InfoPrint XT for AIX

Installing and Using

Version 2 Release 1

G550-1339-00

InfoPrint Solutions Company

InfoPrint XT for AIX

Installing and Using

Version 2 Release 1

G550-1339-00

InfoPrint Solutions Company

> **Note:**
>
> Before using this information and the product it supports, read the information in "Notices" on page 231.

> **Internet**
>
> Visit our home page: `http://www.infoprint.com`

Contents

Figures

Tables

About this publication

This publication describes how to install, configure, and use InfoPrint® XT for AIX®. With InfoPrint XT, you can process and print Xerox Line Conditioned Data Stream (LCDS) jobs and Xerox metacode jobs on Intelligent Printer Data Stream™ (IPDS™) printers.

You can use InfoPrint XT with InfoPrint Manager for AIX, Release 3 (5648-F35) or as a stand-alone transform. This publication describes how to use InfoPrint XT with InfoPrint Manager and points out differences for systems where InfoPrint Manager is not installed.

Note: You can also use InfoPrint XT as a stand-alone transform when you access it from InfoPrint ProcessDirector for AIX (5765-G74) as an InfoPrint ProcessDirector external step.

Who should use this publication

This publication contains instructions and procedures for AIX administrators who install the InfoPrint XT software and do configuration tasks for the installation. It also contains information for printer operators who process and print the Xerox jobs on IPDS printers.

Conventions used in this publication

This publication uses conventions for:
- Highlighting
- Command syntax and example syntax, including special characters in commands

Highlighting

These are the types of highlighting:

Bold   Identifies commands, attributes, files, directories, and other items whose names the InfoPrint XT installation predefines. For example, the **pdxtx2afp** command and the **/usr/opt/pdxt/bin** directory.

Italic   Identifies a variable item whose actual name or value you supply. For example, *local* or *ldest*. Italics also identify publication titles.

Bold *Italic*
Syntax that combines bold and italic highlighting identifies a specific keyword or parameter name that you enter exactly as shown, and a variable value that you supply. For example, **xjdl=***jdl_name*. Enter the string **xjdl=**. *jdl_name* is a value that you choose.

Understanding the syntax notation and the use of special characters

These rules apply to the syntax diagrams and examples that this publication contains:
- Text that you type is case-sensitive. For example, **p0612c.fnt** and **F$P0612C**; type the font names in lowercase and uppercase characters exactly as they are shown.
- Do not type any vertical bars, underscores, or brackets that command examples include:

– A vertical bar or bars between two or more entries means that you can specify only one of the values. **[xspacing=<u>none</u> | word | trnw | char]** is an example of this notation. You can specify one of these values:

- **xspacing=none**
- **xspacing=word**
- **xspacing=trnw**
- **xspacing=char**

– An underscore identifies the default value for an option or parameter. InfoPrint XT uses the default value if you do not explicitly specify a value. **none** was the default value in the previous example.

– Brackets around an item in an example mean that the item is optional. You do not have to include it.

Note: This does not apply to the brackets that you can include in pattern-matching strings.

Abbreviations

AFP™   Advanced Function Presentation™

FCB   Forms Control Buffer

IPDS   Intelligent Printer Data Stream

LCDS   Line Conditioned Data Stream

MO:DCA™
Mixed Object Document Content Architecture™

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

NPRO   Non-process runout

PSF   Print Services Facility™

SMIT   System Management Interface Tool

STDERR
Standard error

STDIN   Standard input

STDOUT
Standard output

Related information

Other sources of information that you can use with InfoPrint XT are:

Web sites

For additional information about InfoPrint Solutions Company products, including printers and software:

`http://www.infoprint.com`

InfoPrint Solutions Company information centers

Information centers provide online, task-oriented information about InfoPrint Solutions Company hardware and software products:

```
http://www4.infoprintsolutionscompany.com/help/index.jsp
```

Publications

InfoPrint Solutions Company provides both hardcopy and viewable versions of publications. For a list of publications that you might find useful with the InfoPrint XT installation, see "Bibliography" on page 247.

InfoPrint XT manual (man) pages

An InfoPrint XT installation includes online help in the form of man pages. To see the InfoPrint XT man pages, enter the **man** command, followed by the name of the man page. For example:

```
man pdxt
```

For a complete list of all the man pages that InfoPrint XT supplies, access the **pdxt** man page.

Chapter 1. Introducing InfoPrint XT

This chapter briefly describes the components of InfoPrint XT for AIX, how it processes jobs, and its non-supported or restricted functions. InfoPrint XT is the Xerox transform technology that you can use to print Xerox jobs on high-speed, Intelligent Printer Data Stream (IPDS) printers.

Note: This publication identifies the system on which you install InfoPrint XT as the AIX system.

InfoPrint XT overview

InfoPrint XT transforms Xerox Line Conditioned Data Stream jobs and metacode jobs to jobs that you can print on IPDS printers. InfoPrint XT converts the jobs and the resources that they require, such as fonts and forms, to the Advanced Function Presentation (AFP) format. AFP is a presentation architecture for creating, storing, retrieving, viewing, and printing data. It was developed by IBM® and is now maintained by the AFP Consortium.

Benefits of using AFP and InfoPrint XT

The presentation architectures provide the ability to represent documents in a data format that is independent of the methods used to capture or create them. Documents might contain combinations of text, images, graphics, and bar code objects in device-independent formats.

You can send the same document to a variety of destinations, including printers, without altering its format for the type of destination. Many methods exist by which you can generate Xerox LCDS and metacode data streams and send them to Xerox printers. Now, you can send Xerox jobs directly to InfoPrint XT without altering the applications that generate the jobs.

InfoPrint XT converts the jobs, which you can then print on a wide variety of IPDS printers. For example, you can print the jobs on InfoPrint 4100 printers, which are nonimpact, all-points-addressable, laser electrophotographic printers. These continuous-forms printers are ideal for the high volume, production printing environment. If your printing needs require cut-sheet printers, with several bins for a variety of paper stocks, you can print the jobs on supported IPDS Cutsheet printers, such as the InfoPrint Pro C900AFP printer.

For in-depth information about the presentation architectures, see the publications listed for "Advanced Function Presentation" on page 247. For detailed information about InfoPrint Solutions Company printers, visit this Web site:

`http://www.infoprint.com`

Xerox resources and the InfoPrint XT load process

Xerox jobs use a combination of printable and non-printable resources. In the Xerox environment, these resources are on the Xerox printer hardware. Before you convert a Xerox job to AFP, you must first convert its printable resources to AFP. You convert the Xerox resources to their AFP counterparts through the InfoPrint XT *load* process. The InfoPrint XT **pdxtloadres** command does the actual conversion. You also convert the non-printable resources.

Printable Xerox resources

Xerox jobs use specific printable Xerox resources, such as fonts, forms, images, and logos. Table 1 lists the major types of printable Xerox resources and their equivalent AFP resources.

Table 1. Printable Xerox resources and their AFP functional equivalents

Xerox Resources	AFP Resources
Xerox FNT (fonts)	AFP code pages, character sets, and coded fonts
Xerox FRM (forms)	AFP overlays
Xerox IMG (images)	AFP page segments
Xerox LGO (logos)	AFP page segments

Non-printable Xerox resources that InfoPrint XT uses

Xerox jobs use other types of Xerox resources, such as job descriptor libraries (JDLs) and page descriptor entries (PDEs). These resources control the data stream characteristics and the printing environment. While you must also load these Xerox resources on the AIX system, the load process does not produce any corresponding AFP resources. Instead, the InfoPrint XT **pdxtloadres** command stores the necessary formatting information that the resources contain. When you process a job that uses these resources, InfoPrint XT creates a unique AFP form definition for the job from some of the formatting information. This list describes the non-printable Xerox resources that InfoPrint XT processes and uses:

Cluster Library (LIB)
> Defines clusters, or groups of printer trays.

Copy Modification Entry (CME)
> Defines changes to the printing characteristics of a job on a copy-by-copy basis.

Job Descriptor Library (JDL)
> A collection of compiled job descriptor entries (JDEs), which define the unique characteristics of one or more Xerox jobs.

Page Descriptor Entry (PDE)
> A set of statements that define formatting information for each page of a job. This includes information such as the page orientation, the starting print line, and the fonts that the page uses.

Routing Text (TST)
> Contains information that is specific to separator sheets, which precede individual Xerox reports.

Stocksets (STK)
> Defines the types of paper that the job requires and associates them with the clusters of printer trays, as defined by **clustr.lib**.

For more information about loading resources and the messages that InfoPrint XT can issue during the load process, see:

- Chapter 4, "Copying and loading Xerox resources," on page 63
- Appendix D, "Resource utility messages and data stream converter messages: AIO*xxxnnn*X," on page 197

Non-printable Xerox resources that InfoPrint XT does not use

The other types of non-printable Xerox resources that you can load through InfoPrint XT are:

- **CMD**
- **DAT**
- **FSL**
- **ISL**
- **JSL**
- **MSC**
- **PCH**
- **TMP**

InfoPrint XT copies information for these non-printable resources when you load them. InfoPrint XT does not use these resources; it copies them for reference purposes only. For more information, see "Types of Xerox resources that you can load" on page 69.

Copying Xerox resources from printers to tapes

You copy the printable and non-printable resources from a Xerox printer to a tape. Then, you use the InfoPrint XT **pdxtrtape** command to copy the resources to directories on the AIX system. If the AIX system does not have a compatible tape drive, you can contact InfoPrint Solutions Company for services to copy the resources from tape to a different media.

Xerox data stream conversion

The InfoPrint XT data stream converter reads and interprets internal Xerox entries and commands when it converts the Xerox job to AFP.

Xerox START commands and InfoPrint XT conversion parameters

When you print a job on a Xerox printer, you enter a specific START command to run the job. The START command specifies the starting JDL and JDE pair to use for the job; the JDL and JDE specify the characteristics of the job. For example, they can specify an initial set of fonts and whether duplexing is in effect. They can also specify carriage control assignments and the delimiters that identify Dynamic Job Descriptor Entry (DJDE) commands. You might have a single START command that applies to all jobs, or several START commands that apply to specific jobs. When you submit a job to InfoPrint XT, you pass this same information to the data stream converter using InfoPrint XT conversion parameters. For more information, see these topics:

- Appendix A, "Conversion parameters for converting Xerox jobs," on page 151, which describes the InfoPrint XT parameters that you pass to the data stream converter.
- Appendix D, "Resource utility messages and data stream converter messages: AIO*xxxnnn*X," on page 197, which describes the messages that the data stream converter issues.

Dynamic Job Descriptor Entries (DJDEs)

Xerox jobs can contain DJDEs, which invoke printable and non-printable Xerox resources and control the printing environment. You can use DJDEs in both LCDS and metacode jobs. They can make modifications to the printing environment that

the starting JDL and JDE pair specifies. The data stream converter interprets a specific set of DJDE commands. For more information, see "Supported and unsupported Xerox DJDE and PDL commands" on page 9.

Methods of sending jobs to the AIX system and submitting them to InfoPrint XT

You can use these methods to send Xerox LCDS and metacode jobs to the AIX system and to process them with InfoPrint XT:

Download for z/OS
Download for z/OS is a separately orderable, licensed feature of IBM Print Services Facility (PSF) for z/OS. You can use it to transfer Xerox jobs over a TCP/IP network to a file system on the AIX system. You also need InfoPrint Manager for AIX or InfoPrint ProcessDirector for AIX, and the **mvsprsd** daemon that they provide, to process jobs through Download for z/OS.

InfoPrint Select
With InfoPrint Select, you can send jobs from word processors, spreadsheet programs, and other desktop applications. InfoPrint Manager provides the InfoPrint Select client; they are not a part of InfoPrint XT.

LPR If you have InfoPrint Manager or InfoPrint ProcessDirector installed, you can send Xerox jobs from any system that supports the line printer control program through the **lpr** command.

pdpr command
If you have InfoPrint Manager installed, you can use the InfoPrint Manager **pdpr** command to submit Xerox jobs for processing. For detailed information about the use of this command, see the InfoPrint Manager documentation listed in the "Bibliography" on page 247.

IPPD Hot Folder
If you have InfoPrint ProcessDirector installed, you can configure a Hot Folder to process the Xerox jobs with InfoPrint XT. See *InfoPrint ProcessDirector: Integrating with Other Applications*, G550–1042.

pdxtx2afp command
You can use the InfoPrint XT **pdxtx2afp** command to process Xerox jobs and create the corresponding AFP versions of the jobs.

For more information about processing jobs, see Chapter 5, "Submitting Xerox jobs for data stream conversion," on page 101.

Xerox job restrictions

These restrictions apply to Xerox jobs that you process with InfoPrint XT:

Accounting statistics
Xerox printers can provide information about job processing, which includes information that is specific to the reports in the job. You can use this information for purposes such as billing or supplies management. InfoPrint XT also collects accounting information at the report level. However, InfoPrint XT does not provide a method of matching the Xerox accounting information to the number of pages that actually print on the printer hardware. The InfoPrint XT accounting information is specific to the pages that it converts.

FILE DJDE support

In the Xerox environment, Xerox printers can only process one job at a time. InfoPrint XT can process two or more jobs concurrently. Do not submit two jobs at the same time that specify different versions of the same resource. Also, do not process any job that specifies more than one version of the same resource in the reports in the job. Unpredictable results can occur in both cases.

Grayscale substitution for Xerox shading

InfoPrint XT can to interpret and convert Xerox shading patterns and characters to grayscale. This improves the overall visual results and increases the readability for any text that is superimposed on the shading. These restrictions apply to grayscale substitution when you use the **xshading** conversion parameter or the **-c** option of the **pdxtloadres** command:

- Grayscale interpretation of Xerox standard shading is only useful with printers, archival solutions, and viewing solutions that support Logical Page and Object Area Coloring.

- In FRM conversion, this enhancement is only effective for shading that is accomplished by the SHADING LIGHT | MEDIUM | HEAVY parameter of the BOX FSL command. It has no effect on conversion of highlight color shading that is accomplished by the FILL parameter of the BOX FSL command.

- In data stream conversion, this enhancement is only effective for shading that is accomplished by the use of the shading characters in FORMS$, FORMSX, or ISISPX fonts. The shading enhancement has no affect on shading that is produced by text fonts, custom fonts, or graphics fonts.

- When converting data streams that use the FILE DJDE to specify one or more inline FRMs, this enhancement controls how InfoPrint XT interprets shading in all the inline FRMs in the job, regardless of whether the input data stream is LCDS or metacode.

- The dot patterns in certain Xerox standard shading code points do not fill the entire area that the code point represents, which leaves white space on one or more sides. The grayscale that InfoPrint XT generates for these and other Xerox shading code points fills the entire area and leaves no white space. In certain shading configurations, this can cause solid grayscale areas to look larger than their dot pattern counterparts.

Highlight color form processing

InfoPrint XT does not support highlight-color shading in Xerox FRMs. If the use of highlight color is restricted to only the text in the form, InfoPrint XT successfully converts the form. However, the resulting AFP overlay is black and white.

Highlight color image processing

InfoPrint XT can process Xerox highlight color images that use Restricted Raster Encoding and produce black-and-white AFP page segments that correspond to the images. These restrictions apply to the highlight color image processing that InfoPrint XT does. InfoPrint XT only supports:

- Interleaving by pixel for the color sample and the black sample that the Xerox image contains. InfoPrint XT does not support interleaving by scan line or interleaving by compressed-pixel vector array.

- Highlight color images that use the portrait scan orientation.

- A maximum of two samples per pixel; one color sample and one black sample.

- A maximum sample value of one.

For detailed information about Xerox highlight color images and Restricted Raster Encoding, see the Xerox Interpress documentation:

- *Xerox Interpress Raster Encoding Standard:* XNS Standard 178506, January, 1985
- *Xerox Interpress Electronic Printing Standard:* XNSS 048601, January, 1986

Highlight color job processing
You can submit Xerox jobs that contain color-related metacodes or PDL commands, such as ICATALOG, IDR, ILIST, and INKINDEX. However, InfoPrint XT does nothing with the color information. The jobs print in black and white.

OTEXT messages
InfoPrint XT processes both informational OTEXT messages and OTEXT messages that require a user response from the operator. OTEXT messages that require a user response use the WAIT parameter of the OTEXT DJDE command. If you process OTEXT jobs in a combined InfoPrint Manager and InfoPrint XT installation, you see both types of messages. If the OTEXT message requires a response, InfoPrint XT suspends the job at the point that it issues the OTEXT message. It does not resume processing until it receives a response from the operator. To use the OTEXT support that InfoPrint XT provides in a combined InfoPrint Manager and InfoPrint XT installation, you must configure InfoPrint Manager; see "InfoPrint Manager configuration tasks" on page 15. You can only configure InfoPrint Manager actual destinations that use the PSF destination support system (DSS) to display OTEXT messages.

Note: InfoPrint XT does not require InfoPrint Manager to process OTEXT jobs. However, use InfoPrint Manager to display the OTEXT messages.

SHIFT and XSHIFT JDL and DJDE commands
InfoPrint XT supports the Xerox SHIFT and XSHIFT JDL and DJDE commands with these exceptions:

1. You must specify the **xhonorshift=yes** conversion parameter for InfoPrint XT to process jobs that contain SHIFT and XSHIFT commands. The default is that InfoPrint XT ignores SHIFT and XSHIFT commands.

2. Xerox LPS printers save DJDE SHIFT values between jobs, but they do not save JDL/JDE SHIFT values. Therefore, if the first SHIFT DJDE in a job specifies a value for only one side, the value for the other side is the last DJDE value specified for that side, even if a previous, unrelated job specified that value.

   InfoPrint XT initializes each job with SHIFT values of zero for both front and back sides. If the first SHIFT DJDE in a job specifies a value for only one side, the value for the side that was not specified is zero. Output does not shift on the unspecified side until InfoPrint XT finds a SHIFT value for that side in a JDL/JDE or in a DJDE in the job.

   This restriction does not apply to XSHIFT.

3. When a Xerox LPS finds SHIFT DJDEs in the data stream, it sometimes misplaces graphic images for the page on which the new SHIFT values take effect. For example, in portrait mode, the images might move lower

on the page instead of shifting to the right or to the left. This might even affect images that are specified by the FRM being printed on the page.

InfoPrint XT correctly shifts all page segments as specified by the SHIFT command when you set up InfoPrint XT to honor SHIFT commands. InfoPrint XT does not try to emulate the incorrect image placement occasionally introduced by the Xerox LPS.

This restriction does not apply to XSHIFT.

Spacing characters in Xerox fonts

With the default **xspacing=none** conversion parameter and value, InfoPrint XT converts spacing characters in Xerox fonts to Presentation Text Object Content Architecture text characters in the AFP that it generates. It does the same for overlays that it generates from Xerox FRMs. You can instruct InfoPrint XT to create Relative Move Inline (RMI) structured fields in the AFP output instead of the PTOCA text characters. You use the **-b** option of the **pdxtloadres** command or the **xspcrmi** conversion parameter to generate RMI structured fields.

Controlling how InfoPrint XT interprets spacing characters is intended for limited use with a small subset of Xerox fonts in any given resource set. Use this function only if you have manually correlated Xerox fonts to AFP fonts and code page conflicts occur with Xerox spacing characters and AFP code points. This function does not correct any other type of code page conflicts that occur after manually correlating Xerox resources to AFP resources.

Stapling support

When you submit jobs that request stapling, these restrictions apply to InfoPrint XT processing:

- You must specify the **xhonorstaple=yes** conversion parameter for InfoPrint XT to process jobs that contain stapling instructions. The default is that InfoPrint XT ignores stapling commands.

- Differences exist in the stitching hardware of InfoPrint Solutions Company cut-sheet printers and Xerox LPS cut-sheet printers. Because of this, InfoPrint XT does not support the Xerox stapling commands FACEUP and NTO1, either when used independently or when used only with each other. InfoPrint XT only recognizes FACEUP and NTO1 when a job uses them with the STAPLE command. Together, STAPLE=YES, FACEUP=YES, and NTO1=YES or NTO1=*n* indicate that stapling should occur. *n* is a positive number.

- When a Xerox LPS printer processes the STAPLE command, it always drives the staples into the upper-left corner of the sheets, as viewed in portrait orientation. This is true even if the report is actually in landscape orientation. If you specify the **xstapleorient=yes** conversion parameter for the job, InfoPrint XT detects reports whose first pages are landscape. It then staples them in the lower-left corner of the sheets, as viewed in portrait orientation. This is equivalent to the upper-left corner when you view the sheet in landscape orientation.

- InfoPrint XT assumes that the default printing order that was established on the Xerox printer at SYSGEN is 1TON. If you specify NTO1 at printer SYSGEN, you must include the **xstaplesysgen=nto1** conversion parameter. Otherwise, InfoPrint XT ignores stapling commands in JDLs and JDEs that jobs invoke internally if the starting JDL and JDE pair does not specify that stapling should occur.

- The Xerox NTO1 command forces the LPS printer to delay output processing until the input processing for the entire report is complete. For

this reason, input processing might not recognize the end of the report until it identifies the beginning of the next report. This might not occur until input processing identifies a BANNER page at the beginning of the next job. This can cause the printer to retain attributes from one job and apply them to subsequent jobs. InfoPrint XT does not apply attributes of one job to the next job. Instead, it processes each job using only the attributes that are specific to the job.

- InfoPrint XT cannot detect if the destination IPDS printer supports stapling. When you specify stapling with the **xhonorstaple=yes** conversion parameter and value and then convert a Xerox job that has JDEs that specify STAPLE=YES, InfoPrint XT includes stapling information in the AFP that it generates. This is always the case, even if the destination printer does not support stapling.

- Each of the InfoPrint Solutions Company printer models that support stapling imposes its own limits on the number of sheets, the paper weights, and the paper sizes that it can staple. InfoPrint XT cannot automatically detect those limits. It does not reference any information about them when it generates an AFP job that includes stapling information. You must set the maximum number of sheets to staple with the **xstaplemax** conversion parameter, as needed.

> **Note:** For more information about the **xhonorstaple**, **xstapleorient**, **xstaplesysgen**, and **xstaplemax** parameters, see Appendix A, "Conversion parameters for converting Xerox jobs," on page 151.

Other restrictions

These InfoPrint XT restrictions apply to considerations other than Xerox job conversion:

240-pel resolution support
> InfoPrint XT only supports 300-pel resolution. If you have older printer models that support 240-pel resolution, do not direct jobs from InfoPrint XT to them.

Receipt of jobs over a channel connection
> For combined InfoPrint XT and InfoPrint Manager or InfoPrint ProcessDirector installations, InfoPrint XT uses the standard InfoPrint Manager or InfoPrint ProcessDirector methods for sending jobs to the AIX system. Neither InfoPrint Manager or InfoPrint ProcessDirector nor InfoPrint XT provides a method of sending jobs over a channel connection.

Security control that is based on AIX user names
> To limit the functions that a given user name can do in InfoPrint Manager or InfoPrint ProcessDirector, you use access control lists and file permissions. InfoPrint XT does not use access control lists for its commands.

Compilers for FSLs
> InfoPrint XT does not provide compilers for Forms Source Libraries (FSLs).

Double-byte character set (DBCS) support

InfoPrint XT supports the conversion of Xerox DBCS LCDS and metacode jobs. It also stores information from the Xerox DBCS fonts that the jobs require for use at data-stream conversion time. However, InfoPrint XT does not directly convert the Xerox DBCS fonts to the AFP DBCS outline fonts that it requires for DBCS data-stream processing. It also does not automatically create the grid-mapping files

that it requires to print DBCS output. These fonts and files are available from InfoPrint Solutions Company as a separately priced option. For more information about AFP DBCS outline fonts and grid-mapping files for use in Xerox DBCS data-stream conversion, contact your marketing representative.

Note: You can use AFP DBCS outline fonts from other sources. Those fonts must fully conform to the MO:DCA FOCA standards; see the *Data Stream and Object Architectures: Font Object Content Architecture (FOCA) Reference*, S544-3285.

Supported and unsupported Xerox DJDE and PDL commands

InfoPrint XT does not support a subset of less-commonly used Xerox DJDE and PDL commands. Table 2 lists both the supported and unsupported commands.

Table 2. Supported and unsupported PDL and DJDE commands

Supported	Unsupported [1]
ALTER	BARCODE, BSEQ, BSIDE, BSKIP, RBAR
ASSIGN	BDELETE, BSELECT, RSELECT, RFEED
BATCH	BTEXT
BEGIN	DESTINATION
BFORM	EXPAGE
BLANKTYPE	EXPORT
BOF	ICATALOG
C	IDFAULT
CANCEL	IDR
COLLATE	ILIST
COPIES	IMISMATCH
DATA	INK [2]
DEPT	INKINDEX
DUPLEX	IRESULT
END	ISUBSTITUTE
FACEUP [3]	ITEXT
FCB	LOGO [5]
FEED	MAP
FILE	PALETTE
FONTINDEX	SAVE
FONTS	SEFFNT, SEFMAP
FORMAT	SF1FUNCTION
FORMS	SF2FUNCTION
GRAPHIC	SNUMBER
IMAGE	SPLIT
INVERT	SRECOVER
JDE	STIMING
JDL	TMODE
MARGIN	TRANS

Table 2. Supported and unsupported PDL and DJDE commands (continued)

Supported	Unsupported [1]
MODIFY	XMP
NTO1 [3]	
NUMBER	
OTEXT	
OVERPRINT	
PMODE	
RFORM	
RTEXT	
SHIFT [4]	
SIDE	
STAPLE	
STOCKS	
TOF	
XSHIFT	

Notes:

- [1] InfoPrint XT ignores these commands when it finds them in a job. InfoPrint XT processes the job and issues informational messages that state that it ignored the commands.
- [2] This is a CME parameter.
- [3] InfoPrint XT only supports this command when you use it with the STAPLE command.
- [4] Restrictions apply to this command. See rate "SHIFT and XSHIFT JDL and DJDE commands" on page 6.
- [5] If you compile an FSL to an FRM that contains LOGO references in its internal font list or logo list, InfoPrint XT supports those references. However, InfoPrint XT does not support a LOGO DJDE in the data stream.
- The InfoPrint Solutions Company can negotiate support for non-supported DJDEs on the basis of customer need.

Chapter 2. Installing and configuring InfoPrint XT

This chapter describes how to install software, configure a base InfoPrint XT for AIX system, and test the installation.

Some of the procedures require you to use the AIX System Management Interface Tool (SMIT). AIX provides these methods of accessing this tool:
- Graphical user interface (GUI)
- Text-based interface

Procedures in this publication describe the GUI method.

Understanding software requirements

Before you install InfoPrint XT, you must first install one of these software products and its prerequisite software:
- AIX 5.3 Maintenance Level 2 or later

The operating system is the only prerequisite software that InfoPrint XT requires. You can install several optional software products, depending on the requirements of the installation.

Optional printer driver software

InfoPrint Manager

InfoPrint Solutions Company recommends InfoPrint Manager for AIX version 4.3 for printer management and for Advanced Function Presentation job management. InfoPrint Manager is also useful if you process jobs other than Xerox jobs. For example, this software supports PostScript® and PCL job processing, and job management. InfoPrint Manager also provides a configurable transform object that you can use specifically with InfoPrint XT when you process Xerox jobs.

Notes:

1. *InfoPrint Manager for AIX: Getting Started*, G550-1061 describes all the InfoPrint Manager and AIX software requirements. It also describes how to install InfoPrint Manager. You must create a minimum configuration for the InfoPrint Manager installation.

2. In addition to completing the base installation, make sure that you install the latest InfoPrint Manager 4.3 updates.

3. Examples of InfoPrint Manager commands in this publication assume that you have set the InfoPrint Manager **PDPRINTER** environment variable for the installation.

4. Make sure that you can print non-Xerox jobs through InfoPrint Manager before continuing with the InfoPrint XT-specific tasks in this chapter. Verification includes submitting jobs from host systems or through other products, such as Download for z/OS, and printing from the command line with the InfoPrint Manager **pdpr** command.

5. You must complete other configuration tasks for combined InfoPrint Manager and InfoPrint XT installations. See "InfoPrint Manager configuration tasks" on page 15.

InfoPrint ProcessDirector

InfoPrint ProcessDirector is a print manufacturing system architecture that lets you manage all aspects of your printing processes. Whether your printing environment is small, with a single printer, or large, with many printers, InfoPrint ProcessDirector can grow as your business needs grow. InfoPrint ProcessDirector provides several Download input devices, LPD input devices, and hot folder input devices. You can make minor modifications to the properties of any of these input devices and use them in the installation. You can also copy them to create new input devices.

Install the latest InfoPrint ProcessDirector as it is described in *InfoPrint ProcessDirector for AIX: Planning and Installation*, G550-1045.

To process Xerox jobs with InfoPrint ProcessDirector, you must complete other configuration tasks for combined InfoPrint ProcessDirector and InfoPrint XT installations. See "InfoPrint ProcessDirector configuration tasks" on page 18.

Optional problem determination software

InfoPrint Solutions Company strongly recommends that you install these software modules so that you can use them as aids in problem determination:

- Base Application Development Debuggers: Software module **bos.adt.debug**
- Local Performance Analysis & Control Commands: Software module **perfagent.tools**

Optional compiler software

You can install this software, based on functional need. For example, install a C compiler if you intend to customize InfoPrint XT application exit programs:

- Any of the IBM C and C++ Compilers
- GNU C compiler, version 4.1.2 or later

Installing InfoPrint XT

Use AIX SMIT to install InfoPrint XT from the installation CD:

1. Log in to the AIX system as the root user.
2. Put the InfoPrint XT installation CD in the CD-ROM drive of the AIX system.
3. Determine if you have a PL/I compiler installed on the AIX system. If you do, the **pli.base** component must be at level 1.1.1.4 or later. From the command line, enter:

```
lslpp -l 'pli*'
```

If the PL/I compiler is installed, the command returns information that is similar to this:

```
Fileset              Level  State       Description
----------------------------------------------------------------------
Path: /usr/lib/objrepos
  pli.base           1.1.1.4  COMMITTED    IBM PL/I Set for AIX

  pli.msg.en_US      1.1.1.3  COMMITTED    IBM PL/I for AIX Messages US
                                           English
```

Note: Depending on the system, you might have additional PL/I modules installed.

If the compiler is installed, continue with "Installing InfoPrint XT when the PL/I compiler is installed" on page 13. If it is not, continue with this procedure.

4. Access the AIX SMIT panel from which you install the software. Enter:

   ```
   smit install_latest
   ```

   You see the **Install and Update from LATEST Available Software** SMIT panel.

5. Click **List** for the *** INPUT device / directory for software** field, select the CD-ROM drive, and then click **OK**. You see a new **Install and Update from LATEST Available Software** SMIT panel.

6. Use the default value of **_all_latest** for the *** SOFTWARE to install** field.

7. Update these fields with the values shown:
   - **SAVE replaced files? yes**
   - **VERIFY install and check files sizes? yes**
   - **DETAILED output? yes**

   Use the default values for all other fields. Click **OK**.

8. AIX prompts for whether you want to continue. Click **OK**.

9. After AIX successfully installs the InfoPrint XT software, the running man in the upper right corner of the installation progress window raises his arms. Click **Done** and then click **Cancel** to exit from SMIT.

Installing InfoPrint XT when the PL/I compiler is installed

InfoPrint XT includes installation modules for the PL/I runtime library; InfoPrint XT requires the library. If you have a PL/I compiler installed on the system, you must use this procedure to install InfoPrint XT:

1. Log in to the AIX system as the root user.

2. Put the InfoPrint XT installation CD in the CD-ROM drive of the AIX system.

3. From the command line, access the AIX SMIT panel from which you install the software. Enter:

   ```
   smit install_selectable_all
   ```

4. Click **List** for the *** SOFTWARE to install** field and select these components from the multi-select list window:
   - **pdxt.com**
   - **pdxt.doc.en_US.rte**
   - **pdxt.man.en_US.rte**
   - **pdxt.msg.en_US.rte**
   - **pdxt.msg.en_US.com**
   - **pdxt.rte**

   Click **OK**. The components that you selected display in the *** SOFTWARE to install** field.

5. Update these fields with the values shown:
   - **SAVE replaced files? yes**
   - **VERIFY install and check file sizes yes**
   - **DETAILED output? yes**

   Use the default values for all other fields. Click **OK**.

6. AIX prompts for whether you want to continue. Click **OK**.

7. After AIX successfully installs the InfoPrint XT software, the running man in the upper right corner of the installation progress window raises his arms. Click **Done** and then click **Cancel** to exit from SMIT.

Adding the printq group to existing user names

All existing user names that you want to authorize to load Xerox resources through InfoPrint XT must be members of the **printq** group.

To verify group membership or to add the **printq** group to a user name:

1. Log in to the AIX system as the root user.
2. Access the **Change/Show Characteristics of a User** SMIT panel. Enter:

   ```
   smit chuser
   ```
3. Click **List** for the *** User NAME** field and select the user name that you want to verify or change.
4. Click **OK**.
5. Verify that **printq** displays in the **Group SET** field. If it does not, add it as the last entry. Separate the entry from other entries with a comma. Do not remove any other group names.
6. Depending on the previous step, either:
   - Click **OK** to add the group. When processing finishes, click **Done**. Then, click **Cancel** to exit from SMIT.
   - Click **Cancel** if the group was already present. This closes SMIT.

Note: If you are using a new system, see "Adding a new administrative user name" on page 24.

Updating the PATH and MANPATH environment variables

After you install the InfoPrint XT software, you must update the **PATH** environment variable to include the directories that contain the InfoPrint XT software modules and customized files. You must also update the **MANPATH** environment variable to provide access to the manual (man) pages that InfoPrint XT supplies. InfoPrint XT provides a command, **pdxtsetenv**, which automatically updates the **/etc/environment** file with the environment variable information. When you make entries in this file, you make the variable information available to all users on the system.

Note: If you do not set the **LANG** environment variable, InfoPrint XT does not update the **MANPATH** environment variable. This prevents you from accessing the InfoPrint XT man pages. To check the setting of the **LANG** environment variable, enter:

```
echo $LANG
```

To update the **PATH** and **MANPATH** environment variables:

1. Log in to the AIX system as the root user.
2. From the command line, enter one of these commands. Use the **-l** command option to specify the **en_US** locale if the **LANG** environment variable is not set on the AIX system.

   ```
   /usr/opt/pdxt/bin/pdxtsetenv
   ```

   ```
   /usr/opt/pdxt/bin/pdxtsetenv -l en_US
   ```

   After you run the **pdxtsetenv** command, the **/etc/environment** file contains entries that are similar to these:

```
# pdxtsetenv - 2009-11-12 09:07:25 MST
# PATH=/usr/bin:/etc:/usr/sbin:/usr/ucb:/usr/bin/X11:/sbin:/usr/lpp/pd/bin:/usr/lpp/psf/bin:
/usr/lpp/Acrobat4/bin
PATH=/usr/bin:/etc:/usr/sbin:/usr/ucb:/usr/bin/X11:/sbin:/usr/lpp/pd/bin:/usr/lpp/psf/bin:
/usr/lpp/Acrobat4/bin:/usr/opt/pdxt/local:/usr/opt/pdxt/bin

# pdxtsetenv - 2009-11-12 09:07:25 MST
# MANPATH=/usr/share/man/en_US
MANPATH=/usr/share/man/en_US:/usr/opt/pdxt/nls/man/en_US
```

3. Log out from AIX and then log back in to pick up the changes in the **/etc/environment** file.

4. If you are using InfoPrint Manager with InfoPrint XT, stop and restart the InfoPrint Manager server to prepare the system for the next procedures:

    ```
    pdshutdown -c server server
    ```

    ```
    startsrv server
    ```

    server is the name of the InfoPrint Manager server.

Notes:

1. If the **/etc/environment** file contains more than one occurrence of an environment variable that the **pdxtsetenv** command updates, it updates all occurrences of that variable.

2. **en_US** is the only locale that you can specify with the **-l** command option.

InfoPrint Manager configuration tasks

If you use InfoPrint Manager with InfoPrint XT, you must do these tasks. These tasks do not apply to installations that do not have InfoPrint Manager installed.

Creating the InfoPrint XT configurable transform

Use the **pdxtcrtxform** command to create an InfoPrint XT configurable transform object in the InfoPrint Manager server. This command creates the transform object with the name **x2afp** and sets the transform attributes that InfoPrint XT requires. For example, it sets the **lcds** and **metacode** values for the **document-formats-supported** attribute.

+ – – – – – – – – – Programming Interface information – – – – – – – – – +

The syntax of the **pdxtcrtxform** command is:

pdxtcrtxform [*servername* [...] | *:]

[*servername* [...] | *:]
>   As an option, specifies the name of one or more InfoPrint Manager servers or all the InfoPrint Manager. If you do not specify a server name, InfoPrint XT tries to determine the name of the default InfoPrint Manager server. It then creates the transform in that server.

Usage notes
These items apply when you use the **pdxtcrtxform** command:

*   If an InfoPrint XT configurable transform object already exists when you enter the **pdxtcrtxform** command, the command resets all attributes of the transform object to the values that InfoPrint XT requires.

- The user name from which you enter the **pdxtcrtxform** command must have InfoPrint Manager authorization to enter the **pdls** command for servers. The user name must also have authorization to enter these commands for transform objects:
  - **pdls**
  - **pdcreate**
  - **pdset**

  See the InfoPrint Manager documentation listed in the "Bibliography" on page 247, as required.
- When the **pdxtcrtxform** command finishes successfully, it does not return a completion message. The command returns only the command prompt. To verify that the command created the transform object, enter this command:

  ```
  pdls -c transform servername:
  ```

  InfoPrint Manager returns information that is similar to this:

  ```
                  Transform
  Identifier      Library
  ----------      ---------------------
  x2afp           command-line-transform
  ```

Return codes from the pdxtcrtxform command

Return codes from the **pdxtcrtxform** command are:

0 The command successfully created the transform.

EINVAL (22) An error exists with one of the command options.

ENOENT (2) The command did not find a server.

E2BIG (7) You specified both a server name and used ***:** to specify the server.

ENOATTR (112)
  A command option is missing.

ETIMEDOUT (78)
  The **pdls** command did not respond to a query.

other Any other return codes that are not in this list are return codes from C functions. See "Return code numbers" on page 184.

+ — — — — — — — End of Programming Interface information — — — — — - — +

Using the pdxtsetdest command to update InfoPrint Manager actual destinations

Use the **pdxtsetdest** command to set up an InfoPrint Manager actual destination to accept and process Xerox Line Conditioned Data Stream jobs and Xerox metacode jobs. The **pdxtsetdest** command sets these attributes for the actual destination:

- **document-formats-supported**

  InfoPrint XT adds **lcds** and **metacode** to the values already supported by the actual destination.
- **transform-sequence**

  InfoPrint XT adds **x2afp** to the values already supported by the actual destination.
- **input-data-user-exit**

  As an option, InfoPrint XT sets this attribute to the name of the InfoPrint XT OTEXT message-processing program.

+ − − − − − − − − − Programming Interface information − − − − − − − − − +

The syntax of the **pdxtsetdest** command is:

pdxtsetdest [-o <u>no</u> | yes] *adestname* **[...]**

[-o <u>no</u> | yes]
Specifies whether InfoPrint XT enables the actual destination to process OTEXT messages. You can specify one of these values:

no InfoPrint XT does not enable the actual destination to process OTEXT messages. This is the default.

yes InfoPrint XT enables the actual destination to process OTEXT messages.

adestname **[...]**
Specifies the name of one or more InfoPrint Manager actual destinations.

Usage notes

These items apply when you use the **pdxtsetdest** command:

- You must create the InfoPrint XT configurable transform object before you enter the **pdxtsetdest** command. See page 15.
- The user name from which you enter the **pdxtsetdest** command must have InfoPrint Manager authorization to enter these commands for actual destinations:
  - **pddisable**
  - **pdenable**
  - **pdls**
  - **pdset**
- You can only use PSF actual destinations to display OTEXT messages. All other types of InfoPrint Manager actual destinations ignore OTEXT messages. For other procedures that relate to OTEXT, see "Configuration tasks for OTEXT job processing: Combined InfoPrint Manager and InfoPrint XT installations" on page 35.
- When you specify an actual destination to process OTEXT messages, InfoPrint XT sets the **input-data-user-exit** attribute. This means that you cannot directly use an existing InfoPrint Manager input data user-exit program. InfoPrint XT provides a substitute application exit that provides the same function. For more information, see "Setting up a substitute InfoPrint Manager input data user-exit program" on page 57.

Streams used by the pdxtsetdest command

The **pdxtsetdest** command uses some file descriptors while it configures actual destinations and ignores others:

fd0 (STDIN) The command does not use this stream.

fd1 (STDOUT) The command does not use this stream.

fd2 (STDERR) The command writes messages to this stream.

Return codes from the pdxtsetdest command

Return codes from the **pdxtsetdest** command are:

0 The command successfully updated the specified actual destinations.

EINVAL (22) An error exists with one of the command options.

E2BIG (7)	You specified an actual destination name that was too long.
ENOATTR (112)	
	You specified a command option without a value.
ENOENT (2)	You did not specify an actual destination name.
other	Any other return codes that are not in this list are return codes from C functions. See "Return code numbers" on page 184.

```
+ — — — — — — — End of Programming Interface information — — — — — - — +
```

InfoPrint ProcessDirector configuration tasks

If you use InfoPrint ProcessDirector with InfoPrint XT, you must do these tasks.

These tasks do not apply to installations that do not have InfoPrint ProcessDirector installed.

The InfoPrint XT data stream converter runs with InfoPrint ProcessDirector as an external step. When a Xerox job is submitted to InfoPrint ProcessDirector, it calls InfoPrint XT to convert the Xerox LCDS or metacode job to AFP.

Use this procedure to set up InfoPrint ProcessDirector for use with InfoPrint XT:

1. Install PTF US00108 for InfoPrint ProcessDirector for AIX. See the *InfoPrint ProcessDirector for AIX: Planning and Installation*, G550–1045 for installation instructions.
2. Make sure the **aiw1.profile** includes this path: `/usr/opt/pdxt/local:/usr/opt/pdxt/bin`. If necessary, issue the **aiwstop** and **aiwstart** commands to reset **PATH**.
3. Make sure that the **aiw** and **aiw1** user IDs are members of the **printq** group.
4. Create your Job Type similar to this:
   a. Job Type Name: XeroxJobType;
   b. Receive Phase:
   i. SetJobPropsFromRules step:
   — Input Data Stream: `Unknown`;
   — Job Name: `PDXTTEST`.
   c. Prepare Phase:
   i. RunExternalProgram step:
   — External command:
   ```
   /usr/opt/pdxt/bin/pdxtx2afp -i ${getFileName(print,unknown,read)}
    -o ${getFileName(print,afp,write)} -p -opa=class=${Job.Class},
    destination=${Job.Destination},forms=${Job.Form},
    jobid=${Job.Host.JesID},jobname=${Job.Name}
   ```
   d. Print Phase:
   i. PrintJobs step:
   — You can specify a *Requested printer*, *Job Class*, *Job Form* or *Job Destination*;
   — Form Definition: `blank`;
   — AFP resource path: `/var/pdxt/resources/pdxttest`.
   e. Complete Phase:
   i. RetainCompletedJobs step;
   ii. RemoveJobs step.
5. Create your Hot Folder Input Device (where the Xerox jobs will be submitted using FTP, SCP or file copying) similar to the following example:

a. Input Device Name: HotFolderXerox;

b. Job type: XeroxJobType (previously defined);

c. Folder location: **/aiw/aiw1/System/hf/pdxt**;

d. Staging location: **/aiw/aiw1/System/hf/pdxt/Staged**;

e. Batching method: None;

f. List patterns: .*LST$;

g. Overrides patterns: *.txt$.

6. In the Job Type, specify the **pdxtx2afp** command with the -p -opa parameter:

```
/usr/opt/pdxt/bin/pdxtx2afp -i ${getFileName(print,unknown,read)}
-o ${getFileName(print,afp,write)} -r '/var/pdxt/resources/resource_group_name'
-p -opa=class=${Job.Class},destination=${Job.Destination},
    forms=${Job.Form},jobid=${Job.Host.JesID},jobname=${Job.Name}
```

7. In the *Job Type* (**SetJobPropsFromRules**), *Job Name* must be left blank. Do not set *Job Name* to ${Job.InputFile}.

8. In Printer properties, specify an appropriate Printer class, form and destination. You will not use these properties to schedule jobs to specific printers.

Testing the InfoPrint XT installation

Test the InfoPrint XT installation before you begin processing Xerox jobs through InfoPrint XT. There are two different methods of processing an InfoPrint XT-supplied test job. The method depends on whether InfoPrint Manager or InfoPrint ProcessDirector is also installed. If you have a combined InfoPrint XT and InfoPrint Manager or InfoPrint ProcessDirector installation, see "To test the InfoPrint Manager and InfoPrint XT installation" on page 20 and "To test the InfoPrint ProcessDirector and InfoPrint XT installation" on page 20.

Testing with the pdxtloadres and pdxtx2afp commands

InfoPrint XT provides a small Xerox test job and the Xerox resources that it requires in the **/usr/opt/pdxt/testjob** directory. You use the InfoPrint XT **pdxtloadres** command to load the resources and the **pdxtx2afp** command to process the test job.

To test the InfoPrint XT installation:

1. Log in to the AIX system with any user name that is a member of the **printq** group.

2. Make the directory that contains the test job the current directory. From the command line, enter:

```
cd /usr/opt/pdxt/testjob
```

3. Load the resources for the test job:

```
pdxtloadres -n '*' -g pdxttest
```

4. Copy the parameter mapping file for the test job to the **/var/pdxt** directory:

```
cp pdxtx2afp.map /var/pdxt
```

5. Submit the test job. Replace *AFPfile* with a file name that you choose:

```
pdxtx2afp -i pdxttest.xrxin -o AFPfile -p -opa=jobname=PDXTTEST
```

InfoPrint XT writes information from the conversion process to standard error (STDERR).

6. Verify that the job converted with a return code of 0 and that the job contains four pages. Scroll through the messages and verify that it contains these messages:

```
        5016-513  Impressions (pages): 4

        5016-502 2007-11-11 13:08:28 MDT (rc 0) - transform ended.
```

To test the InfoPrint Manager and InfoPrint XT installation

In addition to a Xerox test job and its resources, InfoPrint XT provides an InfoPrint Manager attributes file for the test job. The installation process writes this file to the **/usr/opt/pdxt/testjob** directory. Use the attributes file to test the initial InfoPrint XT installation in a combined InfoPrint Manager and InfoPrint XT environment.

To test the InfoPrint Manager and InfoPrint XT installation:

1. Log in to the AIX system with any user name that is a member of the **printq** group.
2. Make the directory that contains the test job the current directory. From the command line, enter:

   ```
   cd /usr/opt/pdxt/testjob
   ```
3. Load the resources for the test job:

   ```
   pdxtloadres -n '*' -g pdxttest
   ```
4. Submit the test job:

   ```
   pdpr -d ldest -X pdxttest.att pdxttest.xrxin
   ```

   ldest is the name of the InfoPrint Manager logical destination that sends jobs to the actual destination that you have configured to print Xerox jobs.

InfoPrint Manager prints four test pages. The first and second test pages are converted Xerox LCDS data that print in portrait and landscape orientation. The third and fourth test pages are converted Xerox metacode data, which also print in portrait and landscape orientation. Figure 1 shows an example of the first test page.

```
InfoPrint XT                                                          PR111E


A B C D E F G H I J K L M N O P Q R S T U V W X Y Z  P0612C
a b c d e f g h i j k l m n o p q r s t u v w x y z  P0612C
0 1 2 3 4 5 6 7 8 9 ! @ # $ % ? & * ( ) - _ = + ; :  P0612C
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z  P06B0B
a b c d e f g h i j k l m n o p q r s t u v w x y z  P06B0B
0 1 2 3 4 5 6 7 8 9 ! @ # $ % ? & * ( ) - _ = + ; :  P06B0B


InfoPrint XT                                                          PR111E
```
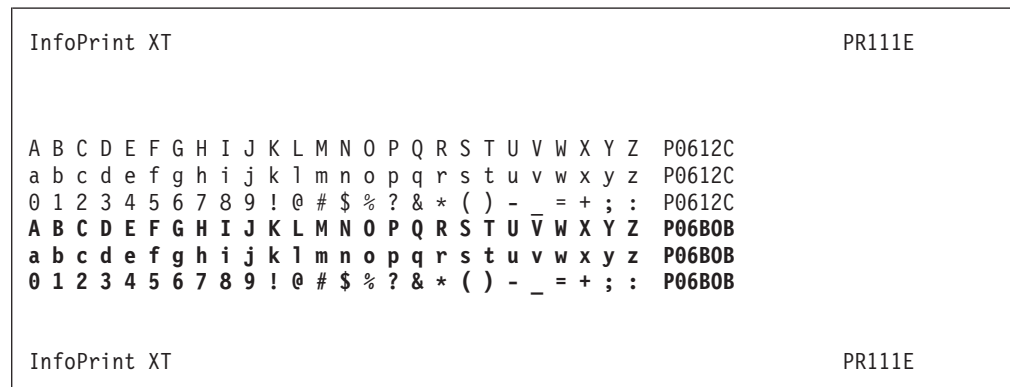
Figure 1. InfoPrint XT test page for an InfoPrint Manager and InfoPrint XT installation

To test the InfoPrint ProcessDirector and InfoPrint XT installation

To test the InfoPrint ProcessDirector and InfoPrint XT installation:

1. Log in to the AIX system with the **aiw1** user name.
2. Make the directory that contains the test job the current directory. From the command line, enter:

   ```
   cd /usr/opt/pdxt/testjob
   ```
3. Load the resources for the test job:

   ```
   pdxtloadres -n '*' -g pdxttest
   ```
4. Copy the parameter mapping file for the test job to the var/pdxt/ directory:

```
                cp pdxtx2afp.map var/pdxt/
```
5. Submit the test job (copy to the InfoPrint ProcessDirector Hot Folder):

```
                cp pdxttest.xrxin /aiw/aiw1/System/hf/pdxt
```

InfoPrint ProcessDirector prints four test pages. The first and second test pages are converted Xerox LCDS data that print in portrait and landscape orientation. The third and fourth test pages are converted Xerox metacode data, which also print in portrait and landscape orientation. Figure 2 shows an example of the first test page.

```
  InfoPrint XT                                                        PR111E


  A B C D E F G H I J K L M N O P Q R S T U V W X Y Z   P0612C
  a b c d e f g h i j k l m n o p q r s t u v w x y z   P0612C
  0 1 2 3 4 5 6 7 8 9 ! @ # $ % ? & * ( ) - _ = + ; :   P0612C
  A B C D E F G H I J K L M N O P Q R S T U V W X Y Z   P06B0B
  a b c d e f g h i j k l m n o p q r s t u v w x y z   P06B0B
  0 1 2 3 4 5 6 7 8 9 ! @ # $ % ? & * ( ) - _ = + ; :   P06B0B


  InfoPrint XT                                                        PR111E
```
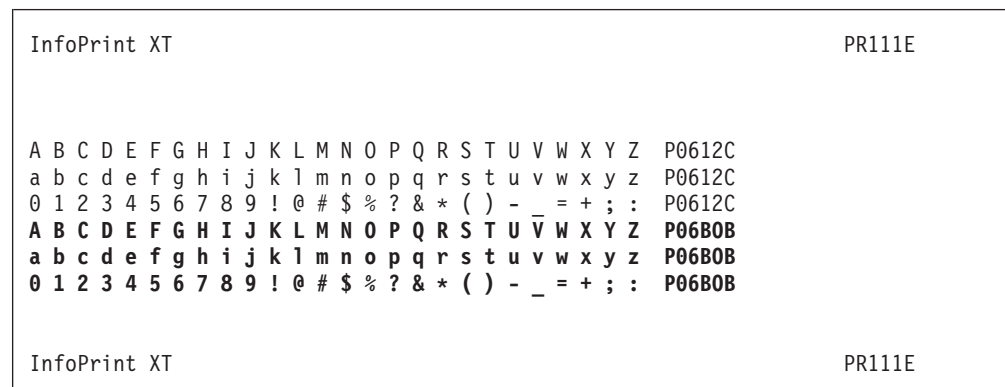
Figure 2. InfoPrint XT test page for an InfoPrint ProcessDirector and InfoPrint XT installation

Applying an InfoPrint XT product update

When an InfoPrint XT update is available, you can install it on the system so that you are running the latest level of InfoPrint XT. The update can be on a CD that you receive, or you can download updates from this Web site:

```
ftp://public.dhe.ibm.com/printers/products/pdxt/fixes/
```

Notes:

1. Make sure that you read the **readme.txt** file that applies to the delivery method through which you received the update. The **readme.txt** file on the CD or on the Web site might contain additional information.
2. If you have previously applied an InfoPrint XT update, see "Committing a tested InfoPrint XT product update" on page 22 before you continue.
3. Product update file names have this format:

```
pdxt-3.1.0.nn.taz
```

   nn specifies the update level.

To apply an InfoPrint XT product update:

1. Log in to the AIX system as the root user.
2. Access the AIX SMIT panel from which you can update software. Enter:

```
smit install_all
```

   You see the **Install and Update from ALL Available Software** SMIT panel.
3. In the *** INPUT device / directory for software** field, either specify the name of the CD-ROM device or enter the name of the directory that contains the downloaded update. Click **OK**.
4. Enter **ALL** in the *** SOFTWARE to install** field.
5. Update these fields with the values shown:

- **COMMIT software updates? no**
- **SAVE replaced files? yes**
- **VERIFY install and check file sizes? yes**
- **DETAILED output? yes**

6. You can use the default values for all other fields. Click **OK**.

After you install an InfoPrint XT update, test it for a period of time. If problems occur, you can reject the update. See "Rejecting an InfoPrint XT product update."

Committing a tested InfoPrint XT product update

After you apply an InfoPrint XT product update and you have tested the update for a sufficient period of time, commit the product update. Then, if you apply a future update and need to reject the new update, you can revert to the committed level of InfoPrint XT.

To commit a tested InfoPrint XT product update:

1. Log in to the AIX system as the root user.
2. Access the AIX SMIT panel from which you can commit a software update. From the command line, enter:

   ```
   smit commit
   ```

   You see the **Commit Applied Software Updates (Remove Saved Files)** SMIT panel.
3. Use the List function for the *** SOFTWARE name** field and select the InfoPrint XT installation components that you want to commit. For example, select:
   - **pdxt.com**
   - **pdxt.doc.en_US.rte**
   - **pdxt.man.en_US.rte**
   - **pdxt.msg.en_US.com**
   - **pdxt.msg.en_US.pli**
   - **pdxt.msg.en_US.rte**
   - **pdxt.pli**
   - **pdxt.rte**
4. Click **OK**.

Rejecting an InfoPrint XT product update

If you apply an InfoPrint XT update and you notice problems when converting and printing Xerox jobs, you can reject the update. This returns the installed InfoPrint XT software to the last committed level.

To reject an InfoPrint XT product update:

1. Log in to the AIX system as the root user.
2. Access the AIX SMIT panel from which you can reject a software update. From the command line, enter:

   ```
   smit reject
   ```

   You see the **Reject Applied Software Updates (Use Previous Version)** SMIT panel.
3. Use the List function for the *** SOFTWARE name** field and select the InfoPrint XT components to reject. For example, select:

- **pdxt.com**
- **pdxt.doc.en_US.rte**
- **pdxt.man.en_US.rte**
- **pdxt.msg.en_US.com**
- **pdxt.msg.en_US.pli**
- **pdxt.msg.en_US.rte**
- **pdxt.pli**
- **pdxt.rte**

4. Click **OK**.

Removing the InfoPrint XT software

To remove the InfoPrint XT software for any reason:

1. Log in to the AIX system as the root user.
2. If you use InfoPrint Manager with InfoPrint XT, enter these commands for each InfoPrint Manager actual destination whose configuration is set to accept Xerox jobs:

   ```
   pddisable -c destination adestname
   ```

   ```
   pdset -c destination -x document-formats-supported-=lcds adestname
   ```

   ```
   pdset -c destination -x document-formats-supported-=metacode adestname
   ```

   ```
   pdset -c destination -x transform-sequence-=x2afp adestname
   ```

   ```
   pdenable -c destination adestname
   ```

   Note: Make sure that you include the minus sign to the left of the equal sign to remove the value.

3. If you use InfoPrint Manager with InfoPrint XT, remove the **x2afp** configurable transform object. Enter:

   ```
   pddelete -c transform servername:x2afp
   ```

   servername is the name of the InfoPrint Manager server that contains the transform object.

4. If you use InfoPrint ProcessDirector with InfoPrint XT, delete the Hot Folder Input Devices and Job Types (used to submit Xerox jobs) using the InfoPrint ProcessDirector web interface.

5. Remove the InfoPrint XT working directory. Enter:

   ```
   rm -rf /var/pdxt
   ```

6. Empty the InfoPrint XT directories for compiled applications exits and for application exit source files:

   ```
   rm -rf /usr/opt/pdxt/local/*
   ```

   ```
   rm -rf /usr/opt/pdxt/localsrc/*
   ```

7. Remove the InfoPrint XT software. Enter:

   ```
   smit remove
   ```

   You see the **Remove Installed Software** SMIT panel.

8. Click **List** for the *** SOFTWARE name** field and select these filesets from the multi-select list window:
   - **pdxt.com**

- **pdxt.doc.en_US.rte**
- **pdxt.man.en_US.rte**
- **pdxt.msg.en_US.com**
- **pdxt.msg.en_US.pli**
- **pdxt.msg.en_US.rte**
- **pdxt.pli**
- **pdxt.rte**

Click **OK**. The components that you selected display in the *** SOFTWARE name** field.

9. Change the **PREVIEW only? (remove operations will NOT occur)** field to **no**.

10. Change the **REMOVE dependent software?** field to **yes**.

11. Click **OK**. AIX prompts for whether you want to continue. Click **OK** to confirm the remove action.

12. After AIX successfully removes the InfoPrint XT software, the running man in the upper right corner of the installation progress window raises his arms. Click **Done** and then click **Cancel** to exit from SMIT.

Adding a new administrative user name

You typically do installation tasks and configuration tasks while logged in as the root user. Any user name can print jobs through InfoPrint XT, and you might want to load resources from a user name other than **root**. If you did not use an existing AIX system for InfoPrint XT and the AIX system is new, you might only have the **root** user name and the other basic system user names. The basic system user names include **daemon, bin, sys, adm, uucp, guest, nobody, lpd,** and **nuucp**. You can create new user names that you can use to load Xerox resources and process Xerox jobs.

To add a new administrative user name:

1. Log in to the AIX system as the root user.
2. From the command line, enter:

   ```
   smit users
   ```

   You see the **Users** SMIT panel.
3. Click **Add a User**. You see the **Add a User** SMIT panel.
4. Update these fields with the values shown. Use the default values for all other fields of the **Add a User** panel:
   - *** User NAME** *xtadmin*

     Use any name that you choose instead of *xtadmin*.
   - **ADMINISTRATIVE USER? true**

     To change the value, click the up arrow or the down arrow to the right of the field.
   - **Primary GROUP staff**
   - **Group SET staff,printq**

     Note: The **printq** group lets the user enter InfoPrint Manager commands, such as **pdpr**, and lets the user load Xerox resources through InfoPrint XT.
   - **HOME directory /home/***xtadmin*

If you specified a user name other than *xtadmin*, substitute that name in the value for the home directory.

- **Initial PROGRAM /usr/bin/ksh**

  Notes:

  a. AIX supports shells other than the Korn shell. If you prefer to use a different shell, enter its path in this field.

  b. Examples in this publication use the Korn shell.

- **Login AUTHENTICATION GRAMMAR compat**
- **Password REGISTRY files**
- **Soft FILE size -1**
- **Soft CPU time -1**
- **Soft DATA segment 544288**
- **Soft STACK size 65536**
- **File Creation UMASK 7**

5. Click **OK** to create the user name.
6. When processing finishes, click **Done**. Press **F12** to exit from SMIT.
7. From the command line, enter:

   ```
   passwd userID
   ```

   userID is the user name that you just created. AIX prompts you twice to enter a new password.
8. Log out from the root user name.

Updating the .profile, .dtprofile, and .krsh files for the new user name

Set up the new user name so that command prompts accessed by that user include the user name and the current directory.

To update files for the new user name:

1. Log in to the AIX system with the new user name.
2. If you are not in the home directory, change to it:

   ```
   cd /home/userID
   ```

   Note: If you do not know the current directory location, enter the **pwd** command.
3. Edit the **.profile** file and add these lines:

   ```
   export HOST=`hostname`
   export ENV=$HOME/.krsh
   export EDITOR=/bin/vi
   ```

   Save the changes and close the file.

   Notes:

   a. You can use the AIX **vi** editor, which you access from the command line. Or, you can use the CDE text editor, which you access from the CDE front panel.

   b. The characters around the value **hostname** are grave symbols, not single quotation marks. On most keyboards, the grave symbol is on the key directly above the **Tab** key.

c. To let the user name have access to the **PATH** information that the **/etc/environment** file specifies, make sure that the **PATH** statement in the **.profile** file is similar to this:

```
PATH=$PATH:path
```

path is the path information that existed in the **.profile** file.

4. Log out and then log back in with the new user name. This causes AIX to create a subdirectory, and these files in the home directory for the user:

- **.dt** subdirectory
- **.TTauthority** file
- **.Xauthority** file
- **.dtprofile** file
- **.sh_history** file

5. Edit the **.dtprofile** file in the home directory and make sure that the file contains this entry:

```
DTSOURCEPROFILE=true
```

6. Create a **.krsh** file in the home directory. Make sure that the file contains this entry:

```
PS1='($?) LOGIN@$HOST: $PWD=> '
```

Note: The characters around the value are single quotation marks. They prevent AIX from trying to interpret the dollar signs. Also, this format causes AIX to display the return code from the last command that you entered to the left of the command prompt. For example:

```
(12)  root@ballachulish: /tmp/waite/51230=>
```

7. Make sure that the **.krsh** file has **700** permissions:

```
chmod 700 .krsh
```

8. Log out and then log back in to pick up these changes. The command prompt displays like this:

```
(0) userid@hostname: /home/userid=>
```

userid is the user name that you logged in with and *hostname* is the name of the AIX system.

Chapter 3. Customizing InfoPrint XT

This chapter describes how to customize InfoPrint XT for AIX . All procedures in this chapter are optional; you do not have to do them to use InfoPrint XT.

Terms used in this chapter

Some topics in this chapter use the term *globalID*. In combined InfoPrint Manager for AIX or InfoPrint ProcessDirector and InfoPrint XT installations, *globalID* is the InfoPrint Manager or InfoPrint ProcessDirector global job identifier. A global job identifier consists of the name of the InfoPrint Manager or InfoPrint ProcessDirector server that processed the job, followed by a colon and a 10-digit number.

If you process a job using the **pdxtx2afp** command, InfoPrint XT uses a format of *jobname-jobID-n* as the job identifier. InfoPrint XT automatically derives the *jobname* and the *jobID*, and assigns a unique sequence number *n*. If InfoPrint XT cannot derive the job name and the job ID, it uses **UNKNOWN-UNKNOWN-***n* as the job identifier.

Setting environment variables

You can set environment variables to control certain aspects of InfoPrint XT resource processing and job processing. If you set the InfoPrint XT environment variables in the **/etc/environment** file, they are available to all users on the system. You must log in as the root user before you can update the **/etc/environment** file. After you make changes, you must log out and log back in to pick up the changes to the environment.

Notes:

1. You can also set environment variables in the **.profile** file for an individual user name. This limits the use of the environment variables to specific user names. The syntax for specifying the environment variables in this file is different from the syntax shown in the next topics, which is specifically for entries in the **/etc/environment** file. Include the **export** command in the **.profile** file. Enclose the values in single quotation marks, as necessary. For example:

   ```
   export PDXTLOADRES_ARGS='-m A4 -s word'
   ```

2. If you are using InfoPrint Manager with InfoPrint XT and the InfoPrint Manager server was running when you set an environment variable, shut down and restart the InfoPrint Manager server. Use the InfoPrint Manager **pdshutdown** and **startsrv** commands to shut down and start the InfoPrint Manager server.

3. If you are using InfoPrint ProcessDirector with InfoPrint XT and the InfoPrint ProcessDirector server was running when you set an environment variable, shut down and restart the InfoPrint ProcessDirector server. Use the InfoPrint ProcessDirector **stopaiw** and **startaiw** commands to stop and start the InfoPrint ProcessDirector server.

Controlling the working directory that InfoPrint XT uses for variable data (PDXTWORKDIR)

The **PDXTWORKDIR** environment variable controls the working directory that InfoPrint XT uses for variable data. The default is that InfoPrint XT uses subdirectories in the **/var/pdxt** directory to store the files that it creates or copies for Xerox resources and jobs. For example, InfoPrint XT uses subdirectories of **/var/pdxt/resources** to store information for Xerox resources that you have loaded.

27

InfoPrint XT creates the **/var/pdxt** directory during installation. To have InfoPrint XT create subdirectories and store files in a different location on the AIX system, use the **PDXTWORKDIR** environment variable. The value that you specify becomes the replacement for **/var/pdxt**. This shows the format that you use to set the variable:

```
PDXTWORKDIR=/path/directory
```

Notes:

1. You can only use one working directory at any given time. For example, you cannot use the default **/var/pdxt** directory for some jobs and **/var/mypdxt** for other jobs.

2. If the directory you specify does not exist, InfoPrint XT creates it.

Controlling the default arguments when you copy Xerox resources from tape (PDXTRTAPE_ARGS)

You can change the default values that InfoPrint XT uses for the options of the **pdxtrtape** command. You use this command to copy Xerox resources from a tape to a directory on the AIX system; see "Using the pdxtrtape command to copy the resources from the resource tape" on page 64. You can use the **PDXTRTAPE_ARGS** environment variable to specify new default values for the options. For example, you might always want to specify the names of the resources to copy in a separate file instead of specifying them with the command.

Use these formats for the value of the **PDXTRTAPE_ARGS** variable:

```
PDXTRTAPE_ARGS=-l /home/resources/loadlist
```

```
PDXTRTAPE_ARGS=-n '*.fnt' -n '*.lgo'
```

Controlling the default arguments when you process Xerox jobs from tape (PDXTJTAPE_ARGS)

You can change the default values that InfoPrint XT uses for the options of the **pdxtjtape** command. You use this command to process Xerox jobs that are on tapes; see "Using the pdxtjtape command to process offline jobs" on page 109. You can use the **PDXTJTAPE_ARGS** environment variable to specify new default values. For example, you might always want to use the file name or data set name that the label specifies when you copy a job from tape to a file on the AIX system.

Use these formats for the value of the **PDXTJTAPE_ARGS** environment variable:

```
PDXTJTAPE_ARGS=-n label
```

```
PDXTJTAPE_ARGS=-r /var/pdxt/resources/payroll
```

Note: If you specify the **-T** command option with the **PDXTJTAPE_ARGS** environment variable, the **pdxtjtape** command ignores the **TAPE** environment variable.

Controlling the default arguments when you load resources (PDXTLOADRES_ARGS)

You can change the default values that InfoPrint XT uses for the options of the **pdxtloadres** command. You use this command to load Xerox resources; see "Using the pdxtloadres command to load Xerox resources" on page 73. You can use the **PDXTLOADRES_ARGS** environment variable to specify new default values for the options. For example, you might want the default value for the **-m** option to be **A4** instead of **letter**.

Use these formats for the value of the **PDXTLOADRES_ARGS** variable:

- If the option that you want to specify does not have an associated value, use this format:

```
PDXTLOADRES_ARGS=-r
```

  This causes InfoPrint XT to automatically add the **-r** option any time you enter the **pdxtloadres** command.

- Enclose parameters and values in single quotation marks when you specify a **PDXTLOADRES_ARGS** entry. The following shows entry examples:

```
PDXTLOADRES_ARGS='-m A4 -s word'
```

```
PDXTLOADRES_ARGS='-n /xyz/*.fnt'
```

Controlling the default arguments when you process jobs (PDXTX2AFP_ARGS)

You can change the default values that InfoPrint XT uses when you convert Xerox jobs with the **pdxtx2afp** command. See "Using the pdxtx2afp command to process Xerox jobs" on page 105. You can use the **PDXTX2AFP_ARGS** environment variable to specify new default values. For example, you might want the default value of the **-x** option to specify a certain JDL and JDE pair.

Use these formats for the value or values of the **PDXTX2AFP_ARGS** environment variable:

- To specify a single option and value:

```
PDXTX2AFP_ARGS=-g payroll
```

- To specify the **-x** option with more than one value, use a combination of single and double quotation marks:

```
PDXTX2AFP_ARGS='-x "xjdl=tonl xjde=dflt xclb=pay"'
```

- To specify one option and value, and to specify the **-x** option with more than one value, also use a combination of single and double quotation marks:

```
PDXTX2AFP_ARGS='-g payroll -x "xjdl=tonl xjde=dflt xclb=pay"'
```

Note: InfoPrint XT uses the value of the **PDXTX2AFP_ARGS** environment variable only when you enter the **pdxtx2afp** command. If you convert jobs by submitting them to InfoPrint Manager, InfoPrint XT ignores this environment variable.

Controlling the default arguments when you create and modify cluster database resources (PDXTCLUSTER_ARGS)

You can change the default values that InfoPrint XT uses for the options of the **pdxtcluster** command. You use this command to create and modify cluster database resources; see "Using the pdxtcluster command to create and modify cluster database resources" on page 87. You can use the **PDXTCLUSTER_ARGS** environment variable to specify new default values for the options. For example, you might want the default value for the **-g** option to be **payroll** instead of **common**:

```
PDXTCLUSTER_ARGS='-g payroll'
```

Note: InfoPrint XT uses the value of the **PDXTCLUSTER_ARGS** environment variable only when you enter the **pdxtcluster** command.

Controlling the default arguments when you compile JSLs (PDXTPDL_ARGS)

You can change the default values that InfoPrint XT uses for the options of the **pdxtpdl** command. You can use the **PDXTPDL_ARGS** environment variable to specify new default values for the options. For example, you might want the default value for the **-g** parameter to be **resgrp** instead of **common**.

Use these formats for the value of the **PDXTPDL_ARGS** variable:

- If the option that you want to specify does not have an associated value, use this format:

```
PDXTPDL_ARGS=-r
```

This causes InfoPrint XT to automatically add the **-r** parameter any time you specify the **pdxtpdl** command.

- Enclose parameters and values in single quotation marks when you specify a **PDXTPDL_ARGS** entry. The following shows entry examples:

```
PDXTPDL_ARGS='-g resgrp -r'
PDXTPDL_ARGS='-n /xyz/*.jsl'
```

Controlling resource-load messages for FILE DJDE jobs (PDXT_AIOLXDFE_TRACE)

You can instruct InfoPrint XT to include messages about the resource-load process for jobs that use FILE DJDE commands. InfoPrint XT can write the messages to the **x2afp.lst** file; see "x2afp.lst file" on page 147. The **PDXT_AIOLXDFE_TRACE** environment variable controls the disposition of the resource-load messages. Set this variable to **1** to include the messages:

```
PDXT_AIOLXDFE_TRACE=1
```

Remove the environment variable to suppress the messages.

Activating trace functions for the font converter (PDXT_XR2FAPI_TRACE)

If you place a service call, the technical support representative might ask you to run a trace of the InfoPrint XT font converter to aid in diagnosing a problem. The **PDXT_XR2FAPI_TRACE** environment variable controls tracing in the font converter. Set this variable to **1** to activate tracing:

```
PDXT_XR2FAPI_TRACE=1
```

Remove the environment variable to turn tracing off.

Note: You must include the **-e listings** command option and value with the **pdxtloadres** command after you activate tracing.

Activating trace functions for the image and logo converter (PDXT_XR2IAPI_TRACE)

If you place a service call, the technical support representative might ask you to run a trace of the InfoPrint XT image and logo converter to aid in diagnosing a problem. The **PDXT_XR2IAPI_TRACE** environment variable controls tracing in the image and logo converter. Set this variable to **1** to activate tracing:

```
PDXT_XR2FAPI_TRACE=1
```

Remove the environment variable to turn tracing off.

Note: You must include the **-e listings** command option and value with the **pdxtloadres** command after you activate tracing.

Controlling the content of error messages (PDXT_INTMSGIDS)

Use the **PDXT_INTMSGIDS** environment variable to control the level of detail that InfoPrint XT provides in the messages that it issues for basic operations. You can use this environment variable for diagnostic purposes, and at the direction of a technical support representative. When you set this variable, InfoPrint XT writes the name of the module that issued the message before the message number. It also writes a line number from the module, which indicates the line at which the condition that caused the message occurred. The expanded output is similar to this:

```
pdxtclnwork: (aioxcwrk0139) 5016-001 The command option -o is not valid.
```

This message shows that the error resulted from a **pdxtclnwork** command and that the error occurred at line **0139** of the module **aioxcwrk**.

Set the **PDXT_INTMSGIDS** variable to **1** to include module and line number information:

```
PDXT_INTMSGIDS=1
```

Remove the environment variable to suppress the module and line number information.

Controlling the format of the error sheet (PDXT_MSG*xxxxxxx*)

If you submit a Xerox job for processing in a combined InfoPrint Manager and InfoPrint XT installation and severe errors occur that prevent InfoPrint XT from generating AFP output, InfoPrint XT generates an error sheet. InfoPrint XT uses four environment variables and the InfoPrint Manager **line2afp** transform to generate the error sheet. Typically, you only change the default settings for these environment variables if you use a medium other than letter, such as A4 paper:

PDXT_MSGFOLDCMD
Controls how the message lines of the error sheet wrap on the page. InfoPrint XT uses AIX standard input (STDIN) to pass the messages to the command specified by the environment variable. Then, InfoPrint XT pipes the output from the command to the InfoPrint Manager **line2afp** command. If you do not set this variable, InfoPrint XT uses **fold -w 120**.

PDXT_MSGFONTDEF
Controls the font definition that InfoPrint XT uses to generate the error sheet. If you do not set this variable, InfoPrint XT uses **trc=no chars=4282**.

PDXT_MSGFORMDEF
Controls the form definition that InfoPrint XT uses to generate the error sheet. If you do not set this variable, InfoPrint XT uses **F1MG0110**.

PDXT_MSGPAGEDEF
Controls the page definition that InfoPrint XT uses to generate the error sheet. If you do not set this variable, InfoPrint XT uses **P1A08682**.

Note: When InfoPrint XT generates the error sheet, it also writes the results of **line2afp** transform processing for the error sheet. The **line2afp.lst** file in the working directory for the job contains the information. The default working directory is **/var/pdxt/jobs/***globalIDjobname-jobnumber-nn.*, unless you have

changed the directory as described in "Controlling the working directory that InfoPrint XT uses for variable data (PDXTWORKDIR)" on page 27.

Environment variables for directives

Two other InfoPrint XT environment variables are specific to transform directives and to installations that use Download for z/OS. Because other considerations for their use exist, this publication describes them in individual topics. See:

- "Using transform directives" on page 37
- "Enabling download directives" on page 135

Creating a custom parameter mapping file

When you convert a Xerox job, you must specify certain parameters that equate to the Xerox START command for the job. The parameters include the starting Job Descriptor Library and Job Descriptor Entry (JDE) pair. You might also specify other parameters that further define the job, such as how to process stapling commands. InfoPrint XT can use a parameter mapping file, which you create, to streamline the process of setting conversion parameters. You can automatically set certain parameters by instructing InfoPrint XT to use the pass-through values of the **pdxtx2afp** command to trigger which parameters to apply. The mapping file assigns parameters using these job characteristics:

- Job class
- Destination for the job
- Form for the job
- Job ID
- Job name

For information about the **-p** option of the **pdxtx2afp** command, see page 106. Also see the **/usr/opt/pdxt/testjob/pdxtx2afp.map** file, which is a mapping file that you can use with the test job that InfoPrint XT supplies.

Notes:

1. Any parameters that you specify with the **pdxtx2afp** command override the same parameters in the mapping file.
2. If you use InfoPrint Manager or InfoPrint ProcessDirector with InfoPrint XT, you can also use the parameter mapping file. Use the **destination-pass-through** document attribute to pass job characteristics. These are examples:

   ```
   destination-pass-through="-opa=jobname=pdxttest"

   destination-pass-through="-opa=class=D"
   ```
3. If you submit jobs using Download for z/OS, the **pdxtdownload** program automatically sets the **destination-pass-through** attribute. See "What the InfoPrint XT pdxtdownload program does" on page 120.

Parameter mapping file syntax rules

You can control how InfoPrint XT processes jobs that have specific characteristics using a custom parameter mapping file. Create a file with the name **pdxtx2afp.map** and then add entries that support the requirements of the installation. After you complete the entries, store the file in the **/var/pdxt** directory. Make sure that the group for the file is **printq** and that the file has 640 permissions. Table 3 on page 33 shows the format of an entry in a mapping file.

Note: If the installation uses the **PDXTWORKDIR** environment variable, store the parameter mapping file in the directory that the environment variable

specifies, instead of the **/var/pdxt** directory.

Table 3. Format of the transform parameter mapping file

Mapping file lines	Explanation

# text 	
keyword=value
    parameter
    parameter
	Comments
	Pass-through parameter and value to match
	Conversion parameter to set
	Additional conversion parameters, as required

Use one of these as the keyword: **class**, **dest**, **forms**, **jobid**, or **jobname**. You can also use a special keyword and value pair, ***=***, to apply parameters to every job. ***=*** specifies that any keyword and value pair is a match; InfoPrint XT applies the associated parameters to every job that it processes.

The parameters that you can assign are **-g**, **-r**, **-t**, and **-x**. These parameters correspond to a subset of the processing parameters that you can specify with the **pdxtx2afp** command.

These rules apply to the parameter mapping file:
- You must use lowercase keyword names in the mapping file: **class**, **dest**, **forms**, **jobid**, or **jobname**.
- The values for the keywords are case-sensitive. For example, **prt1** and **PRT1** are two distinct values.
- You can use asterisks and question marks as wildcard characters for keyword values. You can also use brackets to specify ranges of characters:
  - To specify all jobs whose names begin with **ORB**:

    ```
    jobname=ORB*
    ```
  - To specify all jobs with a destination of **PRT**, followed by any three characters:

    ```
    dest=PRT???
    ```
  - To specify all jobs with a class value of any single character from **A** through **M**:

    ```
    class=[A-M]
    ```
- You cannot use wildcard characters or regular expressions to define the keyword to match. For example, **job*** is not valid for matching both the **jobid** and **jobname** keywords.
- InfoPrint XT ignores blank lines and comment lines. Lines that begin with a number sign, **#**, are comments.
- All *keyword=value* pairs must start in column one. The expression must include the equal sign, **=**, and the expression cannot contain spaces.
- Parameter lines cannot start in column one; use at least one space before the parameter.
- When a keyword match occurs, InfoPrint XT applies all the parameter lines that follow, up to the next keyword line or the end of the file.
- You cannot include comments on keyword lines or parameter lines.
- Two or more keywords on a single line represent an *and* condition. Jobs must match all keywords to use the associated parameters.
- Two or more keywords on separate lines represent an *or* condition. Jobs can match any one of the keywords to use the associated parameters.
- InfoPrint XT checks each keyword group in the file. A job can match more than one keyword group, so it uses parameters from several groups. For the **-g**, **-r**, and **-t** parameters, if the job matches several keywords groups that specify the

same parameter, InfoPrint XT uses the value from the last group. For the **-x** parameter, InfoPrint XT merges all different conversion parameters together in the final **pdxtx2afp** command. For example, if one keyword group specifies **-x xcopies=5** and another specifies **-x xclb=pay1**, InfoPrint XT includes both **xcopies** and **xclb** in the final command. If more than one keyword group specifies the same parameter, for example **-x xjdl=strton** and **-x xjdl=dpljdl**, InfoPrint XT uses the last value.

Figure 3 is an example of a completed parameter mapping file.

```
#------------------------------------------------------#
#  Set the default for all jobs that do not match any #
#  other criteria                                     #
#------------------------------------------------------#
*=*
  -x'xjde=base xjdl=base1'

#------------------------------------------------------#
#  Set parameters for FORMS=STD and CLASS=K jobs      #
#------------------------------------------------------#
forms=STD class=K
  -x'xjde=std xjdl=dpljdl'

#------------------------------------------------------#
#  Set parameters for FORMS=RED or CLASS=J jobs       #
#------------------------------------------------------#
forms=RED
class=J
  -x'xjde=pay1 xjdl=bills'

#------------------------------------------------------#
#  Set parameters for DEST=PRT17                      #
#------------------------------------------------------#
dest=PRT17
  -x'xjde=strt xjdl=prt17'

#------------------------------------------------------#
#  Set parameters for payroll jobs                    #
#------------------------------------------------------#
jobname=PAYROLL
  -x'xjde=strt xjdl=prt17'

#-------------------------------------------------------#
# Class D jobs, class E jobs, or any jobs whose        #
# names starts with INV use resources from             #
# /var/pdxt/resources/inventory.                       #

#-------------------------------------------------------#
class=D
class=E
jobname=INV*
   -g inventory

#-------------------------------------------------------#
# Jobs whose names start with PAY* use AFP             #
# resources in the /pay/secure/monthly directory       #

#-------------------------------------------------------#
jobname=PAY*
   -r /pay/secure/monthly
```

Figure 3. Completed parameter mapping file

Verifying the parameter specification of the mapping file

When you convert a job, InfoPrint XT writes messages to the **pdxtx2afp.log** file. If InfoPrint XT sets parameters from the parameter mapping file, it writes entries similar to these in the transform arguments section:

```
5016-501 2010-04-04  21:51:40  (pid 83951854) - transform started

5016-503 Transform arguments (/var/pdxt/pdxtx2afp.map)
5016-504     -x "xjde=pay1 xjdl=bills"
```

Configuration tasks for OTEXT job processing: Combined InfoPrint Manager and InfoPrint XT installations

InfoPrint XT can process Xerox jobs that contain OTEXT messages. If you use InfoPrint Manager with InfoPrint XT, InfoPrint XT can also display the OTEXT messages on a designated X display. InfoPrint XT uses this hierarchy to display OTEXT messages:

1. The display or displays that the **/var/pdxt/pdxtotext.Xdisplays** file specifies. InfoPrint XT searches for this file in the **/var/pdxt** directory.

2. If it does not find the display file, or if the file does not contain an entry for a specific InfoPrint Manager actual destination, InfoPrint XT uses the display that the **DISPLAY** environment variable specifies.

   Note: If you set or change the setting of the **DISPLAY** environment variable while the InfoPrint Manager server is running, you must shut down and start the server to use the new value that the environment variable specifies. Use the InfoPrint Manager **pdshutdown** and **startsrv** commands to shut down and start the InfoPrint Manager server.

3. If the environment variable has no setting, InfoPrint XT uses **:0.0**, which is the main system console for the AIX system .

Controlling where InfoPrint XT displays OTEXT messages

To use a **pdxtotext.Xdisplays** file to cause InfoPrint XT to display messages from OTEXT jobs on a specific display, create the file in the **/var/pdxt** directory. InfoPrint XT does not provide a sample file for you to modify. Figure 4 shows examples of the types of entries that you can make in the file.

```
#------------------------------------------------#
# Use the operator display as the default         #
#------------------------------------------------#
*: oper.x.server.com:0.0


#------------------------------------------------#
# Use Jim's display for his actual destination     #
# because both his printer and his office are in a #
# remote location.                                 #
#------------------------------------------------#
jim-ad: mobility.x.server.com:0.0
```

Figure 4. Entries in the pdxtotext.Xdisplays file

Entries in the **pdxtotext.Xdisplays** file that contain display information begin with the name of the InfoPrint Manager actual destination, followed by a colon. For each actual destination entry, you then include the host name and the X server display number where you want OTEXT messages to display. To have the display information apply to all InfoPrint Manager actual destinations, use ***:** for the actual destination name. You can also include blank lines in the **pdxtotext.Xdisplays** file,

and comment lines. Lines that begin with the number sign, **#**, are comments. You cannot combine display information and comment information on the same line.

After you create the **/var/pdxt/pdxtotext.Xdisplays** file, make sure that the group for the file is **printq** and that it has 640 permissions:

```
-rw-r-----  xtadmin  printq  567 Oct 09  15:31 pdxtotext.Xdisplays
```

Use the AIX **chgrp** command to change the group:

```
chgrp printq pdxtotext.Xdisplays
```

Use the AIX **chmod** to change the permissions:

```
chmod 640 pdxtotext.Xdisplays
```

Controlling X resources for the OTEXT message window

You can change the X resources, such as the fonts and the colors, that the InfoPrint XT OTEXT message window uses. To specify resources, create the **pdxtotext.Xresources** file. Figure 5 shows examples of the types of entries that you can make in the file.

```
!!----------------------------------------------------------------!!
!! The *geometry entry defines the overall size of the window.  !!
!! It can optionally define the window position, as well.       !!
!!----------------------------------------------------------------!!
*geometry:            875x300

!!----------------------------------------------------------------!!
!! The *fontList entries define the fonts to use in the window. !!
!!                                                              !!
!!    XmText          - Is the widget class for the text box.  !!
!!    XmPushButton    - Is the widget class for the buttons.   !!
!!----------------------------------------------------------------!!
*XmText.fontList:       9x15
*XmPushButton.fontList:  sansb21
```

Figure 5. Entries in the pdxtotext.Xresources file

You can include blank lines and comment lines in the **pdxtotext.Xresources** file; comment lines begin with pairs of exclamation points, **!!**. The X server controls the format of the entries in this file.

The directory in which you create the **pdxtotext.Xresources** file determines whether the resource specifications apply to all displays or to a specific display:

- To have InfoPrint XT use the resources for all displays, create the **pdxtotext.Xresources** file in the **/var/pdxt** directory.
- To have InfoPrint XT use the resources for a specific display, create a *displayname* subdirectory in **/var/pdxt/**. *displayname* is the AIX name of the display, with hyphens used to replace colons in the display name. For example, if the AIX display name is **oper.x.server.com:0.0**, create a subdirectory with a name of **oper.x.server.com-0.0**. Put the **pdxtotext.Xresources** file in the **/var/pdxt/***displayname* directory that you created.

Related information

When you specify an InfoPrint Manager actual destination to process OTEXT messages, InfoPrint XT sets the **input-data-user-exit** attribute. This means that you cannot directly use an existing InfoPrint Manager input data user-exit program.

InfoPrint XT provides a substitute application exit that provides the same function. For more information, see "Setting up a substitute InfoPrint Manager input data user-exit program" on page 57.

Using transform directives

InfoPrint XT provides a set of internal directives that you can activate to control certain aspects of the overall data stream conversion process. For example, you can instruct InfoPrint XT to capture traces of the job data stream as it flows through the conversion process. You primarily use the transform directives for diagnostic purposes or when you require special modifications to the transform process.

Transform directives and syntax

You can set these transform directives:

[-a0 | -a1]
For installations that use InfoPrint Manager with InfoPrint XT, this specifies whether InfoPrint XT captures the InfoPrint Manager document and job attributes. If you specify **-a1**, InfoPrint XT writes the directive output to the **jobattr.ipm** file in the working directory for the job. The working directory is **/var/pdxt/jobs/***globalID*. The default is that InfoPrint XT does not capture the InfoPrint Manager attributes.

[-d jobdir | resdir]
Specifies the directory that InfoPrint XT captures for a specific job. **jobdir** causes InfoPrint XT to capture all files in the working directory for the job. **resdir** causes InfoPrint XT to capture all files in the resource directories for the job. This includes all informational files and the AFP resources.

Notes:

1. Use this directive only at the direction of a technical support representative.

2. You can specify **-d** more than once so that you can capture both the working directory and the resource directories.

3. InfoPrint XT only uses this directive if file descriptor nine was defined when the **pdxtx2afp** command was issued, and if the **pax** command is available. InfoPrint XT writes the output to the file that file descriptor nine specifies. For example:

   ```
   9 > myoutfile
   ```

4. If you use InfoPrint Manager with InfoPrint XT, use the **pdxtcapture** command instead of the **-d** transform directive. See "Using the pdxtcapture command to capture information from the InfoPrint XT system" on page 149.

[-e '*exitname argument...***']**
Specifies an argument or arguments that InfoPrint XT passes to a specific application exit program. *exitname* specifies the name of the application exit program. Valid names are:

- **aioxlxae** for the transform accounting application exit. See "Setting up a transform accounting application exit" on page 44.
- **aioxlxbe** for the transform begin application exit. See "Setting up a transform begin application exit" on page 47.
- **aioxlxie** for the transform input application exit. See "Setting up a transform input application exit" on page 49.

- **aioxlxoe** for the transform output application exit. See "Setting up a transform output application exit" on page 51.
- **aioxlxte** for the transform end application exit. See "Setting up a transform end application exit" on page 53.

The application exit program controls the format of the arguments and the arguments that you can specify. Enclose the program name and the argument string in single quotation marks or escaped quotation marks, depending on the context.

You can specify the **-e** directive more than one time, with different options. If you specify more than one **-e** directive for the same application exit, InfoPrint XT sends all the arguments to the application exit. The various activation methods and notes in "Activating transform directives" on page 39 show examples of passing arguments to application exit programs.

[-j0 | -j1]
Specifies whether InfoPrint XT enables online processing of carriage controls in the job. **-j1** enables online processing. **-j0** disables online processing. The default is that InfoPrint XT does carriage-control processing for online jobs.

[-k0 | -k1]
Specifies whether InfoPrint XT retains the working directory for a job after the data stream conversion process finishes. The default that InfoPrint XT uses for the directive depends on how you run the **pdxtx2afp** command. If you use InfoPrint Manager with InfoPrint XT and you configure InfoPrint XT as an InfoPrint Manager configurable transform, the default is **-k1**. InfoPrint XT retains the working directory, which is **/var/pdxt/jobs/***globalID*, until InfoPrint Manager removes the job from the system. If you specify **-k0**, InfoPrint XT discards the working directly immediately after data stream conversion finishes.

If you enter the **pdxtx2afp** command directly, the working directory is **/var/pdxt/***jobs* and the default is **-k0**.

Note: This directive applies only when InfoPrint XT creates the working directory. It does not apply if you use the **-w** option of the **pdxtx2afp** command to specify a working directory.

[-t *TraceType ...* **]**
Specifies how InfoPrint XT traces a job as it flows through the conversion process. InfoPrint XT writes all output from the **-t** directive to the working directory for the job. Valid values are:
- **x2afp.in** - Saves a copy of the original Xerox job.
- **x2afp.out** - Saves a copy of the AFP job generated by data stream conversion.
- **x2afp** - Saves both the original Xerox job and the generated AFP job.
- **aioxlxie.in** - Saves the Xerox input data sent to the **aioxlxie** application exit.
- **aioxlxie.out** - Saves the Xerox output generated by the **aioxlxie** application exit.
- **aioxlxie** - Saves both the input to, and the output from, the **aioxlxie** application exit.
- **aioxlxoe.in** - Saves the AFP input data sent to the **aioxlxoe** application exit.

- **aioxlxoe.out** - Saves the AFP output data generated by the **aioxlxoe** application exit.
- **aioxlxoe** - Saves both the input to, and the output from, the **aioxlxoe** application exit.

Note: Multiple occurrences of the **-t** directive are cumulative. For example, you can specify **-t aioxlxie.in** with the **PDXTX2AFP_DIRECTIVES** environment variable, and specify **-t aioxlxie.out** with the **-t** command option attribute. In this case, InfoPrint XT saves both the input to, and the output from, the **aioxlxie** application exit. You can also specify more than one value on a single occurrence of the **-t** directive.

[-x 'conversion_parameters**']**

Specifies conversion parameters. Any parameters that you specify with this directive override the same parameters if you specify them with other methods. For example, if you specify them with the **-x** option of the **pdxtx2afp** command or if you specify them with the **other-transform-options** attribute in the InfoPrint Manager environment. Do not use this directive to specify parameters such as **xjdl** or **xjde** for your production environment. You might find this directive useful as a temporary override to the production environment for testing purposes. For more information about conversion parameters, see Appendix A, "Conversion parameters for converting Xerox jobs," on page 151.

Trace transform directives

For service purposes, a technical support representative might ask you to activate a trace. The technical support representative instructs you to use this format:

```
-x xztrace=all1:all2
```

Use this only at the direction of a technical support representative. The technical support representative will provide further information about how to locate the trace output and provide it to service for analysis.

Activating transform directives

Several methods exist for activating InfoPrint XT transform directives. InfoPrint XT checks for an environment variable first and for a directives file second. If you enter the **pdxtx2afp** command directly, InfoPrint XT then checks for the **-t** command option. If you use InfoPrint Manager with InfoPrint XT, InfoPrint XT checks for a document attribute instead of the command option.

PDXTX2AFP_DIRECTIVES environment variable

You can add the environment variable to the **/etc/environment** file so that directives are active for any user who runs the transform. If you are using InfoPrint Manager with InfoPrint XT, you must shut down and restart the InfoPrint Manager server whenever you add the environment variable or whenever you change its value. Log out of AIX and log back in before restarting the server. If you do not have InfoPrint Manager installed, you must also log out of AIX and log back in to use the value of the **PDXTX2AFP_DIRECTIVES** environment variable. These are examples of setting values for the environment variable in the **/etc/environment** file:

```
PDXTX2AFP_DIRECTIVES='-e "aioxlxie OFFSET_ALTBIN"'

PDXTX2AFP_DIRECTIVES='-d jobdir -d resdir'
```

/var/pdxt/pdxtx2afp.directives file

This is a plain text file that contains the directives. Each directive entry is specific to a destination. If you use InfoPrint Manager with InfoPrint XT, the destination is the name of an InfoPrint Manager actual destination. Otherwise, the destination is the destination that the **-p** option of the **pdxtx2afp** command specifies. You can also use ***:** as a destination so that the associated transform directive applies to all job destinations. You can include comments and blank lines in the directives file. Delimit comments with a number sign, **#**. These are examples of the types of entries that you can make in the transform directives file:

```
#------------------------------------------------#
# For all destinations, pass an argument to the  #
# transform input application exit.              #
#------------------------------------------------#
*: -e 'aioxlxie OFFSET_ALTBIN'


#------------------------------------------------#
# Capture and keep the AFP output for all jobs   #
# with a destination of PRT01.                   #
#------------------------------------------------#
PRT01: '-t x2afp.out' -k1
```

After you create the **pdxtx2afp.directives** file in the **/var/pdxt** directory, make sure that the group for the file is **printq** and that it has 640 permissions. For example:

```
-rw-r-----  1 xtadmin  printq  0 Sep 03 12:02 pdxtx2afp.directives
```

You can use the AIX **chgrp** and **chmod** commands, as necessary, to set the group and the permissions.

-t command option of the pdxtx2afp command

If you enter the **pdxtx2afp** command directly to convert a Xerox job, you can specify directives using the **-t** command option. See "Using the pdxtx2afp command to process Xerox jobs" on page 105.

document-comment document attribute

If you use InfoPrint Manager with InfoPrint XT, you can specify directives on a job-by-job basis, or for a group of jobs, using InfoPrint Manager attributes. You can add the **document-comment** attribute when you submit the job. This example shows how to set an InfoPrint XT transform directive with the InfoPrint XT **document-comment** attribute:

```
document-comment='PDXTX2AFP_DIRECTIVES: -t x2afp.out -k1'
```

Notes:

1. If you specify the InfoPrint Manager **document-comment** attribute with the **pdpr -x** command option, you must include quotation marks around the entire **document-comment** attribute and value. For example:

   ```
   -x "document-comment='PDXTX2AFP_DIRECTIVES: -x xztrace=all1all2 -x xzdump=yes'"
   ```

2. If you specify a transform directive that can have several values with the **pdpr -x** command option and the **document-comment** attribute, you must further delimit the string. Include the backslash, ****, escape character:

   ```
   -x "document-comment='PDXTX2AFP_DIRECTIVES: -e \'aioxlxie RECFM=VB\''"
   ```

3. If you specify more than one occurrence of the **-a**, **-j**, or **-k** transform directive using more than one method, InfoPrint XT uses the last occurrence of the directive. For example, if you specify **-j** with the **PDXTX2AFP_DIRECTIVES** environment variable and with the **document-comment** attribute, InfoPrint XT uses the value that the **document-comment** attribute specifies.

Working with the base InfoPrint XT application exits

+ — — — — — — — — — Programming Interface information — — — — — — — — — +

InfoPrint XT provides application exits that you can use to control the various stages of the job submission process and the transform process. This section presents the application exits in the order in which InfoPrint XT calls them.

Setting up a tape begin application exit

InfoPrint XT provides a tape begin application exit, **aioxltbe**, which you can use when you process jobs that are on tape. The **pdxtjtape** command calls this application exit just before it opens the tape volume. Use the tape begin application exit to:

- Do initialization work before the main processing that the **pdxtjtape** command does.
- Log the start time of tape processing.
- Prevent tape processing from occurring.

The **pdxtjtape** command passes these options to the application exit:

-e *arguments*
> Specifies any application exit arguments that the **-e** command option of the **pdxtjtape** command specified.

-T rmt*n*
> Specifies the tape device. The value is the short form of the device name. It does not include the extension that specifies rewind, retensioning, and density information. For example, if the **pdxtjtape** command reads from the device with the name **/dev/rmt0.1**, the value that the command passes with the **-T** option is **rmt0**.

-w *directory*
> Specifies the name of the InfoPrint XT working directory. Typically, this is **/var/pdxt**.

Note: The application exit must ignore any command options passed to it that it does not recognize. InfoPrint XT can then add command options without impacting the operation of a customized application exit.

Input and output data streams for the tape begin application exit

InfoPrint XT communicates with the application exit using streams:

fd0 (STDIN) The **pdxtjtape** command redirects its own standard input to the standard input of **aioxltbe**.

fd1 (STDOUT) The **pdxtjtape** command redirects the standard output from **aioxltbe** to its own standard output (STDOUT).

fd2 (STDERR) The **pdxtjtape** command redirects the standard error from **aioxltbe** to its own standard error.

Return codes from the tape begin application exit

Return codes from the tape begin application exit are:

0
> The processing done by the application exit was successful. The **pdxtjtape** command starts to read from the tape device.

other
> Any other return codes that are not in this list indicate that the

processing done by the application exit failed. The **pdxtjtape** command stops immediately; it does not read from the InfoPrint ProcessDirector tape device.

Customizing the sample tape begin application exit

InfoPrint XT provides a sample of the tape begin application exit in the **/usr/opt/pdxt/samples** directory. The directory contains **aioxltbe**, which is the compiled sample application exit, and **aioxltbe.c**, which is the source. The sample tape begin application exit logs the start time for tape processing in the **/var/pdxt/tape.log** file. For information about how to use or modify the sample application exit, read the prolog of the **aioxltbe.c** source file.

Setting up a tape job application exit

InfoPrint XT provides the tape begin application exit, **aioxltje**, which you can use when you process jobs that are on tape. The **pdxtjtape** command calls this application exit just before it copies the job from the tape to a file. If you use InfoPrint Manager with InfoPrint XT, InfoPrint XT calls the tape begin application exit just before it submits the job to InfoPrint Manager with the **pdpr** command. Use the tape job application exit to:

- Process jobs in a manner that is different from the processing that the **pdxtjtape** command does. For example, use **aioxltje** to redirect jobs from tapes to a printer driver other than InfoPrint Manager.

- Modify or add to the InfoPrint Manager or InfoPrint ProcessDirector attributes that InfoPrint XT assigns to the job. For example, **aioxltje** can assign conversion parameters based on information from the tape volume label.

- Modify the job data before the **pdxtjtape** command submits the job to InfoPrint Manager. For example, use **aioxltje** to convert the data from an unsupported format.

The **pdxtjtape** command passes these options to the application exit:

-e *arguments*
> Specifies any application exit arguments that the **-e** command option of the **pdxtjtape** command specified.

-h *headerlabel*
> Specifies the name of the file that contains the header label records. A 2-byte length field precedes each record in the file. If no header label exists, the file is empty.

-j *jobfile*
> Specifies the name of the file that contains the job. This file might be a symbolic link to the actual file.

-r *respath*
> Specifies the resource path for the job.

-t *trailerlabel*
> Specifies the name of the file that contains the trailer label records. A 2-byte length field precedes each record in the file. If no trailer label exists, the file is empty.

-T rmt*n*
> Specifies the tape device. The value is the short form of the device name. It does not include the extension that specifies rewind, retensioning, and density information. For example, if the **pdxtjtape** command reads from the device with the name **/dev/rmt0.1**, the value that InfoPrint XT passes with the **-T** option is **rmt0**.

-w *directory*
> Specifies the name of the InfoPrint XT working directory. Typically, this is **/var/pdxt**.

-x '*conversion_parameters*'
> Specifies the Xerox-specific conversion parameters for the job. This value is a combination of the conversion parameters from the **pdxtjtape** command. If you specified the **-b pass** option and value with the **pdxtjtape** command, the value includes the conversion parameters that are specific to block information, such as **xdeblock** and **xtblkn**. The value also includes any conversion parameters that the **pdxtjtape -x** command option specified. For more information, see Appendix A, "Conversion parameters for converting Xerox jobs," on page 151.

-Z *pdprfile*
> Specifies the name of the file that contains the **pdpr** command options that the **pdxtjtape** command uses if it submits the job to InfoPrint Manager.

Note: The application exit must ignore any command option passed to it that it does not recognize. InfoPrint XT can then add command options without impacting the operation of a customized application exit.

Input and output data streams for the tape job application exit
InfoPrint XT communicates with the application exit using streams:

fd0 (STDIN) The **pdxtjtape** command redirects its own standard input to the standard input of **aioxltje**.

fd1 (STDOUT) The **pdxtjtape** command redirects the standard output from **aioxltje** to its own standard output.

fd2 (STDERR) The **pdxtjtape** command redirects the standard error from **aioxltje** to its own standard error.

Return codes from the tape job application exit
Return codes from the tape job application exit are:

0
> The processing done by the application exit was successful. The **pdxtjtape** command starts to read from the tape device.

EREMOTE (93)
> **aioxltje** has already submitted the job. The **pdxtjtape** command skips to the next job.

other
> Any other return codes that are not in this list indicate that the processing done by the application exit failed. The **pdxtjtape** command fails the job, and stops reading from the tape device.

Restrictions for the tape job application exit
The **aioxltje** tape job application exit cannot do any tape operations on the same device that the **pdxtjtape** command is accessing.

Customizing the sample tape job application exit
InfoPrint XT provides a sample of the tape job application exit in the **/usr/opt/pdxt/samples** directory. The directory contains **aioxltje**, which is the compiled sample application exit, and **aioxltje.c**, which is the source. The sample tape job application exit converts the Xerox job to AFP and stores it in a file. For information about how to use or modify the application exit, read the prolog of the **aioxltje.c** source file.

Setting up a tape end application exit

InfoPrint XT provides the **aioxltte** tape end application exit, which you can use when you process jobs that are on tape. The **pdxtjtape** command calls this application exit after it closes the tape volume. Use the tape end application exit to:

- Do work after the completion of the processing done by the **pdxtjtape** command.
- Log the completion time of tape processing.

The **pdxtjtape** command passes these options to the application exit:

-e *arguments*

> Specifies any application exit arguments that the **-e** command option of the **pdxtjtape** command specified.

-T rmt*n*

> Specifies the tape device. The value is the short form of the device name. It does not include the extension that specifies rewind, retensioning, and density information. For example, if the **pdxtjtape** command reads from the device with the name **/dev/rmt0.1**, the value that InfoPrint XT passes with the **-T** option is **rmt0**.

-w *directory*

> Specifies the name of the InfoPrint XT working directory. Typically, this is **/var/pdxt**.

Note: The tape end application exit must ignore any command options passed to it that it does not recognize. InfoPrint XT can then add command options without impacting a customized tape end application exit.

Input and output data streams for the tape end application exit

InfoPrint XT communicates with the application exit using streams:

fd0 (STDIN) The **pdxtjtape** command redirects its own standard input to the standard input of **aioxltte**.

fd1 (STDOUT) The **pdxtjtape** command redirects the standard output from **aioxltte** to its own standard output.

fd2 (STDERR) The **pdxtjtape** command redirects the standard error from **aioxltte** to its own standard error.

Return codes from the tape end application exit

The **pdxtjtape** command ignores the return code from the tape end application exit.

Customizing the tape end application exit

InfoPrint XT provides a sample tape end application exit in the **/usr/opt/pdxt/samples** directory. The directory contains **aioxltte**, which is the compiled sample application exit, and **aioxltte.c** which is the source. The sample tape end application exit logs the completion time of tape processing in the **/var/pdxt/tape.log** file. For information about how to use or modify the sample application exit, read the prolog of the **aioxltte.c** source file.

Setting up a transform accounting application exit

InfoPrint XT provides a transform accounting application exit, **aioxlxae**, which you can use to capture transform-specific information from the data stream conversion process. Use this information for purposes such as billing. The application exit does not capture information about the printing process. If you use InfoPrint Manager or InfoPrint ProcessDirector with InfoPrint XT, you can use the InfoPrint Manager or InfoPrint ProcessDirector accounting functions for printing statistics.

InfoPrint XT passes these options to the application exit:

-e *arguments*

Specifies any application exit arguments that were specified with the **-e** transform directive. For more information, see page 37.

-j *globalID* I *jobname-jobID-n*

If you have InfoPrint Manager installed, the **-j** option specifies the InfoPrint Manager global job identifier to the application exit. If you do not have InfoPrint Manager installed and you use the **pdxtx2afp** command, the job identifier that the **-j** option specifies is in the form *jobname-jobID-n*.

-p *passthru_values*

Specifies the same values that the **-p** option for the job specifies, if it is present. For example, InfoPrint XT can use the InfoPrint Manager **destination-pass-through** attribute to set the **-p** job option, or you can set it with the **pdxtx2afp** command. See page 106.

-q *dest*

Specifies the destination for the job. If job processing occurs with InfoPrint Manager, this is the name of the InfoPrint Manager actual destination. Otherwise, it is the destination that the **-p** option for the job specifies.

-s *submit_method*

Specifies the job-submission method. *submit_method* is:

- **infoprint** InfoPrint Manager initiated the transform.
- **pdxtx2afp** The **pdxtx2afp** command initiated the transform.

-x *conversion_parameters*

Specifies all the conversion parameters that InfoPrint XT uses when it converts the Xerox job to AFP. The set of conversion parameters can contain more than one occurrence of a specific parameter. In this case, InfoPrint XT uses the value for the last occurrence of the parameter.

-w *directory*

Specifies the name of the InfoPrint XT working directory. Typically, this is **/var/pdxt**.

-t *type* Specifies the type of accounting information. This corresponds to the point in the transform process at which InfoPrint XT gathered the information. Valid types are:

AIOX2ABC

InfoPrint XT generates a single **AIOX2ABC** observation when it starts the data stream conversion process.

AIOX2AOC

When data stream conversion finishes for a report in the job, InfoPrint XT generates a single **AIOX2AOC** observation for the report.

AIOX2AEC

InfoPrint XT generates a single **AIOX2AEC** observation when data stream conversion finishes for the job.

Note: For specific information about the types of accounting information, see "Components of transform accounting observations" on page 46.

-l *level* Specifies the level of detailed accounting information. This corresponds to the data format. If InfoPrint XT changes the format of the detailed accounting information, it increments the level. This makes it possible for

aioxlxae to differentiate between records that were built with the original format and records built with a new format. The initial level is **0**.

-i *information*

Specifies the detailed accounting information for the three observation types, as described in "Components of transform accounting observations."

Note: The accounting application exit must ignore any command options passed to it that it does not recognize. InfoPrint XT can then add command options without impacting a customized accounting application exit.

Input and output data streams for the transform accounting application exit

InfoPrint XT communicates with the application exit using streams:

fd0 (STDIN)   InfoPrint XT does not pass any data to the standard input of the application exit.

fd1 (STDOUT) InfoPrint XT redirects the standard output from the application exit to **/dev/null**.

fd2 (STDERR) InfoPrint XT redirects the standard error from the application exit to **/dev/null**.

Components of transform accounting observations

The InfoPrint XT accounting observations consist of three distinct components:

1. **Type** indicates where in the transform process the observation took place.
2. **Level** is a number the indicates the version or the format of the observation information.
3. **Information** contains details specific to the observation type.

These accounting observations pertain to the conversion of the Xerox data stream, and not to the actual number of pages that print on the printer.

For the **AIOX2ABC** observation at level 0, the detailed information is always empty.

Table 4 shows the information that InfoPrint XT reports for the **AIOX2AOC** observation at level 0. InfoPrint XT reports this observation when the data stream conversion process finishes processing a report in a job. InfoPrint XT creates one observation for each report.

Table 4. AIOX2AOC accounting observation for level 0

Offset	Length	Description
0	10	Report number
10	6	Job number (HJOBNO)
16	16	Report name (HPRTNA)
32	6	Starting JDE
38	6	Starting JDL
44	10	Maximum copy count
54	31	Department name
85	10	Graphic images read
95	1	Collate (Y | N)
96	1	Duplex (Y | N)

Table 4. AIOX2AOC accounting observation for level 0 (continued)

97	1	Copy sensitive (Y | N)
98	10	Pages (impressions) converted
108	10	Graphic pages (impressions) converted
118	10	Simplex pages (impressions) converted
128	10	Duplex pages (impressions) converted
138	10	Lines converted

Table 5 shows the information that InfoPrint XT reports for the **AIOX2AEC** observation at level 0. InfoPrint XT reports this observation when the data stream conversion process finishes processing a job. InfoPrint XT creates one observation for each job.

Table 5. AIOX2AEC accounting observation for level 0

Offset	Length	Description
0	10	Return code from the data stream conversion process.

Customizing the sample transform accounting application exit

InfoPrint XT provides a sample of the transform accounting application exit in the **/usr/opt/pdxt/samples** directory. The directory contains **aioxlxae**, which is the compiled sample application exit, and **aioxlxae.c**, which is the source. The sample accounting application exit writes the accounting information to the **/var/pdxt/aioxlxae.log** file. For information about how to use or modify the sample application exit, read the prolog of the **aioxlxae.c** source file.

Setting up a transform begin application exit

InfoPrint XT provides a transform begin application exit, **aioxlxbe**. InfoPrint XT calls this application exit before it begins to read the Xerox input data stream. Use the transform begin application exit to:

- Do initialization work before the transform process.
- Log the transform start time.
- Prevent the transform from running under certain conditions.
- Cause InfoPrint XT to transform jobs sequentially instead of concurrently.

InfoPrint XT passes these options to the application exit:

-e *arguments*
> Specifies any application exit arguments that the **-e** transform directive specified. For more information, see page 37.

-j *globalID* | *jobname-jobID-n*
> If you have InfoPrint Manager installed, the **-j** option specifies the InfoPrint Manager global job identifier to the application exit. If you do not have InfoPrint Manager installed and you use the **pdxtx2afp** command, the job identifier that the **-j** option specifies is in the form *jobname-jobID-n*.

-p *passthru_values*
> Specifies the same values that the **-p** option for the job specifies, if it is present. For example, InfoPrint XT can use the InfoPrint Manager **destination-pass-through** attribute to set the **-p** job option, or you can set it with the **pdxtx2afp** command. See page 106.

-q *dest*

Specifies the destination for the job. If job processing occurs with InfoPrint Manager, this is the name of the InfoPrint Manager actual destination. Otherwise, it is the destination.

-s *submit_method*

Specifies the job-submission method. *submit_method* is:

- **infoprint** InfoPrint Manager initiated the transform.
- **pdxtx2afp** The **pdxtx2afp** command initiated the transform.

-x *conversion_parameters*

Specifies all the conversion parameters that InfoPrint XT uses when it converts the Xerox job to AFP. The set of conversion parameters can contain more than one occurrence of a specific parameter. In this case, InfoPrint XT uses the value for the last occurrence of the parameter.

-U *update_file*

If InfoPrint Manager passes the **%u** substitution control sequence to InfoPrint XT, the **-U** option specifies the name of the InfoPrint Manager status file for the InfoPrint Manager Configurable Transform Subsystem. The status file contains updates for certain attributes, and the transform begin application exit can use the InfoPrint Manager **transform_update** command to make changes to the file. For more information, see the InfoPrint Manager documentation. . "Bibliography" on page 247 lists InfoPrint Manager publications.

-w *directory*

Specifies the name of the InfoPrint XT working directory. Typically, this is **/var/pdxt**.

Note: The application exit must ignore any command options passed to it that it does not recognize. InfoPrint XT can then add command options without impacting the operation of a customized application exit.

Input and output data streams for the transform begin application exit

InfoPrint XT communicates with the application exit using streams:

fd0 (STDIN) InfoPrint XT does not pass any data to the standard input of the application exit.

fd1 (STDOUT) InfoPrint XT redirects the standard output from the application exit to **/dev/null**.

fd2 (STDERR) InfoPrint XT captures anything that is written to standard error. InfoPrint XT writes the information from standard error to the **aioxlxbe.lst** file in the working directory for the job.

Customizing the sample transform begin application exit

InfoPrint XT provides a sample of the transform begin application exit in the **/usr/opt/pdxt/samples** directory. The directory contains **aioxlxbe**, which is the compiled sample application exit, and **aioxlxbe.c**, which is the source. The sample application exit logs the transform start time for jobs. It appends this information to the **/var/pdxt/transform.log** file; it does not overwrite previous entries. In addition, it prevents the transform from running during user-specified times. For information about how to use or modify the sample application exit, read the prolog of the **aioxlxbe.c** source file.

Setting up a transform input application exit

InfoPrint XT provides a transform input application exit, **aioxlxie**. Use the application exit to modify the input data stream of the Xerox job before the data stream conversion process. The shipped **aioxlxie** transform input application exit allows you to convert several different input data formats into the format that InfoPrint XT expects for online Xerox jobs. The data stream conversion process converts the job to AFP.

InfoPrint XT passes these options to the application exit:

-e *arguments*

> Specifies any application exit arguments that were specified with the **-e** transform directive. For more information, see page 37.

> The syntax for the **aioxlxie** is:

> **aioxlxie -e [NONE] [RECFM = V | VB]**
>   **[BARR = SPOOL | TBV | S370 | METABAR2**
>   **| COMPUSET | METABAR3 | VM | VBM]**
>   **[CRLF = [a | e] [c] [t] [:i = a | e | s]]**

> **NONE** **aioxlxie** reads from standard input and writes to standard output with no changes to the data stream.

> The remaining parameters describe variable length formats of the input data stream:

> **RECFM=V**
>> unblocked, variable-length records; records are delimited by record descriptor words

> **RECFM=VB**
>> blocked, variable length records; blocks are delimited by block descriptor words; records are delimited by record descriptor words

> **BARR=SPOOL**
>> Barr Systems **SPOOL** format

> **BARR=TBV**
>> Barr Systems **S370** | **METABAR2** | **COMPUSET** or **METABAR3** format; **aioxlxie** automatically determines which format is used and invokes the appropriate exit function

> **BARR=S370**
>> Barr Systems **S370** format

> **BARR=METABAR2**
>> same as **BARR=S370**

> **BARR=COMPUSET**
>> same as **BARR=S370**

> **BARR=METABAR3**
>> Barr Systems **METABAR3** format

> **BARR=VM**
>> same as **RECFM=V**

> **BARR=VBM**
>> same as **RECFM=VB**

CRLF=[a | e] [c] [t] [:i=a | e | s]
> input records are delimited by ASCII carriage returns (x'0D')
> and line feeds (x'0A'):

> **c**   **aioxlxie** generates ANSI carriage control characters

> **a**   generated ANSI carriage control characters are ASCII

> **e**   generated ANSI carriage control characters are
>   EBCDIC; if you specify CRLF=c, this is the default

> **t**   *aioxlxie* translates the output from ASCII to EBCDIC

> **i**   input data type: if specified, this must be the last
>   CRLF flag; valid syntax and values are

> **:i = a** ASCII input data; this is the default

> **:i = e** EBCDIC input data

> **:i = s** iSeries SCS (SNA Character String) input data

METABAR and **METASPUR** formats are the same as **CRLF**.

-j *globalID* | *jobname-jobID-n*
> If you have InfoPrint Manager installed, the **-j** option specifies the InfoPrint
> Manager global job identifier to the application exit. If you do not have
> InfoPrint Manager installed and you use the **pdxtx2afp** command, the job
> identifier that the **-j** option specifies is in the form *jobname-jobID-n*.

-p *passthru_values*
> Specifies the same values that the **-p** option for the job specifies, if it is
> present. For example, InfoPrint XT can use the InfoPrint Manager
> **destination-pass-through** attribute to set the **-p** job option, or you can set
> it with the **pdxtx2afp** command. See page 106.

-q *dest*
> Specifies the destination for the job. If job processing occurs with InfoPrint
> Manager, this is the name of the InfoPrint Manager actual destination.
> Otherwise, it is the destination that the **-p** option for the job specifies.

-s *submit_method*
> Specifies the job-submission method. *submit_method* is:
> - **infoprint** InfoPrint Manager initiated the transform.
> - **pdxtx2afp** The **pdxtx2afp** command initiated the transform.

-U *update_file*
> If InfoPrint Manager passes the **%u** substitution control sequence to
> InfoPrint XT, the **-U** option specifies the name of the InfoPrint Manager
> status file for the InfoPrint Manager Configurable Transform Subsystem.
> The status file contains updates for certain attributes, and the transform
> input application exit can use the InfoPrint Manager command to make
> changes to the file. For more information, see the InfoPrint Manager
> documentation. "Bibliography" on page 247 lists InfoPrint Manager
> publications.

-x *conversion_parameters*
> Specifies all the conversion parameters that InfoPrint XT uses when it
> converts the Xerox job to AFP. The set of conversion parameters can
> contain more than one occurrence of a specific parameter. In this case,
> InfoPrint XT uses the value for the last occurrence of the parameter.

Note: The application exit must ignore any command options passed to it that it does not recognize. InfoPrint XT can then add command options without impacting a customized application exit.

Input and output data streams for the transform input application exit

InfoPrint XT passes data to the transform input application exit using streams, and the application exit passes data back to InfoPrint XT:

fd0 (STDIN) InfoPrint XT uses standard input to pass the original Xerox job to the transform input application exit.

fd1 (STDOUT) The transform input application exit must use standard output to pass the Xerox job back to InfoPrint XT. The Xerox job can be in its original format, or it might contain modifications that the application exit made. The function of the transform input application exit determines the format.

fd2 (STDERR) InfoPrint XT captures anything that is written to standard error. InfoPrint XT writes the information from standard error to the **aioxlxie.lst** file in the working directory for the job. If the conversion process fails to produce AFP output, InfoPrint XT includes the standard error information on the error sheet for the job.

Note: The transform input application exit must always use unbuffered input/output (I/O).

Customizing the sample transform input application exit

InfoPrint XT provides a sample of the transform input application exit in the **/usr/opt/pdxt/samples** directory. The directory contains **aioxlxie**, which is the compiled sample application exit, and **aioxlxie.c**, which is the source. The sample transform input application exit translates various record formats to the variable record format that InfoPrint XT expects. For information about how to use or modify the application exit, read the prolog of the **aioxlxie.c** source file.

Setting up a transform output application exit

InfoPrint XT provides a transform output application exit, **aioxlxoe**, which can modify the AFP output produced by the data stream conversion process. InfoPrint XT passes these options to the application exit:

-e *arguments*
Specifies any application exit arguments that were specified with the **-e** transform directive. For more information, see page 37.

-i *filename*
Specifies the file identifier of the file that contains the original Xerox input data. InfoPrint XT only passes this option if the input data passes to the **pdxtx2afp** command from a file. If the input data passes through standard input, InfoPrint XT does not pass the **-i** option to **aioxlxoe**.

-j *globalID* | *jobname-jobID-n*
If you have InfoPrint Manager installed, the **-j** option specifies the InfoPrint Manager global job identifier to the application exit. If you do not have InfoPrint Manager installed and you use the **pdxtx2afp** command, the job identifier that the **-j** option specifies is in the form *jobname-jobID-n*.

-p *passthru_values*
Specifies the same values that the **-p** option for the job specifies, if it is present. For example, InfoPrint XT can use the InfoPrint Manager

destination-pass-through attribute to set the **-p** job option, or you can set it with the **pdxtx2afp** command. See page 106.

-q *dest*

> Specifies the destination for the job. If job processing occurs with InfoPrint Manager this is the name of the InfoPrint Manager actual destination. Otherwise, it is the destination that the **-p** option for the job specifies.

-s *submit_method*

> Specifies the job-submission method. *submit_method* is:
> - **infoprint** InfoPrint Manager initiated the transform.
> - **pdxtx2afp** The **pdxtx2afp** command initiated the transform.

-U *update_file*

> If InfoPrint Manager passes the **%u** substitution control sequence to InfoPrint XT, the **-U** option specifies the name of the InfoPrint Manager status file for the InfoPrint Manager Configurable Transform Subsystem. The status file contains updates for certain attributes, and the transform output application exit can use the InfoPrint Manager **transform_update** command to make changes to the file. For more information, see the InfoPrint Manager documentation.

-x *conversion_parameters*

> Specifies all the conversion parameters that InfoPrint XT used when it converted the Xerox job to AFP. The set of conversion parameters can contain more than one occurrence of a specific parameter. In this case, InfoPrint XT uses the value for the last occurrence of the parameter.

Note: The application exit must ignore any command options passed to it that it does not recognize. InfoPrint XT can then add command options without impacting the operation of a customized application exit.

Input and output data streams for the transform output application exit

InfoPrint XT passes data to the transform output application exit using streams, and the application exit passes data back to InfoPrint XT:

fd0 (STDIN) InfoPrint XT uses standard input to pass the converted, AFP version of the Xerox job to the transform output application exit.

fd1 (STDOUT) The transform output application exit must use standard output to pass the AFP job back to InfoPrint XT. The AFP job can be in its original format, or it might contain modifications that the application exit made. The function of the application exit determines the format.

fd2 (STDERR) InfoPrint XT captures anything that is written to standard error. InfoPrint XT writes the information from standard error to the **aioxlxoe.lst** file in the working directory for the job. If the conversion process failed to produce AFP output, InfoPrint XT includes the standard error information on the error sheet for the job.

Note: The transform output application exit must always use unbuffered I/O.

Customizing the sample transform output application exit

InfoPrint XT provides a sample of the transform output application exit in the **/usr/opt/pdxt/samples** directory. This directory contains **aioxlxoe**, which is the compiled sample application exit, and **aioxlxoe.c**, which is the source. The sample

transform output application exit causes any pages that the job pulls from the alternate bin of the printer to produce an offset stack change. For information about how to use or modify the application exit, read the prolog of the **aioxlxoe.c** source file.

Setting up a transform end application exit

InfoPrint XT provides a transform end application exit, **aioxlxte**. InfoPrint XT calls this exit after it writes the AFP data stream from the conversion process. Use the transform end application exit to:

- Do work after the transform process.
- Log the transform completion time.
- Process messages from the transform.

InfoPrint XT passes these options to the application exit:

-# *pages*
> Specifies the number of page impressions that the transform process produced.

-c *return_code*
> Specifies the return code from the transform process.

-e *arguments*
> Specifies any application exit arguments that were specified with the **-e** transform directive. See "Using transform directives" on page 37.

-j *globalID* I *jobname-jobID-n*
> If you have InfoPrint Manager installed, the **-j** option specifies the InfoPrint Manager global job identifier to the application exit. If you do not have InfoPrint Manager installed and you use the **pdxtx2afp** command, the job identifier that the **-j** option specifies is in the form *jobname-jobID-n*.

-p *passthru_values*
> Specifies the same values that the **-p** option for the job specifies, if it is present. For example, InfoPrint XT can use the InfoPrint Manager **destination-pass-through** attribute to set the **-p** job option, or you can set it with the **pdxtx2afp** command. See page 106.

-q *dest*
> Specifies the destination for the job. If job processing occurs with InfoPrint Manager, this is the name of the InfoPrint Manager actual destination. Otherwise, it is the destination that the **-p** option for the job specifies.

-s *submit_method*
> Specifies the job-submission method. *submit_method* is:
> - **infoprint** InfoPrint Manager initiated the transform.
> - **pdxtx2afp** The **pdxtx2afp** command initiated the transform.

-U *update_file*
> If InfoPrint Manager passes the **%u** substitution control sequence to InfoPrint XT, the **-U** option specifies the name of the InfoPrint Manager status file for the InfoPrint Manager Configurable Transform Subsystem. The status file contains updates for certain attributes, and the transform end application exit can use the InfoPrint Manager **transform_update** command to make changes to the file. For more information, see the InfoPrint Manager documentation. "Bibliography" on page 247 lists InfoPrint Manager publications.

-x *conversion_parameters*

>Specifies all the conversion parameters that InfoPrint XT used when it converted the Xerox job to AFP. The set of conversion parameters can contain more than one occurrence of a specific parameter. In this case, InfoPrint XT uses the value for the last occurrence of the parameter.

-w *working_directory*

>Specifies the name of the InfoPrint XT working directory. Typically, this is **/var/pdxt**.

Input and output data streams for the transform end application exit

InfoPrint XT passes data to the transform end application exit using streams, and the application exit passes data back to InfoPrint XT:

fd0 (STDIN)   InfoPrint XT does not pass any data to standard input for the application exit.

fd1 (STDOUT) InfoPrint XT redirects the standard output from the application exit to **/dev/null**.

fd2 (STDERR) InfoPrint XT captures anything that is written to standard error. InfoPrint XT writes the information from standard error to the **aioxlxte.lst** file in the working directory for the job.

Customizing the sample transform end application exit

InfoPrint XT provides a sample of the transform end application exit in the **/usr/opt/pdxt/samples** directory. The directory contains **aioxlxte**, which is the compiled sample application exit, and **aioxlxte.c**, which is the source. The sample application exit logs the transform completion time for jobs that you convert with InfoPrint Manager or InfoPrint ProcessDirector. It appends this information to the **/var/pdxt/transform.log** file; it does not overwrite previous entries. In addition, it mails the transform messages to a user-specified e-mail address. For information about how to use or modify the application exit, read the prolog of the **aioxlxte.c** source file.

```
+ — — — — — — — End of Programming Interface information — — — — — - — +
```

Working with InfoPrint Manager-related application exits

```
+ — — — — — — — — — Programming Interface information — — — — — — — — — +
```

Other application exits are available that you can use with InfoPrint XT. These exits are specific to combined InfoPrint Manager and InfoPrint XT installations that use Download for z/OS, or that process OTEXT jobs. You must have InfoPrint Manager installed to use these exits.

Setting up the download data set application exit

InfoPrint XT provides the **aioxldse** download data set application exit, which can modify data sets that are sent from Download for z/OS. Use the download data set application exit to:

- Do job processing that is different from the processing that the InfoPrint XT **pdxtdownload** program does. For example, you can redirect a subset of jobs to a different printer driver.
- Process z/OS options specific to the data set. For example, when you use the download data set application exit with the download job application exit, the data

set application exit can change the CLASS of the job to the CLASS of the first data set in the job. See "Setting up the download job application exit" on page 56.

• Modify the data set before the **pdxtdownload** program does its processing.

InfoPrint XT passes these options to the application exit:

-e *arguments*   Passes any application exit arguments that the **-e** download directive specified. For more information, see page 131.

-p *portnumber*   Specifies the port number that the parent **mvsprsd** daemon used to receive the data set.

-q *value*   Specifies the value of the **-q** option that was used when the **mvsprsd** daemon process started.

-l *filename*   Specifies the name of the file that contains the data set that is being received.

-O *options*   Specifies the list of options that the **mvsprsd** daemon passes to the **pdxtdownload** program.

-P *pidnnnn*   Specifies the process identifier number of the parent **mvsprsd** daemon.

Input and output data streams for the download data set application exit

InfoPrint XT communicates with the application exit using streams:

fd0 (STDIN)   InfoPrint XT does not pass any data to the standard input of the application exit.

fd1 (STDOUT)   InfoPrint XT redirects standard output from the application exit to **/dev/null**.

fd2 (STDERR)   If the return code from the download data set application exit is a value other than **0** or **EREMOTE** (93), InfoPrint XT copies any standard error output from the application exit to the receiver log.

Return codes from the download data set application exit

Return codes from the download data set application exit are:

0   The processing done by the application exit was successful.

EREMOTE (93)
    The application exit has completed processing for the data set and the **pdxtdownload** program skips to the next data set.

    Note: In this case, the application exit must clean up the input file that contains the processed data set.

other   Any other return codes that are not in this list indicate that job processing failed.

Customizing the sample download data set application exit

InfoPrint XT provides a sample of the download data set application exit in the **/usr/opt/pdxt/samples** directory. This directory contains **aioxldse**, which is the compiled sample application exit, and **aioxldse.c**, which is the source. The sample download data stream application exit converts ASA/ANSI carriage controls to machine carriage controls. For information about how to use or modify the sample application exit, read the prolog of the **aioxldse.c** source file.

Setting up the download job application exit

InfoPrint XT provides the **aioxldje** download job application exit, which you can use for each job that is sent to InfoPrint Manager by the **pdxtdownload** program. Use the download job application exit to:

- Do job processing that is different from the processing that the InfoPrint XT **pdxtdownload** program does. For example, you can redirect a subset of jobs to a different printer driver.
- Modify or add InfoPrint Manager attributes for each job. For example, you can assign a specific InfoPrint Manager attribute based on the value of the CLASS or FORMS option passed from z/OS with the job.
- Convert the format of the data sets in the job before the **pdxtdownload** program submits the job to InfoPrint Manager.

InfoPrint XT passes these options to the application exit:

-e *arguments* Passes any application exit arguments that the **-e** download directive specified. See page 131.

-p *portnumber* Specifies the port number that the parent **mvsprsd** daemon used to receive the data set.

-q *value* Specifies the value of the **-q** option that was used when the **mvsprsd** daemon process started.

-O *options* Specifies the list of options that pass from z/OS to the **mvsprsd** daemon.

-P *pidnnnn* Specifies the process identifier number of the parent **mvsprsd** daemon.

-X *filename* Specifies the name of the file that contains the attributes, which the **pdxtdownload** program uses when it submits the job to InfoPrint Manager.

-Z *filename* Specifies the name of the file that contains the command options, which **pdxtdownload** uses when it submits the job to InfoPrint Manager.

Note: The **-X** and **-Z** command options correspond to the **-X** and **-Z** command options that **pdxtdownload** uses when it issues a **pdpr** command.

Output data streams for the download job application exit

InfoPrint XT communicates with the application exit using streams:

fd0 (STDIN) InfoPrint XT does not pass any data to the standard input of the application exit.

fd1 (STDOUT) InfoPrint XT redirects standard output from the download job application exit to **/dev/null**.

fd2 (STDERR) If the return code from the download job application exit is a value other than **0** or **EREMOTE** (93), InfoPrint XT copies any standard error output from the application exit to the receiver log.

Return codes from the download job application exit

Return codes from the download job application exit are:

0 The processing done by the application exit was successful.

EREMOTE (93)

> The application exit has completed processing for the job and the **pdxtdownload** program skips to the next job.

other   Any other return codes that are not in this list indicate that job processing failed.

Customizing the sample download job application exit

InfoPrint XT provides a sample of the download job application exit in the **/usr/opt/pdxt/samples** directory. This directory contains **aioxldje**, which is the compiled sample application exit, and **aioxldje.c**, which is the source. The sample download job application exit adds InfoPrint Manager attributes that are based on options from the **mvsprsd** daemon. For information about how to use or modify the application exit, read the prolog of the **aioxldje.c** source file.

Setting up a substitute InfoPrint Manager input data user-exit program

InfoPrint XT provides a substitute InfoPrint Manager input data user-exit program, named **aioxlide**. Use the InfoPrint XT substitute InfoPrint Manager input data user-exit program:

- In place of an input data user-exit program that you already use with InfoPrint Manager. Both the existing input data user-exit program and the InfoPrint XT OTEXT processor can coexist on the system.
- To conditionally bypass the InfoPrint XT OTEXT message window.

Function prototypes for the substitute InfoPrint Manager input data user-exit program

The function prototype for the substitute InfoPrint Manager input data user-exit program, which the InfoPrint Manager documentation calls the declaration, uses a different entry-point name. You must use **AIOXLXIE** as the entry point name:

```
void AIOXLXIE (INDATA_EXITDATA *ied)
```

You can also use an expanded function prototype. This lets you access information that is specific to InfoPrint XT:

```
void AIOXLXIE (INDATA_EXITDATA *ied,int *rc,FILE *estream)
```

ied   Points to the InfoPrint Manager INDATA_EXITDATA data structure. For more information, see *InfoPrint Manager for AIX: Procedures*, G550-1066.

rc   Points to a return code that **aioxlide** can set to influence InfoPrint XT processing.

estream

> Points to a stream that is open for writing to the **/var/pdxt/otext/pdxtotext.***adest***.lst** file. **aioxlide** can write messages to this file.

Return Codes

Return codes from the substitute InfoPrint Manager input data user-exit program are:

0   InfoPrint XT successfully processes the record.

EREMOTE (93)

> InfoPrint XT ignores the data record and does not display the OTEXT message window.

other   All other values for the return code are reserved.

Note: If the substitute InfoPrint Manager input data user-exit program sets **ied->JobCompletion** to anything other than **JOBC_OK**, InfoPrint XT ignores the data record.

Customizing the sample substitute InfoPrint Manager input data user-exit program

InfoPrint XT provides a sample of the substitute InfoPrint Manager input data user-exit program in the **/usr/opt/pdxt/samples** directory. This directory contains **aioxlide**, which is the compiled sample user-exit program, and **aioxlide.c**, which is the source. The sample substitute InfoPrint Manager input data user-exit program prevents InfoPrint XT from displaying OTEXT messages between 5:00 p.m. and 8:00 a.m. For information about how to use or modify the substitute InfoPrint Manager input data user-exit program, read the prolog of the **aioxlide.c** source file.

```
+ – – – – – – – End of Programming Interface information – – – – – - – +
```

Working with InfoPrint XT AFP structured fields

```
+ – – – – – – – – – – Programming Interface information – – – – – – – – – +
```

InfoPrint XT converts Xerox LCDS and metacode to AFP. The AFP that InfoPrint XT generates results in printed output that matches the original Xerox job. However, the content and form of the AFP can vary with different levels of InfoPrint XT code. The exception to this rule is a series of Mixed Object Document Content Architecture (MO:DCA) No Operation (NOP) structured fields that contain information about the job. You can use these data structures in your own application programs.

InfoPrint XT NOP structured field format

MO:DCA structured fields begin with a Structured Field Introducer that identifies the length and the function or type of the structured field. The Structured Field Data follows the Structured Field Introducer and contains the parameters that are specific to the type of structured field. Table 6 shows the format of the NOP Structured Field Identifier and Structured Field Data that InfoPrint XT inserts in the AFP data stream.

Table 6. InfoPrint XT NOP structured field format

Offset	Length	Value	Description
0	1	X'5A'	Carriage control. InfoPrint XT always uses **X'5A'** for the carriage control.
1	2	8-32767	Total length of the structured field. This does not include the carriage control byte.
3	3	X'D3EEEE'	MO:DCA No Operation structured field identifier.
6	1	X'00'	Flags. InfoPrint XT always uses **X'00'**.
7	2	X'0000'	Reserved bytes. InfoPrint XT always uses **X'0000'**.
9	8	AIOX2AFP	This parameter specifies that InfoPrint XT generated the NOP structured field. InfoPrint XT generates the parameter value in EBCDIC: **X'C1C9D6E7F2C1C6D7'**.
17	2	X'*nnnn*'	The level of the InfoPrint XT Structured Field Data. The current level is **X'0000'**.
19-*n*	*n*	variable	This is the actual data for the structured field. Its format depends on the level. See "InfoPrint XT AIOX2AFP NOP level X'0000' format" on page 59

InfoPrint XT AIOX2AFP NOP level X'0000' format

Table 7 shows the format of the InfoPrint XT AIOX2AFP level X'0000' NOP, which consists of four parts.

Table 7. InfoPrint XT NOP level X'0000' format

Offset	Length	Description
19	8	An EBCDIC keyword that describes the InfoPrint XT information. See "InfoPrint XT AIOX2AFP NOP keywords."
27	1	The flag byte.
28	2	The length of any associated data.
30-*n*	*n*	The data itself, if any.

InfoPrint XT AIOX2AFP NOP keywords

InfoPrint XT uses these keywords in the NOP structured fields that it generates:

CTLHEADR (X'C3E3D3C8C5C1C4D9')
InfoPrint XT generates one **CTLHEADR** record at the beginning of each job and uses it to identify whether the AFP data stream can contain XRXOTEXT records. The values for its flag byte at offset 27 are:

Bit 0: Specifies whether the data stream can contain XRXOTEXT records. **1** indicates that the data stream can contain XRXOTEXT records. **0** indicates that the data stream does not contain XRXOTEXT records.

Bit 1: Specifies whether the data stream can contain XRXCDJDE records. **1** indicates that the data stream can contain XRXCDJDE records. **0** indicates that the data stream does not contain XRXCDJDE records.

Bit 2: Reserved for future use.

Bit 3: Reserved for future use.

Bit 4: Reserved for future use.

Bit 5: Reserved for future use.

Bit 6: Reserved for future use.

Bit 7: Reserved for future use.

The **CTLHEADR** record has no associated data.

A **CTLHEADR** record that indicates the possible presence of NOPs generated from OTEXT DJDEs might contain:

```
----+----1----+----2----+----3
!..LÓÔ...AIOX2AFP..CTLHEADR...
501DEE000CCDEFCCD00CEDCCCCD800
A0D3EE00019672167003338514900D
```

The **CTLHEADR** record has no associated data.

A **CTLHEADR** record that indicates the possible presence of NOPs generated from C DJDEs might contain:

```
----+----1----+----2----+----3
!..LÔÔ...AIOX2AFP..CTLHEADR...
501DEE000CCDEFCCD00CEDCCCCD400
A0D3EE0001967216700333385149000
```

XRXOTEXT (X'E7D9E7D6E3C5E7E3')

InfoPrint XT generates one **XRXOTEXT** record for each OTEXT DJDE command that the job contains. The values for its flag byte at offset 27 are:

Bit 0: Specifies whether the OTEXT DJDE command suspends printing until an operator acknowledges the message. **1** indicates that the OTEXT DJDE command suspends printing.

Bit 1: Reserved for future use.

Bit 2: Reserved for future use.

Bit 3: Reserved for future use.

Bit 4: Reserved for future use.

Bit 5: Reserved for future use.

Bit 6: Reserved for future use.

Bit 7: Reserved for future use.

The data for the **XRXOTEXT** record is the text of the OTEXT message.

AFPRLEVL (X'C1C6D7D9D3C5E5D3')

InfoPrint XT generates one **AFPRLEVL** record at the beginning of each AFP font and each AFP page segment that it creates from Xerox font, image, and logo resources. InfoPrint XT does not use the flag byte at offset 27. The data length at offset 28 is always **X'0002'**. The data at offset 30 is currently **X'0000'**, which indicates the base level for AFP resources created by InfoPrint XT.

XRXHCINK (X'E7D9E7C8C3C9D5D2')

InfoPrint XT also converts Xerox images that contain highlight color controls to AFP page segments. InfoPrint XT generates an **XRXHCINK** record immediately following the AFP Begin Image Object (BIM) structured field for each image object in the page segment. It uses the data section of this record to identify the fully-qualified Xerox ink name for the Xerox sample that corresponds to the image object. InfoPrint XT does not use the flag byte at offset 27.

XRXCDJDE (X'E7D9E7C3C4D1C4C5')

InfoPrint XT generates one **XRXCDJDE** record for each C DJDE that the job contains. The values for its flag byte at offset 27 are:

Bit 0: Reserved for future use.

Bit 1: Reserved for future use.

Bit 2: Reserved for future use.

Bit 3: Reserved for future use.

Bit 4: Reserved for future use.

Bit 5: Reserved for future use.

Bit 6: Reserved for future use.

Bit 7: Reserved for future use.

The data for the **XRXCDJDE** record is the comment text in EBCDIC.

An **XRXCDJDE** record for comment text might contain:

```
----+----1----+----2----+----3----+----4----+----5----+
!..LÔÔ...AIOX2AFP..XRXCDJDE...Data copied from a C DJDE
503DEE000CCDEFCCD00EDECCDCC001C8A8489988848999484C4CDCC
A063EE0001967216700797341450094131036795406964010304145
```

+ − − − − − − − − End of Programming Interface information − − − − − − − +

Working with content-sensitive medium map names

+ − − − − − − − − − − Programming Interface information − − − − − − − − − − +

InfoPrint XT creates an AFP form definition for each Xerox job that it processes. It embeds the form definition in the AFP data stream that it generates from the Xerox data stream. Using the **xcsmmname** conversion parameter, you can instruct InfoPrint XT to use a specific naming convention for each medium map in the form definition. The format of the name defines the characteristics of the medium map. Table 8 describes the name format.

Table 8. Format of content-sensitive medium map names

Byte	Bit	Description
1	Not applicable	InfoPrint XT always uses **X'C6'**.
2 through 5	Not applicable	InfoPrint XT always uses **X'F0F0F0F0'**.
6		This byte consists of bit flags that represent medium map options.
	0	Reserved for future use.
	1	**1** means that the medium map specifies duplexed printing. **0** specifies simplexed printing.
	2	**1** means that the medium map specifies an offset stack change. **0** specifies no offset stack change.
	3	Specifies the format that the E1 keyword of the Medium Modification Control (MMC) structured field uses. **1** means that the medium map specifies format one[1] for the keyword. **0** specifies that the keyword uses format two[2].
7 through 8	Not applicable	These bytes specify the bin number in hexadecimal format.

[1] Bins are numbered 1 through four; bin 65 is the envelope bin, and bin 100 is the manual bin.

[2] Bins are numbered 1 through 255.

You might find content-sensitive medium maps names useful if you use an installation-specific application exit to make modifications to the AFP that InfoPrint XT generates. For information about the **xcsmmname** conversion parameter, see page 154.

+ − − − − − − − End of Programming Interface information − − − − − − − +

Chapter 4. Copying and loading Xerox resources

This chapter describes how to use InfoPrint XT for AIX to copy Xerox resources from tape to the AIX system and then load the Xerox resources. Load all the Xerox resources before you begin to process jobs with InfoPrint XT. For an overview of working with Xerox resources, see the **pdxt_resources** man page that InfoPrint XT provides. Enter this command:

```
man pdxt_resources
```

For overviews of the **pdxtrtape** command and the **pdxtloadres** command, see the **pdxtrtape** and **pdxtloadres** man pages.

Copying Xerox printer resources to a tape

You copy all the resources from each of your Xerox printers to tapes. You then use the InfoPrint XT **pdxtrtape** command to copy the resources from the tapes to a directory on the AIX system. The Xerox printer model determines the type of tape that you use. The **pdxtrtape** command can read from any type of tape device that the AIX system supports. If the AIX **tctl** command recognizes the tape device, you can use the **pdxtrtape** command to access the tape. This includes, but is not limited to, tape formats such as 4 mm, 8 mm, 1/4-inch (QIC), 1/2-inch 9-track, and 3490e.

To copy Xerox printer resources to a tape:

1. At the printer console, initialize the tape volume. Depending on the type of tape drive on the Xerox printer, enter one of these commands:

   ```
   TAPE VOLINIT,6250
   ```

   ```
   CARTRIDGE VOLINIT,6250
   ```

2. Copy the resources to the tape:
   - To write all the resources that are on the printer to tape, enter one of these commands:

     ```
     COPY TAPE WRITE LABEL ALL
     ```

     ```
     COPY CARTRIDGE WRITE LABEL ALL
     ```

   - To write all resources of a specific type to the tape, enter one of these commands:

     ```
     COPY TAPE WRITE LABEL *.xxx
     ```

     ```
     COPY CARTRIDGE WRITE LABEL *.xxx
     ```

     xxx is the resource type. For example, use **FNT** for Xerox font files.
   - To write a specific resource to tape, specify the exact resource name. For example:

     ```
     COPY TAPE WRITE LABEL DFAULT.JDL
     ```

     ```
     COPY CARTRIDGE WRITE LABEL DFAULT.JDL
     ```

   - To write resources using a blocking factor, enter one of these commands:

     ```
     COPY TAPE WRITE /BF:n LABEL ALL
     ```

     ```
     COPY CARTRIDGE WRITE /BF:n LABEL ALL
     ```

     n is an integer from 1 through 16. Using a blocking factor can increase the efficiency of storage on the tape.

3. Rewind the tape:

   ```
   TAPE REWIND
   ```

   ```
   CARTRIDGE REWIND
   ```

4. Print a listing of the resources on the tape:

   ```
   TAPE LIST,PRINT
   ```

   ```
   CARTRIDGE LIST,PRINT
   ```

5. List the resources on the printer:

   ```
   LIST/EX
   ```

   Compare the listing from the tape with the resources on the printer to make sure that you have all the resources on the tape.

6. Unload the tape from the tape drive on the printer:

   ```
   TAPE UNLOAD
   ```

   ```
   CARTRIDGE UNLOAD
   ```

Using the pdxtrtape command to list the resources on the resource tape

You use the InfoPrint XT **pdxtrtape** command to copy the resources from the tape that you made on the Xerox printer. The **pdxtrtape** command can also list the resources on the tape. In most cases, if you verified the contents of the tape with the resources on the Xerox printer, listing the resources again is not necessary. For information about listing the contents of the tape from the tape device on the AIX system, see the **pdxtrtape** man page that InfoPrint XT provides.

Using the pdxtrtape command to copy the resources from the resource tape

+ − − − − − − − − − Programming Interface information − − − − − − − − − +

The syntax for the copy function of the **pdxtrtape** command is:

pdxtrtape [**-f** copy | **list**] [**-T** **/dev/rmt***n* | **rmt***n* | *n*] **-n** '*pattern*' | **-l** *listfile*
          [**-c** 0 | *n*] [**-C** upper | lower] [**-o** *outdirectory*] [**-r** [no | yes]]
          [**-d** no | yes]

Note: These descriptions use the default values that InfoPrint XT supplies for the **pdxtrtape** options. You can change the default values using the **PDXTRTAPE_ARGS** environment variable. See "Controlling the default arguments when you copy Xerox resources from tape (PDXTRTAPE_ARGS)" on page 28.

[-c 0 | *n*]
          Specifies the number of resources to copy. You might find this option useful if theAIX system has limited hard disk drive space. You can copy a specific number of resources, load them with the **pdxtloadres** command, and then delete the resources that you copied with the **pdxtrtape** command. To read sequentially through the tape and to copy sets of resources, do not rewind the tape as part of the copy operation. The value of the **-T** option controls

whether the tape rewinds after the copy operation finishes. See page 66. The default for the **-c** option is **0**, which instructs InfoPrint XT to process all the resources on the tape.

[-C upper | lower]

Specifies whether InfoPrint XT uses uppercase or lowercase characters in the file names of the resources that it copies to the AIX system . This option also controls the case of the file names when you use the **-f list** option and value to list the resources. The default is that InfoPrint XT writes the file names in lowercase characters.

[-d no | yes]

Specifies whether the **pdxtrtape** command runs in problem determination mode. In problem determination mode, the command copies tape files that are not Xerox resources. It stores them in the destination directory. It uses a file name format of **tapefile.***n*. *n* is the corresponding tape file number. Specify **yes** to run in problem determination mode. The default is that the **pdxtrtape** command does not run in problem determination mode.

[-f copy | list]

Specifies whether InfoPrint XT copies the resources on the tape to a directory on the AIX system, or displays a list of the resources without copying them. The default is that InfoPrint XT copies the resources; you do not have to specify the **-f** option to use the default.

-l *listfile*

Specifies the resources to copy. *listfile* is either a file on the AIX system that contains the resource names, or it is a stream. Each resource name must be on a separate line. You can include blanks lines and comments in the list. Lines that start with a number sign, **#**, are comments.

If you specify the list of resources in a stream, use one of these formats:

-l - If you use a dash as the value for the **-l** option, InfoPrint XT reads the resource names from standard input.

-l fd:*n* If you use the **fd:***n* format, InfoPrint XT reads the resource names from the file descriptor that you specify. *n* is the file descriptor number; for example **fd:7**.

If you specify the **-l** option, you cannot specify the **-n** option. You must specify one of these options. If you do not, InfoPrint XT issues an error message.

-n '*pattern***'**

Specifies the resources to copy. You can use pattern-matching strings to specify groups of resources. Make sure that you enclose the pattern in single-quotation marks and that you enter the pattern in lowercase characters. You can specify more than one pair of **-n** options and patterns, up to a maximum of 50. These are examples of how to specify the **-n** option:

- To specify all font resources:

  `-n '*.fnt'`

- To specify all resources, of all types, that begin with the letter **a**:

  `-n 'a*'`

- To specify all images and all logos:

  `-n '*.img' -n'*.lgo'`

If you specify the **-n** option, you cannot specify the **-l** option. You must specify one of these options. If you do not, InfoPrint XT issues an error message.

[-o *outdirectory* **]**
Specifies the directory on the AIX system in which InfoPrint XT copies the resources. The directory that you specify must exist on the AIX system; InfoPrint XT does not create the directory for you. If you do not specify the **-o** option, InfoPrint XT copies the resources to the current directory.

[-r [no | yes]]
Specifies whether InfoPrint XT replaces resources that already exist in the current directory or in the directory that the **-o** option specifies. If you specify the **-r** option with a value of **yes**, or without a value, InfoPrint XT replaces existing resources. The default is that InfoPrint XT does not replace existing resources.

[-T /dev/rmt*n* **| rmt***n* **|** *n* **]**
Specifies the tape device to read. The device number, *n*, is from 0 through 255. You can also include an extension with the device number, which controls how InfoPrint XT accesses the tape. Table 9 shows how to specify the extension with the **/dev/rmt***n* format; you can also specify the extension with either of the other two device-name formats shown for the **-T** syntax.

Table 9. Tape device rewind, retension, and density settings

Value	Rewind on close	Retension on open	Density setting
/dev/rmt*n*	Yes	No	1
/dev/rmt*n***.1**	No	No	1
/dev/rmt*n***.2**	Yes	Yes	1
/dev/rmt*n***.3**	No	Yes	1
/dev/rmt*n***.4**	Yes	No	2
/dev/rmt*n***.5**	No	No	2
/dev/rmt*n***.6**	Yes	Yes	2
/dev/rmt*n***.7**	No	Yes	2

If you do not specify the **-T** option, InfoPrint XT uses the value of the **TAPE** environment variable to determine the tape device. If the **TAPE** environment variable has no setting, InfoPrint XT reads from **/dev/rmt0.1**.

Streams used by the pdxtrtape command

The **pdxtrtape** command uses some file descriptors while it copies resources and ignores others:

fd0 (STDIN) InfoPrint XT does not use file descriptor zero.

fd1 (STDOUT) InfoPrint XT does not use file descriptor one.

fd2 (STDERR) InfoPrint XT writes messages to file descriptor two.

fd3 InfoPrint XT writes a list of resources that it successfully processed with the **pdxtrtape** command to file descriptor three. InfoPrint XT writes each resource name on its own line. If you specify a directory with the **-o** option, the directory to which InfoPrint XT copied the resource precedes the resource name. InfoPrint XT does not include directory information if you copy the resources to the current directory.

Return codes from the pdxtrtape command

Return codes from the **pdxtrtape** command have these meanings:

0
: The command successfully copied the resources from the tape to the destination directory on the AIX system.

EINVAL (22)
: An error exists with one of the command options.

E2BIG (7)
: The command found an unknown argument or command option, or too many command options.

ENOATTR (112)
: The command found an option without a value, or determined that a required option is missing.

ENOENT (2)
: The file that the **-l** option specified did not contain any valid file names, or the pattern that the **-n** option specified did not match any valid resources.

ENODEV (19)
: The value for the **-T** option is not a tape device.

other
: Any other return codes that are not in this list are return codes from C functions. See "Return code numbers" on page 184.

+ — — — — — — — End of Programming Interface information — — — — — - - +

Restrictions

Do not enter more than one **pdxtrtape** command to copy resources to the same destination directory at the same time. If you do, unpredictable results can occur.

Examples: pdxtrtape command

These examples show how you can use the **pdxtrtape** command to copy resources to directories on the AIX system:

- To copy five resources from the **/dev/rmt1** device, without retensioning or rewinding the tape:

```
pdxtrtape -T /dev/rmt1.1 -n '*' -c 5
```

This command copies the resources to the current directory.

- To copy all font resources to the **/home/resources** directory, and to replace any font resources that already exist in that directory:

```
pdxtrtape -T /dev/rmt1 -n '*.fnt' -r yes -o /home/resources
```

This command rewinds the tape after the copy operation finishes.

- To copy all the resources that the **/home/resources/reslist** file specifies to the current directory:

```
pdxtrtape -T /dev/rmt1 -l /home/resources/reslist
```

Using the tctl command for tape functions

There might be occasions when it is useful to use the **tctl** command to position the resource tape. For example, you did not instruct the **pdxtrtape** command to rewind the tape and you now need to rewind it. Or, you need to position the tape at a specific file location on the tape.

For more information about using the **tctl** command, see the **tctl** man page. If you do not have the man pages installed, you can also access the information using the IBM @server pSeries information center:

Using the pdxtrtape command to make a resource tape

You can create a resource tape with the **pdxtrtape** command. For example, you no longer have the original tape that you made on the Xerox printer and you want to update the resources on a remote AIX system. You want the remote system to have the same set of resources as the system to which you copied the resources from the original Xerox tape.

For more information about making a tape, see the **pdxtrtape** man page that InfoPrint XT provides.

Understanding the load process for Xerox resources

In the Xerox environment, all printable and non-printable Xerox resources are on the Xerox printer. When you print converted Xerox jobs on InfoPrint Solutions Company printers, the printable Xerox resources must be available in the Advanced Function Presentation format on the InfoPrint XT system. InfoPrint XT must also have access to the information from the non-printable resources. You use the InfoPrint XT *load* process to create the AFP versions of printable Xerox resources and to gather information about the non-printable resources.

InfoPrint XT resource directories for the load process

Several directory-related actions occur when you use InfoPrint XT to load Xerox resources:

AFP resource directory
> InfoPrint XT creates a directory for the AFP versions of Xerox font, image, logo, and form resources. You control the directory that InfoPrint XT creates when you enter the **pdxtloadres** command. The AFP resource directory is one of these:
> * **/var/pdxt/resources/common**. This is the common InfoPrint XT resource directory.
> * **/var/pdxt/resources/***resgrp*. You can specify an InfoPrint XT directory for a specific group of resources. *resgrp* is a name you choose.
> * */OtherDirectory*. You can also specify a separate, existing directory on the AIX system

Metrics directory
> For each type of Xerox resource that you load, InfoPrint XT creates a related metrics file. This file contains information about the resource that InfoPrint XT uses to reduce processing time when it converts a Xerox job that uses the resource. The directory in which InfoPrint XT writes the metrics file depends on the load options. The metrics directory is one of these:
> * **/var/pdxt/resources/common/metrics**
> * **/var/pdxt/resources/***resgrp***/metrics**
> * **/***OtherDirectory***/metrics**

Xerox resource directory
> For all resources that successfully load, InfoPrint XT copies the original Xerox resource to the system. The directory in which InfoPrint XT writes the Xerox resources depends on the load options. The Xerox resource directory is one of these:

- **/var/pdxt/resources/common/xrxres**
- **/var/pdxt/resources/**_resgrp_**/xrxres**
- **/**_OtherDirectory_**/xrxres**

Note: Use these directory definitions when InfoPrint XT procedures direct you to do actions that involve the AFP resource directory, the metrics directory, or the Xerox resource directory.

Types of Xerox resources that you can load

Table 10 contains information about the Xerox resources that you copy to the AIX system , and the files that InfoPrint XT creates when you load the resources:

- Column one lists the types of Xerox resources and the valid file extension for each type. The actual names of Xerox resources are up to six characters. Xerox resource names can also contain numbers, and dollar signs ($). For example, **p0612c.fnt** is a common Xerox font.
- Column two specifies the prefixes for the AFP files that InfoPrint XT generates from printable Xerox resources. InfoPrint XT generates a single AFP file for each form, image, and logo. It generates three AFP files for each single-byte font; a coded font file, a character set file, and a code page file. If the entry in this column is empty, the associated Xerox resource is a non-printable resource.
- Column three specifies the extensions of the metrics files that InfoPrint XT generates from the Xerox resources.

Table 10. Xerox resource extensions, AFP prefixes, and metrics extensions

Xerox resource type and extension	Resulting InfoPrint XT AFP prefixes	Resulting InfoPrint XT metrics extensions
Cluster Library - **.lib**		**.alb**
Command - **.cmd**		**.acm**
Copy Modification Entry - **.cme**		**.ace**
Data - **.dat**		**.adt**
Font - **.fnt**	**C0**, **T1**, **X0** [1]	**.afn (single-byte)** **.adm (double-byte)**
Form - **.frm**	**O1**	**.afr**
Forms Source Library - **.fsl**		**.afs**
Image - **.img**	**SI**	**.aim**
Ink Source Library - **.isl**		**.ais**
Job Descriptor Library - **.jdl**		**.ajd**
Job Source Library - **.jsl**		**.ajs**
Logo - **.lgo**	**SL**	**.alg**
Miscellaneous - **.msc**		**.ams**
Page Descriptor Entry - **.pde**		**.apd**
Patch - **.pch**		**.apc**
Stockset - **.stk**		**.ast**
Routing Text - **.tst**		**.ats**
Temporary - **.tmp**		**.atp**

[1] Not generated for double-byte character set fonts.

Note: The alphabetic characters in Xerox resource names are lowercase on the AIX system when you use the InfoPrint XT **pdxtrtape** command and its default **-C** value to copy the resources. However, some methods of transferring resources to the AIX system can change the case. For example, the DOS utilities for AIX change file names to uppercase. InfoPrint XT ignores the case of Xerox resource names. If you have several copies of the same resource and they only differ by the case of the name, InfoPrint XT uses the first one that it finds. The resource that it finds first can vary and depends on how you invoked the task that processes the resource. To determine which file InfoPrint XT processed, review its information in the **pdxtloadres.log** file. For more information about this file, see "Information files generated by InfoPrint XT during resource tasks" on page 71.

Loading Xerox double-byte character set (DBCS) and EBCDIC fonts

The InfoPrint XT process that loads Xerox DBCS or EBCDIC fonts is different from the process that it uses for single-byte fonts. InfoPrint XT does not generate the AFP character sets, coded fonts, and code pages for the Xerox DBCS or EBCDIC fonts. You must provide a set of double-byte AFP fonts that you use in place of the Xerox fonts. These fonts must be AFP outline fonts that fully conform to the MO:DCA FOCA standards; see *Data Stream and Object Architectures: Font Object Content Architecture (FOCA) Reference*, S544-3285. You copy the AFP outline fonts to the appropriate AFP resource directory before you actually load the Xerox DBCS or EBCDIC fonts.

During the load process, InfoPrint XT maps each Xerox DBCS or EBCDIC font to an AFP coded font. It uses an AFP coded font name of **XZ***xxxxxx*. *xxxxxx* is the name of the corresponding Xerox DBCS or EBCDIC fonts. For example, if you load the **HST25P.FNT** Xerox DBCS or EBCDIC font, InfoPrint XT maps it to the **XZHST25P** AFP coded font. To use a different AFP coded font name, you must create a manual correlation table that maps the Xerox DBCS or EBCDIC font name to the AFP coded font that you want to use. See "Creating manual correlation entries for double-byte Xerox fonts" on page 84 and "Creating manual correlation entries for Xerox EBCDIC fonts" on page 84.

To load Xerox DBCS or EBCDIC fonts:

1. Most Xerox DBCS and EBCDIC fonts contains sets of user-defined characters. Make sure that the AFP outline fonts that InfoPrint XT will use for the Xerox DBCS or EBCDIC fonts contain the corresponding sets of user-defined characters. InfoPrint Solutions Company offers a separately-priced InfoPrint XT feature to make modifications to the AFP outline fonts.

2. For InfoPrint XT installations that use InfoPrint Manager or InfoPrint ProcessDirector, the installation also requires modified global resource identifier (GRID) files. Make sure that the modified GRID files are installed in the correct directory for the print management program. The separately-priced InfoPrint XT feature also includes services to modify the GRID files.

3. Generate a resource group by loading all JDL, CME, PDE, STK, and TST resources first. You can use the common group or you can specify a group name that you choose.

4. Copy the AFP DBCS or EBCDIC outline font files to the AFP resource directory for the resource group.

5. If the AFP coded font name does not match the **XZ***xxxxxx* naming convention, you must create a manual correlation table.

6. Use the **pdxtloadres** command to load the Xerox DBCS or EBCDIC fonts. See "Using the pdxtloadres command to load Xerox resources" on page 73.

Loading order for Xerox resources by resource type

You can load a single Xerox resource or you can load groups of Xerox resources. For groups, you can load resources that are all the same type, such as all fonts, or resources of different types. When you mix the types of resources, InfoPrint XT loads them in a specific order. This is because some resources, such as forms, can require you to load other resources first. Xerox form resources often require fonts. The information returned from the load process lists the order.

Information files generated by InfoPrint XT during resource tasks

InfoPrint XT creates files in which it stores information about resource tasks, such as loading and deleting resources. The next topics describe the various files using the common resource group and its AFP resource directory. If you load the resources in a different directory, substitute that AFP resource directory name:

/var/pdxt/resources/common/pdxtloadres.log
>   This file contains information about each time the **pdxtloadres** command runs. InfoPrint XT writes new entries at the end of the file. The information for each invocation of the **pdxtloadres** command includes:
>
>   - The time when the command started.
>   - The options and values that were specified with the **pdxtloadres** command.
>   - The resources that InfoPrint XT processed or tried to process. The entry for each resource includes the return code from resource processing. If a failure occurred, the entry includes the name of the processing step that failed. The entry also lists the path to the Xerox resource.
>   - The time when the command ended.
>   - The return code from the **pdxtloadres** command. If any of the resource entries has a non-zero return code, the command returns a non-zero return code.
>
>   These are examples of **pdxtloadres.log** entries:
>
> ```
> 2009-11-11 12:16:13 MST pdxtloadres -r -n *fnt
>     tab.sft            0
>     tab.aft            0
>     ano1l.img         16 XRHDR    /tmp/waite/resources/ano1l.img
>     po812p.fnt         0          /tmp/waite/resources/po812p.fnt
>     rk26bp.fnt        16 FIXFNT   /tmp/waite/resources/rk26bp.fnt
>     ra128p.fnt         0          /tmp/waite/resources/ra128p.fnt
> 2009-11-11 12:16:17 MST pdxtloadres (16)
>
> 2009-11-11 15:23:27 MST pdxtloadres -f delete -np0612c.fnt -g payroll
>     p0612c.fnt         0 DELETED
>     tab.sft            0
>     tab.aft            0
> 2009-11-11 15:23:28 MST pdxtloadres (0)
> ```
>
>   **Notes:**
>
>   1. For convenience, InfoPrint XT provides a link to this file in the **/var/pdxt/resources/common/pdxtloadres** directory.
>   2. InfoPrint XT only records information in the log if the command tried to process a resource. For example, if you use the wrong command option or value, **pdxtloadres** stops immediately. It does not try to process any resources.

/var/pdxt/resources/common/pdxtloadres.lst
>   This file contains the messages that InfoPrint XT wrote to standard error for

the last time the **pdxtloadres** command ran. You typically direct standard error to the console. InfoPrint XT overwrites the information in this file each time the command runs.

> **Note:** For convenience, InfoPrint XT provides a link to this file in the **/var/pdxt/resources/common/pdxtloadres** directory.

/var/pdxt/resources/common/pdxtloadres.rty
> InfoPrint XT creates a retry file if it did not load all the resources that the **pdxtloadres** command specified the last time the command ran. It writes the path and file name for each resource that failed on a separate line in the **pdxtloadres.rty** file. You can correct the problems that InfoPrint XT reported and then try to load the resource or resources again. When you enter the **pdxtloadres** command, include the **-l** option with the command but do not enter a value for that option. This causes InfoPrint XT to use the information in the **pdxtloadres.rty** file to determine the resources to load.
>
> **Note:** InfoPrint XT overwrites the information in the **pdxtloadres.rty** file with each time the **pdxtloadres** command runs.

Error information for resources that fail to load

InfoPrint XT also stores information about the individual resources that fail in the working directory that it uses during the resource load process. Whether you load resources in the common resource group, a specific resource directory, or an existing directory determines what InfoPrint XT uses as the working directory. The working directory for the resource load process is one of these:

- **/var/pdxt/resources/common/pdxtloadres**
- **/var/pdxt/resources/**resgrp**/pdxtloadres**
- **/**OtherDirectory**/pdxtloadres**

This list describes the various files in the working directory:

resname.ext**.lst**
> Contains information that InfoPrint XT generates while it converts the resource. resname.ext is the actual name of the resource. If the resource load process failed, InfoPrint XT includes error information in this file.

xxx**_corr.lst**
> Contains information that InfoPrint XT generates while it builds the correlation table entry for one or more resources of a specific type. xxx specifies the type of Xerox resource.

xxx**_metr.lst**
> Contains information that InfoPrint XT generates while it creates the metrics files for one or more resources of a specific type. xxx specifies the type of Xerox resource. The file includes error messages about any resource for which InfoPrint XT did not generate a metrics file.

xxx**_metr.xrl**
> InfoPrint XT generates this file when failures occur while it tries to create metrics files for a specific type of resource. xxx is the extension of the resource type, such as **cme** or **fnt**. The file lists those resources that InfoPrint XT processed successfully.

resname.**a**xx.**failed**
> Contains output that InfoPrint XT generates when a failure occurs while it tries to create a metrics file. resname is the actual name of the resource.

axx is the extension of the metrics file for the resource. For example, **ajd** is the extension of a metrics file for a Xerox JDL resource. You can ignore the information in this file.

Notes:

1. InfoPrint XT deletes existing files in the **pdxtloadres** subdirectory and writes new information each time that you run the **pdxtloadres** command. It does not save any of the information for the previous time the command ran.

2. InfoPrint XT provides a method to display the information from these files so that you do not have to go to the working directory to access the files. See the description of the **-e** command option for the **pdxtloadres** command in "Using the pdxtloadres command to load Xerox resources."

Using the pdxtloadres command to load Xerox resources

You use the InfoPrint XT **pdxtloadres** command to load all the Xerox resources on the AIX system and to create the AFP versions of printable resources. The command provides options that you can use to control how and where InfoPrint XT creates the converted resource files. You can also use the **pdxtloadres** command to delete resources. The AIX user name from which you run the **pdxtloadres** command must be a member of the AIX **printq** group.

+ – – – – – – – – – Programming Interface information – – – – – – – – – +

The syntax of the **pdxtloadres** command is:

pdxtloadres [**-f** load] [**-a** ioca_rt | no_ioca_rt] [**-b** spcprt | spcrmi]
      [**-c** xerox | grayscale | [lp]:[mp]:[hp]] [**-d** auto | all | none]
      [**-e** listings | nolistings]
      [[**-g** common | resgrp] | **-o** OtherDirectory]
      [**-i** | **-r**] [**-l** listfile | **-n** pattern] [**-m** letter | medium]
      [**-M** none | all | xerox | xerox+font1:font2:fontn |
          xerox-font1:font2:fontn | font1:font2:fontn]
      [**-p** 300_1 | 300_2]
      [**-s** none | word | trnw | char]

pdxtloadres [**-f** delete **-l** listfile | **-n** pattern' [**-g** resgrp | **-o** OtherDirectory]
      [**-e** listings | nolistings]

Note: These descriptions use the default values that InfoPrint XT supplies for the **pdxtloadres** options. You can change the default values using the **PDXTLOADRES_ARGS** environment variable. See "Controlling the default arguments when you load resources (PDXTLOADRES_ARGS)" on page 28.

[-a ioca_rt | no_ioca_rt]
      Specifies whether InfoPrint XT uses the IOCA replicate-and-trim function for the shading patterns in data streams and forms. Valid values are:

      ioca_rt
          InfoPrint XT uses the IOCA replicate-and-trim function. This is the default.

      no_ioca_rt
          InfoPrint XT does not use the IOCA replicate-and-trim function.

Notes:

1. If one or more of your printers do not support the IOCA replicate-and-trim function, specify **no_ioca_rt**.
2. You can further refine the shading patterns with the **-p** option. See page 80.

[-b spcprt | spcrmi]

Controls how InfoPrint XT interprets spacing characters in a Xerox font during the load process. Valid values are:

spcprt

InfoPrint XT interprets spacing characters in the font as Presentation Text Object Content Architecture text-string characters. This is the default.

spcrmi

InfoPrint XT interprets spacing characters in the font as Relative Move Inline structured fields.

Notes:

1. Restrictions apply when you use the **-b** option. See page 7.
2. If you use this option to load specific fonts, reload any forms that use those fonts.
3. You can also change how InfoPrint XT interprets spacing characters in Xerox fonts when FILE DJDEs in a job specify the fonts. See the **xspcrmi** conversion parameter on page 163.

[-c xerox | grayscale | [*lp*]:[*mp*]:[*hp*]]

Controls how InfoPrint XT interprets Xerox shading when it loads FRMs. Valid values are:

xerox InfoPrint XT emulates Xerox shading and produces raster dot patterns in the AFP that it generates. This is the default.

grayscale

InfoPrint XT uses Logical Page and Object Area Coloring to substitute grayscale for the standard shading characters in FRMs. It uses default percentages of grayscale coverage for the levels of Xerox shading:

LIGHT Five percent (5%) coverage.

MEDIUM

Ten percent (10%) coverage.

HEAVY

Fifteen percent (15%) coverage.

[*lp*]:[*mp*]:[*hp*]

InfoPrint XT substitutes grayscale for the Xerox shading and uses coverage percentages you specify. For each position in the value, you can specify an integer from **0** through **100**:

lp The coverage percentage that InfoPrint XT uses for LIGHT shading.

mp The coverage percentage that InfoPrint XT uses for MEDIUM shading.

hp The coverage percentage that InfoPrint XT uses for HEAVY shading.

Do not include the brackets in the value; the brackets indicate each position in the value is optional. Include the colons (**:**) between the positions of the value. If you omit any position, InfoPrint XT uses the default percentage for LIGHT, MEDIUM, or HEAVY. These are examples of values you can specify:

-c :8:16
> InfoPrint XT uses 5% coverage for LIGHT shading, 8% for MEDIUM, and 16% for HEAVY.

-c 3 InfoPrint XT uses 3% coverage for LIGHT shading, 10% for MEDIUM, and 15% for HEAVY.

-c :11 InfoPrint XT uses 5% coverage for LIGHT shading, 11% for MEDIUM, and 15% for HEAVY.

-c ::14 InfoPrint XT uses 5% coverage for LIGHT shading, 10% for MEDIUM, and 14% for HEAVY.

-c 4:9:12
> InfoPrint XT uses 4% coverage for LIGHT shading, 9% for MEDIUM, and 12% for HEAVY.

> **Note:** Restrictions apply when you use the **-c** option. See page 5.

[-d <u>auto</u> | all | none]
> Controls how InfoPrint XT processes encrypted Xerox fonts. Valid values are:

<u>auto</u> InfoPrint XT automatically determines whether each font requires decryption. This is the default.

all InfoPrint XT runs its decryption utility for every font that it processes. You can use this option to force InfoPrint XT to decrypt individual fonts or groups of fonts when it cannot automatically detect that the fonts are encrypted.

none InfoPrint XT does not run its decryption utility for any of the fonts that it processes. You can use this option to prevent InfoPrint XT from attempting to decrypt individual fonts or groups of fonts when it cannot automatically detect that the fonts are not encrypted.

[-e listings | <u>nolistings</u>]
> Controls whether InfoPrint XT writes the listings from the individual steps of the resource-load or resource-delete process to standard error. These listings can contain error information. Valid values are:

listings
> InfoPrint XT writes the listings to standard error.

<u>nolistings</u>
> InfoPrint XT does not write the listings to standard error. This is the default.

[-f <u>load</u> | delete]
> Specifies whether InfoPrint XT loads or deletes Xerox resources. The default is that InfoPrint XT loads resources. Valid values are:

<u>load</u> InfoPrint XT loads Xerox resources. This is the default.

delete InfoPrint XT deletes Xerox resources. InfoPrint XT deletes the information that it generated during the load process and deletes the original Xerox resources.

Note: If the AFP resource directory contains DBCS and EBCDIC fonts, InfoPrint XT does not delete them when it deletes the Xerox DBCS and EBCDIC font resources.

[-g common | ** *resgrp* **]
Specifies a resource group name that InfoPrint XT uses to build subdirectories in the **/var/pdxt/resources** directory. InfoPrint XT uses these subdirectories to store the converted AFP resources, the metrics files, and copies of the original Xerox resource files. Valid values are:

common
InfoPrint XT builds subdirectories in **/var/pdxt/resources/ common**. This is the default.

resgrp InfoPrint XT builds subdirectories in **/var/pdxt/resources/** *resgrp*. *resgrp* is a name that you choose. The name must be alphanumeric and it cannot contain any special characters.

If you specify the **-g** option, you cannot specify the **-o** option. If you do not specify either **-g** or **-o**, the **pdxtloadres** command uses the common resource group, which is **/var/pdxt/resources/common**.

[-i] For a specific Xerox resource that is already loaded, InfoPrint XT reconverts the resource. If the Xerox resource is a printable resource, InfoPrint XT also rebuilds the AFP file or files. InfoPrint XT uses the original version of the Xerox resource that it copied to the Xerox resource directory when you originally converted the resource. You might find this option useful for reconverting a resource to use a different medium or a different shading pattern.

If you specify the **-i** option, you cannot specify the **-r** option.

Note: If you specify a Xerox resource that is not currently loaded, InfoPrint XT issues an error message when you specify the **-i** option.

[-r] For a specific Xerox resource that is already loaded, InfoPrint XT loads a new version of the Xerox resource. If the Xerox resource is a printable resource, InfoPrint XT also rebuilds the AFP file or files. If the load process is successful, InfoPrint XT replaces the original copy of the Xerox resource in the **xrxres** subdirectory.

If you specify the **-r** option, you cannot specify the **-i** option.

[-l ** *listfile* **] Specifies the resources that you want InfoPrint XT to load or delete. *listfile* is either a file on the AIX system that contains the resource names or it is a stream. Each resource that the file lists must be on a separate line. If you specify the list of resources in a stream, use one of these formats:

-l - If you use a dash as the value for the **-l** option, InfoPrint XT reads the resource names from standard input.

-l fd:*n* If you use the **fd:***n* format, InfoPrint XT reads the resource

names from the file descriptor that you specify. *n* is the file descriptor number; for example **fd:7**.

If you specify the **-l** option, you cannot specify the **-n** option. If you do not specify either **-n** or **-l**, the **pdxtloadres** command updates correlation tables, as needed.

Notes:

1. You cannot use wildcard characters in the entries in the list file.

2. If you are loading resources, you can specify Xerox resources with names that follow IBM Infoprint XT Extender for z/OS naming conventions. See Table 11 on page 79.

3. If you are loading resources, you can specify the **-l** option without a value. InfoPrint XT tries to load resources using the retry file. See page 72.

4. If you use both the **-l** option and the **-i** option, do not include path information with the resource names. Only specify the resource names in lowercase characters.

5. If you are deleting resources, you must specify either the **-l** option or the **-n** option. The resource names that you specify for deletion must be lowercase. You cannot specify resource names that follow IBM Infoprint XT Extender for z/OS naming conventions.

[-m letter | *medium* **]**

Specifies the medium (paper) size that InfoPrint XT uses when it loads Xerox forms. The **letter** paper size is the default that InfoPrint XT uses when it converts form resources.

Valid paper sizes are:
- **folio**
- **ledger**
- **legal**
- **letter**
- **A3**
- **A4**
- **A4LT**
- **B4**

Notes:

1. InfoPrint XT only uses the paper size that you specify if the Xerox resource does not explicitly define the paper size. Any value in the resource overrides the value of the **-m** option.

2. **A4LT** is a custom paper size that is 8.5 inches by 11.69 inches, or 216 mm by 297 mm.

[-M none | all | xerox | xerox+*font1:font2:fontn* **| xerox-***font1:font2:fontn* **|** *font1:font2:fontn* **]**

Specifies whether InfoPrint XT generates AFP magnetic character ink recognition (MICR) fonts when it loads Xerox fonts. You can specify one of these values:

none   InfoPrint XT does not generate AFP MICR fonts for any of the Xerox fonts that it loads. This is the default.

all InfoPrint XT generates AFP MICR fonts for all the Xerox fonts that it loads.

xerox InfoPrint XT generates AFP MICR fonts for all Xerox fonts whose names begin with these standard prefixes for MICR font names:

- **E13B**
- **E14B**
- **CMC7**

For example, InfoPrint XT generates AFP MICR fonts for these Xerox fonts: **E13BPX.FNT**, **E14BL.FNT**, **CMC7J.FNT**.

xerox+*font1***:***font2***:***fontn*
InfoPrint XT generates AFP MICR fonts for all Xerox fonts whose names begin with **E13B**, **E14B**, or **CMC7**. In addition, it generates AFP MICR fonts for up to 33 fonts that you specify by name. Separate the font names with colons (**:**). The fonts you specify can be any Xerox fonts.

xerox-*font1***:***font2***:***fontn*
InfoPrint XT generates AFP MICR fonts for all Xerox fonts whose names begin with **E13B**, **E14B**, or **CMC7**, except for the fonts you specify after the minus sign (**-**). You can specify up to 33 Xerox fonts that begin with the standard prefixes for MICR font names. Separate the font names with colons.

*font1***:***font2***:***fontn*
InfoPrint XT generates AFP MICR fonts for the Xerox fonts you specify. You can specify up to 33 fonts. Separate the font names with colons. The fonts you specify can be any Xerox fonts. InfoPrint XT does not generate AFP MICR fonts for any Xerox fonts that begin with the standard prefixes for MICR font names unless you specify them in the list of fonts.

[-n *pattern* **]** Specifies the Xerox resources to load or delete. You can use AIX pattern-matching strings to specify groups of resources. You can specify more than one pair of **-n** options and patterns, up to a maximum of 50:

- To load all Xerox font files in the directory **fonts**:

  ```
  pdxtloadres -n /fonts/*.fnt
  ```

- To load all resources in the current directory that begin with the letter **a**:

  ```
  pdxtloadres -n ./a*
  ```

- To delete a specific JDL file in a specific group:

  ```
  pdxtloadres -f delete -g payroll -n dplonl.jdl
  ```

If you specify the **-n** option, you cannot specify the **-l** option. If you do not specify either **-n** or **-l**, the **pdxtloadres** command updates correlation tables, as needed.

Notes:

1. If you use both the **-n** option and the **-i** option, do not include path information in the value for the **-n** option.

2. When you delete resources, you must specify resource names in lowercase.

3. When you load resources, the **pdxtloadres** command also recognizes IBM Infoprint XT Extender for z/OS naming conventions for Xerox resource files. You can transfer Xerox resources from z/OS to the AIX system using a method such as File Transfer Protocol (FTP). The Xerox resource data sets have specific naming conventions. See Table 11.

Table 11. IBM Infoprint XT Extender for z/OS naming conventions for Xerox resource files

Xerox resource extensions	Corresponding z/OS name format
*.CLS [1]	B#*
*.CME	C$*
*.CMD	D$*
*.DAT	A$*
*.FNT	F$*
*.FRM	M$*
*.FSL	G$*
*.ICT	U$*
*.IMG	I$*
*.IDR	V$*
*.ISL	W$*
*.JDL	J$*
*.JSL	K$*
*.LGO	L$*
*.LIB	B$*
*.MSC	S$*
*.PCH	E$*
*.PDE	P$*
*.STK	Y$*
*.TMP	E$*
*.TST	T$*

[1] This is the source code, in an InfoPrint XT format, for a reformatted Xerox cluster database LIB file.

[-o *OtherDirectory* **]**

Specifies an existing directory in which you want InfoPrint XT to store AFP versions of Xerox printable resources. Use this option to store AFP resources in a directory other than **/var/pdxt/resources/common** or **/var/pdxt/resources/***resgrp*. InfoPrint XT also creates a **metrics** subdirectory, an **xrxres** subdirectory, and a **pdxtloadres** subdirectory under the directory that you specify.

If you specify the **-o** option, you cannot specify the **-g** option. If you do not specify either **-o** or **-g**, the **pdxtloadres** command uses the common resource group.

Note: If the directory that you specify does not exist or you do not have permission to write to the directory, InfoPrint XT issues an error message.

[-p 300_1 | 300_2]

Specifies the type of shading patterns that InfoPrint XT uses when it converts Xerox forms. Valid values are:

300_1 Specifies the shading patterns used by Xerox 9700, 4x50, and 4x90 printers. This is the default.

300_2 Specifies the patterns used by Xerox 4x35 printers.

[-s none | word | trnw | char]

Specifies the type of spacing fidelity adjustments that InfoPrint XT makes when it converts Xerox forms. Valid values are:

none InfoPrint XT does not make any spacing adjustments during conversion. This is the default and is adequate for most Xerox forms. However, if you see a noticeable difference between the Xerox printed form and the corresponding AFP overlay printed on an InfoPrint Solutions Company printer, you can make adjustments with the other values for this option.

word InfoPrint XT makes spacing adjustments at word boundaries.

trnw InfoPrint XT makes spacing adjustments at word boundaries, with minimal embedded blanks in Presentation Text Object Content Architecture text characters.

char InfoPrint XT makes spacing adjustments at both word and character boundaries.

Note: Use of word or character adjustments affects performance and results in larger AFP files.

Streams used by the pdxtloadres command

The **pdxtloadres** command uses some file descriptors while it processes Xerox resources and ignores others:

fd0 (STDIN) The command does not use this stream.

fd1 (STDOUT) The command does not use this stream.

fd2 (STDERR) The command writes messages to this stream.

fd3 If you define this stream, the command writes one record for each resource that it successfully loads or deletes. The command always reports the resource name in lowercase characters, such as **p0612c.fnt**.

fd8 The default is that InfoPrint XT appends information about the resource load process and the resource delete process to the **pdxtloadres.log** file, which is in the directory for the resource group. If you define this stream, the command redirects the information to this file descriptor. InfoPrint XT automatically defines this stream when you process jobs that contain FILE DJDE commands that specify the **D** storage parameter. These are temporary resources; InfoPrint XT loads the resources and then deletes them when the job finishes. Frequently processing jobs that

specify temporary resources through FILE DJDE commands can cause the size of the log file to increase at a faster rate. InfoPrint XT does not delete the **pdxtloadres.log** file from the directory for the resource group.

Note: InfoPrint XT writes the output from file descriptor eight to the **pdxtloadres.log** file in the working directory for the job. This file contains the names of the resources that InfoPrint XT loaded and deleted.

For information about the log file, see page 71 and "Processing jobs that contain FILE DJDE commands" on page 116.

fd9   The command writes a file that contains problem determination information to file descriptor nine. It uses the AIX **pax** command to generate a compressed archive of the resource directory. The archive is in USTAR format.

Return codes from the pdxtloadres command

Return codes from the **pdxtloadres** command have these meanings:

0   The command successfully loaded or deleted all the specified resources.

EINVAL (22)   An error exists with one of the command options.

E2BIG (7)   The command contains too many command options.

ENOATTR (112)
    You specified a command option without a value, or you did not specify a required command option.

ENOENT (2)   The command did not locate the resources to load or delete. The file or pattern that the **-l** or **-n** command option specified did not contain or match any valid file names.

ENOMEM (12)   Not enough memory is available for the command.

EEXIST (17)   A resource was already loaded; you did not specify the **-r** option with the command.

ECONNABORTED (72)
    The command did not load or delete one or more resources because of a non-zero return code from an associated subcommand.

ECONNRESET (73)
    The command did not load or delete one or more resources, but associated subcommands had return codes of zero.

other   Any other return codes that are not in this list are return codes from C functions. See "Return code numbers" on page 184.

```
+ — — — — — — — End of Programming Interface information — — — — — — — +
```

Examples: pdxtloadres command

These examples show how you can use the **pdxtloadres** command to load Xerox resources:

- To load all the resources specified in a list file named **resource.list** and to use the common resource library:

    ```
    pdxtloadres -l /var/xerox_resources/resource.list
    ```

- To load all the resources specified in a list file in the current directory:

  ```
  pdxtloadres -l ./resource.list
  ```

- To load all fonts in the current directory in the **payroll** resource group:

  ```
  pdxtloadres -g payroll -n './*fnt'
  ```

Scanning a job for required resources with the pdxtx2afp command

When you initially set up InfoPrint XT, you loaded all the resources that were on the Xerox printer or printers. If you add applications that generate new jobs and that use new resources, you can scan the jobs to determine the resources they require. This is an iterative process because some Xerox resources require other Xerox resources. For example, a Xerox form might require one or more images and fonts.

You can use the **pdxtx2afp** command to create a preliminary list of the resources that a job requires. Before you scan the job, you must load the starting JDL for the job. When you scan the job, use the **xafprc=12** and **xconvert=no** conversion parameters. For the syntax of the **pdxtx2afp** command and examples of its use, see "Using the pdxtx2afp command to process Xerox jobs" on page 105.

Printing samples of overlays and page segments

You can print copies of the AFP overlays that InfoPrint XT generates from Xerox forms, and you can print the AFP page segments that it generates from Xerox images and logos. For installations that use InfoPrint Manager with InfoPrint XT, you can use the InfoPrint Manager **pdpr** command to submit the print request. Use the **resource-context** document attribute to specify the location of the AFP resources:

- To print a copy of the AFP overlay named **O1LBB007**, which is in the common resource library:

```
pdpr -d ldest -x resource-context=/var/pdxt/resources/common /var/pdxt/resources/common/O1LBB007
```

ldest is the name of the InfoPrint Manager logical destination.

> **Note:** Make sure that you include the **resource-context** attribute so that InfoPrint Manager can locate any fonts that the overlay might use.

- To print a copy of the AFP page segment named **SIBROM1**, which is in the resource library for the resource group **printrun**:

```
pdpr -d ldest  /var/pdxt/resources/printrun/SIBROM1
```

You can also use relative paths when you print copies of overlays and page segments. For example, if **/var/pdxt/resources/printrun** is the current directory, you can use this command:

```
pdpr -d ldest ./SIBROM1
```

Correlating font, image, or logo resources manually

When you load Xerox fonts, images, and logos, InfoPrint XT automatically generates the corresponding AFP resources. InfoPrint XT also creates correlations that map the Xerox resources to their AFP counterparts. For most installations, the correlations that InfoPrint XT makes satisfy all printing requirements. However, advanced users might want to change the correlations for purposes like:

- Substituting a new font or image for an old one, to change the appearance of the printed output. This eliminates any changes to the application that generates the jobs.
- Substituting AFP outline fonts for Xerox DBCS or EBCDIC fonts.

- Substituting AFP page segments for Xerox signature fonts. The size of some signature fonts can prevent InfoPrint XT from creating a corresponding AFP font.
- Adjusting the horizontal or vertical placement of a signature or a logo.

To make correlation updates, create correlation tables in the metrics directory of the resource group. Separate tables exist for fonts, images, and logos. Each table has its own format. Each line in a correlation table is a separate entry consisting of keywords. All the text for the complete entry is in uppercase characters. No column restrictions exist. This means that the second keyword of one entry does not have to start at the same column location as the second keyword of another entry. You might want to use a specific columnar format, for readability, as you make entries.

After you create the manual correlation tables, use the **pdxtloadres** command to apply the updates.

Note: If Xerox spacing characters in fonts cause code page conflicts after you manually correlate a Xerox font to an AFP font, you can change how InfoPrint XT interprets the spacing characters. See the **-b** command option in "Using the pdxtloadres command to load Xerox resources" on page 73.

Creating manual correlation entries for single-byte Xerox fonts

To make manual correlations for single-byte fonts, create a **tab.mft** file in the appropriate metrics directory. In the table, you can correlate a Xerox font to an AFP coded font, to an AFP character set and code page pair, or to an AFP page segment. The syntax for single-byte character set (SBCS) font entries in the correlation table is:

F *XName A2ETable CFont | CSet Cpage | PSeg { Char | XChar } [X=nn] [Y=nn]*

F   The entry is an SBCS font.

XName
　　　　The name of the Xerox font in uppercase, without the **.FNT** extension. **P0612C** is an example.

A2ETable
　　　　The name of the ASCII-to-EBCDIC translation table that InfoPrint XT uses. Unless instructed otherwise by a technical support representative, this value is **X2AFP**.

CFont The name of the AFP coded font to use in place of the Xerox font. **X0KY96** is an example.

CSet CName
　　　　The name of an AFP character set and code page pair to use in place of the Xerox font. **C0H01030 T1H01030** is an example.

PSeg { Char I *XChar }* **[X=***nn* **] [Y=***nn* **]**
　　　　PSeg is the name of an AFP page segment to use in place of one character in the Xerox font. You have two methods by which you can identify the character:
- *Char* specifies the literal ASCII character in the font.
- *XChar* specifies the code point of the character in hexadecimal notation. If you have access to a Xerox printer, you can sample the font to determine the code point.

These are examples of both methods:

```
F ABC X2AFP S1ABCA A

F ABC X2AFP S1ABC41 41
```

As an option, you can also adjust the positioning of the character that the page segment represents. The adjustments that you make are relative to the page segment when you look at it in the portrait orientation. You can use **X=***nn* to make a horizontal adjustment. *nn* is a value in pels. A positive value moves the page segment to the right. A negative value moves it to the left. Use **Y=***nn* to make a vertical adjustment. A positive value moves the page segment down on the page. A negative value moves it up.

Table 12 shows the various types of entries that you can make in a manual font correlation table for single-byte Xerox fonts.

Table 12. Sample correlation entries for single-byte Xerox fonts

```
F CRC12P X2AFP X0P0612C
F RK141P X2AFP C0UN411E T1UN411E
F CSFL30 X2AFP S1L3021  41
F CSFP01 X2AFP S1P0121  A
F CSFP02 X2AFP S1P0122  21 Y=-7
F CSFP03 X2AFP S1P0123  F X=3
F CSFP04 X2AFP S1P0124  Y X=-3 Y=4
```

Creating manual correlation entries for double-byte Xerox fonts

Correlation table entries for DBCS Xerox fonts are similar to entries for SBCS fonts. However, you can only correlate a DBCS font to an AFP coded font. Add the DBCS entry to the same **tab.mft** file that has any SBCS entries you require. The syntax for a DBCS font entry is:

```
D XName A2ETable CFont
```

D   The entry is a double-byte font.

XName
        The name of the Xerox font in uppercase, without the **.FNT** extension.

A2ETable
        The name of the ASCII-to-EBCDIC translation table that InfoPrint XT uses. Unless instructed otherwise by a technical support representative, this value is **X2AFP**.

CFont The name of the AFP coded font to use in place of the Xerox font.

This is an example of an entry for a DBCS or EBCDIC font in the **tab.mft** table:

```
D CX24L X2AFP XZABCDEF
```

If you require AFP DBCS outline fonts for use with double-byte Xerox fonts, contact your marketing representative for more information. You can also use AFP DBCS outline fonts from other sources. Those fonts must fully conform to the MO:DCA FOCA standards; see *Data Stream and Object Architectures: Font Object Content Architecture (FOCA) Reference*, S544-3285.

Creating manual correlation entries for Xerox EBCDIC fonts

Correlation table entries for EBCDIC Xerox fonts are similar to entries for SBCS fonts. However, you can only correlate a EBCDIC font to an AFP coded font. Add the EBCDIC entry to the same **tab.mft** file that has any SBCS entries you require. The syntax for a EBCDIC font entry is:

```
E XName A2ETable CFont
```

E   The entry is a double-byte font.

XName
>   The name of the Xerox font in uppercase, without the **.FNT** extension.

A2ETable
>   The name of the ASCII-to-EBCDIC translation table that InfoPrint XT uses. Unless instructed otherwise by a technical support representative, this value is **X2AFP**.

CFont The name of the AFP coded font to use in place of the Xerox font.

This is an example of an entry for a EBCDIC font in the **tab.mft** table:

```
E CX24L X2AFP XZABCDEF
```

If you require AFP EBCDIC outline fonts for use with double-byte Xerox fonts, contact your marketing representative for more information. You can also use AFP EBCDIC outline fonts from other sources. Those fonts must fully conform to the MO:DCA FOCA standards; see *Data Stream and Object Architectures: Font Object Content Architecture (FOCA) Reference*, S544-3285.

Creating manual correlation entries for images

To create a manual correlation table for image resources, create a **tab.mit** file in the appropriate metrics directory. You can correlate a Xerox image to an AFP page segment. You can specify horizontal and vertical spacing values if you require them. The syntax for an image entry is:

```
I XName Pseg [ X=nn ] [ Y=nn ]
```

I   The entry is an image.

XName
>   The name of the Xerox image in uppercase, without the **.IMG** extension.

PSeg **[X=***nn* **] [Y=***nn* **]**
>   The AFP page segment to use in place of the Xerox image. As an option, you can also adjust the position of the page segment on the page. The adjustments that you make are relative to the page segment when you look at it in the portrait orientation. You can use **X=***nn* to make a horizontal adjustment. *nn* is a value in pels. A positive value moves the page segment to the right, and a negative value moves it to the left. Use **Y=***nn* to make a vertical adjustment. A positive value moves the page segment down on the page, and a negative value moves it up.

Table 13 shows the various types of entries that you can make in a manual correlation table for Xerox images.

Table 13. Sample correlation entries for Xerox images

```
I  GOALIE   S1LANCHE
I  KOALA1   S1SKYET  Y=4
I  X14BAR   S1IBI13B X=-2
I  AIR767   S1PIPERC X=3 Y=-2
```

Creating manual correlation entries for logos

To create a manual correlation table for logo resources, you create a **tab.mlt** file in the appropriate metrics directory. You can correlate a Xerox logo to an AFP page segment. You can specify horizontal and vertical spacing adjustments if you require them. The syntax for a logo entry is:

```
L XName PSeg [X=nn] [Y=nn]
```

L   The entry is a logo.

XName
> The name of the Xerox logo in uppercase, without the **.LGO** extension.

PSeg **[X=***nn* **] [Y=***nn* **]**
> The AFP page segment to use in place of the Xerox logo. As an option, you can also adjust the position of the page segment on the page. The adjustments that you make are relative to the page segment when you look at it in the portrait orientation. You can use **X=***nn* to make a horizontal adjustment. *nn* is a value in pels. A positive value moves the page segment to the right. A negative value moves it to the left. Use **Y=***nn* to make a vertical adjustment. A positive value moves the page segment down on the page. A negative value moves it up.

Table 14 shows the various types of entries that you can make in a manual correlation table for Xerox logos.

Table 14. Sample correlation entries for Xerox logos

```
L  PANDT  S1SUB01
L  L1980  S1BLUE   Y=4
L  L1990  S1GREEN  X=-2
L  L2003  S1DKRED  X=3 Y=-2
```

Processing a manual correlation table

To process a manual resource correlation table and activate correlation entries:

1. Log in to the InfoPrint XT system with an AIX user name that is a member of the **printq** group.

2. Copy the font and page segment files to the AFP resource directory. Copies of the AFP fonts and AFP page segments that you specify in a manual resource correlation table must be in the appropriate InfoPrint XT AFP resource directory. For example, you specified an AFP resource in the manual correlation table that is in the **/usr/lpp/psf/reslib** directory. If you loaded the Xerox resources in the common resource group, the copy command is similar to this:

   ```
   cp /usr/lpp/psf/reslib/X0423002 /var/pdxt/resources/common
   ```

3. If you made modifications for the common resources (located in **/var/pdxt/resources/common**) process the manual correlation table by entering the **pdxtloadres** command without any options:

   ```
   pdxtloadres
   ```

   If you are working with a resource group or a separate directory, use the **-g** or the **-o** option with the **pdxtloadres** command. For example:

   ```
   pdxtloadres -g statements
   ```

   InfoPrint XT displays information that is similar to this:

   ```
   5016-600 Resource load process started for type "xxx".
   5016-614 Resource correlation process started.
   5016-615 Resource correlation process is complete.
   5016-601 Resource load process is complete for type "xxx".
   ```

"xxx" is **fnt**, **img**, or **lgo**.

Using the pdxtcluster command to create and modify cluster database resources

You use the InfoPrint XT **pdxtcluster** command to process Xerox cluster databases. The **pdxtcluster** command loads and modifies Xerox cluster database resources for use with InfoPrint XT. The command provides options that you can use to control how and where InfoPrint XT creates the reformatted cluster database resource files.

You can change the contents of cluster database source files by using the **pdxtcluster –f add | remove | edit** commands. You can also manually edit cluster data base source files.

The **pdxtcluster** command automatically stores cluster database files in the correct locations when you specify the **–f create | delete | revert | copy | rename** functions. If you edit a *name***.cls** cluster database source file manually, the **pdxtcluster –f cls2alb** command requires that you store the file in the **xrxres** directory of the resource.

The user name that you use to enter the **pdxtcluster** command must be a member of the **printq** group.

```
+ — — — — — — — — — Programming Interface information — — — — — — — — — +
```

The syntax of the **pdxtcluster** command is:

> **pdxtcluster [-f lib2cls]**
>   **[-n** *pattern* **]**
>   **[[-g common** | *resgrp* **] | [-o** *OtherDirectory* **]**
>
> **pdxtcluster -f cls2alb**
>   **-n** *pattern*
>   **[[-g common** | *resgrp* **] | [-o** *OtherDirectory* **]]**
>   **[-r]**
>
> **pdxtcluster -f create | copy | rename | revert | list**
>   **-n** *pattern*
>   **[[-g common** | *resgrp* **] | [-o** *OtherDirectory* **]]**
>
> **pdxtcluster -f add | edit**
>   **-n** *pattern*
>   **-c** *cluster_name=tray_numbers*
>   **[[-g common** | **resgrp] | [-o** *OtherDirectory* **]]**
>   **[-a]**
>
> **pdxtcluster -f remove**
>   **-n** *pattern*
>   **-c** *cluster_name*
>   **[[-g common** | **resgrp] | [-o** *OtherDirectory* **]]**
>   **[-a]**

Note: InfoPrint XT uses the **.cls** extension to indicate cluster database source files and the **.alb** extension to indicate reformatted cluster database resources. All *name***.cls** and *name***.alb** files must have valid Xerox resource names.

-f　　Indicates which function to perform. If specified, this parameter must precede all other **pdxtcluster** parameters.

> **lib2cls**
>> **pdxtcluster** converts the **clustr.lib** to **clustr.cls** and places both files in the **xrxres** directory for the specified resource group. Either issue **pdxtcluster** from the directory in which **clustr.lib** resides, or specify the path to the **clustr.lib** in the **-n** parameter. This is the default function.
>
> **cls2alb**
>> **pdxtcluster** converts the *name***.cls** file in the **xrxres** directory for the specified resource group to *name***.alb** in the **metrics** directory for the specified resource group.
>
> **create**
>> **pdxtcluster** creates a new *name***.cls** resource file in the **xrxres** directory for the specified resource group. The *name***.cls** resource file is a copy of the **master.cls** file.
>
> **copy**
>> **pdxtcluster** copies the *name***.cls** file in the specified resource group. This function is useful after specifying **-f lib2cls** to copy **clustr.cls** to a new name without affecting the **clustr.alb** file if it already exists.
>
> **rename**
>> **pdxtcluster** renames the cluster resource in the specified resource group. This includes all *name***.cls**, *name***.alb** and *name***.cls.bak** files.
>
> **revert**
>> **pdxtcluster** reverts to the previous version of *name***.cls** If there is no previous version, the command issues an error message.
>
> **add**
>> **pdxtcluster** adds the cluster entries you specify with the **-c** parameter to *name***.cls** in the specified resource group. The command issues an error message if any of the clusters already exist. The command also creates a copy of the previous *name***.cls** file, *name***.cls.bak,** in the **xrxres** directory for the resource group.
>
> **edit**
>> **pdxtcluster** edits specified clusters that already exist in *name***.cls**, or creates any cluster entries that do not exist. The command also creates a copy of the previous *name***.cls** file, *name***.cls.bak**, in the **xrxres** directory for the resource group.
>
> **remove**
>> **pdxtcluster** removes the specified cluster entries from *name***.cls** in the specified resource group. The command also creates a copy of the previous *name***.cls** file, *name***.cls.bak**, in the **xrxres** directory for the resource group.
>
> **list**
>> **pdxtcluster** writes a list of the current clusters in the *name***.cls** file for the specified resource group to standard output.

-g　　Specifies the resource group name that InfoPrint XT uses to build subdirectories in the **/var/pdxt/resources** directory. InfoPrint XT uses these subdirectories to store and edit the cluster database files. The name you

specify must be alphanumeric. It can contain the letters ″a″ through ″z″ and ″A″ through ″Z″, and the numbers 0 through 9.

If you specify the **-g** option, you cannot specify the **-o** option. If you do not specify either option, **pdxtcluster** uses the common resource group.

-o   Specifies an existing directory in which you want InfoPrint XT to store the cluster database resources. Use this option to store the cluster database resources in a directory other than **/var/pdxt/resources/common** or **/var/pdxt/resources**/*resgrp*. InfoPrint XT also creates a metrics subdirectory, and *xrxres* subdirectory, and a **pdxtcluster** subdirectory under the directory that you specify.

If you specify the **-o** option, you cannot specify the **-g** option. If you do not specify either option, InfoPrint XT uses the directory for the common resource group.

-n

[clustr.lib]
Specifies the Xerox cluster database to process with the **-f lib2cls** function. The name of the database must be **clustr.lib**.

To process **clustr.lib** in the directory *xerox_res*:

pdxtcluster -f lib2cls -n "**/***xerox_res***/clustr.lib**"

To process **clustr.lib** in the current directory:

pdxtcluster -f lib2cls -n "**clustr.lib**"

If you do not specify **-n**, InfoPrint XT processes **clustr.lib** in the current directory.

name.**cls**
Specifies the Xerox cluster database source file to process. *name* must be a valid Xerox resource name.

old.**cls=***new*.**cls**
Specifies the old and new names for a Xerox cluster database source file and the associated reformatted cluster database file in the **-f copy** and **rename** functions. *old* and *new* must be valid Xerox resource names.

To rename /**xrxres**/*old*.**cls** and /**metrics**/*old*.**alb**:

pdxtcluster –f rename –n "*old*.**cls=***new*.**cls**"

InfoPrint XT issues an error message if *old*.**cls** does not exist.

-c

Specifies the cluster names and their tray numbers. You can specify more than one **-c** argument, up to a maximum of 50.

The cluster names you specify must contain from 1 through 6 alphanumeric characters. Although you can enter lowercase letters in cluster names, InfoPrint XT stores the cluster names using uppercase letters.

Tray numbers must be in the range of 1 through 8 and can be specified in any order. Separate each tray number with a ' : ' colon. The lowest tray number is used for the AFP tray.

cluster_name=*tray_numbers*
Specifies a cluster and its associated tray numbers to add or edit in the cluster database.

To add cluster NEWCLS with tray numbers 3, 5, and 7:

pdxtcluster -f add -g *resgrp* **-n myclst.cls -c newcls=3:5:7**

cluster_name
Specifies a cluster to remove from the cluster database.

If any of the clusters that you specify with the **-c** *cluster_name* parameter do not exist in the cluster database, InfoPrint XT issues an error message, but removes other specified clusters that do exist.

-r   If a *name*.**cls** is already loaded, the **-f cls2alb** function loads a new version of *name*.**alb**. If the conversion is successful, InfoPrint XT replaces the original copy of the *name*.**alb** in the metrics subdirectory for the resource group.

-a   After modifying *name*.**cls** with the **add**, **edit**, or **remove** function, **pdxtcluster** converts *name*.**cls** to *name*.**alb** and places the *name*.**alb** file in the metrics directory for the specified resource group. The command replaces the existing *name*.**alb** if it exists. This is the same as running a separate **pdxtcluster** command with **-f cls2alb**.

Master cluster database source file

InfoPrint XT installs a master cluster database source file (**master.cls**) in **/usr/opt/pdxt/samples**.

The format of the **master.cls** file is based on the output of the Xerox **CLS** and **CLU** operator commands. InfoPrint XT uses the same format for **clustr.cls** and **file_name.cls** cluster database source files.

Figure 6 shows the cluster entries in the **master.cls** file.

```
*
* CLUSTER  AUTO  ---PREFERRED TRAYS--  ----CURRENT TRAYS---
*  NAME    SIZE  AFP ------Xerox-----  AFP ------Xerox-----     STATUS
* ------    -     MMC 12345678 future  MMC 12345678 future   ----------
*---+----1----+----2----+----3----+----4----+----5----+----6----+----7----+----8
*
  MAIN      A    1 1                   1 1                   HAS TRAYS
  AUX       A    2  2                  2  2                  HAS TRAYS
  AUTO      A    1 1234                1 1234                HAS TRAYS
  ONE            1 1                   1 1                   HAS TRAYS
  TWO            2  2                  2  2                  HAS TRAYS
  THREE          3   3                 3   3                 HAS TRAYS
  FOUR           4    4                4    4                HAS TRAYS
  FIVE           5     5               5     5               HAS TRAYS
  SIX            6      6              6      6              HAS TRAYS
  SEVEN          7       7             7       7             HAS TRAYS
  EIGHT          8        8            8        8            HAS TRAYS
```

Figure 6. Cluster entries in the **master.cls** *file*

Table 15. InfoPrint XT master cluster database source file format

Offset	Length	Value	Description
0	1	"*"	Indicates that the line is a comment
2	6	variable	Uppercase alphanumeric cluster name
12	1	"A" or blank	Xerox Autosize value; not used

Table 15. InfoPrint XT master cluster database source file format (continued)

Offset	Length	Value	Description
19	1	″1″ - ″8″	Preferred tray number InfoPrint XT specifies in MMCs in the output AFP
21	8	″1″ - ″8″	Preferred Xerox tray numbers
29	8	blank	future use
41	1	″1″ - ″8″	Current tray number for output AFP; not used
43	8	″1″ - ″8″	Current Xerox tray numbers
51	8	blank	future use
61	19	variable	Xerox cluster status

Streams used by the pdxtcluster command

fd0 (STDIN)   The command does not use this stream.

fd1 (STDOUT) The **-f list** function writes to this stream.

fd2 (STDERR) The command writes messages to this stream.

Return codes from the pdxtcluster command

Return codes from the **pdxtcluster** command mean:

0   The command was successful.

EINVAL (22)   There is an error with one of the command options.

E2BIG (7)   The command contains too many arguments or command options.

ENOATTR (112)
                   The command contains a command option without a value or a required command option is missing.

ENOENT (2)   The file or pattern you specified with the **-n** command option did not contain any valid file names.

EEXIST (17)   The resource is already loaded, but you did not specify the **-r** command option.

ENOMEM (12) There is not enough memory available for the command.

other   The error is from a C function, such as *open()* or *read()*.

+ — — — — — — — End of Programming Interface information — — — — — — — +

Examples: pdxtcluster command

- Convert **clustr.lib** in the */xerox_res* directory to a **clustr.cls** source file in the common resource group:

  ```
  pdxtcluster -n "/xerox_res/clustr.lib"
  ```

  Note: -g common and **-f lib2cls** are the defaults.

- Convert a **clustr.cls** file in the resource group common to a **clustr.alb** reformatted resource file:

  ```
  pdxtcluster -f cls2alb -n "clustr.cls"
  ```

- Add two new clusters to **clustr.cls** in the **common** resource group. The cluster **CL2** is mapped to tray 2 and **CL3** is mapped to tray 3:

  ```
  pdxtcluster -f add -n "clustr.cls" -c cl2=2 -c cl3=3
  ```

- Remove two clusters, **CL2** and **CL3**, from **clustr.cls**:

  ```
  pdxtcluster -f remove -n "clustr.cls" -c cl2 -c cl3
  ```

- List the clusters in **clustr.cls** in the **common** resource group:

  ```
  pdxtcluster -f list -n "clustr.cls"
  ```

Deblocking and reblocking CMDs, FSLs, ISLs, and JSLs

To see the contents of certain types of Xerox resource files, you must first change their format from blocked to deblocked. After you have completed the tasks for the deblocked resources, you reblock them. InfoPrint XT provides two commands, **pdxtdblkres** and **pdxtblkres**, that you can use to deblock and block resources.

Using the pdxtdblkres command to deblock resources

+ — — — — — — — — — Programming Interface information — — — — — — — — — +

You use the **pdxtdblkres** command to deblock one or more Xerox resource files. The syntax for the command is:

pdxtdblkres [-p <u>yes</u> | no] [*file* ...]

[-p <u>yes</u> | no]

Specifies whether the **pdxtdblkres** command passes through data from the deblocking process if the resource is already deblocked, or if the command cannot deblock the data. Valid values are:

<u>yes</u>   If the resource is already deblocked or it cannot be deblocked, the command passes the resource data through as it is. This is the default.

no   If the resource is already deblocked or it cannot be deblocked, the command stops processing.

[*file* ...]

Specifies one or more Xerox resource files that you want the command to deblock. When the **pdxtdblkres** command deblocks a resource file, it replaces the contents of the existing file with the deblocked output. If you do not specify a file name, the command reads from standard input and writes to standard output.

You can specify more than one file. Separate the file names with spaces.

Streams used by the pdxtdblkres command

The **pdxtdblkres** command uses file descriptors while it processes Xerox resources:

fd0 (STDIN)   If you do not specify any resource file names with the command, the command reads the blocked resource from standard input.

fd1 (STDOUT)   If you do not specify any resource files names with the command, the command writes the deblocked resource to standard output.

fd2 (STDERR)   The command writes messages from the deblocking process to standard error.

Return codes from the pdxtdblkres command

Return codes from the **pdxtdblkres** command mean:

0   The command successfully deblocked the resource.

EINVAL (22)   An error exists with one of the command options.

ENOATTR (112)
              You specified a command option without a value.

other   Any other return codes that are not in this list are return codes from
              C functions. See "Return code numbers" on page 184.

+ — — — — — — — End of Programming Interface information — — — — — — - +

Restrictions

The **pdxtdblkres** command can only deblock these types of Xerox resources:

*   Command (CMD) files
*   Forms Source Libraries (FSLs)
*   Ink Source Libraries (ISLs)
*   Job Source Libraries (JSLs)

Note: InfoPrint XT automatically runs the **pdxtdblkres** command when it loads
        these types of resources with the **pdxtloadres** command. Therefore, you
        can read the contents of the metrics files for these types of resources when
        the load process completes. If you loaded resources with a version of
        InfoPrint XT before product update 13, reload these types of resources to
        generate readable versions of the metrics files.

Using the pdxtblkres command to block resources

+ — — — — — — — — — Programming Interface information — — — — — — — — — +

You use the **pdxtblkres** command to block one or more Xerox resource files. The
syntax for the command is:

pdxtblkres [**-f** *filename.ext*] [*file ...*]

[-f *filename.ext* **]**
              The file name that the command uses in the header record or label record
              of the blocked resource. If you do not use the **-f** command option, the
              default name that the command uses depends on how you specified the
              input data:

*   If you explicitly specify the name of a Xerox resource file, the command
    uses the name of the resource file. The extension for the file name that
    you specify must be **.cmd**, **.fsl**, **.isl**, or **.jsl**.

*   If you use standard input to pass the Xerox resource, the command uses
    the default name **dfault.jsl**.

    Note: The **pdxtblkres** command does not verify that the Xerox resource
            is a JSL.

              If you use the **-f** command option, you can only block one resource at a
              time.

[*file ...* **]**
              The name of the Xerox resource file to block. When the command blocks
              the resource, it replaces the contents of the existing file with the blocked
              output. If you do not specify a file name, the command reads from standard
              input and writes to standard output.

              You can specify more than one file. Separate the file names with spaces.

Streams used by the pdxtblkres command

The **pdxtblkres** command uses file descriptors while it processes Xerox resources:

fd0 (STDIN) If you do not specify a resource file name with the command, the command reads the deblocked resource from standard input.

fd1 (STDOUT) If you do not specify a resource file name with the command, the command writes the blocked resource to standard output.

fd2 (STDERR) The command writes messages from the blocking process to standard error.

Return codes from the pdxtblkres command

Return codes from the **pdxtblkres** command mean:

0 The command successfully blocked the resource.

EINVAL (22) An error exists with one of the command options.

ENOATTR (112)
You specified a command option without a value.

E2BIG (7) You specified the **-f** command option and more than one input file name.

other Any other return codes that are not in this list are return codes from C functions. See "Return code numbers" on page 184.

+ – – – – – – – End of Programming Interface information – – – – – – – +

Restrictions

The **pdxtblkres** command can only block these types of Xerox resources:

- CMDs
- FSLs
- ISLs
- JSLs

InfoPrint XT JSL (Job Source Library) Metrics Compiler

This compiler produces reformatted environment control resource files from JSL files.

The JSL Metrics Compiler performs these tasks:

- Reads and parses JSL files that can exist in any of these formats:
  - LF-delimited ASCII text files
  - CRLF-delimited ASCII text files
  - EBCDIC text files
  - Binary 80-byte card image format files
- Creates reformatted binary environment control file resources in the formats used by InfoPrint XT during data stream conversions. This table shows the existing relationships between original Xerox environment control resource types and the corresponding reformatted resource types that InfoPrint XT creates using the **pdxtloadres** command. The **pdxtpdl** command creates these same reformatted resource types when it compiles JSL files.

Original Xerox Resource Type	Reformatted Resource in /var/pdxt/.../metrics
file_name.jdl	file_name.ajd
file_name.cme	file_name.ace
file_name.pde	file_name.apd
file_name.stk	file_name.ast
file_name.tst	file_name.ats

Note: The **pdxtpdl** command does not create JDLs, CMEs, PDEs, STKs or TSTs in their original Xerox formats when it compiles JSLs. The reformatted resources that the **pdxtpdl** command creates cannot be used to print jobs on a Xerox printer.

Using the pdxtpdl command to compile Xerox JSL resources

You use the InfoPrint XT **pdxtpdl** command to compile JSL files and create reformatted environment control resources. The command provides options that you can use to control how and where InfoPrint XT creates the reformatted resource files. After the **pdxtpdl** compiles the JSL resources, you do not have to load any resource files with the **pdxtloadres** command. InfoPrint XT automatically uses the compiled resources when it processes jobs that require the resources.

Note: The AIX user name that you run the **pdxtpdl** command from must be a member of the AIX **printq** group

+ − − − − − − − − − Programming Interface information − − − − − − − − − +

The syntax of the **pdxtpdl** command is:

pdxtpdl [**-e** **listings** | **nolistings**]
        [**-g** **common** | *resgrp*]
        [**-o** *outputdirectory*]
        [**-r** | **-j** *pattern* | **-s**]
        [**-l** *listfile* | **-n** *pattern*]
        [**-t** **truncate** | **notruncate**]
        [*file* **...**]

[-e listings | nolistings]
    Controls whether InfoPrint XT writes the listings from the individual steps of the JSL compilation process to standard error. These listings can contain error information. Valid values are:

    listings
        InfoPrint XT writes the listings to standard error.

    nolistings
        InfoPrint XT does not write the listings to standard error. This is the default.

[-g common | *resgrp*]
    Specifies a resource group name that InfoPrint XT uses to build subdirectories in the **/var/pdxt/resources** directory. InfoPrint XT uses these subdirectories to store the reformatted resource files that the **pdxtpdl** command creates. Valid values are:

common
> InfoPrint XT builds subdirectories in **/var/pdxt/resources/common**. This is the default.

resgrp
> InfoPrint XT builds subdirectories in **/var/pdxt/resources/**_resgrppresgrp_. *resgrp* is a name that you choose. The name must be alphanumeric, and it cannot contain any special characters.
>
> If you specify the **-g** option, you cannot specify the **-o** option. If you do not specify either **-g** or **-o**, the **pdxtpdl** command uses the common resource group, which is **/var/pdxt/resources/common**.

[-o *outputdirectory* **]**
> Specifies an existing directory where you want InfoPrint XT to store the reformatted resources that the **pdxtpdl** command creates. Use this option to store resources in a directory other than **/var/pdxt/resources/common** or **/var/pdxt/resources/**_resgrp_.
>
> If you specify the **-o** option, you cannot specify the **-g** option. If you do not specify either **-o** or **-g**, the **pdxtpdl** command uses the common resource group.
>
> **Note:** If the directory that you specify does not exist or you do not have permission to write to the directory, InfoPrint XT issues an error message.

[-r | -j *pattern* **| -s]**
> Specifies the how to handle the Xerox resources the **pdxtpdl** command creates. The options for this are:

-r When compiling a JSL file, the **pdxtpdl** command creates new versions of all Xerox resources that the JSL defines. This includes JDLs and any other standalone Xerox resources that the JSL defines, such as PDEs and CMEs.

> If you specify the **-r** option, you cannot specify the **-j** option or the **-s** option.

-j *pattern*
> Specifies which Xerox resources the **pdxtpdl** command compiles within the JSLs that it processes. The **pdxtpdl** command creates new versions of all resources that you specify. If you specify more than one JSL using the **-n** parameter, and **pdxtpdl** finds the internally defined resources that you specify with the **-j** parameter in more than one of the JSLs, it uses the last occurrence of each resource that it finds. You can use pattern-matching strings to specify groups of resources. You can specify more than one pair of **-j** options and patterns, up to a maximum of 50.
>
> For example:
> - To compile all internally defined JDLs, but not any other type of resources within each JSL, specify:
>
> ```
> pdxtpdl -j "*.jdl"
> ```
>
> - To compile only the internally defined resource ABC.CME within each JSL, specify:
>
> ```
> pdxtpdl -j "abc.cme"
> ```
>
> - To compile only the internally defined PDEs whose names begin with "FMT" within each JSL, specify:
>
> ```
> pdxtpdl -j "fmt*.pde"
> ```

- When you specify multiple pairs of the -j parameter, separate the pairs with blanks, and InfoPrint XT processes all three patterns in a single invocation of the compiler.

```
pdxtpdl -j "*.stk" -j "xyz.jdl" -j "clear.cme"
```

If you specify the **-j** option, you cannot specify the **-r** option or the **-s** option.

-s   When compiling a JSL file, the **pdxtpdl** command only creates a new version of a Xerox resource that the JSL defines if it does not find a reformatted version of the resource in the **/metrics** directory. If you specify more than one JSL using the **-n** parameter, and **pdxtpdl** creates new reformatted versions of any internally defined resources in more than one of the JSLs, it uses the last occurrence of each resource that it finds.

If you specify the **-s** option, you cannot specify the **-r** option or the **-j** option.

[-l *listfile* **| -n** *pattern* **]**
Specifies the JSL resources that you want the **pdxtpdl** command to compile.

-l *listfile*
listfile is either a file on the AIX system that contains the resource names or it is a stream. Each resource that the file lists must be on a separate line.

If you specify the list of resources in a stream, use one of these formats:

-l -
If you use a dash as the value for the **-l** option, the **pdxtpdl** command reads the resource name from standard input.

-l fd:*n*
If you use the **fd:***n* format, the **pdxtpdl** command reads the resource names from the file descriptor that you specify. *n* is the file descriptor number; for example **fd:7**.

If you specify the **-l** option, you cannot specify the **-n** option.

Notes:
1. You cannot use wildcard characters in the entries in the list file.
2. You can specify Xerox JSL resources with names that follow IBM InfoPrint XT Extender for z/OS naming conventions.
3. You can specify the **-l** option without a value. The **pdxtpdl** command tries to load resources using the retry file.

-n *pattern*
Specifies the Xerox JSL resources to compile. You can use AIX pattern-matching strings to specify groups of resources. You can specify more than one pair of -n options and patterns, up to a maximum of 50.

For example:
- To compile all Xerox JSL files in the directory **jslsrc**, specify:

```
pdxtpdl -n "/jslsrc/*.jsl"
```

- To compile all resources in the current directory that begin with the letter **a**, specify:

```
pdxtpdl -n "./a*"
```

If you specify the **-n** option, you cannot specify the **-l** option.

Note: When you compile JSL resources, the **pdxtpdl** command also recognizes IBM InfoPrint XT Extender for z/OS naming conventions for Xerox resource files. See Table 11 on page 79. You can transfer

Xerox resources from z/OS to the AIX system using a method such as File Transfer Protocol (FTP). The Xerox resource data sets have specific naming conventions.

[-t truncate | notruncate]
Specifies whether the **pdxtpdl** command reads only the first 72 bytes of each input JSL record or all 80 bytes. Valid values are:

truncate
The **pdxtpdl** command only reads the first 72 bytes of each JSL input record. This is the default.

notruncate
The **pdxtpdl** command only reads all 80 bytes of each JSL input record.

[*file* ...]
Specifies one or more Xerox JSL files that you want to compile with the **pdxtpdl** command.

Streams used by the pdxtpdl command

The **pdxtpdl** command uses some file descriptors while it processes Xerox resources and ignores others:

fd0 (STDIN) The command does not use this stream.

fd1 (STDOUT) The command does not use this stream.

fd2 (STDERR) The command writes messages to this stream

fd3 If you define this stream, the command writes one record for each resource that it successfully compiles. The command always reports the resource name in lowercase characters, such as **default.jsl**

fd8 The default is that InfoPrint XT appends information about the resource compilation process to the **pdxtpdl.log** file, which is in the directory for the resource group. If you define the **fd8** stream, the command redirects the information to this file descriptor. InfoPrint XT does not delete the **pdxtpdl.log** file from the directory for the resource group.

> **Note:** InfoPrint XT writes the output from file descriptor eight (**fd8**) to the **pdxtpdl.log** file in the working directory for the job. This file contains the names of the resources that InfoPrint XT compiled.

fd9 The command writes a file that contains problem determination information to file descriptor nine (**fd9**). It uses the AIX **pax** command to generate a compressed archive of the resource directory. The archive is in USTAR format.

Return codes from the pdxtpdl command

Return codes from the **pdxtpdl** command are:

0 The command successfully compiled all the specified resources.

EINVAL (22) One of the command's options has an error.

E2BIG (7) The command contains too many command options.

ENOATTR (112)
> You specified a command option without a value, or you did not specify a required command option.

ENOENT (2) The command did not locate the resources to compile. The file or pattern that the **-l** or **-n** parameter specified did not contain or match any valid file names.

ENOMEM (12) Not enough memory is available for the command.

EEXIST (17) A resource was already compiled; you did not specify the **-r** parameter with the command.

ECONNABORTED (72)
> The command did not compile one or more resources because of a non-zero return code from an associated subcommand.

ECONNRESET (73)
> The command did not compile one or more resources, but associated subcommands had return codes of zero.

other Any other return codes that are not in this list are return codes from C functions. See "Return code numbers" on page 184.

`+ — — — — — — — End of Programming Interface information — — — — — - — +`

Chapter 5. Submitting Xerox jobs for data stream conversion

This chapter describes how to convert Xerox Line Conditioned Data Stream and metacode jobs to the Advanced Function Presentation format. For a brief overview about working with Xerox jobs, see the **pdxt_jobs** man page that InfoPrint XT for AIX provides. Enter this command:

```
man pdxt_jobs
```

Whether you use InfoPrint XT with InfoPrint Manager for AIX or InfoPrint ProcessDirector determines how you use InfoPrint XT to convert the jobs. See the appropriate topic for the type of installation: "Processing Xerox jobs with InfoPrint Manager" or "Using the pdxtx2afp command to process Xerox jobs" on page 105.

Processing Xerox jobs with InfoPrint Manager

These topics apply to installations that use InfoPrint Manager with InfoPrint XT.

Document attributes that you specify for processing

You can use several InfoPrint Manager document attributes when you process Xerox jobs with InfoPrint XT. Whether you use an InfoPrint XT parameter mapping file influences which attributes you use for a job. See "Creating a custom parameter mapping file" on page 32.

If you do not use a parameter mapping file, you must specify these attributes for every Xerox job:

document-format
Specify this attribute with a value of either **lcds** or **metacode**. These values are equivalent and identify the associated job as a Xerox job.

other-transform-options
Specify this attribute with a value that lists the conversion parameters that the job requires. See Appendix A, "Conversion parameters for converting Xerox jobs," on page 151. This is an example of specifying conversion parameters with the **other-transform-options** attribute:

```
-x "other-transform-options='xjdl=p1mvs xjde=dflt xrecfm=fixed xlrecl=133 xcc=m'"
```

Note: At a minimum, you must know the starting JDL and JDE pair, the carriage-control type, and the record format of the job. If the job contains fixed records, you must also know the record length.

resource-context
Specify this attribute with a value that identifies the path to the AFP resources that the job requires. For example:

```
-x resource-context=/var/pdxt/resources/common
```

The value is the same as the path that the **-o** option of the **pdxtloadres** command specifies, or the path to the resource group that the **-g** option specifies. See "Using the pdxtloadres command to load Xerox resources" on page 73.

If you use a parameter mapping file, how you set up the mapping file entries determines which of these document attributes you must specify for Xerox jobs:

document-format
You must always specify **lcds** or **metacode** for this attribute.

destination-pass-through

You can specify this attribute with the value or values that you want InfoPrint Manager to pass through. To have InfoPrint XT read information in the parameter mapping file and use the values to compare to mapping file entries, use this format:

```
-x destination-pass-through=-opa=passthru_values
```

The valid keywords and values that you can use with a parameter mapping file are the same ones that you can specify with the **-p** option of the **pdxtloadres** command. You can specify one or more keyword and value pairs. See page 106. This is an example of keyword and value pairs that InfoPrint XT can use with the **destination-pass-through** attribute:

```
-x destination-pass-through=-opa=class=D,forms=BILLING
```

If you use only ***=*** keyword and value pairs in the parameter mapping file, you can omit the **destination-pass-through** attribute.

resource-context

You can specify this attribute with a value that identifies the path to the AFP resources that the job requires. If you use the **xinlr** conversion parameter to embed the AFP resources in the data stream for the job, you can omit the **resource-context** attribute. For more information about the **xinlr** conversion parameter, see page 155.

In addition to the attributes already described, as an option, you can specify the **document-comment** attribute. Use this attribute to activate transform directives. See "Using transform directives" on page 37. Whether you use a parameter mapping file does not affect the use of the **document-comment** attribute.

Methods you can use to associate document attributes with a job

InfoPrint XT provides flexibility in the methods that you can use to associate the required attributes and any optional attributes with a job. The most common methods are using Download for z/OS and specifying the attributes directly with the **pdpr** command. See Chapter 6, "Transferring jobs with Download for z/OS," on page 119, and "Using the pdpr command to transform and print Xerox jobs" on page 103.

Less commonly used methods are associating an InfoPrint Manager default document with a logical destination or using an attributes file. To use one of these methods, see the InfoPrint Manager documentation for information about creating default document objects and attributes files. "Bibliography" on page 247 lists InfoPrint Manager publications.

How InfoPrint XT searches for resources

Before you submit Xerox jobs for processing by InfoPrint XT, you must load all the Xerox resources that the jobs require on the AIX system. The load process creates AFP versions of the Xerox resources. When you submit a Xerox job, those AFP versions of the Xerox resources must be available to InfoPrint XT. This lists the locations in the order that InfoPrint XT searches them for the resources:

1. The path that the InfoPrint Manager **resource-context** document attribute specifies.
2. The path that the **PSFPATH** environment variable specifies.
3. The path that the InfoPrint Manager **resource-context** actual destination attribute specifies.

Notes:

1. Other InfoPrint Manager attributes specify resource paths, such as **resource-context-font** and **resource-context-form-definition**. InfoPrint XT ignores the path information specified with these attributes.

2. When you process jobs that contain FILE Dynamic Job Descriptor Entry commands, InfoPrint XT also uses this search path hierarchy. For FILE DJDE commands that specify the **P** storage parameter, InfoPrint XT loads the associated resources in the first directory that it locates in the search order. For example, if the **resource-context** document attribute specifies **/var/pdxt/resources/pdxttest** and the **resource-context** actual destination attribute specifies **/var/pdxt/resources/common**, InfoPrint XT loads the FILE DJDE resources in the **/var/pdxt/resources/pdxttest** directory. For more information about FILE DJDE storage parameters, see "Processing jobs that contain FILE DJDE commands" on page 116.

Using the pdpr command to transform and print Xerox jobs

Use the InfoPrint Manager **pdpr** command and a combination of attributes to print Xerox jobs. You can specify all InfoPrint Manager job and document attributes and all InfoPrint XT conversion parameters directly from the command line. Because the command can be lengthy, this example uses the AIX line-continuation character, ****. You can use continuation characters to span several lines for a single command. When you enter a long command on the AIX system, you generally do not have to use continuation characters. You can enter the command on the same line; AIX system scrolls to the right as you enter the command.

- To submit the job **SIMPLEX**, which is in the **/home/inputdata/jobs** directory, to the **pdxt-ld** logical destination:

```
pdpr -d pdxt-ld -x document-format=metacode \
-x "other-transform-options='xjdl=p1mvs xjde=dflt xrecfm=f xlrecl=133 xcc=m'" \
-x resource-context=/var/pdxt/resources/test \
/home/inputdata/jobs/SIMPLEX
```

Working with jobs that contain OTEXT DJDE commands

When you use InfoPrint Manager with InfoPrint XT, InfoPrint XT can display the messages that OTEXT DJDE commands specify. It also embeds the messages in No Operation (NOP) structured fields in the AFP that it generates for the job. See "Working with InfoPrint XT AFP structured fields" on page 58.

Note: You cannot display OTEXT messages on systems that do not have InfoPrint Manager installed. You can still process the jobs.

InfoPrint XT OTEXT message window overview

InfoPrint XT can display OTEXT messages on a specific X server. See "Configuration tasks for OTEXT job processing: Combined InfoPrint Manager and InfoPrint XT installations" on page 35. Figure 7 on page 104 shows an example of the InfoPrint XT window for OTEXT messages.

Figure 7. InfoPrint XT OTEXT message window for Processing Xerox jobs

When you submit an OTEXT job for processing, InfoPrint XT shows the window the first time that it finds an OTEXT message in the job. The title bar for the window contains the name of the InfoPrint Manager actual destination. Information in the message area of the window identifies the job and can include job-attribute information if it is present for the job. The message area also includes the text of the OTEXT messages that the job contains. The types of OTEXT messages are:

- Informational messages that require no operator response.
- OTEXT messages that use the WAIT parameter and that require an operator response before processing can continue. For WAIT OTEXT messages, InfoPrint XT forces the OTEXT message window to the forefront on the display. Wait until the printer stops printing the current segment of the job before you do the action that the OTEXT message requests. After you do the action, click **Continue** to respond to the message.

The InfoPrint XT OTEXT window is scrollable. It accumulates messages up to a preset number of bytes. If you close the window and InfoPrint XT opens it again for a new OTEXT job, messages for previous jobs are no longer available.

You can also do these other actions from the OTEXT window:

- Cancel the job.
- Disable the actual destination that is printing the job

The next topics describe these actions.

Canceling an OTEXT job

When InfoPrint XT finds a WAIT OTEXT message, and while it waits for an operator responFse, the **Cancel Job** button on the OTEXT message window is active. You can click this button to cancel the job and discard it from the system. You might find this function useful if an OTEXT message requests an action that you cannot complete. For example, it requests that you load a specific form in a specific tray on the printer, but that form is not available. Click **Cancel Job** to cancel the job so that other jobs can print. When you have the correct form available, you can resubmit the job that you cancelled.

Disabling the actual destination for the OTEXT job

When InfoPrint XT finds a WAIT OTEXT message, and while it waits for an operator response, the **Disable** *adestname* button on the OTEXT window is active. Click this

button to disable the InfoPrint Manager actual destination. Disabling the actual destination does not cause InfoPrint Manager to discard the job; InfoPrint Manager changes the job state to pending. Click **Disable** *adestname* at any point in the job to temporarily suspend printing. For example, if you notice that the job contains sensitive information, and you must secure the printer area before continuing with the job, you can use this function. When you are ready to resume the job, use standard InfoPrint Manager methods, such as entering the **pdenable** command, to enable to actual destination.

Related information

InfoPrint XT provides a substitute InfoPrint Manager input data user-exit program that you can use when you enable InfoPrint Manager actual destinations to process jobs that contain OTEXT DJDE commands. See "Setting up a substitute InfoPrint Manager input data user-exit program" on page 57.

Processing Xerox jobs with InfoPrint ProcessDirector

These topics apply to installations that use InfoPrint ProcessDirector.

When processing Xerox jobs with InfoPrint ProcessDirector, you should use an InfoPrint XT parameter mapping file to specify the attributes you want to use for a job. See "Creating a custom parameter mapping file" on page 32. You can also specify the job attributes using the **pdxtx2afp** command options. See "Using the pdxtx2afp command to process Xerox jobs."

You must also tell **InfoPrint ProcessDirector** where to find the AFP resources that InfoPrint XT used to process each Xerox job. To specify the location of the InfoPrint XT AFP resources in the InfoPrint ProcessDirector GUI, select the appropriate **Job Type**, open the **PrintJobs** step and enter an InfoPrint XT AFP resource path, such as **/var/pdxt/resources/common**, in the **AFP resource path** property.

Using the pdxtx2afp command to process Xerox jobs

If you do not have InfoPrint Manager or InfoPrint ProcessDirector installed, use the InfoPrint XT **pdxtx2afp** command to process a Xerox job. If you only want to convert a job without printing it, you can also use this command in a combined InfoPrint Manager or InfoPrint ProcessDirector and InfoPrint XT installation. You might find this useful to use the AFP that InfoPrint XT generates for other purposes, or to verify that a job will convert.

Notes:

1. This topic shows the default values for **pdxtx2afp** command options as supplied by InfoPrint XT. You can change the default values using the **PDXTX2AFP_ARGS** environment variable. See "Controlling the default arguments when you process jobs (PDXTX2AFP_ARGS)" on page 29. You can also affect the default values for the **pdxtx2afp** command using a parameter mapping file. See "Creating a custom parameter mapping file" on page 32.

2. You can control some aspects of the conversion process using transform directives. See "Using transform directives" on page 37.

```
+ — — — — — — — — — Programming Interface information — — — — — — — — — +
```

The syntax of the **pdxtx2afp** command is:

pdxtx2afp [**-i** *inputfile* | -] [**-o** *outputfile* | -]
    [[**-g common** | *group*] | [**-r** *resourcepath*]]

[**-x** '**xjdl=dfault xjde=dflt**' | '*cparms*']
[**-p** *passthru_values*] [**-t** '*directives*'] [**-w** *workingdirectory*]

[**-i** *inputfile* | **-**]
Specifies the name of the original Xerox LCDS or metacode job file. If you specify a dash, **-**, for this command option, InfoPrint XT reads from standard input. If you do not specify the **-i** command option, InfoPrint XT reads from standard input.

[**-o** *outputfile* | **-**]
Specifies the file in which InfoPrint XT writes the AFP output from the conversion process. If you specify a dash, **-**, for this command option, InfoPrint XT writes to standard output. If you do not specify the **-o** command option, InfoPrint XT writes to standard output.

[**-g common** | *group*]
Specifies the resource group that contains the resources for the job. This group name is the same name that you specified when you loaded the resources with the **pdxtloadres**, **pdxtcluster** or **pdxtpdl** commands. See the **-g** command option on page 76. If you do not specify this command option, InfoPrint XT looks in the common resource group for the resources that the job requires.

If you specify the **-g** command option, do not specify the **-r** command option. If you specify both, InfoPrint XT uses the value of the last command option specified with the command.

[**-r** *resourcepath*]
Specifies the AFP resource path. This corresponds to the value that you specify for the **resource-context** attribute if you submit the job using the InfoPrint Manager **pdpr** command. If you do not specify this command option, InfoPrint XT looks for resources in the **/var/pdxt/resources/common** directory.

If you specify the **-r** command option, do not specify the **-g** command option. If you specify both, InfoPrint XT uses the value of the last command option specified with the command.

[**-x** '**xjdl=dfault xjde=dflt**' | '*cparms*']
Specifies the Xerox-specific conversion parameters for the job. See Appendix A, "Conversion parameters for converting Xerox jobs," on page 151.

You can specify more than one pair of **-x** parameters and values, up to a maximum of 50. If you do not specify the **-x** command option, InfoPrint XT uses a default of **xjdl=dfault xjde=dflt**.

[**-p** *passthru_values*]
Specifies pass-through values that you can use to pass information to InfoPrint XT, or that you can use to pass information to application exits. If you use InfoPrint Manager with InfoPrint XT, this is equivalent to the InfoPrint Manager **destination-pass-through** document attribute. To pass information to InfoPrint XT, use one of these formats:

```
-p passthru_values
```

```
-p -opa=passthru_values
```

When the value for the **-p** command option begins with **-opa=**, InfoPrint XT reads information from the parameter mapping file **pdxtx2afp.map**. It also defines the temporary working directory in

/var/pdxt/jobs. The remainder of the value is a series of one or more keyword and value pairs. Valid keywords and values are:

class=*n*
> Specifies the class for the job. This corresponds to the CLASS parameter that you specify if you submit the job with job control language (JCL). *n* is a single character.

destination=*dest*
> Specifies the destination for the job. This corresponds to the DEST parameter that you specify if you submit the job with JCL. *dest* is a value from 1 through 8 characters.

forms=*form*
> Specifies the name of the form for the job. This corresponds to the FORMS parameter that you specify if you submit the job with JCL. *form* is a value from 1 through 8 characters.

jobid=*jobid*
> Specifies an ID for the job. *jobid* is a value from 1 through 8 characters. If you do not specify this keyword, InfoPrint XT uses **UNKNOWN** for the job ID.

jobname=*name*
> Specifies a name for the job. *name* is a value from 1 through 8 characters. If you do not specify this keyword, InfoPrint XT uses **UNKNOWN** for the job name.

If you specify more than one keyword and value pair, separate the pairs with commas; do not include any spaces.

Note: If you specify any keywords other than those that are shown, InfoPrint XT ignores them.

These examples show different methods of specifying the **-p** command option, with keywords and values that InfoPrint XT can use:

```
-p -opa=class=D,forms=BILLING
```

```
-p -opa=jobname=NOV004
```

[-t '*directives***']**
> Specifies any job-specific transform directives. This corresponds to the values that you specify for the **document-comment=PDXTX2AFP_DIRECTIVES:** attribute if you submit the job using theInfoPrint Manager **pdpr** command. For more information, see "Using transform directives" on page 37 and page 40.

[-w *workingdirectory* **]**
> Specifies the working directory that InfoPrint XT uses when it processes the job. Unless errors occur, InfoPrint XT always deletes the files that it creates in this directory after conversion finishes successfully. If you do not specify this command option, InfoPrint XT uses a subdirectory of the directory that the **PDXTWORKDIR** environment variable specifies as the working directory. InfoPrint XT builds a subdirectory name of *jobname-jobID-n*. *jobname* and *jobid* come from the **-p -opa** values, and *n* is a sequence number. For more information about the **PDXTWORKDIR** environment variable,

see "Controlling the working directory that InfoPrint XT uses for variable data (PDXTWORKDIR)" on page 27.

Notes:

1. Any directory that you specify must exist; InfoPrint XT does not create the directory for you.

2. InfoPrint XT ignores the **-k** transform directive when you specify a working directory with the **-w** command option.

3. Whether files remain in a user-specified working directory depends on the severity and the type of error.

4. Only one instance of the **pdxtx2afp** command can use a given working directory at a time. This is because the **pdxtx2afp** command creates and uses files that are not job-specific. For example, the command writes messages to the **x2afp.lst** file. If two instances of the command share the same working directory, you lose the messages from one of the instances.

Streams used by the pdxtx2afp command

The **pdxtx2afp** command uses file descriptors while it processes Xerox jobs:

fd0 (STDIN) You can pass the Xerox data stream as standard input to file descriptor zero.

fd1 (STDOUT) You can instruct InfoPrint XT to write the AFP data stream that results from conversion to file descriptor one.

fd2 (STDERR) InfoPrint XT writes messages from the conversion process to standard error.

fd3 If you define this file descriptor and InfoPrint XT tried to convert the job, InfoPrint XT writes one record that contains the total number of pages that the conversion process produced.

fd9 The command writes a file that contains problem determination information to file descriptor nine. It uses the AIX **pax** command to generate a compressed archive of the resource directory. The archive is in USTAR format.

Return codes from the pdxtx2afp command

Return codes from the **pdxtx2afp** command have these meanings:

0 The command successfully produced one or more AFP pages.

EINVAL (22) The parameter list for the command contains arguments that are not valid.

E2BIG (7) The parameter list for the command contains too many arguments.

ENOATTR (112)
A parameter is missing.

ECONNABORTED (72)
The command converted the job, but it produced no pages because of a non-zero return code from an associated subcommand.

ECONNRESET (73)
The command converted the job, but it produced no pages. Associated subcommands had return codes of zero.

other   Any other return codes that are not in this list are return codes from C functions. See "Return code numbers" on page 184.

+ — — — — — — — End of Programming Interface information — — — — - — +

Examples: pdxtx2afp command

These are examples of **pdxtx2afp** commands for conversion and scanning tasks. Because of the length of the commands, the examples use the line continuation character:

- In this example, the Xerox job and all files that the **pdxtx2afp** command generates are in the **/tmp/waite/51230** directory. The resources for the job are in the InfoPrint XT common resource library:

```
pdxtx2afp -i /tmp/waite/51230/103355000 -o /tmp/waite/51230/103355000.afp \
-r /var/pdxt/resources/common -w /tmp/waite/51230 \
-x 'xjdl=lbb xjde=pay xcc=machine xclb=none xrecfm=variable xlrecl=32760' \
2> /tmp/waite/51230/conversion.log
```

- In this example, the Xerox job is in the current directory. The resources are loaded in the resource library for the resource group named **payroll** (the JDL for the job must be loaded before InfoPrint XT can scan the job successfully). The conversion process only scans the job for the resources that it requires, as specified by the **xconvert=no** conversion parameter. InfoPrint XT does not produce an AFP file for the job. The **x2afp.lst** section of the file **scanlist** contains the names of the resources that the job requires:

```
pdxtx2afp -i ./103355000 -r /var/pdxt/resources/payroll \
-x 'xjdl=lbb xjde=pay xcc=machine xclb=none xrecfm=variable xlrecl=32760 \
xconvert=no xafprc=12' 2> ./scanlist
```

Using the pdxtjtape command to process offline jobs

Xerox offline jobs are on tape volumes. InfoPrint XT provides the **pdxtjtape** command, which you can use to work with jobs on tape. The command supports tape volumes that have standard labels or ISO/ANSI labels, and tape volumes that have no labels. If you use InfoPrint Manager with InfoPrint XT, you can use the command to submit jobs from tapes to InfoPrint Manager for processing. If you do not have a combined InfoPrint Manager and InfoPrint XT installation, or if you only want to copy the jobs from the tape to files on the AIX system, you also use the **pdxtjtape** command. In addition, use the command to query tape volumes.

The **pdxtjtape** command can read from any type of tape device that the AIX system supports. If the AIX **tctl** command recognizes the tape device, you can use the **pdxtjtape** command to access the device. This includes, but is not limited to, tape formats such as 4 mm, 8 mm, 1/4-inch (QIC), 1/2-inch 9-track, and 3490e.

+ — — — — — — — — — Programming Interface information — — — — — — — — — +

The syntax of the **pdxtjtape** command is:

- To submit jobs to InfoPrint Manager or InfoPrint ProcessDirector:

  pdxtjtape [-f submit] [-T /dev/rmt*n* **| rmt***n* **|** *n* **] [-c 0 |** *numfiles* **]**
         [-l ? | *labeltype* **] [{ -d | -p }** *destination* **] [-P** "*prtopts*" **]**
         [-x "*cparms*" **] [-g** *resgrp* **| -r** *respath* **] [-e** "*exitname arguments*" **]**
         [-b yes | no | pass] [-i yes | no]
- To copy jobs to files on the AIX system:

pdxjtape [**-f copy**] [**-T /dev/rmt***n* | **rmt***n* | *n*] [**-c 0** | *numfiles*]
        [**-l ?** | *labeltype*] [**-o** *outdirectory*] [**-n auto** | **label**] [**-x** "*cparms*"]
        [**-g** *resgrp* | **-r** *respath*] [**-e** " *exitname arguments*"]
        [**-b yes** | **no** | **pass**] [**-i yes** | **no**]

• To query a tape volume:

pdxjtape -f query [**-T /dev/rmt***n* | **rmt***n* | *n*] [**-c 0** | *numfiles*]
        [**-l ?** | *labeltype*] [**-i yes** | **no**]

[-b yes | no | pass]
    Specifies whether the **pdxjtape** command does deblocking for tape
    volumes that have IBM standard labels or ISO/ANSI labels. Valid values
    are:

    yes   The command does deblocking if the tape label indicates that the
            data is blocked. This is the default.

    no   The command does not do deblocking and it does not pass any
            deblocking information to other programs. You might find this useful
            for troubleshooting tasks that require you to access the Xerox data
            in its original format.

    pass   The command does not do deblocking. However, it passes
            deblocking information to the **aioxltje** tape job application exit. If
            you are using the command to submit the job to InfoPrint Manager,
            it also passes conversion parameters that are specific to deblocking
            to InfoPrint Manager. See "Setting up a tape job application exit" on
            page 42, and Appendix A, "Conversion parameters for converting
            Xerox jobs," on page 151.

[-c 0 | *numfiles*]
    Specifies the number of jobs that you want to process. The default is **0**,
    which causes the **pdxjtape** command to process all the jobs on the tape
    volume.

[-d *destination*]
    If you are processing the job with InfoPrint Manager, this command option
    specifies the target destination to which the **pdxjtape** command submits
    the job. The target destination is either an actual destination name, if the
    logical-destinations-assigned attribute is set on the actual destination, or
    a logical destination name.

    If you specify both the **-d** command option and the **-p** command option, the
    pdxjtape command uses the last destination specified.

[-e "*exitname argument*"]
    Specifies arguments to pass to any of the application exits that you can use
    with the **pdxjtape** command. *exitname* is the name of the application exit;
    see:
    • "Setting up a tape begin application exit" on page 41
    • "Setting up a tape job application exit" on page 42
    • "Setting up a tape end application exit" on page 44

    Enclose the name of the application exit and its arguments in quotation
    marks.

[-f submit | copy | query]
    Specifies the function that you want the **pdxjtape** command to do:
    • **submit** submits the job to InfoPrint Manager.

- **copy** copies the job to a file on the AIX system.
- **query** displays messages about the tape volume.

The default for the **-f** command option depends on whether InfoPrint Manager is installed on the AIX system. If InfoPrint Manager is installed, the default is **submit**. If InfoPrint Manager is not installed, the default is **copy**.

[-g *resgrp* **]**

Specifies the resource group that contains the resources that you loaded for the jobs on the tape volume. The **pdxtjtape** command does not use the **-g** command option and value. Instead, it passes this information to the **aioxltje** application exit and to InfoPrint Manager, if InfoPrint Manager is installed.

If you specify the **-g** command option, you cannot specify the **-r** command option. If you do not specify either **-g** or **-r**, InfoPrint XT derives a value from the system configuration.

[-i <u>yes</u> | no]

Specifies whether the **pdxtjtape** command runs in interactive mode:

- **yes** specifies that the command runs in interactive mode. This is the default.
- **no** specifies that the command does not run in interactive mode.

In interactive mode, the **pdxtjtape** command can prompt for responses from the user. For example, if the label on the tape volume does not match the label type that the **-l** command option specifies, the **pdxtjtape** command ejects the tape volume and asks the user to insert another volume. If you specify **-i no**, the command does not prompt for another tape. Instead, it stops processing the tape.

The **-i** command option is intended for use by application programs, when no user is available to respond to prompts.

[-l <u>?</u> | *labeltype* **]**

Specifies the type of label for the tape volume:

?   The **pdxtjtape** command queries the tape volume and determines whether it has labels. If labels are present, InfoPrint XT determines the type of labels. This is the default.

NL   The tape volume does not have labels.

      Note: InfoPrint XT still checks the tape volume for labels. If labels are present, it issues a message.

BLP   The tape volume does not have labels and the **pdxtjtape** command bypasses label processing. InfoPrint XT does not verify whether labels are present.

SL   The tape volume has IBM standard labels.

SUL   The tape volume has both IBM standard labels and user labels.

AL   The tape volume has ISO/ANSI labels.

AUL The tape volume has both ISO/ANSI labels and user labels.

Notes:

1. The label types of **NL**, **BLP**, **SL**, **SUL**, **AL**, and **AUL** for the **pdxtjtape** command correspond to the label types for the label subparameter of the LABEL data definition (DD) statement on z/OS.

2. The **pdxjtape** command ignores user labels.

[-n auto | label]

Specifies the naming convention to use when the **pdxjtape** command copies jobs from the tape volume to files on the AIX system:

auto   Causes the command to generate an automatic name. The command uses this pattern for the file name:

```
pdxjtape.rmtn.m.job
```

In the file name, **rmt**n is the tape device from which the **pdxjtape** command read the job. m is an integer that represents the relative position of the job on the tape volume. The command assigns 0 for the first job, 1 for the second job, and so on. If a file with an automatically generated name already exists in the target directory on the AIX system, the **pdxjtape** command replaces the existing file. **auto** is the default.

label   Causes the command to use the file or data set name from the volume label. If a file with this name already exists in the target directory on the AIX system, the **pdxjtape** command appends a period and a sequence number to the end of the name of the new file, so that it has a unique name. For example, if three jobs on the tape volume have the name **ABC**, the command creates three files with these names:

- **ABC**
- **ABC.0**
- **ABC.1**

If you specify **-n label**, and the tape volume has no label or the label does not contain a file name or a data set name, the **pdxjtape** command uses the constant **NONAME** as the file name.

[-o *outdirectory* **]**

For copy operations, specifies the directory in which the **pdxjtape** command copies the job files. The directory that you specify with the **-o** command option must exist; InfoPrint XT does not create it for you. If you do not specify a directory, the command copies the job files to the current directory.

[-p *destination* **]**

If you are processing the job with InfoPrint Manager, this command option specifies the target destination to which the **pdxjtape** command submits the job. The target destination is either an actual destination name, if the **logical-destinations-assigned** attribute is set on the actual destination, or a logical destination name.

If you specify both the **-p** command option and the **-d** command option, the **pdxjtape** command uses the last destination specified.

[-P "*prtopts***"]**

If you are processing the job with InfoPrint Manager, the **-P** command option specifies the command options and values for the InfoPrint Manager **pdpr** command. For example, to use an attributes file, specify:

```
-P "-X filename"
```

Enclose the InfoPrint Manager command options and values in quotation marks.

[-r *respath* **]**

Specifies the directory that contains the resources that you loaded for the jobs on the tape volume. The **pdxtjtape** command does not use the **-r** command option and value. Instead, it passes this information to the **aioxltje** application exit and to InfoPrint Manager, if InfoPrint Manager is installed.

If you specify the **-r** command option, you cannot specify the **-g** command option. If you do not specify either **-r** or **-g**, InfoPrint XT derives a value from the system configuration.

[-T /dev/rmt*n* **| rmt***n* **|** *n* **]**

Specifies the tape device to read. The device number, *n*, is from 0 through 255. You can also include an extension with the device number. The extension controls how InfoPrint XT accesses the tape volume. Table 16 shows how to specify the extension with the **/dev/rmt***n* format; you can also specify the extension with either of the other two formats.

Table 16. Tape device rewind, retension, and density settings

Value	Rewind on close	Retension on open	Density setting
/dev/rmt*n*	Yes	No	1
/dev/rmt*n***.1**	No	No	1
/dev/rmt*n***.2**	Yes	Yes	1
/dev/rmt*n***.3**	No	Yes	1
/dev/rmt*n***.4**	Yes	No	2
/dev/rmt*n***.5**	No	No	2
/dev/rmt*n***.6**	Yes	Yes	2
/dev/rmt*n***.7**	No	Yes	2

If you do not specify the **-T** command option, InfoPrint XT uses the value of the **TAPE** environment variable to determine the tape device. If the **TAPE** environment variable has no setting, InfoPrint XT reads from **/dev/rmt0.1**.

[-x "*cparms***"]**

Specifies the Xerox-specific conversion parameters for the job. For the parameters that you can specify, see Appendix A, "Conversion parameters for converting Xerox jobs," on page 151. Enclose the conversion parameters and values in quotation marks. The **pdxtjtape** command does not use the **-x** command option and value. Instead, it passes this information to the **aioxltje** application exit and to InfoPrint Manager, if InfoPrint Manager is installed.

Streams used by the pdxtjtape command

The **pdxtjtape** command uses file descriptors while it processes Xerox jobs on tapes:

fd0 (STDIN) The command reads user responses to prompts from file descriptor zero.

fd1 (STDOUT) The command does not use file descriptor one.

fd2 (STDERR) The command writes messages to file descriptor two.

fd3 When it copies jobs from the tape volume to files on the AIX

system, the **pdxtjtape** command writes a list of the files that it created to file descriptor three. It writes each file name on its own line.

fd4
When it submits jobs to InfoPrint Manager or when it copies jobs to files, the **pdxtjtape** command writes a single record that contains the label information to file descriptor four. Table 17 shows the record format of the record that the command writes to file descriptor four.

Table 17. Record format for label information, pdxtjtape command

Offset	Format	Description
0	short int	Record length of this record (117)
2	char[1]	Label class: I = SL or SUL A = AL or AUL N = NL or BLP
3	char[9]	Label type (see the description of the **-l** command option on page 111)
12	char[7]	Volume serial number or volume identifier
19	char[15]	Owner name or owner identifier
34	char[18]	Data set identifier or file identifier
52	char[7]	Creation date (cyyddd)[1]
59	char[12]	Creation date (yyyy-mm-dd)
71	char[7]	Expiration date (cyyddd)[1]
78	char[12]	Expiration date (yyyy-mm-dd)
90	char[1]	Record format: F = Fixed V = Variable (SL or SUL) D = Variable (AL or AUL) S = Spanned (AL or AUL) U = Undefined
91	int	Record length
95	int	Block length
99	int	Block offset
103	char[1]	Control character: M = Machine A = ANSI blank = none
104	char[14]	System code
118	char[1]	Block attribute

Notes:

1. [1] The **c** in this date format specifies the century.
2. The **pdxtjtape** command only completes the fields in the record where they apply. For example, only SL and SUL labels have a control character field.

3. Character fields that are longer than a single byte are null-terminated strings. For SL and SUL labels, the **pdxtjtape** command converts the strings from EBCDIC to ASCII.

Return codes from the pdxtjtape command

Return codes from the **pdxtjtape** command have these meanings:

0
The command successfully completed a job submission, job copy, or query operation.

EINVAL (22)
An error exists with one of the command options.

E2BIG (7)
The command has too many command options.

ENOATTR (112)
The command contains a command option without a value, or a required command option is missing.

ENODEV (19)
The value of the **-T** command option is not a tape device.

ECONNRESET (73)
The process was stopped by the user or by an application exit.

EIO (5)
A volume label is not valid.

other
Any other return codes that are not in this list are return codes from C functions. See "Return code numbers" on page 184.

+ — — — — — — — End of Programming Interface information — — — — — - — +

Restrictions

The **pdxtjtape** command has these restrictions:

- The command does not support multivolume tapes.
- The command does not deblock spanned record formats or undefined record formats.

Related information

Be aware of these points when you use the **pdxtjtape** command to process offline jobs:

- You can change the default values for **pdxtjtape** command options using the **PDXTJTAPE_ARGS** environment variable. See "Controlling the default arguments when you process Xerox jobs from tape (PDXTJTAPE_ARGS)" on page 28.

  Note: If you specify the **-T** command option with the **PDXTJTAPE_ARGS** environment variable, the **pdxtjtape** command ignores the **TAPE** environment variable.

- For combined InfoPrint Manager and InfoPrint XT installations, the **pdxtjtape** command sets these document attributes for jobs that it submits to InfoPrint Manager:

  document-file-name
  The command uses the data set name or the file name from the volume label as the value of the **document-file-name** attribute. If no label exists, or if the label does not contain this information, the **pdxtjtape** command does not set this attribute.

document-format
> The command always sets the **lcds** value for this attribute.

document-type
> The command always sets the **printable** value for this attribute.

other-transform-options
> The command uses the conversion parameters that you specified with the **-x** command option. In addition, if you specified the **-b pass** command option and value with the **pdxtjtape** command and the label contains deblocking information, the command appends the corresponding conversion parameters that apply to deblocking. For example, the **xdeblock** conversion parameter and the **xtrecfm** conversion parameter. If you did not specify the **-x** command option, or if no deblocking information exists to pass, the **pdxtjtape** command does not set this attribute.

resource-context
> The command uses the resource path that you specified with the **-g** or the **-r** command option. If you do not specify either **-g** or **-r**, the **pdxtjtape** command does not set this attribute.

Examples: pdxtjtape command

These examples show how you can process jobs on tape volumes with the **pdxtjtape** command:

- To submit one job to InfoPrint Manager from a tape volume in the device **/dev/rmt1** without retensioning or rewinding the tape:

  ```
  pdxtjtape -f submit -T /dev/rmt1.1 -c 1 -d mydest
  ```

- To copy one job from **/dev/rmt1** to a file in the current directory and to name the file using the data set name or the file name that the label specifies:

  ```
  pdxtjtape -f copy -T /dev/rmt1.1 -c1 -n label
  ```

- To display information about the volume in **/dev/rmt1** and to rewind it afterward:

  ```
  pdxtjtape -f query -T /dev/rmt1
  ```

Processing jobs that contain FILE DJDE commands

In the Xerox environment, the use of FILE DJDE commands is a common method of updating the resources that are on the printer. InfoPrint XT supports jobs that include FILE DJDE commands; you do not have to specify any special conversion parameters to process jobs that contain them.

InfoPrint XT loads the resource that each FILE DJDE specifies in a resource group or in a specific directory location. You control the resource group or location in which InfoPrint XT loads the resources when you submit the job for conversion. When you submit the job with the **pdxtx2afp** command, you can use the **-g** or the **-r** command option to specify the group or location.

When you use the **pdpr** command in a combined InfoPrint Manager and InfoPrint XT installation, the search-path hierarchy determines where InfoPrint XT loads the resources. See "How InfoPrint XT searches for resources" on page 102.

The **P** or **D** storage parameter of the FILE DJDE command determines how long InfoPrint XT retains the files that it generates during the resource-load process in the resource group or location:

- FILE DJDE commands that use the **P** storage parameter specify that the associated resources are permanent resources. They remain on the system after the job that specifies them finishes. Permanent resources are then available to subsequent jobs that specify the same resource group or location.
- FILE DJDE commands that use the **D** storage parameter indicate that the associated resources are temporary. InfoPrint XT embeds all temporary resources inline in the AFP data stream that it generates for the job. It then deletes copies of the temporary resource files from the resource group or location after the job finishes conversion. Therefore, subsequent jobs cannot use them.

There might be occasions when you want to embed some or all the permanent resources inline with the AFP data stream for the job. InfoPrint XT provides the **xinlr** conversion parameter, which you can use to specify which permanent resources you want InfoPrint XT to embed. You can specify one or more types of printable resources, such as AFP page segments and AFP character sets. You can also specify that InfoPrint XT embeds all types of printable resources. For the syntax of the **xinlr** conversion parameter, see page 155.

Processing limitations

In the Xerox environment, the printer can only process one job at a time. Because InfoPrint XT can convert jobs simultaneously, a limitation exists that applies to concurrently processing jobs that use FILE DJDEs. If you have several jobs that specify the same resource group or location, do not submit them at the same time. Unpredictable results can occur.

Do not submit a job that uses FILE DJDEs to load two different resources with the same name. For example, if the first report in the job loads one version of the image **abc.img** and the second report loads another version of **abc.img**, unpredictable results can occur.

Including resource-load messages for FILE DJDE jobs

The default is that InfoPrint XT does not include messages about the resources that it loads from FILE DJDE commands. You can instruct InfoPrint XT to include resource-load messages in the **x2afp.lst** file for the job by setting an environment variable. See:

- "Controlling resource-load messages for FILE DJDE jobs (PDXT_AIOLXDFE_TRACE)" on page 30
- "x2afp.lst file" on page 147

Processing jobs that contain stapling commands

You can process jobs that contain Xerox stapling commands with InfoPrint XT. Xerox OUTPUT STAPLE PDL commands, combined with FACEUP and NTO1 commands, specify stapling actions. InfoPrint XT supports these combinations of the three commands:

```
OUTPUT STAPLE=YES   and   OUTPUT FACEUP=YES   and   OUTPUT NTO1=YES
OUTPUT STAPLE=YES   and   OUTPUT FACEUP=YES   and   OUTPUT NTO1=n
```

InfoPrint XT provides these conversion parameters that you can specify with the job to control stapling: **xhonorstaple**, **xstaplemax**, **xstapleorient**, and **xstaplesysgen**. For more information about these parameters, see Appendix A, "Conversion parameters for converting Xerox jobs," on page 151.

Notes:

1. Some restrictions apply when InfoPrint XT processes jobs that contain stapling commands. See page 7.

2. Always review the documentation for your particular printer for the latest information about features and capabilities. For example, stapling capacities and supported media differ between printer models. See these publications:

   - *InfoPrint 2190, 2210, & 2235 Printers (MT 2707): Planning Guide*, G550-0952
   - *InfoPrint 2060ES/2075ES/2090ES/2105ES: Finishing Guide for Printing*, S544-5845
   - *InfoPrint Pro C900, Pro C900 AFP, and Pro C900S Printers: Planning Guide*, G550-1148

Chapter 6. Transferring jobs with Download for z/OS

This chapter describes how to set up and use Download for z/OS to submit Xerox jobs for processing by InfoPrint XT for AIX.

Download for z/OS is a communications mechanism that sends jobs to InfoPrint Manager for AIX or InfoPrint ProcessDirector for AIX. It is a separately orderable feature of IBM Print Services Facility (PSF) for z/OS.

Notes:

1. You cannot use the download support that InfoPrint XT provides in installations that do not have InfoPrint Manager or InfoPrint ProcessDirector installed.

2. For information about using download functions, see the **pdxt_download** man page that InfoPrint XT provides. Enter this command:

   ```
   man pdxt_download
   ```

Sending jobs to InfoPrint Manager

When you use Download for z/OS to send jobs for processing by InfoPrint XT, you use these major components:

1. The first component is Download for z/OS. It operates as an output writer, or functional subsystem application, of the job entry subsystem (JES). The output writer sends the output data sets to remote systems on the TCP/IP network.

2. The second component is part of InfoPrint Manager. The InfoPrint Manager **mvsprsd** daemon process receives the data sets from the output writer on z/OS.

3. The third component is a download program that the InfoPrint Manager **mvsprsd** daemon calls. This program is typically specific to the data stream in use:

   - InfoPrint Manager provides a sample shell script program that receives MO:DCA-P data without inline resources, line data, and mixed mode data sets. The shell script name is **mvsprpsm.sh**.

   - InfoPrint XT provides a program that receives Xerox Line Conditioned Data Stream and metacode jobs. The program name is **pdxtdownload**.

For more information about the output writer on z/OS, see *Print Services Facility for z/OS: Download for z/OS*, S550-0429. For more information about **mvsprsd** and **mvsprpsm.sh**, see the InfoPrint Manager documentation. "Bibliography" on page 247 lists InfoPrint Manager publications.

Sending jobs to InfoPrint ProcessDirector

When you use Download for z/OS to send jobs for processing by InfoPrint XT, you use these major components:

1. The first component is Download for z/OS. It operates as an output writer, or functional subsystem application, of the job entry subsystem (JES). The output writer sends the output data sets to remote systems on the TCP/IP network.

2. The second component is part of InfoPrint ProcessDirector. The InfoPrint ProcessDirector **mvsprsd** daemon process receives the data sets from the output writer on z/OS.

3. The third component is a download program that the InfoPrint ProcessDirector **mvsprsd** daemon calls. This program is typically specific to the data stream in use:

- Download input devices receive data sets from Download for z/OS. Download for z/OS might create a job control language (JCL) file that is sent with the job. InfoPrint ProcessDirector treats the JCL file as a control file; Download input devices can use this control file to set job properties or to set the job type. InfoPrint ProcessDirector provides several predefined Download input devices that receive jobs from Download for z/OS.

  Each of the InfoPrint ProcessDirector Download input devices start their own instance of the **mvsprsd** daemon.

- InfoPrint XT provides a program that receives Xerox Line Conditioned Data Stream and metacode jobs. The program name is **pdxtdownload**.

For more information about the output writer on z/OS, see *Print Services Facility for z/OS: Download for z/OS*, S550-0429. For more information about **mvsprsd**, and Download input devices, see the InfoPrint ProcessDirector documentation. "Bibliography" on page 247 lists InfoPrint ProcessDirector publications.

What the InfoPrint XT pdxtdownload program does

The InfoPrint XT **pdxtdownload** program receives Xerox LCDS and metacode jobs. If InfoPrint Manager is installed, InfoPrint XT submits them to InfoPrint Manager using the **pdpr** command. If InfoPrint ProcessDirector is installed, InfoPrint XT submits them to a specific InfoPrint ProcessDirector Input Device based on the Input Device named in the command used to invoke the **pdxtdownload** daemon. During job processing, **pdxtdownload** merges data sets for jobs that contain more than one data set and translates z/OS job information to InfoPrint Manager attributes.

Notes:

1. You do not have to use **pdxtdownload** to receive Xerox LCDS and metacode jobs. You can write your own program, or you can modify the InfoPrint Manager **mvsprpsm.sh** sample shell script in installations with InfoPrint Manager..

2. When running with InfoPrint Manager, the **pdxtdownload** program does not automatically set the **document-format**, **other-transform-options**, and **resource-context** attributes. You must define these externally. For example, you can use an attribute mapping file to set the attributes based on the characteristics of the job. See "Using JCL parameters to assign InfoPrint Manager attributes" on page 125 and "Creating an attribute mapping file" on page 127.

3. You can use the **pdxtdownload** program to receive other data streams, such as PCL and PostScript jobs. This publication does not describe how to process PCL or PostScript jobs. Also, if you use the default setting of **YES** for the **SEND_REC_LENGTH** parameter on z/OS, z/OS adds a 2-byte length field to the beginning of each record. This prevents InfoPrint Manager from correctly recognizing the data format as PCL or PostScript.

   Note: Use a setting of **SEND_REC_LENGTH=YES** for Xerox data sets and set the **xrecfm** conversion parameter for the jobs to **variable** on the AIX system.

Setting up Download for z/OS

Print Services Facility for z/OS: Download for z/OS, G550–0429, contains detailed information about installing and configuring Download for z/OS. Use this as a checklist to make sure that the required tasks are done:

1. Create one or more Download for z/OS functional subsystems (FSSs) on z/OS. You can then route jobs to Download for z/OS using traditional methods for routing jobs to printers. For example, you can route them through the output class or the destination.

2. Create a routing-control data set that specifies to Download for z/OS the TCP/IP address and port number of the AIX system. The port number must be the same one that you use when you start the InfoPrint Manager or InfoPrint ProcessDirector **mvsprsd** daemon process on the AIX system. See "Starting the InfoPrint Manager mvsprsd daemon" on page 124. and "Starting the InfoPrint ProcessDirector mvsprsd daemon." Figure 8 shows a sample routing-control data set:

```
/**** Route data sets with destination PRT01 or PRT02 **********
DEST=PRT01,PRT02,      /* All data sets with destination PRT01 or PRT02
CLASS=Q,               /* and a CLASS of Q
IPADDR=9.99.176.136,   /* Send to the AIX system with this IP address
PORTNUM=7777;          /* at this port number

/**** Routing Criteria 2 ***********************
CLASS=R,               /* All data sets with CLASS R
FORMS=BILLS,           /* and with form name BILLS
      RECEIPTS,        /* or form name RECEIPTS
IPADDR=9.99.176.138,   /* Send to the AIX system with this IP address
PORTNUM=6001,          /* at this port number
RETRYNUM=3,            /* Retry 3 times if transmission fails
RETRYINTV=60;          /* Wait 60 seconds between retries
```

Figure 8. Sample z/OS routing-control data set

3. Set up the Download for z/OS Print Parameters Exit 15, either **APSUX15** or **APSUC15**, as required for the installation. If you process jobs that contain more than one data set, you must make sure that the exit passes the output group identifier with the **-opa** parameter. The **OUTGRP** parameter specifies the output group identifier as **FIRST**, **NEXT**, or **LAST**.

4. Start the Download for z/OS FSS on z/OS.

Starting the InfoPrint ProcessDirector mvsprsd daemon

The InfoPrint XT **pdxtdownload** program works with the InfoPrint ProcessDirector **mvsprsd** daemon.

The user should be logged on as **aiw1**.

Instead of invoking the **pdxtdownload** program directly, you start it through the **-x** command option when you start the **mvsprsd** daemon. You must also specify other **mvsprsd** command options. Some are required and others are optional. An underline denotes the required options:

-d *Directory*   Specifies the name of the working directory that the **mvsprsd** daemon uses when it receives a data set. The **pdxtdownload** program also stores log information in this directory.

You can use any directory that you want for the **-d** command option. However, you must create the directory before you start the **mvsprsd** daemon. Consider using one of these conventions:

- One directory for all TCP/IP ports: **/var/pdxt/download**
- One directory for each TCP/IP port: **/var/pdxt/download/** *portnumber*

-k   Causes the **mvsprsd** daemon to retain JCL files for use with InfoPrint ProcessDirector.

-n 1   Causes the **mvsprsd** daemon to receive one job at a time. You must specify this option to merge a job with several data sets into a single job.

-p *portnumber*   Specifies the TCP/IP port number that the **mvsprsd** daemon uses when it communicates with the output writer on z/OS. This number must be the same as the one that the routing-control data set specifies on z/OS. See Figure 8 on page 121.

-q "'*input_device* [*directives* ...]'"
       Specifies the InfoPrint ProcessDirector input device that the **pdxtdownload** program uses. The value you specify must be **aiw1**~*input_device_name*, where *input_device_name* is the name of the desired InfoPrint ProcessDirector input device name. At minimum, you must specify the input device. You can also specify download directives that control how **pdxtdownload** processes data sets. See "Using download directives" on page 130.

> **Note:** The notation is an outer set of double quotation marks and an inner set of single quotation marks. You do not have to use this notation if you specify only the name of the input device.

-x /usr/opt/pdxt/bin/pdxtdownload
       Causes the **mvsprsd** daemon to call the **pdxtdownload** program whenever it receives a data set from z/OS. You must include the path information.

-X "*directives***"**   Specifies download directives that control how the **pdxtdownload** program processes data sets. These are the same directives that you can specify with the **-q** option. If you specify both the **-X** command option and the **-q** command option, InfoPrint XT ignores any directives specified through **-q**.

> **Note:** You might find that using the **-X** command option is simpler than specifying directives with the **-q** command option. This is because **-X** does not require sets of different types of quotation marks.

Notes:

1. In an InfoPrint ProcessDirector environment, you must start any **mvsprsd** daemons that will invoke **pdxtdownload**. InfoPrint ProcessDirector cannot invoke **pdxtdownload** from the **mvsprsd** daemons that it starts automatically.

2. In an InfoPrint ProcessDirector environment, the port numbers that you specify when you start **mvsprsd** must be different from the ones used by any **mvsprsd** daemons that InfoPrint ProcessDirector starts automatically.

Starting the **mvsprsd** daemon to submit jobs to InfoPrint ProcessDirector:

```
mvsprsd -p 6001 -q aiw1~input_device_name-d /var/pdxt/download —k —n 1
        -x /usr/opt/pdxt/bin/pdxtdownload
```

Notes:

1. You can verify that the **mvsprsd** daemon started with the parameters that you specified by entering this command:

   ```
   ps -ef | grep mvsprsd
   ```

2. If you enter a command to start the **mvsprsd** daemon and it is already running, InfoPrint ProcessDirector does not issue an error message. If you get unexpected results when sending and processing jobs, you might want to verify the parameters for the daemon. Use the **ps** command described in the previous note.

Stopping the InfoPrint ProcessDirector mvsprsd daemon

InfoPrint ProcessDirector for AIX provides no automated method of stopping the **mvsprsd** daemon. You must use the AIX **kill** command to kill the process for the daemon:

1. Log in to the AIX system as the root user.

2. From the command line, determine the process ID number for the **mvsprsd** daemon. Enter:

   ```
   ps -ef | grep mvsprsd
   ```

   AIX system displays information similar to this:

   ```
   aiw1      1726     1  0 Jan27 ?        00:00:00 mvsprsd —p 6001 -q aiw1~HotFolderXerox
   -d /var/pdxt/download -k —n 1 -x /usr/opt/pdxt/bin/pdxtdownload
   ```

   The number in the second column at the left is the process ID number for the daemon.

3. Kill the daemon process. Enter:

   ```
   kill nnnnn
   ```

   nnnnn is the process ID number.

Using JCL parameters to set InfoPrint ProcessDirector job properties

The **pdxtdownload** program prepares and copies the JCL file, the PRD file and the LST file to the designated Hot Folder.

In InfoPrint ProcessDirector, in the Job Type properties, configure the Job property rules from the **SetJobPropsFromRules** step, to specify the default control file: **/aiw/aiw1/control_files/rules/receive_jcl_overrides.cfg**.

The control file sets initial values for job properties by using values of JCL parameters that accompany a job that was submitted through Download for z/OS. You can write your own control file for this purpose.

In the designated Hot Folder Input Device, set the Batching Mode property value to List.

Starting the InfoPrint Manager mvsprsd daemon

The InfoPrint XT **pdxtdownload** program works with the InfoPrint Manager **mvsprsd** daemon. Instead of invoking the **pdxtdownload** program directly, you start it through the **-x** command option when you start the **mvsprsd** daemon. You must also specify other **mvsprsd** command options. Some are required and others are optional. An underline denotes the required options:

-d *Directory*   Specifies the name of the working directory that the **mvsprsd** daemon uses when it receives a data set. The **pdxtdownload** program also stores log information in this directory.

You can use any directory that you want for the **-d** command option. However, you must create the directory before you start the **mvsprsd** daemon. Consider using one of these conventions:

- One directory for all TCP/IP ports: **/var/pdxt/download**
- One directory for each TCP/IP port: **/var/pdxt/download/***portnumber*

-n 1   Causes the **mvsprsd** daemon to receive one job at a time. You must specify this option to merge a job with several data sets into a single job.

-p *portnumber*   Specifies the TCP/IP port number that the **mvsprsd** daemon uses when it communicates with the output writer on z/OS. This number must be the same as the one that the routing-control data set specifies on z/OS. See Figure 8 on page 121.

-q "'*ldest* [*directives* ...]'"
Specifies the default logical destination that the **pdxtdownload** program uses. At minimum, you must specify the destination. You can also specify download directives that control how **pdxtdownload** processes data sets. See "Using download directives" on page 130.

> **Note:** The notation is an outer set of double quotation marks and an inner set of single quotation marks. You do not have to use this notation if you specify only the name of the logical destination.

-x /usr/opt/pdxt/bin/pdxtdownload
Causes the **mvsprsd** daemon to call the **pdxtdownload** program whenever it receives a data set from z/OS. You must include the path information.

-X "*directives*"   Specifies download directives that control how the **pdxtdownload** program processes data sets. These are the same directives that you can specify with the **-q** option. If you specify both the **-X** command option and the **-q** command option, InfoPrint XT ignores any directives specified through **-q**.

> **Note:** You might find that using the **-X** command option is simpler than specifying directives with the **-q** command option. This is because **-X** does not require sets of different types of quotation marks.

Starting the **mvsprsd** daemon to submit jobs to InfoPrint Manager:

```
mvsprsd -p 6001 -q prtxt-ld -d /var/pdxt/download —n 1 -x /usr/opt/pdxt/bin/pdxtdownload
```

Notes:

1. You can verify that the **mvsprsd** daemon started with the parameters that you specified by entering this command:

   ```
   ps -ef | grep mvsprsd
   ```

2. If you enter a command to start the **mvsprsd** daemon and it is already running, InfoPrint Manager for AIX does not issue an error message. If you get unexpected results when sending and processing jobs, you might want to verify the parameters for the daemon. Use the **ps** command described in the previous note.

Stopping the InfoPrint Manager mvsprsd daemon

InfoPrint Manager for AIX provides no automated method of stopping the **mvsprsd** daemon. You must use the AIX **kill** command to kill the process for the daemon:

1. Log in to the AIX system as the root user.

2. From the command line, determine the process ID number for the **mvsprsd** daemon. Enter:

   ```
   ps -ef | grep mvsprsd
   ```

   AIX system displays information similar to this:

   ```
   aiw1      1726     1  0 Jan27 ?        00:00:00 mvsprsd -p 6001 -q aiw1~HotFolderXerox
   -d /var/pdxt/download -k -n 1 -x /usr/opt/pdxt/bin/pdxtdownload
   ```

   The number in the second column at the left is the process ID number for the daemon.

3. Kill the daemon process. Enter:

   ```
   kill nnnnn
   ```

   nnnnn is the process ID number.

Using JCL parameters to assign InfoPrint Manager attributes

When the **mvsprsd** daemon receives a data set and calls the **pdxtdownload** program, it passes a series of options and values. Some of the values, such as the job title, come from the job control language (JCL) statements that submitted the data set. Other values, such as the job identifier, come from z/OS itself.

The **pdxtdownload** program translates most of these options to InfoPrint Manager attributes. Table 18 shows how **pdxtdownload** uses the options and values that it receives from **mvsprsd**.

The **pdxtdownload** program prepares and copies the JCL file, the PRD file and the LST file to the designated Hot Folder.

Table 18. InfoPrint Manager attribute assignments when using the pdxtdownload program

Information from z/OS that passes to mvsprsd	mvsprsd options that pass to pdxtdownload	InfoPrint Manager attributes that pdxtdownload assigns
ADDRESS	-oaddress1 -oaddress2 -oaddress3 -oaddress4	address1-text address2-text address3-text address4-text
APSUX15	-opa OUTGRP	Not applicable

Table 18. InfoPrint Manager attribute assignments when using the pdxtdownload program (continued)

BUILDING	-obu	building-text
CLASS	-opa class	destination-pass-through=-opa=class class
COPIES	-ocop	results-profile [2]
DATACK	-odatac	data-fidelity-problem-reported
DCB=RECFM	-occ -occtype	Not applicable [1]
DCB=OPTCD=J	-otrc	Not applicable [1]
Not applicable	-odatat	Not applicable [1]
DEPT	-ode	department-text
DEST	-opa destination	destination-pass-through=-opa=destination mvs-destination
DEST=IP	-oipdest	Not applicable
DUPLEX	-odu	sides plex
FCB	-opagedef	Not applicable [1]
FORMDEF	-of	Not applicable [1]
FORMS	-opa forms	destination-pass-through=-opa=forms forms mvs-forms
INTRAY	-oin	Not applicable
Job ID	-opa jobid	destination-pass-through=-opa=jobid
Job Name	-ojobn	job-name
NAME	-ona	name-text
Node ID	-ono	node-id-text
OFFSETXB	-ooffxb	x-image-shift-back
OFFSETXF	-ooffxf	x-image-shift
OFFSETYB	-ooffyb	y-image-shift-back
OFFSETYF	-ooffyf	y-image-shift
OUTBIN	-ooutbin	Not applicable
OVERLAYB	-oovlyb	Not applicable[1]
OVERLAYF	-oovlyf	Not applicable[1]
PAGEDEF	-opagedef	Not applicable[1]
PRMODE	-oprmode	shift-out-shift-in
Programmer	-opr	programmer-text
PRTQUEUE	-oprtqueue	destination-name-requested [3] other attributes [4]
RESFMT	-ore	Not applicable [1]
ROOM	-oro	room-text

Table 18. InfoPrint Manager attribute assignments when using the pdxtdownload program (continued)

SEGMENT	-opa segmentid	destination-pass-through=-opa=segmentid mvs-segment-id
Source File	-ofileformat	Not applicable [1]
TITLE	-oti	title-text
TRC	-otrc	Not applicable [1]
UCS	-ochars	Not applicable [1]
User ID	-ous	user-id-text

Notes:
1. These apply to AFP (MO:DCA-P) data sets. They do not apply to Xerox jobs.
2. This applies when you use the **-m none** download directive. See "Using download directives" on page 130.
3. This applies when you use the **-q ldest** download directive.
4. This applies when you use the **-q ldest** or **-q attr** download directives.

For jobs with more than one data set, **pdxtdownload** uses only the options from the last data set for the job. It ignores options for all preceding data sets.

Creating an attribute mapping file

InfoPrint XT can automatically assign InfoPrint Manager or attributes to a job based on criteria that you specify. You specify the criteria in an attribute mapping file. The default attribute mapping file is **pdxtdownload.map**. It is in the **/var/pdxt** directory. You can specify a different file with the **-a** download directive; see page 130.

The attribute mapping file contains attribute groups. An attribute group consists of one or more expressions and one or more attribute-and-value pairs. The expressions are in the form *keyword=value*. They specify the criteria to match. When a job matches the criteria, InfoPrint XT assigns the attribute-and-value pairs that follow the expression to the job. When you edit an attribute mapping file, make sure that the expressions start in the first column of the file. Precede attribute-and-value pairs by one or more blank spaces. Put each attribute-and-value pair on a separate line. For example:

```
keyword=value
   attribute=value
   attribute=value
```

These rules apply to attribute mapping files:
- The keywords that you can use in the expressions are the same as the **mvsprsd** options shown in the middle column of Table 18 on page 125. The **-opa** option is further split into these individual keywords:
  - **class**
  - **destination**
  - **forms**
  - **jobid**
  - **OUTGRP**
  - **segmentid**

- You can use the special keyword-and-value pair ***=*** to specify that the attribute group applies to all jobs.
- Do not include spaces between a keyword and value. Do not include spaces in the value itself.
- Values for the keywords can be any string. The value can include the wildcard characters **?** and *****. The question mark matches any single character. The asterisk matches any number of characters.
- Both keywords and values are case-sensitive.
- You cannot use wildcard characters to define the keyword to match. For example, **-ooffx*** is not valid for matching both the **-ooffxb** and **-ooffxf** keywords.
- The attribute mapping file can contain blank lines and comment lines, which InfoPrint XT ignores. Comment lines start with a number sign, **#**.
- You cannot include comments on keyword lines or on attribute lines.
- Two or more keywords on a single line represent an *and* condition. Jobs must match all the keywords to use the associated attributes.
- Two or more keywords on separate lines represent an *or* condition. Jobs can match any one of the keywords to use the associated attributes.
- InfoPrint XT checks all attribute groups in the file. A job can match the criteria for more than one group and thereby use attributes from several groups. The associated attribute-and-value pairs can complement or override each other; if several groups specify the same attribute, InfoPrint XT uses the last occurrence of the attribute.

Figure 9 on page 129 shows examples of various types of attribute groups.

```
#---------------------------------------------#
# All jobs contain Xerox data streams          #
#---------------------------------------------#
*=*
   document-format=metacode

#---------------------------------------------#
# Send all jobs from userid SMITH to logical   #
# destination smith and limit them to 10 pages #
#---------------------------------------------#
-ous=SMITH
   destination-name-requested=smith
   page-select=:10

#---------------------------------------------#
# Class D jobs, class E jobs, and any jobs with #
# names that start with INV use resources from  #
# /var/pdxt/resources/inventory                 #


#---------------------------------------------#
class=D
class=E
-ojobn=INV*
   resource-context=/var/pdxt/resources/inventory

#-----------------------------------------------------------#
# Jobs with class D and forms INSURE use resources from      #
# /var/pdxt/resources/insurance                              #
#-----------------------------------------------------------#
class=D forms=INSURE
   resource-context=/var/pdxt/resources/insurance
```

Figure 9. Completed attribute mapping file

You can also use substitute values from the **mvsprsd** options in expressions. A substitute value is a keyword that you delimit with a leading and trailing pair of percent signs. This is an example of how to use a substitute value:

```
#---------------------------------------------#
# Use the FORMS value as the resource group  #
# for all jobs                                #
#---------------------------------------------#
*=*
   resource-context=/var/pdxt/resources/${Job.Form}
```

In this example, if FORMS=BLUE is specified for the job on z/OS, InfoPrint XT assigns this InfoPrint Manager or InfoPrint ProcessDirector attribute to the job:

```
resource-context=/var/pdxt/resources/BLUE
```

If InfoPrint XT does not recognize the substitute value, it passes the attribute-and-value pair to InfoPrint Manager exactly as it is in the attribute mapping file.

Processing jobs that contain more than one data set

For jobs that contain several data sets, Download for z/OS sends each data set separately to the **mvsprsd** daemon. In turn, **mvsprsd** calls the **pdxtdownload** program once for each data set.

If you use the **-m 1document**, **-m 1jobcop**, or **-m 1jobdup** download directive, **pdxtdownload** can submit the data sets to InfoPrint Manager or InfoPrint

ProcessDirector as a single job. You must do these tasks if you use any of the directives that cause **pdxtdownload** to merge the data sets:

- You must install Print Parameters Exit 15 on z/OS. This causes the output writer to include sequence information with the data sets as it sends them. You can use either APSUX15 or APSUC15. PSF for z/OS provides these exits.
- On AIX, specify the **-n 1** command option when you start the **mvsprsd** daemon. This causes **mvsprsd** to call one instance of **pdxtdownload** at a time.

If you use the **-m 1document** download directive, all the data sets in the job must use the same type of carriage control. If one or more of the data sets uses a different type of carriage control, you can use the **-p** download directive to convert the carriage controls. For information about the directive, see page 132.

Using download directives

InfoPrint XT provides download directives that you can use to control some aspects of the overall download process. For example, you can use a download directive to tell InfoPrint XT how to handle jobs that contain more than one data set.

InfoPrint XT provides these download directives:

-a   Specifies the name of an attribute mapping file. InfoPrint XT ignores this directive when you specify job submission to InfoPrint Manager or to InfoPrint ProcessDirector. The default mapping file is **pdxtdownload.map**. It is in the directory that you specify with the **mvsprsd -d** command option. You can change the mapping file with the **-a** directive. The file that you specify must already exist. It can be in any directory. Include the path with the file name. For more information, see "Creating an attribute mapping file" on page 127.

-c   Specifies how **pdxtdownload** builds the InfoPrint Manager **job-comment** attribute:

   options
   pdxtdownload stores all the **mvsprsd** options in the **job-comment** attribute for the job. This is the default.

   jobid   **pdxtdownload** stores the z/OS job identifier in the **job-comment** attribute for the job.

   none   **pdxtdownload** does not set the **job-** attribute for the job.

-d   This multi-valued directive specifies the debug options for the **pdxdownload** program. If you specify more than one value, separate the values with commas:

   nofiles
   Discards attributes files, ***.att**, and data set list files, ***.dsl**, after submitting jobs to InfoPrint Manager or InfoPrint ProcessDirector.

   files   Keeps attributes files and data set list files after submitting jobs to InfoPrint Manager or InfoPrint ProcessDirector.

   nojobs
   Discards job data files after submitting jobs to InfoPrint Manager or InfoPrint ProcessDirector.

   jobs   Keeps job data files after submitting jobs to InfoPrint Manager or InfoPrint ProcessDirector.

submit

Submits jobs to InfoPrint Manager or InfoPrint ProcessDirector.

nosubmit

Does not submit jobs to InfoPrint Manager or InfoPrint ProcessDirector.

Note: Use this download directive only at the direction of a technical support representative.

-e   Specifies arguments to pass to specific application exits. Use this format for the value:

"*exitname argument...*"

exitname is the name of the application exit, either **aioxldse** or **aioxldje**, to which **pdxtdownload** passes the arguments. *argument...* is one or more specific arguments. For more information about the application exits, see these topics:

- "Setting up the download data set application exit" on page 54
- "Setting up the download job application exit" on page 56

-h   Specifies the name of a hot folder that **pdxtdownload** uses to submit jobs to InfoPrint ProcessDirector. The default hot folder name is **/aiw/aiw1/System/hf/pdxt**. InfoPrint XT ignores this directive if InfoPrint ProcessDirector is not installed.

-i [ippd | ipm]

Specifies whether **pdxtdownload** submits jobs to InfoPrint Manager or InfoPrint ProcessDirector, when both products coexist on the same AIX system.

ippd

Specifies that **pdxtdownload** submits jobs to InfoPrint ProcessDirector. If InfoPrint ProcessDirector is installed, this is the default.

ipm

Specifies that **pdxtdownload** submits jobs to InfoPrint Manager. If InfoPrint ProcessDirector is also installed, you must specify this directive in order to submit jobs to InfoPrint Manager.

Note: If InfoPrint ProcessDirector is not installed, **pdxtdownload** ignores the **-i** directive and submits jobs to InfoPrint Manager. The **-i** directive assumes that InfoPrint Manager is installed, regardless of whether InfoPrint ProcessDirector is also installed.

-j   Controls whether **pdxtdownload** adds the z/OS job identifier as a prefix to the input file name before it submits the job to InfoPrint Manager or InfoPrint ProcessDirector:

yes   **pdxtdownload** adds the z/OS job identifier to the input file name. This is the default.

no   **pdxtdownload** does not add the z/OS job identifier to the input file name.

-l   Specifies what **pdxtdownload** writes to the receiver log. For more information, see "Receiver log" on page 136:

error   **pdxtdownload** writes information to the receiver log for any jobs that had errors. It does not write information for jobs that completed processing successfully. This is the default.

all   **pdxtdownload** writes information to the receiver log for all jobs.

none   **pdxtdownload** does not write information to the receiver log.

-m   Specifies how InfoPrint XT handles jobs that contain several data sets:

<u>**1document**</u>

> **pdxtdownload** submits the data sets to InfoPrint Manager or InfoPrint ProcessDirector as a single job that contains a single document. Use this directive for Xerox LCDS and metacode data sets.
>
> **pdxtdownload** creates the single document by concatenating all the data sets together in a single file. If the JCL specified a number of copies, the file contains the copies.
>
> **1document** is the default.

1jobcop

> **pdxtdownload** submits the data sets to InfoPrint Manager or InfoPrint ProcessDirector as a single job that contains one document for each data set. If the JCL specified a number of copies, **pdxtdownload** sets the **copy-count** document attribute. If the **pdxtdownload** command submits the data sets to InfoPrint Manager, use this directive for data sets that contain data streams other than Xerox LCDS or metacode, such as PCL or PostScript data sets.
>
> **Notes:**
> 1. This publication does not go into detail about processing PCL or PostScript jobs. Also, make sure that z/OS does not prepend record-length information to each record in the job. InfoPrint Manager or InfoPrint ProcessDirector recognizes PCL and PostScript data by the values in the first bytes of the job. Record-length information prevents InfoPrint Manager or InfoPrint ProcessDirector from correctly identifying the type of data.
> 2. Because Xerox data streams are record-oriented, they require record-length information to distinguish between the individual records, if the records vary in length. Non-Xerox data streams, such as PCL and PostScript, are stream-oriented, so record lengths corrupt the data stream.

1jobdup

> **pdxtdownload** submits the data sets to InfoPrint Manager or InfoPrint ProcessDirector as a single job that contains one document for each copy of each data set. Use this directive for data sets that contain data streams other than Xerox LCDS or metacode, such as PCL or PostScript data sets.

none   **pdxtdownload** submits each individual data set to InfoPrint Manager or InfoPrint ProcessDirector as a separate job that contains a single document. If the JCL specified a number of copies, **pdxtdownload** sets the **results-profile** attribute for the job.

> **Note:** **pdxtdownload** always processes jobs that contain a single data set as though the **-m none** command option is in effect.

-p   Specifies how **pdxtdownload** pre-processes data sets as it receives them. For Xerox LCDS and metacode jobs, you might need to pre-process the

data sets before InfoPrint XT can process them. For example, if you merge multi-dataset jobs together as a single job, make sure that all data sets use the same type of carriage control.

The operands for the **-p** directive consist of *keyword=value* pairs. You can specify more than one operand with the directive; separate operands with commas:

a2m   Specifies whether **pdxtdownload** converts ISO/ANSI carriage controls to machine carriage controls:

    a2m=none
        pdxtdownload does not convert the carriage controls. This is the default.

    a2m=multi
        pdxtdownload converts the carriage controls for multi-dataset jobs.

    a2m=all
        pdxtdownload converts the carriage controls for all jobs.

        Note: If you do not transfer online Xerox jobs from z/OS with Download for z/OS and the jobs contain both ANSI and machine code carriage controls, the AFP that InfoPrint XT generates can be wrong. You can use the **xpcctest** conversion parameter to process online jobs with mixed carriage controls that you transfer through methods other than Download for z/OS. See Appendix A, "Conversion parameters for converting Xerox jobs," on page 151.

addmcc
    Specifies whether **pdxtdownload** adds machine carriage controls to data sets that have none:

    addmcc=none
        pdxtdownload does not add machine carriage controls. This is the default.

    addmcc=multi
        pdxtdownload adds machine carriage controls to multi-dataset jobs.

    addmcc=all
        pdxtdownload adds machine carriage controls to all jobs.

addskip
    Specifies whether **pdxtdownload** adds a skip-to-channel-one carriage control to the beginning of data sets that do not have one:

    addskip=none
        pdxtdownload does not add skip-to-channel-one carriage controls. This is the default.

    addskip=multi
        pdxtdownload adds skip-to-channel-one carriage controls to multi-dataset jobs.

    addskip=all
        pdxtdownload adds skip-to-channel-one carriage controls to all jobs.

> **Note:** **pdxtdownload** adds skip-to-channel-one carriage controls only to data sets that you process with the **a2m** and **addmcc** operands. If you specify **a2m=none** and **addmcc=none**, **pdxtdownload** ignores the **addskip** operand.

countrec

Specifies whether **pdxtdownload** counts records and pages:

countrec=no

pdxtdownload does not count records or pages. This is the default.

countrec=yes

pdxtdownload counts records and pages.

When you specify **countrec=yes** to cause **pdxtdownload** to count records and pages, InfoPrint XT sets the InfoPrint Manager or InfoPrint ProcessDirector **record-count** and **page-count** document attributes. **pdxtdownload** counts pages by counting the number of records that have a skip-to-channel-one carriage control. If it does not find any skip-to-channel-one carriage controls, it does not set the **page-count** attribute. The number of skip-to-channel-one carriage controls does not always reflect the true number of pages in the data stream when the job prints. InfoPrint XT sets the **page-count** attribute to the true number of pages when it converts Xerox LCDS and metacode jobs to AFP. Operators can use the page-count value that **pdxtdownload** sets to estimate the size of the printed output for workflow purposes.

Notes:

1. **pdxtdownload** honors **countrec=yes** only when the resulting job contains a single document.
2. At the point that **pdxtdownload** sets the initial value of the **page-count** attribute, it does not try to distinguish logical pages from physical pages.
3. If you have multi-dataset jobs and their carriage controls are not consistent, specify the **-p** directive with these operands:

   ```
   -p a2m=multi,addmcc=multi,addskip=multi
   ```

-q Specifies how **pdxtdownload** interprets the **PRTQUEUE** value from z/OS. InfoPrint XT ignores this directive when you specify job submission to InfoPrint ProcessDirector.

ldest **pdxtdownload** uses the first word of the value for the **destination-name-requested** attribute. It passes any remaining text as InfoPrint Manager attributes. This is the default.

For example, if the **PRTQUEUE** statement has this value:

```
PRTQUEUE='IP4000 initial-value-document=dfault'
```

pdxtdownload passes both the **destination-name-requested** attribute and the **initial-value-document** attribute.

attr **pdxtdownload** uses the entire value as InfoPrint Manager attributes. For example, if the **PRTQUEUE** statement has this value:

```
PRTQUEUE='room-text=B12-4 title-text=DRAFT'
```

pdxtdownload passes the **room-text** and **title-text** attributes to InfoPrint Manager.

ignore
> **pdxtdownload** ignores the **PRTQUEUE** value.

Enabling download directives

You can enable download directives using any one or more of these methods:

PDXTDOWNLOAD_DIRECTIVES environment variable
> Download directives defined by the **PDXTDOWNLOAD_DIRECTIVES** environment variable apply to any data set that **pdxtdownload** receives while the environment variable is in effect. This example shows how to specify the environment variable in the **/etc/environment** file so that it is available to all users:

```
PDXTDOWNLOAD_DIRECTIVES='-j no -q attr'
```

> Do not include delimiters around the value.

> This example shows how to specify the environment variable in the **.profile** file for a user ID:

```
export PDXTDOWNLOAD_DIRECTIVES="-j no -q attr"
```

> **Notes:**
> 1. After you add the environment variable, log out of AIX and log back in to pick up the change.
> 2. You must stop and restart the **mvsprsd** daemon.

/var/pdxt/pdxtdownload.directives file
> Download directives defined in the **pdxtdownload.directives** file can apply to any data set that **pdxtdownload** receives, or they can apply to data sets received on a specific port number. For example:

```
# Port 6001:
# - Do not merge jobs with more than one dataset
6001: -m none

# All ports:
# - Do not prepend the job identifier to input file names
*: -j no
```

> After you create the directives file, make sure that the group is **printq**. Also, make sure that the owner and group have read-write permissions:

```
-rw-rw----   1  xtadmin   12 Jun 06 13:36 pdxtdownload.directives
```

> Use the AIX **chgrp** command to change the group:

```
chgrp printq pdxtdownload.directives
```

> Use the **chmod** command to change the permissions:

```
chmod 660 pdxtdownload.directives
```

mvsprsd -X command option
> You can use the **mvsprsd -X** command option to specify directives. The directives specified through this method apply to any data set received by that instance of the InfoPrint Manager or InfoPrint ProcessDirector **mvsprsd** daemon. For example:

```
mvsprsd -X "-m none"
```

You can also use the **-q** option of the InfoPrint Manager **mvsprsd**
command to specify directives. Do not use both the **-X** command option
and the **-q** command option at the same time.

mvsprsd -q command option
You can use the **mvsprsd -q** command option to specify directives. The
directives apply to any data set received by that instance of the InfoPrint
Manager or InfoPrint ProcessDirector **mvsprsd** daemon. For example:

```
mvsprsd -q "'ldest -m none'" -p 6001 -d /var/pdxt/download -x /usr/opt/pdxt/bin/pdxtdownload
```

Note: When you use the **mvsprsd -q** command option, you must use
multiple pairs of quotation marks. This keeps the logical destination
and directives together when **mvsprsd** calls the **pdxtdownload**
program. In the previous example, the outer pair of double quotation
marks keeps the items together for the initial **mvsprsd** invocation.
The inner pair of single quotation marks keeps the items together for
the **pdxtdownload** invocation.

More than one occurrence of the **-e** download directive are cumulative. The other
download directives are not. For example, if you set the
PDXTDOWNLOAD_DIRECTIVES environment variable to **-e aioxldse** *parm1* and
the **pdxtdownload.directives** file contains ***: -e "aioxldse** *parm2"*, **pdxtdownload**
passes both *parm1* and *parm2* to the **aioxldse** application exit.

pdxtdownload file naming conventions

These topics describe the various file naming conventions that the **pdxtdownload**
program uses during job processing.

Input data sets

The InfoPrint Manager or InfoPrint ProcessDirector **mvsprsd** daemon uses this file
naming convention for data sets that it receives from z/OS:

system.*jobname*[.*step_name*].*form_name*.*date*.*time*.PRD

pdxtdownload always adds a data set sequence number to the end of the input file
name. As an option, it can also add the z/OS job identifier to the beginning of the
file name. The resulting file name convention looks like this:

[*jobid*.]*system*.*jobname*[.*step_name*].*form_name*.*date*.*time*.PRD.*seq#*

Note: For single-data set jobs, the data set sequence number is always **0**.

Receiver log

The file name of the receiver log is **pdxtdownload.***portnumber***.log**. *portnumber* is
the value of the **mvsprsd -p** command option. The receiver log is in the directory
that the **mvsprsd -d** command option specifies. The receiver log contains
information about the download process, such as the information sent from z/OS to
the **mvsprsd** daemon for the job, download directives in effect, and the information
that the **pdxtdownload** program passed to InfoPrint Manager or InfoPrint
ProcessDirector. The log also contains error information that you can use for
diagnostic purposes.

This is an example of the type of information that the receiver log contains:

```
5016-701 2009-11-11 09:07:14 MDT (ppid 23858/pid 29526) port=6001 dset=0 - receipt started
5016-711 Download arguments:
5016-712    i_inpfile = BNMC.WALLINGK.GENER.STD.2002158.09133417364.PRD
5016-712    i_options = -odatat=line -ofileformat=record -occ=yes -occtype=m -opagedef=PA06462 -of=F1A10110
         -ocop=001 -odatac=block -ojobn=WALLINGK -ous=WALLING -ono=BNMCMVSA -ona=SAME -opr=KATHYWALLING-WAITE
         -obu=BUILDING3 -oro=E8-18 -oti=ORB.WAITE.XRXIN,UVD8HMAH -oaddress1=6800DIAGONAL -oaddress2=BOULDER
-oaddress3=CO -oaddress4=80301 -opa=forms=STD,class=J,destination=BALLA,jobid=JOB02106
5016-712    i_queue = "prtxt-ld -j no"

5016-721 Download directives:
5016-722    PDXTDOWNLOAD_DIRECTIVES = ""
5016-723    /var/pdxt/pdxtdownload.directives:
5016-724       "6001: -j no"
5016-725    mvsprsd -q: "-j no""

5016-731 Command: pdpr -X pdxtdownload.6001.att -Z pdxtdownload.6001.dsl < /dev/null > /dev/null
5016-732    rc = 10
   pdpr: 5010-624 Each opening quote (' or ") must have a closing quote.
    ' destination-name-requested="prtxt-ld
                                         ^
5016-707 pdxtdownload.6001.att:
   address1-text=6800DIAGONAL
   address2-text=BOULDER
   address3-text=CO
   address4-text=80301
   building-text=BUILDING3
   job-name=WALLINGK
   name-text=SAME
   node-id-text=BNMCMVSA
   programmer-text=KATHYWALLING-WAITE
   room-text=E8-18
   title-text=ORB.WAITE.XRXIN,UVD8HMAH
   user-id-text=WALLING
   results-profile=::001:
   data-fidelity-problem-reported=none
   destination-pass-through='-opa=class=J,destination=BALLA,forms=STD,jobid=JOB02106'
   class=J
   mvs-destination=BALLA
   mvs-forms=STD
   forms=STD
   job-='-odatat=line -ofileformat=record -occ=yes -occtype=m -opagedef=P1A06462 -of=F1A10110
          -ocop=001 -odatac=block -ojobn=WALLINGK -ous=WALLING -ono=BNMCMVSA -ona=SAME -opr=KATHYWALLING-WAITE
          -obu=BUILDING3 -oro=E8-18 -oti=ORB.WAITE.XRXIN,UVD8HMAH -oaddress1=6800DIAGONAL -oaddress2=BOULDER
          -oaddress3=CO -oaddress4=80301 -opa=forms=STD,class=J,destination=BALLA,jobid=JOB02106 '
   destination-name-requested="prtxt-ld
5016-707 pdxtdownload.6001.dsl:
   -n 1
   -f BNMC.WALLINGK.GENER.STD.2002158.09133417364.PRD.0
5016-702 2009-11-11 09:07:15 MDT (ppid 23858/pid 29526) port=6001 dset=0 (rc 10) - receipt ended
```

Figure 10. Sample Download receiver log

Note: InfoPrint XT only includes a **5016-707** message, which lists the contents of the **pdxtdownload.**_port_**.att** file, if **pdpr** errors occur.

Temporary files

pdxtdownload uses several temporary files. The temporary files are in the directory that the **mvsprsd -d** command option specifies. The names of these files all use the format **pdxtdownload.*.**_extension_:

- The value of ***** depends on whether **pdxtdownload** merges data sets for jobs that contain several data sets. If **pdxtdownload** merges data sets, the value is the port number on which the data set was received. If **pdxtdownload** does not merge data sets, the value is _pidnnnnn. pidnnnnn_ is the **pdxtdownload** process identifier.

- The value of _extension_ is one of these:

  att   Contains the document and job attributes. When **pdxtdownload** submits the job to InfoPrint Manager, it specifies this file with the **pdpr -X** command option.

cat   Contains the data sets for the job. It only exists when you use the **-m 1document** download directive to merge data sets for jobs that contain several data sets.

cnt   Contains record and page-count information.

dsl   Contains the **pdpr** command options that specify the number of copies to print and the files that make up the individual documents of the job. The **-n** command option specifies the number of copies. The **-f** command option specifies the file name. The **dsl** file contains two lines for each document in the job:

```
-n copies_for_document_A
-f document_A
-n copies_for_document_B
-f document_B
```

When **pdxtdownload** submits the job to InfoPrint Manager or InfoPrint ProcessDirector, it specifies the **dsl** file with the **pdpr -Z** command option.

jcl   Contains JCL parameters and print options passed from the z/OS host.

joblog   Contains **pdxtdownload** messages for a given job. After **pdxtdownload** receives all the data sets for a job, it moves the contents of this file to the receiver log.

Unless an unrecoverable error occurs, **pdxtdownload** removes all the temporary files except the receiver log.

Restrictions

These restrictions apply when you use the **pdxtdownload** program:

- Do not use **pdxtdownload** to receive AFP (MO:DCA-P) data streams. Use the InfoPrint Manager **mvsprpsm.sh** shell script or ProcessDirector DownloadAFP Input Device instead.

- If you use an InfoPrint Manager 2000 DSS, you must add these attributes to the **document-attributes-supported** attribute of the InfoPrint Manager 2000 actual destination:

```
node-id-text
room-text
user-id-text
```

- Do not start the **mvsprsd** daemon with the **-k** command option. If you specify this option, the **mvsprsd** daemon retains JCL files for jobs. You must manually discard these files; no mechanism exists to remove them automatically.

Related information

InfoPrint XT provides two application exits that you can use with data sets and with jobs that you send through Download for z/OS. See:

-
-

Chapter 7. Troubleshooting InfoPrint XT

This chapter describes how to diagnose and correct problems when you transform Xerox jobs with InfoPrint XT for AIX. It also describes customer responsibilities for problem determination and how to place a service call to report a problem.

Note: Some of the steps in this chapter use the term *globalID*. In combined InfoPrint Manager or InfoPrint ProcessDirector and InfoPrint XT installations, *globalID* is the InfoPrint Manager or InfoPrint ProcessDirector global job identifier. A global job identifier consists of the name of the InfoPrint Manager or InfoPrint ProcessDirector server that processed the job, followed by a colon and a 10-digit number.

Problem determination: The job resulted in some type of printed output

If you experience problems when you process Xerox jobs, you can begin diagnostic testing by determining whether you received any type of printed output for the job. Printed output is anything that prints for the job, including an InfoPrint XT error sheet. For installations that use InfoPrint Manager with InfoPrint XT, printed output includes an InfoPrint Manager header page or an InfoPrint Manager error page. Review the topics in this section if the job resulted in printed output:

Did the job print, but the pages of the job contained printing errors?
Printing errors on the pages of the job might include data placed at the wrong position on the page or Xerox control information, such as DJDE statements, that print as part of the job data. First, verify the Xerox-specific conversion parameters and values for the job. See Appendix A, "Conversion parameters for converting Xerox jobs," on page 151.

Note: Whether InfoPrint XT creates Advanced Function Presentation output for a Xerox job that has errors in the conversion parameters depends on the severity of the errors. Appendix D, "Resource utility messages and data stream converter messages: AIO*xxxnnnX*," on page 197 describe error severities.

If you use InfoPrint Manager, also verify that the value of the **document-format** attribute for the job is either **lcds** or **metacode**. If the attribute specifies a different format, and depending on what that format is, you might receive printed output that is completely incorrect. For example, if the value is **ascii** for a Xerox job, the printed output might be unreadable. If the job is still on the system, you can issue this command to determine the document format specified for the job:

```
pdls -c job -r document-format globalID
```

If the job is not on the system, submit it again and specify the InfoPrint Manager **job-hold=true** attribute. InfoPrint Manager accepts the job, but does not continue to process it. You can then query for the value of the **document-format** attribute. This example shows how you can submit a job from the command line and specify the **job-hold** attribute. The example assumes that the logical destination supplies all other attributes and conversion parameters for the job:

```
pdpr -p ldest -x job-hold=true /path/jobname
```

Note: An incorrect document format value can also result in no printed output.

Did an InfoPrint Manager header page and an InfoPrint XT error sheet print?
InfoPrint XT generates an error sheet if it cannot create any AFP pages for the Xerox job. The error sheet prints after the InfoPrint Manager header page and includes messages from the transform process. See "Diagnostic and informational files that InfoPrint XT produces" on page 146 for more information.

If the InfoPrint XT error sheet printed, use the information that it contains to do diagnostic tasks. Some common things that you can check for include whether you specified the correct Xerox JDE and JDL pair for the job. You must provide the same Xerox START command information to InfoPrint XT that you enter at a Xerox printer. The **JDL=** and **JDE=** parameters in the **x2afp.lst** section of the error sheet that InfoPrint XT produces identify the starting JDE and JDL pair that InfoPrint XT used. Also, make sure that all values specified with the **other-transform-options** document attribute are correct. Then, verify that you have loaded the JDL and all other resources that the job requires on the system. See Chapter 4, "Copying and loading Xerox resources," on page 63.

Verify that the path you specified with the **resource-context** attribute is correct. This path specifies the location of the converted, AFP resources for the job. InfoPrint XT also uses this path to determine the location of the metrics files for the resources, which it uses in data stream conversion.

Did an InfoPrint Manager header page and an InfoPrint Manager error page print? An InfoPrint Manager error page contains messages that begin with the prefixes **0420** through **0425**, and **5010**. A common cause of InfoPrint Manager errors is specifying the incorrect path to the AFP resources for the job. InfoPrint Manager uses the resources when the job actually prints. Another cause is permissions that prevent InfoPrint XT from accessing an AFP resource. Use the InfoPrint Manager **pdmsg** command to determine the cause of the problem. For example, if the error page included error message **0423-311**, enter this command:

```
pdmsg 0423-311
```

Did an InfoPrint ProcessDirector header page, an InfoPrint ProcessDirector trailer page or a PSF error page print?
Consult InfoPrint ProcessDirector publications to identify the cause of the problem: "InfoPrint ProcessDirector for AIX" on page 247.

Were none of the previous items true?
If none of the previous items were true, continue with combined InfoPrint Manager and InfoPrint XT diagnostic tasks. See "Problem determination: The job resulted in no printed output."

Problem determination: The job resulted in no printed output

Note: See "Problem determination: Processing jobs through Download for z/OS" on page 143 if you submit the job from z/OS using Download for z/OS.

If you submit a Xerox job and you receive no printed output, including no header page and no error sheet, check these items:

Was the value of the document-format attribute for the job correct?
For a Xerox job, the value of the **document-format** attribute must be either **lcds** or **metacode**. If the value of the attribute specifies another format that

requires conversion processing by InfoPrint Manager, processing might fail. For example, if the document format value for a Xerox job was incorrectly specified as **line-data**, InfoPrint Manager tries to use its **line2afp** transform to convert the job. When it cannot complete the conversion, InfoPrint Manager changes the status of the job to **held** and does not print any of the job. You can issue these commands to do diagnostic tests if nothing prints for the job:

- Determine whether InfoPrint Manager still has control of the job and determine the job number for the job. Enter:

  ```
  pdls -f "job-name=jobname"
  ```

  jobname is the actual name of the job. If the job exists, InfoPrint Manager returns information that is similar to this:

  ```
  51   skye:289100001  jobname  held      1         skye-ld
  ```

  Note: If you do not know the name of the job, you can enter this command:

  ```
  pdls | more
  ```

  If many jobs exist on the system, you can use the spacebar to advance through the list to locate a specific job. When you locate the job, make note of the number in the first column.

- Determine the document format of the job by entering the **pdls** command and specifying the job number. For example, if the job number is **51**, enter:

  ```
  pdls 51
  ```

  InfoPrint Manager returns information that is similar to this:

  ```
                              Current Intervening Destination Destinations
  Job  ID              Name     State   Jobs        Requested   Assigned
  ---  --------------  -------- ------- ----------- ----------- ------------
  51   skye:289100001  jobname  held    1           skye-ld

  Document                Document File
  Number    Format        State    Name
  --------  ---------      -------- -------
  1         line-data               jobname
  ```

  The **Format** field identifies the value of the **document-format** attribute.

- Determine the reason for the job state. Enter:

  ```
  pdls -r job-state-reasons 51
  ```

  InfoPrint Manager returns information that is similar to this:

  ```
  skye:289100001: job-state-reasons = rip-failed
                                       job-hold-set
  ```

  In this example, the value **rip-failed** indicates that InfoPrint Manager tried to do the conversion because the document format was a value other than **lcds** or **metacode**, which a Xerox job requires. For descriptions of any values returned for the **job-state-reasons** job attribute, see the *InfoPrint Manager: Reference*, S550-1052.

Is the actual destination enabled?

The actual destination must be enabled and ready to accept jobs. You can issue this command to determine if the actual destination is enabled:

```
pdls -c destination adestname
```

If it is not enabled, you can issue this command to enable it:

```
pdenable -c destination adestname
```

Note: InfoPrint Manager sets the job state to **pending** for a job that you submit when the actual destination is disabled. You can issue these types of **pdls** commands to determine the job state:

```
pdls -f "job-name=jobname"
```

```
pdls jobnumber
```

Does the InfoPrint XT configurable transform object exist in the InfoPrint Manager server?

InfoPrint Manager does not automatically provide the InfoPrint XT configurable transform object. You must explicitly create the transform object during InfoPrint XT installation. See "Creating the InfoPrint XT configurable transform" on page 15.

Is the actual destination set up correctly for use with InfoPrint XT?

Values for the **document-formats-supported** actual destination attribute must include **lcds** and **metacode**. The **transform-sequence** attribute must include the **x2afp** value. You can enter this command to verify that the actual destination settings are correct:

```
pdls -c destination -r document-formats-supported,transform-sequence adestname
```

If the destination settings are correct, the command returns information that is similar to this:

```
adestname: document-formats-supported = ascii
                                         modca-p
                                         dbcs-ascii
                                         ditroff
                                         line-data
                                         gif
                                         jpeg
                                         pcl
                                         pdf
                                         postscript
                                         pjtf
                                         ppml
                                         tiff
                                         lcds
                                         metacode
adestname: transform-sequence        = x2afp
```

If the actual destination settings are not correct, see "Using the pdxtsetdest command to update InfoPrint Manager actual destinations" on page 16.

Is the PATH environment variable set correctly?

The **PATH** environment variable must include the path to the InfoPrint XT executable software . Also, you must start the InfoPrint Manager or InfoPrint ProcessDirector server with this path in effect. You can enter the **whence** command to determine if the **PATH** environment variable includes the directories for the InfoPrint XT executable software:

```
whence pdxtx2afp
```

If the **PATH** is correct, AIX displays information that is similar to this:

```
/usr/opt/pdxt/bin/pdxtx2afp
```

If AIX only returns the command prompt, see "Updating the PATH and MANPATH environment variables" on page 14.

Next, check the InfoPrint Manager error log to determine if InfoPrint Manager has access to the InfoPrint XT executable software. Review the InfoPrint Manager server error log and check for messages that are similar to these:

```
A 04/22/09 09:23:20 [1b22 skye] 5010-341 Job 48 (skye:1098400000, ./103355000) is created.
A 04/22/09 09:23:20 [1c23 skye] 5010-580 Job ./103355000 (skye:1098400000) is scheduled to destination prt4.
A 04/22/09 09:23:20 [1b24 skye,prt4] 5010-279 Started processing job ./103355000 (1098400000).
A 04/22/09 09:23:20 [1c23 skye,prt4] 5010-341 Job 48 (skye:1098400000, ./103355000) is created.
E 04/22/07 09:23:21 [1b24 skye,prt4] /bin/ksh[10]: pdxtx2afp:  not found.
E 04/22/07 09:23:21 [1b24 skye,prt4] 5010-631 System function IPMXFORM returned error number 127.
A 04/22/09 09:23:21 [1b24 skye,prt4] 5010-280 Finished processing job ./103355000 (1098400000).
A 04/22/09 09:23:21 [f10 skye,prt4] 5010-280 Finished processing job ./103355000 (1098400000).
```

The highlighted lines indicate that InfoPrint Manager could not access the InfoPrint XT executable software.

Shut down the InfoPrint Manager server and restart it. You can issue these commands to stop and restart an InfoPrint Manager server:

```
pdshutdown -c server server
```

```
startsrv server
```

If InfoPrint ProcessDirector is installed, check the InfoPrint ProcessDirector error log to determine if InfoPrint ProcessDirector has access to the InfoPrint XT executable software. Review the InfoPrint ProcessDirector server error log and check for messages that are similar to these:

```
10000115,'2010-03-30 08:45:33.618+0300',StepAdapterManager,S,AIWP0003I,"Job 10000115: moved from
       Receive.XeroxJobType.CopyToFolder.Processing to Prepare.XeroxJobType.RunExternalProgram.Queued"
10000115,'2010-03-30 08:45:33.629+0300',StepAdapterManager,I,AIWP0108I,"Step XeroxJobType.RunExternalProgram was started on server System."
10000115,'2010-03-30 08:45:33.630+0300',StepAdapterManager,S,AIWP0003I,"Job 10000115: moved from
       Prepare.XeroxJobType.RunExternalProgram.Queued to
       Prepare.XeroxJobType.RunExternalProgram.Processing"
10000115,'2010-03-30 08:45:33.666+0300',RunExternalProgram,I,AIWI0017I,"/bin/bash: pdxtx2afp: command not found"
10000115,'2010-03-30 08:45:33.667+0300',RunExternalProgram,E,AIWI6073E,"External step export PSFPATH=/aiw/aiw1/resources:${PSFPATH};pdxtx2afp -i
       /aiw/aiw1/spool/default/10000115/10000115.print.unknown -o /aiw/aiw1/spool/default/10000115/tmp/10000115.print.afp -p
       -opa=class=A,destination=,forms=STD,jobid=,jobname=PDXTTEST -t "-k1" finished with a return code 127, which is defined as an error."
10000115,'2010-03-30 08:45:33.674+0300',StepAdapterManager,S,AIWP0003I,"Job 10000115: moved from
       Prepare.XeroxJobType.RunExternalProgram.Processing to
       Prepare.XeroxJobType.RunExternalProgram.Error"
```

Shut down the InfoPrint ProcessDirector server and restart it. You can issue these commands to stop and restart an IPPD server:

```
stopaiw
```

```
startaiw
```

Are any file systems on the AIX system full?
Sufficient space must be available for InfoPrint Manager or InfoPrint ProcessDirector to process the job. You can issue this command to determine if any of the AIX file systems are 100% full or approaching 100% full:

```
df
```

Verify that the values in the **Use%** column are not 100%. If any file system is full, you must either extend the file system or delete files to make space available.

Problem determination: Processing jobs through Download for z/OS

Use this section for jobs that you submit from z/OS using Download for z/OS and that result in no printed output. If some type of printed output results, see "Problem determination: The job resulted in some type of printed output" on page 139.

Does submitting the job control language (JCL) on z/OS result in a return code of 0?

> Any return code other than **0** indicates that something is wrong with the JCL, or something is wrong elsewhere on z/OS. Diagnose the problem on the host system and resubmit the job.

Does the job remain on z/OS after you submit it?

> Examine the **SDSF Output Queue Panel** on z/OS. If the job displays, it means that the job has remained on z/OS. Various conditions on z/OS can cause this. Check for these problems:
>
> - Errors in the routing-control data set. See "Setting up Download for z/OS" on page 121. If you use **DEST** in the routing-control data set, it must have the same value as the **DEST** parameter in the JCL. **IPADDR** must be the same as the Internet Protocol (IP) address of the InfoPrint Manager or InfoPrint ProcessDirector system. **PORTNUM** must be the same as the port number that you specified for the value that the **-p** command option of the InfoPrint Manager or InfoPrint ProcessDirector **mvsprsd** daemon uses.
> - The JCL does not select a z/OS printer. The JCL selects a printer based on parameters such as **DEST**, **CLASS**, and **FORMS**. See the **SDSF Printer Panel** on z/OS for a possible printer based on these parameters.
> - You have not drained and restarted the z/OS printer after making changes to the routing-control data set. You must drain and restart the z/OS printer to pick up any changes you make.
> - The z/OS printer is in a state other than **INACTIVE**. Examine the **SDSF Printer Panel** to check for this problem. To solve this type of problem, restart the printer. The status must be **INACTIVE**.

Does the SDSF Held Output Queue Panel contain an entry that indicates the problem?

> This queue contains an entry that corresponds to the job that remained on z/OS. Review the entry to help determine the problem.

Does a problem with the InfoPrint Manager or InfoPrint ProcessDirector mvsprsd daemon cause the job to remain on z/OS?

> On the InfoPrint Manager or InfoPrint ProcessDirector system, the absence of the **mvsprsd** daemon process or incorrect starting options can cause this. See "Starting the InfoPrint Manager mvsprsd daemon" on page 124. When the daemon is running, you can use this command to check the options that were used when the daemon started:

```
ps -ef | grep mvsprsd
```

> AIX displays output that is similar to this:

```
xtadmin 28042 19812  3 16:11:29  pts/2 0:00 grep mvsprsd
root     29584     1  0  Jul 26     - 0:00 mvsprsd -p 6001 -q prtxt-ld
         -d /var/pdxt/download -x /usr/opt/pdxt/bin/pdxtdownload
```

> Ignore the line that ends with **grep mvsprsd**. The other line of this output example shows the invocation. The line begins with **root**, because the root user starts the daemon. The value of the **-p** command option must match that of **PORTNUM** in the routing-control data set.

Does the job have an entry in the InfoPrint Manager server error log?

> When InfoPrint Manager receives a job, it writes an entry to its server error log, which is typically **/var/pd/**_servername_**/error.log**. If this occurs, correct any error that the log indicates and resubmit the job. If the job still does not print, see "Problem determination: The job resulted in no printed output" on page 140.

Does the working directory of the InfoPrint Manager or InfoPrint ProcessDirector mvsprsd daemon contain any .PRD or .JCL files for the job?
The value after the **-d** command option of the **mvsprsd** invocation specifies the working directory for the daemon. Check this directory for any files that are associated with the job. There might be files whose names are the job name and number, with the extension **.PRD** or **.JCL**. This can indicate that the daemon had a problem when it tried to run the **pdxtdownload** program. Check these items:

- **-x /usr/opt/pdxt/bin/pdxtdownload** is a required command option of **mvsprsd**. Make sure that the path and the file name for the **pdxtdownload** program are specified correctly.
- Make sure that **/usr/opt/pdxt/bin/pdxtdownload** exists and that it has executable permission.

Are you using download directive -l none ?
The value of the **-l** download directive controls the creation of the receiver log. See "Using download directives" on page 130 and "Receiver log" on page 136. Do not use download directive **-l none** because this prevents InfoPrint XT from creating the receiver log. To set or change download directives, see "Enabling download directives" on page 135.

What is the return code for the job in the receiver log?
A non-zero return code indicates an error during job processing. A brief description of the error accompanies a non-zero return code. Correct the error and resubmit the job. If the return code is **0**, see "Problem determination: The job resulted in no printed output" on page 140.

Problem determination: Processing OTEXT jobs

If problems occur while InfoPrint XT processes jobs that contain OTEXT DJDE commands, InfoPrint XT tries to write messages to the **/var/pdxt/otext/pdxtotext.**_adest_**.lst** file. _adest_ is the name of the InfoPrint Manager actual destination that prints the job. The messages in the file can originate from either InfoPrint XT or the X server. For example, if InfoPrint XT cannot access the **/var/pdxt/pdxtotext.Xdisplays** file, it issues the message. If the X server determines that the target display is not valid, or the display refuses connections from the AIX system on which the InfoPrint Manager server is running, the X server issues the message. For most conditions that cause a message entry in the **pdxtotext.Xdisplays** file, InfoPrint XT cancels the OTEXT job. Review the messages in this file and see the appropriate documentation to correct the problem. Then, resubmit the OTEXT job.

Other conditions can cause InfoPrint XT to disable the actual destination before it can write any messages to file. The two most common conditions are when InfoPrint XT cannot:

- Open the **/var/pdxt/otext/pdxtotext.**_adest_**.lst** file.
- Load the **aioxlide** application exit into its address space. When you use InfoPrint Manager with InfoPrint XT and update the actual destination for OTEXT processing, InfoPrint XT uses this application exit, if it exists, for every job that you submit. For more information, see "Using the pdxtsetdest command to update InfoPrint Manager actual destinations" on page 16 and "Setting up a substitute InfoPrint Manager input data user-exit program" on page 57.

Diagnostic and informational files that InfoPrint XT produces

If InfoPrint XT cannot process the job, only a header page and an error sheet might print in place of the job data. If errors exist in the output that InfoPrint XT produced, it also records information about the failure. To determine the exact cause of the problem, you can use the listing files that InfoPrint XT produces.

InfoPrint XT creates the listing file **pdxtx2afp.log** in the **/var/pdxt/jobs**/*globalID* subdirectory.

InfoPrint XT also creates the **x2afp.lst** listing file which is included in the **pdxtx2afp.log** log file.

Depending on whether you have active application exits, InfoPrint XT can also generate these files:

- **aioxlxbe.lst**
- **aioxlxie.lst**
- **aioxlxoe.lst**
- **aioxlxte.lst**

If you set the **PDXTWORKDIR** environment variable, as described by "Controlling the working directory that InfoPrint XT uses for variable data (PDXTWORKDIR)" on page 27, InfoPrint XT writes the log file and listing files to the *$PDXTWORKDIR*/**jobs**/*globalID* directory.

Note: The error sheets that InfoPrint XT produces include the contents of the various listing files.

pdxtx2afp.log file

This file contains sections that list the arguments, any transform directives, the commands that InfoPrint XT issued, and the return codes from those commands. It also includes the number of impressions (pages) of AFP output that InfoPrint XT produced. This is an example of the information in the **pdxtx2afp.log** file:

```
5016-501 2009-08-04 14:47:47 MDT (pid 31448) - transform started.

5016-503 Transform arguments (pdxtx2afp):                          1
5016-504    -i "/var/pd/ballachulish/pdprw75iae"
5016-504    -o "/var/pd/ballachulish/pdprw75iae_xfm1"
5016-504    -e "/var/pd/ballachulish/pdprw75iae_xfm1_err"
5016-504    -U "/var/pd/ballachulish/pdprw75iae_update"
5016-504    -q "prtxt-ad"
5016-504    -p ""
5016-504    -d "ASCII"
5016-504    -# "ballachulish:4881900001"
5016-504    -D "1"
5016-504    -s "ballachulish"
5016-504    -x "xjdl=pdxton xjde=strton xcc=a xrecfm=v xclb=none xafprc=4"
5016-504    -r "/var/pdxt/resources/pdxttest"
5016-504    -P ""

5016-505 Transform directives (/var/pdxt/pdxtx2afp.directives):     2
5016-506    -x "xclb=none"

5016-509 Command Sequence:        3
5016-510    1) aioxlxie -e '' -j 'ballachulish:4881900001' -q 'prtxt-ad' -p '' -x 'xjdl=pdxton xjde=strton
xcc=a xrecfm=v xclb=none xafprc=4 respath=/var/pdxt/resources/pdxttest::/usr/lpp/afpfonts:
xfmtlib=/var/pdxt/resources/pdxttest/metrics:/usr/lpp/afpfonts/metrics:/usr/opt/pdxt/resources
xclb=none xcaobs=yes
```

```
xonepass=no jobname=ballachulish:4881900001' 2> aioxlxie.lst < '/var/pd/ballachulish/pdprw75iae'
5016-510    2) x2afp xjdl=pdxton xjde=strton xcc=a xrecfm=v xclb=none xafprc=4
respath=/var/pdxt/resources/pdxttest::/usr/lpp/afpfonts: xfmtlib=/var/pdxt/resources/pdxttest/metrics:
/usr/lpp/afpfonts/metrics:/usr/opt/pdxt/resources xclb=none xcaobs=yes xonepass=no jobname=ballachulish:
4881900001 x2afp.fifo 2> x2afp.lst
5016-510    3) aioxcsfi -c3 -f1 2> aioxcsfi.lst 3> aioxcsfi.pgs > '/var/pd/ballachulish/pdprw75iae_xfm1'

5016-511 Return codes:         ▌4▐
5016-512    1) 0 (pid 23010)
5016-512    2) 0 (pid 27106)
5016-512    3) 0 (pid 14104)

5016-513 Impressions (pages): 4   ▌5▐
5016-502 2009-08-04 14:47:49 MDT (rc 0) - transform ended.
```

The different sections of the **pdxtx2afp.log** file contain these types of information:

5016-503 Transform arguments (pdxtx2afp): ▌1▐

Lists the transform arguments that were in effect for the job. The name in parentheses indicates the component that supplied the arguments. The arguments were explicitly specified, or InfoPrint XT derived the arguments, or they are a combination of specified and derived arguments. It is possible to have several transform arguments sections. For example, the file might contain a section for arguments that were specified through the **PDXTX2AFP_ARGS** environment variable, and a section for arguments that were specified by the **pdxtx2afp** command:

```
5016-503 Transform arguments (PDXTX2AFP_ARGS):
5016-504    -x "xrptfile=."

5016-503 Transform arguments (pdxtx2afp):
5016-504    -x "xjdl=pdxton xjde=strton xcc=a xrecfm=v xclb=none xafprc=4"
```

5016-505 Transform directives (/var/pdxt/pdxtx2afp.directives): ▌2▐

Shows the entries that the transform directives file contains. This section is present only if an active directives file exists; see page 40.

If you specify transform directives through the **PDXTX2AFP_DIRECTIVES** environment variable, InfoPrint XT adds a section that shows which directives the environment variable specifies.

5016-509 Command Sequence: ▌3▐

Lists the commands, in order, that InfoPrint XT issued when it processed the job.

5016-511 Return codes: ▌4▐

Lists the return codes from each of the commands that were identified in the **Command Sequence** section.

5016-513 Impressions (pages): 4 ▌5▐

If InfoPrint XT generated AFP output for the job, this message lists the number of pages that InfoPrint XT produced.

x2afp.lst file

The **x2afp.lst** file contains the results of the data stream conversion process. The contents of this file can help you determine what caused the failure. InfoPrint XT also creates this file when the conversion process is successful. This is an example of how the information from the **x2afp.lst** file prints on the error sheet:

```
5016-521 x2afp.lst
   AIOUT1002S Unrecognized option for the keyword: xrecfm=nv.  Valid options for
this keyword are:

variable
```

```
                    fixed
                    nfs
                    Processing ended with return code 16
                    General error 7 occurred (errno 0)
```

aioxlxbe.lst file

If you use the **aioxlxbe** transform begin application exit, this listing file contains the standard error output that the application exit writes. See "Setting up a transform begin application exit" on page 47.

aioxlxie.lst file

If you use the **aioxlxie** transform input application exit, this listing file contains the standard error output that the application exit writes. See "Setting up a transform input application exit" on page 49.

aioxlxoe.lst file

If you use the **aioxlxoe** transform output application exit, this listing file contains the standard error output that the application exit writes. See "Setting up a transform output application exit" on page 51.

aioxlxte.lst file

If you use the **aioxlxte** transform end application exit, this listing file contains the standard error output that the application exit writes. See "Setting up a transform end application exit" on page 53.

Service coordinator responsibilities

It is your responsibility to provide a service coordinator for InfoPrint XT. The service coordinator must be a knowledgeable AIX (UNIX) system support person. The service coordinator does these tasks:

- Screens all on-site problems before reporting them to make sure that the problem is not a result of an operator error. The coordinator uses the troubleshooting information in this publication to do diagnostic tasks and corrects any condition that the troubleshooting information addresses. The coordinator also makes sure that the problem is not a previously reported problem.

- Establishes the severity for a reported problem using the severity definitions that the next topic lists.

- Assists technical-support representatives in analyzing new problems.

- Applies and verifies fixes that the InfoPrint Solutions Company supplies. The service coordinator tests all fixes before releasing them to their production environment.

Determining problem severity

InfoPrint Solutions Company supplies fixes for all valid defects in InfoPrint XT. A technical-support representative and your service coordinator assign a severity to each valid defect using this criteria:

Severity 1
    Function is inoperable.

Severity 2
    Function is operable, but has severe restrictions.

Severity 3
> Function is operable with minor impact, or a work-around is available.

Severity 4
> Function is operable with little or no impact.

Placing a service call

To report a problem, call 1-800-426-7378. Make sure that you have the customer number for your account available. The program identification (PID) for InfoPrint XT is **5799-GTF** and the component ID is **5765F6800** . When you call the service number, be aware that only certain individuals from your account have authorization to open problems. You control who is on the authorization list. Typically, support personnel, such as the InfoPrint XT development group, do not have authorization to open calls on your account.

Using the pdxtcapture command to capture information from the InfoPrint XT system

After you place a service call, the technical-support representative might ask you to capture information from the InfoPrint XT system. InfoPrint XT provides the **pdxtcapture** command that you can use to make an image of the working directory for the last job that was converted or an image of a resource directory. This image is a compressed tar file that the technical-support representative can use as an aid in problem determination. The AIX user name from which you enter the **pdxtcapture** command must be a member of the **printq** group.

The syntax for the **pdxtcapture** command is:

pdxtcapture [**-o** *outputfile*] { [**-j** [*globalID ...*]] [**-r**] | **-g** [*Resgrp ...*] }

[-j [*globalID ...*]]
> Specifies one or more global job identifiers for jobs whose working directories you want to capture. If you specify the **-j** option, but do not specify a global job identifier, InfoPrint XT captures the working directory for the last job that it converted. You cannot specify the **-j** option if you specify the **-g** option.

[-g [*Resgrp ...*]]
> Specifies one or more resource groups whose resource directories you want to capture. The default resource group directories are subdirectories of **/var/pdxt/resources**. If you do not specify the **-g** option, InfoPrint XT captures the resources in the common resource group. You cannot specify the **-g** option if you specify the **-j** option.

[-o *outputfile*]
> Specifies the name of the file to which InfoPrint XT writes the output from the **pdxtcapture** command. If you do not specify this option, InfoPrint XT writes job information to the **/tmp/pdxtcapt.job** file and resource information to the **/tmp/pdxtcapt.res** file.

[-r]
> When you specify the **-j** option to capture the working directory for a job, you can also include the **-r** option. This causes InfoPrint XT to include the resources for the job in the capture output.

Notes:

1. You cannot use the **pdxtcapture** command to capture information for jobs that you convert with InfoPrint ProcessDirector or the **pdxtx2afp** command. You must process jobs with InfoPrint Manager to use the **pdxtcapture** command.

2. The **pdxtx2afp** command provides equivalent function to capture job information through file descriptor nine. See "Streams used by the pdxtx2afp command" on page 108.

3. For a brief overview about using the **pdxtcapture** command, see the **pdxtcapture** man page that InfoPrint XT provides.

4. Include an InfoPrint Manager job retention period for a job whose working directory you want to capture. This prevents InfoPrint XT from discarding the working directory for the job during the capture process.

Using the pdxtclnwork command to clean work directories

InfoPrint XT removes the job directories that it creates after the jobs print and when new jobs arrive on the system. If a failure occurs that prevents InfoPrint XT from removing the directories, use the **pdxtclnwork** command. This command manually removes job directories from the system. Use this command only at the direction of a technical-support representative. The technical-support representative will assist you with running the command.

Appendix A. Conversion parameters for converting Xerox jobs

Conversion parameters control how InfoPrint XT for AIX converts the Xerox data stream to the Advanced Function Presentation data stream. The conversion parameters are the same, whether the Xerox job is the Line Conditioned Data Stream or the metacode data stream. How you specify the conversion parameters depends on whether you use InfoPrint Manager for AIX with InfoPrint XT.

If you have InfoPrint Manager installed, you can use the **other-transform-options** attribute to pass Xerox-specific conversion parameters and values to InfoPrint XT. When you specify the attribute with the InfoPrint Manager **pdpr** command, use this format:

```
-x "other-transform-options='parm=value parm=value parm=value'"
```

If you do not have InfoPrint Manager or InfoPrint ProcessDirector installed, use the **pdxtx2afp** command to convert Xerox jobs. Include the **-x** command option to specify the conversion parameters. For more information about the **-x** option, see page 106.

This list describes the conversion parameters for Xerox jobs:

[xaccount = <u>yes</u> | no]
>   Specifies whether InfoPrint XT prints a Xerox-style accounting page for the
>   job. The default is that InfoPrint XT prints the accounting page.
>
>   **Note:** There can be occasions when you request the accounting page, but
>   no accounting page prints with the job. If the job does not produce
>   an accounting page on a Xerox printer, InfoPrint XT does not
>   produce an accounting page regardless of the presence of this paraf[
>   xcc = ansi | machine]meter.

[xafpfunction = <u>ioca_rt</u> | no_ioca_rt]
>   Specifies whether the printer supports the IOCA replicate-and-trim function.
>   InfoPrint XT uses this function for the shading patterns in data streams and
>   forms. The default is that InfoPrint XT assumes the printer supports the
>   IOCA replicate-and-trim function.
>
>   **Notes:**
>   1. If one or more of your printers do not support the IOCA
>   replicate-and-trim function, specify **no_ioca_rt** for the **xafpfunction**
>   parameter.
>   2. The value of this attribute affects how InfoPrint XT processes jobs that
>   contain FILE DJDE commands.

[xafprc = <u>12</u> | 0 through **16]**
>   Specifies the largest return code that lets InfoPrint XT generate AFP output.
>   If you do not specify this parameter, the default is **12**. InfoPrint XT does not
>   generate any AFP when the return code is greater than the value of this
>   parameter.

[xalign = <u>0</u> | *scan_value* **|** *dot_value* **]**
>   Controls how InfoPrint XT aligns the AFP output with the pages of the job.
>   The value range for *scan_value* is **-100** through **300** pels. The value range
>   for *dot_value* is **-300** through **1500** pels. Separate the scan value and the
>   dot value with a colon (**:**). Scan and dot values have these effects:

- A positive scan value moves the page image to the right in the portrait orientation, or down in the landscape orientation.
- A negative scan value moves the page image to the left in the portrait orientation, or up in the landscape orientation.
- A positive dot value moves the page image up in the portrait orientation, or to the right in the landscape orientation.
- A negative dot value moves the page image down in the portrait orientation, or to the left in the landscape orientation.

If you do not specify the **xalign** conversion parameter, the default is **0** for both the scan value and the dot value. If you specify the **xalign** conversion parameter but omit either the scan value or the dot value, InfoPrint XT uses a default of **0** for the omitted value.

Notes:

1. InfoPrint XT only supports values for the Xerox scan and dot directions in 300 dots-per-inch (dpi) resolution. It does not support values in 600 dpi resolution.

2. InfoPrint XT does not support the TEST parameter of the Xerox ALIGN command.

3. See the **xhonorinvert** conversion parameter on page 155 and the **xinvertalign** conversion parameter on page 156. These parameters affect how InfoPrint XT aligns inverted output.

[xcc = ansi | machine]
Specifies the type of carriage controls, if any, that are present in the original Xerox data. The **xcc** conversion parameter only applies to online jobs. For offline jobs, InfoPrint XT uses the carriage control definitions from the Job Descriptor Library (JDL). InfoPrint XT ignores this parameter for offline jobs.

xcc = ansi
Specifies American National Standards Institute (ANSI) carriage controls. This is the default.

xcc = machine
Specifies machine carriage controls.

Notes:

1. If you manually specify the type of carriage control in the job control language (JCL) for a z/OS job, such as with the **DCB=RECFM** parameter, make sure that the type you specify matches what the data actually contains. If you specify a type that is different from the carriage controls in the data, z/OS can discard data before it sends the job to InfoPrint XT.

2. If you use Download for z/OS to send jobs to InfoPrint XT and the jobs contain both ANSI and machine code carriage controls, you can use the **-p** download directive. With the directive, InfoPrint XT can convert ANSI carriage controls to machine code carriage controls so that the job contains only the one type. Then, use a value **machine** for the **xcc** conversion parameter. For more information, see "Using download directives" on page 130.

3. You cannot use the **-p** download directive for online jobs that you transfer from z/OS through methods other than Download for z/OS. If the jobs include the **xpcctest** conversion parameter with its default value of **yes**, InfoPrint XT reads the first records of the job to verify the type of carriage controls the job contains. If it determines that the carriage controls are different from the type the **xcc** parameter specifies, it passes the type of carriage control it determined to its online

carriage-control processing component. This can cause the AFP output that InfoPrint XT generates to be wrong. For example, if the online job contains both ANSI and machine code carriage controls, the **xpcctest=yes** carriage control test might produce an incorrect result. For more information, see page 160.

[xckdupnlimg = yes | no]
Specifies whether InfoPrint XT checks inline images to prevent duplicate image processing when it converts online jobs. When you specify **xckdupnlimg=yes**, InfoPrint XT can reduce its execution time for jobs that contain many duplicate inline images. The default is **xckdupnlimg=no**.

Notes:
1. This conversion parameter only applies to inline images that GRAPHIC DJDEs specify. It does not apply to inline images that IMAGE DJDEs specify.
2. **xckdupnlimg** does not apply to offline jobs.

[xclb = clustr | *clusterlib_name* | none]
Specifies the name of the cluster database in use, or specifies that no cluster database is in use. If you do not specify this parameter, the default is **clustr** for the cluster database name.

Notes:
1. If the job uses stocksets and you print the job on a continuous-forms printer, specify **xclb=none**. This causes InfoPrint XT to ignore stock references. Specifying a paper drawer has no meaning when the job prints on a continuous-forms printer.
2. The **clustr.lib** file can specify both a preferred tray and a current tray for a specific cluster name. If a cluster name specifies both a preferred tray and a current tray, InfoPrint XT uses the value for the current tray. This matches the operation of a Xerox printer.
3. The **pdxtcluster** command can help you customize your Xerox cluster databases. See "Using the pdxtcluster command to create and modify cluster database resources" on page 87.

[xcmt2nop=yes | no]
Specifies whether InfoPrint XT generates No Operation (NOP) structured fields for the text of C DJDEs in the job. If you specify **xcmt2nop=yes**, InfoPrint XT includes all C DJDE text for a Xerox input page in the corresponding page of the AFP output. The default is **xcmt2nop=no**. See the information about the **XRXCDJDE** keyword in "Working with InfoPrint XT AFP structured fields" on page 58.

Note: The C DJDE is record-oriented and takes effect on the next record that follows the next END; DJDE packet terminator. If a C DJDE occurs in a packet that contains one or more page-oriented DJDEs, InfoPrint XT associates the AFP NOP that it creates from the C DJDE with the page on which the DJDE occurs. It does not associate the AFP NOP with the page on which the page-oriented DJDEs in the packet take effect.

[xbinerror ignore | stop | continue]

The **xbinerror** parameter controls printing when the wrong media is loaded on the printer

The **xbinerror** parameter has these options:

ignore

InfoPrint XT does not include a media error instruction in the inline form definition. This is the default

stop   InfoPrint XT includes a media error instruction in the inline form definition. If the specified input media is not found when the job is printed, printing stops and the job is held in a state that it can be resubmitted from.

continue

InfoPrint XT includes a media error instruction in the inline form definition. If the specified input media is not found when the job is printed, printing continues using the printer default input media.

[xconsecutivedjde = ignore | process]

Specifies whether InfoPrint XT ignores or processes consecutive DJDEs.

ignore

InfoPrint XT ignores extra DJDE records directly following a previously terminated DJDE packet. This is the default.

process

InfoPrint XT processes extra DJDE records directly following a previously terminated DJDE packet.

[xconvert = yes | no]

Specifies whether InfoPrint XT converts the job and produces AFP output. If you specify **xconvert=no**, InfoPrint XT lists the resources that the job requires. The default is that InfoPrint XT converts the job.

[xcopies = *nnnnn*]

Specifies the starting value for the number of copies. *nnnnn* is an integer from **1** through **32767**. This parameter provides compatibility with the Xerox START command. If you specify this parameter and value, it overrides the number of copies for each file as requested by the Job Descriptor Entry (JDE) or Dynamic Job Descriptor Entry (DJDE) COPIES option. If you do not specify this parameter, either the DJDE in the data stream or in the active JDE determines the number of copies.

[xcsmmname=yes | no]

Specifies how InfoPrint XT derives the medium map names that it uses in the inline form definition for a job. The default is that InfoPrint XT uses sequentially numbered names that are not related to the contents of the medium maps. The default numbering begins with **AIO00001**. If you specify **yes** as the value of this conversion parameter, InfoPrint XT creates medium map names in a format that describes the contents of the medium map. For information about the format that InfoPrint XT uses for content-sensitive medium map names, see "Working with content-sensitive medium map names" on page 61.

[xdecrypt auto | all | none]

Controls font decryption during data stream conversion when InfoPrint XT loads Xerox fonts that FILE DJDEs identify. You can use one of these values:

auto   InfoPrint XT automatically determines whether each font that it loads from a FILE DJDE command requires decryption.This is the default

all   InfoPrint XT runs its decryption utility for every font that it loads

from a FILE DJDE command. You can use this option to force InfoPrint XT to decrypt fonts when it cannot automatically detect that the fonts are encrypted.

none   InfoPrint XT does not run its decryption utility for any of the fonts that it loads from a FILE DJDE command. You can use this option to prevent InfoPrint XT from attempting to decrypt when it cannot automatically detect that the fonts are not encrypted.

[xdeblock = yes | no]
> Specifies whether InfoPrint XT deblocks records in offline jobs during conversion, based on the starting JDE. InfoPrint XT ignores this parameter for online jobs. If you do not specify this parameter, InfoPrint XT does not deblock records. If you invoke the **pdxtjtape** with the **-b pass** option and value, the **pdxtjtape** command passes **xdeblock=yes**.

[xhonorfcb2 = yes | no]
> Specifies whether InfoPrint XT honors Forms Control Buffers (FCBs) specified by the JDL or JDLs for the job. If you specify **xhonorfcb2=yes** and the JDL specifies FCB=PROCESS, InfoPrint XT processes FCBs that it finds in the job data stream. If the JDL specifies FCB=IGNORE, InfoPrint XT ignores the FCBs. If you specify **xhonorfcb2=no**, or if you omit this parameter, InfoPrint XT does not process FCBs, regardless of whether the JDL specifies FCB=PROCESS or FCB=IGNORE.

[xhonorinvert = yes | no]
> Specifies whether InfoPrint XT honors INVERT commands that JDLs or DJDEs for the job specify. If you specify **xhonorinvert=yes**, InfoPrint XT processes INVERT commands that it finds in the job data stream. If you specify **xhonorinvert=no**, InfoPrint XT does not process INVERT commands. If you do not specify this parameter, the default is **no**.
>
> **Note:** See the **xalign** conversion parameter on page 151 and the **xinvertalign** conversion parameter on page 156. If you specify **xhonorinvert=no** or **xinvertalign=no**, InfoPrint XT aligns all output pages in the same direction.

[xhonorshift = yes | no]
> Specifies whether InfoPrint XT honors SHIFT and XSHIFT commands that JDLs or DJDEs for the job specify. If you specify **xhonorshift=yes**, InfoPrint XT processes SHIFT and XSHIFT commands that it finds in the job data stream. If you specify **xhonorshift=no**, InfoPrint XT does not process SHIFT or XSHIFT commands. If you do not specify this parameter, the default is **no**. Restrictions apply when you use **xhonorshift=yes**. See page "SHIFT and XSHIFT JDL and DJDE commands" on page 6.

[xhonorstaple = yes | no]
> Specifies whether InfoPrint XT honors FACEUP, NTO1, and STAPLE commands, which are subparameters of the OUTPUT PDL command. These commands control how the printer hardware staples the reports in the job. The default is that InfoPrint XT ignores stapling commands. See the descriptions of **xstaplemax**, **xstapleorient**, and **xstaplesysgen** on page 163. For information about stapling restrictions, see page 7.

[xinlr = all:cs:cp:cf:pseg:ovly:inlr]
> Specifies the printable AFP resources that InfoPrint XT embeds inline in the AFP data stream for the job. You can specify one or more values. If you specify more than one value, separate the values with colons (**:**). Do not include any spaces. Valid values are:

all InfoPrint XT embeds all AFP character sets, code pages, coded fonts, overlays, and page segments that the job requires in the AFP data stream. Specifying **xinlr=all** is the same as specifying **xinlr=cs:cp:cf:ovly:pseg**.

cs InfoPrint XT embeds all AFP character sets that the job requires in the AFP data stream.

cp InfoPrint XT embeds all AFP code pages that the job requires in the AFP data stream.

cf InfoPrint XT embeds all AFP coded fonts that the job requires in the AFP data stream.

pseg InfoPrint XT embeds all AFP page segments that the job requires in the AFP data stream.

ovly InfoPrint XT embeds all AFP overlays that the job requires in the AFP data stream.

inlr InfoPrint XT embeds the resources that it loaded from the Xerox job, as directed by the FILE DJDE commands that the job contains. This includes both permanent and temporary resources, as defined by the storage parameter.

The default is that InfoPrint XT only embeds temporary resources that it loaded through FILE DJDE commands with the **D** storage parameter.

[xinvertalign = <u>no</u> | yes]
Controls how InfoPrint XT aligns the AFP output with pages that are inverted by the Xerox OUTPUT INVERT command or INVERT DJDE. **xhonorinvert=yes** must be set for the job.

If you specify **xinvertalign=yes**, scan and dot values that you specify with the **xalign** conversion parameter align output on the inverted pages in the opposite direction as the alignment of non-inverted pages. For example, if you specify **xalign=0:-56** for a job that is in the landscape orientation, non-inverted pages are aligned 56 dots to the left, and inverted pages are aligned 56 dots to the right.

If you specify **xinvertalign=no** or omit the **xinvertalign** conversion parameter, InfoPrint XT aligns all output pages in the same direction. This is also true if you specify **xhonorinvert=no**.

Note: See the **xhonorinvert** conversion parameter on page 155 and the **xinvertalign** conversion parameter on page 156.

[xjde = <u>dflt</u> | *jde_name*]
Specifies the name of the Xerox JDE that the operator starts on the Xerox printer before the job prints. If you do not specify this parameter, the default is **dflt**.

[xjdl = <u>dfault</u> | *jdl_name*]
Specifies the Xerox JDL that contains the starting JDE. If you do not specify this parameter, the default is **dfault**.

[xlinecount = *n*]
Specifies the maximum number of lines per page for jobs that have no explicit page breaks, as defined through the Job Entry Subsystem (JES) line spacing parameter.

[xlrecl = <u>80</u> | *nnnnn* **]**

Specifies the record length of the records in the job. If you specify the **xrecfm=fixed** parameter, the valid range is **1** through **32767**. If you do not specify the **xlrecl** parameter with the **xrecfm=fixed** parameter, the default is **80**.

If you specify **xrecfm=variable**, the valid range is **1** through **32763**. However, InfoPrint XT derives the record length from the 2-byte length field at the beginning of each record and does not use the **xlrecl** value.

[xmediatypes <u>none</u> | *blank_sub:type1:type2:type3:type4* **]**

The **xmediatypes** parameter allows you to associate Xerox input tray numbers with MO:DCA media types or component IDs. InfoPrint XT includes the media types or component IDs in the medium maps of the inline form definition that InfoPrint XT creates during data stream conversion.

<u>none</u>   InfoPrint XT does not specify media types in the inline form definition. This is the default.

blank_sub:type1:type2:type3:type4

InfoPrint XT specifies MO:DCA media types in the inline form definition that it creates.

Here are the usage guidelines for the MO:DCA media types:

- You can specify up to four media type identifiers. The identifiers can be media names or component IDs.

- Media names must be from 1 to 12 bytes long. InfoPrint XT validates media names using a subset of IBM code page 500, character set 640 (plus space character). This subset includes:

  uppercase A-Z

  lowercase a-z

  0 – 9

  blank

  period (.)

  special characters @ % * - _ = + , / ?

- Media names that you specify in the **xmediatypes** parameter should not contain single quotation marks or double quotation marks. Media names cannot contain colons because colons are used to delimit media type values in the parameter.

- If a media name contains embedded blanks, you must replace the blanks with the character you specify as the *blank_sub* value. The *blank_sub* value can be any of these special characters: @ % * - _ = + , / ?

- If you omit the *blank_sub* value, the default is the underscore character (_). InfoPrint XT internally converts all occurrences of the *blank_sub* value in media names to blanks. For example, if the *blank_sub* value is the underscore character, InfoPrint XT matches `'210x340_MED'` to the registered MO:DCA media name `'210x340 MED'`.

- Media names are case-sensitive. For example, if you specify the underscore character as the *blank_sub* value, InfoPrint XT recognizes `'210x340_MED'` as the registered MO:DCA media name `'210x340 MED'`, but it processes `'210x340_med'` as user-defined, non-registered media name `'210x340 med'`.

- Component IDs must be integers in the range 0 – 268,435,455. InfoPrint XT assumes that non-numeric media types are media names.
- Separate the media type identifiers with colons. The identifiers are positional: InfoPrint XT substitutes *type1* for tray 1, *type2* for tray 2, and so on. If you omit any of the media type identifiers, InfoPrint XT uses the tray number instead.
- InfoPrint XT searches the MO:DCA media types registry for entries that match the media names or component IDs that you specify. InfoPrint XT processes any media names or component IDs that are not found in the registry as user-defined.
- You can specify the **xmediatypes** parameter twice in one `pdxtx2afp` command, and this gives a total of 8 media type identifiers.

These are examples of values you can specify:

```
xmediatypes=@:ISO@A4:50::MY@MEDIA
xmediatypes=*:8x13*MED:13000:LEDGER
```

Xerox tray numbers	Media type substitutions in AFP output
1	Registered MO:DCA media name 'ISO A4' (component ID 0)
2	Registered MO:DCA component ID 50 (media name LETTER)
3	Tray 3, no substitution
4	User defined media name 'MY MEDIA'
5	Registered MO:DCA media name '8x13 MED' (component ID 163)
6	User defined component ID 13000
7	Registered MO:DCA media name LEDGER (component ID 67)
8	Tray 8, no substitution

```
xmediatypes=-:BLUE-MED:GREEN-STOCK:LETTER
xmediatypes=:MY_PAPER::8x13_MED:69
```

Xerox tray numbers	Media type substitutions in AFP output
1	User defined media name 'BLUE MED'
2	User defined media name 'GREEN STOCK'
3	Registered MO:DCA media name LETTER (component ID 50)
4	Tray 4, no substitution
5	User defined media name 'MY PAPER'
6	Tray 6, no substitution
7	Registered MO:DCA media name '8x13 MED' (component ID 163)
8	Registered MO:DCA component ID 69 (media name STATEMNT)

[xmicrfont=<u>none</u> | all | xerox | xerox+*font1***:***font2***:***font3*** | xerox-***font1***:***font2***:***font3*** | ***font1***:***font2***:***font3***]**

Specifies whether InfoPrint XT generates AFP magnetic ink character recognition (MICR) fonts when it loads Xerox fonts that FILE DJDEs identify. You can use one of these values:

none InfoPrint XT does not generate AFP MICR fonts for any of the Xerox fonts that it loads from FILE DJDE commands. This is the default.

all InfoPrint XT generates AFP MICR fonts for all the Xerox fonts that it loads from FILE DJDE commands in the job.

xerox InfoPrint XT generates AFP MICR fonts for all Xerox fonts whose names begin with these standard prefixes for MICR font names:

- **E13B**
- **E14B**
- **CMC7**

For example, InfoPrint XT generates AFP MICR fonts for these Xerox fonts: **E13BPX.FNT**, **E14BL.FNT**, **CMC7J.FNT**.

xerox+*font1***:***font2***:***font3***
InfoPrint XT generates AFP MICR fonts for all Xerox fonts whose names begin with **E13B**, **E14B**, or **CMC7**. In addition, it generates AFP MICR fonts for up to three fonts that you specify by name. Separate the font names with colons (**:**). The fonts you specify can be any Xerox fonts.

xerox-*font1***:***font2***:***font3***
InfoPrint XT generates AFP MICR fonts for all Xerox fonts whose names begin with **E13B**, **E14B**, or **CMC7** except for the fonts you specify after the minus sign (**-**). You can specify up to three Xerox fonts that begin with the standard prefixes for MICR font names. Separate the font names with colons.

*font1***:***font2***:***font3***
InfoPrint XT generates AFP MICR fonts for the Xerox fonts you specify. You can specify up to three fonts. Separate the font names with colons. The fonts you specify can be any Xerox fonts. InfoPrint XT does not generate AFP MICR fonts for any Xerox fonts that begin with the standard prefixes for MICR font names unless you specify them in the list of fonts.

Note: To name more than three fonts, you can specify more than one **xmicrfont** conversion parameter, up to 11 occurrences that specify a combined total of 33 fonts. Values for all occurrences of the conversion parameter must be of the same type, either **xerox+**, **xerox-**, or user-specified names.

[xotext = no | yes]
Specifies whether InfoPrint XT honors OTEXT DJDE commands. If you specify **xotext=yes**, InfoPrint XT embeds the OTEXT messages in special No Operation (NOP) structured fields in the AFP that it generates. See "Working with InfoPrint XT AFP structured fields" on page 58. If you use InfoPrint Manager or InfoPrint ProcessDirector with InfoPrint XT and you configure the actual destination, InfoPrint XT displays the OTEXT messages in a separate window on a specific console. See "Using the pdxtsetdest command to update InfoPrint Manager actual destinations" on page 16 and "Configuration tasks for OTEXT job processing: Combined InfoPrint Manager and InfoPrint XT installations" on page 35. If you do not specify this parameter, the default is **no**; InfoPrint XT ignores OTEXT DJDE commands.

[xpaper = <u>letter</u> | ledger | folio | A3 | A4 | A4LT | B4]

Specifies the paper size for jobs that specify inline forms through FILE DJDEs. Use this parameter only if the inline forms do not specify a paper size internally, or if the JDL and JDEs for the job do not specify a paper size.

Notes:

1. **A4LT** is a custom paper size that is 8.5 inches by 11.69 inches, or 216 mm by 297 mm.
2. The value of this attribute affects how InfoPrint XT processes jobs that contain FILE DJDE commands.

[xpattern_set = <u>300-1</u> | 300-2]

Specifies the type of shading patterns that InfoPrint XT uses when it processes Xerox FORMS$, FORMSX, and ISISPX fonts during metacode data-stream conversion. **300-1** specifies the shading patterns that Xerox 97*xx*, 4*x*50, and 4*x*90 printers use. This is the default. **300-2** specifies the patterns that Xerox 4*x*35 printers use.

Note: The value of this attribute affects how InfoPrint XT processes jobs that contain FILE DJDE commands.

[xpcctest = <u>yes</u> | no]

Specifies whether InfoPrint XT automatically tests the onlineXerox data stream to verify whether the carriage controls are ANSI or machine code. InfoPrint XT passes the type of carriage control to its online carriage-control processing component. It first looks at the value of the **xcc** conversion parameter. Then, if the value of the **xpcctest** conversion parameter is **yes**, it reads the first records of the job to further verify the type of carriage controls. If InfoPrint XT determines that the carriage controls are different, it ignores the value of the **xcc** conversion parameter and uses the carriage control type that it found. **xpcctest=yes** is the default.

The **xpcctest** parameter is useful for installations that have Xerox jobs that contain both ANSI and machine carriage controls but that do not use Download for z/OS to transfer online jobs to InfoPrint XT. For example, a multi-step job on z/OS might have an initial step that consists of banner pages with ANSI carriage controls. The subsequent steps that contain the actual data for the job have machine code carriage controls. For installations that use Download for z/OS, InfoPrint XT provides the **-p** download directive. By using the **-p** download directive, InfoPrint XT can convert the ANSI carriage controls for the banner pages so that all the carriage controls in the job are machine code. Then, you can specify **xcc=machine**. As directed by the default value of **xpcctest=yes**, InfoPrint XT reads the first few records that have the converted ANSI carriage controls. Because all carriage controls are now machine code, it uses a carriage control type of machine.

If the installation does not use Download for z/OS and the Xerox data streams contain a mixture of ANSI and machine code carriage controls, you cannot use the **-p** download directive to convert carriage controls. The **xcc** conversion parameter should specify the type of carriage controls for the job data. Using the job described in the previous example, the **xcc** parameter should have a value of **machine**. However, when InfoPrint XT reads the first records of the job as directed by **xpcctest=yes**, it finds the ANSI carriage controls in the banner pages. It then ignores the value of the **xcc** parameter and uses a value of ANSI. The AFP output that InfoPrint XT generates is not correct. In this case, you can use **xpcctest=no**. This

prevents InfoPrint XT from verifying the carriage controls in the first few records of the job and it uses the value of the **xcc** parameter.

This prevents InfoPrint XT from verifying the carriage controls in the first few records of the job and it passes the value of the **xcc** parameter to jes3211.

In some cases, specifying **xpcctest=no** might not produce correct output because of the particular combination of ANSI and machine code carriage controls in the job data. In these cases, you must correct your application so that it specifies either ANSI or machine code carriage controls throughout the job data that it generates.

[xrecfm = <u>fixed</u> | variable]
>Specifies the record format of the records in the job. For fixed length records, as specified by **xrecfm=fixed**, the **xlrecl** parameter specifies the length of the record. This is the default. **xrecfm=variable** specifies that the records are variable length, with a 2-byte length field at the beginning of each record. The record length does not include the 2-byte length field itself.

[xrptfile = . | *path/file***]**
>Specifies the path and file in which InfoPrint XT writes a report of all DJDEs found in the job. Specifying **xrptfile=.** causes InfoPrint XT to write the report to the **x2afp.djde** file in the working directory for the job. The default working directory for the job is either **/var/pdxt/jobs/**globalIDor **/var/pdxt/jobs/**jobname-jobID-n. If you do not specify this parameter, InfoPrint XT does not generate a DJDE report.

>**Note:** If you specify a path, make sure that it is the full path. You cannot use a relative path with the **xrptfile** parameter.

[xshading = <u>xerox</u> | grayscale | [*lp* **]:[** *mp* **]:[** *hp* **]]**
>Controls how InfoPrint XT interprets Xerox shading when it converts the Xerox data stream and any inline FRMs that FILE DJDEs specify. Valid values are:

>**<u>xerox</u>** InfoPrint XT emulates Xerox shading and produces raster dot patterns in the AFP that it generates. This is the default.

>**grayscale**
>>InfoPrint XT uses Logical Page and Object Area Coloring to substitute grayscale for the standard shading characters in FRMs. It uses default percentages of grayscale coverage for the levels of Xerox shading:

>>**LIGHT** Five percent (5%) coverage.

>>**MEDIUM**
>>>Ten percent (10%) coverage.

>>**HEAVY**
>>>Fifteen percent (15%) coverage.

>**[** *lp* **]:[** *mp* **]:[** *hp* **]**
>>InfoPrint XT substitutes grayscale for the Xerox shading and uses the coverage percentages you specify. For each position in the value, you can specify an integer from **0** through **100**:

>>*lp*   The coverage percentage that InfoPrint XT uses for LIGHT shading.

mp   The coverage percentage that InfoPrint XT uses for MEDIUM shading.

hp   The coverage percentage that InfoPrint XT uses for HEAVY shading.

Do not include the brackets in the value; the brackets indicate each position in the value is optional. Include the colons (**:**) between the positions of the value. If you omit any position, InfoPrint XT uses the default percentage for LIGHT, MEDIUM, or HEAVY. These are examples of values you can specify:

xshading = :8:16
> InfoPrint XT uses 5% coverage for LIGHT shading, 8% for MEDIUM, and 16% for HEAVY.

xshading = 3
> InfoPrint XT uses 3% coverage for LIGHT shading, 10% for MEDIUM, and 15% for HEAVY.

xshading = :11
> InfoPrint XT uses 5% coverage for LIGHT shading, 11% for MEDIUM, and 15% for HEAVY.

xshading = ::14
> InfoPrint XT uses 5% coverage for LIGHT shading, 10% for MEDIUM, and 14% for HEAVY.

xshading = 4:9:12
> InfoPrint XT uses 4% coverage for LIGHT shading, 9% for MEDIUM, and 12% for HEAVY.

Restrictions apply when you use the **xshading** conversion parameter. See page 5.

[xspacing = <u>none</u> | word | trnw | char]
> Specifies adjustments that InfoPrint XT makes to the spacing to match the original Xerox output as closely as possible. This conversion parameter also affects spacing fidelity for inline FRMS in FILE DJDE jobs:

xspacing = none
> Specifies no spacing adjustment. This is the default.

xspacing = word
> Specifies spacing adjustments between words only.

xspacing = trnw
> Specifies spacing adjustments between words only and reduces or eliminates embedded blanks in Presentation Text Object Content Architecture text characters.

xspacing = char
> Specifies spacing adjustments between words and characters.

Notes:

1. Use of word adjustments or character adjustments affects InfoPrint XT performance and results in larger AFP files.

2. The value of this attribute affects how InfoPrint XT processes jobs that contain FILE DJDE commands.

[xspcrmi = yes | <u>no</u>]
Controls how InfoPrint XT interprets spacing characters in Xerox fonts during job processing for fonts that FILE DJDEs specify:

<u>no</u> InfoPrint XT interprets spacing characters in the font as Presentation Text Object Content Architecture text-string characters. This is the default.

yes InfoPrint XT interprets spacing characters in the font as Relative Move Inline (RMI) structured fields.

Restrictions apply when you use the **xspcrmi** conversion parameter. See page 7.

Note: The **xspcrmi** conversion parameter does not control how InfoPrint XT interprets spacing characters in Xerox fonts that you have previously loaded with the **pdxtloadres** command. If you specify **xspcrmi=yes** and the job does not contain FILE DJDE commands, InfoPrint XT does not generate RMI structured fields for any of the fonts the job uses. In this case, reload the fonts that the job requires with the **pdxtloadres** command and use the **-b** option.

[xstaplemax=*n*]
Specifies the maximum number of sheets that accumulate before a staple action occurs. You can specify a value from **1** through **32767**. This matches the values that Xerox printers support. However, Xerox printers do not staple more than 102 sheets at a time. InfoPrint XT issues a warning message for each sheet, over 102 sheets, that accumulates for a single stapling action.

Notes:
1. The printer model that you are using determines the number of sheets that you can staple at one time. For detailed information, see the documentation for the printer.
2. If you do not specify the **xstaplemax** conversion parameter, InfoPrint XT honors the NTO1 limits that the JDEs for the job specify.

[xstapleorient = yes | <u>no</u>]
Specifies whether InfoPrint XT honors the orientation of the first page of a report when it determines the corner in which to staple. The default is that InfoPrint XT always staples in the upper left corner of the pages, as you look at them in the portrait orientation. If you specify **xstapleorient=yes**, InfoPrint XT detects reports whose first pages are in the landscape orientation. It staples these in the lower-left portrait corner. This corresponds to the upper-left landscape corner.

[xstaplesysgen = nto1 | <u>1ton</u>]
Specifies whether the default printing order that was specified to the Xerox printer at SYSGEN time was 1TON or NTO1. This determines whether the Xerox printer delivers the printed output starting with the first page of the job or with the last. If you use the default **xstaplesysgen** value of **1ton**, the starting JDL and JDE pair for the job must include:
- STAPLE=YES
- NTO1=YES or NTO1=*n*
- FACEUP=YES

If these values are present in the starting JDL and JDE pair, InfoPrint XT includes stapling commands in the AFP output that it generates. If the

values are not present, no stapling occurs. This is true even if subsequent JDL and JDE pairs in the job specify stapling.

If you specify **xstaplesysgen=nto1** and subsequent JDL and JDE pairs in the job specify stapling, InfoPrint XT includes stapling commands in the AFP regardless of whether the starting JDL and JDE pair specifies stapling.

[xtblkln = n **]**

For offline jobs, this conversion parameter specifies the block length. If you enter the **pdxtjtape** command with the **-b pass** option and value, the **pdxtjtape** command uses the value from the volume label as the value for the **xtblkn** conversion parameter. Otherwise, InfoPrint XT uses the value that the starting JDE specifies. For InfoPrint XT to honor the **xtblkn** conversion parameter, you must specify **xdeblock=yes** or use the **-b pass** option and value of the **pdxtjtape** command.

[xtoffset = n **]**

For offline jobs, this conversion parameter specifies the buffer offset. If you enter the **pdxtjtape** command with the **-b pass** option and value, the **pdxtjtape** command uses the value from the volume label as the value for the **xtoffset** conversion parameter. Otherwise, InfoPrint XT uses the value that the starting JDE specifies. For InfoPrint XT to honor the **xtoffset** conversion parameter, you must specify **xdeblock=yes** or use the **-b pass** option and value of the **pdxtjtape** command.

[xtrblanks = no | yes]
Specifies whether InfoPrint XT removes the trailing blanks on each line of the input data stream. If you do not specify this parameter, InfoPrint XT does not remove the trailing blanks.

[xtrecfm = fixed | decimal | variable]
For offline jobs, this conversion parameter specifies the record format. If you enter the **pdxtjtape** command with the **-b pass** option and value, the **pdxtjtape** command uses the value from the volume label as the value for the **xtrecfm** conversion parameter. Otherwise, InfoPrint XT uses the value that the starting JDE specifies. For InfoPrint XT to honor the **xtrecfm** conversion parameter, you must specify **xdeblock=yes** or use the **-b pass** option and value of the **pdxtjtape** command.

[xtrecln = n **]**
For offline jobs, this conversion parameter specifies the record format. If you enter the **pdxtjtape** command with the **-b pass** option and value, the **pdxtjtape** command uses the value from the volume label as the value for the **xtrecfm** conversion parameter. Otherwise, InfoPrint XT uses the value that the starting JDE specifies. For InfoPrint XT to honor the **xtrecfm** conversion parameter, you must specify **xdeblock=yes** or use the **-b pass** option and value of the **pdxtjtape** command.

[xzctrace = yes | no]
Captures trace information that a technical support representative can use for problem analysis. If you do not specify this parameter, InfoPrint XT does not capture trace information. Use this parameter only at the direction of a technical support representative.

[xzdump = yes | no]
Captures trace information that a technical support representative can use for problem analysis. If you do not specify this parameter, InfoPrint XT does not capture trace information. Use this parameter only at the direction of a technical support representative.

[xztrace = all1 | all2 | all1:all2]

Captures trace information that a technical support representative can use for problem analysis. If you do not specify this parameter, InfoPrint XT does not capture trace information. Use this parameter only at the direction of a technical support representative.

Appendix B. InfoPrint XT messages: 5016-*nnn*

This section lists the 5016 series of messages that InfoPrint XT for AIX can issue. Depending on the message, the message might include an additional error return code. See "Return code numbers" on page 184 for explanations of these numbers.

Note: You can also see detailed error message information by entering the **pdxtmsg** command. See "Using the pdxtmsg command" on page 186.

5016-001   The command option *-option* **is not valid.**

Explanation: You entered a command and included an option that is not valid. The message text identifies the option.

System action: InfoPrint XT cannot process the command.

User response: Review the syntax for the command and enter the command again.

5016-002   Cannot process command option *-option*. **The value for the option is missing.**

Explanation: You entered a command with an option that requires a value. The value for the option was missing. The message text identifies the option that requires a value.

System action: InfoPrint XT cannot process the request.

User response: Enter the command again and specify a value for the option.

5016-003   The command did not expect the value *"value"*.

Explanation: You entered a command and included an option or other argument that is not valid. The message text identifies the unexpected value.

System action: InfoPrint XT cannot process the request.

User response: Enter the command again and specify a valid value.

5016-004   Command options *-option* **and** *-option* **are mutually exclusive.**

Explanation: You entered a command and included two options that the command cannot process together.

System action: InfoPrint XT cannot process the request.

User response: Enter the command again and specify only one of the options.

5016-005   Value "*value***" is not valid for command option** *-option*.

Explanation: You entered a command and included a value for an option that is not one of the allowed values. Or, the value is not in the correct format. For example, you entered an alphanumeric value instead of a numeric value. The message text identifies the incorrect value and the name of the option.

System action: InfoPrint XT cannot process the request.

User response: Review the command syntax and enter the command again.

5016-006   There are too many instances of the *-option* **command option. You can specify up to** *nn* **instances.**

Explanation: You entered a command and included more than one instance of a command option. The message text indicates the maximum number of times that you can specify the option.

System action: InfoPrint XT cannot process the request.

User response: Review the command syntax and enter the command again.

5016-007   One or more required parameters are missing.

Explanation: You entered a command that has required parameters, but you did not specify one or more of the required parameters.

System action: InfoPrint XT cannot process the request.

User response: Review the command syntax and enter the command again.

5016-008   Cannot parse *environment_variable* **(error** *ReturnCode*). *...msg*

Explanation: You entered a command that reads an environment variable to obtain default command options. An error occurred when InfoPrint XT tried to parse the value of that environment variable. The most likely cause is a problem with the content of the

---

variable. For example, it might require quotation marks because the command contains special characters, or the command might contain an unbalanced set of quotation marks.

System action: InfoPrint XT cannot process the request.

User response: Correct the value of the environment variable and enter the command again.

5016-010 **One or more required command options are missing.**

Explanation: You entered a command that has required command options, but you did not specify one or more of the required command options.

System action: InfoPrint XT cannot process the request.

User response: Review the command syntax and enter the command again.

5016-012 **Command options** *-option1* **and** *-option2* **conflict with each other.**

Explanation: You entered a command with two command options that do not work together.

System action: InfoPrint XT cannot process the request.

User response: Review the command syntax and enter the command again with only one of the command options.

5016-013 **Value** *″value″* **is too long for command option** *-option***.**

Explanation: You entered a command and included a value for an option that is too long.

System action: InfoPrint XT cannot process the request.

User response: Review the command syntax and enter the command again.

5016-050 **The directive** *directive* **is not valid.**

Explanation: You entered a command that uses directives, but you specified a directive that is not valid.

System action: InfoPrint XT cannot process the request.

User response: Correct the directive and enter the command again.

5016-051 **Cannot process directive** *-directive***. The value for the directive is missing.**

Explanation: You entered a command with a directive that requires a value, but the value for the directive was missing.

System action: InfoPrint XT cannot process the request.

User response: Enter the command again and specify a value for the directive.

5016-052 **Value "***value***" is not valid for directive** *-directive***.**

Explanation: You entered a command with a directive that was not in the correct format. For example, the directive specified an alphanumeric value instead of a numeric value.

System action: InfoPrint XT cannot process the request.

User response: Enter the command again and specify a valid value for the directive.

5016-053 **The value for directive** *-directive* **is too long.**

Explanation: You entered a command with a directive value that was longer than the allowed length.

System action: InfoPrint XT cannot process the request.

User response: Enter the command again and specify a valid value for the directive.

5016-054 **Cannot parse a directive (error** *Return Code***). ...***msg*

Explanation: You entered a command with a directive value that InfoPrint XT cannot parse. The most likely cause is a problem with the content of the directive. For example, it might contain an unbalanced set of quotation marks.

System action: InfoPrint XT cannot process the request.

User response: Enter the command again and specify a valid value for the directive.

5016-100 **The resource** *resource_name* **is already loaded. Use the -r command option to replace it.**

Explanation: You entered the **pdxtloadres** command to load the resource specified in the message, but that resource is already loaded on the system. If this is a new version of the resource and you want to load it again, you must specify the **-r** option

System action: InfoPrint XT cannot process the request.

User response: Enter the command again and specify the **-r** option.

5016-102   **The input list file did not contain any valid resources.**

Explanation: You entered the **pdxtloadres** command and included the **-l** option, which specified a file that contains a list of resources. The entries in the file might not be in a valid format. Each entry in the file must be on a separate line. Or, the resources might not exist in the path explicitly specified in the file. You must specify a full path or a relative path in the file. InfoPrint XT also issues this message if the file is empty.

System action: InfoPrint XT cannot process the request.

User response: Correct the problem with the input list file and enter the command again.

5016-103   **The input pattern-matching string used for the search did not match any valid resources.**

Explanation: You entered the **pdxtloadres** command and included the **-n** option, which specified a pattern-matching string to use to locate specific Xerox resources. InfoPrint XT did not locate any valid resources when it used the pattern-matching string.

System action: InfoPrint XT cannot process the request.

User response: Correct the problem with the pattern-matching string and enter the command again.

5016-104   **You cannot use command option** *-option* **when you delete resources.**

Explanation: You entered the **pdxtloadres** command and included the **-f delete** option, which is a request to delete resources. You also included another option that does not apply when you delete resources.

System action: InfoPrint XT cannot process the request.

User response: Review the command syntax and enter the command again.

5016-110   **Specify one or more actual destinations.**

Explanation: You entered the **pdxtsetdest** command and did not specify one or more actual destinations.

System action: InfoPrint XT cannot process the request.

User response: Enter the **pdxtsetdest** command again and specify an actual destination.

5016-111   **Destination name** *name* **is not valid. It is too long.**

Explanation: You entered the **pdxtsetdest** command and specified an actual destination name that is longer than InfoPrint Manager allows.

System action: InfoPrint XT cannot process the request.

User response: Enter the command again and specify a valid destination name.

5016-112   *value* **is not an actual destination name.**

Explanation: You entered the **pdxtsetdest** command and specified the name that the message identifies as the actual destination name. No actual destination with that name exists.

System action: InfoPrint XT cannot process the request.

User response: Enter the command again and specify the name of an existing actual destination.

5016-113   **You cannot specify other server names when you specify "*:".**

Explanation: You entered the **pdxtcrtxform** command and specified ***:** to specify all servers. You also included a specific server name with the command. You cannot combine these two parameters.

System action: InfoPrint XT cannot process the request.

User response: Enter the command again and only specify ***:** or a specific server name.

5016-114   **Specify a message number.**

Explanation: You entered the **pdxtmsg** command, but you did not specify a message number. You must specify a message number to see more information.

System action: InfoPrint XT cannot process the request.

User response: Enter the command again and specify a message number.

5016-115   *nn* **is not a valid message number.**

Explanation: You entered the **pdxtmsg** command and specified the number identified in the message. That number is not in the *nnnn-nnn* format.

System action: InfoPrint XT cannot process the request.

User response: Enter the command again and specify a valid message number in the correct format.

5016-116   **Message** *nn* **does not exist.**

Explanation: You entered the **pdxtmsg** command and specified the number identified in the message. That number is not in the message catalog.

System action: InfoPrint XT cannot process the request.

User response: Enter the command again and specify a valid message number.

5016-120   **The command option** *-option* **is not valid.**

Explanation: InfoPrint Manager issued the **pdxtx2afp** command and included an option that is not valid. The attributes of the **x2afp** configurable transform might not be correct.

System action: InfoPrint XT cannot process the command.

User response: Enter the **pdxtcrtxform** command to reconfigure the **x2afp** configurable transform.

5016-121   **Cannot process command option** *-option*. **The value for the option is missing.**

Explanation: InfoPrint Manager issued the **pdxtx2afp** command with an option that requires a value. The value for the option was missing. The attributes of the **x2afp** configurable transform might not be correct.

System action: InfoPrint XT cannot process the request.

User response: Enter the **pdxtcrtxform** command to reconfigure the **x2afp** configurable transform.

5016-122   **The command did not expect the value "***value***".**

Explanation: InfoPrint Manager issued the **pdxtx2afp** command and included an option or other argument that is not valid. The attributes of the **x2afp** configurable transform might not be correct.

System action: InfoPrint XT cannot process the request.

System action: Enter the **pdxtcrtxform** command to reconfigure the **x2afp** configurable transform.

5016-123   **The command option -***option* **is missing.**

Explanation: InfoPrint Manager issued the **pdxtx2afp** command without a required command option. The attributes of the **x2afp** configurable transform might not be correct.

System action: InfoPrint XT cannot process the request.

User response: Enter the **pdxtcrtxform** command to reconfigure the **x2afp** configurable transform.

5016-130   **The input list file did not contain any valid resources.**

Explanation: You entered the **pdxtrtape** command and included the **-l** option, which specified a file that contains a list of resources. The entries in the file might not be in a valid format. Each entry in the file must be on a separate line. InfoPrint XT also issues this message if the file is empty.

System action: InfoPrint XT cannot process the request.

User response: Correct the problem with the input list file and enter the command again.

5016-131   *value* **is not a tape device.**

Explanation: You entered the **pdxtrtape** command and included the **-T** option, which specified the tape device to read from. The value that you specified is not a tape device.

System action: InfoPrint XT cannot process the request.

User response: Enter the command again and specify a valid tape device name.

5016-132   **The input pattern-matching string used for the search did not match any files.**

Explanation: You entered the **pdxtrtape** command and included the **-n** option, which specified a pattern-matching string to use to locate specific files. InfoPrint XT did not locate any valid files when it used the pattern-matching string.

System action: InfoPrint XT cannot process the request.

User response: Correct the problem with the pattern-matching string and enter the command again.

5016-200   **Cannot access** *file_or_directory* **(error** *ReturnCode*). *...msg*

Explanation: The file or directory identified in the message is not accessible. It might not exist or it might not have the permissions that are required to provide access. The message provides additional information about why the action failed.

Note: For the accessing the ink correlation table, the explanation is: a directory containing the ink correlation table is not accessible.

System action: InfoPrint XT cannot process the request.

User response: Examine the specified file or directory

and correct the problem. Then, enter the command again.

5016-201   Cannot open file *file_name* **(error** *ReturnCode*). *...msg*

Explanation: InfoPrint XT cannot open the file identified in the message. The message provides additional information about why the open action failed.

System action: InfoPrint XT cannot process the request.

User response: Examine the file or the directory that contains the file and correct the problem. Then, enter the command that resulted in this error message.

5016-202   Cannot read file *file_name* **(error** *ReturnCode*). *...msg*

Explanation: InfoPrint XT cannot read the file identified in the message. The message provides additional information about why the action failed.

System action: InfoPrint XT cannot process the request.

User response: Examine the file and correct the problem. Then, enter the command again.

5016-203   Cannot write to file *file_name* **(error** *ReturnCode*). *...msg*

Explanation: InfoPrint XT cannot write to the file identified in the message. The message provides additional information about why the action failed.

System action: InfoPrint XT cannot process the request.

User response: Examine the file or use the additional information that the message provides to correct the problem. Then, enter the command again.

5016-204   File *file_name* **does not exist.**

Explanation: The file identified in the message does not exist. The file might be one you specified or one that InfoPrint XT tried to create.

System action: InfoPrint XT cannot process the request.

User response: Enter the command again and specify a valid file name. Or, use other error information to determine why InfoPrint XT cannot create the file.

5016-205   File *file_name* **is empty.**

Explanation: The file identified in the message exists, but it does not contain any data.

System action: InfoPrint XT cannot process the request.

User response: Correct the problem with the file and enter the command again.

5016-206   Cannot rename file *file_name* **to** *file_name* **(error** *ReturnCode*). *...msg*

Explanation: You entered a command, but InfoPrint XT cannot rename the file identified in the message. The message provides additional information about why the action failed.

System action: InfoPrint XT cannot process the request.

User response: Examine the file and correct the problem. Then, enter the command again.

5016-207   Cannot set permissions for file *file_name* **(error** *ReturnCode*). *...msg*

Explanation: You entered a command, but InfoPrint XT cannot change the permissions for the file identified in the message. The message provides additional information about why setting file permissions failed.

System action: InfoPrint XT cannot process the request.

User response: Examine the file and correct the problem. Then, enter the command again.

5016-208   Cannot set the ownership for file *file_name* **(error** *ReturnCode*). *...msg*

Explanation: You entered a command, but InfoPrint XT cannot set the ownership for the file identified in the message. The message provides additional information about why setting the ownership failed.

System action: InfoPrint XT cannot process the request.

User response: Examine the file and correct the problem. Then, enter the command again.

5016-209   Cannot lock file *file_name* **(error** *ReturnCode*). *...msg*

Explanation: You entered a command, but InfoPrint XT cannot lock the file identified in the message. The message provides additional information about why the action failed.

System action: InfoPrint XT cannot process the request.

User response: Examine the file and correct the problem. Then, enter the command again.

5016-210   **Cannot read from fd***n* **(error**
ReturnCode)**.** *...msg*

Explanation: InfoPrint XT cannot read from the file
descriptor identified in the message. The message
provides additional information about why the action
failed.

System action: InfoPrint XT cannot process the
request.

User response: Use the information that the message
provides to correct the problem. Then, enter the
command again.

5016-211   **Cannot write to fd***n* **(error** *ReturnCode*)**.**
...msg

Explanation: InfoPrint XT cannot write to the file
descriptor identified in the message. The message
provides additional information about why the write
action failed.

System action: InfoPrint XT cannot process the
request.

User response: Use the information that the message
provides to correct the problem. Then, enter the
command again.

5016-215   **Cannot perform** *operation* **tape**
operation on *device* **(error** *ErrorCode*)**.**
...msg

Explanation: InfoPrint XT cannot do the tape
operation identified in the message. The message
provides additional information about why the tape
operation failed. The possible tape operations are:

operation	Associated function
DEOF	Disable end-of-file check
ERASE	Erase tape
FSF	Forward space file
FSR	Forward space record
OFFL	Rewind and unload tape
RETEN	Retension tape
REW	Rewind
RSF	Reverse space file
RSR	Reverse space record
WEOF	Write end-of-file mark

System action: InfoPrint XT cannot process the
request.

User response: Examine the specified file, or the
location that contains the file, and correct the problem.
Then, enter the original command that resulted in this
error message again.

5016-216   **Cannot load module** *module_name*
(error *ReturnCode*)**.** *...msg*

Explanation: InfoPrint XT cannot load the module
identified in the message. The message provides
additional information about why the action failed.

System action: InfoPrint XT cannot process the
request.

User response: Examine the specified module or the
directory that contains the module, and correct the
problem. Then, enter the original command that resulted
in this error message again.

5016-217   **Cannot link** *source* **to target (error**
ReturnCode)**.** *...msg*

Explanation: You entered a command, but InfoPrint
XT cannot create the link identified in the message. The
message provides additional information about why the
try to create the link failed.

System action: InfoPrint XT cannot process the
request.

User response: Examine the entries identified in the
message and correct the problem. Then, enter the
command again.

5016-220   **AFP record** *record_number* **(offset**
offset) **is not valid. The structured field**
introducer is not complete.

Explanation: InfoPrint XT cannot read the AFP data
stream. The introducer portion of a structured field is not
complete.

System action: InfoPrint XT cannot process the
request.

User response: Correct the AFP data stream. Then,
enter the command again. If you cannot determine the
cause of the problem, report this message to your
technical support representative.

5016-221   **AFP record** *record_number* **(offset**
offset) **is not valid. The structured field**
data is not complete.

Explanation: InfoPrint XT cannot read the AFP data
stream. Not enough data exists to satisfy the length
specified in the structured field introducer.

System action: InfoPrint XT cannot process the
request.

User response: Correct the AFP data stream. Then,
enter the command again. If you cannot determine the
cause of the problem, report this message to your
technical support representative.

5016-222   **AFP record** *record_number* **(offset** *offset***) is not valid. The carriage control is 0x***nn***, not 0x5A.**

Explanation: InfoPrint XT cannot read the AFP data stream. The carriage control is not correct.

System action: InfoPrint XT cannot process the request.

User response: Correct the AFP data stream. Then, enter the command again. If you cannot determine the cause of the problem, report this message to your technical support representative.

5016-230   **Cannot create directory** *directory_name* **(error** *ReturnCode***).** *...msg*

Explanation: InfoPrint XT cannot create the directory identified in the message. The parent directory might not exist or might not have the permissions required to create the specified directory. The message provides additional information about why the action failed.

System action: InfoPrint XT cannot process the request.

User response: Examine the directory or directories and correct the problem. Then, enter the command again.

5016-231   **Cannot change to directory** *directory_name* **(error ReturnCode).** *...msg*

Explanation: InfoPrint XT cannot change to the directory identified in the message. The message provides additional information about why the action failed.

System action: InfoPrint XT cannot process the request.

User response: Examine the directory and correct the problem. Then, enter the command again.

5016-232   **Cannot open directory** *directory_name* **(error** *ReturnCode***).** *...msg*

Explanation: InfoPrint XT cannot open the directory identified in the message. The message provides additional information about why the action failed.

System action: InfoPrint XT cannot process the request.

User response: Examine the directory and correct the problem. Then, enter the command again.

5016-233   **Cannot read directory** *directory_name* **(error** *ReturnCode***).** *...msg*

Explanation: InfoPrint XT cannot read the directory identified in the message. The message provides additional information about why the action failed.

System action: InfoPrint XT cannot process the request.

User response: Examine the directory and correct the problem. Then, enter the command again.

5016-234   **Cannot resolve directory** *directory_name* **(error** *ReturnCode***).** *...msg*

Explanation: InfoPrint XT cannot resolve the directory identified in the message. The directory might not exist or might not have the correct permissions. *msg* provides additional information about why the action failed.

System action: InfoPrint XT cannot process the request.

User response: Verify that the directory exists and that it has the correct permissions. Then, enter the command again.

5016-240   **Cannot search** *directory_name* **(error** *ReturnCode***).** *...msg*

Explanation: You entered a command that required InfoPrint XT to scan a directory using a pattern-matching string. The scan operation failed. The message provides additional information about why the action failed.

System action: InfoPrint XT cannot process the request.

User response: Use the information that the message provides to correct the problem. Then, enter the command again.

5016-250   **Cannot allocate storage (error** *ReturnCode***).** *...msg*

Explanation: InfoPrint XT cannot allocate the required storage. The message provides additional information about why the action failed.

System action: InfoPrint XT cannot process the request.

User response: Use the information that the message provides to correct the problem. Then, enter the command again.

5016-260   Cannot create semaphore *semaphore* **(error** *ReturnCode*). *...msg*

Explanation: InfoPrint XT cannot create the semaphore identified in the message. The message provides additional information about why the action failed.

System action: InfoPrint XT cannot process the request.

User response: Use the information that the message provides to correct the problem.

5016-261   Cannot create values for semaphore *semaphore* **(error** *ReturnCode*). *...msg*

Explanation: InfoPrint XT cannot set the values for the semaphore identified in the message. The message provides additional information about why the action failed.

System action: InfoPrint XT cannot process the request.

User response: Use the information that the message provides to correct the problem.

5016-262   Cannot access semaphore *semaphore* **(error** *ReturnCode*). *...msg*

Explanation: InfoPrint XT cannot access the semaphore identified in the message. The message provides additional information about why the action failed.

System action: InfoPrint XT cannot process the request.

User response: Use the information that the message provides to correct the problem.

5016-263   Cannot get values for semaphore *semaphore* **(error** *ReturnCode*). *...msg*

Explanation: InfoPrint XT cannot get the values for the semaphore identified in the message. The message provides additional information about why the action failed.

System action: InfoPrint XT cannot process the request.

User response: Use the information that the message provides to correct the problem.

5016-264   Cannot remove semaphore *semaphore* **(error** *ReturnCode*). *...msg*

Explanation: InfoPrint XT cannot remove the semaphore identified in the message. The message provides additional information about why the remove action failed.

System action: InfoPrint XT cannot process the request.

User response: Use the information that the message provides to correct the problem.

5016-280   Command *command* **failed (error** *ReturnCode*). *stderr*

Explanation: InfoPrint XT issued the command identified in the message, but it failed. The message provides additional information about why the command failed.

System action: InfoPrint XT cannot process the request.

User response: Use the information that the message provides to correct the problem.

5016-281   Command *command* **failed (error** *ReturnCode*).

Explanation: InfoPrint XT issued the command identified in the message. The command did not return any standard error output when it failed.

System action: InfoPrint XT cannot process the request.

User response: Depending on the command, there might be additional information in an InfoPrint Manager or InfoPrint ProcessDirector error log or a system error log. Use the log information to correct the problem.

5016-282   Cannot launch the command *command* **(error** *ReturnCode*). *...msg*

Explanation: InfoPrint XT issued the command identified in the message, but it failed. The message provides additional information about why the command failed.

System action: InfoPrint XT cannot process the request.

User response: Use the information that the message provides to correct the problem.

5016-283   Cannot read from command *command* **(** *ReturnCode*). *...msg*

Explanation: InfoPrint XT cannot read the output from the command identified in the message. The message provides additional information about why the action failed.

System action: InfoPrint XT cannot process the request.

User response: Use the information that the message provides to correct the problem. Then, enter the command again.

5016-284　Cannot write to command *command* **(***ReturnCode***).** *...msg*

Explanation: InfoPrint XT cannot write data to the command identified in the message. The message provides additional information about why the action failed.

System action: InfoPrint XT cannot process the request.

User response: Use the information that the message provides to correct the problem.

5016-290　Cannot set the effective group to *group_name* **(error** *ReturnCode***).** *...msg*

Explanation: InfoPrint XT cannot set the effective group to the value specified in the message. The message provides additional information about why the action failed.

System action: InfoPrint XT cannot process the request.

User response: Use the information that the message provides to correct the problem. Then, enter the command again.

5016-291　You must enter this command while logged in as the root user.

Explanation: You entered the command while logged in with a user name other than **root**.

System action: InfoPrint XT cannot process the request.

User response: Log in as the root user and enter the command again.

5016-292　You must be in the *group_name* **group to enter this command.**

Explanation: You entered the command while logged in with a user name that is not in the required group.

System action: InfoPrint XT cannot process the request.

User response: Either add the user name to the group, or log in with a user name that is already in the group. Then, enter the command again.

5016-400　Cannot query destination *destination_name* **...** *stderr*

Explanation: You entered the **pdxtsetdest** command to configure an actual destination for use with InfoPrint XT. The **pdls** query of the actual destination failed. The message provides additional information about why the action failed.

System action: InfoPrint XT cannot process the request.

User response: Use the information that the message provides to correct the problem. Then, enter the command again.

5016-401　Cannot query destination *destination_name* **(error** *ReturnCode***).**

Explanation: You entered the **pdxtsetdest** command to configure an actual destination for use with InfoPrint XT. The **pdls** query of the actual destination failed. Or, there was a problem with the information returned by the command.

System action: InfoPrint XT cannot process the request.

User response: Use the return code information to identify the problem and correct it. Then, enter the command again.

5016-402　Cannot create or set the x2afp transform for *server_name ... stderr*

Explanation: You entered the **pdxtcrtxform** command to create an **x2afp** configurable transform object in the server identified in the message. Either the **pdcreate** function or the **pdset** function failed. The message provides additional information about why the action failed.

System action: InfoPrint XT cannot process the request.

User response: Use the information that the message provides to correct the problem. Then, enter the command again.

5016-403　Cannot query the server list (error *ReturnCode***).** *...msg*

Explanation: You entered the **pdxtcrtxform** command with the *: option, which creates an **x2afp** configurable transform object in all InfoPrint Manager servers. An error occurred when InfoPrint XT tried to build the list of servers. The message provides additional information about why the action failed.

System action: InfoPrint XT cannot process the request.

User response: Use the information that the message provides to correct the problem. Then, enter the command again.

5016-404　Cannot query the server list. *stderr*

Explanation: You entered the **pdxtcrtxform** command with the *: option, which creates an **x2afp** configurable transform object in all InfoPrint Manager servers. An error occurred when InfoPrint XTT tried to build the list of servers. The message provides additional information about why the action failed.

System action: InfoPrint XT cannot process the request.

User response: Use the information that the message provides to correct the problem. Then, enter the command again.

5016-405　　There are no active servers.

Explanation: You entered the **pdxtcrtxform** command with the ***:** option, which creates an **x2afp** configurable transform object in all InfoPrint Manager servers. InfoPrint Manager did not return any server names when InfoPrint XT queried for the list of InfoPrint Manager servers.

System action: InfoPrint XT cannot process the request.

User response: There might be a problem with InfoPrint Manager. Manually enter the **pdls -c server *:** command to try to list the InfoPrint Manager servers. Use any information provided by InfoPrint Manager to correct the problem.

5016-406　　Cannot query the default server (error *ReturnCode***).** *...msg*

Explanation: You entered the **pdxtcrtxform** command to create an **x2afp** configurable transform object in the default InfoPrint Manager server. An error occurred when InfoPrint XT tried to determine the name of the default server. InfoPrint Manager identifies the default server through the setting of the **PDPRINTER** environment variable. The message provides additional information about why the action failed.

System action: InfoPrint XT cannot process the request.

User response: Use the information that the message provides to correct the problem. Then, enter the command again.

5016-407　　Cannot query the default server. *stderr*

Explanation: You entered the **pdxtcrtxform** command to create an **x2afp** configurable transform object in the default InfoPrint Manager server. An error occurred when InfoPrint XT tried to determine the name of the default server. InfoPrint Manager identifies the default server through the setting of the **PDPRINTER** environment variable. The message provides additional information about why the action failed.

System action: InfoPrint XT cannot process the request.

User response: Use the information that the message provides to correct the problem. Then, enter the command again.

5016-408　　There is no default server.

Explanation: You entered the **pdxtcrtxform** command to create an **x2afp** configurable transform object in the default InfoPrint Manager server. InfoPrint Manager identifies the default server through the setting of the **PDPRINTER** environment variable. InfoPrint XT did not find a default server.

System action: InfoPrint XT cannot process the request.

User response: Set a default InfoPrint Manager server by setting the **PDPRINTER** environment variable and enter the command again. Or, specify the name of a server when you enter the **pdxtcrtxform** command.

5016-409　　Cannot query attribute *attribute* **(error** *ReturnCode***).** *...msg*

Explanation: InfoPrint XT issued the **pdxtx2afp** command to transform a Xerox job, and tried to query the InfoPrint Manager attribute identified in the message. The message provides additional information about why the action failed.

System action: InfoPrint XT cannot process the request.

User response: Use the information that the message provides to correct the problem. Then, resubmit the job.

5016-410　　Cannot parse *line* **in** *file_name* **(error** *ReturnCode***).** *...msg*

Explanation: You specified parameters in the parameter mapping file. An error occurred when InfoPrint XT tried to parse the value of one of the lines in the file. The most likely cause is a problem with the content of a variable. For example, it might contain an unbalanced set of quotation marks.

System action: InfoPrint XT cannot process the request.

User response: Correct the line in the parameter mapping file and enter the command again.

5016-430　　Tape file *nn* **is not a Xerox resource.**

Explanation: You entered the **pdxtrtape** command to process a Xerox resource tape. One of the files on the tape is not a Xerox resource.

System action: InfoPrint XT continues processing.

User response: This is an informational message and requires no user response.

5016-431   Tape file *nn* contains *resource* .

Explanation: You entered the **pdxtrtape** command to process a Xerox resource tape. The command found a Xerox resource that meets the search criteria you specified. The tape file number is relative to the tape position when you entered the command.

System action: InfoPrint XT continues processing.

User response: This is an informational message and requires no user response.

5016-432   Tape file *nn* contains *resource*, but the file already exists.

Explanation: You entered the **pdxtrtape** command to copy resources from a Xerox resource tape. The command found a resource that meets the search criteria that you specified. However, the file already exists. Because you did not specify to replace existing files, **pdxtrtape** skips the file. The tape file number is relative to the tape position when you entered the **pdxtrtape** command.

System action: InfoPrint XT continues processing.

User response: This is an informational message and requires no user response.

5016-433   *nn* of *nn* tape files matched the search criteria.

Explanation: You entered the **pdxtrtape** command to process a Xerox resource tape. This message shows how many tape files the command checked, and how many of them met the search criteria that you specified.

System action: InfoPrint XT continues processing.

User response: This is an informational message and requires no user response.

5016-440   Start of OTEXT for job *job_information*.

Explanation: InfoPrint XT found OTEXT in the job. You see the OTEXT after this message.

System action: InfoPrint XT continues processing.

User response: This is an informational message and requires no user response.

5016-441   End of OTEXT for job *job_information*.

Explanation: InfoPrint XT has displayed all the OTEXT in the job, and InfoPrint Manager has sent the whole job to the printer.

System action: InfoPrint XT continues processing.

User response: This is an informational message and requires no user response.

5016-442   Printing is suspended. Press 'Continue' to resume.

Explanation: InfoPrint XT found OTEXT that included the WAIT parameter and it suspended printing.

System action: InfoPrint XT waits for you to click **Continue**.

User response: Wait for the printer to finish printing the pages that InfoPrint Manager has sent, then click **Continue**.

5016-443   Printing is resumed.

Explanation: InfoPrint XT displayed message 5016-442, and you responded by clicking **Continue**.

System action: InfoPrint XT continues processing.

User response: This is an informational message and requires no user response.

5016-444   Waiting for OTEXT...

Explanation: InfoPrint XT is looking for OTEXT as InfoPrint Manager sends the job to the printer.

System action: InfoPrint XT continues processing.

User response: This is an informational message and requires no user response.

5016-450   A label record is not valid.

Explanation: The **pdxtjtape** command is reading the label on a volume. It found a record that does not meet the requirements of the label type. For example, the label record might be too short.

System action: **pdxtjtape** cannot process the request.

User response: Replace the volume with one that has a valid label and enter the **pdxtjtape** command again.

5016-451   The volume in *device* is *type*, not *expected_type*.

Explanation: The **pdxtjtape** command is reading the label on a volume. The label type that it found is different from what it needed.

System action: **pdxtjtape** ejects the volume and prompts for another.

User response: Wait for the prompt. If you specified the wrong label type with the **-l** command option, cancel the request and enter the command again with the correct label type. If you inserted the wrong volume, replace the current volume with the correct one and continue.

5016-452   To continue, insert a new volume and type 1. To cancel, type 0. Then, press Enter.

Explanation: The **pdxtjtape** command is requesting a new volume. If there was a previous error, this is to replace the current volume with the correct one. For multi-volume job files, this is to continue with the next volume in the series.

System action: InfoPrint XT waits for a response.

User response: To continue, insert the new volume, type **1**, and then press **Enter**. To cancel, type **0** and then press **Enter**.

5016-453   The volume has an IBM standard label:

Volume serial number:	'*number*'
Owner name and address code:	'*code*'
Data set identifier:	'*identifier*'
Creation date:	'*date*' (*date*)
Expiration date:	'*date*' (*date*)
System code:	'*code*'
Control character:	'*character*'
Record format:	'*format*'
Record length:	*length*
Block attribute:	'*attribute*'
Block length:	*length*

Explanation: The **pdxtjtape** command is processing a volume that has an IBM standard label. This message shows some of the information from the label.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-454   The volume has an ISO/ANSI label:

Volume identifier:	'*identifier*'
Owner identifier:	'*identifier*'
File identifier:	'*identifier*'
Creation date:	'*date*' (*date*)
Expiration date:	'*date*' (*date*)
System code:	'*code*'
Record format:	'*format*'
Record length:	*length*
Block attribute:	'*attribute*'
Block length:	*length*
Block offset:	*offset*

Explanation: The **pdxtjtape** command is processing a volume that has an ISO/ANSI label (AL or AUL). This message shows some of the information from the label.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-455   The volume has an FLX/RSX11 label: ...File name: '*file*'

Explanation: The **pdxtjtape** command is processing a volume that has an FLX/RSX11 label. This message shows some of the information from the label

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-456   The volume has no label.

Explanation: The **pdxtjtape** command is processing a volume that has no label.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-457   The HDR1 and EOV1 labels do not match.

Explanation: The **pdxtjtape** command is processing a multi-volume job file or data set. The HDR1 label on the current volume does not match the EOV1 label from the previous volume. This means the current volume is not the one that follows the previous one.

System action: InfoPrint XT ejects the volume and prompts for another.

User response: Wait for the prompt. Replace the current volume with the correct one and continue.

5016-458   Command: *command*

Explanation: This message shows the **pdpr** command that the **pdxtjtape** command issued as part of the job submission process. Any information that follows this message and that precedes message 5016-459 is information from this command.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-459   rc = *command*

Explanation: This message shows the return code from the command shown in the preceding message, 5016-458. Any information that follows message

5016-458 and that precedes this message is information from this command.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-460 The volume has spanned records.

Explanation: The **pdxtjtape** command is processing a volume that has an ISO/ANSI label. The record format field in the volume label contains the value S. This means that the data has spanned records. InfoPrint XT cannot deblock spanned records.

System action: InfoPrint XT cannot process the request.

User response: To copy the data from the tape without deblocking it, enter the **pdxtjtape** command with the **-b pass** option and value.

5016-461 Job *position_nn* **has** *nn* **records from** *nn* **blocks.**

Explanation: TThis message shows the relative position of the job on the volume. It also shows the number of records and blocks that the **pdxtjtape** command found for the job.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-462 Job position_nn has *nn* **blocks.**

Explanation: This message shows the relative position of the job on the volume. It also shows the number of blocks that the **pdxtjtape** command found for the job.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-463 End of volume reached while reading from *device*.

Explanation: This message shows that the **pdxtjtape** command has found the end of the current volume.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-470 Resource name *file* **is not valid for deblocking.**

Explanation: You entered the **pdxtdblkres** command and specified a resource name that is not supported.

The **pdxtdblkres** command can deblock CMD, FSL, ISL, and JSL resources.

System action: InfoPrint XT processes the request.

User response: Enter the command again and specify a valid resource name.

5016-471 The label record is not valid.

Explanation: You entered the **pdxtdblkres** command to deblock a resource. The first record in the resource is not a valid label record.

System action: InfoPrint XT cannot process the request.

User response: Enter the command again and specify a different resource.

5016-472 A block is too short. It should be *nn* **bytes, not** *nn* **bytes.**

Explanation: You entered the **pdxtdblkres** command to deblock a resource. A block in the resource is too short. The resource itself might be truncated.

System action: InfoPrint XT processes the request.

User response: Enter the command again and specify a different resource.

5016-473 Resource name *file* **is not valid for blocking.**

Explanation: You entered the **pdxtblkres** command and specified a resource name that is not valid. The **pdxtblkres** command can block CMD, FSL, ISL, and JSL resources.

System action: InfoPrint XT processes the request.

User response: Enter the command again and specify a valid resource name.

5016-474 Cluster name *cluster_name* **already exists in** *file*.

Explanation: You entered the **pdxtcluster** command with the **-f add** function. The cluster name you specified using the **-c** parameter already exists in the cluster source file.

System action: InfoPrint XT cannot process the request.

User response: Specify a cluster name that does not already exist in the cluster source file, or specify **pdxtcluster -f edit** to modify the existing cluster entry.

5016-475   **A resource processor could not find cluster name** *cluster_name* **in** *file.*

Explanation: You entered the **pdxtcluster** command with the **-f remove** function, but the cluster name you specified using the **-c** parameter does not exist in the cluster source file.

System action: InfoPrint XT continues processing.

User response: Use **pdxtcluster -f list** to display a list of clusters in the cluster source file and enter the command again with the correct cluster name.

5016-476   **Unable to process the cluster database request. The –n parameter matched** *n* **files.**

Explanation: You entered the **pdxtcluster** command, but the pattern you specified using the **-n** parameter matches more than one cluster database resource. The **pdxtcluster** command can only process one cluster database at a time.

System action: InfoPrint XT cannot process the request.

User response: Specify the complete filename for the cluster database.

5016-477   **Name: AFP Tray: Xerox Trays:**

Explanation: The **pdxtcluster** command with the **-f list** function displays a list of cluster names and their associated AFP Tray and Xerox Trays.

System action: InfoPrint XT continues processing.

User response: This is an informational message and requires no user response.

5016-478   **Name: Cluster name** *cluster_name* **is not valid.**

Explanation: You entered the **pdxtcluster** command and specified the **-f add**, **-f edit** or **-f remove** function. You also entered a cluster name that is not valid. Xerox cluster names must contain from 1 through 6 alphanumeric characters.

System action: InfoPrint XT cannot process the request.

User response: Specify a valid cluster name and enter the command again.

5016-501   *Date_Time* **(pid** *ProcessID***) - transform started.**

Explanation: InfoPrint XT started to convert the Xerox job to AFP.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-502   *Date_Time* **(rc** *ReturnCode***) - transform ended.**

Explanation: InfoPrint XT completed converting the Xerox job to AFP.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-503   **Transform arguments (***argument_source***) :**

Explanation: This message, with message 5016-504, lists the transform arguments in use.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-504   **-***Option ″Value″*

Explanation: This message, with message 5016-503, lists the transform arguments in use.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-505   **Transform directives: (***directive_source***)**

Explanation: This message, with message 5016-506, lists the transform directives in use.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-506   *-directive* **"***value***"**

Explanation: This message, with message 5016-505, lists the transform directives in use.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-509   **Command Sequence:**

Explanation: This message, with message 5016-510, lists the commands that make up transform processing.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-510   **(***Sequence_nn***)** *command_string*

Explanation: This message, with message 5016-509, lists the position of the command in the sequence of commands, and the command string itself.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-511   **Return Codes:**

Explanation: This message, with message 5016-512, lists the return codes from each of the commands in the transform process.

System action: InfoPrint XT processes the request.

User response: Depending on the return codes, you might need to do diagnostic tests or look through error logs to correct any problems.

5016-512   **(***Sequence_nn***)** *ReturnCode* **(pid** *ProcessID***)**

Explanation: This message, with message 5016-511, lists the return codes from each of the commands in the transform process. The first variable corresponds to the sequence number listed in message 5016-510. The second variable is the return code. The third variable is the AIX process ID number for the command.

System action: InfoPrint XT processes the request.

User response: Depending on the return codes, you might need to do diagnostic tests or look through error logs to correct any problems.

5016-513   **Impressions (pages):** *nn*

Explanation: This message shows the number of impressions that InfoPrint XT created for the job.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-520   **InfoPrint XT -** *globaljobID*

Explanation: This message prints at the top of the error report that prints at the end of the job if a transform error occurs. The variable is the InfoPrint Manager server global job identifier for the job.

System action: InfoPrint XT cannot complete some portion of the request.

User response: Use the information from the error report to correct the problem. Then, submit the job again.

5016-521   *file_name***:**

Explanation: This message identifies the name of the log file or listing file that supplied the information in the error report.

System action: InfoPrint XT processes the request.

User response: Use the information from the error report to correct the problem. Then, submit the job again.

5016-590   **Application exit** *exitn_name* **stopped the transform (error** *ReturnCode***).**

Explanation: An application exit ended with a return code other than 0. This directs InfoPrint XT to stop the transform process.

System action: InfoPrint XT stops the transform process.

User response: This is an informational message and requires no user response for InfoPrint XT. Correct the problem with the application exit.

5016-600   **Resource load process started for type "***resource_type***"**

Explanation: InfoPrint XT has started to load resources of a specific type. The message identifies the type of resource that InfoPrint XT is loading.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-601   **Resource load process is complete for type "***resource_type***"**

Explanation: InfoPrint XT has finished loading resources of a specific type. The message identifies the type of resource that InfoPrint XT loaded.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-610   **Resource conversion process started. Number of resources to convert:** *nn***.**

Explanation: InfoPrint XT to convert resources of a specific type. The message indicates how many resources InfoPrint XT is converting.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-611   **Conversion step** *step nn* **failed for resource** *resource_name* **(error** *ReturnCode***).**

Explanation: InfoPrint XT writes this message to the listing file for the resource identified in the message. Depending on how you loaded the resource, the listing file is in the **/var/pdxt/resources/common/pdxtloadres** directory, or the directory for a specific resource group, or the directory specified by the **-o** option. The message indicates the conversion step that failed. The return code provides additional information about why the conversion failed.

System action: InfoPrint XT cannot process the request.

User response: Use the return code to determine why the conversion process failed and correct the problem. Then, load the resource again.

Note: InfoPrint XT overwrites the listing file each time you use the **pdxtloadres** command.

5016-612   *nn* **resources have completed conversion.**

Explanation: When converting a group of resources, InfoPrint XT periodically issues this message to show the progress of the conversion process.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-613   **Resource conversion process is complete. Number of successes:** *nn***.**

Explanation: InfoPrint XT has converted a group of resources. The message specifies the number of resources that InfoPrint XT converted successfully.

System action: InfoPrint XT processes the request.

User response: If any accompanying messages indicate that conversion failures occurred, determine the cause of the conversion failures and correct the problems. Then, load the resources that initially failed conversion again. If no conversion failures occurred, no action is necessary.

5016-614   **Resource correlation process started.**

Explanation: During the resource-load process, InfoPrint XT issues this message when it starts to build a resource correlation table.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-615   **Resource correlation process is complete.**

Explanation: During the resource-load process, InfoPrint XT issues this message when it finishes building a resource correlation table.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-616   **Resource correlation step** *step_name* **failed (error** *ReturnCode***).**

Explanation: During the resource-load process, InfoPrint XT issues this message when it cannot build a resource correlation table. The return code provides additional information about why the correlation failed.

System action: InfoPrint XT cannot process the request.

User response: Use the return code to determine why the correlation process failed and correct the problem. Then, load the resource again.

5016-617   **Metrics generation process started.**

Explanation: During the resource-load process, InfoPrint XT issues this message when it starts to generate the metrics files.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-618   **Metrics generation process is complete. Number of successes:** *nn***.**

Explanation: InfoPrint XT issues this message after it generates the metrics files for one or more resources. The message specifies the number of metrics files that InfoPrint XT created successfully.

System action: InfoPrint XT processes the request.

User response: If any accompanying messages indicate that failures occurred, determine the cause of the failures and correct the problems. Then, load the resources that initially failed again. If no other failures occurred, no action is necessary.

5016-619   **Install process started.**

Explanation: During the resource-load process, InfoPrint XT issues this message when it starts to copy the AFP resources and metrics files to their appropriate directories.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-620   *nn* **resources have completed installation.**

Explanation: When installing a group of resources, InfoPrint XT periodically issues this message to show the progress of the install process.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-621   **Install process is complete.**

Explanation: InfoPrint XT issues this message after it finishes copying the AFP resources and the metrics files to the appropriate directories.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-690   **Resource delete process started for type** *resource_type***. Number of resources to delete:** *n***.**

Explanation: InfoPrint XT issues this message when it starts to delete resources of a specific type. The message indicates the type of resource and how many resources InfoPrint XT is deleting.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-691   **Resource delete process is complete for type** *resource_type***. Number of deletes:** *nn***.**

Explanation: InfoPrint XT issues this message after it deletes a group of resources. The message specifies the number of resources that InfoPrint XT deleted.

System action: InfoPrint XT processes the request.

User response: If any accompanying messages indicate that deletion failures occurred, determine the cause of the deletion failures and correct the problems. If no deletion failures occurred, no action is necessary.

5016-701   *date_time* **(ppid** *nn***/pid** *nn***) port=***nn* **- receipt started**

Explanation: InfoPrint XT issues this message when it starts receiving a data set that originated through Download for z/OS.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-702   *date_time* **(ppid** *nn***/pid** *nn***) port=***nn* **(rc=***nn***) - receipt ended**

Explanation: InfoPrint XT issues this message when it finishes receiving a data set that originated through Download for z/OS.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response unless the return code is a value other than 0.See "Return code numbers" on page 184 for descriptions of non-zero return codes.

5016-707   *file_name***:**

Explanation: This message identifies the name of the file whose content follows in the log.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-711   **Download arguments:**

Explanation: This message, with message 5016-712, lists the download arguments in use.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-712   *argument* **=** *value*

Explanation: This message, with message 5016-711, lists the download arguments in use.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-721   **Download directives (***source***):**

Explanation: This message, with message 5016-722, lists the download directives in use.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-722   *download_directive* **=** "*value*"

Explanation: This message, with message 5016-721, lists the download directives in use and their values.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-731 Command: *command*

Explanation: This message shows the command that **pdxtdownload** invoked as part of the download process. Any information that follows this message and that precedes the associated 5016-732 message is information from this command.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-732 rc = *n*

Explanation: This message shows the return code from the command shown in the preceding 5016-731 message. Any information that follows message

5016-731 and that precedes this message is information from the command.

System action: InfoPrint XT processes the request.

User response: This is an informational message and requires no user response.

5016-900 Message *nnnn-nnn* **does not exist.**

Explanation: InfoPrint XT found an error while processing a message.

System action: InfoPrint XT processes the request.

User response: Report this message to your technical support representative.

Return code numbers

Tables 19 and 20 describe the return code numbers that some InfoPrint XT messages contain:

Table 19. Return code numbers 1-64 in InfoPrint XT messages

Error	Explanation:	Error	Explanation:
1	Operation not permitted	33	Domain error in math function
2	No such file or directory	34	Result too large
3	No such process	35	No message of desired type
4	Interrupted system call	36	Identifier removed
5	I/O error	37	Channel number out of range
6	No such device or address	38	Level 2 not synchronized
7	Argument list too long	39	Level 3 halted
8	Exec format error	40	Level 3 reset
9	Bad file descriptor	41	Link number out of range
10	No child processes	42	Protocol driver not attached
11	Resource temporarily unavailable	43	No CSI structure available
12	Not enough space	44	Level 2 halted
13	Permission denied	45	Resource deadlock avoided
14	Bad address	46	Device not ready
15	Block device required	47	Write-protected media
16	Resource busy	48	Unformatted media
17	File exists	49	No locks available
18	Improper link	50	No connection
19	No such device	51	Reserved
20	Not a directory	52	No file system
21	Is a directory	53	Unused
22	Invalid argument	54	Operation would block
23	Too many open files in system	55	Operation now in progress
24	Too many open files	56	Operation already in progress

Table 19. Return code numbers 1-64 in InfoPrint XT messages (continued)

25	Inappropriate I/O control operation	57	Socket operation in non-socket
26	Text file busy	58	Destination address required
27	File too large	59	Message too long
28	No space left on device	60	Protocol wrong type for socket
29	Invalid seek	61	Protocol not available
30	Read-only file system	62	Protocol not supported
31	Too many links	63	Socket type not supported
32	Broken pipe	64	Operation not supported on socket

Table 20. Return code numbers 65-127 in InfoPrint XT messages

Error	Explanation:	Error	Explanation:
65	Protocol family not supported	89	Invalid file system control data
66	Address family not supported by protocol family	90-92	Reserved
67	Address already in use	93	Item is not local to host
68	Cannot assign requested address	94-108	Reserved
69	Network is down	109	Function not implemented in POSIX
70	Network is unreachable	110	Media surface area
71	Network dropped connection on reset	111	I/O completed, but needs relocation
72	Software caused connection abort	112	No attribute found
73	Connection reset by peer	113	Security authentication denied
74	No buffer space available	114	Not a trusted program
75	Socket is already connected	115	Too many references; cannot splice
76	Socket is not connected	116	Wide character not valid
77	Cannot send after socket shutdown	117	Asynchronous I/O cancelled
78	Connection timed out	118	Temp out of streams resources
79	Connection refused	119	I_STR ioctl timed out
80	Host is down	120	Wrong message type at stream head
81	No route to host	121	STREAMS protocol error
82	Restart the system call	122	No message ready at stream head
83	Too many processes	123	fd is not a stream
84	Too many users	124	POSIX threads unsupported value
85	Too many levels of symbolic links	125	multihop is not allowed
86	File name too long	126	The link was severed
87	Directory not empty	127	Value too large to store in data type

88	Disc quota exceeded		

Using the pdxtmsg command

InfoPrint XT provides the **pdxtmsg** command, which you can use to display detailed information about messages on the AIX system that is running InfoPrint XT. The syntax for the **pdxtmsg** command is:

pdxtmsg [-d] [-t] *nnnn-nnn*

[-d]   Displays only the explanation, system action, and response information for the message.

[-t]   Displays only the text of the message.

nnnn-nnn
           Specifies the 7-digit InfoPrint XT message number. The number must be in the format shown. The 4-digit prefix must be an InfoPrint XT message prefix.

If you do not specify either of the options for the command, InfoPrint XT shows the message text, the explanation, the system action, and the response.

Appendix C. JSL Metrics Compiler messages (5031-*nnn*)

This section lists the 5031 series of messages that InfoPrint XT for AIX can issue for the JSL metrics compiler. Depending on the message, the message might include an additional error return code. See "Return code numbers" on page 184 for explanations of these numbers.

Note: You can also see detailed error message information by entering the **pdxtmsg** command. See "Using the pdxtmsg command" on page 186.

5031-001 **The command option** -*option* **is not valid.**

Explanation: You entered a command and included an option that is not valid. The message text identifies the option.

System action: InfoPrint XT cannot process the command.

User response: Review the syntax for the command and enter the command again.

5031-002 **Cannot process command option** -*option*. **The value for the option is missing.**

Explanation: You entered a command with an option that requires a value. The value for the option was missing. The message text identifies the option that requires a value.

System action: InfoPrint XT cannot process the request.

User response: Enter the command again and specify a value for the option.

5031-003 **The command did not expect the value** ″*value*″.

Explanation: You entered a command and included an option or other argument that is not valid. The message text identifies the unexpected value.

System action: InfoPrint XT cannot process the request.

User response: Enter the command again and specify a valid value.

5031-004 **Command options** -*option* **and** -*option* **are mutually exclusive.**

Explanation: You entered a command and included two options that the command cannot process together.

System action: InfoPrint XT cannot process the request.

User response: Enter the command again and specify only one of the options.

5031-005 **Value** ″*value*″ **is not valid for command option** -*option*.

Explanation: You entered a command and included a value for an option that is not one of the allowed values. Or, the value is not in the correct format. For example, you entered an alphanumeric value instead of a numeric value. The message text identifies the incorrect value and the name of the option.

System action: InfoPrint XT cannot process the request.

User response: Review the command syntax and enter the command again.

5031-006 **There are too many instances of the** -*option* **command option. You may specify up to** *number* **instances.**

Explanation: You entered a command and included more than one instance of a command option. You specified the command option more times than InfoPrint XT allows. The message text indicates the maximum number of times that you can specify the option.

System action: InfoPrint XT cannot process the request.

User response: Review the command syntax and enter the command again.

5031-008 **Cannot parse** *variable* **(error** *ReturnCode*). **...***msg*

Explanation: You entered a command that reads an environment variable to obtain default command options. An error occurred when InfoPrint XT tried to parse the value of that environment variable. The most likely cause is a problem with the content of the variable. For example, it might require quotation marks because the command contains special characters, or the command might contain an unbalanced set of quotation marks.

System action: InfoPrint XT cannot process the request.

User response: Correct the value of the environment variable and enter the command again.

5031-010   One or more required command options are missing.

Explanation: You entered a command that has required command options. You did not specify one or more of the required command options.

System action: InfoPrint XT cannot process the request.

User response: Review the command syntax and enter the command again.

5031-100   The resource *resourcename* **is already loaded. Use the -r command option to replace it.**

Explanation: You entered the **pdxtpdl** command to load the resource specified in the message. That resource is already loaded on the system. If this is a new version of the resource and you want to load it again, you must specify the **-r** option.

System action: InfoPrint XT cannot process the request.

User response: Enter the command again and specify the **-r** option.

5031-102   The input list file did not contain any valid resources.

Explanation: You entered the **pdxtpdl** command and included the **-l** option, which specified a file that contains a list of resources. The entries in the file might not be in a valid format. Each entry in the file must be on a separate line. Or, the resources might not exist in the path explicitly specified in the file. You must specify a full path or a relative path in the file. InfoPrint XT also issues this message if the file is empty.

System action: InfoPrint XT cannot process the request.

User response: Correct the problem with the input list file and enter the command again.

5031-103   The input pattern-matching string used for the search did not match any valid resources.

Explanation: You entered the **pdxtpdl** command and included the **-n** option, which specified a pattern-matching string to use to locate specific Xerox resources. InfoPrint XT did not locate any valid resources when it used the pattern-matching string.

System action: InfoPrint XT cannot process the request.

User response: Correct the problem with the pattern-matching string and enter the command again.

5031-201   Cannot open file *filename* **(error** *ReturnCode***). ...***msg*

Explanation: The **pdxtpdl** command cannot open the file identified in the message. The message provides additional information about why the open action failed.

System action: InfoPrint XT could not process the request.

User response: Examine the specified file, or the directory that contains the file, and correct the problem. Then, enter the command that resulted in this error message.

5031-202   Cannot read file *filename* **(error** *ReturnCode***). ...***msg*

Explanation: The **pdxtpdl** command cannot read the file identified in the message. The message provides additional information about why the open action failed.

System action: InfoPrint XT could not process the request.

User response: Examine the specified file, or the directory that contains the file, and correct the problem. Then, enter the command that resulted in this error message.

5031-203   Cannon write file *filename* **(error** *ReturnCode***). ...***msg*

Explanation: The **pdxtpdl** command cannot write to the file identified in the message. The message provides additional information about why the open action failed.

System action: InfoPrint XT could not process the request.

User response: Examine the specified file, or the directory that contains the file, and correct the problem. Then, enter the command that resulted in this error message.

5031-205   The JSL metrics compiler did not generate any resources from source file *filename***.**

Explanation: The **pdxtpdl** command cannot create any reformatted resources from the file identified in the message.

System action: InfoPrint XT could not process the request.

User response: Examine the specified file and correct any errors. Then, enter the command that resulted in this error message.

5031-209   **Cannot lock file** *filename* **(error** *ReturnCode***). ...***msg*

Explanation: You entered a command, but InfoPrint XT cannot lock the file identified in the message. The message provides additional information about why the file-lock action failed.

System action: InfoPrint XT cannot process the request.

User response: Examine the file identified in the message and correct the problem. Then, enter the command again.

5031-230   **Cannot create directory** *directoryname* **(error** *ReturnCode***). ...***msg*

Explanation: InfoPrint XT cannot create the directory identified in the message. The parent directory might not exist or might not have the permissions required to create the specified directory. The message provides additional information about why the create action failed.

System action: InfoPrint XT cannot process the request.

User response: Examine the specified directory or directories and correct the problem. Then, enter the command again.

5031-231   **Cannot change to directory** *directoryname* **(error** *ReturnCode***). ...***msg*

Explanation: InfoPrint XT cannot change to the directory identified in the message. The message provides additional information about why the change action failed.

System action: InfoPrint XT cannot process the request.

User response: Examine the specified directory and correct the problem. Then, enter the command again.

5031-234   **Cannot resolve directory** *directoryname* **(error** *ReturnCode***). ...***msg*

Explanation: InfoPrint XT cannot resolve the directory identified in the message. The directory might not exist or might not have the correct permissions. The message provides additional information about why the resolve action failed.

System action: InfoPrint XT cannot process the request.

User response: Verify that the specified directory exists and that it has the correct permissions. Then, enter the **pdxtpdl** command again.

5031-240   **Cannot search** *directoryname* **(error** *ReturnCode***). ...***msg*

Explanation: You entered a command that required InfoPrint XT to scan a directory using a pattern-matching string. The scan operation failed. The message provides additional information about why the scan action failed.

System action: InfoPrint XT cannot process the request.

User response: Use the information that the message provides to correct the problem. Then, enter the command again.

5031-250   **Unable to allocate storage (error** *ReturnCode***). ...***msg*

Explanation: InfoPrint XT cannot allocate the required storage. The message provides additional information about why the storage allocation action failed.

System action: InfoPrint XT cannot process the request.

User response: Use the information that the message provides to correct the problem. Then, enter the command again.

5031-290   **Cannot set the effective group to** *groupname* **(error** *ReturnCode***). ...***msg*

Explanation: InfoPrint XT cannot set the effective group to the value specified in the message. The message provides additional information about why the set action failed.

System action: InfoPrint XT cannot process the request.

User response: Use the information that the message provides to correct the problem. Then, enter the command again.

5031-292   **You must be in the** *groupname* **group to issue this command.**

Explanation: You entered the command while logged in with a user name that is not in the required group.

System action: InfoPrint XT cannot process the request.

User response: Either add the user name to the group, or log in with a user name that is already in the group. Then, enter the command again.

5031-300   **Starting compilation of** *filename***...**

Explanation: The **pdxtpdl** command has begun compiling a JSL source file.

System action: InfoPrint XT continues processing.

User response: This is an informational message and requires no user response.

5031-301 Compilation completed with return code *return_code***.**

Explanation: The **pdxtpdl** command has completed compiling a JSL source file.

System action: InfoPrint XT continues processing.

User response: This is an informational message and requires no user response.

5031-302 Input source file *filename* **contains one or more errors.**

Explanation: The **pdxtpdl** command found syntax errors in *filename*. Other messages explain the errors.

System action: InfoPrint XT continues processing the request, but output from data stream conversions using the reformatted resources that the request creates might not be correct.

User response: If any accompanying messages indicate syntax errors in the JSL, correct the errors. Then, compile the JSL again. If there are no syntax errors, no action is necessary.

5031-303 The JSL metrics compiler created resource *resource* **from source file** *filename***.**

Explanation: The **pdxtpdl** command has compiled *resource* from a JSL source file.

System action: InfoPrint XT continues processing.

User response: This is an informational message and requires no user response.

5031-400 At line *line_number***, column** *column_number:*

Explanation: This message that indicates the location of one or more syntax errors that the **pdxtpdl** command found in a JSL. Other messages explain the errors.

System action: InfoPrint XT continues processing.

User response: This is an informational message and requires no user response.

5031-500 Command keyword *keyword* **is incorrect.**

Explanation: The **pdxtpdl** command found an incorrect keyword in a command.

System action: InfoPrint XT cannot process the request.

User response: Correct the error. Then, compile the JSL again.

5031-501 Parameter keyword *keyword* **is incorrect.**

Explanation: The **pdxtpdl** command found an incorrect keyword in a parameter.

System action: InfoPrint XT cannot process the request.

User response: Specify the correct parameter for the command options. Then, compile the JSL again.

5031-502 Unable to determine the correct parameter for the option or option group *option* **in command** *command***.**

Explanation: You specified a command with one or more options that imply parameters that you did not specify. The options can apply to more than one possible parameter. The **pdxtpdl** command cannot determine which parameter is correct.

System action: InfoPrint XT cannot process the request.

User response: Specify the correct parameter for the command options. Then, compile the JSL again.

5031-503 Option *option* **is incorrect for parameter** *parameter***.**

Explanation: The **pdxtpdl** command found an incorrect option in a parameter.

System action: InfoPrint XT cannot process the request.

User response: Correct the error. Then, compile the JSL again.

5031-505 Expanding short form command specification to *long_command_form***...**

Explanation: The **pdxtpdl** command expanded the short form of a command to its long form.

System action: InfoPrint XT continues processing.

User response: This is an informational message and requires no user response.

5031-506 Null parameter option is incorrect.

Explanation: The **pdxtpdl** command found an incorrect null option in a parameter.

System action: InfoPrint XT cannot process the request.

User response: Correct the error. Then, compile the JSL again.

5031-507   Command *command* has no parameter that accepts the specified option.

Explanation: You specified a command with an option that implies parameters that you did not specify. None of the parameters for the command can use the options that you specified.

System action: InfoPrint XT cannot process the request.

User response: Specify the correct options for the command. Then, compile the JSL again.

5031-508   Closing quote is missing.

Explanation: Each opening quote (' or ") must have a closing quote.

System action: InfoPrint XT cannot process the request.

User response: Correct the error. Then, compile the JSL again.

5031-509   Comment close is missing.

Explanation: Each comment opening (/*) must have a comment close (*/).

System action: InfoPrint XT cannot process the request.

User response: Correct the error. Then, compile the JSL again.

5031-510   The command did not expect end of file.

Explanation: The **pdxtpdl** command found end of file in an unexpected location or context.

System action: InfoPrint XT cannot process the request.

User response: Correct the error. Then, compile the JSL again.

5031-600   Unit of measure *unit* is incorrect.

Explanation: The **pdxtpdl** command found an incorrect unit of measure.

System action: InfoPrint XT ignores the unit of measure.

User response: Correct the error. Then, compile the JSL again.

5031-601   Command *command* is unsupported

Explanation: The **pdxtpdl** command found a command that is unsupported.

System action: InfoPrint XT cannot process the request.

User response: Correct the error. Then, compile the JSL again.

5031-602   Parameter *parameter* for command *command* is unsupported.

Explanation: The **pdxtpdl** command found a parameter that is unsupported.

System action: InfoPrint XT cannot process the request.

User response: Correct the error. Then, compile the JSL again.

5031-603   Label *label* is a duplicate.

Explanation: The **pdxtpdl** command found a label that is used in another location in the JSL

System action: InfoPrint XT cannot process the request.

User response: Change the label. Then, compile the JSL again.

5031-604   Criteria for command *command* is missing.

Explanation: The **pdxtpdl** command cannot find the criteria that it expected for the command.

System action: InfoPrint XT cannot process the request.

User response: Correct the error. Then, compile the JSL again.

5031-605   Parameter *parameter* for command *command* is missing.

Explanation: The **pdxtpdl** command cannot find the parameter that it expected for the command.

System action: InfoPrint XT cannot process the request.

User response: Correct the error. Then, compile the JSL again.

5031-606   Value *value* is out of range. Valid range is *lower_limit* to *upper_limit*.

Explanation: The **pdxtpdl** command found a value that is not in the range of valid values.

System action: InfoPrint XT cannot process the request.

User response: Correct the error. Then, compile the JSL again.

5031-607   **Parameter** *parameter* **contains too many options. Extraneous options ignored.**

Explanation: The **pdxtpdl** command found extraneous parameter options

System action: InfoPrint XT ignores the extraneous options and continues processing.

User response: Examine the parameter and correct the problem. Then, compile the JSL again.

5031-608   **Referenced label** *label* **is missing.**

Explanation: The **pdxtpdl** command could not find the label identified in the message.

System action: InfoPrint XT cannot process the request.

User response: Specify the correct label. Then, compile the JSL again.

5031-609   **A JDL declaration is missing for command** *command***.**

Explanation: The **pdxtpdl** command found a command that should be part of a JDL, but could not find a declaration for the JDL.

System action: InfoPrint XT skipped the command.

User response: Specify the correct JDL declaration for the command. Then, compile the JSL again.

5031-610   **One or more options for parameter** *parameter* **are missing.**

Explanation: You specified a parameter without some of the required options.

System action: InfoPrint XT cannot process the request.

User response: Specify all of the required options for the parameter. Then, compile the JSL again.

5031-611   **The JSL metrics compiler ignored option** *option* **for parameter parameter.**

Explanation: The **pdxtpdl** command found a valid Xerox parameter option that is currently unsupported.

System action: InfoPrint XT ignored the parameter option.

User response: This is an informational message and requires no user response.

5031-612   **A user table declaration is missing for command** *command***.**

Explanation: You specified command with a reference to a user-defined table, but the **pdxtpdl** command cannot find a declaration for the table.

System action: InfoPrint XT cannot process the request.

User response: Specify a declaration for the user-defined table. Then, compile the JSL again.

5031-613   **An unlabeled user table declaration is already declared in command. Unlabeled user table declaration ignored.**

Explanation: You specified more than one unlabeled user table declaration in the command and parameter identified in the message.

System action: The **pdxtpdl** command ignored the extraneous user table declaration.

User response: Specify only one user table declaration for the command and parameter. Then, compile the JSL again.

5031-614   **A string size exceeded the maximum of** *maximum_size* **bytes.**

Explanation: You specified a character string that is too large.

System action: InfoPrint XT cannot process the request.

User response: Specify a character string of the correct length. Then, compile the JSL again.

5031-615   **The command did not expect end of JDL.**

Explanation: The *pdxtpdl* command found the end of the JDL in an unexpected location or context.

System action: InfoPrint XT cannot process the request.

User response: Correct the error. Then, compile the JSL again.

5031-616   **A required label for command** *command* **is missing.**

Explanation: The **pdxtpdl** command cannot find the label that it expected for the command.

System action: InfoPrint XT cannot process the request.

User response: Correct the error. Then, compile the JSL again.

5031-618   The last successfully parsed command was *command* **on line** *line_number***.**

Explanation: This message that indicates the last command that the **pdxtpdl** command was able to process successfully. Other messages explain the errors that caused processing to end.

System action: InfoPrint XT cannot continue.

User response: This is an informational message and requires no user response.

5031-619   STOCK reference *stock_name* **is already assigned.**

Explanation: You specified a STOCK name that is already in use.

System action: InfoPrint XT cannot process the request.

User response: Specify the correct STOCK name. Then, compile the JSL again.

5031-620   STOCK *stock_name* **is undefined.**

Explanation: You specified a STOCK name that is not declared in the JSL.

System action: InfoPrint XT cannot process the request.

User response: Specify the correct STOCK name, or specify a declaration for the STOCK name. Then, compile the JSL again.

5031-621   Two or more string constants must have the same length.

Explanation: You specified string constants that do not have the same length.

System action: InfoPrint XT cannot process the request.

User response: Specify the correct string constants. Then, compile the JSL again.

5031-622   Label *label* **identifies a system table.**

Explanation: You specified a label identifier that is already being used to identify a system table.

System action: InfoPrint XT cannot process the request.

User response: Specify the correct label identifier. Then, compile the JSL again.

5031-623   The command expected integer value *integer* **but found** *fractional_value***.**

Explanation: You specified a fractional value, but the compiler expected an integer value.

System action: InfoPrint XT continues processing.

User response: Specify the correct integer value. Then, compile the JSL again.

5031-626   The length of TABLE CONSTANT *constant* **does not match the length value in CRITERIA** *criteria***.**

Explanation: You specified a TABLE CONSTANT whose length is not equal to the length value in the corresponding CRITERIA.

System action: InfoPrint XT cannot process the request.

User response: Specify the correct TABLE CONSTANT or the correct CRITERIA length value. Then, compile the JSL again.

5031-700   JDE *JDE_name* **contains one or more errors.**

Explanation: This message that indicates that the **pdxtpdl** command found syntax errors in the JDE identified in the message. Other messages explain the errors that caused processing to end.

System action: InfoPrint XT cannot continue.

User response: This is an informational message and requires no user response.

5031-701   BLOCK length is not a multiple of fixed RECORD LENGTH value.

Explanation: You specified RECORD STRUCTURE=F or FB with a BLOCK length value that is not a multiple of the RECORD length.

System action: InfoPrint XT cannot process the request.

User response: Specify the correct BLOCK length. Then, compile the JSL again.

5031-702   ZERO=YES requires a RECORD LTHFLD value greater than zero.

Explanation: You specified BLOCK ZERO=YES, but the **pdxtpdl** command did not find RECORD LTHFLD, or found RECORD LTHFLD=0.

System action: InfoPrint XT cannot process the request.

User response: Remove BLOCK ZERO=YES, or specify a RECORD LTHFLD value greater than zero. Then, compile the JSL again.

5031-703 **IDEN SKIP value is greater than RECORD LENGTH value.**

Explanation: You specified an IDEN SKIP value that is too large.

System action: InfoPrint XT cannot process the request.

User response: Specify the correct IDEN SKIP value. Then, compile the JSL again.

5031-704 **MINLAB value is greater than MAXLAB value.**

Explanation: You specified a MINLAB value that is too large.

System action: InfoPrint XT cannot process the request.

User response: Specify the correct MINLAB value. Then, compile the JSL again.

5031-705 **Length of IDEN DJDE identifier fields is greater than RECORD LENGTH value.**

Explanation: The sum of the IDEN OFFSET value and the length of the IDEN PREFIX string is too large.

System action: InfoPrint XT cannot process the request.

User response: Specify the correct IDEN OFFSET value and an IDEN PREFIX string with the correct length. Then, compile the JSL again.

5031-706 **HOST type** *host_type* **is not valid with LABEL type** *label_type***.**

Explanation: You specified an unsupported combination of HOST type and LABEL type.

System action: InfoPrint XT replaces the incorrect label type with a label that is valid for the host type.

User response: Specify the correct HOST type and LABEL type. Then, compile the JSL again.

5031-707 **BLOCK ADJUST value is greater than BLOCK LENGTH value.**

Explanation: You specified a BLOCK ADJUST value that is too large.

System action: InfoPrint XT cannot process the request.

User response: Specify the correct BLOCK ADJUST value. Then, compile the JSL again.

5031-708 **RECORD ADJUST value is greater than RECORD LENGTH value.**

Explanation: You specified a RECORD ADJUST value that is too large.

System action: InfoPrint XT cannot process the request.

User response: Specify the correct RECORD ADJUST value. Then, compile the JSL again.

5031-709 **RECORD LENGTH value is greater than BLOCK LENGTH value.**

Explanation: You specified a RECORD LENGTH value that is too large.

System action: InfoPrint XT cannot process the request.

User response: Specify the correct RECORD LENGTH value. Then, compile the JSL again.

5031-710 **Sum of BLOCK PREAMBLE and BLOCK POSTAMBLE values is greater than BLOCK LENGTH value.**

Explanation: You specified a combined BLOCK PREAMBLE and BLOCK POSTAMBLE value that is too large.

System action: InfoPrint XT cannot process the request.

User response: Specify the correct BLOCK PREAMBLE and BLOCK POSTAMBLE values. Then, compile the JSL again.

5031-711 **Sum of RECORD PREAMBLE and RECORD POSTAMBLE values is greater than RECORD LENGTH value.**

Explanation: You specified a combined RECORD PREAMBLE and RECORD POSTAMBLE value that is too large.

System action: InfoPrint XT cannot process the request.

User response: Specify the correct RECORD PREAMBLE and RECORD POSTAMBLE values. Then, compile the JSL again.

5031-712 **Variable RECORD STRUCTURE requires a RECORD LTHFLD value greater than zero.**

Explanation: You specified RECORD STRUCTURE=V or VB, but the **pdxtpdl** command did not find RECORD LTHFLD, or found RECORD LTHFLD=0.

System action: InfoPrint XT cannot process the request.

User response: Specify the correct RECORD STRUCTURE value, or specify a RECORD LTHFLD value greater than zero. Then, compile the JSL again.

5031-713 Undefined blocked RECORD STRUCTURE requires a RECORD CONSTANT value.

Explanation: You specified RECORD STRUCTURE=UB, but the **pdxtpdl** command did not find RECORD CONSTANT.

System action: InfoPrint XT cannot process the request.

User response: Specify the correct RECORD STRUCTURE, or specify a RECORD CONSTANT value. Then, compile the JSL again.

5031-714 MINLAB value is greater than BLOCK LENGTH value.

Explanation: You specified a MINLAB value that is too large.

System action: InfoPrint XT cannot process the request.

User response: Specify the correct MINLAB value. Then, compile the JSL again.

5031-715 MAXLAB value is greater than BLOCK LENGTH value.

Explanation: You specified a MAXLAB value that is too large.

System action: InfoPrint XT cannot process the request.

User response: Specify the correct MAXLAB value. Then, compile the JSL again.

5031-800 JSL compilation process started. Number of resources to compile: *number*.

Explanation: InfoPrint XT has begun compiling the JSLs that you specified in the **pdxtpdl** command

System action: InfoPrint XT continues processing.

User response: This is an informational message and requires no user response.

5031-802 Replacing resource *resource*.

Explanation: You specified the **–r pdxtpdl** parameter. The **pdxtpdl** command has replaced the reformatted resource identified in the message.

System action: InfoPrint XT continues processing.

User response: This is an informational message and requires no user response.

5031-803 The JSL metrics compiler generated *number* resources.

Explanation: This message specifies the total number of reformatted resources that the **pdxtpdl** command created.

System action: InfoPrint XT continues processing.

User response: This is an informational message and requires no user response.

5031-804 The JSL metrics compiler replaced previously compiled resource *resource*.

Explanation: The **pdxtpdl** command replaced an existing reformatted resource that was already compiled.

System action: InfoPrint XT continues processing.

User response: This is an informational message and requires no user response.

5031-805 The JSL metrics compiler skipped resource *resource*, which did not match the input pattern-matching string.

Explanation: The **pdxtpdl** command skipped a JSL file that did not match the pattern-matching string that you specified with the **–j** parameter.

System action: InfoPrint XT continues processing.

User response: This is an informational message and requires no user response.

5031-806 The JSL metrics compiler skipped previously compiled resource *resource*.

Explanation: The **pdxtpdl** command skipped an existing reformatted resource that was already compiled.

System action: InfoPrint XT continues processing.

User response: This is an informational message and requires no user response.

5031-807 The resource *resource* is already compiled. Use the –r command option to replace it or the –s command option to skip it.

Explanation: You entered the **pdxtpdl** command to compile the resource specified in the message. That resource is already compiled on the system. If this is a new version of the resource and you want to compile it again, you must specify the **-r** option. If you want to skip the resource, you must specify the **-s** option.

System action: InfoPrint XT cannot continue.

User response: Specify the **–r** command option or the **–s** command option. Then, compile the JSL again.

Appendix D. Resource utility messages and data stream converter messages: AIO*xxxnnn*X

This section lists the messages that the InfoPrint XT for AIX (InfoPrint XT) resource utility and Xerox data stream converter programs can issue. Make sure that you see the appropriate set of messages, depending on whether InfoPrint XT issues them while loading a resource or while converting a job.

Resource path names used in messages

Some of the messages and message explanations include information about where the resource utility or data stream converter looked for reformatted Xerox resources and Advanced Function Presentation (AFP) resources. The **reformatted Xerox resource path** is the location of the metrics files that InfoPrint XT generates when you load a Xerox resource. Depending on whether you loaded them as common resources, loaded them in a specific resource group, or loaded them in a directory of your choice, the reformatted Xerox resource path is one of these:

- **/var/pdxt/resources/common/metrics**
- **/var/pdxt/resources/***resgrp***/metrics**
- *OtherDirectory***/metrics**

The **AFP resource path** is the directory that contains the AFP resources that InfoPrint XT generates when you load Xerox printable resources. The AFP resource path is one of these:

- **/var/pdxt/resources/common**
- **/var/pdxt/resources/***resgrp*
- *OtherDirectory*

InfoPrint XT resource utility messages

This section lists messages that the InfoPrint XT resource utility program can issue and a short explanation of each message. InfoPrint XT calls the resource utility and the resource converters when it loads Xerox resources. During the load process, the resource utility creates the associated metrics files for all types of Xerox resources that InfoPrint XT processes. The resource converters create the AFP versions of Xerox fonts, images, logos, and forms.

Many of the messages contain variable data, shown in italics, which InfoPrint XT replaces with specific information when it issues the messages. A vertical bar (|) between portions of variable data means that InfoPrint XT uses only one of the variable-data strings when it issues the message. The error condition determines the variable-data string that InfoPrint XT uses.

The middle three characters of the message identifier indicate the program module that found the error. This chapter replaces these with the characters *xxx*. These characters are variable and have no meaning to users.

The message identifier ends with a letter that indicates the severity:

I   Informational. Processing continues. This corresponds to return code 0. The resource or resources processed successfully.

W   Warning. Processing continues. This corresponds to return code 4. It alerts

the user that the resource utility found a possible problem in the input resource. However, the resource or resources processed successfully.

E   Error. Processing continues. This corresponds to return code 8. This indicates an error that caused InfoPrint XT to complete a default action. Error messages issued when the resource utility is converting an FRM indicate that the AFP overlay generated by InfoPrint XT and printed on an IPDS printer might or might not match the output of the same resource printed on a Xerox printer. Otherwise, an error prevented InfoPrint XT from loading the resource.

S   Severe error. InfoPrint XT processing stops. This corresponds to return code 12. An error prevented InfoPrint XT from loading the resource.

U   Unrecoverable error. InfoPrint XT processing stops. This corresponds to return code 16. An error prevented InfoPrint XT from loading the resource.

AIOxxx000S Unknown logic error.

Explanation: An unexpected error condition occurred in the parameter parser.

System action: InfoPrint XT cannot process the resource.

User response: If you are converting a Xerox job, make sure that the conversion parameters for the job are valid. See Appendix A, "Conversion parameters for converting Xerox jobs," on page 151. Otherwise, report this message to your technical support representative.

AIOxxx000S Unrecognized keyword: *keyword*. **Valid keywords are:**

> *keyword*
> **:**
> **:**
> *keyword*

Explanation: The parameter parser found a keyword that it did not recognize.

System action: InfoPrint XT cannot process the request.

User response: If you are converting a Xerox job, make sure that the conversion parameters for the job are valid. See Appendix A, "Conversion parameters for converting Xerox jobs," on page 151. Otherwise, report this message to your technical support representative.

AIOxxx001S Specified option for keyword: *keyword* **is too long. Maximum length is** *length*.

Explanation: The parameter parser found a value for a keyword that is too long.

System action: InfoPrint XT cannot process the request.

User response: If you are converting a Xerox job, make sure that the conversion parameters and values for the job are valid. See Appendix A, "Conversion parameters for converting Xerox jobs," on page 151.

Otherwise, report this message to your technical support representative.

AIOxxx002S Unrecognized option for the keyword: *keyword*. **Valid options for this keyword are:**

> *option*
> **:**
> **:**
> *option*

Explanation: The parameter parser found a keyword option or value that is not valid.

System action: InfoPrint XT cannot process the request.

User response: If you are converting a Xerox job, make sure that the conversion parameters and values for the job are valid. See Appendix A, "Conversion parameters for converting Xerox jobs," on page 151. Otherwise, report this message to your technical support representative.

AIOxxx003S Value for keyword: *keyword* **is out of range. Valid range is** *lower_limit* **to** *upper_limit*.

Explanation: The parameter parser found a keyword value that is not in the range of valid values.

System action: InfoPrint XT cannot process the request.

User response: If you are converting a Xerox job, make sure that the conversion parameters and values for the job are valid. See Appendix A, "Conversion parameters for converting Xerox jobs," on page 151. Otherwise, report this message to your technical support representative.

AIOxxx004S Extra data: *data_string* **was found after the file name. Data ignored.**

Explanation: The parameter parser found extraneous data among the keywords.

System action: InfoPrint XT cannot process the request.

User response: If you are converting a Xerox job, make sure that the conversion parameters and values for the job are valid. See Appendix A, "Conversion parameters for converting Xerox jobs," on page 151. Otherwise, report this message to your technical support representative.

AIOxxx203S *code_module* **could not read parameters due to** *error_condition***. Processing cannot continue without correction of parameter input error.**

Explanation: An internal InfoPrint XT error occurred.

System action: InfoPrint XT cannot process the resource.

User response: Report this message to your technical support representative.

AIOxxx204I   Reading resource utility parameters.

Explanation: This is an informational message that indicates that InfoPrint XT has begun reading the resource conversion parameters. It requires no user response.

AIOxxx208I   The resource utility parameters in effect are:

> *option1 option2 option3 optionN*

Explanation: This message reports the runtime options.

System action: InfoPrint XT continues to process the resources.

User response: This is an informational message and requires no user response.

AIOxxx211E Incorrect resource utility parameter *option***.**

Explanation: A user-supplied conversion parameter did not match the valid options.

System action: InfoPrint XT cannot process the resource.

User response: Correct the option *option* and rerun the program.

AIOxxx220I   Processing selection criteria...

Explanation: This is an informational message and requires no user response.

AIOxxx221E The following SELECT parameter value is too long: *parameter***.**

Explanation: An internal InfoPrint XT error occurred.

System action: InfoPrint XT cannot process the resource.

User response: Report this message to your technical support representative.

AIOxxx222E Incorrect character *character* **in SELECT parameter value** *value***.**

Explanation: An internal InfoPrint XT error occurred.

System action: InfoPrint XT cannot process the request.

User response: Report this message to your technical support representative.

AIOxxx226I   The resource utility found no resource names that match one or more SELECT criteria.

> *criteria1 criteria2 criteria3 criteriaN*

Explanation: This is an informational message that reports SELECT criteria for which the resource utility found no matching resource names. It requires no user response.

AIOxxx227I   The resource utility will process Xerox resources that match the following SELECT criteria:

> *criteria1   criteria2   criteriaN*

Explanation: This is an informational message that reports the types of resources that InfoPrint XT is processing. It requires no user response.

AIOxxx228I   Processing will occur for files with the following filetypes:

> *filetype1*
> *filetype2*
> :
> :
> *filetypeN*

Explanation: This is an informational message that reports the types of resources that InfoPrint XT is processing. It requires no user response.

AIOxxx230I Processing Correlation Source File...

Explanation: This is an informational message that indicates that InfoPrint XT is rebuilding the correlation tables. It requires no user response.

AIOxxx231E Line *line_number* **- correlation resource name** *resource_name* **contains incorrect characters.**

Explanation: A resource name in the resource correlation table contains characters that are not valid.

System action: InfoPrint XT continues processing the resource, but it does not process line *line_number*.

User response: If you manually updated the correlation table, correct the entry and rerun the failing command. Otherwise, this indicates an internal error in InfoPrint XT. Report this message to your technical support representative.

AIOxxx232E Correlation source record *record_number* **does not start with D, E, F, I, or L.**

Explanation: An entry in the resource correlation table starts with an incorrect record type indicator.

System action: InfoPrint XT continues processing the resource, but it does not process line *line_number*.

User response: If you manually updated the correlation table, correct the indicator and rerun the failing command. Otherwise, this indicates an internal error in InfoPrint XT. Report this message to your technical support representative.

AIOxxx233E The correlation source file processor found a duplicate entry for *resource_name* **on line** *line_number*. **The resource utility will use the last valid entry.**

Explanation: The resource correlation table contains more than one entry for a specific Xerox resource.

System action: Processing continues. InfoPrint XT uses the last valid correlation entry in the table.

User response: If you manually updated the correlation table, remove the duplicate entry and rerun the failing command. Otherwise, this indicates an internal error in InfoPrint XT. Report this message to your technical support representative.

AIOxxx234E A required field on line *line_number* **of the correlation source file is blank.**

Explanation: A correlation record is incomplete.

System action: Processing continues, but InfoPrint XT does not process line *line_number*. This is the line with the incomplete correlation record.

User response: If you manually updated the correlation table, complete the incomplete record and rerun the failing command. Otherwise, this indicates an internal error in InfoPrint XT. Report this message to your technical support representative.

AIOxxx235E The correlation source file processor found an incorrect X/Y offset for page segment *psegname* **on line** *line_number*.

Explanation: The X- or Y-offset specified for a page segment in the resource correlation table is not valid.

System action: InfoPrint XT cannot process the resource.

User response: Correct the offset value and rerun the failing command.

AIOxxx236E The resource utility found an incorrect correlation for Xerox DBCS font *font_name* **on line** *line_number*. **The correlated AFP object must be a coded font.**

Explanation: You must correlate each Xerox DBCS font to an AFP coded font, which associates an AFP code page with an AFP outline character set. You cannot correlate a DBCS font to an AFP character set and AFP code page pair.

System action: InfoPrint XT cannot process the resource.

User response: Specify an AFP coded font for the Xerox DBCS font. Rebuild the font correlation table.

AIOxxx237I The correlation source processor did not create the font correlation table.

Explanation: InfoPrint XT found no valid font entries in the correlation source file. Other messages might provide more information about the problem.

System action: InfoPrint XT might continue processing, or it might not process a particular resource.

User response: Make sure that at least one font resource is loaded for the resource group. InfoPrint XT cannot process more resources without at least one font already loaded. If you manually updated the resource correlation table and expected InfoPrint XT to create the table, verify that the entries for the missing table are correct. Then, rerun the command that resulted in this message. If you did not update the resource correlation table, but you expected InfoPrint XT to create the table, report this message to your technical support representative.

AIOxxx238I The correlation source processor did not create the *table_name* **correlation table.**

Explanation: InfoPrint XT found no valid image or logo entries in the correlation source file. Other messages might provide more information about the problem.

System action: InfoPrint XT might continue processing, or it might not process a particular resource.

User response: If you manually updated the resource correlation table and expected InfoPrint XT to create the table, verify that the entries for the missing table are correct. Then, rerun the command that resulted in this message. If you did not update the resource correlation table, but you expected InfoPrint XT to create the table, report this message to your technical support representative.

AIOxxx239I The correlation source processor created *table_name* **with** *n* **entries.**

Explanation: This is an informational message that indicates the correlation table that InfoPrint XT created (*table_name*), and the number of entries (*n*) in the table. InfoPrint XT creates correlation tables for fonts, images, and logos. This message requires no user response.

AIOxxx240I Processing Translation Source File...

Explanation: This is an informational message that indicates InfoPrint XT is rebuilding the translation tables. It requires no user response.

AIOxxx241E Hexadecimal value x'n**' on line** *line_number* **of translation table** *table_name* **is not valid.**

Explanation: This message indicates that an internal error exists in a translation table source record.

System action: InfoPrint XT cannot process the resource.

User response: Report this message to your technical support representative.

AIOxxx242E The translation source file processor found duplicate translation table name *table_name* **on line** *line_number***. The processor will use the last valid definition.**

Explanation: This message indicates that an internal error exists in a translation table source record.

System action: InfoPrint XT continues processing.

User response: If you manually updated the translation source file, correct the record identified in the message. Then, rerun the command that caused this

error. Otherwise, report this message to your technical support representative.

AIOxxx243E Not enough records in translation table *table_name* **on line** *line_number***.**

Explanation: This message indicates that an internal error exists in a translation table source record.

System action: InfoPrint XT cannot process the resource.

User response: If you manually updated the translation source file, correct the record identified in the message. Then, rerun the failing command. Otherwise, report this message to your technical support representative.

AIOxxx244E Translation table name *table_name* **has incorrect characters on line** *line_number***.**

Explanation: This message indicates that an internal error exists in a translation table source record.

System action: InfoPrint XT cannot process the resource.

User response: If you manually updated the translation source file, correct the record identified in the message. Then, rerun the failing command. Otherwise, report this message to your technical support representative.

AIOxxx245E The translation source file processor found an incorrect record on line *line_number***.**

Explanation: This message indicates that an internal error exists in a translation table source record.

System action: InfoPrint XT cannot process the resource.

User response: If you manually updated the translation source file, correct the record identified in the message. Then, rerun the failing command. Otherwise, report this message to your technical support representative.

AIOxxx246I The translation source file processor wrote *number* **translation tables to the reformatted Xerox resource path:**

table1 table2 table3 table4 tableN

Explanation: This is an informational message that indicates the number of translation tables that the InfoPrint XT translation source file processor created. It requires no user response.

AIOxxx247I   The resource utility created no translation tables:

Explanation: The translation source entries in the translation tables contained errors.

System action: InfoPrint XT cannot process the resource.

User response: If you manually updated the translation source file, correct the file and rerun the failing command. Otherwise, report this message to your technical support representative.

AIOxxx250I   Processing Xerox resources...

Explanation: This is an informational message that indicates that InfoPrint XT is creating the metrics tables for resources. It requires no user response.

AIOxxx251I   The resource utility found no reformatted Xerox DBCS fonts for metrics extraction.

Explanation: InfoPrint XT tried to extract DBCS AFP font metrics, but it did not find a corresponding reformatted Xerox font file.

System action: InfoPrint XT cannot process the resource.

User response: Verify that the fonts you are loading include Xerox DBCS fonts.

AIOxxx252W   The data stream converter cannot use JDL *jdl_name***/JDE** *jde_name* **pair for data stream conversion due to one or more unsupported BLOCK | RECORD command functions:**

function1 function2 function3

Explanation: The JDL/JDE pair successfully loads, but InfoPrint XT issues message AIOxxx775S and stops processing if data stream conversion uses the JDL/JDE pair. The unsupported functions that InfoPrint XT might list are FORMAT ¬= BIN, LMULT ¬= 1, and ZERO = YES.

System action: InfoPrint XT continues to process the resource.

User response: If the JDL/JDE pair is essential to printing operations, report this message to your technical support representative.

AIOxxx253W   The resource utility will process Xerox resource *filename.filetype* **by using paper size** *paper_size1* **instead of the requested** *paper_size2***.**

Explanation: The resource utility was given a paper size to use during Xerox form conversion that is

different from the paper size defined internally in the form. InfoPrint XT used the internally specified paper size.

System action: InfoPrint XT continues processing the resource.

User response: No action is necessary, unless you want to use the paper size that you specified. In that case, you must specify the PAPER command in the FSL for the Xerox FRM resource, and recompile it using the Xerox FDL command. This sets the internally specified size to the size that you want. Then, reload the FRM using the InfoPrint XT **pdxtloadres** command.

AIOxxx254W   While converting form *form_name***, the following errors occurred:**

Explanation: Additional error messages provide specific information about the errors that InfoPrint XT found during the conversion of form *form_name*.

System action: InfoPrint XT might or might not have processed the resource, depending on the errors.

User response: Review the errors listed and do corrective actions as necessary.

AIOxxx255E   The form converter could not find logo *logo_name***image** *image_name* **in the logo | image correlation table.**

Explanation: InfoPrint XT did not find entries for the named logo or image in the correlation tables located in the reformatted Xerox resource path. The logo correlation tables are **tab.alt** and **tab.slt**. The image correlation tables are **tab.ait** and **tab.sit**.

System action: InfoPrint XT cannot process the request.

User response: Load the logo or image identified in the message.

AIOxxx256E   The form converter could not find logo *logo_name***image** *image_name* **in the reformatted Xerox resource path.**

Explanation: While processing a Xerox form, InfoPrint XT determined that the form referenced a Xerox LGO file (*logo_name*) or an IMG file (*image_name*) that is not loaded on the system.

System action: InfoPrint XT cannot process the resource.

User response: Load the resource identified in the message and the form that generated the error.

AIOxxx259S The resource utility found an inconsistency in Xerox resource *filename.filetype***:**

phase_name: error_info

Explanation: The program found a resource (*filename.filetype*) that it cannot process.

System action: Processing continues, but InfoPrint XT does not convert the resource.

User response: A phase number and diagnostic information follow this message to help identify the problem. Use the diagnostic information to correct the problem. If the problem continues, report this message to your technical support representative.

AIOxxx260I The number of Xerox resources successfully processed was *number***.**

resource1 resource2 resourceN

Explanation: This is an informational message and requires no user response.

AIOxxx261I The resource utility processed no Xerox resources successfully.

Explanation: This is an informational message. Other messages report the reasons why InfoPrint XT cannot successfully process the resources.

AIOxxx262I The number of Xerox resources not successfully processed was *number***.**

Explanation: InfoPrint XT did not process *number* resources. Other messages explain the errors found by InfoPrint XT.

System action: InfoPrint XT cannot process the resource or resources listed.

User response: Review the other messages and correct the problems. Then, load the resources again.

AIOxxx263I The resource utility processed all requested Xerox resources successfully.

Explanation: InfoPrint XT successfully processed all the Xerox resources. This is an informational message and requires no user response.

AIOxxx264S The resource utility processed none of the requested Xerox resources successfully.

Explanation: InfoPrint XT cannot successfully process any of the Xerox resources. Other messages explain the errors found by InfoPrint XT.

System action: InfoPrint XT cannot process the resources.

User response: Review the other messages and correct the problems. Then, load the resources again.

AIOxxx265I The resource utility skipped no Xerox resources.

Explanation: This is an informational message. Other messages indicate whether InfoPrint XT successfully completed the task.

AIOxxx266I The number of Xerox resources skipped by the resource utility was *number***.**

Explanation: This is an informational message that lists the internal names of the Xerox resources that the resource utility did not process. Other messages indicate whether InfoPrint XT successfully completed the task.

AIOxxx268W One or more Xerox resources do not conform to the typical source file format of sequenced 80-byte records. *number* **may not have processed successfully.**

file01.xxx file02.xxx   ... filenn.xxx

Explanation: This message indicates that InfoPrint XT might not have recognized the Xerox source file format in the files listed. Possible causes are that the internal record length was not 80, the sequence numbers were not found in columns 75 to 80 of every possible 80-byte record, or both conditions exist. InfoPrint XT tried to reformat the resource. However, because the listed files might not contain ASCII text, the corresponding resources might not be usable.

System action: InfoPrint XT continues processing the resource.

User response: Print a job that uses the resources to determine whether they are usable. If they are not, create them again.

AIOxxx270I The *table_name* **correlation table has** *number* **entries.**

Explanation: This is an informational message that summarizes the number of entries in each resource correlation table (*table_name*). It requires no user response.

AIOxxx271W AFP resource *AFP_resource***, correlated to Xerox resource** *Xerox_resource***, does not exist in the AFP resource path.**

Explanation: InfoPrint XT cannot find the

AFP_resource resource for Xerox resource *Xerox_resource* in the AFP resource path. The AFP resource name might be incorrect, or it might not be available on the system.

System action: The process failed.

User response: If you manually updated the correlation table, verify that the entry is correct and that the AFP resource exists. Then, rerun the failing command. Otherwise, report this message to your technical support representative.

AIOxxx272W   No correlation exists between Xerox resource *Xerox_resource* and an AFP resource.

Explanation: The resource correlation table does not contain a correlation entry for the Xerox reformatted resource *Xerox_resource*. The reformatted Xerox resource path contains the reformatted resource.

System action: The process failed.

User response: Reload the Xerox resource and rerun the failing command.

AIOxxx273W   Xerox font *font_name* in the font correlation table does not exist in the reformatted Xerox resource path.

Explanation: The resource correlation table does not contain an entry for the Xerox font *font_name*. The reformatted Xerox resource path contains the reformatted resource.

System action: The process failed.

User response: Reload the Xerox resource and rerun the failing command.

AIOxxx274W   Translation table *table_name* in the font correlation table does not exist in the reformatted Xerox resource path.

Explanation: The font correlation table contains an entry for the table *table_name*, but the table does not exist.

System action: The process failed.

User response: If you manually updated the correlation table, verify that the translation table identified in the message exists and correct the entry. Then, rerun the failing command. Otherwise, report this message to your technical support representative.

AIOxxx275W   Xerox logo *logo_name* in the logo correlation table does not exist in the reformatted Xerox resource path.

Explanation: The resource correlation table does not contain an entry for the Xerox logo *logo_name*. The

reformatted Xerox resource path contains the reformatted resource.

System action: The process failed.

User response: Reload the Xerox resource and rerun the failing command.

AIOxxx276W   Xerox image *image_name* in the image correlation table does not exist in the reformatted Xerox resource path.

Explanation: The resource correlation table does not contain an entry for the Xerox image *image_name*. The reformatted Xerox resource path contains the reformatted resource.

System action: The process failed.

User response: Reload the Xerox image resource and rerun the failing command.

AIOxxx280I   Processing cluster database source file *cls_name*...

Explanation: This is an informational message that lists the name, *cls_name*, of the cluster database source file that InfoPrint XT is compiling. It requires no user response.

AIOxxx281E   The resource utility found incorrect cluster name *cl_name* in cluster database source file *cls_name*, line *line_number*. Cluster names must begin with a letter and must consist of 1 to 6 alphanumeric characters.

Explanation: Cluster names must conform to the convention for Xerox file names that the message describes.

System action: InfoPrint XT cannot process the request.

User response: Correct the cluster name and rerun the failing command.

AIOxxx282E   The resource utility found incorrect character string *'EBCDIC_char'* (*x'EBCDIC_hex'*) in cluster database source file *cls_name*, cluster name *cl_name*, line *line_number*, column *column_number*: *error_description*.

Explanation: The cluster database source file *cl_name* contains an incorrectly coded character at the location described in the message. *error_description* can be any of these:

- ASIZ must be coded as 'A' or blank.
- Preferred AFP MMC tray must be blank, 'E', 'M', or '1' - '255', right justified.
- Preferred Xerox trays are positional and must be blank or '1' - '8'.

- Incorrect preferred Xerox tray position.
- Current AFP MMC tray must be blank, 'E', 'M', or '1' - '255', right justified.
- Current Xerox trays are positional and must be blank or '1' - '8'.
- Incorrect current Xerox tray position.

System action: InfoPrint XT cannot process the request.

User response: Correct the character and rerun the failing command.

AIOxxx283W   Undefined cluster name *cl_name* **in cluster database source file** *cls_name***, line** *line_number***, has no current or preferred AFP MMC trays assigned and will be excluded from reformatted cluster database** *clb_name***.**

Explanation: The *cl_name* cluster entry on record *line_number* of a cluster database source file *cls_name* is not meaningful because it does not reference any current or preferred input media sources.

System action: If InfoPrint XT finds no other errors that are more serious than this for *cls_name*, it writes the reformatted cluster database to the resource library without the undefined cluster entry.

User response: Check for any other errors that InfoPrint XT might have found while reformatting the cluster database.

AIOxxx283W   Undefined cluster name *cl_name* **in cluster database source file** *cls_name***, line** *line_number***, has no current or preferred AFP MMC trays assigned.**

Explanation: The *cl_name* cluster entry on record *line_number* of a cluster database source member *cls_name* is not meaningful because it does not references any current or preferred input media sources.

System action: Because InfoPrint XT found other, more serious errors in *cls_name*, it did not write the reformatted cluster database to the resource library.

User response: Correct the cluster database source member and rerun the failing command.

AIOxxx284E The resource utility found no valid cluster entries in Xerox cluster database *file_name***.lib, and could not process the resource.**

Explanation: While processing Xerox cluster database *file_name***.lib**, InfoPrint XT did not find any cluster entries.

System action: InfoPrint XT did not reformat the

database. If a source file was requested, InfoPrint XT did not produce it.

User response: Verify that the Xerox cluster database that InfoPrint XT is processing contains cluster entries, and then reload the file.

AIOxxx290U The resource utility could not find the *source_type* **source file.**

Explanation: InfoPrint XT cannot find the correlation source file or the translation source file in the reformatted Xerox resource path.

System action: InfoPrint XT cannot process the request.

User response: Report this message to your technical support representative.

AIOxxx292U File access error with return code *return_code* **occurred during** *action* **operation of file** *file_name* **in the** *path_name* **path directory or DDNAME:**

error_description

Explanation: An unidentifiable or unexpected I/O condition occurred during processing.

System action: InfoPrint XT cannot process the request.

User response: Report this message to your technical support representative.

AIOxxx294W   A record in *file_name* **was longer than the maximum record length of** *nn***. The transform ignored data in bytes beyond the expected length.**

Explanation: A logic error occurred while reading from file *file_name*.

System action: InfoPrint XT cannot process the request.

User response: Examine the file and make sure that it is not corrupt. Make sure that the **xcc** conversion parameter specified the correct type of carriage control, and that the data stream conversion parameters are correct. Then, do the operation that caused this error again.

AIOxxx298U A program or operating system error has occurred. Internal diagnostic information follows:

error_info   error_info

Explanation: A logic error occurred in the resource utility program. InfoPrint XT supplies a phase name, diagnostic information, or both, to help identify the problem.

System action: The process failed.

User response: Report this message to your technical support representative.

AIOxxx299U Resource utility processing aborted due to unrecoverable errors.

Explanation: This message occurs when the resource utility program ends abnormally. The previous messages give the reason for abnormal end of the program.

System action: InfoPrint XT cannot process the resource.

User response: Review the other messages that InfoPrint XT issued and correct the problems. Then, rerun the failing command.

AIOxxx444I The number of fonts correlated to page segments in form *form_name* **was** *number***.**

.fnt name	Page segment name(s)	Trigger	Line spacing value
fnt_name	*pseg_name*	*x'hh x'hh*	*x* **inches or** *y* **pels**
fnt_name	*pseg_name*		*x* **inches o** *y* **pels**
:			
:			

AIOxxx444I The number of logo references in form *form_name* **was** *number***.**

.lgo name	Page segment name(s)	Position
lgo_name	*pseg_name*	*(x,y)* **inches or** *(x,y)* **pels**
lgo_name	*pseg_name*	*(x,y)* **inches or** *(x,y)* **pels**
:		
:		

AIOxxx444I The number of highlight color ink references in form *form_name* **was** *number***.**

Ink catalog name	Palette name	Color name
ict_name	*palette_name*	*color_name*
ict_name	*palette_name*	*color_name*
:		
:		

AIOxxx444I The number of image references in form *form_name* **was** *number***.**

.img name	Page segment name	Scaling factor	Position
img_name	*pseg_name*	*n/d*	*(x,y)* **inches or** *(x,y)* **pels**
img_name	*pseg_name*	*n/d*	*(x,y)* **inches or** *(x,y)* **pels**
:			
:			

Explanation: This is an informational message that indicates the fonts, logos, images, or highlight color resources that Xerox form *form_name* uses. *x* and *y* are numeric values. *fnt_name* identifies a Xerox font name, *lgo_name* identifies a Xerox logo name, and *img_name* identifies a Xerox image name. If Xerox highlight color resource references were found, *ict_name* identifies an ink catalog, *palette_name* identifies a palette in the catalog, and *color_name* identifies a color in the palette. *AFP_name* identifies the AFP font name (either a coded font name or a character set/code page pair). *pseg_name* identifies the AFP page segment name. *hh* is the hexadecimal value of the trigger character associated with a page segment. *n* and *d* are numeric values for the numerator and denominator of the scaling factor requested for images. The positions shown for logos and images reference the upper left corner of the associated page segments as viewed with the sheet in the portrait orientation. The list of logo references does not include the names of logos that might occur in the internal logo entries for the form, but that are not actually used in the form.

System action: InfoPrint XT processes the resources.

User response: This message requires no user action.

AIOxxx454E The resource utility could not identify AFP resources referenced in overlay *overlay_name* **for form** *form_name***.**

Explanation: The resource utility tried to collect global FRM information for form *form_name*, but it did not determine the list of AFP resources that the FRM requires.

System action: InfoPrint XT continues processing.

User response: Make sure that the AFP overlay is correct. If necessary, reload the Xerox FRM to create both the metrics file and the overlay again. This makes sure that the metrics information and the overlay match the original Xerox resource.

AIOxxx463E The form converter could not find a bitmap for code point *code_point* **in** *fnt_name***. Internal EBCDIC font processing in** *frm_name***.FRM cannot continue.**

Explanation: InfoPrint XT found an internal EBCDIC font bitmap that it could not correlate to a DBCS font bitmap.

System action: InfoPrint XT cannot process the request.

User response: Make sure that the code points specified for *fnt_name*.FNT in *frm_name*.FRM exist in the DBCS font. Then, reload the form.

AIOxxx471E The transform could not identify AFP fonts and page segments from form *form_name*. Reload the form to verify resource availability.

Explanation: InfoPrint XT found a reformatted list file *resource_list_name* for a form resource in a format that is not at the current level. The file does not include some of the required information.

System action: InfoPrint XT continues processing the job.

User response: Reload the corresponding Xerox form to update the resource list file to the latest format and to create the overlay again.

AIOxxx472E Overlay *overlay_name* does not match the overlay available when the transform converted *resource_list_name*.

Explanation: InfoPrint XT found that overlay *overlay_name* has changed since the last time it was loaded.

System action: InfoPrint XT continues processing the job.

User response: Reload the corresponding Xerox form to make sure that the information in the resource list file *resource_list_name* matches the information in overlay *overlay_name*.

AIOxxx480E Unrecognized parameter: *parameter*.

Explanation: InfoPrint XT did not recognize the input parameter (*parameter*) as a valid parameter.

System action: InfoPrint XT ignores the parameter and continues processing.

User response: Correct the parameter and reconvert the job.

AIOxxx482E Incorrect numeric argument: *argument*.

Explanation: InfoPrint XT expected a numeric argument in a parameter, but found a nonnumeric argument instead.

System action: InfoPrint XT ignores the parameter and continues processing.

User response: Correct the parameter. Do the operation that caused the error again.

AIOxxx483W Numeric argument *numeric_argument* is outside the range of permitted values. The transform will use a value of *default_value*.

Explanation: InfoPrint XT expects the parameter (*numeric_argument*) for the job to be numeric. It is not numeric, or the numeric value is too large or too small.

System action: InfoPrint XT replaces the incorrect value with the system default value.

User response: Correct the parameter and reconvert the job.

AIOxxx490E The transform found a relative move in the *dot | scan* direction with no preceding absolute move on page *page_number*, logical record *line_number*.

Explanation: Before the print position was established, InfoPrint XT either found characters to print or relative moves in a metacode print control record of a form.

System action: InfoPrint XT ignores the current print control record and continues processing with the next record.

User response: Correct the input form and rerun the failing command.

AIOxxx491W The transform detected an attempt to reshape graphic characters by using nongraphic Xerox font *font_name* on page *page_number*, logical record *line_number*. Of *number* active fonts, *font_name* is number *number* and no graphic fonts were found in the active font list.

AIOxxx491W The transform detected an attempt to reshape graphic characters by using nongraphic Xerox font *font_name* on page *page_number*, logical record *line_number*. Of *number* active fonts, *font_name* is number *number*. Active graphic fonts include *graphic_font1* (number a), *graphic_font2* (number b), and *graphic_font3* (number c).

Explanation: InfoPrint XT found a character-reshaping metacode print control sequence in a form, but a nongraphic font was in effect. The message either indicates that no graphic fonts were active, or lists up to three active graphic fonts.

System action: Processing continues, but graphics might be missing from the output.

User response: Compare the font list in effect to the font list expected at metacode generation. Correct the

inconsistency between the font lists and reload the form.

AIOxxx492E A translation error occurred while processing input character x'*input_hex*' at logical record *line_number*. Code page *code_page* did not contain EBCDIC character x'*EBCDIC_hex*'. The transform substituted a blank. The original Xerox font was *font_name*.

Explanation: While processing metacode print controls in a form, InfoPrint XT translated ASCII input character x'*input_hex*' into EBCDIC character x'*EBCDIC_hex*'. However, because this character is not available in code page *code_page*, InfoPrint XT uses a blank in its place. This might occur because of incorrect characters, such as binary zeros, in a text line in a form. It might also occur if you have manually correlated a Xerox font to an AFP font and the AFP font does not have characters that correspond to some of the characters in the Xerox font. Or, a character translation

table was altered so that a character in the job does not map to the correct character in the AFP font.

System action: InfoPrint XT continues processing.

User response: Correct the form or correlation and reload the form.

AIOxxx494E InfoPrint XT found an incorrect repeat sequence on record: *nn*. The transform ignored the repeat command.

Explanation: InfoPrint XT found an error during repeat command processing at the location identified in the message.

System action: InfoPrint XT ignores the repeat command.

User response: Correct the repeat command. Then, submit the job and convert it again.

InfoPrint XT data stream converter messages

This section lists messages that the InfoPrint XT data stream converter can issue and a short explanation of each message.

Many of the messages contain variable data, shown in italics, which InfoPrint XT replaces with specific information when it issues the messages. A vertical bar (|) between portions of variable data means that InfoPrint XT uses only one of the variable-data strings when it issues the message. The error condition determines the variable-data string that InfoPrint XT uses.

The middle three characters of the message identifier indicate the program module that found the error. This section replaces these with the characters *xxx*. These characters are variable and have no meaning to users.

The message indicator ends with a letter that indicates the severity:

I Informational. Processing continues. This corresponds to return code 0. InfoPrint XT generates AFP output for the job.

W Warning. Processing continues. This corresponds to return code 4. It alerts the user that the converter found a possible problem in the input data stream. However, InfoPrint XT generates AFP output for the job.

E Error. InfoPrint XT processing continues. This corresponds to return code 8. This indicates an error that caused InfoPrint XT to complete a default action. The error might or might not prevent InfoPrint XT from generating AFP output for the job.

S Severe error. InfoPrint XT processing stops. This corresponds to return code 12. An error that prevented InfoPrint XT from generating AFP output for the job.

U Unrecoverable error. InfoPrint XT processing stops. This corresponds to return code 16. An error that prevented InfoPrint XT from generating AFP output for the job.

Note: You can use the **xafprc** conversion parameter to control when InfoPrint XT generates AFP output, based on the return code.

AIOxxx000S Unknown logic error.

Explanation: An unexpected error condition occurred in the parameter parser.

System action: InfoPrint XT cannot process the resource.

User response: If you are converting a Xerox job, make sure that the conversion parameters for the job are valid. See Appendix A, "Conversion parameters for converting Xerox jobs," on page 151. Otherwise, report this message to your technical support representative.

AIOxxx000S Unrecognized keyword: *keyword***. Valid keywords are:**

>   *keyword:*
>   **.**
>   **.**
>   *keyword*

Explanation: The parameter parser found a keyword that it did not recognize.

System action: InfoPrint XT cannot process the request.

User response: If you are converting a Xerox job, make sure that the conversion parameters for the job are valid. See Appendix A, "Conversion parameters for converting Xerox jobs," on page 151. Otherwise, report this message to your technical support representative.

AIOxxx001S Specified option for keyword: *keyword* **is too long. Maximum length is** *length***.**

Explanation: The parameter parser found a value for a keyword that is too long.

System action: InfoPrint XT cannot process the request.

User response: If you are converting a Xerox job, make sure that the conversion parameters and values for the job are valid. See Appendix A, "Conversion parameters for converting Xerox jobs," on page 151. Otherwise, report this message to your technical support representative.

AIOxxx002S Unrecognized option for the keyword: *keyword***. Valid options for this keyword are:**

>   *option*
>   **.**
>   **.**
>   *option*

Explanation: The parameter parser found a keyword value that is not valid.

System action: InfoPrint XT cannot process the request.

User response: If you are converting a Xerox job, make sure that the conversion parameters and values for the job are valid. See Appendix A, "Conversion parameters for converting Xerox jobs," on page 151. Otherwise, report this message to your technical support representative.

AIOxxx003S Value for keyword: *keyword* **is out of range. Valid range is** *lower_limit* **to** *upper_limit***.**

Explanation: The parameter parser found a keyword value that is not in the range of valid values.

System action: InfoPrint XT cannot process the request.

User response: If you are converting a Xerox job, make sure that the conversion parameters and values for the job are valid. See Appendix A, "Conversion parameters for converting Xerox jobs," on page 151. Otherwise, report this message to your technical support representative.

AIOxxx004S Extra data: *data_string* **was found after the file name. Data ignored.**

Explanation: The parameter parser found extraneous data among the keywords.

System action: InfoPrint XT cannot process the request.

User response: If you are converting a Xerox job, make sure that the conversion parameters and values for the job are valid. See Appendix A, "Conversion parameters for converting Xerox jobs," on page 151. Otherwise, report this message to your technical support representative.

AIOxxx203S *code_module* **could not read parameters due to** *error_condition***. Processing cannot continue without correction of a parameter input error.**

Explanation: An internal InfoPrint XT error occurred.

System action: InfoPrint XT cannot process the input data stream.

User response: Report this message to your technical support representative.

AIOxxx207I Reading data stream conversion parameters.

Explanation: This is an informational message that

identifies the source of the conversion parameters. It requires no user response.

AIOxxx209I The data stream conversion parameters in effect are:

option1 option2 option3 option4

Explanation: This is an informational message that reports the runtime options. It requires no user response.

AIOxxx292U File access error with return code *return_code* **occurred during** *action* **operation of file** *file_name* **in the** *path_name* **path directory or DDNAME:**

error_description

Explanation: An unidentifiable or unexpected I/O condition occurred during processing.

System action: InfoPrint XT cannot process the request.

User response: Report this message to your technical support representative.

AIOxxx293I The data stream converter needs Xerox resource *resource_name* **for this conversion.**

Explanation: InfoPrint XT did not find a required Xerox resource during job conversion.

System action: InfoPrint XT cannot complete the conversion.

User response: Make sure that you load the resource on the system, and that you rerun the job. You might also receive this as an informational message when you scan jobs for required resources.

AIOxxx294W   A record in *file_name* **was longer than the maximum record length of** *nn***. The transform ignored data in bytes beyond the expected length.**

Explanation: A logic error occurred while reading from file *file_name*.

System action: InfoPrint XT cannot process the request.

User response: Examine the file and make sure that it is not corrupt. Make sure that the **xcc** conversion parameter specifies the correct type of carriage control, and that the data stream conversion parameters are correct. Then, do the operation that caused this error again.

AIOxxx298U A program or operating system error has occurred. Internal diagnostic information follows:

error_info   error_info

Explanation: A logic error occurred. InfoPrint XT supplies a phase name, diagnostic information, or both, to help identify the problem.

System action: The process fails.

User response: Report this message to your technical support representative.

AIOxxx400I Data stream converter processing aborted due to unrecoverable errors.

Explanation: This message occurs when the conversion process ends abnormally. Previous messages give the reason for abnormal end of the process.

AIOxxx404I The data stream converter will process the input file by using *cc_type* **carriage control characters.**

Explanation: InfoPrint XT examined the job data to determine whether ANSI or IBM3211 control characters were in use. The type of controls found was different from the type expected. *control_type* is either:
- ISO/ANSI/FIPS
- IBM3211 (machine code)

System action: InfoPrint XT continues converting the job.

User response: Check the printed output. If the output is not correct, specify the correct type of carriage control for the job. Use the **xcc** conversion parameter. Then, convert the job again.

AIOxxx407I Reading online / offline JDL query parameters.

Explanation: This is an informational message that indicates that InfoPrint XT has begun to read the online/offline JDL query parameters to determine whether the job is an online or offline job. It requires no user response.

AIOxxx408I Reading reformatted Xerox resource dump parameters.

Explanation: This is an informational message that indicates that InfoPrint XT has begun to read the reformatted Xerox resource dump parameters. It requires no user response.

AIOxxx420S UNDEFINEDFILE condition raised on *name***, ONCODE** *number***. Check** *name* **path or file.**

Explanation: InfoPrint XT did not find the input file for the job, or it detected incorrect or conflicting attributes for the file.

System action: The process fails.

User response: If you are submitting a job from disk, check both the path to the file and the spelling of the file name to make sure that the path and file exist. If you are manually converting the job with the **pdxtx2afp** command, also make sure that the **xrecfm** parameter value correctly matches the fixed or variable record format of the input data, and that the **xlrecl** parameter value is in the valid range for the record format. If the problem continues after you have verified the path name, file name, file attributes, and parameter values, report this message to your technical support representative.

AIOxxx421S RECORD condition raised on *file_name***, ONCODE** *nn***. Check** *file_name* **file attributes.**

Explanation: The named file (*file_name*) has an incorrect record format (**xrecfm=**) or record length (**xlrecl=**) specified by the conversion parameters for the job.

System action: InfoPrint XT produces no output, or produces incomplete output.

User response: Make sure that the **xcc** conversion parameter specifies the correct type of carriage control, and verify that the data stream conversion parameters are correct. Then, convert the job again.

AIOxxx431E Resource conversion for inline resource *resource_name* **ended with return code** *nn***. Resource will not be used.**

Explanation: InfoPrint XT cannot dynamically load the resource that the message identifies. A FILE DJDE in the job specified the resource.

System action: InfoPrint XT continues processing the job.

User response: To get more information about why the resource did not load, set the **PDXT_AIOLXDFE_TRACE** environment variable to **1**. Log out and log back in to pick up the change. Then, rerun the job and review the messages in the **x2afp.lst** file. Depending on the cause of the problem, you might need to create the Xerox resource and the job data stream again to correct the problem.

AIOxxx453E The transform could not find the overlay *overlay_name* **in the AFP resource path and did not process form** *resource_list_name***.**

Explanation: InfoPrint XT cannot find overlay *overlay_name*. Without the overlay, it also cannot track the resources that the overlay invoked and that the reformatted form resource list file *resource_list_name* listed.

System action: InfoPrint XT continues processing the job.

User response: Make sure that you have loaded or reloaded the overlay correctly.

AIOxxx457E The data stream converter could not create a unique content-sensitive medium map name due to one or more Xerox commands:

command_names

The converter will use a medium map name of *sequential_name* **instead of** *content_sensitive_name***.**

Explanation: The data stream converter found one or more Xerox commands *command_names* in the job that generated a request for a medium map subcommand. The data stream converter cannot represent the medium map subcommand in a content-sensitive medium map name. Content-sensitive medium map names can only represent:

- Duplex or simplex
- Offset stack change or no offset stack change
- The format of the E1 keyword of the MMC structured field
- The input bin number

The converter used the sequentially numbered name *sequential_name* instead of the content-sensitive name *content_sensitive_name*.

System action: InfoPrint XT continues processing the job.

User response: If the job finishes with no other errors, you might be able to print the output if you also specified the **xafprc** conversion parameter with a value of **8** or greater. If you cannot print the output, run the job again and specify **xcsmmname=no**.

AIOxxx470E The data stream converter could not find or validate reformatted Xerox FRM resource *form_name* **and will not use fonts from the form.**

Explanation: The data stream converter could not read the metrics file for form *form_name* in the

---

reformatted Xerox resource path. The file might not exist, or there might be a problem with the file. InfoPrint XT cannot use any fonts that the form specifies and the printed output might not be correct.

System action: InfoPrint XT continues processing the job.

User response: Reload the form and reconvert the job.

AIOxxx471E The transform could not identify AFP fonts and page segments from form *form_name*. **Reload the form to verify resource availability.**

Explanation: InfoPrint XT found a reformatted form resource list file *resource_list_name* in a format that is not at the current level. The file does not include some of the required information.

System action: InfoPrint XT continues processing the job.

User response: Reload the corresponding Xerox form to update the resource list file to the latest format and to create the overlay again.

AIOxxx472E Overlay *overlay_name* **does not match the overlay available when the transform converted** *resource_list_name*.

Explanation: InfoPrint XT found that overlay *overlay_name* has changed since the last time it was loaded.

System action: InfoPrint XT continues processing the job.

User response: Reload the corresponding Xerox form to make sure that the information in the resource list file *resource_list_name* matches the information in overlay *overlay_name*.

AIOxxx473E The data stream converter detected one or more missing overlays or overlay resources. Data stream conversion to AFPDS may be successful, but the AFP file will not print correctly. Load the missing resources to ensure correct output.

Explanation: The job uses one or more overlays that are missing from the AFP resource library, or one or more reformatted Xerox forms that are missing from the reformatted Xerox resource path.

System action: InfoPrint XT continues processing the job.

User response: Make sure that you have loaded all the Xerox forms for this job, and any fonts, images, or logos that the forms use.

AIOxxx480E Unrecognized parameter: *parameter*.

Explanation: InfoPrint XT did not recognize the input parameter (*parameter*) as a valid parameter.

System action: InfoPrint XT ignores the parameter and continues processing.

User response: Correct the parameter and reconvert the job.

AIOxxx481E Incorrect JDE/JDL argument: *jdl_argument*.

Explanation: The JDE or JDL name specified in the conversion parameters is either too long or it contains non-alphanumeric characters.

System action: InfoPrint XT uses the system default and continues processing.

User response: Correct the JDE/JDL specification and reconvert the job.

AIOxxx482E Incorrect numeric argument: *argument*.

Explanation: InfoPrint XT expected a numeric argument in a parameter, but found a nonnumeric argument instead.

System action: InfoPrint XT ignores the parameter and continues processing.

User response: Correct the parameter. Do the operation that caused the error again.

AIOxxx483W Numeric argument *numeric_argument* **is outside the range of permitted values. The transform will use a value of** *default_value*.

Explanation: InfoPrint XT expects the parameter (*numeric_argument*) for the job to be numeric. It is not numeric, or the numeric value is too large or too small.

System action: InfoPrint XT replaces the incorrect value with the system default value.

User response: Correct the parameter and reconvert the job.

AIOxxx484S The data stream converter could not find reformatted cluster database *clb_name* **in the reformatted Xerox resource path.**

Explanation: The conversion parameters for the job specified the CLUSTERLIB parameter (**xclb=**), or used the default cluster name, which is **clustr.lib**. However, the cluster database specified in the message does not exist in the reformatted Xerox resource path.

System action: InfoPrint XT continues processing the job.

User response: Correct the name of the cluster database or add the **xclb=none** conversion parameter. Then, reconvert the job.

AIOxxx486S Incorrect parameter: *parameter***.**

Explanation: InfoPrint XT did not recognize the input parameter (*parameter*) as a valid parameter. Processing cannot continue without producing potentially incorrect output or resource conversions in FILE DJDE jobs.

System action: InfoPrint XT cannot process the request.

User response: Make sure that you specify the correct parameter. Then, reconvert the job.

AIOxxx487W The data stream converter does not support XCSMMNAME=YES with *incompatible_parameter***. Conversion will use** *substitute_parameter***.**

Explanation: You specified the **xcsmmname=yes** parameter and another parameter that is incompatible with content-sensitive medium map names processing.

System action: InfoPrint XT replaces the incompatible parameter.

User response: Correct the parameter and reconvert the job.

AIOxxx490E The transform found a relative move in the *dot* **/** *scan* **direction with no preceding absolute move on page** *page_number***, logical record** *line_number***.**

Explanation: Before the print position was established, InfoPrint XT found characters to print or relative moves in a metacode print control record.

System action: InfoPrint XT ignores the current print control record and continues processing with the next record.

User response: Correct the input data stream, and rerun the failing command.

AIOxxx491E The transform detected an attempt to reshape graphic characters by using nongraphic Xerox font *font_name* **on page** *page_number***, logical record** *line_number***. Of** *number* **active fonts,** *font_name* **is number** *number* **and no graphic fonts were found in the active font list.**

AIOxxx491E The transform detected an attempt to reshape graphic characters by using nongraphic Xerox font *font_name* **on page** *page_number***, logical record** *line_number***. Of** *number* **active fonts,** *font_name* **is number** *number***. Active graphic fonts include** *graphic_font1* **(number a),** *graphic_font2* **(number b), and** *graphic_font3* **(number c).**

Explanation: InfoPrint XT found a character-shaping metacode print control sequence that specified a nongraphic font. The message either indicates that no graphic fonts were active, or lists up to three active graphic fonts.

System action: Processing continues, but graphics might be missing from the output.

User response: Compare the font list in effect with the font list expected at metacode generation. Correct the inconsistency between the font lists and rerun the job.

AIOxxx492E A translation error occurred while processing input character x'*input_hex***' at logical record** *line_number***. Code page** *code_page* **did not contain EBCDIC character x'***EBCDIC_hex***'. The transform substituted a blank. The original Xerox font was** *font_name***.**

Explanation: While processing metacode print controls, InfoPrint XT translated ASCII input character x'*input_hex*' to EBCDIC character x'*EBCDIC_hex*'. However, because this character is not available in code page *code_page*, InfoPrint XT uses a blank in its place. This might occur because of incorrect characters, such as binary zeros, in the print data stream. It might also occur if you have manually correlated a Xerox font to an AFP font, and the AFP font does not have characters that correspond to some of the characters in the Xerox font.

System action: InfoPrint XT continues processing the job, but the output is not correct.

User response: Correct the input data or correlation, and rerun the job.

AIOxxx493E The data stream converter found no font information for AFP DBCS coded font *font_name***. Characters will print as blanks.**

Explanation: InfoPrint XT did not process DBCS information for *font_name.*

System action: InfoPrint XT continues processing the job, but the output is not correct.

User response: Reload the corresponding Xerox font to make sure that the information is available.

AIOxxx500S The data stream converter could not find the image correlation table in the reformatted Xerox resource path, or the table contains no entries.

Explanation: InfoPrint XT requires a Xerox image (IMG) to process the job, but no image correlation records exist in the correlation table. Typically, this is because no IMG resources were loaded, or they were loaded as non-shared resources for a different resource group.

System action: The process fails.

User response: Load the required resource as a shared resource or load it in the correct resource group for the job, and rerun the job. If the problem continues after you load the image, report this message to your technical support representative.

AIOxxx550W   The data stream converter ignored a DJDE identifier on record *line_number: djde_record***.**

Explanation: InfoPrint XT ignored the DJDE record *djde_record*, which it considers to be extraneous. If the DJDE record was a downloadable PDE (FORMAT=*), *djde_record* contains a message that indicates that InfoPrint XT did not use the fonts listed in the downloadable PDE.

System action: InfoPrint XT continues processing the job.

User response: Check the input data stream for any occurrence of consecutive DJDE packets (one or more DJDEs ending with an END;) with no intervening data records. Correct the problem and rerun the job.

AIOxxx562W   The data stream converter found a conflicting COLLATE change request.

Explanation: The data stream specified COLLATE=NO, but also specified DUPLEX=YES, which implies COLLATE=YES.

System action: InfoPrint XT processes the data stream using COLLATE=YES.

User response: Make sure of the correct placement of the COLLATE DJDE in the input file and reconvert the job.

AIOxxx563W   The data stream converter ignored an incorrect COLLATE change request.

Explanation: The COLLATE DJDE that InfoPrint XT found is not valid after the first data record of the report.

System action: InfoPrint XT continues processing the job.

User response: Make sure of the correct placement of

the COLLATE DJDE in the input file and reconvert the job.

AIOxxx564E *djde_name* **- DJDE value** *value* **is not valid for the specified conversion units.**

Explanation: InfoPrint XT cannot process the value *value* correctly. For units such as IN (inches) or CM (centimeters), InfoPrint XT expects no more than three decimal places. For DOTS, InfoPrint XT expects an integer value.

System action: InfoPrint XT continues processing the job, but the output might not be correct.

User response: Round any decimal values to three decimal places, or supply integer values for DOTS.

AIOxxx565E *djde_name* **- DJDE value** *input* **is not valid for a numeric entry field.**

Explanation: InfoPrint XT cannot process the value *input* correctly. InfoPrint XT does not process the DJDE (*djde_name*). DJDE naming conventions require a numeric entry with specific rounding values.

System action: InfoPrint XT continues processing the job, but the output might not be correct.

User response: Correct the value and reconvert the job.

AIOxxx566E *DJDE_keyword* **— DJDE** *option_name* **is not valid.**

Explanation: The *option_name* option of the *DJDE_keyword* DJDE is not valid.

System action: InfoPrint XT ignores the DJDE keyword and continues processing.

User response: Correct the DJDE and reconvert the job.

AIOxxx567E The data stream converter found an incorrect copy sensitive change request.

Explanation: A copy-sensitive MODIFY, FORMS, or BFORM change request was made during the processing of the current report. You can only specify copy-sensitive MODIFY, FORMS, and BFORM commands at the beginning of a report. The program ignores the request. After text has printed on a copy-sensitive report, you can only change a MODIFY, FORMS, or BFORM command to NONE.

System action: InfoPrint XT continues processing the job, but the output might not be correct.

User response: Correct the request that was made after the beginning of the report and reconvert the job.

AIOxxx568E The data stream converter could not find graphic image *resource_name* **in the image correlation table and did not process the** *command* **DJDE command.**

Explanation: The named resource, *resource_name*, was not found. The resource name might be misspelled. The resource might not be loaded on the InfoPrint XT server or it might have been loaded as a resource that belongs to a specific resource group.

System action: InfoPrint XT continues processing the job, but the output might not be correct.

User response: Check the spelling of the resource name. Make sure that the resource has been loaded either as a shared resource or as a resource that belongs to a specific resource group. Then, reconvert the job.

AIOxxx569E The data stream converter found incorrect DJDE command *command***.**

Explanation: The listed command (*command*) is not a known DJDE command, or its specification or format is not correct. The program might not process the input.

System action: InfoPrint XT might not continue to process the job.

User response: Correct the command and reconvert the job. For SHIFT or XSHIFT DJDEs that are not valid, the previous front or back side SHIFT or XSHIFT value might remain in effect. The DJDE report provides details.

AIOxxx573W Graphic image *image_name* **is not active. The data stream converter did not process the** *command* **command.**

Explanation: The data stream converter did not find graphic image *image_name* before it found the ALTER or CANCEL command for the image.

System action: InfoPrint XT might not continue to process the job.

User response: Correct the original Xerox job so that it uses the syntax rules for graphic images. Then, reconvert the job.

AIOxxx574W The data stream converter ignored page-oriented keywords in the DJDE packet on record *number* **due to a prior page oriented DJDE on this page.**

Explanation: The data stream converter found more than one DJDE packet that contained page-oriented DJDEs on a page. You can only apply one page-oriented DJDE to each page. The converter ignores all packets after the first packet.

System action: InfoPrint XT might not continue to process the job.

User response: Correct the original Xerox job so that it uses the syntax rules for page-oriented DJDEs, and reconvert the job.

AIOxxx575W The data stream converter found a GRAPHIC= DJDE with no options and no preceding IMAGE= DJDE that used option T. The converter discarded the GRAPHIC data for image *image_name***.**

Explanation: The GRAPHIC DJDE can document-interleave because it has no parameters other than the image name. However, two inconsistencies exist. First, document-interleaved GRAPHIC DJDEs must occur at the beginning of the job, but InfoPrint XT found this GRAPHIC DJDE after text data. This is where page-interleaved graphics occur. Second, a preceding IMAGE DJDE must reference a page-interleaved GRAPHIC DJDE. InfoPrint XT found no prior matching IMAGE DJDE.

System action: InfoPrint XT continues processing the job, but the output is not correct.

User response: Correct the application that created the data stream so that all document-interleaved GRAPHICs occur at the beginning of the job, and all page-interleaved GRAPHICS are referenced by a preceding IMAGE DJDE.

AIOxxx576E The number of inline graphics exceeded the maximum of 1,000,000. Inline graphics will overlay existing images.

Explanation: InfoPrint XT tracks page segments that correspond to inline graphics using the naming convention SG*nnnnnn*. *nnnnnn* is a number from 0 through 999999. If more inline graphics are found than can be tracked using this convention (after SG999999 has been used), InfoPrint XT begins using previous names, starting with SG000000. InfoPrint XT replaces the page segments associated with the reused names.

System action: InfoPrint XT continues processing the job, but the output is not correct.

User response: Reduce the number of inline graphics, or split the job into smaller jobs.

AIOxxx582E FILE - The data stream converter does not support inline files in the 80-byte card image format (file input format parameter C) and may print their contents as unusable data. The converter only supports the LPS format (file input format parameter L).

Explanation: The data stream converter found one or more FILE DJDEs that specify the card image format instead of the required LPS format.

System action: The data stream converter ignores the

card-image inline Xerox file or files that follow the FILE DJDE.

User response: Regenerate the FILE DJDE job so that all inline resources are in the LPS format, and that all FILE DJDEs specify a file input format parameter of **L**. Then, rerun the job.

AIOxxx589E The data stream converter found incorrect font enlargement factors * *enl_vert* ***** *enl_horiz* **on record** *record_number* **and substituted factors *** **1 * 1. Valid factors are 1, 2, 4, 8 or 16.**

Explanation: The Xerox LPS does not support DBCS font enlargement factors other than 1, 2, 4, 8, or 16.

System action: InfoPrint XT ignores the specified enlargement factor.

User response: Correct the font enlargement factor. Then, submit the job and convert it again.

AIOxxx590E The data stream converter could not find image *image_name* **in the reformatted Xerox resource path.**

Explanation: While processing a Xerox data stream, InfoPrint XT determined that the data stream referenced a Xerox IMG, *image_name*, which is not loaded on the system.

System action: InfoPrint XT continues to process the job, but the AFP output that it produces is not correct.

User response: Load the resource identified in the message and resubmit the job.

AIOxxx591I FEED - The data stream converter will interpret FEED=tray_name** as FEED=MAIN.**

Explanation: While **xclb=none** was in effect, the data stream converter found a FEED DJDE that specified *tray_name*, which is a name other than MAIN, AUX, or OPR. The converter interprets the FEED DJDE as FEED=MAIN, and generates AFP that invokes input media source 1.

System action: InfoPrint XT continues to process the job.

User response: This is an informational message that requires no user response.

AIOxxx610E A translation error occurred while processing input character **x'**EBCDIC_hex**' (ASCII x'**ASCII_hex**') at logical record** line_number**. Code page** code_page **did not contain EBCDIC character x'**EBCDIC_hex**'. The data stream converter substituted a blank. The original Xerox font was** font_name**.**

Explanation: While processing line data input, InfoPrint XT found that EBCDIC character x'*EBCDIC_hex*' was not available in code page *code_page*. InfoPrint XT uses a blank in its place. This might occur because of incorrect characters, such as binary zeros, in the print data stream. It might also occur if you have manually correlated a Xerox font to an AFP font and the AFP font does not have characters corresponding to some of the characters in the Xerox font. Or, a character translation table was altered so that a character in the Xerox input does not map to the correct character in the AFP font.

System action: InfoPrint XT continues the process, but the output might not be correct.

User response: Correct the input data correlation table or translation record, and reconvert the job.

AIOxxx611E The data stream converter found a shift-in function code before a shift-out function code.

Explanation: While processing the input data stream, InfoPrint XT found a shift-in function code but did not find a preceding shift-out function code. There are errors in the input data stream.

System action: InfoPrint XT cannot process the input data stream.

User response: Correct the input data stream and convert the job again.

AIOxxx612E The data stream converter did not find a shift-in function code that corresponded to a preceding shift-out function code on record record_number**.**

Explanation: While processing the input data stream, InfoPrint XT did not find a shift-in function code that corresponded to a preceding shift-out function code. There are errors in the input data stream.

System action: InfoPrint XT cannot process the input data stream.

User response: Correct the input data stream and convert the job again.

AIOxxx613E The data stream converter found a duplicate shift-out function code on record record_number**.**

Explanation: While processing the input data stream, InfoPrint XT found more than one shift-out function code in succession. There are errors in the input data stream.

System action: InfoPrint XT cannot process the input data stream.

User response: Correct the input data stream and convert the job again.

AIOxxx614E The data stream converter did not find a DBCS font labeled 'DB1' or 'K1' in the active font list while processing record *record_number***.**

Explanation: While processing the input data stream, InfoPrint XT found a shift-out function code but did not find a DBCS font labeled 'DB1' or 'K1' in the active font list.

System action: InfoPrint XT cannot process the input data stream.

User response: Make sure that the DJDEs in the input data stream or the JDEs used to process the data stream contain a 'DB1' or 'K1' DBCS font. Then, reconvert the job.

AIOxxx621S The input data stream file is empty. The data stream converter could not produce printable AFP output.

Explanation: InfoPrint XT did not find any input data in the Xerox job file.

System action: Although InfoPrint XT might produce a small AFP output file to prevent errors, it contains no printable data.

User response: Make sure the job contains data and transfer it to the InfoPrint XT system again.

AIOxxx623E The data stream converter could not find the tiff2afp transform in the current search path.

Explanation: The job contains an inline graphic image that is in the TIFF format, but the data stream converter cannot locate the InfoPrint Manager **tiff2afp** transform.

System action: InfoPrint XT cannot process the inline graphic image.

User response: Either add the path to the **tiff2afp** transform to the current path, or regenerate the Xerox job so that the inline graphics that it contains are in the Xerox Interpress IMG format.

AIOxxx624E The tiff2afp transform returned error code *error_code* **while processing inline graphic number** *number***.**

Explanation: Conversion of an inline TIFF graphic failed. *err_code* is the return code from the **tiff2afp** transform program. *gr_name* uses the naming convention SG*nnnnnn*. *nnnnnn* is a number from 0 through 999999. Numbering begins with SG000000 for the first inline graphic found in the data stream, SG000001 for the next, and so on.

System action: InfoPrint XT cannot process the inline graphic image.

User response: Verify that the inline graphic is

correct. If it is, report this message to your technical support representative.

AIOxxx625E An internal error - *error* **- occurred while processing inline graphic number** *number***.**

Explanation: The data stream converter found an error during inline graphic processing. The error occurred while opening a TIFF image for input, opening a file for **tiff2afp** transform output, or while verifying the header record for the graphic.

System action: InfoPrint XT cannot process the inline graphic image.

User response: Verify that the inline graphic is correct. If it is, report this message to your technical support representative.

AIOxxx626E The image converter returned error code *error_code* **while processing inline graphic number** *number* **ending near record** *rec_num***.**

Explanation: Conversion of an inline image graphic failed. *err_code* is the return code from the image transform program. *number* uses the naming convention SG*nnnnnn*. *nnnnnn* is a number from 0 through 999999. Numbering begins with SG000000 for the first inline graphic found in the data stream, SG000001 for the next, and so on. *rec_num* is the approximate record number of the end of the inline graphic image in the input file.

System action: InfoPrint XT continues to process the job, but the output is not correct.

User response: Verify that the inline graphic is correct. If it is, report this message to your technical support representative.

AIOxxx627E A memory allocation error occurred in the image/logo converter while processing inline graphic number *number***.**

Explanation: Conversion on an inline image graphic failed because of insufficient memory. The image graphic uses the naming convention SG*nnnnnn*. *nnnnnn* is a number from 0 through 999999. Numbering begins with SG000000 for the first inline graphic found in the data stream, SG000001 for the next, and so on.

System action: InfoPrint XT continues to process the job, but the output is not correct.

User response: Verify that the inline graphic is correct. If it is, report this message to your technical support representative.

AIOxxx628W The data stream converter found an incorrect or unsupported Xerox file type in downloadable file *file_name.file_ext* **(internal name x'***hex_name***') on record** *record_number***. The file will print as data.**

Explanation: The InfoPrint XT data stream converter expected to find a valid Xerox resource file name and extension, but found a string that it did not recognize instead.

System action: InfoPrint XT ignores the record and continues processing.

User response: This message might indicate that a job that downloads resources through FILE DJDEs is corrupted. Verify that all resources that were copied from the job to the Xerox resource directory were processed successfully. If the input file is corrupt, correct the error or errors, regenerate the file, and rerun the job.

AIOxxx629E The data stream converter did not find the expected end of an inline graphic on record *line_number***. Inline graphic number** *graphic_number* **may be corrupt. The graphic and data that follows it may not print correctly.**

Explanation: While processing an inline graphic in an offline job, InfoPrint XT did not find the end of the graphic where it was expected. The graphic might have been created incorrectly, it might have data missing, or it might be otherwise corrupted. While searching for the end of the graphic, InfoPrint XT might have read through some of the data that immediately follows the graphic, causing incorrect output.

System action: InfoPrint XT continues to process the job, but the output is not correct.

User response: Correct the problem with the format of the graphic and reconvert the job.

AIOxxx690W The data stream converter found no 'END;' DJDE command before the end of the report.

Explanation: InfoPrint XT found the end of a report before it found a DJDE record that contained the END**;** command. InfoPrint XT does not process DJDEs that it finds after the end of the report.

System action: InfoPrint XT continues to process the job.

User response: Add an END**;** command at the correct location in the input data stream and reconvert the job.

AIOxxx691W The data stream converter could not print an accounting page due to a font processing error.

Explanation: The data stream converter uses Xerox font **p0612c.fnt** to print accounting pages. It did not find the font.

System action: No accounting page prints.

User response: Load the **p0612c.fnt** font from your Xerox printer so that InfoPrint XT can access it.

AIOxxx710W The data stream converter collected *sheet_count* **sheets for stapling. This total may be outside the range of supported values for the target printer.**

Explanation: Although Xerox LPS printers support an NTO1 value of **1** through **32767** for stapling, data stream conversion might not produce the results that you want if the target printer does not support the value.

System action: The data stream converter processes the data stream as it is, regardless of whether the target printer is capable of stapling the output as specified.

User response: Verify that the job output is correct. If the target printer cannot staple as many sheets as requested, consider overriding the JDL NTO1 value by specifying the **xstaplemax** conversion parameter. Specify a value for the parameter that is consistent with the hardware stapling capabilities of the printer. For more information about limitations, see the printer documentation.

AIOxxx711W The data stream converter collected *sheet_count* **sheets for stapling, but the NTO1 maximum is** *NTO1_value***. The converter disabled stapling for the current report.**

Explanation: The number of report sheets collected for stapling either exceeds the limit that the NTO1 command in the current JDL/JDE specifies, or the limit that the **xstaplemax** conversion parameter specifies.

System action: The data stream converter processes the data stream, but the AFP generated for the report does not include stapling commands.

User response: Verify that the job output is correct. Then, specify the **xstaplemax** conversion parameter with a value that is large enough to include all the sheets in the report and reconvert the job.

AIOxxx712W XHONORSTAPLE is in effect, but reformatted JDL *jdl_name***/JDE** *jde_name* **does not include stapling information. The converter disabled stapling for the current report.**

Explanation: Although you requested that InfoPrint XT process Xerox stapling commands, you did not reload

the JDL and JDE pair in effect after stapling support became available in InfoPrint XT. Because InfoPrint XT cannot determine whether the original JDL and JDE pair specified STAPLE=YES, NTO1=YES or NTO1=*n*, or FACEUP=YES, it uses STAPLE=NO. InfoPrint XT does not include stapling commands in the AFP that it generates for this report.

System action: InfoPrint XT continues to process the job, but the printer does not staple the pages in the current report.

User response: You must reload the JDL that the job uses for InfoPrint XT to process stapling commands. After you reload the JDL, reconvert the job.

AIOxxx720E A text placement item specified font number *number***, but the maximum number of fonts per page is 128.**

Explanation: One page specified more than 128 fonts.

System action: InfoPrint XT cannot process the request.

User response: Check the font list in effect at the time to make sure that no more than 128 fonts requests are present, and reconvert the job.

AIOxxx721S A text placement item specified font number *font_number***, but the number in the active font list is** *font_maximum***.**

Explanation: InfoPrint XT tried to process AFP text placement items using the wrong font list.

System action: InfoPrint XT cannot process the request.

User response: Contact your technical-support representative.

AIOxxx760E The font processor could not find font *font_name* **in the font correlation table.**

Explanation: InfoPrint XT did not find entries for the named font in the correlation tables located in the reformatted Xerox resource path. The font correlation tables are **tab.aft** and **tab.sft**.

System action: InfoPrint XT cannot process the request.

User response: Use the **pdxtloadres** command to load the font identified in the message.

AIOxxx761S No fonts available to print text.

Explanation: The data stream converter did not find one or more fonts in the font correlation table, so no default text font was available for printing text.

System action: InfoPrint XT cannot process the request.

User response: Make sure that the DJDEs in the Xerox data stream or the JDEs used to process the data stream contain valid font lists. Make sure that you load all fonts specified by the font lists. Then, reconvert the job, or load a default text font and reconvert the job.

AIOxxx762E The font processor could not find reformatted font *font_name* **in the reformatted Xerox resource path.**

Explanation: InfoPrint XT did not find the metrics file for the named font in the reformatted Xerox resource path. It was looking for *font_name***.afn**.

System action: InfoPrint XT cannot process the request.

User response: Use the **pdxtloadres** command to load the font identified in the message.

AIOxxx763E The font processor could not find font resource *resource_name* **in the AFP resource path.**

Explanation: While loading a form, InfoPrint XT did not find the AFP font listed in the message.

System action: InfoPrint XT continues to process the job and tries to use the first correctly defined font as a replacement.

User response: If you manually updated the resource correlation table, make sure the correlation record is correct, the font exists, and the font is accessible to InfoPrint XT. If the AFP font is a font that InfoPrint XT created from a Xerox font, reload the Xerox font. If the problem continues or if the font was supplied by InfoPrint Solutions Company, report this message to your technical support representative.

AIOxxx764E Font resource *resource_name* **has an incorrect format.**

Explanation: The AFP font resource identified in the message has an internal structure that is not valid.

System action: InfoPrint XT continues to process the job, and tries to use the first correctly defined font as a replacement.

User response: If the font is a custom AFP font, a problem might have occurred during its transfer to the system. Make sure that you download or copy the resource in binary format. If the font is an InfoPrint Solutions Company-supplied font or a font that InfoPrint XT created from a Xerox font, report this message to your technical support representative.

AIOxxx766S The font processor could not find character translation table *table_name* **in the reformatted Xerox resource path.**

Explanation: InfoPrint XT did not locate the character

translation table identified in the message in the reformatted Xerox resource path.

System action: The process fails.

User response: If you manually updated the resource correlation table, this can indicate a syntax error in the correlation record. Make sure that the correlation record is correct and rebuild the correlation table. Otherwise, this indicates an internal error in InfoPrint XT. Report this message to your technical support representative.

AIOxxx767E **Font resource** *resource_name* **does not contain a required character rotation.**

Explanation: An AFP font resource is incomplete.

System action: InfoPrint XT cannot process the resource.

User response: Reload the corresponding Xerox resource.

AIOxxx768S **The font processor could not find the font correlation table in the reformatted Xerox resource path, or the table contains no entries.**

Explanation: InfoPrint XT did not locate any font correlation in the reformatted Xerox resource path.

System action: The process fails.

User response: Make sure that you load at least one font. Then, enter the command or do the task again.

AIOxxx769E **Character ID** *character_id* **(EBCDIC code point x'***EBCDIC_hex***') in code page** *code_page* **is not in character set** *character_set*. **The original Xerox font was** *font_name*, **correlated to coded font** *coded_font*.

AIOxxx769E **Character ID** *character_id* **(EBCDIC code point x'***EBCDIC_hex***') in code page** *code_page* **is not in character set** *character_set*. **The original Xerox font was** *font_name*.

Explanation: Code page *code_page* and character set *character_set* do not match for character ID *character_id*.

System action: The process fails.

User response: If you manually updated the resource correlation table, you have specified an incompatible code page and character set. Correct the correlation record and rebuild the correlation table. Then, reconvert the job. Otherwise, if the font was supplied by InfoPrint Solutions Company or if it is a font that InfoPrint XT created from a Xerox font, report this message to your technical support representative.

AIOxxx770S **A resource processor could not find reformatted JDL** *name* **in the reformatted Xerox resource path.**

Explanation: InfoPrint XT cannot locate the JDL specified in the message.

System action: The process fails.

User response: Make sure that you specify the correct location for the JDL resource when you submit the job. Also make sure that you have loaded the JDL on the system. Make sure that you have spelled the name of the JDL correctly. The name is case-sensitive. After correcting the problem, submit the job again.

AIOxxx771S **A resource processor could not find JDE** *jde_name* **in the reformatted** *jdl_name* **JDL.**

Explanation: The program did not find JDE *jde_name* in JDL *jdl_name*.

System action: The process fails.

User response: Make sure that the JDE and JDL names are correct and spelled correctly. Make sure that the correct version of the JDL was loaded on the InfoPrint XT system in the common resource library or in a resource group available to the job. Then, reconvert the job.

AIOxxx772E **A resource processor could not find** *cl_type* **cluster name** *cl_name* **in reformatted cluster database** *clb_name* **during processing of STOCKSET internal to JDL** *jdl_name***/JDE** *jde_name*.

AIOxxx772E **A resource processor could not find** *cl_type* **cluster name** *cl_name* **in reformatted cluster database** *clb_name* **during processing of external STOCKSET** *stk_name* **in JDL** *jdl_name***/JDE** *jde_name*.

Explanation: The STOCKSET that InfoPrint XT was processing refers to a cluster entry, *cl_name*, which does not exist in cluster database *clb_name*. *cl_type* can be INIFEED, SYSPAGE, or ASSIGN.

System action: The process fails.

User response: Verify that the job specifies the correct STOCKSET and that the **xclb** conversion parameter specifies the correct cluster database. Then, reconvert the job.

AIOxxx773E **A resource processor could not find** *cl_type* **cluster name** *cl_name* **in reformatted cluster database** *clb_name* **during processing of STOCKSET** *stk_name* **in DJDE packet ending on record** *record_number*.

Explanation: A stock reference in a FEED DJDE or in the STOCKSET *clb_name* during processing of external STOCKSET *stk_name* invoked by the STOCKS DJDE is correlated to a cluster entry, *cl_name*, which does not exist in cluster database *clb_name*. *cl_type* can be FEED for the FEED DJDE, or INIFEED, SYSPAGE, or ASSIGN for the STOCKS DJDE.

System action: The process fails.

User response: Verify that the job correctly specifies the STOCKSET, FEED DJDE, and cluster database. Then, reconvert the job.

AIOxxx774E **The data stream converter could not find FEED cluster name** *cl_name* **in reformatted cluster database** *clb_name* **during processing of DJDE packet ending on record** *record_number*.

Explanation: A cluster name in a FEED DJDE has no corresponding entry in cluster database *clb_name*. InfoPrint XT ignores the FEED DJDE.

System action: The process fails.

User response: Verify that the job specifies the correct FEED DJDE and the correct cluster database. Then, reconvert the job.

AIOxxx775S **Processing terminated due to unsupported** *BLOCK* **|** *RECORD* **command** *function* **|** *functions* **found in JDL** *jdl_name* **|** *jde_name***:**

function1 function2 function3

Explanation: InfoPrint XT cannot process the job because it uses the unsupported function FORMAT¬=BIN, LMULT¬=1, or ZERO=YES.

System action: The process fails.

User response: If the JDL/JDE is essential to printing operations, report this message to your technical support representative.

AIOxxx776E **The data stream converter could not find FEED cluster name** *cl_name* **in reformatted cluster database** *clb_name* **during processing of JDL** *jdl_name***/JDE** *jde_name*.

Explanation: A FEED command in a JDE/JDL refers to a cluster, *cl_name*, which has no corresponding entry in cluster database *clb_name*.

System action: InfoPrint XT ignores the FEED command.

User response: Verify that the **xjdl** and **xjde** conversion parameters for the job specify the correct JDL and JDE. Also, make sure that the **xclb** conversion

parameter specifies the correct cluster database. Then, reconvert the job.

AIOxxx777E **The data stream converter could not find FEED stock reference** *stk_ref* **in STOCKSET** *stk_name* **during processing of DJDE packet ending on record** *record_number*.

AIOxxx777E **The data stream converter could not find FEED stock reference** *stk_ref* **in STOCKSET internal to a JDL/JDE during processing of DJDE packet ending on record** *record_number*.

AIOxxx777E **The data stream converter could not find FEED stock reference** *stk_ref* **in STOCKSET** *stk_name* **invoked by a JDL/JDE during processing of DJDE packet ending on record** *record_number*.

Explanation: Stock reference *stk_ref* in a FEED DJDE has no corresponding entry in the STOCKSET identified in the message.

System action: InfoPrint XT ignores the FEED DJDE.

User response: Verify that the **xjdl** and **xjde** conversion parameters for the job specify the correct JDL and JDE, and that the STOCKSET is correct. Then, reconvert the job.

AIOxxx778E **The data stream converter could not find FEED stock reference** *stk_ref* **in an internal STOCKSET during processing of JDL** *jdl_name***/JDE** *jde_name*.

AIOxxx778E **The data stream converter could not find FEED stock reference** *stk_ref* **in external STOCKSET during processing of JDL** *jdl_name***/JDE** *jde_name*.

Explanation: A FEED command in a JDL/JDE specifies a stock reference, *stk_ref*, which has no corresponding entry in STOCKSET *stk_name*.

System action: InfoPrint XT ignores the FEED command.

User response: Verify that the **xjdl** and **xjde** conversion parameters for the job specify the correct JDL and JDE, and that the STOCKSET is correct. Then, reconvert the job.

AIOxxx779E **FEED command in DJDE packet ending on record** *record_number* **specified stock reference** *stk_ref***, but no STOCKSET is in use; the data stream converter cannot resolve the stock reference.**

Explanation: A FEED DJDE specifies a stock reference, *stk_ref*, but no STOCKSET is in effect. InfoPrint XT ignores the FEED DJDE command.

System action: InfoPrint XT ignores the FEED DJDE and pulls paper from the main bin.

User response: Verify that the job specifies the correct FEED DJDE and the correct STOCKSET. Then, reconvert the job.

AIOxxx780E FEED command in JDL *jdl_name***/JDE** *jde_name* **specified stock reference** *stk_ref***, but no STOCKSET is in use; the data stream converter cannot resolve the stock reference.**

Explanation: A FEED command in a JDL/JDE specifies a stock reference, *stk_ref*, but no STOCKSET is in effect.

System action: InfoPrint XT ignores the FEED command.

User response: Verify that the **xjdl** and **xjde** conversion parameters for the job specify the correct JDL and JDE, and that the STOCKSET is correct. Then, reconvert the job.

AIOxxx781E A resource processor could not find reformatted *resource_type* **resource** *resource_name* **in the reformatted Xerox resource path.**

Explanation: *resource_type* can be CME, PDE, STK, or TST. InfoPrint XT did not find the named resource *resource_name* in the reformatted Xerox resource directory.

System action: InfoPrint XT ignores the reformatted resource and continues processing the job.

User response: Verify that the spelling of the resource name is correct, and that you have loaded the resource as a common resource or as a resource that belongs to a specific group. Then, make sure that the path to the resource is available to InfoPrint XT and reconvert the job.

AIOxxx783W   XHONORFCB2 is in effect, but reformatted JDL *jdl_name* **I JDE** *jde_name* **does not include FCB information. The data stream converter will ignore FCBs found in the data stream.**

Explanation: Although you requested that InfoPrint XT process FCBs, you did not reformat the JDL/JDE in effect after FCB support became available. Because InfoPrint XT cannot determine whether the original Xerox JDL/JDE specified FCB=PROCESS or FCB=IGNORE, it uses FCB=IGNORE and does not process any FCBs in the data stream.

System action: InfoPrint XT continues processing the job, but the printed output is not correct.

User response: You must reload the JDL that the job uses to enable FCB processing by InfoPrint XT. By reloading the JDL, InfoPrint XT creates a new metrics file for the JDL, which includes information that enables it to process FCBs. After you reload the JDL, reconvert the job.

AIOxxx790E Correlation of Xerox DBCS font *font_name* **to non-DBCS AFP font resource** *resource_name* **is not valid.**

Explanation: During AFP font processing, InfoPrint XT found a correlation between a Xerox DBCS font and an AFP single-byte font. InfoPrint XT does not support this type of correlation.

System action: InfoPrint XT cannot process the font.

User response: Correct the entry in the font correlation table so that the correlation is between a Xerox DBCS font and an AFP DBCS outline font. Then, rebuild the font correlation table.

AIOxxx791E Reformatted font information for Xerox font *font_name* **is incomplete. Reload the resource to extract and store DBCS information.**

Explanation: During AFP font processing, InfoPrint XT determined that the reformatted Xerox font metrics file for *font_name* does not contain DBCS information.

System action: InfoPrint XT cannot process the font.

User response: Reload the Xerox DBCS font. Then, reconvert the job.

AIOxxx792E Font processing found a reference to Xerox DBCS font *font_name***, but** *option* **is in effect. DBCS mode requires XRESOLUTION=300.**

Explanation: During AFP font processing, InfoPrint XT found a reference to Xerox DBCS font *font_name*, but it also found an **xresolution** value other than 300.

System action: InfoPrint XT cannot process the font.

User response: Correct the resolution specification so that it specifies 300-pel resolution.

Appendix E. DJDE report messages: ALTER through XMP

This section lists the possible messages that you might see in the Dynamic Job Descriptor Entry report generated by InfoPrint XT for AIX, and includes a short explanation of each message. These messages can occur in any order in the DJDE report; they are listed in alphabetic order by DJDE name here. If the DJDE report contains a data stream converter message, you can find its explanation in Appendix D, "Resource utility messages and data stream converter messages: AIO*xxxnnnX*," on page 197.

Many of the messages in the DJDE report contain variable data, shown in italics, which InfoPrint XT replaces with specific information when it issues the messages. A vertical bar (l) between portions of variable data means that InfoPrint XT uses only one of the variable-data strings when it issues the message.

Notes:

1. Any value that specifies inches as a unit of measure can have up to three decimal places.
2. The default is that InfoPrint XT does not produce a DJDE report when it converts Xerox data streams. To generate a DJDE report, you must include the **xrptfile** conversion parameter when you submit the job. For more information about using the **xrptfile** conversion parameter, see the **xrptfile** parameter, see page 161.
3. For a list of supported and unsupported DJDE commands, see "Supported and unsupported Xerox DJDE and PDL commands" on page 9.

ALTER - **The new position for IMG:** *IMG_name* **(page segment:** *PSEG_name***) is** *x,y* **inches or** *x,y* **pels. The requested graphic scaling factor is:** *nn***.**

Explanation: Specifies the new imaging parameters for a previously defined reference image. *img_name* identifies the Xerox IMG file. *pseg_name* identifies the Advanced Function Presentation page segment. *x* and *y* are numeric values. *x* represents the horizontal coordinate. *y* represents the vertical coordinate. InfoPrint XT only includes the second sentence of the message when the scaling factor is a number other than 1.

ASSIGN - **The data stream converter made the following channel to line assignments:** *ch_number* **to line(s)** *line_num1 ... line_numN***.**

Explanation: Specifies the VFU channel-to-line-number assignments. *ch_number* is the channel number. *line_num1* through *line_numN* specify the line numbers assigned to this channel.

BATCH - **The data stream converter does not support batch mode graphics. Parameter was** *START* **l** *END***.**

Explanation: The job specified processing for online banner pages and batch-mode graphics. InfoPrint XT does not support BATCH=START or BATCH=END.

BEGIN - **The new page position is (***x,y***) inches or (***x,y***) pels.**

Explanation: Specifies the starting position of one or more logical pages. *x* and *y* are numeric values. *x* represents the horizontal coordinate. *y* represents the vertical coordinate.

BFORM - **Overlay** *overlay_name* **will appear on the back of subsequent sheets.**

Explanation: When used with DUPLEX=YES, this message specifies that a form prints on the back side of the page. *overlay_name* identifies the AFP overlay that prints.

BFORM - **The following overlays will appear on the back of subsequent sheets.**

> **Overlaycopy ply**
> *overlay1x* **to** *y*
> .
> .
> *overlayNx* **to** *y*

Explanation: This message only occurs when the job specifies copy-sensitive forms. *overlay1* and *overlayN* identify the AFP overlays. *x* and *y* are numeric values.

BFORM -   **No overlay will appear on the back of subsequent sheets.**

Explanation: A BFORM=NONE DJDE cancelled a previous BFORM DJDE.

BOF -   **The new bottom of form line number is** *number***.**

Explanation: Specifies that *number* is the line number of the bottom of the form.

C -   **The data stream converter found a comment DJDE.**

Explanation: A comment DJDE is present.

CANCEL -   **The data stream converter will no longer automatically image the following graphics on each page:**

.img namePage segment name
img_namepseg_name

Explanation: Specifies cancellation of automatic graphic imaging. *img_name* identifies the Xerox IMG file. *pseg_name* identifies the corresponding AFP page segment.

COLLATE -   **The data stream converter** *will | will not* **collate multi-copy reports.**

Explanation: Specifies whether InfoPrint XT collates the reports.

COPIES -   **The number of** *report | sheet* **copies will be** *number***.**

Explanation: Specifies whether the copies are *report* copies or *sheet* copies, and specifies the total *number* of copies.

DATA -   **Printable data now begins at byte** *x* **and continues for up to** *y* **bytes.**

Explanation: Specifies the beginning location of the printable data in the input record and the length of the printable information. *x* and *y* are integer values.

DEPT -   **The department name for account billing is** *dept_name***.**

Explanation: Specifies the *dept_name* to associate with accounting information.

DJDE -   **The data stream converter found a DJDE identifier on record** *line_number:djde_record***.**

Explanation: Specifies that *line_number* contains one or more DJDEs (*djde_record*).

Note: There is no DJDE with the name DJDE. The message title is for explanation retrievability only.

DUPLEX -   **The print mode will be** *duplex | simplex***.**

Explanation: Specifies whether the print mode is *duplex* or *simplex*.

END -   **The data stream converter found an END; DJDE.**

Explanation: An END; DJDE is present in the job data.

FCB -   **The data stream converter found an FCB on record** *nn***; the current environment specifies** *FCB=PROCESS | FCB=IGNORE***.**

The data stream converter assigned FCB channel *channel_num* **to line** *line_num*

.
.
.

The data stream converter assigned FCB channel *channel_num* **to line**
line_num
FCB BOF (bottom of form) line number is *nn*.

Explanation: InfoPrint XT found a LOAD FCB (forms control buffer; channel command x'63') in the input data stream. If the current environment is FCB=PROCESS, the FCB becomes effective immediately. InfoPrint XT lists the new channel assignments and BOF after this message. If the current environment is FCB=IGNORE, InfoPrint XT saves the FCB for possible use if the environment changes to FCB=PROCESS later in the job.

FCB -   **JDL** *JDL_name* **| JDE** *JDE_name* **specified no VFU channel assignments; the data stream converter will use the FCB found on record** *nn* **instead.**

The data stream converter assigned FCB channel *channel_num* **to line** *line_num*

.
.
.

The data stream converter assigned FCB channel *channel_num* **to line** *line_num*
FCB BOF (bottom of form) line number is *nn*.

Explanation: The environment is FCB=PROCESS and the invoked JDL/JDE specifies no channel assignments. The data stream converter uses the VFU channel assignments of the most recently found FCB. InfoPrint XT lists the FCB channel assignments and BOF after this message.

FCB - **The data stream converter will use the FCB on record** *nn* **instead of the starting JDE/JDL environment restored by an RSTACK.**

The data stream converter assigned FCB channel *channel_num* to line *line_num*
.
.
.
The data stream converter assigned FCB channel *channel_num* TO line *line_num*
FCB BOF (bottom of form) line number is *nn*.

Explanation: The environment is FCB=PROCESS and InfoPrint XT found an RSTACK. Although the RSTACK has restored the environment of the starting JDE/JDL, the data stream converter uses the VFU channel assignments of the most recently found FCB. InfoPrint XT lists the FCB channel assignments and BOF after this message.

FEED - **The input tray will be** *auxiliary* | *main*.

Explanation: Specifies the tray that contains the medium on which the job prints.

FEED - **The data stream converter does not support the** *tray_name* **option.**

Explanation: When you specify **xclb=none**, InfoPrint XT issues this message when it finds FEED DJDE values (*tray_name*) other than MAIN, AUX or OPR. It uses the MAIN input tray in the generated AFP. Verify that you specified the correct value for the **xclb** conversion parameter. Also, make sure that the value of the FEED command in the job is correct.

FEED - **The input media source will be tray** *mmc_tray*.

Explanation: You specified a valid cluster database. InfoPrint XT indicates the number of the input tray with *mmc_tray*.

FEED - **The input media source will be INIFEED tray** *mmc_tray*.

Explanation: You specified a valid cluster database. InfoPrint XT indicates the number of the input tray with *mmc_tray*. If InfoPrint XT finds a STOCKS DJDE, but the DJDE packet does not specify FEED, it uses the INIFEED tray.

FONTINDEX - **The data stream converter will no longer use table reference characters.**

Explanation: Specifies that the job contains a FONTINDEX= NONE DJDE, and that the data stream converter no longer uses table reference characters to select fonts.

FONTINDEX - **The data stream converter will interpret data bytes at offset** *x* **as table reference characters, which number the fonts from** *number* **and contain font references in the low-order** *z* **bits.**

Explanation: Specifies that the job contains a FONTINDEX DJDE, and identifies the location and the numbering of the font indexes that the data stream converter uses. *x*, *y*, and *z* are integer values.

FONTS - **font** *font_name* **does not meet naming requirements.**

Explanation: The name of the Xerox font, *font_name*, is not in the correct format. Xerox font names must not exceed 6 characters and can include only uppercase alphabetic characters, numeric characters, and the dollar sign ($).

FONTS - **The number of fonts listed was** *number*.

.fnt name	AFP name(s)	line spacing value
fnt_name	*afp_name*	*x* **inches or** *y* **pels**
fnt_name	*afp_name*	*x* **inches or** *y* **pels**
.		
.		

Explanation: Specifies the fonts that the job lists. *x* and *y* are numeric values. *fnt_name* identifies the Xerox font name. *afp_name* identifies the corresponding AFP font name, which is either a coded font name or a character set and code page pair.

FORMAT - **font** *font_name* **does not meet naming requirements.**

Explanation: The name of the Xerox font, *font_name*, is not in the correct format. Xerox font names must not exceed 6 characters and can include only uppercase alphabetic characters, numeric characters, and the dollar sign ($).

FORMAT - **The new page positions are:**

(*x*,*y*) **inches or** (*x*,*y*) **pels**

Explanation: A new PDE has changed the page positions at a specific offset in the job. The message lists the new positions.

FORMAT - **The number of fonts listed was** *x*.

.fnt name	AFP name(s)	line spacing value
fnt_name	*afp_name*	*x* **inches or** *y* **pels**
fnt_name	*afp_name*	*x* **inches or** *y* **pels**
:		

Explanation: *x* and *y* are numeric values. *fnt_name* identifies the Xerox font name. *afp_name* identifies the corresponding AFP font name, which is either a coded font name or a character set and code page pair.

FORMAT - **A DJDE referenced PDE** *pde_name*, **which contained the following information:**

  The print mode will be *portrait/landscape*.
  The number of fonts listed was *x*.

.fnt name	AFP name(s)	line spacing value
fnt_name	*afp_name*	*x* **inches or** *y* **pels**
fnt_name	*afp_name*	*x* **inches or** *y* **pels**
:		

The new page position is (*x,y***) inches or (***x,y***) pels.**

Explanation: The job invoked a PDE. *pde_name* identifies the name of the PDE. InfoPrint XT indicates whether this PDE is *landscape* or *portrait*. *fnt_name* identifies the name of the Xerox font. *afp_name* identifies the corresponding AFP font name, which is either a coded font name or a character set and code page pair. *m* and *n* are numeric values. *x* and *y* are numeric values that represent the horizontal coordinate and the vertical coordinate.

FORMS - **No overlay will appear on the front of subsequent sheets.**

Explanation: Specifies that no overlay prints on the front of subsequent pages. This might be an informational message, or it might indicate that an internal error exists in the job, such as two DJDE packets set to take effect at the same time.

FORMS - **Overlay** *overlay_name* **will appear on the front of subsequent sheets.**

Explanation: The FORMS DJDE specifies one form and specifies either SIMPLEX or BFORM. *overlay_name* identifies the AFP overlay that prints on the front of subsequent sheets.

FORMS - **Overlay** *overlay_name* **will appear on both sides of subsequent sheets.**

Explanation: The FORMS DJDE only specifies one form. *overlay_name* identifies the AFP overlay that prints on both sides of the sheet.

FORMS - **The following overlays will appear on the front of subsequent sheets.**

  Overlaycopy ply
  overlay_name1x **to** *y*
    :
  overlay_nameNx **to** *y*

Explanation: This message occurs when the job specifies copy-sensitive forms and either SIMPLEX or BFORM. *overlay_name1* through *overlay_nameN* identify the names of the AFP overlays. *x* and *y* are integer values.

GRAPHIC - **The data stream converter found graphic image** *img_name* **(page segment** *pseg_name***) imbedded in data stream. The image position is (***x,y***) inches or (***x,y***) pels. The converter** *will / will not* **automatically image the graphic on each page. The requested graphic scaling factor was** *x*.

Explanation: *img_name* identifies the Xerox IMG file. *pseg_name* identifies the AFP page segment. *x* and *y* are numeric values. *x* represents the horizontal coordinate. *y* represents the vertical coordinate. InfoPrint XT indicates whether it automatically prints the graphic on each page. InfoPrint XT only includes the second sentence of the message when the scaling factor is a number other than 1.

ICATALOG - **The data stream converter does not support the ICATALOG DJDE.**

Explanation: An ICATALOG DJDE, which InfoPrint XT does not support, is present.

IDFAULT - **The data stream converter does not support the IDFAULT DJDE.**

Explanation: An IDFAULT DJDE, which InfoPrint XT does not support, is present.

IDR - **The data stream converter does not support the IDR DJDE.**

Explanation: An IDR DJDE, which InfoPrint XT does not support, is present.

ILIST -   **The data stream converter does not support the ILIST DJDE.**

Explanation: An ILIST DJDE, which InfoPrint XT does not support, is present.

IMAGE -   **A DJDE referenced one or more BATCH mode graphic images. The converter will automatically image each graphic on a separate page at image position (x,y) inches or (x,y) pels.**

Explanation: *x* and *y* are numeric values. *x* represents the horizontal coordinate. *y* represents the vertical coordinate

---

INKINDEX -   **The data stream converter does not support the INKINDEX DJDE.**

Explanation: An INKINDEX DJDE, which InfoPrint XT does not support, is present.

INVERT -   **The data stream converter will ignore INVERT DJDEs.**

Explanation: The data stream converter found an INVERT DJDE, but the conversion parameters include **xhonorinvert=no**. **xhonorinvert=no** is the default. InfoPrint XT does not invert the output.

INVERT -   **The data stream converter will invert output on the front sides of subsequent sheets.**

Explanation: Specifies that front-side printing is inverted. Back-side printing is not inverted.

INVERT -   **The data stream converter will invert output on the back sides of subsequent sheets.**

Explanation: Specifies that back-side printing is inverted. Front-side printing is not inverted.

INVERT -   **The data stream converter will invert output on the both sides of subsequent sheets.**

Explanation: Specifies that front-side and back-side printing is inverted.

INVERT -   **The data stream converter will not invert output on subsequent sheets.**

Explanation: Specifies that front-side and back-side printing is not inverted.

IRESULT -   **The data stream converter does not support the IRESULT DJDE.**

Explanation: An IRESULT DJDE, which InfoPrint XT does not support, is present.

ITEXT -   **The data stream converter does not support the ITEXT DJDE.**

Explanation: An ITEXT DJDE, which InfoPrint XT does not support, is present.

JDE -   **A DJDE referenced Job Descriptor Entry** *jde_name***.**

Explanation: The name of the JDE in use, which is *jde_name*.

JDL -   **A DJDE referenced Job Descriptor Library** *jdl_name***.**

Explanation: The name of the JDL file, which is *jdl_name*.

MARGIN -   **The left margin will be** *position_count* **positions.**

Explanation: InfoPrint XT calculates the left margin by multiplying *position_count* by the average character width of the font in effect.

MARGIN -   **The left margin will be** *x* **inches or** *y* **pels.**

Explanation: This message occurs when the job specifies a left margin in terms of inches or centimeters, rather than positions.. *x* and *y* are numeric values. InfoPrint XT uses pels as the unit of measure.

MODIFY -   **The data stream converter will not apply a CME to the input data.**

Explanation: No copy modifications are in effect, starting at the point in the job where InfoPrint XT found this DJDE.

MODIFY -   **The data stream converter will apply CME** *cme_name* **to the input data.**

Explanation: The input data invoked a CME that is not copy-sensitive to do copy modifications. *cme_name* identifies the name of the CME in effect.

MODIFY -   **The data stream converter will apply the following CMEs:**

CME name	copy ply
cme_name	*x* **to** *y*

:
:

| cme_name | x **to** y |

Explanation: The input data invoked one or more copy-sensitive CMEs to do copy modifications. *cme_name* identifies the CME file. *x* and *y* are integer values.

NUMBER - **The data stream converter will not number output pages.**

Explanation: The job contains a NUMBER=NO DJDE. InfoPrint XT does not number pages.

NUMBER - **The data stream converter will number output pages by using font** *fontname***. The first page number will be** *x***. The page number appears on line** *y***. | The page number ends in column** *z***. | The page number appears on line** *y* **and ends in column** *z***.**

Explanation: The job contains a NUMBER DJDE that defines the numbering of the output pages. InfoPrint XT might report the location of the page number as line *y*, column *z*, or both. *x*, *y*, and *z* are integer values.

OVERPRINT - **The data stream converter will** *print | ignore | merge* **overprint lines.**

Explanation: Specifies whether the OVERPRINT option is PRINT, IGNORE, or MERGE.

OVERPRINT - **The data stream converter will print only the first line in each group of overprint lines.**

Explanation: Specifies that the OVERPRINT option is PRINT2.

PALETTE - **The data stream converter does not support the PALETTE DJDE.**

Explanation: A PALETTE DJDE, which InfoPrint XT does not support, is present.

PMODE - **The print mode will be** *portrait | landscape***.**

Explanation: Specifies whether the print mode is *portrait* or *landscape*.

RAUX - **The data stream converter selected the alternate paper source.**

Explanation: Specifies that InfoPrint XT pulls one sheet from the alternate paper tray.

RFORM - **Overlay** *overlay_name* **will appear on the front of routing text pages.**

Explanation: Specifies that the AFP overlay *overlay_name* will print on all RTEXT pages.

ROFFSET - **The data stream converter will offset the current sheet.**

Explanation: An ROFFSET statement is present. InfoPrint XT offsets the current sheet.

RPAGE - **The current logical page will move to the** *front | back* **of a new sheet.**

Explanation: This message occurs when the job specifies RPAGE WHEN=TOP and the SIDE= parameter forces the start of a new sheet. InfoPrint XT indicates whether the page moves to the *front* or *back*.

RPAGE - **The current logical page will move to the back of the current sheet.**

Explanation: This message occurs when a specification of SIDE=NEXT or SIDE=BACK forces output to the back of the current sheet.

RPAGE - **The next logical page will begin on the** *front | back* **of a new sheet.**

Explanation: This message occurs when the job specifies RPAGE WHEN=BOTTOM and the SIDE= parameter forces the start of a new sheet. InfoPrint XT indicates whether the page begins on the *front* or the *back* of the sheet.

RPAGE - **The next logical page will begin on the back of the current sheet.**

Explanation: This message occurs when a specification of SIDE=NEXT or SIDE=BACK does not force a new sheet.

RPAGE - **The remaining text for the logical page will move to the** *front | back* **of a new sheet.**

Explanation: This message occurs when the job specifies RPAGE WHEN=NOW and the SIDE= parameter forces the start of a new sheet. InfoPrint XT indicates whether the remaining text moves to the *front* or *back* of a new sheet.

RPAGE - **The remaining text for the logical page will move to the back of the current sheet. The data stream converter** *will | will not* **offset the page.**

Explanation: This message occurs when a specification of SIDE=NEXT or SIDE=BACK does not

force a new sheet. InfoPrint XT indicates whether the page offsets.

RRESUME - Printing will resume. The RRESUME record *will | will not* **print.**

Explanation: Specifies whether the current record prints when printing resumes.

RSTACK - The data stream converter found the end of the current report. The RSTACK record *will | will not* **print.**

Explanation: The starting print environment is now in effect. The message specifies whether the RSTACK record prints.

RSUSPEND - The data stream converter will suspend printing until it finds the end of report or an RRESUME record. The RSUSPEND record *will | will not* **print.**

Explanation: Specifies whether print retention starts with the current record.

RTEXT - A DJDE provided the following routing text information:

Report copy	line no.	column no.	Xerox font name	AFP name(s)
copy_num	*line_num*	*column_num*	*xrx_name*	*afp_name*
copy_num	*line_num*	*column_num*	*xrx_name*	*afp_name*
:				
:				

text

Explanation: *copy_num* identifies the report copy. *line_num* identifies the line number of the report. *column_num* identifies the column number of the report. *xrx_name* identifies the name of the Xerox font. *afp_name* identifies either a coded font name or a code page and character set pair.

RTEXT - The report will not include routing text.

Explanation: The data stream converter found an RTEXT=NONE DJDE.

SAVE - The data stream converter does not support the SAVE DJDE.

Explanation: A SAVE DJDE, which InfoPrint XT does not support, is present.

SEFFNT - The data stream converter does not support the SEFFNT DJDE.

Explanation: A SEFFNT DJDE, which InfoPrint XT does not support, is present.

SEFMAP - The data stream converter does not support the SEFMAP DJDE.

Explanation: A SEFMAP DJDE, which InfoPrint XT does not support, is present.

SHIFT - The data stream converter will ignore SHIFT DJDEs.

Explanation: The data stream converter found a SHIFT DJDE, but the conversion parameters include **xhonorshift=no**. **xhonorshift=no** is the default. InfoPrint XT does not shift the output.

SHIFT - Printing on subsequent sheets will not shift *up or down | to the left or right***.**

Explanation: The data stream converter found a SHIFT=NO DJDE, which prevents the output from shifting in the directions specified.

SHIFT - Printing on subsequent sheets will not shift on front sides, but will shift *bk_inches* **inches (***bk_pels* **pels)** *to the left | to the right | up | down* **on back sides.**

Explanation: A SHIFT DJDE specified that front-side printing does not shift. Back-side printing does shift *bk_inches* inches in the direction specified.

SHIFT - Printing on subsequent sheets will shift *fr_inches* **inches (***ft_pels* **pels)** *to the left | to the right | up | down* **on front sides, but will not shift on back sides.**

Explanation: A SHIFT DJDE specified that front-side printing shifts *fr_inches* inches in the direction specified. Back-side printing does not shift.

SHIFT - Printing on subsequent sheets will shift *fr_inches* **inches (***ft_pels* **pels)** *to the left | to the right | up | down* **on front sides, and** *bk_inches* **inches (***bk_pels* **pels)** *to the left | to the right | up | down* **on back sides.**

Explanation: A SHIFT DJDE specified that front-side printing shifts *fr_inches* inches and *bk_inches* inches on back sides, in the directions specified.

SIDE -   **The current logical page will begin on the** *front* | *back* **of a new sheet.**

Explanation: This message occurs when the SIDE= specification forces the start of a new sheet. InfoPrint XT indicates whether the page begins on the *front* or *back* of a new sheet.

SIDE -   **The current logical page will begin on the back of the current sheet. The data stream converter** *will* | *will not* **offset the page.**

Explanation: This message occurs when the SIDE= specification does not force a new sheet. InfoPrint XT indicates whether the page offsets.

STOCKS -   **A DJDE specified STOCKSET** *stk_name*.

Command	Stock Reference	Cluster Name	Media Source
INIFEED	*stk_ref*	*cl_name*	*mmc_tray*
SYSPAGE	*stk_ref*	*cl_name*	*mmc_tray*
ASSIGN	*stk_ref*	*cl_name*	*mmc_tray*

Explanation: STOCKSET correlates each stock reference, *stk_name*, to a cluster name, *cl_name*. The reformatted cluster database in effect then correlates each cluster, *cl_name*, to an input media source tray, *mmc_tray*. INIFEED identifies the stock that InfoPrint XT uses if no OUTPUT FEED or OUTPUT DJDE commands are in effect. SYSPAGE identifies the stock that InfoPrint XT uses for Xerox system-generated pages, such as the accounting pages at the ends of reports. ASSIGN associates stock references with cluster names.

STOCKS -   **The data stream converter will ignore the STOCKS DJDE.**

Explanation: A STOCKS DJDE is present. However, the value of the **xclb** conversion parameter is **none**. Or, **xclb** is not present and InfoPrint XT did not find the default **clustr.alb** in the reformatted Xerox resource directory. Verify that the **xclb** parameter has the correct value.

TOF -   **The new top of form (TOF) line number is** *number*.

Explanation: Specifies the line number for the top of the form.

XMP -   **The data stream converter does not support the XMP DJDE.**

Explanation: An XMP DJDE, which InfoPrint XT does not support, is present.

XSHIFT -   **The data stream converter will ignore XSHIFT DJDEs.**

Explanation: The data stream converter found an XSHIFT DJDE, but the conversion parameters include **xhonorshift=no**. **xhonorshift=no** is the default. InfoPrint XT does not shift the output.

XSHIFT -   **Printing on subsequent sheets will not shift** *up or down* | *to the left or right*.

Explanation: Specifies that the data stream converter found an XSHIFT=NO DJDE, which prevents the output from shifting in the directions specified.

XSHIFT -   **Printing on subsequent sheets will not shift on front sides, but will shift** *bk_inches* **inches (***bk_pels* **pels)** *to the left* | *to the right* | *up* | *down* **on back sides.**

Explanation: An XSHIFT DJDE specified that front-side printing does not shift. Back-side printing shifts *bk_inches* inches in the direction specified.

XSHIFT -   **Printing on subsequent sheets will shift** *fr_inches* **inches (***ft_pels* **pels)** *to the left* | *to the right* | *up* | *down* **on front sides, but will not shift on back sides.**

Explanation: An XSHIFT DJDE specified that front-side printing shifts *fr_inches* inches in the direction specified. Back-side printing does not shift.

XSHIFT -   **Printing on subsequent sheets will shift** *fr_inches* **inches (***ft_pels* **pels)** *to the left* | *to the right* | *up* | *down* **on front sides, and** *bk_inches* **inches (***bk_pels* **pels)** *to the left* | *to the right* | *up* | *down* **on back sides.**

Explanation: An XSHIFT DJDE specified that front-side printing shifts *fr_inches* inches and *bk_inches* inches on back sides, in the directions specified.

Notices

This information was developed for products and services offered in the U.S.A.

InfoPrint Solutions Company may not offer the products, services, or features discussed in this document in other countries. Consult your local InfoPrint Solutions Company representative for information about the products and services currently available in your area. Any reference to an InfoPrint Solutions Company product, program, or service is not intended to state or imply that *only* that InfoPrint Solutions Company product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any InfoPrint Solutions Company intellectual property rights may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-InfoPrint Solutions Company product, program, or service.

References in this document to InfoPrint Solutions Company products, product features, programs or services do not imply that InfoPrint Solutions Company intends to make such products, product features, programs or services available in all countries in which InfoPrint Solutions Company operates or does business.

InfoPrint Solutions Company may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

InfoPrint Solutions Company, LLC
6300 Diagonal Hwy 002J
Boulder, CO 80301-9270
U.S.A.

For license inquiries regarding double-byte (DBCS) information, contact the InfoPrint Solutions Company Intellectual Property Department in your country or send inquiries, in writing, to:

InfoPrint Solutions Company, LLC
6300 Diagonal Hwy 002J
Boulder, CO 80301-9270
U.S.A.

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law: INFOPRINT SOLUTIONS COMPANY PROVIDES THIS PUBLICATION ″AS IS″ WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. InfoPrint Solutions Company may make improvements and/or changes in the product(s) described in this publication at any time without notice.

Any references in this information to non-InfoPrint Solutions Company Web sites are provided for convenience only and do not in any manner serve as an

231

endorsement of those Web sites. The materials at those Web sites are not part of the materials for this InfoPrint Solutions Company product and use of those Web sites is at your own risk.

InfoPrint Solutions Company may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

InfoPrint Solutions Company, LLC
6300 Diagonal Hwy 002J
Boulder, CO 80301-9270
U.S.A.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by InfoPrint Solutions Company under terms of the InfoPrint Solutions Company Customer Agreement, InfoPrint Solutions Company International Program License Agreement or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurement may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-InfoPrint Solutions Company products was obtained from the suppliers of those products, their published announcements or other publicly available sources. InfoPrint Solutions Company has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-InfoPrint Solutions Company products. Questions on the capabilities of non-InfoPrint Solutions Company products should be addressed to the suppliers of those products.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

COPYRIGHT LICENSE:

This information contains sample application programs in source language, which illustrates programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to InfoPrint Solutions Company, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written.

These examples have not been thoroughly tested under all conditions. InfoPrint Solutions Company, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs.

Each copy or any portion of these sample programs or any derivative work, must include a copyright notice as follows:

© (your company name) (year). Portions of this code are derived from InfoPrint Solutions Company Sample Programs. © Copyright InfoPrint Solutions Company_enter the year or years_. All rights reserved.

If you are viewing this information softcopy, the photographs and color illustrations may not appear.

Programming interfaces

This publication primarily documents information that is NOT intended to be used as a Programming Interface of InfoPrint XT.

This publication also documents intended Programming Interfaces that allow the customer to write programs to obtain the services of InfoPrint XT. This information is identified where it occurs, either by an introductory statement to a chapter or section, or by this marking:

```
+ — — — — — — — — — - Programming Interface information — — — — — — — — — +

+ — — — — — — — End of Programming Interface information — — — — — - — — +
```

Trademarks

These terms are trademarks or registered trademarks of Ricoh Co., Ltd., in the United States, other countries, or both:
- Advanced Function Presentation
- AFP
- InfoPrint
- Infoprint®
- Intelligent Printer Data Stream
- IPDS
- Bar Code Object Content Architecture™
- Mixed Object Document Content Architecture
- MO:DCA
- Ricoh

These terms are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both:
- IBM
- IBM logo
- ibm.com®
- AIX
- Z/OS

If these and other IBM trademarked terms are marked on their first occurrence in this information with a trademark symbol (® or ™), these symbols indicate U.S.

registered or common law trademarks owned by IBM at the time this information was published. Such trademarks may also be registered or common law trademarks in other countries. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at www.ibm.com/legal/copytrade.shtml.

Adobe, the Adobe logo, PostScript, and the PostScript logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

UNIX is a registered trademark of The Open Group in the United States, other countries, or both.

Other company, product, or services names may be trademarks or service marks of others.

Glossary of selected InfoPrint Solutions Company terms

This glossary provides definitions of specialized terms that are used with InfoPrint XT for AIX, InfoPrint Manager for AIX, and InfoPrint ProcessDirector for AIX. This glossary does not include terms that non-technical dictionaries define, or that have no special meaning in information processing and printing.

A

actual destination.   In InfoPrint Manager, an object that represents the output device that does the printing or transmission function. See also *physical printer*, *printer device*; contrast with *logical destination*.

addressable point.   (1) In computer graphics, any point of a device that can be addressed. (2) Synonym for *pel*, or, in Xerox terminology, *dot*.

administrator.   A person responsible for administrative tasks, such as access authorization and content management. Administrators can also grant levels of authority to users.

In InfoPrint Manager or InfoPrint ProcessDirector, the person who creates and manages one or more components of a printing system, such as servers and actual destinations. InfoPrint Manager or InfoPrint ProcessDirector gives the administrators the authorization to perform some InfoPrint Manager or InfoPrint ProcessDirector operations, and access to certain information that is not available to operators or job submitters.

In InfoPrint XT, the person who performs configuration tasks.

Advanced Function Presentation.   The InfoPrint Solutions Company printing and presentation architecture.

Advanced Function Presentation data stream.   (1) A presentation data stream that is processed in AFP environments. MO:DCA-P is the AFP interchange data stream. IPDS is the AFP printer data stream. (2) A data stream that includes composed text, page segments, electronic overlays, form definitions, and fonts.

Advanced Interactive Executive (AIX).   A UNIX operating system developed by IBM that is designed and optimized to run on POWER microprocessor-based hardware such as servers, workstations, and blades.

AFP.   Advanced Function Presentation. The InfoPrint Solutions Company printing and presentation architecture.

AFP resource directory.   In InfoPrint XT, the directory in which it stores the AFP versions of Xerox printable resources. The AFP resource directory is one of these:

- **/var/pdxt/resources/common**
- **/var/pdxt/resources/***resgrp*
- */OtherDirectory*

AFP resource path.   One or more *AFP resource directories*.

AIX.   Advanced Interactive Executive.

American National Standards Institute.   (1) A private, nonprofit organization whose membership includes private companies, U.S. government agencies, and professional, technical, trade, labor, and consumer organizations. ANSI coordinates the development of voluntary consensus standards in the U.S. (2) An organization consisting of producers, consumers, and general interest groups that establishes the procedures by which accredited organizations create and maintain voluntary industry standards in the United States.

ANSI.   American National Standards Institute.

application program.   (1) A complete, self-contained program, such as an editor or electronic mail, that performs a specific task for the user, in contrast to system software, such as the operating system kernel, server processes, and program libraries. (2) In InfoPrint XT, a program that produces the Xerox print data set or file.

application exit.   (1) A user-written program that is given control during operation of a system function. (2) A program to which control is passed from an exit point. (3) In InfoPrint XT, a custom program that can modify the Xerox data before conversion, or modify the AFP generated by the data stream conversion process. InfoPrint XT also provides an application exit that you can use to capture detailed information about the data stream conversion process.

attribute.   (1) A property, quality, or characteristic whose value contributes to the specification of an element or program function. (2) In InfoPrint Manager, 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.

C

CLI.   Command line interface.

character set.   (1) A defined set of characters with no coded representation assumed that can be recognized by a configured hardware or software system. A character set might be defined by alphabet, language,

script, or any combination of these items. (2) An AFP font file that contains the raster patterns or outlines, identifiers, and descriptions of characters.

code page. A resource object containing descriptive information, graphic character identifiers, and code points corresponding to a coded graphic character set. A set of assignments, each of which assigns a code point to a character. Each code page has a unique name or identifier. Within a given code page, a code point is assigned to one character. More than one character set can be assigned code points from the same code page. See also *code point*.

code point. A unique bit pattern that can serve as an element of a code page or a site in a code table, to which a character can be assigned. The element is associated with a binary value. The assignment of a character to an element of a code page determines the binary value that will be used to represent each occurrence of the character in a character string. Code points are one or more bytes long. See also *code page*.

coded font. An AFP font file that associates a code page and a font character set. For double-byte fonts, a coded font associates more than one pair of code pages and font character sets.

command line interface (CLI). (1) A type of computer interface in which the input command is a string of text characters. (2) An interface that lets users enter commands on a command line, such as the command line of an AIX **dterm** or **aixterm** window. Contrast with *Graphical User Interface*.

common resource. In InfoPrint XT, resource files that are in the **/var/pdxt/resources/common** directory and the **/var/pdxt/resources/common/metrics** directory. These resources are the AFP resource files and metrics files that correspond to Xerox resources that you have loaded on the system. Contrast with *resource group*.

D

data stream. (1) The commands, control codes, data, or structured fields that are transmitted between an application program and a device such as printer or nonprogrammable display station. (2) All data sent through a data channel in a single read or a single write operation. (3) A continuous stream of data elements in transmission, or intended for transmission, in character or binary-digit form that use a defined format. (4) Records sent to the InfoPrint Manager or InfoPrint ProcessDirector server from host systems that generate the print data sets.

default document. In InfoPrint Manager, an object that represents default attribute values for a document in a job. Synonymous with *initial value document*.

destination. (1) Any point or location, such as a program, node, station, printer, or a particular terminal,

to which information is sent. (2) For InfoPrint Manager, see *actual destination, logical destination*.

document. (1) A machine-readable collection of one or more objects that represent a composition, a work, or a collection of data. (2) In InfoPrint Manager, an object representing a grouping of data in 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 in a job can contain printable data or a resource that is not printable.

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

Download input devices. The type of input devices that receives data sets from Download for z/OS. InfoPrint ProcessDirector provides several predefined Download input devices that you can use.

duplex printing. Printing on both sides of a sheet of paper, with the placement of the output images in a head-to-head format on the page. This places the top of one image at the same edge as the top of the next image. Synonymous with *normal duplex* printing. See also *tumble duplex* printing. Contrast with *simplex printing*.

E

electronic mail. Correspondence in the form of messages sent between workstations over a network. Synonymous with *e-mail*.

electronic overlay. An overlay that is in a library and that you or an application can request for a printing job. See also *overlay*.

e-mail. Electronic mail.

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

environment variable. (1) Any one of the variables that describe the way that an operating system runs and the devices that it recognizes. The operating system can supply the variable, or applications can define the variables. (2) A variable that is included in the current software environment and is therefore available to any called program that requests it.

error log. A data set or file in a product or system, in which the product or system stores error information for later access.

F

FCB.   Forms Control Buffer.

File Transfer Protocol (FTP).   (1) In TCP/IP, the application protocol that makes it possible to transfer data to and from host computers, and to use foreign hosts indirectly. (2) In the Internet suite of protocols, an application layer protocol that uses TCP and Telnet services to transfer bulk-data files between machines or hosts.

font.   (1) A collection of characters of a given typeface and size. (2) Used generically to mean the collection of coded fonts, character sets, and code pages.

form.   In AFP, a physical sheet of paper on which data prints. Synonymous with *physical page* and *sheet*. See also *medium*.

form definition.   An AFP resource that defines the characteristics of the form, which include:

- Overlays required, if any
- Paper source (for cut-sheet printers)
- Duplex printing
- Text suppression
- Position of composed-text data on the form

Forms Control Buffer.   (1) An area of virtual storage in a printer control unit that contains the binary image of an IBM 3211 printer carriage control tape, the binary image itself, or a member of the z/OS system PDS SYS1.IMAGELIB, which contains such an image in the form of an assembled and linkedited CSECT. FCBs control vertical and horizontal placement of data on the page by assigning carriage control channels to line numbers, and designating a line number as the bottom of the form. (2) A buffer for controlling the vertical format of printed output. The FCB is a line-printer control that is similar to the punched-paper, carriage-control tape. For Advanced Function Presentation printers, the forms control buffer is replaced by the page definition.

FTP.   File Transfer Protocol.

G

globalID.   Global job identifier.

global job identifier.   An unambiguous job identifier. In InfoPrint Manager , it is the name of the server that manages the job, followed by a colon, **:**, and a 10-digit, generated integer. This ID uniquely identifies the job in the InfoPrint Manager server.

graphics.   (1) Charts, pictures, illustrations, and tables created from fundamental drawing units such as lines, curves, and polygons. (2) Images, text, or a combination of both that you can put on an overlay by name.

graphical user interface (GUI).   A type of computer interface that presents a visual metaphor of a real-world scene, often of a desktop, by combining high-resolution graphics, pointing devices, menu bars and other menus, overlapping windows, icons and the object-action relationship. Contrast with *command line interface*.

H

Hot folder input devices.   The directories that the system monitors. When a print job is copied or sent to a Hot folder, the system notices it and begins to process it. InfoPrint ProcessDirector provides several predefined Hot folder input devices that you can use

I

icon.   (1) A graphical representation of a choice or object for the user to select. An icon can represent something a user wants to work with, such as a document, file, application, or user-created object or list. An icon can also represent an action a user wants to do. (2) A graphical symbol displayed on a screen that a user can select to call a function or software application.

image.   (1) An electronic representation of an original document or picture produced by a scanning device or created from software. (2) A pattern of toned and untoned pels that form a picture.

image cell.   A portion of an image that saves storage by defining only part of a raster pattern. Each image cell must also contain information that defines the placement of its raster pattern in the complete image. An image cell can repeat so that it fills a defined area.

InfoPrint Manager.   (1) A solution of software products and hardware products. The solution 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 Manager takes documents from creation to the published and kitted product. (2) In InfoPrint Manager and InfoPrint XT software publications, InfoPrint Manager for AIX or any of its components.

InfoPrint Manager Control.   The administration and management component of InfoPrint Manager for AIX. It runs on AIX and provides a complete set of system administrator functions and operator functions to control all aspects of a print environment. This includes job-submitter printing functions for submitting jobs and controlling them.

InfoPrint Manager Library.   A component of InfoPrint Manager for AIX. InfoPrint Manager Library is a document archival and retrieval system in which you store job tickets and their associated resource files (graphics, fonts, images, and PostScript data). You can retrieve these archived items and reuse them.

InfoPrint Manager for AIX. The software component of InfoPrint Manager. 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 packing of the printed product.

InfoPrint Manager Network. The local area network, which runs TCP/IP protocol, and that InfoPrint Manager uses to communicate among servers, clients, and output devices.

InfoPrint Manager Scan. The component of InfoPrint Manager for AIX through which you can scan images as TIFF files for inclusion with jobs that InfoPrint Manager submits from a Windows workstation.

InfoPrint Manager Submit. The component of InfoPrint Manager for AIX through which you can submit jobs with a job ticket from a Windows workstation or a Macintosh workstation.

InfoPrint ProcessDirector. A print manufacturing system architecture that lets you manage all aspects of your printing processes. Whether your printing environment is small, with a single printer, or large, with many printers, InfoPrint ProcessDirector can grow as your business needs grow.

input devices. The InfoPrint ProcessDirector objects through which InfoPrint ProcessDirector receives jobs. Input devices receive input files, create jobs, and submit them to the InfoPrint ProcessDirector system for processing.

initial value document. Synonym for *default document*.

Intelligent Printer Data Stream (IPDS). (1) An all-points-addressable (APA) data stream that enables users to position text, images, and graphics at any defined point on the printed page. (2) Information that the host sends to 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 the data (text, image, graphics, and bar codes) and controls the definition of how to present the data. IPDS provides a device-independent interface to control and manage APA printers.

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

IPDS. Intelligent Printer Data Stream.

ISO. International Organization for Standardization.

J

JCL. Job control language.

JES. Job Entry Subsystem.

job control language (JCL). A language of control statements used to identify a computer job or describe its requirements to an operating system.

Job Class. A Job property.

Job Destination. A Job property.

Job Entry Subsystem (JES). (1) An IBM licensed program that receives jobs into the system and processes all output data that is produced by jobs. (2) A z/OS subsystem that receives jobs into the system, converts them to an internal format, selects them for execution, processes their output, and purges them from the system.

Job Form. A Job property.

job ID. A local or global identifier that identifies a job to a job submitter, administrator, operator, or to InfoPrint Manager or InfoPrint ProcessDirector, to z/OS. See *local job identifier, global job identifier*.

Job Number attribute. Shows a unique number that identifies the job on the system. The format of the number depends on whether the job is a parent job or a job that has no child jobs, or if the job is a child job. For example, a child job contains a decimal point such as 1000023.100. InfoPrint ProcessDirector assigns the value of this property when the input device submits the input file for job processing. You cannot change the value.

jogging. A function that allows the printed output pages to be offset for easy separation of the print jobs. See also *offset stacking*.

L

landscape orientation. The position of a printed page on a sheet of paper, so that the longer edges of the paper are the top and bottom of the page, and the shorter edges of the paper are the sides of the page. Contrast with *portrait orientation*.

line printer. A device that prints individual characters in sequence from left to right, and top to bottom. Contrast with *page printer*.

local job identifier. In InfoPrint Manager or InfoPrint ProcessDirector, a job identifier that the server automatically generates, which maps the job to the user who submitted it. InfoPrint Manager or InfoPrint ProcessDirector maps a local job ID to a global job ID.

logical destination. In InfoPrint Manager, an object to which users or programs submit jobs. The destination routes the jobs to one or more actual destinations that represent output devices, such as printers, electronic mail systems, or fax machines.

logical page. Synonymous with *page*.

logical printer. In InfoPrint Manager, a type of logical destination. The logical printer routes jobs to one or more physical printers, which represent printer devices.

LPD. Line printer daemon. The type of input devices that receive jobs that are submitted using the LPD protocol.

M

medium. In InfoPrint Manager or InfoPrint ProcessDirector, an object representing the physical material on which the job prints.

metrics directory. In InfoPrint XT, the directory in which it stores the metrics files for all the Xerox resources that you load. The metrics directory is one of these:

- **/var/pdxt/resources/common/metrics**
- **/var/pdxt/resources/**resgrp**/metrics**
- **/OtherDirectory/metrics**

message catalog. (1) A file that contains all the possible messages that can display during the processing done by an application. (2) An indexed table of messages. Two or more catalogs can contain the same index values. The index value in each table refers to a different language version of the same message.

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

Mixed Object Document Content Architecture-Presentation (MO:DCA-P). A subset of MO:DCA that defines presentation documents.

MO:DCA. Mixed Object Document Content Architecture.

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

monospaced font. (1) A font in which the spacing of the characters does not vary. (2) A font in which the graphic characters have uniform character increments. Contrast with *proportionally-spaced font*.

multiple-up printing. The arrangement of more than one page of data on a single sheet of paper. Synonymous with *N_UP*.

N

N_UP. (1) The partitioning of a side of a sheet into a fixed number of equal size partitions. For example, 4-up divides each side of a sheet into four equal partitions. (2) Pertaining to the number of forms that you put together in a layout. Typical layouts are 2_UP, 4_UP, 8_UP, 16_UP, and so on. You specify N_UP printing to use the maximum area of the print sheet. Synonymous with *multiple-up printing*.

non-process runout (NPRO). (1) An operation that moves paper or forms through the paper path of a printer without printing. (2) The process of removing the last few sheets of a job that has finished printing on a continuous-forms printer. Typically, the last sheets of a job remain in the printer, and the next job forces the last sheets of the previous job out of the printer. This procedure saves time when printing is continuous, but when a delay exists between jobs, it is necessary to remove the end of the last job. After a period of time, as specified by an NPRO parameter, the printer clears out the last sheets of the job.

normal duplex printing. Duplex printing for sheets that are bound on the long edge of the paper, regardless of whether the printing is in portrait orientation or landscape orientation. Contrast with *tumble duplex printing*.

NPRO. Non-process runout.

O

offset stacking. For certain printer devices, a function through which the printer can offset the printed output pages for easy job separation.

orientation. (1) In printing, the number of degrees an object is rotated relative to a reference; for example, the orientation of an overlay relative to the logical page origin, or the orientation of printing on a page relative to the page coordinates. Orientation usually applies to blocks of information. Character rotation applies to individual characters. (2) The angle between the top or bottom edge of the page and the baselines of text, as measured in a clockwise direction. (3) The rotation of an element relative to a fixed reference.

operator. In InfoPrint Manager or InfoPrint ProcessDirector, and InfoPrint XT, the person responsible for printer devices. Also, this person does a subset of tasks for InfoPrint Manager or InfoPrint ProcessDirector, queues and actual destinations, and does some job-related tasks.

overlay. (1) A resource object that can contain text, image, graphics, and bar code data. Overlays define their own environment and are often used as electronic forms. (2) A collection of predefined static data, such as

lines, shading, text, boxes, or logos that can merge with variable data on a sheet while printing.

P

page.   (1) In AFP, a data stream object delimited by a Begin Page structured field and an End Page structured field. A page can contain presentation data such as text, image, graphics, and bar code data. (2) A collection of data that can print on a physical sheet of paper. Synonymous with *logical page*.

page definition.   (1) An AFP resource that defines the rules for transforming line data and XML data into MO:DCA-P data and text controls. (2) An AFP resource that contains a set of formatting controls for printing logical pages of data. It includes controls for the number of lines per sheet, font selection, print direction, and mappings for individual data fields to positions on the printed sheet.

page printer.   Any of a class of printers that accepts composed pages, constructed of composed text and images, among other things, and that prints any sequence of pels in any order on the page. Contrast with *line printer*.

page segment.   (1) An AFP resource object that contains text, image, graphics, or bar code data that can be positioned on any addressable point on a page or an electronic overlay. (2) An AFP resource prepared before formatting and included during printing. Synonymous with *segment*. Compare with *electronic overlay*.

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

pattern.   Synonymous with *raster pattern*.

PDF.   Portable Document Format.

pel.   Short for *picture element*. The smallest area that the printer can tone individually. Synonymous with *addressable point* or *dot* in Xerox terminology.

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

physical page.   Synonymous with *form*. Contrast with *logical page*.

physical printer.   In InfoPrint Manager, a type of actual destination that represents a printer device. See *printer device*.

picture element.   See *pel*.

point.   (1) A unit of measurement whose main purpose is to describe type sizes. Each pica contains 12 points, with approximately 72 points to an inch. (2) In the Didot point system, a point is 0.0148 of an inch. Each cicero contains twelve Didot points.

Portable Document Format.   A standard specified by Adobe Systems, Incorporated, for the electronic distribution of documents. PDF files are compact; can be distributed globally via e-mail, the Web, intranets, or CD-ROM; and can be viewed with the Acrobat Reader.

portrait orientation.   (1) In printers, text and images that are printed parallel to the shorter side of the form. (2) The position of a printed page on a sheet of paper, so that the shorter edges of the paper are the top and bottom of the page, and the longer edges are the sides of the page. Contrast with *landscape*.

print fidelity.   A function of InfoPrint XT that measures the length of a Xerox print line and makes sure that the corresponding AFP line it generates is the same length.

print job.   The data to print, with specific conversion parameters and print options that you submit to InfoPrint Manager or InfoPrint ProcessDirector, for processing. A print job is similar to a *report*, which is the Xerox term used for the job.

Print Services Facility (PSF).   (1) An InfoPrint Solutions Company licensed program that produces printer commands from the data sent to it. (2) A program that manages and controls the input data stream and output data stream required by supported printers.

printer device.   The actual printer hardware, such as an InfoPrint 4100. See also *physical printer*.

proportionally-spaced font.   A font in which the characters are contained in character cells that vary with the size of each character. Fonts of this type provide for even spacing between printed characters, and eliminate excess white space around narrow characters, such as the letter "i". Contrast with *monospaced font*.

PSF.   Print Services Facility.

R

raster pattern.   A series of pels arranged in scan lines to form an image. The toned or untoned status of each pel creates an image. A digitized raster pattern is an array of bits. The on or off status of each bit determines the toned or untoned status of each pel.

resource.   In the AFP architecture, a collection of printing instructions and sometimes data that consists entirely of AFP structured fields. You store a resource as a member of a library, and InfoPrint Manager can call the resource when it needs it. Coded fonts, font

character sets, code pages, page segments, overlays, form definitions, and page definitions are all AFP resources.

reformatted Xerox resource path.   Synonymous with *metrics directory*.

Requested printer.   A Job property.

resource group.   In InfoPrint XT, resource files that are in the **/var/pdxt/resources/***resgrp* directory, the **/var/pdxt/resources/***resgrp***/metrics** directory and the **/var/pdxt/resources/***resgrp***/xrxres** directory. These resources are the AFP resource files, the metrics files that correspond to Xerox resources and copies of the original Xerox resources that you have loaded on the system. Using resources groups, you can load several versions of Xerox resources that have the same names, but different internal characteristics. Contrast with *common resource*.

root user.   (1) In Linux and UNIX operating systems, a user who has superuser authority and root privileges. The user identifier (UID) for the root user is 0. (2) In the UNIX environment, the system user with the most authority, who can log in and enter restricted commands, shut down the system, and edit or delete protected files. Synonymous with *superuser*.

rotation.   The number of degrees to rotate a character relative to the print direction. One of four directions that define the orientation of text relative to a sheet, page, overlay, text block, or page segment.

S

section.   A portion of a double-byte code page that consists of 256 consecutive entries. The first byte of a two-byte code point is the section identifier. A code-page section is also called a code-page ward in some environments. See also *code page* and *code point*.

section identifier.   A value that identifies a section. Synonymous with *section number*.

section number.   A value that identifies a section. Synonymous with *section identifier*.

segment.   Synonymous with *page segment*.

server.   In InfoPrint Manager, the object that accepts configuration, management, and printing requests, does the requested operations, and sends responses back as a result of the operations.

sheet.   Synonymous with *form*.

simplex printing.   Pertaining to printing on only one side of the paper. Contrast with *duplex printing*.

SMIT.   System Management Interface Tool.

SPOOL (Simultaneous Peripheral Operations On-line).   Auxiliary storage used as a buffer storage to reduce processing delays when transferring data between peripheral equipment and the processors of a computer.

standard error (STDERR).   In the UNIX operating system, the primary destination of the error messages that a command or a program generates. Standard error corresponds to file descriptor two; **fd2**.

standard input (STDIN).   In the UNIX operating system, the primary source of data that enters into a command. Standard input comes from the keyboard unless you use redirection or piping, in which case the input can be from a file, or from the output of another command. Standard input corresponds to file descriptor zero; **fd0**.

standard output (STDOUT).   In the UNIX operating system, the primary destination of data that comes from a command. Standard output goes to the display unless you use redirection or piping, in which case the output can go to a file, or to another command. Standard error corresponds to file descriptor one; **fd1**.

STDERR.   Standard error.

STDIN.   Standard input.

STDOUT.   Standard output.

structured field.   A self-identifying string of bytes and either its data or parameters; the basic building blocks of AFP resources and formatted AFP output.

superuser.   Synonym for *root user*.

System Management Interface Tool (SMIT).   In the AIX operating system, an interface tool for installation, maintenance, configuration, and diagnostic tasks. Through SMIT, you can do tasks without entering any commands.

T

text orientation.   A description of the appearance of text as a combination of inline directions, baseline directions, and character rotation.

tumble duplex printing.   Duplex printing for sheets that are to be bound on the short edge of the paper, regardless of whether the printing is portrait or landscape. Contrast with *normal duplex printing*.

W

ward.   A deprecated term for section.

working directory.   In InfoPrint XT, the main directory that InfoPrint XT uses when it creates subdirectories for a specific job, or subdirectories for resources. The

default working directory is **/var/pdxt**. You can change the default working directory with the **PDXTWORKDIR** environment variable.

X

Xerox resource directory. In InfoPrint XT, the directory in which it stores copies of all the Xerox resources that you load successfully. The Xerox resource directory is one of these:

- **/var/pdxt/resources/common/xrxres**
- **/var/pdxt/resources/***resgrp***/xrxres**
- */OtherDirectory***/xrxres**

Z

z/OS. An IBM operating system for the IBM zSeries family of enterprise servers that includes and integrates functions previously provided by many IBM software products (including the MVS and OS/390 operating systems). z/OS is an open, secure operating system for the IBM zSeries family of enterprise servers, complies with industry standards, is enabled for network computing and e-business, and supports technology advances in networking server capability, parallel processing, and object-oriented programming.

Glossary of selected Xerox terms

C

CMD. The file type, or extension, of a Xerox command file. These text files contain command-language statements for groups of related commands. The commands can do tasks, such as setting up a printing environment and running a specific job. Then, the operator can run all the commands in the CMD file by entering its name as a single command, rather than having to enter all the commands individually.

CME. Copy Modification Entry.

Copy Modification Entry (CME). A Xerox page description language (PDL) construct that is present on the hard disk of the Xerox LPS printer, such as an 8700, a 9790, or a 4050. A CME contains the text changes or font changes to make at a specific location on the page. The change can occur on all copies of a job, or only on specific copies. For example, you can use a CME to replace or highlight text on line eight of page three, on the second copy of that page.

copy-sensitive. A report that has multiple, collated copies, with CMEs, FORMS, or BFORMs that apply to specific copies. For example, you can request three copies of a particular report and specify that copy one of the report use CME1, and that copies two and three use CME2. Likewise, in a report with six copies, you can request that FORM1 be printed on copies one through four, and that BFORM2 be printed on the backs of copies three through six. The Xerox LPS processes copy-sensitive CMEs only in the offline environment. In online jobs, it ignores copy-sensitive specifications for CMEs, and it applies the CMEs to all the copies. You can specify copy-sensitive FORMS and BFORMs for both online and offline jobs.

D

DJDE. Dynamic Job Descriptor Entry.

Dynamic Job Descriptor Entry. Commands in an input file for a Xerox LPS printer. The Xerox printer uses these commands to dynamically modify the printing environment; for example, DUPLEX, COPIES, COLLATE, FORMS, and SHIFT are representative of page-oriented commands. InfoPrint XT supports the majority of the common DJDE commands.

downloadable PDE. A DJDE that begins with 'FORMAT=*' and that contains a list of fonts in a binary format. Xerox developed the downloadable PDE for use with early versions of Xerox printer software. Although the FONTS DJDE currently replaces it, later Xerox printer software versions still support the downloadable PDE. XICS and HFDL programs can optionally generate downloadable PDEs when producing metacode output.

Metacode produced by customer-written programs might also contain the 'FORMAT=*' DJDE.

E

Electronic Printer Image Construction (EPIC). A Xerox host-resident software product (z/OS/ and z/VM) that transforms graphics files to Xerox compressed raster image format for printing on an LPS printer equipped with the graphics handling option (GHO). Interfaces are provided to Dassault System of America's CADAM, ISSCO's DISSPLA/TELL-A-GRAF, SAS Institute's SAS/Graph, GDDM, and DCF.

EPIC. Electronic Printer Image Construction.

F

FDL. Forms Description Language.

FNT. The file type, or extension, of a Xerox font file. InfoPrint XT converts Xerox FNTs to AFP fonts.

form. A Xerox form is a collection of predefined data that is on the printer hard disk, such as lines, shading, graphics, and text, which can merge with variable data on a sheet while printing.

Forms Description Language (FDL). A command-oriented language that enables the user to create forms by specifying such things as page orientation, font selection, and rules. Customers use FDL commands by inputting them through the Xerox LPS printer console. FDL is also the Xerox LPS compiler task that creates FRMs from FSLs. InfoPrint XT does not use FSL commands in data-stream conversion. Instead, it uses the actual form, as specified in an FRM file.

Forms Source Library (FSL). A file that contains FDL source statements, which define one or more electronic forms. InfoPrint XT does not use FSLs during data-stream conversion.

FRM. The file type, or extension, of a Xerox forms file. InfoPrint XT converts Xerox FRMs to AFP overlays.

FSL. Forms Source Library.

G

GHO. Graphics Handling Option.

Graphics Handling Option (GHO). A collection of hardware and software that enables a Xerox LPS printer to print encoded, digitized graphic images.

H

HFDL. Host Forms Description Language.

Host Forms Description Language (HFDL). A Xerox host-resident software product (on z/OS and z/VM) that customers use to create electronic forms for Xerox LPS printers. The printer software (microcode) included with the Xerox LPS printer includes a printer-resident version of the software.

I

IMG. The file type, or extension, of a Xerox image file. InfoPrint XT converts Xerox IMGs to AFP page segments.

inline resources. In a Xerox printing environment, all resources, such as fonts and graphics, are on the Xerox printer. Xerox printers can accept jobs that specify FILE or GRAPHICS DJDEs, which cause new resources to load on the printer. In some cases, the incoming job contains no print data, but rather contains resources that load on the printer when the job runs.

inverse landscape orientation. The position of printed data on a sheet of paper, 180° from standard landscape orientation for a device.

inverse portrait orientation. The position of printed data on a sheet of paper, 180° from standard portrait orientation for a device.

J

JDE. Job Descriptor Entry.

JDL. Job Description Library.

Job Descriptor Entry (JDE). A set of print-job characteristics grouped together to represent the processing requirements for a specific print job. These are also known as job command sets. You can define one of the JDEs as the default job descriptor entry. You can then use this to establish a default print environment, which DJDE statements embedded in the actual print job can then dynamically alter.

Job Descriptor Library. The object file created by compiling the JSL, which contains one or more JDEs to use on a Xerox LPS printer.

JSL. Job Source Library.

Job Source Library (JSL). A Xerox LPS printer source file that contains statements that define the characteristics of one or more print environments (JDEs), such as tape formats for tape to print, logical processing requirements, and output formats (COPIES, OFFSET, DUPLEX, SHIFT, FORMS, and so forth). To run Xerox print jobs, the JSL must first be translated to an object form (compiled) JDL by the printer control unit. InfoPrint XT does not use JSL commands in data stream conversion.

L

Laser Printing System (LPS). A class of Xerox cut-sheet production printers that accept LCDS and metacode jobs. Most of the LPS printers, such as the 4635, are in the DocuPrint series of printers.

LCDS. Line Conditioned Data Stream.

LGO. The file type, or extension, of a Xerox logo file. InfoPrint XT converts Xerox LGOs to AFP page segments.

LIB. The file type of a Xerox 80-byte text file, or a cluster library file (not in 80-byte text format). InfoPrint XT processes and uses information in the CLUSTR.LIB file. This file correlates clusters, which are individual paper drawers or groups of paper drawers, with names of paper drawers or paper drawer groups. STK files contain the name definitions.

Line Conditioned Data Stream. Line data with embedded DJDEs that specify formatting instructions for the data.

line data. A data stream format that contains standard text data and impact printer controls, such as channels and carriage controls. Line data contains no metacodes or DJDEs.

logical page. An imaginary rectangular section of a physical side of a sheet. Using the BEGIN command, Xerox print jobs can specify that several logical pages exist on each physical page. Xerox data streams typically use skip-to-channel-one carriage controls to jump from one logical page to the next. When data processing finishes for all the logical pages on one side, the next skip-to-channel-one carriage control causes the printer to jump to the first logical page on the next side.

logical processor commands. Special Xerox commands that look for predefined character strings or character-string changes in the input data, and take various kinds of action when one of the strings is found. The logical processor commands include:

BANNER
Detects banner pages. It might use some of the information about the banner pages for accounting purposes, or it might delimit reports in a print job.

BDELETE
Deletes specified blocks from offline data to prevent them from printing.

BSELECT
Selects specified blocks from offline data to cause them to print.

RAUX Pulls a single sheet of paper from the auxiliary paper tray.

RDELETE
Deletes specified records from offline data to prevent them from printing.

RFEED Dynamically specifies a cluster of input paper drawers.

ROFFSET
Causes the paper in the output tray to jog.

RPAGE
Moves the next or current logical page to the back of the current sheet, or to the front or back of the next sheet.

RRESUME
Resumes printing after a group of records when the contents of the first and last records are known, but the contents of the records between them are not.

RSELECT
Selects specified records from offline data to cause them to print.

RSTACK
Delimits reports in a print job.

RSUSPEND
Prevents printing of a group of records when the contents of the first and last records are known, but the contents of the records between them are not.

LPS. Laser Printing System.

M

metacode data stream. A data stream that contains embedded metacodes. It might or might not include DJDEs. Some Xerox host system software products, such as XICS, produce output with embedded metacodes. Additionally, some Xerox customers have written applications that embed metacodes in the print file.

metacodes. Metacodes are a set of reserved character codes that convey formatting instructions to the printer. The metacode format is the native language of the Xerox LPS printer.

N

non-printable resource. In InfoPrint XT, a Xerox CMD, CME, JDL, LIB, PDE, STK, or TST file from which InfoPrint XT creates a metrics file when you load the resource.

O

offline environment. In an offline printing environment, the Xerox printer receives the incoming data from a tape drive directly attached to the printer, rather than from a channel-attached host. This environment requires operator intervention to send the data to the printer.

online environment. In an online environment, the printer receives the incoming data directly from a channel-attached host. This environment requires no operator intervention to send the data to the printer.

OTEXT. A type of job that contains messages for the operator that display on the console of the printer. For example, the message might specify the type of paper to load.

P

Page Description Entry (PDE). A set of statements that define formatting information for each page of a print job, including page orientation, starting print line, and fonts.

PDE. Page Description Entry.

PDL. Print Description Language.

PDL compiler. A printer, workstation, or host-based program that you use to translate PDL source commands to objects usable by the Xerox LPS.

Print Description Language (PDL). Statements that define the characteristics of print jobs, such as tape formats for tape to print, logical processing requirements, and output formats. You use these statements to create CMEs, PDEs, JDLs, and so on.

printable resource. In InfoPrint XT, a Xerox FNT, FRM, IMG, or LGO file from which InfoPrint XT creates both a metrics file, and one or more AFP resource files when you load the resource.

R

report. In Xerox terminology, a logical subset of the data in a Xerox print job. Each print job might consist of a single report, or might contain several reports. Delimiter pages might separate reports in the printed output. Each report might also end with an accounting information page. In the input data stream, character strings defined by the RSTACK or BANNER command serve to separate the reports.

resource. See *non-printable resource* and *printable resource*.

S

signature font. A font that contains one or more images, logos, or signatures that are tiled into many characters. You can reproduce the image by printing the correct sequence of characters from the font.

START. The command that a Xerox printer operator enters to start a print job from the console of a Xerox LPS printer. The command has two arguments, separated by a comma. The first argument is the JDE for the job and the second argument is the JDL. Each job must specify the appropriate starting JDE and JDL, otherwise the job either does not print, or prints with errors.

STK. The file type, or extension, of a Xerox stockset file. A stockset file defines paper drawers, such as which are the main and auxiliary drawers, and which is the default drawer. You use STK files with the cluster database (CLUSTR.LIB), which contains cluster information in a binary format. The stockset and the CLUSTR.LIB represent a specific printing environment when the operator loads specific types of paper in the drawers of the printer. For example, when printing checks, the customer might have forms in one drawer on which a monthly statement prints, and the actual checks in another drawer.

T

TST. The file type, or extension, of a Xerox routing text file. These precompiled files contain text strings that print on separate pages, which precede the individual reports. These text strings are also called routing text and, as an option, you can print them with an overlay. You create TST files by compiling ROUTE commands in JSL files. The RTEXT JDL command, or the RTEXT DJDE invokes them from the job data stream. The RFORM JDL command or RFORM DJDE specifies whether an overlay prints on the routing text page.

X

Xerox Integrated Composition System (XICS). A host-resident software product for composing text documents (z/OS, z/VSE, z/VM) that print on a Xerox centralized printer or photo-typesetter. XICS provides support for merging Xerox format graphic images inline or to reserve white space for merging at the printer. Commands are of the control word variety, rather than generalized markup.

Xerox Job Control Facility (XJCF). A host-resident software product developed by Xerox Computer Systems as an extension to z/OS JES2 for the Xerox LPS printers. It builds and inserts DJDE records in the output file based on user job control statements, Xerox-extended JES2 parameters, initialization parameters, and JES2 system defaults. In addition to

3800-1 compatibility support, it provides a mechanism for accessing other features of the Xerox centralized printers (such as duplex, two-up, and electronic forms merge) without user awareness of DJDEs.

Xerox Production Print Mode (XPPM). Pertaining to printing to Xerox LPS printers using LCDS or metacode data streams.

Bibliography

You can find additional information about products that you can use with InfoPrint XT for AIX in the publications listed in this bibliography.

The titles and order numbers may change from time to time. To verify a current order number or a current title, consult your marketing representative.

Note: You can access viewable copies of many publications through the InfoPrint Solutions Company Web site:

`http://www.infoprint.com`

Advanced Function Presentation

- *Advanced Function Presentation: Programming Guide and Line Data Reference*, S544-3884
- *Data Stream and Object Architectures: Bar Code Object Content Architecture Reference*, S544-3766
- *Data Stream and Object Architectures: Font Object Content Architecture (FOCA) Reference*, S544-3285
- *Data Stream and Object Architectures: Graphics Object Content Architecture for Advanced Function Presentation Reference*, S544-5498
- *Data Stream and Object Architectures: Image Object Content Architecture Reference*, SC31-6805
- *Data Stream and Object Architectures: Intelligent Printer Data Stream Reference*, S544-3417
- *Data Stream and Object Architectures: Mixed Object Document Content Architecture Reference*, SC31-6802
- *Data Stream and Object Architectures: Presentation Text Object Content Architecture Reference*, SC31-6803

InfoPrint Manager for AIX

- *InfoPrint Manager: Reference*, S550-1052
- *InfoPrint Manager for AIX: Introduction and Planning Guide*, G550-1060
- *InfoPrint Manager for AIX: Getting Started*, G550-1061
- *InfoPrint Manager for AIX: Installation Instructions*, G550-1059
- *InfoPrint Manager for AIX: Procedures*, G550-1066
- *InfoPrint Manager for AIX: Configuration and Tuning Guide*, S550-1062

Note: Your InfoPrint Manager installation media includes a CD-ROM that contains all the InfoPrint Manager publications.

InfoPrint ProcessDirector for AIX

- *InfoPrint ProcessDirector for AIX: Planning and Installation*, G550-1045
- *InfoPrint ProcessDirector: Integrating with Other Applications*, S550-1069
- *InfoPrint ProcessDirector: Installing and Configuring the Manufacturing Optimization Feature*, G550-1070

> **Note:** Your InfoPrint ProcessDirector for AIX installation media includes a CD-ROM that contains all the InfoPrint ProcessDirector publications.

Print Services Facility for z/OS

- *Print Services Facility for z/OS: Download for z/OS*, G550-0429

InfoPrint Solutions Company printers

- *InfoPrint 2190, 2210, & 2235 Printers (MT 2707): Planning Guide*, G550-0952
- *InfoPrint 2060ES/2075ES/2090ES/2105ES: Finishing Guide for Printing*, S544-5845
- *InfoPrint 40 InfoPrint 32: User's Guide*, S544-5484
- *InfoPrint Pro C900, Pro C900 AFP, and Pro C900S Printers: Planning Guide*, G550-1148
- *InfoPrint 4000 and 3900 Advanced Function Printers: Introduction and Planning Guide*, G544-5427

Index

Special characters

Numerics

A

Y

InfoPrint Solutions Company

Program Number: 5799-GTF

Printed in USA