that determines how to route data from its source to its destination in an internet environment.

intervening jobs. In Infoprint, the number of jobs in a queue that are scheduled to print before the job in question.

IOCA. Image object content architecture.

IP address. The Internet Protocol address of the server in a dotted decimal format where each node is an integer. (For example, `9.99.9.143`).

IPDS. Intelligent Printer Data Stream.

ISO. International Organization for Standardization.

J

job. In Infoprint, an object that represents a request to print or transmit one or more documents together in a single session. A job includes the data to be printed or transmitted and resources such as fonts, images, and overlays. Depending on how it was submitted, it may also include a job ticket. Synonymous with *job bundle* and *print job*.

job bundle. Synonym for *job*.

job data. The page descriptions, merge data, and embellishments that compose a document in a job, either directly or by reference.

job ID. A local or a global identifier that identifies a job to a job submitter, administrator, operator, or Infoprint. See *local job identifier*, *global job identifier*.

job-priority. In Infoprint, a queuing technique where the next job assigned to the first position in the queue is the one with the highest priority. Contrast with *deadline*, *FIFO (first-in-first-out)*, *longest-job-first*, and *shortest-job-first*.

job submitter. In Infoprint, the person who submits jobs for printing. Often, this person is an application programmer who maintains applications that generate data to be printed.

job ticket. The customer's hardcopy or electronic instructions listing all the variables describing a print job, either directly or by reference. The print shop can add specifications to the job ticket and can print the job ticket.

Joint Photographic Experts Group (JPEG). A compressed graphics format widely used on the Internet.

JPEG. Joint Photographic Experts Group.

K

kerning. In typesetting, adjusting the relative spacing of two characters to improve their appearance and readability. Kerning pairs are specific sets of characters with built-in relative spacing. Some typefaces have as many as 100 kerning pairs.

keyword. (1) A name or symbol that identifies a parameter. (2) Part of a command operand that consists of a specific character string, such as **DSNAME=**.

kitting. In a print shop, packaging the completed published work with attendant binders, tabs, diskettes, and other equipment or information, before shipping the finished product.

L

LAN. Local Area Network.

laser (light amplification by stimulated emission of radiation). In IBM printers, a device that emits a beam of coherent light that forms the image on the photoconductor that is subsequently transferred to the paper.

late binding. In Infoprint, waiting to assign a job to an actual destination until it is about to be processed.

Late binding permits Infoprint to route a job to the first suitable actual destination that becomes available. Contrast with *early binding*.

LED. Light-emitting diode.

light-emitting diode (LED). The imaging device element for electrophotographic print units.

lines per inch (lpi). A measure of the density of the grid used to space halftone dots. Typical grid spacings are 85 lpi (newspaper), 133 lpi (low end), 150 lpi (midrange), and 175+ lpi (high quality).

Local Area Network (LAN). A computer network at one location that consisting of devices connected to one another and communicating. This network can also be connected to a larger network.

local ID. Local job identifier.

local job identifier. In Infoprint, a job identifier automatically generated by the server, identifying the job to the person who submitted it. Infoprint maps a local job ID to a global job ID.

locale. (1) The human language and character set of information presented to a user. (2) In Infoprint, the language Infoprint uses when sending notification and error messages or displaying the Infoprint graphical user interfaces.

log. (1) A collection of messages or message segments added to a file for accounting or data collection purposes. (2) To record messages in a file.

logical destination. In Infoprint, an object to which users submit their jobs. The logical destination routes jobs to one or more actual destinations representing output devices such as printers, electronic mail systems, or fax machines. See also *logical printer*; contrast with *actual destination*.

logical printer. In Infoprint, a type of logical destination. The logical printer routes jobs to one or more physical printers representing printing devices.

logical unit (LU). A type of network accessible unit that enables end users to gain access to network resources and communicate with each other.

logical unit (LU) 6.2. A type of logical unit that supports general communication between programs in a distributed processing environment. LU 6.2 is characterized by (a) a peer relationship between session partners, (b) efficient utilization of a session for multiple transactions, (c) comprehensive end-to-end error processing, and (d) a generic application program interface (API) consisting of structured verbs that are mapped into a product implementation.

longest-job-first. In Infoprint, a queuing technique where the next job assigned to the first position in the queue is the longest job in the queue. Contrast with *deadline*, *FIFO (first-in-first-out)*, *job-priority*, and *shortest-job-first*.

lpi. Lines per inch.

LU. Logical unit.

M

magnetic ink character recognition (MICR). Identification of characters printed with ink that contains particles of magnetic material.

mainframe processor. A functional unit that interprets and executes instructions in a large computer to which other computers are connected so that they can share the facilities the mainframe provides.

makeready. All the setup work involved in preparing a press for a print run.

manage. In the Infoprint GUI, the action used to put an object into a mode where its icon reflects changes of status.

mechanical. A camera-ready layout. The mechanical can consist of multiple sheets or overlays for each spot or process color used. Final images, if not stripped in later, should be at final size, cropped and screened to the correct line frequency.

medium. In Infoprint, an object representing the physical material upon which a job is printed.

merge data. Data that is unique to each copy of a document and that customizes the document; for example, serial numbers or mailing information. Merge data is typically a small percentage of the total data in the document.

message catalog. A file of all the possible messages than can display during the processing of an application.

MICR. Magnetic ink character recognition.

Mixed Object Document Content Architecture (MO:DCA). An architected, device-independent data stream for interchanging documents.

MO:DCA-P. Mixed Object Document Content Architecture Presentation.

modify. In Infoprint, an action used to modify the values of attributes within the object attributes notebook.

moire. Undesirable interference patterns caused by two overprinting halftone screens with incorrect halftone dot angles.

monospaced. In typesetting, pertaining to a typeface in which all the characters have equal widths. Monospaced typefaces are useful for tabulating figures.

Multiple Virtual Storage (MVS). An operating system developed by IBM. The design of MVS incorporates an addressing architecture that provides a unique address space to each job in the system.

MVS. Multiple Virtual Storage.

N

N_UP. Pertaining to the number of forms placed together in a layout. Typical layouts are 2_UP, 4_UP, 8_UP, 16_UP, and so on. N_UP printing is done to use the maximum area of the print sheet.

name service. The DCE service that administers the namespace and provides the network binding information that a client requires to access the server.

namespace. A global name repository available to all utilities and API procedures. The namespace contains mappings of object names to other related objects. For example, the namespace provides the mapping of a logical destination to the server in which it resides.

Network File System (NFS). A protocol developed by Sun Microsystems that uses Internet Protocol to allow a set of cooperating computers to access each other's file systems as if they were local.

newline options. The different ways in which the printer determines how lines are delimited in a document data stream.

NFS. Network File System.

non-process-runout (NPRO). A printer function that moves the last printed sheet to the stacker of the printer device.

non-settable attribute. An attribute that is neither initially settable nor resettable. The values for these attributes are controlled by Infoprint. Contrast with *initially settable attribute* and *resettable attribute*.

notification. (1) The act of reporting the occurrence of events. (2) In Infoprint, notification of events appears as messages in event logs or messages sent to administrators, operators, and job submitters. In the Infoprint GUI, notification of events also appears as changes to the appearance of icons.

notification-profile. In Infoprint, an attribute associated with an object that contains information designating the people to whom Infoprint sends notification about events for that object, which event information it sends, and how it sends the information.

NPRO. Non-process-runout.

O

object. A collection of attributes that represent a physical or logical entity in the print system. For example, a specific printer device is represented by an actual destination (physical printer) object. An object is identified by its object name. Objects are grouped into classes. See also *object class*.

object class. A group of objects that share a common definition and therefore share common properties, operations, and behavior as defined by their attributes. For example, all Infoprint queue objects are in the same object class and each queue has the same set of queue attributes. However, the values for those attributes can differ for each queue within the queue object class.

Object Identifier (OID). In architecture, a notation that assigns a globally unambiguous identifier to an object or a document component. The notation is defined in international standard ISO.IEC 8824(E).

object name. The alphanumeric term that identifies an object.

object state. The state of an object indicates its availability and readiness for performing its functions. An object can be in one of a number of states such as ready, busy, or unknown.

OCR. Optical character recognition.

octet. A byte that consists of eight binary digits (bits).

offset stacking. In certain printer devices, a function that allows the printer to offset the printed output pages for easy separation of the jobs.

OID. Object Identifier.

open destinations window. In the Infoprint GUI, the action used to open a new application window displaying the logical and actual destinations associated with a queue.

Open Prepress Interface (OPI). An industry standard for replacing low-resolution images in review documents with high-resolution images needed for high-quality final output.

Open Software Foundation (OSF). A nonprofit research and development organization created by a consortium of companies that work together to develop software in the open systems market. OSF developed the Distributed Computing Environment (DCE).

open window. In the Infoprint GUI, the action used to open a new application window representing one or more objects displayed in the currently open application window.

operation. An action performed on one or more data items.

operator. In Infoprint, the person responsible for printer devices. Also, this person performs a subset of tasks for Infoprint queues and actual destinations and performs some job-related tasks.

OPI. Open Prepress Interface.

optical character recognition (OCR). Conversion of scanned text to editable ASCII characters.

option. A modifier of a command that specifies the action of the command. A dash usually precedes an option. Synonymous with *flag*. See also *keyword*.

orphan logical destination. In the Infoprint GUI, an object that represents a logical destination that is not associated with an existing queue.

orphan logical printer. In the Infoprint GUI, an object that represents a logical printer that is not associated with an existing queue.

OSF. Open Software Foundation.

overlay. A collection of constant data, such as lines, shading, text, boxes, or logos, that is electronically composed in the host processor and stored in a library, and that can be merged with variable data during printing.

P

PAC. Privilege Attribute Certificate.

page definition. (1) A resource that contains the formatting controls for line data. (2) In Infoprint, a resource that defines the rules of transforming line data into composed pages and text controls.

page segment. A resource that contains composed text and images, which are prepared before formatting and included during printing.

Palladium. A distributed print system developed at MIT/Project Athena with participation from Digital Equipment Corporation (DEC), International Business Machines (IBM), and Hewlett-Packard (HP). It is a reference implementation for the OSI Document Printing Architecture (DPA) standard, ISO/IEC 10175. Palladium was selected in 1990 as the DCE distributed printing technology. Infoprint was designed using Palladium concepts.

pane. In the Work Area of the Infoprint VSM administrator's GUI, an area containing a group of objects of a specific type, such as an actual destinations pane.

parent/child relationship. In Infoprint, servers, queues, and destinations are related to one another in a parent/child relationship. For example, a server is the parent of all the queues that reside in that server, and these queues are its children.

pass through. In Infoprint, referring to options submitted with a job that are used by the device driver, but not Infoprint. Infoprint does not process or validate this information; it passes it along to the device driver. See *printer driver*.

path. The route used to locate files; the storage location of a file. A fully qualified path lists the drive identifier (if any), directory name, subdirectory name (if any), and file name with the associated extension.

pause. In Infoprint, the action used to temporarily halt the printing or transmission of jobs on actual destinations or the distribution of jobs from servers or queues.

pdcrcds. In Infoprint, a utility used to create directories within the DCE namespace.

pdcreate. In Infoprint, the command used to create a new object and set its attributes to specified values.

PDF. (1) Portable Document Format. (2) Printer description file.

pdmsg. In Infoprint, a utility used to display information about a message.

pdpr. In Infoprint, the command used to create and submit a job, consisting of one or more documents, to a server for printing or transmission.

perfect binding. A type of book binding in which the pages are held together with flexible adhesive. Contrast with *edition binding*, *spiral binding*, and *wire-o binding*.

permissions. In AIX, codes that determine who can access a file and what operations they can perform on the file.

physical printer. In Infoprint, a type of actual destination that represents a printer device. See also *printer device*.

piobe. The standard printer input/output backend program used by AIX for printing. See also *ainbe*.

pipe-pull. In Infoprint, a document transfer method where Infoprint saves the documents in a file and transfers the address of the file to the server. Infoprint transfers the file to the server upon the request from the server. This is an efficient transfer method for large jobs and is the default transfer method at job submission. Contrast with *with-request*.

plex. A document or actual destination attribute used to define the placement of output images on the page. See the plex values *simplex* and *tumble*.

plug-ins. A component of Adobe PageMaker that enables users to incorporate variable data into fixed-text documents to produce personalized or customized documents.

Portable Document Format (PDF). An Adobe PostScript data format that can be viewed or printed.

Portable Operating System Interface for Computer Environments (POSIX). An Institute of Electrical and Electronics Engineers (IEEE) standard for computer operating systems.

POSIX. Portable Operating System Interface for Computer Environments.

PostScript. Adobe's page description language. PostScript has become a standard for graphic design and layout software. PostScript files can contain both vector and raster data. Fonts are described using PostScript coding. Many desktop publishing systems produce PostScript data as their output data stream.

PostScript printer description (PPD). A file that contains options for printing PostScript data on various printer devices.

PPD. PostScript printer description.

preflight. To assess all resources for a job before the actual print run.

prepress. Work done in the print shop before printing a job, such as preparing data and art, page imposition, color retouching, electronic editing, and page layout.

print database. The set of files on disk that provide a permanent repository for the attributes of all print objects, such as logical destinations, queues, and actual destinations.

print job. Synonym for *job*.

Print Quality Enhancement (PQE). A printer facility that provides edge smoothing along diagonal lines, fine fidelity protection, and independent boldness control.

Print Services Facility (PSF). Any of several programs, including PSF for AIX, PSF/MVS, PSF/VM, and PSF/VSE, that produce printer commands from the data sent to them.

print system. A group of one or more print servers and one or more printing devices, which may or may not be located in the same geographical area. The components of a print system are assumed to be interconnected in some manner, providing at least one network interface to print clients, and acting synergistically to supply the defined document print service. (D)

printable document. In Infoprint, an object that represents text or data to be printed by a job. Contrast with *resource document*.

printer description file (PDF). A file that contains options for printing PostScript data on a specific printer device.

printer device. The physical output device that performs the printing function. See also *physical printer*.

printer driver. A file that describes the physical characteristics of a printer or other peripheral device. This file is used to convert graphics and text into device-specific data at the time of printing or plotting. Synonymous with *device driver*.

priority. In Infoprint, a number assigned to a job that determines its precedence in being printed. Jobs with higher priority numbers are handled before jobs with lower priority numbers.

Privilege Attribute Certificate (PAC). In DCE, a certified set of access privileges that can be presented by a user or administrator to establish access rights to objects.

process color. Color made up of CMYK links simulating a specified color. This is the traditional method of reproducing continuous tone color images (color separations). Because of the nature of color inks, certain inks do not reproduce well.

processor. In a computer, a functional unit that interprets and executes instructions. A processor consists of at least an instruction control unit and an arithmetic and logic unit. (T)

promote. In Infoprint, the action used to move a job to the beginning of the queue so that it will print on the next available printer that can handle that job.

protocol. A set of semantic and syntactic rules that determines the behavior of functional units in achieving communication.

PSF. Print Services Facility.

PSF destination support system. In Infoprint, the destination support system that communicates with PSF for AIX to print jobs.

PSF physical printer. In Infoprint, the object representing a printer device that uses the PSF destination support system.

Q

QuarkXpress. A desktop publishing system produced by Quark, Incorporated.

queue. (1) In Infoprint, an object that manages a collection of jobs that are waiting to print. A queue receives jobs from one or more logical destinations and sends jobs to one or more actual destinations. (2) A line or list formed by items waiting for processing.

R

raster. A pattern of dots defined at varying data depths. Black and white images are one-bit (on/off); grayscale images are 8-bit (256 levels); RGB images are 24-bit; CMYK images are 32-bit.

raster image processor (RIP). A processor in which a PostScript data stream is converted into dot patterns that are transferred to the final print medium. Infoprint uses an Adobe RIP to convert PostScript to IPDS for such printers as the Infoprint 4000 and Infoprint 60.

rc.pd. In Infoprint, a utility used to start the Infoprint servers listed in the **/etc/pd.servers** file.

read-only. In Infoprint, describes an attribute value that cannot be set by the user but may change based on other activity.

ready. (1) A state in which an object is ready and able to perform tasks. (2) An available resource, such as a value of the **media-ready** attribute. Contrast with *supported*.

red, green, blue (RGB). The colors of CRT display phosphors. RGB images are for screen display only. They must be converted to CMYK images before printing.

registration. (1) The accuracy of printing on paper relative to the edges of the paper. (2) The accuracy of printing a single color (cyan, magenta, or yellow) relative to black. (3) The accuracy of printing on one side of a page relative to printing on the reverse side of the page.

Remote Procedure Call (RPC). A DCE component that manages communication between clients and servers in a DCE environment. It allows requests from a client program to access a procedure anywhere in the network.

reprographics. The process of copying or duplicating documents or information.

requested. In Infoprint, pertaining to the specific values of attributes requested by a job when it is submitted. The requested attribute values of a job are validated against supported attribute values for an actual destination to determine if the printer can handle that job. Contrast with *supported*.

resettable attribute. An attribute whose value can be set or modified after an object has been created, assuming the object is in an appropriate state to be modified. See also *initially settable attribute*; contrast with *non-settable attribute*.

resource. In AFP, a file containing a collection of printing instructions used when printing a job. Resources include fonts, overlays, form definitions, page definitions, and page segments.

resource context. In Infoprint, an object that contains directory path information that helps the print system locate resources needed for printing a job. The resources include fonts, overlays, form definitions, page definitions, and page segments.

resource document. In Infoprint, an object that represents a resource, such as graphics or fonts, used by a job to print a printable document. Contrast with *printable document*.

resubmit. In Infoprint, an action used to reroute pending or retained jobs to a different logical destination than the one through which the job was originally submitted.

resume. In Infoprint, the action used to resume the printing of paused jobs or resume the distribution of jobs from paused servers or queues.

retained job. In Infoprint, an object that represents a job that is being stored in the print system for a specified amount of time, normally after the completion of printing the job. A retained job does not reside in a queue.

retention. The process of storing data after completion of a process for a certain length of time.

retrieval. The process of bringing digital archived data out of storage and into online memory for reuse. See also *archiving*.

RGB. Red, green, blue.

RIP. (1) Raster image processor. (2) To convert data to dot patterns using a raster image processor.

root user. In the AIX environment, the system user with the most authority who can log in and execute restricted commands, shut down the system, and edit or delete protected files. Synonymous with *superuser*.

RPC. Remote Procedure Call.

RS/6000. A family of workstations and servers based on IBM's POWER architecture. They are primarily designed for running multi-user numerical computing applications that use the AIX operating system.

S

scanner. A device that converts hardcopy source data into digital format (halftone dots) to avoid retyping the data.

scheduler. In Infoprint, the scheduling method that the queue uses when assigning a job to an actual destination.

separator sheet. The sheet of paper, blank or otherwise, that separates documents within a job. See also *auxiliary sheet*.

server. In Infoprint, the object that accepts configuration, management, and printing requests, performs the requested operations, and sends responses back as a result of the operation.

settable attribute. See *initially settable attribute*, *resettable attribute*.

severity. An indication of how serious an error condition is.

shell. In the AIX operating system, a command interpreter that acts as an interface between the user and the operating system. In Infoprint documentation, all shell examples use the Korn shell.

shift-out, shift-in code. Control characters used to indicate the beginning and end of a string of double-byte, ideographic characters.

shortest-job-first. In Infoprint, a queuing technique where the next job assigned to the first position in the queue is the shortest job in the queue. Contrast with *deadline*, *FIFO (first-in-first-out)*, *job-priority*, and *longest-job-first*.

shut down. In Infoprint, the action used to halt all server or actual destination processes without deleting the server or actual destination.

signature. A group of pages that are printed, folded, cut, and bound together. Manual placement of pages in the signature is determined using a folding dummy.

simplex. In Infoprint, the value of the document or actual destination **plex** attribute indicating that output images are placed on the media in a head-to-head format, so that the top of one image is at the same edge as the top of the next image. Depending on the value of the document or actual destination **sides** attribute, the document may be printed on one or both sides of the paper. Contrast with *tumble*; see also *simplex printing* and *duplex printing*.

simplex printing. (1) Printing on only one side of the paper. Contrast with *duplex printing (1)*. (2) Printing on one or both sides of the paper, placing output images on the media in a head-to-head format, so that the top of one image is at the same edge as the top of the next image. Contrast with *tumble duplex printing*; see also *duplex printing (2)*.

SMIT. System Management Interface Tool.

SNA. Systems Network Architecture.

spiral binding. A type of book binding in which wire or plastic coils are threaded through a series of holes or slots in the binding edge. Contrast with *edition binding*, *perfect binding*, and *wire-o binding*.

spot color. Individual colored inks formulated to exactly match a specified color. Spot color is used when

CMYK process color is unable to produce a reasonable facsimile of the color or when vivid color is needed. Spot color is also used when fluorescent or metallic colors are needed.

spread. In color printing, an area whose dimensions have been enlarged to eliminate white space between it and another color. Contrast with *choke*.

start sheet. The sheet of paper, blank or otherwise, that can precede a job. See also *auxiliary sheet*.

state. Synonym for *object state*.

stripping. The process of mechanically assembling film into plate layouts. Page imposition takes place during stripping.

subnet mask. A bit template indicating which part of an IP address represents the network. A 1 in the subnet mask means that the corresponding bit in the IP address is part of the network address; a 0 means that it is not. For example, if the IP address is `9.99.12.137` and the subnet mask is `255.255.255.0`, the network address is `9.99.12.0`.

subnetwork. (1) Any group of nodes that have a set of common characteristics, such as the same network ID. (2) In the AIX operating system, one of a group of multiple logical divisions of another network, such as can be created by TCP/IP.

subtractive color system. A system that reproduces an image by mixing (adding) appropriate quantities of cyan, magenta, and yellow paints on white paper. These paints reflect certain colors and absorb—or subtract—others. Contrast with *additive color system*.

superuser. Synonym for *root user*.

supported. In Infoprint, pertaining to the specific job attribute values that the actual destination can accept during job validation. Infoprint validates the requested attribute values of the job against the supported attribute values of the actual destination to determine whether the actual destination can handle that job. Contrast with *requested*.

synchronous. Occurring with a regular or predictable time relationship to a specified action. Contrast with *asynchronous*.

system administrator. Synonym for *administrator*.

System Management Interface Tool (SMIT). In the AIX operating system, an interface tool for installation, maintenance, configuration, and diagnostic tasks. SMIT allows you to perform tasks without entering any commands.

Systems Network Architecture (SNA). The description of IBM's logical structure, formats,

protocols, and operational sequences for transmitting units through, and controlling the configuration and operation of, networks.

T

table reference character (TRC).   An optional control character in a print data set. The TRC identifies the font used to print the record and can be used to select a font during printing.

Tagged Image File Format (TIFF).   A digital format for storing scanned images. TIFF files are also referred to as raster format files (as opposed to vector format files). When used in desktop publishing, TIFF files produce only a low-resolution FPO image; the high-resolution data remains on the hard disk.

task help.   A type of online help that provides a list of tasks that can be completed with a selected object. When you select a task, the help provides step-by-step information about how to complete the task.

TCP/IP.   Transmission Control Protocol/Internet Protocol.

TCP/IP-attached printer.   (1) A printer device attached to an RS/6000 through telecommunication lines using the TCP/IP protocol. (2) In Infoprint, a PSF physical printer that represents a TCP/IP-attached printer device. See also *AIX-attached printer*, *channel-attached printer*, *direct-attached printer*, *upload-SNA-attached printer*, *upload-TCP/IP-attached printer*.

template.   In the Infoprint VSM administrator's GUI, an object that represents a set of default attribute values that has been defined for creating a particular type of object, such as an actual destination.

ticket.   See *job ticket* and *DCE ticket*.

TIFF.   Tagged Image File Format.

Transmission Control Protocol/Internet Protocol (TCP/IP).   A set of communication rules used in the Internet and in any network that follows the U.S. Department of Defense standards for inter-network protocol. TCP provides a reliable host-to-host protocol between hosts in packet-switched communications networks and in interconnected systems of such networks. It assumes that the Internet Protocol (IP) is the underlying protocol. See also *Internet Protocol*.

trapping.   In desktop publishing, the amount of overlap in overprinting colors. Trapping prevents white paper showing through gaps caused by normal errors in registration. On sheet-fed presses, trapping is usually 0.25 point. See also *choke* and *spread*.

TRC.   Table Reference Character.

tumble.   In Infoprint, the value of the document or actual destination **plex** attribute indicating that output

images are placed on the media in a head-to-toe format, so that the top of one image is at the same edge as the bottom of the next image. The document must be printed on both sides of the paper. Contrast with *simplex*.

tumble duplex printing.   Printing on both sides of the paper, placing output images on the media in a head-to-toe format, so that the top of one image is at the same edge as the bottom of the next image. Contrast with *simplex printing (2)*, *duplex printing (2)*.

U

UCR.   Under color removal.

under color removal (UCR).   Conversion of neutral color areas to black ink that reduces use of CMY inks, improves trapping, and reduces setup time. Generally, UCR is performed during image scanning, but some RIPs perform it during processing. Synonymous with *gray component replacement (GCR)*.

unmanage.   In the Infoprint VSM administrator's GUI, the action used to put an object into a mode where its icon does not reflect the changes of status for the object.

upload printer.   See *upload-SNA-attached printer*, *upload-TCP/IP-attached printer*.

upload-SNA-attached printer.   In Infoprint, a PSF physical printer that represents a printer device attached through an MVS system and managed by PSF/MVS. Infoprint communicates with the MVS system through the SNA network. See also *AIX-attached printer*, *channel-attached printer*, *direct-attached printer*, *TCP/IP-attached printer*, *upload-TCP/IP-attached printer*.

upload-TCP/IP-attached printer.   In Infoprint, a PSF physical printer that represents a printer device attached through an MVS system and managed by PSF/MVS. Infoprint communicates with the MVS system through the TCP/IP network. See also *AIX-attached printer*, *channel-attached printer*, *direct-attached printer*, *TCP/IP-attached printer*, and *upload-SNA-attached printer*.

V

validate.   In Infoprint, to compare the attribute values requested by a job with the supported attribute values of the actual destinations in the system and to determine whether there is an actual destination capable of printing or transmitting the job.

value.   A specific characteristic of an attribute.

variable.   A name used to represent a data item whose value can change while the program is running.

variable data. Data that can be changed between copies of a document. For example, a form letter (constant data) can be merged with variable data, such as a customer's name and address to produce personalized documents.

varnish. A protective layer applied to a finished sheet, usually for photos, but sometimes used as a design element because of its reflective qualities. Varnishes can be tinted.

vector. An absolute coordinate point and line in space. PostScript files can contain vector artwork. Vector files are converted to rasters during the RIP process.

velox. A black and white photographic print made from a halftone negative, to be used as a proof copy.

vignette. An image with soft, fade-away edges.

Virtual Machine (VM). (1) An IBM licensed product that manages the resources of a single computer so that multiple computing systems appear to exist. (2) A virtual data processing system that appears to be at the exclusive disposal of a particular user, but whose functions are accomplished by sharing the resources of a real data processing system. (T)

Virtual Storage Extended (VSE). An IBM licensed program whose full name is the Virtual Storage Extended/Advanced Function. It is a software operating system controlling the execution of programs.

Visual Systems Management (VSM). In AIX, a type of graphical user interface that allows system management through the direct manipulation of objects.

VM. Virtual Machine.

VSE. Virtual Storage Extended.

VSM. Visual Systems Management.

W

web. A roll of paper used in web or rotary printing.

well. In the Infoprint VSM administrator's GUI, an area within a pane that contains a group of objects related to the objects in the pane; for example, a queues well within a servers pane.

what you see is what you get (WYSIWYG). Refers to the fact that the composite image displayed on the screen at a computer workstation has the appearance of the final printed image.

window. A rectangular area of the screen that you can move about, place on top of, or pull under other windows, or reduce to an icon.

wire-o binding. A continuous double series of wire loops run through punched slots along the binding side of a booklet. Contrast with *edition binding*, *perfect binding*, and *spiral binding*.

with-request. In Infoprint, a document transfer method where the client transfers the documents directly to the server. Contrast with *pipe-pull*.

workstation. A terminal or microcomputer, usually one that is connected to a mainframe or to a network, at which a user can use applications.

write access. A level of authorization that grants the ability to modify data.

WYSIWYG. What you see is what you get.

X

X-Windows. A network-transparent windowing system developed by MIT. It is the basis for Enhanced X-Windows, which runs on the AIX Operating System.

xerography. A dry printing process using corona-charged photoconductive surfaces to hold latent images that are developed with a dry toner and then transferred to paper and fused with heat.

Xstation. A terminal that is connected through a network to an RS/6000 system, from which a user can perform command-line functions and run X-Windows based applications.

Xtensions. A UNIX-provided software component that enables users to incorporate variable data into fixed-text documents to produce personalized or customized documents.

Numerics

3170 destination support system. The destination support system used by the IBM InfoColor 70 to print jobs.

3170 physical printer. A physical printer representing an IBM InfoColor 70 printer device.

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