Infoprint Server Messages and Diagnosis
Infoprint Server Messages and Diagnosis
Diagnosis roadmap ........................................... 225
Detecting printer definition errors ......................... 226
Identifying which printer definition is involved in VTAM applications 226
Querying printer definitions .................................. 227
Message logs .................................................. 227
Finding abend information, system dumps, and messages .... 227
Checking permissions settings ............................... 229
Common Infoprint Server problems ......................... 232
Diagnosing problems with z/OS UNIX sendmail .......... 236
Diagnosing problems in Infoprint Central .................. 238

Chapter 6. Building a keyword string ...................... 241
Preparing to build the keyword string ..................... 241
The keywords .................................. 241
Component identification number ......................... 243
Procedure ........................................... 244
Type-of-failure keyword .................................. 244
ABENDx ............................................. 245
LOOP .................................................. 245
WAIT ............................................... 246
MSGx .................................................. 246
INCORROUT ....................................... 247
PERFM .............................................. 247
DOC .................................................. 248
Module keyword ........................................ 248
Procedure ........................................... 248
INCORROUT modifier keywords ......................... 249
Procedure ........................................... 249
Version, release, and maintenance level keywords ....... 250
Procedure ........................................... 250
Search argument procedure ............................... 251
Preparing APARs ...................................... 251
Procedure ........................................... 251

Chapter 7. Using Infoprint Server diagnostic tools ....... 255
Submitting APARs ....................................... 255
Tracing Infoprint Server .................................. 255
Tracing Infoprint Server daemons ......................... 257
Examples .............................................. 258
Tracing the lp, lpstat, or cancel commands ............... 259
Tracing the SMB support in DFS server ................. 259
Tracing the AOPPRINT procedure ....................... 260
Tracing Infoprint Central ................................ 260
Changing the trace directory ............................. 260
Finding the trace file ................................... 261
Finding the transform stderr file ......................... 261
ISPF trace ............................................ 262
Setting the ISPF trace on and off ......................... 262
Database diagnostic tools ................................ 263
Commands ............................................. 263
Environment variable ..................................... 264
Using IPP server diagnostic information ................. 264

Chapter 8. Using IP PrintWay basic mode diagnostic tools 265
Submitting APARs ....................................... 265
Tracing IP PrintWay basic mode ........................... 265
IP PrintWay basic mode internal wrap trace ............................................. 266
IP PrintWay basic mode external traces ................................................... 266
Starting an IP PrintWay basic mode trace ................................................ 267
Starting the Generalized Trace Facility .................................................... 267
Starting a trace at IP PrintWay basic mode initialization ........................... 268
Starting a trace dynamically using the MODIFY operator command ............ 271
Stopping an IP PrintWay basic mode trace ............................................... 273
Stopping a trace using the MODIFY operator command ............................ 273
Stopping a trace in the FSS and FSA definitions in the Printer Inventory .... 274
Viewing and printing GTF trace data ..................................................... 274
Examples of tracing IP PrintWay basic mode ............................................. 275
Starting an internal trace for an FSS and all FSAs at IP PrintWay initialization ......................................................................................... 275
Starting an internal trace for one FSA dynamically .................................... 275
Starting an external and internal trace for an FSS and all FSAs at IP PrintWay initialization ................................................................. 276
Starting an external and internal trace of all FSAs at IP PrintWay initialization, with prompting ................................................................. 277
Starting an external and internal trace of an FSA dynamically .................... 277
Tracing IP PrintWay basic mode ISPF panel logic .................................... 278
Dumps for IP PrintWay basic mode ......................................................... 279
z/OS abend dump ..................................................................................... 279
SVC dump ............................................................................................... 279

Chapter 9. Using NetSpool diagnostic tools .............................................. 281
Submitting APARs .................................................................................... 281
NetSpool traces ....................................................................................... 281
NetSpool internal wrap trace .................................................................. 281
NetSpool external trace ......................................................................... 282
Tracing considerations ........................................................................... 282
Starting a NetSpool trace ....................................................................... 282
Starting the Generalized Trace Facility (GTF) ....................................... 283
Starting a trace at NetSpool initialization ............................................... 283
Trace parameter on the EXEC statement ............................................... 283
Trace options data set statement ............................................................ 284
Trace options data set ........................................................................... 284
Starting and stopping a trace dynamically using NetSpool operator commands ................................................................. 285
Viewing and printing GTF trace data ..................................................... 287
Dumps ..................................................................................................... 287

Appendix A. Starting the Generalized Trace Facility (GTF) ......................... 289

Appendix B. Accessibility .......................................................................... 291
Using assistive technologies ..................................................................... 291
Keyboard navigation of the user interface ................................................ 291
z/OS information .................................................................................... 291

Notices .................................................................................................. 293
Trademarks ............................................................................................ 295

Bibliography .......................................................................................... 297
Infoprint Server ....................................................................................... 297
Infoprint transforms for z/OS ................................................................. 297
Print Services Facility (PSF) for z/OS ..................................................... 297
z/OS ....................................................................................................... 297
CICS ....................................................................................................... 299
Figures

1. Sample output from command ls -E /usr/lpp/Printsrv/bin ........................................... 231
2. Sample output from command ls -nE /usr/lpp/Printsrv/bin ........................................... 231
3. Sample output from command ls -E /usr/lpp/Printsrv/lib ............................................ 232
4. Sample output from command ls -nE /usr/lpp/Printsrv/lib ............................................ 232
5. Building and using a keyword string ................................................................. 243
Tables

1. Books for Infoprint Server .................................................. xvi
2. Books for IBM transform products ............................................. xvii
3. Books for InfoPrint Solutions Company transform products ............... xvii
4. Infoprint Server reason codes ................................................. 177
5. NetSpool abend reason codes ................................................ 213
6. SNA sense codes for Function Management Data (FMD) ..................... 215
7. SNA sense codes for BIND .................................................... 215
8. Printer Inventory Manager return codes ................................... 217
9. Printer Inventory Manager reason codes .................................... 217
10. NetSpool print job identification ............................................ 224
11. Infoprint Server functions and corresponding Infoprint Server components 225
12. General location of abend information and system dumps .................. 228
13. General location of messages .............................................. 229
14. Installation problems with Infoprint Central ................................ 238
15. Browser problems with Infoprint Central ................................ 238
16. Other problems with Infoprint Central .................................. 239
17. Component identification numbers ...................................... 244
18. Examples of modifier keywords: Description of incorrect document ....... 249
19. Examples of modifier keywords: Description of incorrect part ............. 249
20. Examples of modifier keywords: Description of incorrect output .......... 250
About this book

This book helps you troubleshoot difficulties with Infoprint® Server, which is an element of these products:

- z/OS® Version 1 Release 8 (5694-A01) and higher
- z/OS.e Version 1 Release 8 (5655-G52) and higher

This book helps you use the messages and codes that Infoprint Server displays. It also helps you do diagnostic procedures to isolate problems and work with IBM® Support Center service representatives.

This book is intended to help you with problem determination and recovery procedures. This book does not give enough information to change or correct program logic.

IBM provides the information in this book for diagnostic purposes. It is subject to change as a result of maintenance and other activity.

This book assumes that you are familiar with TCP/IP, JES, and z/OS job control language (JCL).

**Tip for system automators:** Any new, changed, or deleted messages can affect your installation's automation package. Make sure that your installation's automation package is updated with these changes. For details about message changes, see z/OS Summary of Message and Interface Changes.

Who should read this book

The list of messages and codes can be used by anyone who knows how to maintain and operate Infoprint Server or its components or the printers that work with Infoprint Server.

Use the diagnostic information in this book if you are a system programmer, a system analyst, or an application programmer responsible for diagnosing problems in Infoprint Server.

How this book is organized

This book is divided into two main parts:

- **Part 1, “Messages and codes,” on page 1** lists the messages and codes that Infoprint Server displays, describes what the system does after an error occurs, and suggests what you should do to correct the problem. The chapters list messages and codes for different components of Infoprint Server. They are ordered alphanumerically by message number.
  - **Chapter 1, “IP PrintWay basic mode (ANFM) messages and codes,” on page 3** describes messages and codes for IP PrintWay™ basic mode.
  - **Chapter 2, “Infoprint Server (AOP) messages and codes,” on page 77** describes messages and codes for all components of Infoprint Server except IP PrintWay™ basic mode and the NetSpool™ started task.
Chapter 3, “NetSpool (API) messages and codes,” on page 179 describes messages and codes for NetSpool. The NetSpool daemon issues messages with the AOP prefix. They are in Chapter 2, “Infoprint Server (AOP) messages and codes,” on page 77.

Chapter 4, “Printer Inventory Manager return codes and reason codes,” on page 217 describes codes that the Printer inventory Manager sends to other Infoprint Server components.

Part 2, “Diagnosis,” on page 219 describes the diagnostic tools available for troubleshooting Infoprint Server.

Chapter 5, “Using the Infoprint Server diagnostic process,” on page 223 describes how to determine with which Infoprint Server component diagnostic tools to work and offers some troubleshooting tips.

Chapter 6, “Building a keyword string,” on page 241 describes how to build a keyword string to help you communicate with the IBM Support Center.


Chapter 8, “Using IP PrintWay basic mode diagnostic tools,” on page 265 describes the diagnostic tools for use with the IP PrintWay basic mode component of Infoprint Server.

Chapter 9, “Using NetSpool diagnostic tools,” on page 281 describes the diagnostic tools for use with the NetSpool component of Infoprint Server.

Appendix A, “Starting the Generalized Trace Facility (GTF),” on page 289 explains how to start the Generalized Trace Facility, which is used with NetSpool and IP PrintWay basic mode external tracing.

This book also contains a bibliography and an index.

The Infoprint Server glossary is located in z/OS Infoprint Server Customization.

How to read syntax diagrams

This section explains the general notations that this book uses in syntax diagrams. For ease of reading, this book breaks some examples into several lines. However, when you enter a command, enter it all on one line. Do not press Enter until you have typed the entire command.

<table>
<thead>
<tr>
<th>This notation:</th>
<th>Means:</th>
<th>You enter:</th>
<th>For example:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apostrophes</td>
<td>String</td>
<td>As shown</td>
<td>SEND '123'</td>
</tr>
<tr>
<td>Bold</td>
<td>Keyword</td>
<td>As shown</td>
<td>CLASS</td>
</tr>
<tr>
<td>Braces</td>
<td>List of items</td>
<td>The braces and one or more items from the list</td>
<td>{GT10 GT12}</td>
</tr>
<tr>
<td>Brackets</td>
<td>Optional item</td>
<td>One item or no items</td>
<td>aopstop [now]</td>
</tr>
<tr>
<td>Comma</td>
<td>Separator</td>
<td>As shown</td>
<td>DISPLAY C,K</td>
</tr>
<tr>
<td>Ellipsis</td>
<td>Repeatable item</td>
<td>One or more items</td>
<td>filename ...</td>
</tr>
<tr>
<td>Lowercase</td>
<td>Item the system defines</td>
<td>As shown, in lowercase</td>
<td>lp</td>
</tr>
<tr>
<td>Lowercase italics</td>
<td>Variable item</td>
<td>A value for the item</td>
<td>MOUNT devnum</td>
</tr>
</tbody>
</table>
This notation: Means: You enter:

<table>
<thead>
<tr>
<th>This notation:</th>
<th>Means:</th>
<th>You enter:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parentheses</td>
<td>List of items</td>
<td>The parentheses and one or more items from the list</td>
</tr>
<tr>
<td>Special characters</td>
<td>Various symbols</td>
<td>As shown</td>
</tr>
<tr>
<td>Underline</td>
<td>Default</td>
<td>The item, or you can omit it</td>
</tr>
<tr>
<td>Uppercase</td>
<td>Item the system defines</td>
<td>As shown, in uppercase</td>
</tr>
<tr>
<td>Vertical bar</td>
<td>UNIX® pipe (the output of the first is input to the second)</td>
<td>As shown</td>
</tr>
<tr>
<td>Vertical bar in braces</td>
<td>Required choice</td>
<td>One item</td>
</tr>
<tr>
<td>Vertical bar in brackets</td>
<td>Optional choice</td>
<td>One item or no items</td>
</tr>
</tbody>
</table>

For example:

<table>
<thead>
<tr>
<th>This book shows:</th>
<th>You enter:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(GT10,GT12)</td>
<td>(GT10,GT12)</td>
</tr>
<tr>
<td>%filter-options</td>
<td>%filter-options</td>
</tr>
<tr>
<td>K T REF</td>
<td>K T</td>
</tr>
<tr>
<td>PRMODE</td>
<td>PRMODE</td>
</tr>
<tr>
<td>ls</td>
<td>lp</td>
</tr>
<tr>
<td>NOW</td>
<td>FOREVER</td>
</tr>
<tr>
<td>PORTNO</td>
<td>PRTQUEUE</td>
</tr>
</tbody>
</table>

Where to find more information

This section describes where to find information related to z/OS and Infoprint Server.

Web sites

These Web sites contain related information:

<table>
<thead>
<tr>
<th>This site:</th>
<th>Contains:</th>
</tr>
</thead>
</table>
| www.ibm.com/printers/download.html | Downloads for IBM products:  
  * InfoPrint Port Monitor for Windows®  
  * AFP™ Viewer plug-in for Windows  
  * AFP Printer Driver for Windows |
| www.infoprint.com/support/downloads | Downloads for InfoPrint Solutions Company products:  
  * lprafp command |
| http://www.ibm.com/servers/eserver/zseries/zos/ | Information about z/OS |
| http://www.ibm.com/servers/eserver/zseries/zos/bkserv/ | z/OS documentation, including:  
  * All z/OS books  
  * Updates from APARs and PTFs |
| http://www.ibm.com/redbooks | IBM redbooks, including one for InfoPrint Server |
| http://www.ibm.com/servers/eserver/zseries/zos/unix/ | Information about z/OS UNIX System Services |
| publibz.boulder.ibm.com/cgi-bin/bookmgr_OS390/Shelves | z/OS bookshelves, including bookshelves for InfoPrint Server |

Using LookAt to look up message explanations

LookAt is an online facility that lets you look up explanations for most of the IBM messages you encounter, as well as for some system abends and codes. Using
LookAt to find information is faster than a conventional search because in most cases LookAt goes directly to the message explanation.

You can use LookAt from these locations to find IBM message explanations for z/OS elements and features, z/VM®, z/VSE™, and Clusters for AIX® and Linux™:

- Your z/OS TSO/E host system. You can install code on your z/OS systems to access IBM message explanations using LookAt from a TSO/E command line (for example: TSO/E prompt, ISPF, or z/OS UNIX System Services).
- Your Microsoft® Windows workstation. You can install LookAt directly from the z/OS Collection (SK3T-4269) or the z/OS and Software Products DVD Collection (SK3T-4271) and use it from the resulting Windows graphical user interface (GUI). The command prompt (also known as the DOS > command line) version can still be used from the directory in which you install the Windows version of LookAt.
- Your wireless handheld device. You can use the LookAt Mobile Edition from [www.ibm.com/servers/eserver/zseries/zos/bkserv/lookat/lookatm.html](http://www.ibm.com/servers/eserver/zseries/zos/bkserv/lookat/lookatm.html) with a handheld device that has wireless access and an Internet browser (for example: Internet Explorer for Pocket PCs, Blazer or Eudora for Palm OS, or Opera for Linux handheld devices).

You can obtain code to install LookAt on your host system or Microsoft Windows workstation from:

- A CD in the z/OS Collection (SK3T-4269).
- The z/OS and Software Products DVD Collection (SK3T-4271).
- The LookAt Web site (click Download and then select the platform, release, collection, and location that suit your needs). More information is available in the LOOKAT.ME files available during the download process.

Using IBM Health Checker for z/OS

IBM Health Checker for z/OS is a z/OS component that installations can use to gather information about their system environment and system parameters to help identify potential configuration problems before they impact availability or cause outages. Individual products, z/OS components, or ISV software can provide checks that take advantage of the IBM Health Checker for z/OS framework. This book might refer to checks or messages associated with this component.


SDSF also provides functions to simplify the management of checks. See [z/OS SDSF Operation and Customization](http://www.ibm.com/servers/eserver/zseries/zos/bkserv/lookat/lookatm.html) for additional information.

Preventive Service Planning information

Before installing Infoprint Server, you should review the current Preventive Service Planning (PSP) information, also called the PSP bucket. You should also periodically review the current PSP information. The PSP upgrade ID is: ZOSV1R8. The subset for Infoprint Server is: INFOPRINT.

To obtain the current PSP bucket, contact the IBM Support Center or use z/OS SoftwareXcel (IBMLink™). If you obtained z/OS as part of a CBPDO, HOLDDATA
and PSP information is included on the CBPDO tape. However, this information might not be current if the CBPDO tape was shipped several weeks prior to installation.

**Infoprint Server migration information**

For information about the tasks required to migrate from previous releases, see:

<table>
<thead>
<tr>
<th>Book</th>
<th>Form number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>z/OS Migration</strong></td>
<td>GA22-7499</td>
</tr>
<tr>
<td>Describes the tasks required to migrate to z/OS V1R8 from V1R5, V1R6, and V1R7. Includes the migration tasks for Infoprint Server.</td>
<td></td>
</tr>
<tr>
<td><strong>z/OS V1R7.0 Migration</strong></td>
<td>GA22-7499-08</td>
</tr>
<tr>
<td>Describes the tasks required to migrate to z/OS V1R7 from V1R4. Includes the migration tasks for Infoprint Server. If you are migrating from V1R4, do the migration tasks in this book and also in <strong>z/OS Migration, GA22-7499</strong></td>
<td></td>
</tr>
<tr>
<td><strong>z/OS Summary of Message and Interface Changes</strong></td>
<td>SA22-7505</td>
</tr>
<tr>
<td>Describes new and changed messages and interfaces in z/OS V1R8. Includes the messages and interfaces for Infoprint Server.</td>
<td></td>
</tr>
<tr>
<td><strong>z/OS Infoprint Server Customization</strong></td>
<td>S544-5744</td>
</tr>
<tr>
<td>Describes the tasks required to migrate to IP PrintWay extended mode from IP PrintWay basic mode. Also, describes the tasks required to use the new functions introduced in z/OS V1R8.</td>
<td></td>
</tr>
<tr>
<td><strong>Infoprint Transforms to AFP for z/OS</strong></td>
<td>G550-0443</td>
</tr>
<tr>
<td>Describes the tasks required to migrate to Infoprint Transforms to AFP V2.1 from Infoprint Server Transforms V1.1.</td>
<td></td>
</tr>
<tr>
<td><strong>Infoprint Transforms from AFP for z/OS</strong></td>
<td>G550-0444</td>
</tr>
<tr>
<td>Describes the tasks required to migrate to Infoprint Transforms for AFP V2.1 from Infoprint Server Transforms V1.1.</td>
<td></td>
</tr>
<tr>
<td><strong>z/OS V1R2.0 Infoprint Server Migration</strong></td>
<td>G544-5743-04</td>
</tr>
<tr>
<td>Describes how to use the Infoprint Server migration program (<strong>aopmig</strong>). This migration program can help you migrate from the IP PrintWay and NetSpool features of PSF V3R2 and earlier releases. This book is in the z/OS V1R2 – V1R4 libraries.</td>
<td></td>
</tr>
</tbody>
</table>

For information about new functions in z/OS V1R8, see:

<table>
<thead>
<tr>
<th>Book</th>
<th>Form number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>z/OS Infoprint Server Introduction</strong></td>
<td>S544-5742</td>
</tr>
<tr>
<td>Describes new functions in Infoprint Server for z/OS V1R8.</td>
<td></td>
</tr>
<tr>
<td><strong>z/OS Introduction and Release Guide</strong></td>
<td>GA22-7502</td>
</tr>
<tr>
<td>Describes new functions in z/OS V1R8, including new functions in Infoprint Server.</td>
<td></td>
</tr>
</tbody>
</table>
Books

This section lists related books that can help you use Infoprint Server, Infoprint Transforms V2.1, and other transform products. For a list of the books referred to in this book, and for books that contain additional information about related products, see “Bibliography” on page 297. For books for all z/OS products, see z/OS Information Roadmap.

Table 1. Books for Infoprint Server

<table>
<thead>
<tr>
<th>Book</th>
<th>Form number</th>
</tr>
</thead>
<tbody>
<tr>
<td>z/OS Infoprint Server Introduction</td>
<td>S544-5742</td>
</tr>
<tr>
<td>Introduces Infoprint Server. This book contains printing scenarios that show how you can use Infoprint Server in your installation.</td>
<td></td>
</tr>
<tr>
<td>z/OS Infoprint Server Customization</td>
<td>S544-5744</td>
</tr>
<tr>
<td>Describes customization tasks for Infoprint Server. This book describes Infoprint Server environment variables, configuration files, startup procedures, how to write exit routines and filter programs, and how to use the Infoprint Server API.</td>
<td></td>
</tr>
<tr>
<td>z/OS Infoprint Server Operation and Administration</td>
<td>S544-5745</td>
</tr>
<tr>
<td>Describes operator procedures and administrative tasks for Infoprint Server. This book describes how to start and stop Infoprint Server and how operators can use Infoprint Central. It describes how administrators can create entries in the Printer Inventory using either ISPF panels or the Printer Inventory Definition Utility (PIDU) program and define NetSpool printer LUs to VTAM®.</td>
<td></td>
</tr>
<tr>
<td>z/OS Infoprint Server Printer Inventory for PSF</td>
<td>S544-5745</td>
</tr>
<tr>
<td>Describes the Printer Inventory for PSF for PSF customers who do not purchase an Infoprint Server license. It describes the tasks required to customize Infoprint Server, start and stop Infoprint Server, create PSF FSS and FSA definitions in the Printer Inventory, and diagnose problems in Infoprint Server.</td>
<td></td>
</tr>
<tr>
<td>z/OS Infoprint Server User’s Guide</td>
<td>S544-5746</td>
</tr>
<tr>
<td>Describes user tasks for Infoprint Server. This book describes how to submit print jobs from remote systems (including Windows systems), the local z/OS system, and Virtual Telecommunications Access Method (VTAM) applications. It describes z/OS UNIX commands; the AOPPRINT JCL procedure; the AOPBATCH program; DD and OUTPUT JCL parameters that Infoprint Server supports; and how to download and install the Infoprint Port Monitor for Windows.</td>
<td></td>
</tr>
<tr>
<td>z/OS Infoprint Server Messages and Diagnosis</td>
<td>G544-5747</td>
</tr>
<tr>
<td>Describes messages from Infoprint Server. This book also describes how to use Infoprint Server tracing facilities to diagnose and report errors.</td>
<td></td>
</tr>
<tr>
<td>Table 2. Books for IBM transform products</td>
<td></td>
</tr>
<tr>
<td>------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Book</strong></td>
<td><strong>Form number</strong></td>
</tr>
<tr>
<td>Infoprint Transforms to AFP for z/OS</td>
<td>G550-0443</td>
</tr>
<tr>
<td>Describes IBM Infoprint Transforms to AFP V2.1 for z/OS (5655-N60). This book describes using transforms, customizing transforms, administering transforms, diagnosing errors, messages, and migrating from Infoprint Server Transforms V1.1.</td>
<td></td>
</tr>
<tr>
<td>Infoprint Transforms from AFP for z/OS</td>
<td>G550-0444</td>
</tr>
<tr>
<td>Describes V2.1 of these IBM products:</td>
<td></td>
</tr>
<tr>
<td>• Infoprint Transform for AFP to HP PCL for z/OS (5655-P19)</td>
<td></td>
</tr>
<tr>
<td>• Infoprint Transform for AFP to Adobe® PDF for z/OS (5655-P20)</td>
<td></td>
</tr>
<tr>
<td>• Infoprint Transform for AFP to Adobe PostScript® for z/OS (5655-P21)</td>
<td></td>
</tr>
<tr>
<td>This book describes using transforms, customizing transforms, administering transforms, diagnosing errors, messages, and migrating from Infoprint Server Transforms V1.1.</td>
<td></td>
</tr>
<tr>
<td>Infoprint XML Extender for z/OS</td>
<td>S544-5855</td>
</tr>
<tr>
<td>Describes how to plan for, configure, and submit jobs with Infoprint XML Extender for z/OS (5655-J66).</td>
<td></td>
</tr>
<tr>
<td>Infoprint XT Extender for z/OS: Customization and Usage</td>
<td>S544-5879</td>
</tr>
<tr>
<td>Describes how to customize and use Infoprint XT™ Extender for z/OS (5655-J65).</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 3. Books for InfoPrint Solutions Company transform products</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Book</strong></td>
</tr>
<tr>
<td>InfoPrint Transform Manager for Linux</td>
</tr>
<tr>
<td>Describes InfoPrint Transform Manager for Linux transforms, including functions, limitations, and transform options.</td>
</tr>
<tr>
<td>InfoPrint Transform Manager for Linux:AFP2PDF Transform Installation and User's Guide</td>
</tr>
<tr>
<td>Describes the InfoPrint Transform Manager for Linux AFP to PDF transform, including functions, limitations, and transform options.</td>
</tr>
</tbody>
</table>

**Infoprint Server online help**

The Infoprint Server ISPF panels contain integrated online help for each panel and field. To view the help, place your cursor on a panel or in a field on a panel and press the Help function key (F1).

Infoprint Central contains an integrated online help system. To view the help system, select the question mark (?) in the left navigation bar. To view the help for a particular Web page, select the question marks (?) or the Help buttons on the Web page.

**Message explanations**

Part 1 lists the messages for each component of Infoprint Server in ascending alphanumeric order. The message entries in this section provide:
Explanation
The explanation gives more information about the condition that caused Infoprint Server to display the message.

System action
The system action describes how the system responds to the condition.

User response, system programmer response, and operator response
The user response, system programmer response, and operator response provide actions for recovering from the error condition. Often this part of the entry gives more than one recovery action, or a series of related recovery actions. This means that more than one problem might have caused the error.

Tip: Infoprint Server often displays more than one message for an error condition. When this occurs, use all the messages to understand and correct the error.

Some message descriptions refer you to other books for hardware and software for more information. “Bibliography” on page 297 contains a listing of applicable printer, communications, and operating system books.

Message destinations
Infoprint Server components send messages to one or more of these destinations, depending on which is most appropriate:

Operator’s console
Messages that the operator or system programmer must address.

Job submitter’s console
Messages reporting the completion or failure of a job to print.

IP PrintWay basic mode message log data set
IP PrintWay basic mode sends messages to the message log data set that your installation defined for this purpose.

NetSpool message log data set
NetSpool sends messages to the message log data set that your installation defined for this purpose.

Infoprint Server common message log
All components of Infoprint Server, except for IP PrintWay basic mode and Infoprint transforms, send messages to the Infoprint Server common message log if your installation has customized it. Infoprint Central lets
authorized users view messages in the common message log for selected print jobs and IP PrintWay extended mode printers. In addition, Infoprint Server administrators can use the z/OS UNIX aoplogu command to select messages in a particular time range and copy them to a file or view them on the terminal. For information about the aoplogu command, see z/OS Infoprint Server Operation and Administration.

Transform daemon message log
The transform daemons write messages in the message log file created each session for each daemon. The message log file is located in the xfd subdirectory under the base directory defined in aopd.conf (usually /var/Printsrv/). The filename is daemon.n.stderr:

- **daemon** The name of the transform daemon with the error. For example, pcl2afp.
- **n** The instance of the transform daemon

The message log data sets clear every time the Infoprint Server Transform Manager is restarted.

### Code types

Infoprint Server messages contain information about these types of codes:
- Action codes
- Dynamic allocation error codes
- Event Control Block (ECB) completion codes
- Information codes
- Status codes
- Return reason codes
- Abend reason codes
- System completion codes
- SNA sense codes
- VTAM codes

In determining a recovery procedure, use these codes in addition to the information in this book. The code explanations in this book either tell you how to interpret these codes, or refer you to another book that contains the information you need.
Summary of changes

Summary of changes
for G544-5747-09
z/OS Version 1 Release 8 and higher

This book contains information previously presented in G544-5747-08, which supports z/OS Version 1 Release 8 (V1R8).

It contains messages for these PTFs:
• UA37619
• PTF for APAR OA22880

New information

These messages have been added:
• AOP146I
• AOP147E

Changed information

• The InfoPrint Solutions Company now owns these former IBM products:
  – lprafp command
  – InfoPrint Manager for AIX
  – InfoPrint Manager for Windows
  – InfoPrint Transform Manager for Linux
  – Network Printer Manager for the Web
• The descriptions of these messages have changed:
  – AOP004E
  – AOP047E
  – AOP076E
  – AOP126E
  – API0927E

Technical changes or additions to the text and illustrations are indicated by a vertical line to the left of the change.

Summary of changes
for G544-5747-08
z/OS Version 1 Release 8

This book contains information previously presented in G544-5747-07, which supports z/OS Version 1 Release 5 (V1R5) through Version 1 Release 7 (V1R7).

For lists of new and changed messages, see z/OS Summary of Message and Interface Changes

New information

• These codes have been added: 0313, 0400, 0D22, 0EA0, 0EA1, 0EA2, 0EA3, 0EA4, 0EA5.
• The “Transform Interface” component of Infoprint Server is new. It includes a new client that interfaces with InfoPrint Transform Manager for Linux. It also includes the Infoprint Server Transform Manager component, which is unchanged from the previous release.

• A section has been added to help you find information that the IBM service representative might ask you to locate. See “Finding abend information, system dumps, and messages” on page 227.

• A section has been added to help you determine if you have a problem with permissions. See “Checking permissions settings” on page 229.

**Changed information**

• New fields have been added to the aoplogu command messages. See “Format of messages in the Infoprint Server common message log” on page 77.

• These codes have been changed: 0205, 0E91.

• The procedure for tracing Infoprint Central has been changed. See “Tracing Infoprint Central” on page 260.

• The product name “OS/400” has been changed to “i5/OS”.

**Moved information**

• The section “Diagnosing problems with z/OS UNIX sendmail” has been renamed and moved to Chapter 5, “Using the Infoprint Server diagnostic process.”

• Information from the chapter “Using Printer Inventory Manager diagnostic tools” and the section “Finding the transform stderr file” has been moved to Chapter 7, “Using Infoprint Server diagnostic tools.”

• These messages have been moved: AOP2001E, AOP2005E, AOP2006E, AOP2007E, AOP2008E, AOP2009E, AOP2010E, AOP2011E, AOP2012E, AOP2013E, AOP2014E, AOP2015W, AOP2016E, AOP2018E, AOP2020E, AOP2022E, AOP2023E, AOP2024E, AOP2060E, AOP2201E, and all messages with prefix AOX. The messages have been moved to these books:
  – Infoprint Transforms to AFP for z/OS, G550-0443
  – Infoprint Transforms from AFP for z/OS, G550-0444

**Deleted information**

• This code has been deleted: 02A8.

• Information about Infoprint Server Transforms V1.1 for z/OS (5697-F51) has been deleted because Infoprint Server Transforms V1.1 is no longer in service. Although Infoprint Server continues to work with Infoprint Server Transforms V1.1, you should use the replacement transform products instead. For information, see these books:
  – Infoprint Transforms to AFP for z/OS, G550-0443
  – Infoprint Transforms from AFP for z/OS, G550-0444
# Part 1. Messages and codes

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>IP PrintWay basic mode (ANFM) messages and codes</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ANFM message format</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Messages</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>IP PrintWay basic mode system completion code and abend reason codes</td>
<td>54</td>
</tr>
<tr>
<td>2</td>
<td>Infoprint Server (AOP) messages and codes</td>
<td>77</td>
</tr>
<tr>
<td></td>
<td>AOP message format</td>
<td>77</td>
</tr>
<tr>
<td></td>
<td>Format of messages in the Infoprint Server common message log</td>
<td>77</td>
</tr>
<tr>
<td></td>
<td>Messages</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>Infoprint Server system completion code and reason codes</td>
<td>177</td>
</tr>
<tr>
<td>3</td>
<td>NetSpool (API) messages and codes</td>
<td>179</td>
</tr>
<tr>
<td></td>
<td>API message format</td>
<td>179</td>
</tr>
<tr>
<td></td>
<td>Messages</td>
<td>179</td>
</tr>
<tr>
<td></td>
<td>System abend code and reason codes</td>
<td>213</td>
</tr>
<tr>
<td></td>
<td>SNA sense codes</td>
<td>214</td>
</tr>
<tr>
<td>4</td>
<td>Printer Inventory Manager return codes and reason codes</td>
<td>217</td>
</tr>
</tbody>
</table>
Chapter 1. IP PrintWay basic mode (ANFM) messages and codes

This chapter describes the messages, system completion codes, and abend reason codes that the IP PrintWay basic mode component of Infoprint Server writes.

ANFM message format

The messages have a message identifier followed by the message text:

ANFMnnnt

ANFM Identifies IP PrintWay basic mode messages
nnnn Three to four-digit message number
t One-character type code:

<table>
<thead>
<tr>
<th>Type code</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>This is an information message.</td>
</tr>
<tr>
<td>W</td>
<td>A warning situation occurred.</td>
</tr>
<tr>
<td>A</td>
<td>Operator action is required.</td>
</tr>
<tr>
<td>E</td>
<td>An error occurred.</td>
</tr>
</tbody>
</table>

Messages

ANFM000 - ANFM999

Explanation: These messages are displayed by Infoprint Server ISPF panel modules. For an explanation, see the help on the ISPF panel.

ANFM004I Using message table msgtabl

Explanation: In the message text, msgtabl is the name of the message table that was loaded by the messaging facility.

System action: IP PrintWay basic mode initialization continues.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM006S Unable to create message table token tokennm

Explanation: IP PrintWay basic mode could not create the named token that contains the message table anchor.

In the message text, tokennm is the message token.

ANFM005S Failed to load message table msgtabl

Explanation: IP PrintWay basic mode could not load the message table into storage. Either the table was not found in the STEPLIB/LINKLIB concatenation, or insufficient virtual storage was available to load the table.

In the message text, msgtabl is the name of the message table that failed to load.

System action: Message processing is not available. IP PrintWay basic mode is terminated.

Operator response: Notify your system programmer of this error.

System programmer response: Verify that IP PrintWay basic mode was installed correctly and that the message table is stored in a library in the search list of the load module library (STEPLIB/LINKLIB).

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
name that could not be created.

**System action:** Message processing is not available. IP PrintWay basic mode is terminated.

**Operator response:** None.

**System programmer response:** Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**ANFM007I** Unable to retrieve message table token

**tokennm**

**Explanation:** IP PrintWay basic mode could not retrieve the named token that contains the message table anchor.

In the message text, *tokennm* is the message token name that could not be retrieved.

**System action:** Termination continues.

**Operator response:** None.

**System programmer response:** If the error condition persists, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**ANFM008I** Unable to delete message table token

**fctcode**

**Explanation:** Unknown function code sent to message initialization routine. This is an internal error.

In the message text, *fctcode* is the unknown ANFMINIT function code.

**System action:** The task is terminated.

**Operator response:** Notify your system programmer of this error.

**System programmer response:** Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
ANFM011S Unable to retrieve message table token

tokennm

Explanation: IP PrintWay basic mode could not retrieve the named token that contains the message table anchor.

In the message text, tokennm is the message token name that could not be retrieved.

System action: IP PrintWay basic mode ends.

Operator response: None.

System programmer response: If the error condition persists, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM012S Unable to obtain stgsise bytes of storage for message DCB

Explanation: IP PrintWay basic mode could not obtain storage below 16 M for the message file DCB.

In the message text, stgsize is the amount of storage requested.

System action: PrintWay ends.

Operator response: Notify your system programmer of this error.

System programmer response: Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM016I Invalid TCP/IP jobname

Explanation: The TCP/IP job name specified in the TCPIPJOBNAME statement in the TCPIP.DATA data set is not a valid name, or it is a symbolic name. IP PrintWay does not support symbolic job names. IP PrintWay writes this message for each IP PrintWay functional subsystem (FSS) and functional subsystem application (FSA) that uses the TCPIP.DATA data set.

System action: If the IP PrintWay FSS definition in the Printer Inventory specifies the TCP/IP job name, IP PrintWay uses the TCP/IP job name in the Printer Inventory and continues processing. If no IP PrintWay FSS definition exists in the Printer Inventory, or if no TCP/IP job name is specified in the FSS definition, IP PrintWay abends.

Operator response: If IP PrintWay does not abend, ignore this message. If IP PrintWay abends, notify your system programmer.

System programmer response: If IP PrintWay abends, follow the instructions for abend code 0E9I. If IP PrintWay does not abend, you can ignore this message. However, if you want IP PrintWay to avoid writing this message at all, replace the symbolic TCP/IP job name with the actual TCP/IP job name. Specify the new TCPIP.DATA data set in the SYSTCPD DD statement in the IP PrintWay startup procedure.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM020A jobname Enter the IP PrintWay trace command or U – using the MVS MODIFY command

Explanation: The PARM parameter in the startup procedure specifies the PROMPT for the operator interface. IP PrintWay basic mode has not been initialized. See Operator Response.

In the message text, jobname is a job name, an FSS name, or an FSA name.

System action: IP PrintWay basic mode initialization continues.

Operator response: You can do one of these:

1. Enter MODIFY commands for the FSS and then initialize the IP PrintWay basic mode operator interface by responding U. Do not specify an FSA name of the MODIFY command:
   \{MODIFY | F \} fssname,command

2. Continue initializing of the IP PrintWay basic mode operator interface:
   \{MODIFY | F \} fssname,U

fssname is the name of the IP PrintWay basic mode FSS as provided in the message. Do not enter an FSA name, or the command will be rejected. After the IP
PrintWay basic mode operator interface is initialized, you can enter any IP PrintWay basic mode operator commands.

For more information about the format of the MODIFY command, see Chapter 8, “Using IP PrintWay basic mode diagnostic tools,” on page 265.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM021I  \textit{jobname} The IP PrintWay operator interface has been initialized

Explanation: The IP PrintWay basic mode operator interface has been initialized successfully. All IP PrintWay basic mode commands can now be entered.

In the message text, \textit{jobname} is the job name, an FSS name, or an FSA name.

System action: IP PrintWay basic mode initialization continues.

Operator response: You can now type IP PrintWay basic mode commands.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM021I  \textit{jobname} The IP PrintWay operator interface has been initialized

Explanation: The IP PrintWay basic mode operator interface has been initialized successfully. All IP PrintWay basic mode commands can now be entered.

In the message text, \textit{jobname} is the job name, an FSS name, or an FSA name.

System action: IP PrintWay basic mode initialization continues.

Operator response: You can now type IP PrintWay basic mode commands.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM022I  \textit{jobname} Not enough storage is available to initialize the IP PrintWay operator interface - storage requested \((storagesize)\), return code = \((retcode)\)

Explanation: Not enough storage is available for control blocks or work areas. The message indicates the size of the storage being requested. The return code is from the MVS™ GETMAIN macro.

In the message text, \textit{jobname} is the job name, an FSS name, or an FSA name. \textit{storagesize} is the storage size requested by the GETMAIN macro. \textit{retcode} is the GETMAIN macro return code from the unsuccessful GETMAIN request.

System action: The IP PrintWay basic mode operator interface is not initialized. IP PrintWay basic mode initialization continues.

Operator response: None.

System programmer response: The size of the REGION parameter should be increased. Increase the REGION parameter used in the IP PrintWay startup procedure.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM023I  \textit{jobname} The IP PrintWay operator interface initialization was unsuccessful - module\((modulename)\)

Explanation: The IP PrintWay basic mode operator interface was not initialized successfully. A functional command initialization module returned a nonzero return code.

In the message text, \textit{jobname} is either a job name, an FSS name, or an FSA name. \textit{modulename} is a functional command initialization module that returned a nonzero return code.

System action: The IP PrintWay basic mode operator interface is not initialized. IP PrintWay basic mode initialization continues.

Operator response: Inform your system programmer that this error occurred.

System programmer response: See the specific error conditions described in the accompanying messages to determine an appropriate response.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM024I  \textit{jobname} The IP PrintWay operator interface is being terminated, module\((modulename)\) has terminated

Explanation: An abend has occurred in a module that has had a previous abend condition. Because the previous abend and this abend involve the same module, IP PrintWay basic mode does not attempt a recovery of the operator interface.

In the message text, \textit{jobname} is a job name, an FSS
name, or an FSA name.  *modulename* is a previous module that had abended and has abended again.

**System action:** The IP PrintWay basic mode operator interface is terminated.

**Operator response:** Inform your system programmer that this error occurred.

**System programmer response:** If you suspect an IP PrintWay programming error, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

ANFM025I *jobname* The IP PrintWay operator interface has been terminated

**Explanation:** The IP PrintWay basic mode operator interface has had an unrecoverable error and has been terminated.

In the message text, *jobname* is a job name, an FSS name, or an FSA name.

**System action:** The IP PrintWay basic mode operator interface is terminated.

**Operator response:** To activate the operator interface, purge and restart IP PrintWay basic mode.

**System programmer response:** If you suspect an IP PrintWay programming error, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

ANFM027I *jobname* The FORCE command terminated the IP PrintWay FSA *fsaname*

**Explanation:** The operator has entered an MVS MODIFY FORCE command for the specified IP PrintWay basic mode FSA.

In the message text, *jobname* is a job name, an FSS name, or an FSA name.  *fsaname* is the name of FSA that has been terminated.

**System action:** Abend processing continues.

**Operator response:** Inform your system programmer that this error occurred.

**System programmer response:** Print the SVC dump that the ESTAI routine provides.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM030I  jobname The IP PrintWay ESTAI cannot evaluate system completion code 'systemcompletioncode', abnormal termination continues

Explanation: The IP PrintWay basic mode ESTAI routine is unable to continue because IP PrintWay basic mode did not display the system completion code.
In the message text, jobname is a job name, an FSS name, or an FSA name. systemcompletioncode is the system completion code.

System action: Abend processing continues.
Operator response: Notify your system programmer of this error.
System programmer response: Print the SVC dump that the ESTAI routine provides. For more information, see [z/OS MVS System Codes](https://www.ibm.com/support/pages/zos-system-codes).
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM031I  jobname IP PrintWay ESTAI cannot evaluate system completion code 'systemcompletioncode', abnormal termination continues

Explanation: The IP PrintWay basic mode ESTAI routine is unable to continue because IP PrintWay basic mode did not display the system completion code.
In the message text, jobname is a job name, an FSS name, or an FSA name. systemcompletioncode is the system completion code.

System action: IP PrintWay basic mode continues processing.
Operator response: Type the command again after starting the named FSA.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM032I  jobname The IP PrintWay command(command) was not processed, FSA(fsaname) is not active

Explanation: The FSA name specified in a command was not active.
In the message text, jobname is a job name, an FSS name, or an FSA name. command is the IP PrintWay basic mode command. fsaname is the IP PrintWay basic mode FSA name.

System action: IP PrintWay basic mode continues processing.
Operator response: Type the command again after starting the named FSA.
System programmer response: None.
Problem determination: None.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM033I  jobname Command(command) is not valid for IP PrintWay

Explanation: An unsupported command was typed as a parameter of the MODIFY command. The command is not supported.
In the message text, jobname is a job name, an FSS name, or an FSA name. command is the IP PrintWay basic mode command.

System action: IP PrintWay basic mode ignores the command and processes the next command.
Operator response: Type a valid command.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
ANFM036I  jobname An unsupported keyword(keyword) was specified for command(command)

Explanation: You entered an incorrect keyword with the MODIFY command. The keyword is not supported.

In the message text, jobname is a job name, an FSS name, or an FSA name. keyword is the IP PrintWay basic mode keyword. command is the IP PrintWay basic mode command.

System action: IP PrintWay basic mode ignores the command and processes the next command.

Operator response: Type the command using a valid keyword.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM037I  jobname Processing of the FORCE command for IP PrintWay FSA fsaname has been terminated because the FSA has already begun terminating

Explanation: The operator has entered an IP PrintWay basic mode FORCE command with the MVS MODIFY command for a FSA that is already in the process of terminating.

In the message text, jobname is a job name, an FSS name, or an FSA name. fsaname is the IP PrintWay basic mode FSA Name.

System action: The IP PrintWay basic mode MODIFY FORCE command for the indicated FSA has been discarded by IP PrintWay basic mode. The termination processing already in progress will complete to attain the results desired by the discarded MODIFY FORCE command.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM038I  jobname No IP PrintWay command was specified—data

Explanation: The operator entered data that is not a command. The last character of data was the last position checked before it was decided a correct command was not present.

In the message text, jobname is a job name, an FSS name, or an FSA name. data are alphanumeric characters.

System action: IP PrintWay basic mode ignores the data and processes the next command entered.

Operator response: Type a valid IP PrintWay basic mode command.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM039I  jobname The status of the IP PrintWay command(command) is status

Explanation: The IP PrintWay basic mode command has been accepted or the command has been queued for later processing. When the command is accepted, the functional processor is called to process the command. When the command is queued, the command is placed on either an FSS-level queue or an FSA-level queue. All commands that are queued in which the FSA name was specified are queued on the FSA-level queue. Commands entered without the FSA name are queued on the FSS-level queue.

In the message text, jobname is a job name, an FSS name, or an FSA name. command is the IP PrintWay basic mode command. status is the status of the command—for example, accepted or queued.

System action: IP PrintWay basic mode continues processing the data.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
ANFM046I  jobname The keyword(keyword) is mutually exclusive with another keyword specified in the IP PrintWay command(command)

Explanation: You entered two mutually exclusive keywords in this command.

In the message text, jobname is a job name, an FSS name, or an FSA name. keyword is the IP PrintWay basic mode keyword. command is the IP PrintWay basic mode command.

System action: The command is ignored and processing continues with the next command entered.

Operator response: Type the command again specifying the correct keywords.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM047I  jobname A duplicate keyword (keyword) was entered for the IP PrintWay command (command)

Explanation: You entered the same keyword more than once in the same command.

In the message text, jobname is a job name, an FSS name, or an FSA name. keyword is the IP PrintWay basic mode keyword. command is the IP PrintWay basic mode command.

System action: IP PrintWay basic mode ignores the command and processes the next command entered.

Operator response: Type the correct format of the command.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM048I  jobname An IP PrintWay keyword was expected but was not found - commandtext

Explanation: The operator entered commandtext instead of a valid keyword. The last character of commandtext is the last position checked before determining that the keyword was incorrect.

In the message text, jobname is a job name, an FSS name, or an FSA name. command is the IP PrintWay basic mode keyword. commandtext is the text of the command entered.

System action: IP PrintWay basic mode ignores the command and processes the next command entered.

Operator response: Type the correct format of the command.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
ANFM050I  

**jobname Keywords are not allowed with the IP PrintWay command(command)**

**Explanation:** You typed a command with keywords, but this command does not allow keywords.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *command* is the IP PrintWay basic mode command.

**System action:** IP PrintWay basic mode ignores the command and processes the next command entered.

**Operator response:** Type the command again without the keywords.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

ANFM051I  

**jobname A keyword is required for the IP PrintWay command(command)**

**Explanation:** You entered a command without keywords, but this command requires keywords.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *command* is the IP PrintWay basic mode command.

**System action:** IP PrintWay basic mode ignores the command and processes the next command entered.

**Operator response:** Type the command again with the required keywords.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

ANFM061I  

**jobname A duplicate parameter(parameter) was entered for keyword(keyword) in the IP PrintWay command(command)**

**Explanation:** You typed a parameter more than once in the keyword.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *parameter* is the IP PrintWay basic mode keyword parameter. *keyword* is the IP PrintWay basic mode keyword.

**System action:** IP PrintWay basic mode ignores the command and processes the next command entered.

**Operator response:** Type the command again with consistent keywords specified.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
keyword. *command* is the IP PrintWay basic mode command.

**System action:** IP PrintWay basic mode ignores the command and processes the next command entered.

**Operator response:** Type the command without a duplicate parameter for the keyword.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**ANFM068I** jobname A delimiter was found where an IP PrintWay parameter was expected - *commandtext*

**Explanation:** A delimiter was found where a parameter was expected. The last character of the *commandtext* data is the incorrect delimiter.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *commandtext* is the text of the command up to the error.

**System action:** IP PrintWay basic mode ignores the command and processes the next command entered.

**Operator response:** Type the correct format of the command.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**ANFM070I** jobname An unbalanced parenthesis was encountered in the IP PrintWay command - *commandtext*

**Explanation:** An ending parenthesis is missing from a command. *commandtext* is the data that was entered. The last character of *commandtext* was the last position checked before it was decided a correct parameter list was not present.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *commandtext* is the text of the command up to the error.

**System action:** IP PrintWay basic mode ignores the command and processes the next command entered.

**Operator response:** Type the command and the keyword parameter list in the correct format.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**ANFM069I** jobname No parameters were specified for keyword(keyword) in the IP PrintWay command(*command*)

**Explanation:** You entered a keyword without its required parameters.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *keyword* is the IP PrintWay basic mode keyword. *command* is the IP PrintWay basic command.

**System action:** IP PrintWay basic mode ignores the command and processes the next command entered.

**Operator response:** Type the command again with the correct keyword parameters.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**ANFM071I** jobname An IP PrintWay parameter was found where an FSA name was expected - *commandparameter*

**Explanation:** You entered a command without the FSA name. The command was entered as *command,parameter*, but you should have entered it as *command prttnnn parameters* if you want to specify an FSA name. If you do not want to specify an FSA name, enter *command,,parameters*.

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *commandparameter* are the command parameters up to the error.

**System action:** IP PrintWay basic mode ignores the command and processes the next command entered.

**Operator response:** Type the command again with a
FSA name or with a comma to occupy the position of the FSA name.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**ANFM083I**

**jobname** An FSA name cannot be specified for an IP PrintWay command during initialization.

**Explanation:** The reply for message ANFM020A specified the FSA name in the command. During initialization the FSA name cannot be specified with any command. These commands take effect for the entire FSS. Thus, an FSA name specification is not valid.

In the message text, *jobname* is a job name, an FSS name, or an FSA name.

**System action:** IP PrintWay basic mode ignores the command and processes the next command entered.

**Operator response:** Type the command without the FSA name.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**ANFM084I**

**jobname** The format of FSA name *(fsaname)* is not valid in IP PrintWay command *(command)*

**Explanation:** The FSA name specified is not valid because its format is not valid. The format of an FSA name is prt(nnnnn).

In the message text, *jobname* is a job name, an FSS name, or an FSA name. *fsaname* is the IP PrintWay basic mode FSA name. *command* is the IP PrintWay basic mode command.

**System action:** IP PrintWay basic mode ignores the command and processes the next command entered.

**Operator response:** Type the correct format of the FSA name.

**System programmer response:** None.
ANFM087I  jobname An FSA name cannot be specified with the IP PrintWay command(command) with parameter(parameter)

Explanation: The FSA name was specified for a command, but the parameter specified with this command does not allow the FSA name to be specified.

In the message text, jobname is a job name, an FSS name, or an FSA name. command is the IP PrintWay basic mode Command. parameter is the IP PrintWay basic mode keyword parameter.

System action: IP PrintWay basic mode ignores the command and processes the next command entered.

Operator response: Type the command again without an FSA name.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM092I  jobname The IP PrintWay QEDIT request was unsuccessful - return code = (retcode)

Explanation: An MVS QEDIT request to change the number of requests that could be queued for this FSS was unsuccessful. The return code is the code returned by the QEDIT macro.

In the message text, jobname is a job name, an FSS name, or an FSA name. retcode is the return code from the request.

System action: The operator interface is terminated with a dump.

Operator response: Inform your system programmer that this error occurred.

System programmer response: For information about the QEDIT return code, see z/OS MVS Programming: Authorized Assembler Services Reference LLA-SDU.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM093I  jobname The MVS STOP command is not valid for the IP PrintWay operator interface

Explanation: You entered an MVS STOP command for the IP PrintWay basic mode operator interface. The IP PrintWay basic mode operator interface processes only the MVS MODIFY command.

In the message text, jobname is a job name, an FSS name, or an FSA name.

System action: IP PrintWay basic mode ignores the command and processes the next command.

Operator response: Use the MVS MODIFY command to enter IP PrintWay basic mode commands.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
ANFM094I  jobname The systemfunction call was unsuccessful for the IP PrintWay module modulename, return code (retcode) - module(modulename)

Explanation: A system function was used to do some task for the operator interface. The function returned a non-zero return code.

In the message text, jobname is a job name, an FSS name, or an FSA name. systemfunction is a System Function used to do some task for the operator interface. modulename is the System function request that was sent for this module. retcode is the return code returned by the system function.

System action: Processing ends with an abend or error message. A subsequent IP PrintWay basic mode message notifies the operator what action was taken.

Operator response: Inform your system programmer that this error occurred.

System programmer response: For information about the return code, see z/OS MVS Programming: Authorized Assembler Services Reference ALE-DYN

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM100I  An IP PrintWay SVC dump was unsuccessful - reason code(reasoncode)

Explanation: The IP PrintWay basic mode ESTAI routine received a return code of X'08' from the system's SVC dump service. This indicates that the SVC dump was unsuccessful.

In the message text, reasoncode is the SVC dump's reason code.

System action: Abend processing continues.

Operator response: Notify your system programmer of this error.

System programmer response: If you receive reason code X'08', Dump Analysis Elimination (DAE) has suppressed the dump due to a previous similar dump having occurred. Check the SYS1.DAE data set for a symptom string that matches the abend that just occurred. If you receive reason code X'05', verify that at least one SYS1.DUMPnn data set is available when IP PrintWay basic mode attempts to take a dump. To determine why the macro failed or returned unexpected results, see the information for your operating system that explains system macros.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM095I  jobname An IP PrintWay FREEMAIN invocation was unsuccessful for subpool(subpool), return code = (retcode) - module(modulename)

Explanation: The FREEMAIN was unsuccessful. It returned a nonzero return code.

In the message text, jobname is a job name, an FSS name, or an FSA name. subpool is the Subpool being freed. retcode is the return code from the FREEMAIN macro. modulename is the name of module that sent the FREEMAIN macro.

System action: Processing ends with an abend or error message. A subsequent IP PrintWay basic mode message notifies the operator what action was taken.

Operator response: Inform your system programmer that this error occurred.

System programmer response: For information about the return code, see z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM101I  An IP PrintWay SVC dump was successful

Explanation: IP PrintWay basic mode successfully completed an SVC dump to a SYS1.DUMPnn data set.

System action: Abend processing continues.

Operator response: Notify your system programmer of this error.

System programmer response: Examine the SVC dump.
Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM102I System completion code complcode ABEND reason code rsncode has been detected by IP PrintWay module modulename

Explanation: The IP PrintWay basic mode ESTAI routine detected an abend condition.

In the message text, complcode is the system completion code. rsncode is the abend reason code. The abend reason codes are described in "IP PrintWay basic mode system completion code and abend reason codes" on page 54. modulename is the name of the ESTAI module.

System action: Depending on the error condition, processing is terminated for the FSA for which the error occurred, or processing is terminated for the entire IP PrintWay basic mode address space.

Operator response: Notify your system programmer of this error.

System programmer response: Examine the accompanying IP PrintWay basic mode message to determine the appropriate response.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM103I Data set: dsname The time value timeval specified with the jclkeyw is not valid, the data set is released

Explanation: The time value specified on the OUTPUT statement with the RETRYT, RETAINS, or RETAINF keyword was not valid. The format is SS, MM:SS, or HH:MM:SS. SS and MM are values from 0 to 59, and HH is a value from 0 to 99.

In the message text, dsname is the data set name. timeval is the time specification. jclkeyw is the JCL Keyword.

System action: IP PrintWay basic mode releases the data set to JES. JES will delete the data set from the JES spool.

User response: Correct the options on the OUTPUT statement and resubmit the job.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM104I An IP PrintWay SVC dump request created a partial dump

Explanation: The IP PrintWay basic mode ESTAI routine received a return code of X'04' from the system's SVC dump routine. The code indicates that a partial dump was taken.

System action: Abend processing continues.

Operator response: Notify your system programmer of this error.

System programmer response: Increase the size of the SYS1.DUMPnn data set, if needed.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM105I An IP PrintWay ESTAI cannot evaluate system completion code, complcode, module, modulename, abnormal termination will continue

Explanation: The IP PrintWay basic mode ESTAI routine is unable to continue because either the abend reason code was not displayed by IP PrintWay basic mode, or the abend reason code was not available.

In the message text, complcode is the system completion code. modulename is the name of the failing module.

System action: Abend processing continues.

Operator response: Notify your system programmer of this error.

System programmer response: Examine the SVC dump. Register 15 at the time of the abend might contain the abend reason code.

For assistance related to this error code, consult your
service representative in the IBM Support Center, or use your electronic link with IBM service.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**ANFM106I**  An IP PrintWay FSA ESTAI VSAM call (vsfunc) failed

**Explanation:** The FSA ESTAI routine was called during abnormal termination. While trying to clean up the VSAM transmission-queue data set, an error was encountered in the indicated function.

In the message text, *vsfunc* is the failing VSAM function.

**System action:** Termination continues.

**Operator response:** None.

**System programmer response:** The message indicates a VSAM or IP PrintWay basic mode logic error.

If the error condition persists, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**ANFM107I**  There was an error at the Inventory Server, an indication of the error will appear on the Inventory server log.

**Explanation:** The Printer Inventory Manager had an error. Check the Printer Inventory Manager log to determine the error.

In the message text, *inventory* is the name of the Printer Inventory with the error.

**System action:** IP PrintWay basic mode ends.

**Operator response:** None.

**System programmer response:** If the error condition persists, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**ANFM108I**  There is not enough storage to satisfy a request to the Inventory Server.

**Explanation:** There is not enough storage to satisfy a request to the Printer Inventory Manager.

**System action:** IP PrintWay basic mode ends abnormally.

**Operator response:** None.

**System programmer response:** Increase the IP PrintWay basic mode REGION size on the JCL statement. For more information, see [z/OS Infoprint Server Customization](https://www.ibm.com/support/knowledgecenter/SSEP75_8.1.0/com.ibm.zos.zosinfoprinthtml/aenf16i108w.html).

**Problem determination:** Not applicable.
ANFM110I  The Inventory Server API (AOPDBPKG) could not be loaded. The load failed with a return code of retcode and reason code of reasoncode.

Explanation:  Load failed for module AOPDBPKG. The high-order half word is the abend code. The low-order half word is the reason code.

System action:  IP PrintWay basic mode ends.

Operator response:  None.

System programmer response:  Make sure the Printer Inventory Manager API (AOPDBPKG) is in the SYS1.LINKLIB. Look up the message's return and reason codes in z/OS MVS System Codes for more information about the error. If the error condition persists, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Problem determination:  Not applicable.

Source:  Infoprint Server
Module:  Not applicable.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

ANFM113I  Data set: datasetname The time value timeval specified with the keyword is not valid, the data set is released.

Explanation:  For the data set named, the time value specified is not in the correct format on the RETRYT, RETAINS, or RETAINF keyword. The correct format is SS, MM:SS, or HH:MM:SS. SS and MM are values from 0 to 59, HH is a value from 0 to 99.

In the message text, datasetname is the name of the data set at the time of the error. timeval is the time value specified. keyword is the keyword with the incorrect time value.

System action:  The data set is released.

Operator response:  None.

System programmer response:  Correct the format and submit the data set again.

Problem determination:  Not applicable.

Source:  Infoprint Server
Module:  Not applicable.
ANFM115I  The INV= string was not found on the EXEC parameter statement in the writer procedure.

Explanation: A Printer Inventory name must be identified to IP PrintWay basic mode in the PARM parameter on the EXEC statement:

```
PARM=(INV=xxxx)
```

xxxx is the 1- to 4-character name of the Printer Inventory.

System action: IP PrintWay basic mode does not start.

Operator response: Notify the system programmer.

System programmer response: Code the EXEC statement with the correct 1- to 4-character name for the Printer Inventory. For more information about the PARM parameter on the EXEC statement, see z/OS Infoprint Server Customization.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM116I  There are more than four characters specified for the inventory server name on the EXEC parameter. The name must be 1 to 4 characters.

Explanation: The INV= statement on the PARM parameter on the EXEC statement has a name that is not valid. The name of the Printer Inventory must be one to four characters. The Printer Inventory cannot be started until this value is correct. The correct format of the INV statement in the PARM parameter on the EXEC statement is:

```
PARM=(INV=xxxx)
```

xxxx is the 1- to 4-character name of the Printer Inventory.

System action: IP PrintWay basic mode does not start.

Operator response: Notify the system programmer.

System programmer response: Code the EXEC statement with the correct 1- to 4-character name for the Printer Inventory. For more information about the PARM parameter on the EXEC statement, see z/OS Infoprint Server Customization.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM117I  The call to BPX1SSD returned a bad return code: retcode.

Explanation: The call to BPX1SSD could not be completed. The return code indicates the reason for the failure.

System action: IP PrintWay basic mode ends.

Operator response: Notify the system programmer.

System programmer response: Use the reason code and the extended reason code to determine the problem. For details about these codes, see z/OS Language Environment Debugging Guide.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM122I  FSS: fssname IP PrintWay must be started by JES

Explanation: IP PrintWay basic mode was started by some means other than JES.

In the message text, fssname is the FSS name from FSS definition.

System action: The FSS ends.

Operator response: None.

System programmer response: Start IP PrintWay basic mode using the appropriate JES command.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
ANFM123I  FSS:  fssname  IP PrintWay requires the FSI to run above the line

Explanation:  Your FSI is set up to run below the 16 M line, but IP PrintWay basic mode requires it to run above the line.

In the message text,  fssname  is the FSS name from the FSS definition.

System action:  The FSS ends.

Operator response:  None.

System programmer response:  Set up your FSI to run above the line.

Problem determination:  Not applicable.

Source:  Infoprint Server

Module:  Not applicable.

Routing code:  Not applicable.

Descriptor code:  Not applicable.

Automation:  Not applicable.

ANFM126I  FSS:  fssname  The queue manager for this FSS has terminated

Explanation:  The transmission-queue manager terminated unexpectedly.

In the message text,  fssname  is the FSS name from the FSS definition.

System action:  The FSS ends.

Operator response:  None.

System programmer response:  See previous messages to determine why the transmission-queue manager terminated.

Problem determination:  Not applicable.

Source:  Infoprint Server

Module:  Not applicable.

Routing code:  Not applicable.

Descriptor code:  Not applicable.

Automation:  Not applicable.

ANFM130I  FSA:  fsaname  An IP PrintWay initialization error occurred in module modname

Explanation:  The module mentioned encountered an initialization error.

In the message text,  fsaname  is the FSA name.  modname  is the name of failing module.

System action:  The FSA ends.

Operator response:  None.

System programmer response:  If the error condition persists, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Problem determination:  Not applicable.

Source:  Infoprint Server

Module:  Not applicable.

Routing code:  Not applicable.

Descriptor code:  Not applicable.

Automation:  Not applicable.

ANFM131I  Data set:  dsname  No routing entry was found, the data set is held

Explanation:  IP PrintWay basic mode could not find a printer definition with the form name, class, and destination specified in the JCL for this data set.  Therefore, the data set is held by the system.

In the message text,  dsname  is the data set name.

System action:  IP PrintWay releases the data set back to JES and requests that the system hold it.

Operator response:  Notify your system programmer of this error.

To attempt to transmit the data set again, release the data set from hold status.

System programmer response:  Change the forms, class, or destination of the data set, or create a printer definition in the Printer Inventory for the current forms, class, and destination.

In the printer definition, make sure that the Use DEST, CLASS, and FORMS for IP PrintWay printer selection field is selected.  This field is displayed on the main ISPF panel for the printer definition.  If you use the Printer Inventory Definition Utility (PIDU) instead of ISPF panels to create or modify the printer definition, the corresponding printer attribute to specify is dcf-routing=yes.

Problem determination:  Not applicable.

Source:  Infoprint Server

Module:  Not applicable.

Routing code:  Not applicable.

Descriptor code:  Not applicable.

Automation:  Not applicable.

ANFM132I  Data set:  dsname  The options entry optname was not found, the data set is held

Explanation:  The printer definition or the PRTOPTNS parameter in the OUTPUT JCL statement contains the name of an options component, but IP PrintWay basic
mode could not find the named options component in
the printer definition or Printer Inventory. An options
component might be missing, or the name of the
options component might be spelled incorrectly.

In the message text, dsname is the data set name.
optname is the name of the options component
specified in JCL or the printer definition.

System action: IP PrintWay releases the data set
back to JES and requests that the system hold it.

User response: If the name of the options component
is incorrect in the PRTOPTNS parameter, specify the
correct name and resubmit the data set.

Operator response: Notify your system programmer
of this error.

To attempt to transmit the data set again, release the
data set from hold status.

System programmer response: Either create an
options component with the specified name in the
Printer Inventory, or specify the correct options
component in the printer definition. Use the Infoprint
Server ISPF panels to add a new options component or
to modify the printer definition.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM134I Data set: dsname The end of a spanned
record was found with no previous
beginning, the data set is held

Explanation: A spanned record end was found, but a
spanned record was not currently being processed.

In the message text, dsname is the data set name.

System action: IP PrintWay releases the data set
back to JES and requests that the system hold it.

Operator response: Notify your system programmer
of this error.

To attempt to transmit the data set again, release the
data set from hold status.

System programmer response: See the JES I/O
error message to determine an appropriate action.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM135I Data set: dsname A spanned record is
too big, the data set is held

Explanation: A spanned record is bigger than the
allowable maximum of 32K.

In the message text, dsname is the data set name.

System action: IP PrintWay releases the data set
back to JES and requests that the system hold it.

Operator response: Notify your system programmer
of this error.

To attempt to transmit the data set again, release the
data set from hold status.

System programmer response: Make sure no
records for IP PrintWay basic mode are bigger than
32K.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
ANFM136I Data set: dsname No end of a spanned record was found, the data set is held

Explanation: A spanned record was started but not ended.

In the message text, dsname is the data set name.

System action: IP PrintWay releases the data set back to JES and requests that the system hold it.

Operator response: Notify your system programmer of this error.

To attempt to transmit the data set again, release the data set from hold status.

System programmer response: See the JES I/O error message to determine an appropriate action.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM137I IP PrintWay is terminating due to the requested ABEND

Explanation: The operator requested an abend.

System action: IP PrintWay basic mode ends the requested level with an abend.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM138I An IP PrintWay SVC dump received a return code of 08

Explanation: The operator requested a dump, but the dump request completed with a return code of 08, indicating no dump occurred.

System action: Processing continues.

Operator response: None.

System programmer response: Allow more space for dump data sets or free a dump data set.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM139I Data set: dsname Writing of an IP PrintWay SMF6 record failed

Explanation: A data set completed, and IP PrintWay basic mode attempted to write an SMF6 record but could not write the SMF record.

In the message text, dsname is the data set name.

System action: Processing continues.

Operator response: None.

System programmer response: See any associated errors to correct the SMF problem.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM140I Data set: dsname Successful Transmission

Explanation: The NOTIFY parameter caused notification for this data set to be sent, and its transmission worked.

In the message text, dsname is the data set name.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM142I  Data set: dname Unsuccessful Transmission

Explanation: The NOTIFY parameter caused notification for this data set to be sent, and its transmission failed. For more information, see the IP PrintWay basic mode message log data set.

In the message text, dname is the data set name.

System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM143I  The submitter is not authorized to send status to userid using the NOTIFY parameter

Explanation: The NOTIFY parameter indicated this user, but the submitter is not authorized to send status to that user.

In the message text, userid is the name of submitter.

System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM144I  The NOTIFY command failed - code = errorb

Explanation: The NOTIFY command failed with the indicated code. 28 - storage, 08 - cancelled, other - logic error.

In the message text, errorb is the failure code byte.

System action: Processing continues.
Operator response: None.
System programmer response: To determine why the macro failed or returned unexpected results, see the information for your operating system that explains system macros.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM145I  A NOTIFY error was received - code = errorb

Explanation: The NOTIFY command failed with the indicated code. 28 - storage, 08 - cancelled, other - logic error.

In the message text, errorb is the failure code byte.
System action: Processing continues.
Operator response: None.
System programmer response: To determine why the macro failed or returned unexpected results, see the information for your operating system that explains system macros.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM147I A NOTIFY error was received - code = errorb
Explanation: The NOTIFY parameter failed with the indicated code.
In the message text, errorb is the failure code byte.
System action: Processing continues.
Operator response: None.
System programmer response: To determine why the macro failed or returned unexpected results, see the information for your operating system that explains system macros.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM148I Notify your system programmer
Explanation: See the previous messages for the error.
System action: Processing continues.
Operator response: None.
System programmer response: To determine why the macro failed or returned unexpected results, see the information for your operating system that explains system macros.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM149I Data set: dsname Released, no transmission
Explanation: The NOTIFY parameter caused notification for this data set to be sent. The data set was released to JES without attempting its transmission. This situation could occur if the data set was restarted from a JES checkpoint, or if the FSA was stopped.
In the message text, dsname is the data set name.
System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM150I Data set: dsname IP was specified on the OUTPUT statement, but the PRTQUEUE keyword was not specified, the data set is released
Explanation: The DEST=IP: parameter was specified on the OUTPUT statement in the JCL for the data set. However, the required PRTQUEUE parameter was not also specified.
In the message text, dsname is the data set name.
System action: IP PrintWay basic mode releases the data set to JES and requests that JES delete the data set from the JES spool.
User response: Submit the data set again and specify the PRTQUEUE parameter.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
ANFM152I Data set: dsname The BDS user exit 
bdsexit was not found

Explanation: The printer definition that IP PrintWay basic mode used for this data set specified the name of a Begin Data Set exit. The named exit could not be located.

In the message text: dsname is the data set name.
bdsexit is the name of the Begin Data Set exit as specified in the printer definition.

System action: IP PrintWay releases the data set back to JES and requests that the system hold it.

Operator response: To attempt to transmit the data set again, release the data set from hold status.

System programmer response: If the name of the exit is correct, make sure that the exit routine is in the library search order (STEPLIB/LINKLIST). If the name of the exit is not correct, change the exit name in the IP PrintWay Options panel of the printer definition using the Infoprint Server ISPF panels.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM153I Data set: dsname The EDS user exit edsexit was not found

Explanation: The printer definition that IP PrintWay basic mode used for this data set specified the name of an End Data Set exit. The named exit could not be located.

In the message text: dsname is the data set name.
edsexit is the name of the End Data Set exit as specified in the printer definition.

System action: IP PrintWay releases the data set back to JES and requests that the system hold it.

Operator response: To attempt to transmit the data set again, release the data set from hold status.

System programmer response: If the name of the exit is correct, make sure that the exit routine is in the library search order (STEPLIB/LINKLIST). If the name of the exit is not correct, change the exit name in the IP PrintWay Options panel of the printer definition using the Infoprint Server ISPF panels.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM154I Data set: dsname The record user exit record exit was not found

Explanation: The printer definition that IP PrintWay basic mode used for this data set specified the name of a Record exit. The named exit could not be located.

In the message text: dsname is the data set name.
record exit is the name of the Record exit as specified in the printer definition.

System action: IP PrintWay releases the data set back to JES and requests that the system hold it.

Operator response: To attempt to transmit the data set again, release the data set from hold status.

System programmer response: If the name of the exit is correct, make sure that the exit routine is in the library search order (STEPLIB/LINKLIST). If the name of the exit is not correct, change the exit name in the IP PrintWay Options panel of the printer definition using the Infoprint Server ISPF panels.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM155I usrtxt

Explanation: One of the IP PrintWay basic mode installation exits requested that IP PrintWay basic mode write this message to the IP PrintWay basic mode message log data set. The usrtxt was generated by the exit. For information about how an exit can create messages, see [z/OS Infoprint Server Customization](#).

System action: IP PrintWay basic mode continues processing.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
ANFM156W  An FSA in the IP PrintWay address space was unable to acquire storage

Explanation:  A IP PrintWay basic mode FSA attempted to acquire storage but failed. Sufficient storage might be unavailable because IP PrintWay basic mode has retained a large number of data sets on the JES spool. IP PrintWay basic mode retains a data set on the JES spool after successful transmission or failed transmission if (1) the job submitter specifies a retain time in the RETAINS and RETAINF parameters on the OUTPUT JCL statement or if (2) the printer definition used for the data set specifies a retention period.

System action:  If IP PrintWay basic mode is attempting to acquire a data set from JES when this error occurs, IP PrintWay basic mode does not acquire the data set. The data set remains on the JES spool and might be acquired again.

If IP PrintWay basic mode is attempting to transmit a data set when this error occurs, IP PrintWay basic mode retries the transmission. If IP PrintWay basic mode has already attempted the requested number of retries, IP PrintWay basic mode retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set.

Operator response:  Notify your system programmer of this error.

To make more storage available, delete some of the data sets that IP PrintWay basic mode has retained on the JES spool. Use the Infoprint Server ISPF panels to list entries on the IP PrintWay basic mode transmission queue with a status of S (successful transmission) or F (failed transmission). These entries represent data sets retained on the JES spool. Consider deleting entries with a status of S before deleting entries with a status of F. Also consider deleting data sets that have been retained the longest. The Last Activity field in each entry contains the date and time of the last transmission attempt. For more information, see z/OS Infoprint Server Operation and Administration.

System programmer response:  Consider shortening the retention periods specified in the printer definitions in the Printer Inventory. For information about how to use the Infoprint Server ISPF panels to modify the printer definitions, see z/OS Infoprint Server Operation and Administration or the ISPF online help panels.

Problem determination:  Not applicable.

Source:  Infoprint Server
Module:  Not applicable.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

ANFM157I  Both PRTQUEUE and PORTNO JCL keywords were specified on the OUTPUT statement. The PRTQUEUE value is ignored.

Explanation:  IP PrintWay basic mode uses the PORTNO value when both PORTNO and PRTQUEUE JCL keywords are used on the OUTPUT statement. This message is for information only, to let you know that both keywords are specified and that only PORTNO is used.

System action:  Processing continues with the PORTNO value.

Operator response:  None.

System programmer response:  None.

Problem determination:  Not applicable.

Source:  Infoprint Server
Module:  Not applicable.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

ANFM158I  Data set: datasetname No entry was found for the printer name, the data set is held PRINTER NAME = printer-name

Explanation:  No printer definition was found matching the printer of the named data set, so the data set is held by the system.

In the message text, datasetname is the data set at the time of the error. printer-name is the printer specified for the data set.

System action:  The data set is held.

Operator response:  None.

System programmer response:  Have the job submitter change the printer name of the data set and resubmit the job, or create a printer definition in the Infoprint Server Printer Inventory for the current printer name.

Problem determination:  Not applicable.

Source:  Infoprint Server
Module:  Not applicable.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.
### ANFM159I Data set: `datasetname` An error occurred on the Inventory Server, the data set is held. Check the server log for an indication of the error.

**Explanation:** The Printer Inventory Manager had an error.

In the message text, `datasetname` is the data set at the time of the error.

**System action:** The data set is held by the system.

**Operator response:** None.

**System programmer response:** Determine and fix the cause of the error, then reset the data set. For information about resetting the data set, see [z/OS Infoprint Server Operation and Administration](https://www.ibm.com/support/knowledgecenter/en/SSG60P_7.1.0/com.ibm.zos.feature.iprint.doc/infoprint_inv_server_operation_administration.html).

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

### ANFM160I Data set: `datasetname` The printer inventory server is not responding.

**Explanation:** IP PrintWay basic mode could not start or contact the Printer Inventory Manager.

In the message text, `datasetname` is the data set at the time of the error.

**System action:** The data set is held.

**Operator response:** None.

**System programmer response:** Find and fix the server error, then reset the data set. For more information about the Printer Inventory Manager and about resetting the data set, see [z/OS Infoprint Server Operation and Administration](https://www.ibm.com/support/knowledgecenter/en/SSG60P_7.1.0/com.ibm.zos.feature.iprint.doc/infoprint_inv_server_operation_administration.html).

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

### ANFM161I Data set: `datasetname` No Printer Inventory entry was found for the options name specified either through JCL or the Routing exit. The data set is held. `Entry name = componentname`

**Explanation:** No component was found in the Infoprint Server Printer Inventory with the requested component name. A Processing, IP PrintWay basic mode Options, or Protocol component with the requested name must exist in the Printer Inventory.

In the message text, `datasetname` is the data set at the time of the error. `componentname` is the name of the component that was requested either in the PRTOPTNS JCL parameter of the OUTPUT statement or in the IP PrintWay basic mode routing exit.

**System action:** The data set is held by the system.

**Operator response:** None.

**System programmer response:** Correct the component name in the PRTOPTNS JCL parameter or in the Routing exit. If the component name is correct, create a Processing, IP PrintWay basic mode Options, or Protocol component with that name in the Infoprint Server Printer Inventory. For information about how to create components for the PRTOPTNS parameter, see [z/OS Infoprint Server Operation and Administration](https://www.ibm.com/support/knowledgecenter/en/SSG60P_7.1.0/com.ibm.zos.feature.iprint.doc/infoprint_inv_server_operation_administration.html).

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
ANFM163I  ANFLIB=libpath
Explanation: This informational message tells you the
path name of ANFLIB DD.
System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM164I  ANFCALL=callpath
Explanation: This informational message tells you the
path name of ANFCALL DD.
System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM165I  Data set: datasetname The VTAM
feature is not enabled or the APPLID is
not coded on the FSS definition, the
data set is held.
Explanation: IP PrintWay basic mode attempted to
transmit a data set to a VTAM-controlled printer. To print
on VTAM-controlled printers, your installation must
enable Coax Printer Support V1.1 (5697-F51) and
enable Infoprint transforms. (Infoprint Coaxial Printer
Support V2.1 for z/OS, 5655-N62, does not need to be enabled.)
Also, you must create a VTAM application
program resource definition (APPL) for IP PrintWay
basic mode and specify the APPL ID in an FSS
definition in the Printer Inventory. This message
indicates that either you did not enable Coax Printer
Support or did not specify the APPL ID in the FSS
definition.
In the message text, datasetname is the data set at the
time of the error.
System action: The data set is placed on the system
hold queue and IP PrintWay basic mode continues
processing other data sets.
Operator response: Notify the system programmer
that this error occurred. After the problem is corrected,
restart the IP PrintWay basic mode FSS to pick up any
changes to the APPL ID in the FSS definition in the
Printer Inventory. Then, release the data set from the
system hold queue.
System programmer response: Make sure that
Infoprint transforms are enabled. Also, create an FSS
definition for the IP PrintWay basic mode FSS and
specify the name of the VTAM APPL statement for IP
PrintWay basic mode.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM166I  The SNA feature is not enabled.
Explanation: The FSS definition for IP PrintWay basic
mode in the Printer Inventory specifies a VTAM APPL
ID, indicating that you want IP PrintWay basic mode to
print on VTAM-controlled printers. To print on
VTAM-controlled printers, your installation must enable
Coax Printer Support V1.1 (5697-F51) and enable
Infoprint transforms. (Infoprint Coaxial Printer Support
V2.1 for z/OS, 5655-N62, does not need to be enabled.)
System action: Processing continues.
Operator response: Notify the system programmer
that this error occurred. After the problem is corrected,
restart the IP PrintWay basic mode FSS to pick up any
changes to the FSS definition in the Printer Inventory.
System programmer response: Either enable
Infoprint transforms or remove the APPL ID from the
SNA definition. If you remove the APPL ID, IP PrintWay
basic mode will not be able to print on VTAM-controlled
printers.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
ANFM167I  The VTAM ACB initialization failed with a return code = returncode. Verify that the APPLID name is correct.

Explanation: The VTAM ACB macro failed. The APPL ID specified in the FSS definition in the Printer Inventory for the IP PrintWay basic mode functional subsystem (FSS) might be incorrect.

In the message text, returncode is the return code from the VTAM ACB macro.

System action: Processing continues.

Operator response: Notify your system programmer that this error occurred. After the error is corrected, restart the IP PrintWay basic mode FSA to pick up changes to the FSS definition in the Printer Inventory.

System programmer response: Make sure that the APPL ID specified in the FSS definition matches the name of an APPL statement defined to VTAM. For information about the APPL statement and FSS definition, see z/OS Infoprint Server Customization. For information about the VTAM return code, see z/OS Communications Server: IP and SNA Codes.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM171I  Data set: dname The printer type: type is invalid for IP PrintWay.

Explanation: The printer definition that IP PrintWay basic mode selected in the Infoprint Server Printer Inventory to print the data set is not the correct type. The printer definition must be an IP PrintWay basic mode printer definition.

In the message text, dname is the data set name and type is the type of the printer definition: PSF-MVS, GENERAL, or UNKNOWN.

System action: The data set is released to JES and is put into a hold status.

Operator response: Notify your system programmer that this error occurred. After the error is corrected, release the data set from the system hold queue.

System programmer response: Inspect the DEST, CLASS, and FORMS values of the output data set to determine which printer definition IP PrintWay basic mode selected to print the data set. If that is not possible, you can use the Infoprint Server ISPF panels to list all printer definitions with the incorrect type identified in the message text and attempt to determine which printer definition has caused this problem.

If the DEST, CLASS, and FORMS values on the JCL are incorrect and caused IP PrintWay basic mode to select the wrong printer definition, change the DEST, CLASS, and FORMS values of the output data set.

Otherwise, use the Infoprint Server ISPF panels or the Printer Inventory Definition Utility (PIDU) to change the type of the printer definition. The type must be IP PrintWay basic mode.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM170I  Data set: dname The TCP/IP HOSTNAME is not configured. Correct the TCP/IP configuration and restart the FSA again.

Explanation: TCP/IP is not configured with a host name. In the message text, dname is the data set name.

System action: The data set is released to JES and is put into a hold status.

Operator response: Notify your system programmer that this error occurred. After the error is corrected, restart the IP PrintWay basic mode FSA and release the data set from the system hold queue.

System programmer response: Code a HOSTNAME in either the hlq.TCPIP.DATA data set or in the /etc/resolv.conf file.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM600I  FSS: fssname The queue manager has been started

Explanation: The queue manager component for the listed FSS has been started.

In the message text, fssname is the FSS name from the FSS definition.

System action: The queue manager component continues processing normally.

Operator response: None.

System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

**ANFM601I**  Data set: dsname The data set was successfully transmitted to host and queue: host queue

Explanation: The listed data set has been successfully transmitted.

In the message text, dsname is the data set name. host is the target host. queue is the target print queue.

System action: The queue manager module continues processing normally.

Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

**ANFM602I**  Data set: dsname The data set was not successfully transmitted to host and queue: host queue

Explanation: The listed data set was not successfully transmitted (including any retries).

In the message text, dsname is the data set name. host is the target host. queue is the target print queue.

System action: Queue manager continues processing normally.

Operator response: This message might be due to a transient error in the network, the target system, or printer. If you see the message several times for a particular target system or printer, it might indicate a problem at that system. In this case, notify your system programmer of this error.
System programmer response: If this message recurs for a particular target system or printer, attempt to determine the reason data cannot be successfully transmitted and correct the problem.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

**ANFM603I**  Data set: dsname The data set is being released with a JES checkpoint

Explanation: The IP PrintWay basic mode FSA is being stopped. IP PrintWay basic mode releases the data set to JES with checkpoint information. The data set remains on the JES spool and can be acquired again. If it is acquired again, IP PrintWay basic mode will use the retry and restart status information in the checkpoint.

In the message text, dsname is the data set name.

System action: IP PrintWay basic mode releases the data set to JES with checkpoint information. The FSA continues normal termination.

Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

**ANFM604I**  Data set: dsname The data set is being released to JES

Explanation: The retention period specified for the data set has expired. The retention period is specified either on the OUTPUT JCL statement or in the printer definition. The data set is being released to JES and will be deleted from the JES spool.

In the message text, dsname is the data set name.

System action: IP PrintWay releases the data set back to JES and requests that the system delete it.

Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
ANFM605I  Data set: dsname The data set is being released to JES due to an error

Explanation: The listed data set is being released to JES following an error.

In the message text, dsname is the data set name.

System action: The data set is released to JES and is put into a hold status.

Operator response: Either an I/O error was encountered when IP PrintWay basic mode tried to read the records of the data set from the JES spool, or an exit routine or FCB routine produced a terminating return code. If you want to attempt the data set again, it must first be released from hold status.

Notify your system programmer of this error.

System programmer response: See other system messages associated with this I/O error to determine the correct response.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM606I  Data set: dsname The data set was successfully transmitted to host and port: host port

Explanation: The listed data set has been successfully transmitted. In the message text, dsname is the data set name. host is the target host. port is the target port.

System action: The queue manager module continues processing normally.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM607I  Data set: dsname The data set was not successfully transmitted to host and port: host port

Explanation: The listed data set was not successfully transmitted (including any retries).

In the message text, dsname is the data set name. host is the target host. port is the target port.

System action: The queue manager module continues processing normally.

Operator response: This message might be due to a transient error in the network, the target system, or printer. If you see the message several times for a particular target system or printer, it might indicate a problem at that system. In that case, notify your system programmer of this error.

System programmer response: If this message recurs for a particular target system or printer, attempt to determine the reason that data cannot be successfully transmitted and correct the problem.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM6901  The IP PrintWay queue manager ESTAI routine VSAM call (vsfunc) failed

Explanation: The transmission-queue manager ESTAI routine was called during abnormal termination. While IP PrintWay basic mode was trying to clean up the VSAM transmission-queue data set, an error was encountered in the indicated function.

In the message text, vsfunc is the failing VSAM function.

System action: Termination continues.

Operator response: None.

System programmer response: The message indicates a VSAM or IP PrintWay basic mode logic error.

If the error condition persists, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
ANFM691I  Data set: dsname The queue manager ESTAI routine has deleted the transmission queue entry for this data set

Explanation: The entry in the transmission queue for the listed data set has been deleted by the queue manager ESTAI during abend recovery processing. This is normal processing. The data set remains on the JES spool and is available for subsequent printing.

In the message text, dsname is the data set name.

System action: Termination continues.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM699I  FSS: fssname The queue manager has stopped

Explanation: The queue manager for the listed FSS has been stopped.

In the message text, fssname is the FSS name from the FSS definition.

System action: Queue manager continues termination.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM700I  Data set: dsname The data set has been acquired by fsaname

Explanation: The listed data set has been acquired from JES and IP PrintWay basic mode has made a transmission queue entry for it.

In the message text, dsname is the data set name. fsaname is the FSA name.

System action: A subsequent attempt will be made to transmit the data set.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM701I  Data set: dsname The data set was successfully transmitted to URL: printer-url

Explanation: The listed data set has been successfully transmitted to the printer.

In the message text, dsname is the data set name. printer-url is the Uniform Resource Locator (URL) of the target printer.

System action: IP PrintWay basic mode continues processing normally.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM702I  Data set: dsname The data set was not successfully transmitted to URL: printer-url

Explanation: The listed data set was not successfully transmitted to the printer. IP PrintWay basic mode has completed all attempts to retry the transmission.

In the message text, dsname is the data set name. printer-url is the Uniform Resource Locator (URL) of the target printer.

System action: IP PrintWay basic mode continues processing normally.

Operator response: This message might be due to a transient error in the network, the target system, or printer. If you see the message several times for a particular target system or printer, it might indicate a problem at that system. In that case, notify your system programmer of this error.

System programmer response: If this message recurs for a particular target system or printer, attempt
to determine the reason data cannot be successfully transmitted and correct the problem.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**ANFM703I** Data set: *dsname* The data set was successfully sent to e-mail address: *addresses*

**Explanation:** z/OS UNIX sendmail, a component of z/OS Communications Server, accepted the sendmail command from IP PrintWay basic mode to send the data set to the e-mail recipients.

In the message text, *dsname* is the data set name, and *addresses* is the list of e-mail addresses of the e-mail recipients.

**System action:** Sendmail attempts to send the e-mail to the recipients. IP PrintWay basic mode continues processing.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**ANFM704I** Data set: *dsname* The data set was not successfully sent to e-mail address: *addresses*

**Explanation:** z/OS UNIX sendmail, a component of z/OS Communications Server, did not successfully execute the sendmail command from IP PrintWay basic mode to send the data set to the e-mail recipients. This error might indicate that sendmail is not installed correctly, that sendmail did not find an alias name in its aliases file, or that an e-mail address on the local system does not exist. An associated message explains the error in more detail.

In the message text, *dsname* is the data set name and *addresses* is the list of e-mail addresses of the e-mail recipients.

**System action:** IP PrintWay basic mode continues processing.

**Operator response:** See the associated IP PrintWay basic mode error message to determine the sendmail error.

**System programmer response:** Determine the reason for the sendmail error and correct the problem. Some possible problems and solutions are:

- If sendmail did not recognize an alias name, run the sendmail newaliases command to update the sendmail aliases file.
- If the e-mail address is incorrect, correct the address in the printer definition in the Infoprint Server Printer Inventory or in one of the e-mail JCL parameters or e-mail job attributes.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**ANFM1100T** The TCP/IP INITAPI call failed with an ERRNO value of (*errno*)

**Explanation:** The TCP/IP INITAPI call failed for this FSA.

In the message text, *errno* is the TCP/IP ERRNO returned from INITAPI.

**System action:** The FSA ends.

**Operator response:** None.

**System programmer response:** Check the ERRNO in z/OS Communications Server: IP Sockets Application Programming Interface Guide and Reference for the cause.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**ANFM1101I** The TCP/IP GETHOSTNAME call failed with an ERRNO value of (*errno*)

**Explanation:** The TCP/IP GETHOSTNAME call failed for this IP PrintWay basic mode FSA.

In the message text, *errno* is the TCP/IP ERRNO returned from GETHOSTNAME.

**System action:** IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention...
time expires, IP PrintWay automatically deletes the print job from the JES spool.

**Operator response:** None.

**System programmer response:** Check the ERRNO and the datasetname in z/OS Communications Server: IP Sockets Application Programming Interface Guide and Reference for the cause.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**ANFM1102I** The hyperspace initialization failed with a return code of (retcode) and a reason code of (reasoncode)

**Explanation:** The DSPSERV macro call failed for this IP PrintWay basic mode FSA.

In the message text, retcode is the DSPSERV macro return code from the CREATE request. reasoncode is the DSPSERV macro reason code from CREATE request.

**System action:** IP PrintWay basic mode ends with an E90 abend. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

**Operator response:** None.

**System programmer response:** Check the return and reason code in z/OS MVS System Codes for the cause.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**ANFM1103I** Data set: datasetname IP address: ipaddress The TCP/IP BIND call failed with an ERRNO value of (errno)

**Explanation:** The TCP/IP BIND call failed for the target address for the well-known port range from 721 to 731.

In the message text:

<table>
<thead>
<tr>
<th>datasetname</th>
<th>Name of the data set</th>
</tr>
</thead>
<tbody>
<tr>
<td>ipaddress</td>
<td>Printer's IP address or host name</td>
</tr>
<tr>
<td>errno</td>
<td>TCP/IP ERRNO returned from BIND</td>
</tr>
</tbody>
</table>

**System action:** IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

**Operator response:** Notify your system programmer of this error.

**System programmer response:** Look up the ERRNO value in z/OS Communications Server: IP Sockets Application Programming Interface Guide and Reference to determine the cause of this error.

---

Also see “Common Infoprint Server problems” on page 232 for more information about this message.

**System action:** IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

**Operator response:** None.

**System programmer response:** Look up the ERRNO value in z/OS Communications Server: IP Sockets Application Programming Interface Guide and Reference to determine the cause of the problem.

An ERRNO value of 60 indicates that the IP PrintWay basic mode connection timeout value expired. Typically, the connection timeout value expires when a permanent error prevents TCP/IP from connecting to the printer. For example, the printer might be turned off or a firewall might prevent TCP/IP from connecting to the printer. If you think that TCP/IP cannot connect to the printer due to heavy network traffic, consider increasing the value in the Connection timeout field in the printer definition in the Printer Inventory.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
An ERRNO value of 60 indicates that the IP PrintWay basic mode connection timeout value expired. Typically, the connection timeout value expires when a permanent error prevents TCP/IP from connecting to the printer. For example, the printer might be turned off or a firewall might prevent TCP/IP from connecting to the printer. If you think that TCP/IP cannot connect to the printer due to heavy network traffic, consider increasing the value in the Connection timeout field in the printer definition in the Printer Inventory.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**ANFM1105I**

Data set: datasetname IP address: ipaddress The TCP/IP IOCTL call failed with an ERRNO value of (errno)

**Explanation:** The TCP/IP IOCTL call failed for this target address.

In the message text:

<table>
<thead>
<tr>
<th>datasetname</th>
<th>Name of the data set</th>
</tr>
</thead>
<tbody>
<tr>
<td>ipaddress</td>
<td>Printer’s IP address or host name</td>
</tr>
<tr>
<td>errno</td>
<td>TCP/IP ERRNO returned from IOCTL</td>
</tr>
</tbody>
</table>

**System action:** IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

**Operator response:** Notify your system programmer of this error.

**System programmer response:** Look up the ERRNO value in z/OS Communications Server: IP Sockets Application Programming Interface Guide and Reference to determine the cause of the problem.

An ERRNO value of 60 indicates that the IP PrintWay basic mode connection timeout value expired. Typically, the connection timeout value expires when a permanent error prevents TCP/IP from connecting to the printer. For example, the printer might be turned off or a firewall might prevent TCP/IP from connecting to the printer. If you think that TCP/IP cannot connect to the printer due to heavy network traffic, consider increasing the value in the Connection timeout field in the printer definition in the Printer Inventory.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
| Module: Data set: datasetname IP address: ipaddress The TCP/IP SOCKET call failed with an ERRNO value of (errno) | Explanation: The TCP/IP SOCKET call failed for this data set. In the message text: datasetname Name of the data set ipaddress Printer's IP address or host name errno TCP/IP ERRNO returned from SOCKET System action: IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool. Operator response: None. System programmer response: Look up the ERRNO value in z/OS Communications Server: IP Sockets Application Programming Interface Guide and Reference to determine the cause of the problem. Problem determination: Not applicable. Source: Infoprint Server Module: Not applicable. Routing code: Not applicable. Descriptor code: Not applicable. Automation: Not applicable. |
| ANFM1108I | Data set: datasetname The data set received a TCP/IP SOCKET RECEIVE error with an ERRNO value of (errno) | Explanation: The TCP/IP RECEIVE function indicated that the communication partner has closed the connection. In the message text, datasetname is the name of the data set at time of the error. errno is the TCP/IP ERRNO returned from RECEIVE. System action: IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool. Operator response: None. System programmer response: Check the ERRNO in z/OS Communications Server: IP Sockets Application Programming Interface Guide and Reference for the cause. Problem determination: Not applicable. Source: Infoprint Server |
| ANFM1110I | Data set: datasetname The data set received a TCP/IP SOCKET SEND error with an ERRNO value of (errno) | Explanation: The TCP/IP SEND function failed. In the message text, datasetname is the name of the data set at time of the error. errno is the TCP/IP ERRNO returned from SEND. System action: IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool. Operator response: None. System programmer response: Check the ERRNO in z/OS Communications Server: IP Sockets Application Programming Interface Guide and Reference for the cause. Problem determination: Not applicable. Source: Infoprint Server |
**System programmer response:** Check the ERRNO in z/OS Communications Server: IP Sockets Application Programming Interface Guide and Reference for the cause.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**ANFM1111I** IP address: ipaddress The name or address specified is not recognized as a host name or valid dotted decimal address

**Explanation:** The host name or address cannot be resolved.

In the message text, ipaddress is the target IP address or name at the time of the error.

**System action:** IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

**Operator response:** Try to ping the target host using the address or name specified in JCL or in the printer definition.

**System programmer response:** Check the ERRNO in z/OS Communications Server: IP Sockets Application Programming Interface Guide and Reference for the cause.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**ANFM1112I** Data set: datasetname An unsupported record format was found, FIXED and VARIABLE record formats are supported

**Explanation:** A record format other than Fixed or Variable was detected.

In the message text, datasetname is the name of the data set.

**System action:** IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

**Operator response:** None.

**System programmer response:** Reblock or create a translate table that has either a Fixed or Variable record format.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**ANFM1113I** Data set: datasetname The end of data set was found before the SBCS or DBCS translate table could be read for the data set

**Explanation:** The end of the data set was found before IP PrintWay basic mode read the translate table.

In the message text, datasetname is the name of the data set.

**System action:** IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

**Operator response:** None.

**System programmer response:** Correct the single-byte or double-byte translate table data set, or specify another table.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**ANFM1114I** Data set: datasetname The SYNAD exit executed indicating an error for the SBCS or DBCS translate table

**Explanation:** The SYNAD exit was called, indicating an I/O error.

In the message text, datasetname is the name of the data set.

**System action:** IP PrintWay attempts to retransmit the
document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

**Operator response:** None.

**System programmer response:** Correct the single-byte or double-byte translate table, or specify another table.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**ANFM1115I** Data set: `datasetname` A record greater than 256 bytes for a fixed block data set or greater than 260 bytes for a variable blocked data set was returned on a GET macro for the SBCS translate table data set

**Explanation:** A single-byte data set translate table must not be larger than 256 bytes.

In the message text, `datasetname` is the name of the data set.

**System action:** IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

**Operator response:** None.

**System programmer response:** Correct the single-byte translate table or specify another table.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**ANFM1117I** Hyperspace request is larger than the maximum allowed of 524 288 blocks

**Explanation:** The maximum size of a hiperspace request is 524 288 blocks.

**System action:** IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

**Operator response:** None.

**System programmer response:** The maximum size that can be requested is 524 288 blocks.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**ANFM1118I** Data set: `datasetname` The SVC99 call failed with a return code of `retcode`, an S99ERROR code of `errorcode`, and an S99INFO code of `infocode`

**Explanation:** SVC99 dynamic allocation failed. The message is displayed only when internal or external tracing is active. The message is not an error message unless none of the translate tables can be allocated. This message will appear if the data set name is not on the system. This search order for DBCS translate tables is used if the XLATETABLE LPR option is specified.
1. translate_table_name.language_name
2. tcpip_hlq.translate_table_name.language_name
3. tcpip_hlq.STANDARD.language_name

This search order for single-byte translate tables is used if the XLATETABLE LPR option is specified:
1. translate_table_name.TCPXLBIN
2. tcpip_hlq.translate_table_name.language_name

This search order for DBCS translate tables is used if the XLATETABLE LPR option is NOT specified:
1. tcpip_hlq.LPR.language_name
2. tcpip_hlq.STANDARD.language_name

This search order for single-byte translate tables is used if the XLATETABLE LPR option is NOT specified:
1. tcpip_hlq.LPR.TCPXLBIN
2. tcpip_hlq.STANDARD.TCPXLBIN

In the message text, datasetname is the name of the data set.
retcode is the return code.
errorcode is the error code.
infocode is the information code.

System action: IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

Operator response: None.

System programmer response: For the data set search order, see z/OS Infoprint Server Operation and Administration. One of these data sets must be cataloged on the system.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM1119I Data set: datasetname The data set has exceeded the hyperspace allocation for this FSA

Explanation: The hyperspace default size or the size specified in the FSS definition for the IP PrintWay basic mode functional subsystem (FSS) in the Printer Inventory has been exceeded for this data set.

In the message text, datasetname is the name of the data set.

System action: IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

Operator response: None.

System programmer response: Increase the hyperspace size in the FSS definition for the IP PrintWay basic mode FSS in the Infoprint Server Printer Inventory. You can use the Infoprint Server ISPF panels to change the hyperspace size. After you change the hyperspace value, restart the IP PrintWay basic mode FSS so that IP PrintWay basic mode picks up the changes in the FSS definition.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM1120I The host name of the system where IP PrintWay is running: hostname

Explanation: This informational message, which is displayed for each data set IP PrintWay basic mode processes, displays the host name of the z/OS system where IP PrintWay basic mode is running. In the message text, hostname is the host name returned by the TCP/IP GETHOSTNAME function call.

System action: Processing continues.

Operator response: If the host name is not correct, notify your system programmer that this error occurred.

System programmer response: If this host name is not correct, configure the z/OS host name correctly in TCP/IP. You do not need to restart IP PrintWay basic mode after you reconfigure TCP/IP. Then, verify that this message displays the correct host name the next time it is displayed.

You can ignore this message if IP PrintWay basic mode does not use the LPR transmission protocol. You can view the printer definitions in the Infoprint Server Printer Inventory to determine which transmission protocols IP PrintWay basic mode uses.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
ANFM1121I Hostname from GETHOSTNAME call is invalid.

Explanation: The TCP/IP GETHOSTNAME function call returned a host name that is too long. This condition generally indicates that the z/OS host name is incorrectly configured in TCP/IP.

System action: IP PrintWay basic mode uses the first 8 characters of the z/OS host name when it transmits the data set to the printer. The host name that the printer's LPD prints on the banner (separator) page and on page headers will probably not be correct. IP PrintWay basic mode obtains a new z/OS host name each time it transmits a new data set.

Operator response: Notify your system programmer that this error occurred.

System programmer response: Configure the z/OS host name correctly in TCP/IP. You do not need to restart IP PrintWay basic mode after you reconfigure TCP/IP. Then, verify that message ANFM1120I displays the correct host name.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM1149I Data set: datasetname The LPR option TRANSLATETABLE or XLATETABLE name could not be loaded

Explanation: The translation option TRANSLATETABLE or XLATETABLE name could not be loaded from disk.

In the message text, datasetname is the name of the data set.

System action: IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

Operator response: None.

System programmer response: The default single-byte translation table is loaded using a valid name of a data set. This search order is used:
1. tcpip_hlq_name.LPR.TCPXLBIN
2. tcpip_hlq_name.STANDARD.TCPXLBIN

Or check the IP PrintWay basic mode message log data set for any indication of an I/O error.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM1158I Data set: datasetname The default single byte translate table could not be loaded

Explanation: The default single-byte translation table could not be loaded from disk.

In the message text, datasetname is the name of the data set.

System action: IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

Operator response: None.

System programmer response: The default single-byte translation table is loaded using a valid name of a data set. This search order is used:
1. tcpip_hlq_name.LPR.TCPXLBIN
2. tcpip_hlq_name.STANDARD.TCPXLBIN

Or check the IP PrintWay basic mode message log data set for any indication of an I/O error.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM1160I The TCP/IP INITAPI call failed with an ERRNO value of errno

Explanation: The TCP/IP INITAPI call failed for this FSA and this job.

In the message text, errno is the TCP/IP ERRNO returned from INITAPI.

System action: The FSA continues processing.
ANFM1164I  Data set: datasetname  The LPR option LANDSCAPE conflicts with a PostScript data set

Explanation:  The formatting option LANDSCAPE was specified for a data set that is PostScript. These are incompatible options.

In the message text, datasetname is the name of the data set.

System action:  IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

Operator response:  None.

System programmer response:  Remove the formatting LANDSCAPE option for a PostScript data set.

Problem determination:  Not applicable.

Source:  Infoprint Server

Module:  Not applicable.

Routing code:  Not applicable.

Descriptor code:  Not applicable.

Automation:  Not applicable.

ANFM1166I  Data set: datasetname  At least one record was found with a carriage control that IP PrintWay does not support. The record was printed with a line feed, or a line termination string if one was specified. Verify that the output is correct.

Explanation:  IP PrintWay basic mode supports ANSI and machine carriage controls for Print (no space), Space 1 line, Space 2 lines, Space 3 lines, and Skip to Channel 1. If Use FCB is specified as a formatting option, Skip to Channels 2-12 are also supported. All other controls are not supported. Each record that has an unsupported carriage control is printed using single space mode or the line termination string if one was specified.

System action:  None.

Operator response:  None.

System programmer response:  Verify the printed output is correct.

Problem determination:  Not applicable.

Source:  Infoprint Server

Module:  Not applicable.

Routing code:  Not applicable.

Descriptor code:  Not applicable.

Automation:  Not applicable.

ANFM1168I  Data set: datasetname  A record greater than 5124 bytes or a non-variable blocked data set was returned on a GET macro for the DBCS translate table data set

Explanation:  A double-byte translate table data set
must have variable blocked format with a record length of 5124.

In the message text, datasetname is the name of the data set.

**System action:** IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

**Operator response:** None.

**System programmer response:** Correct the double-byte translate table data set or specify another translate table.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**ANFM1169I**  
**Dataset** datasetname **Data which is not valid was found in the DBCS translate table, loading has been stopped**

**Explanation:** A double-byte translation table is being loaded for the data set named in the message. The translation table does not contain data in the format required for double-byte translation tables.

In the message text, datasetname is the name of the data set.

**System action:** IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

**Operator response:** None.

**System programmer response:** Correct the double-byte translate table data set or specify another translate table.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**ANFM1170I**  
**Dataset** datasetname **The DBCS translate table could not be found, loading has been stopped**

**Explanation:** A double-byte translation table is being loaded for the data set named in the message. The language-specific translation table could not be found in the translate table data set.

In the message text, datasetname is the name of the data set.

**System action:** IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

**Operator response:** None.

**System programmer response:** Correct the double-byte translate table data set or specify another translate table.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**ANFM1171I**  
**Dataset** datasetname **The DBCS translate table data set has a size greater than the maximum allowed**

**Explanation:** A double-byte translation table being loaded for the data set named in the message has a size greater than 131 070 bytes.

In the message text, datasetname is the name of the data set.

**System action:** IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

**Operator response:** None.

**System programmer response:** Correct the double-byte translate table data set or specify another translate table.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
Automation: Not applicable.

**ANFM1172I** Dataset "datasetname" The DBCS translate table data set OPEN call failed

Explanation: The last data set in the search order cannot be opened for the data set named in the message.

In the message text, "datasetname" is the name of the data set.

System action: IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

Operator response: None.

System programmer response: For the data set search order, see [z/OS Infoprint Server Operation and Administration](https://www.ibm.com). One of these data sets must be cataloged on the system. Verify that the CONVXLAT program has created the double-byte translate table data set that is specified by the table search hierarchy. For more information about CONVXLAT, see [z/OS Communications Server: IP Configuration Reference](https://www.ibm.com).

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

---

**ANFM1173I** Dataset "datasetname" During EBCDIC DBCS conversion to ASCII, the first double-byte character: firstchar is not valid

Explanation: The first character of a double-byte character, with the specified value, is not in the valid range for EBCDIC double-byte characters.

In the message text, "datasetname" is the name of the data set. firstchar is the first character of a double-byte character in the data set.

System action: The erroneous character is translated using a single-byte EBCDIC to ASCII translation table. If the translation mode uses shift-out and shift-in characters to delimit single-byte and double-byte ASCII data, a shift-in character is added before the erroneous character. Data continues to be translated using the single-byte translation table until an EBCDIC shift-out character is encountered.

**ANFM1174I** Dataset "datasetname" During EBCDIC DBCS conversion to ASCII, the second double-byte character: secondchar is not valid

Explanation: The second character of a double-byte character, with the specified value, is not in the valid range for EBCDIC double-byte characters.

In the message text, "datasetname" is the name of the data set. firstchar is the first character of a double-byte character in the data set. secondchar is the second character of a double-byte character in the data set.

System action: The erroneous character is translated using single-byte EBCDIC to ASCII translation tables. If the translation mode uses shift-out and shift-in characters to delimit single-byte and double-byte ASCII data, a shift-in character is added before the erroneous character. Data continues to be translated using the single-byte translation table until an EBCDIC shift-out character is encountered.

Operator response: None.

System programmer response: Check the contents of the data being transmitted to see if it contains valid double-byte characters. EBCDIC double-byte characters are enclosed in shift-out X'0E' and shift-in X'0F' characters.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

---

**ANFM1175I** Dataset "datasetname" The DBCS translation table for the specified IP PrintWay DBCS translation type could not be loaded

Explanation: The double-byte translation table could not be loaded from disk. See previous messages for...
System action: IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

Operator response: None.

System programmer response: Specify the target system to a system that has enough space, or modify the maximum document size option.

Problem determination: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM1180I Data set: datasetname The data set is larger than the maximum document size.

Explanation: A value was entered in the Maximum document size field of the printer definition but the data set is larger than the size specified. This field specifies the maximum document size to send to the printer or e-mail destination.

In the message text, datasetname is the name of the data set.

System action: IP PrintWay basic mode attempts to again transmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay basic mode retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change the printer definition's options and routing information, if necessary, and also to retransmit the data set if IP PrintWay basic mode has completed all retries. For more information, see [z/OS Infoprint Server Operation and Administration].

Operator response: None.

System programmer response: Specify the target system to a system that has enough space, or modify the maximum document size option.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM1180I Data set: datasetname The data set is larger than the maximum document size.

Explanation: A value was entered in the Maximum document size field of the printer definition but the data set is larger than the size specified. This field specifies the maximum document size to send to the printer or e-mail destination.

In the message text, datasetname is the name of the data set.

System action: IP PrintWay basic mode attempts to again transmit the data set named in the message. If this is the final retry, or if no retries are requested, IP PrintWay basic mode retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change the printer definition's options and routing information, if necessary, and also to retransmit the data set if IP PrintWay basic mode has completed all retries. For more information, see [z/OS Infoprint Server Operation and Administration].

Operator response: None.

System programmer response: Specify the target system to a system that has enough space, or modify the maximum document size option.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM1190I Data set: datasetname At least one record was found with a skip to a channel that is not defined in the FCB. The record was printed with a line feed, or with a line termination string if one was specified. Verify that the output is correct.

Explanation: The data contains a skip to channel carriage control that causes a skip to a channel, which is undefined in the current active FCB. The line is printed, followed by a line feed or line termination string if the data set has a machine carriage control. If the data set has an ANSI carriage control, the line is preceded by a line feed or a line termination string.

System action: None.

Operator response: None.

System programmer response: Verify the printed output is correct.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM1193I Data set: datasetname FCB was specified, but the data set does not have carriage control

Explanation: The formatting options associated with the failed job contains the option Use FCB, but the data set does not have a carriage control.

System action: IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

Operator response: None.

System programmer response: Do not select the Use FCB option in the Formatting field of the printer definition.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.
**ANFM1194I**  Data set: `datasetname The OPEN call failed for SYS1.IMAGELIB`

**Explanation:** The return code from either the allocate or from the open DCB for SYS1.IMAGELIB indicated an error.

**System action:** IP PrintWay basic mode releases the data set back to JES and requests that the system hold it.

**Operator response:** To attempt to transmit the data set again, release the data set from hold status.

**System programmer response:** Make sure the FCB is in the format created by the IEBIMAGE program.

**Problem determination:** Not applicable.

**Source:** Infoprint Server  
**Module:** Not applicable.  
**Routing code:** Not applicable.  
**Descriptor code:** Not applicable.  
**Automation:** Not applicable.

---

**ANFM1195I**  Data set: `datasetname FCB FCBname was not found in SYS1.IMAGELIB`

**Explanation:** The FCB name specified was not found in SYS1.IMAGELIB with a prefix of FCB4, FCB2, or FCB3.

**System action:** IP PrintWay basic mode releases the data set back to JES and requests that the system hold it.

**Operator response:** To attempt to transmit the data set again, release the data set from hold status.

**System programmer response:** Make sure that the member name is spelled correctly, and that the member exists in SYS1.IMAGELIB.

**Problem determination:** Not applicable.

**Source:** Infoprint Server  
**Module:** Not applicable.  
**Routing code:** Not applicable.  
**Descriptor code:** Not applicable.  
**Automation:** Not applicable.

---

**ANFM1196I**  Data set: `datasetname Member FCBname of SYS1.IMAGELIB was not loaded successfully`

**Explanation:** The specified member of SYS1.IMAGELIB was not loaded successfully.

**System action:** IP PrintWay basic mode releases the data set back to JES and requests that the system hold it.

**Operator response:** To attempt to transmit the data set again, release the data set from hold status.

**System programmer response:** Make sure that the FCB is in the format created by the IEBIMAGE program.

**Problem determination:** Not applicable.

**Source:** Infoprint Server  
**Module:** Not applicable.  
**Routing code:** Not applicable.  
**Descriptor code:** Not applicable.  
**Automation:** Not applicable.

---

**ANFM1197I**  Data set: `datasetname The option FCB conflicts with a PostScript data set`

**Explanation:** The formatting option Use FCB was specified for a PostScript data set. These are incompatible options.

In the message text, `datasetname` is the name of the data set.

**System action:** IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

**Operator response:** None.

**System programmer response:** Do not send a PostScript data set to a printer with the Use FCB option selected in the Formatting field of the printer definition.

**Problem determination:** Not applicable.

**Source:** Infoprint Server  
**Module:** Not applicable.  
**Routing code:** Not applicable.  
**Descriptor code:** Not applicable.  
**Automation:** Not applicable.

---

**ANFM1198I**  Data set: `datasetname There was an error loading one of the ICONV tables: ICONV return code = errno document code page = coded character set name printer code page = coded character set name`

**Explanation:** Function `iconv_open` failed due to an incorrect or unsupported code page specified in the Printer Inventory. In the message text, `datasetname` is the name of the data set, `errno` is the error number returned from `iconv_open`, `coded character set name` is...
a code page name specified in the Infoprint Server Printer Inventory.

**System action:** IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

**Operator response:** None.

**System programmer response:** Make sure that the coded character set names are valid for your level of z/OS. For valid names, see [z/OS XL C/C++ Programming Guide] sections “Code Set Converters Supplied” and “Universal Coded Character Set Converters”. To correct a job that IP PrintWay basic mode is currently processing, use Infoprint Server ISPF panels to update the IP PrintWay basic mode transmission queue record for the data set. Specify a valid coded character set name in the translation options section of the queue record. Also, use Infoprint Server ISPF panels to correct the coded character set names in the Document code page and Printer code page fields in the printer definition in the Printer Inventory. The document code page might be specified in the FSS definition for IP PrintWay basic mode in the Printer Inventory instead of in the printer definition.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

The following table describes the message text, datasetname is the name of the data set, target host is the target host, print queue is the target print queue.

<table>
<thead>
<tr>
<th>Code</th>
<th>Data set: datasetname The data set had an error on receiving an ACK from the LPD after sending all the print data Target host: target host Print queue: print queue</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANFM1201</td>
<td>The LPR RECEIVE A PRINT JOB command failed because a print queue which is not valid was specified, or the LPD accepts jobs only in the well-known range of 721 to 731 Target host: target host Print queue: print queue</td>
</tr>
</tbody>
</table>

**Explanation:** The LPR RECEIVE A PRINT JOB command can fail for a number of different reasons. Error messages pertaining to the error might have been sent. See the message log for the related messages. This might indicate that the print queue in the printer definition is not correct or the LPD is accepting print jobs in the well-known port ranges of 721 to 731.

This error can occur when you use the resubmit for filtering function and the Print Interface LPD is not configured to receive print jobs at port 515. In this case, the IP address is the address of the z/OS system and the queue name is the name of the Infoprint Server printer definition. IP PrintWay always sends print jobs to LPD listening at port 515. For information about configuring the lpd-port-number, see [z/OS Infoprint Server Customization]

In the message text, datasetname is the name of the data set, target host is the target host, print queue is the target print queue.

**System action:** IP PrintWay attempts to retransmit the document to the LPD. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

**Operator response:** None.

**System programmer response:** Correct the error based on the messages in the message log. Verify that the print queue is running on the target host and that the LPD can accept connections outside of port ranges of 721 to 731. If the LPD requires that the z/OS port be in the range of 721 to 731, select the Restrict ports LPR option in the printer definition.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
expires, IP PrintWay automatically deletes the print job from the JES spool.

Operator response: Notify your system programmer that this error occurred.

System programmer response: Correct the error based on the messages in the IP PrintWay basic mode message log.

If Infoprint Server was sending a large job to the LPD when this error occurred, try increasing the value in the Response timeout field to 600 (10 minutes) in the printer definition for the printer.

If the target host is the address of the z/OS system and the print queue is the name of the printer definition, this indicates that IP PrintWay basic mode sent data to the Print Interface LPD to be transformed to another data format. The Print Interface LPD responds to IP PrintWay only after all data has been transformed. Therefore, if you see this message, you might need to increase the performance of the Workload Manager service class that the transform daemons use so that the transform completes before the IP PrintWay response timeout value expires. For more information about Workload Manager, see z/OS Infoprint Server Customization and z/OS MVS Planning: Workload Management.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM1202I Data set: datasetname The LPR RECEIVE CONTROL FILE command failed Target host: target host Print queue: print queue

Explanation: The LPD returned a non-zero return code from the RECEIVE CONTROL FILE command. Error messages pertaining to the error might have been sent. See the message log for the related messages.

In the message text, datasetname is the name of the data set, target host is the target host, print queue is the target print queue.

System action: IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

Operator response: None.

System programmer response: Correct the error based on the messages in the message log.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM1204I Data set: datasetname The LPR RECEIVE DATA FILE command failed Target host: target host Print queue: print queue

Explanation: The LPD returned a non-zero return code from the RECEIVE DATA FILE command. Error messages pertaining to the error might have been sent. For the related messages, see the message log.

System action: None.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Chapter 1. IP PrintWay basic mode (ANFM) messages and codes 47
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM1205I Data set: datasetname The LPR RECEIVE DATA FILE OF UNSPECIFIED LENGTH command failed Target host: target host Print queue: print queue

Explanation: The LPD returned a non-zero return code from the RECEIVE DATA FILE OF UNSPECIFIED LENGTH command. Error messages pertaining to the error might have been sent. For the related messages, see the message log.

System action: None.
Operator response: None.

System programmer response: Verify that the LPD supports the RECEIVE DATA FILE OF UNSPECIFIED LENGTH command. Not all LPDs support this command.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM1206I Data set: datasetname The LPR RECEIVE CONTROL FILE FIRST command failed Target host: target host Print queue: print queue

Explanation: The LPD returned a non-zero return code from the RECEIVE CONTROL FILE FIRST command. Error messages pertaining to the error might have been sent. For the related messages, see the message log.

System action: IP PrintWay basic mode again attempts to transmit the data set named in the message. If this is the final retry, or if no retries are requested. IP PrintWay basic mode retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is on the JES spool, you can use Infoprint Server ISPF panels to change the printer definition’s LPR options and routing information, if necessary, and also retransmit the data set if IP PrintWay basic mode has completed all retries. For more information, see z/OS Infoprint Server Operation and Administration.

Operator response: None.
System programmer response: Verify that the LPD will accept the RECEIVE CONTROL FILE FIRST command. Not all LPDs support this command.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM1207I Data set: datasetname The LPR RECEIVE A PRINT JOB command failed with a time out condition. This may be caused by an intervention on the printer or a printer problem. Target host: target host Print queue: print queue

Explanation: The LPD returned a nonzero return code, indicating a time-out condition from the RECEIVE PRINT JOB command. This condition might be caused by a printer problem such as an intervention condition.

In the message text, datasetname is the name of the data set, target host is the target host, print queue is the target print queue.

System action: IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

Operator response: None.
System programmer response: Check the printer for any abnormal conditions.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM1208I Data set: datasetname A failure occurred after nnn copies were sent

Explanation: IP PrintWay basic mode encountered an error while transmitting multiple copies of the same data set to the printer. In the message text, datasetname is the name of the data set, and nnn is the number of copies of the data set that were successfully sent to the printer. Another message explains the error.

System action: IP PrintWay basic mode retries the transmission and attempts to transmit the remaining copies. If this is the final retry, or if no retries are
requested in the printer definition, IP PrintWay basic mode retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set. While the data set is retained on the JES spool, you can use Infoprint Server ISPF panels to retransmit the original number of copies that were requested to the same printer or to a different printer.

Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM1209I Data set: $datasetname The buffer limit for the BDS exit is exceeded.

Explanation: The Begin Data Set (BDS) exit created more records than can fit into the buffer for the header separator page, or the exit might not be working correctly. The buffer is 32K. In the message text, $datasetname is the name of the data set.

System action: IP PrintWay basic mode attempts to retransmit the data set. If this is the final retry, or if no retries are requested, IP PrintWay basic mode retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set.
User response: Resubmit the job after the problem is fixed.
Operator response: None.
System programmer response: Correct the BDS exit and ask the job submitter to resubmit the job.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM1605I FSS/FSA: $fss/fsaname Virtual storage could not be acquired for tracing so all tracing has been canceled

Explanation: IP PrintWay basic mode could not acquire virtual storage for all required trace control blocks. The tracing has stopped.

In the message text, $fss/fsaname is the FSS name from the FSS definition or the FSA name.
System action: All tracing has stopped.
Operator response: Inform your System Programmer that this error occurred.
System programmer response: Increase the REGION size specified in the startup procedure.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM1606I FSS/FSA: $fss/fsaname Permanent I/O error occurred on trace data set: synadaf text

Explanation: The IP PrintWay basic mode SYNAD routine encountered a permanent I/O error while writing to the trace data set.

In the message text, $fss/fsaname is the FSS name from the FSS definition or FSA name. synadaf text is the information returned by SYNADAF.
System action: Tracing stops.
Operator response: Inform your System Programmer that this error occurred.
System programmer response: Correct the error based on the information that the message provides.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM1607I  FSS/FSA: fss/fsaname External tracing has started
Explanation: External trace records are now being generated.
In the message text, fss/fsaname is the FSS name from the FSS definition or FSA name.
System action: Tracing begins.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM1608I  FSS/FSA: fss/fsaname External tracing has stopped
Explanation: External trace records are no longer being generated.
In the message text, fss/fsaname is the FSS name from the FSS definition or FSA name.
System action: Tracing stops.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM1610I  FSS/FSA: fss/fsaname GTF return code = retcode
Explanation: Generalized Trace Facility (GTF) has returned a nonzero return code from the GTRACE request. The return codes are:
4 inactive MVS GTF
8 incorrect length
C incorrect data address
10 incorrect FID
14 incorrect EID
18 no GTF buffer space
1C incorrect parameter address
20 data paged out
xx unknown GTF return code
The above message might be received validly when attempting to start a trace. If the message is received, GTF was NOT started with the correct USR event IDs. You must specify USR=FD1 to GTF when it is started.
In the message text, fss/fsaname is the FSS name from the FSS definition or FSA name. retcode is the GTF return code.
System action: The action depends on the return code. For return codes 18 and 20, tracing continues to GTF. For all other return codes, GTF tracing stops.
Operator response: None.
System programmer response: For more information about the return codes, see z/OS MVS Diagnosis: Tools and Service Aids.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM1650I  Data set: datasetname The SNA initialization call failed with a return code = code
Explanation: An error occurred when IP PrintWay basic mode attempted to send a data set to a VTAM-controlled printer.
In the message text, datasetname is the name of the data set, code is a code that can help the IBM service representative diagnose the error.
System action: IP PrintWay basic mode attempts to retransmit the data set. If this is the final retry, or if no retries are requested, IP PrintWay basic mode retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set.
Operator response: Notify your system programmer that this error occurred.

System programmer response: This message indicates a possible logic problem. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM1651I  Data set: datasetname The SNA BEGIN DATASET call failed with a return code = code

Explanation: An error occurred when IP PrintWay basic mode attempted to send a data set to a VTAM-controlled printer.

In the message text, datasetname is the name of the data set and code is a code that can help the IBM service representative diagnose the error.

System action: IP PrintWay basic mode attempts to retransmit the data set. If this is the final retry, or if no retries are requested, IP PrintWay basic mode retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set.

Operator response: Notify your system programmer that this error occurred.

System programmer response: This message indicates a possible logic problem. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM1652I  Data set: datasetname The SNA END DATASET call failed with a return code = code

Explanation: An error occurred when IP PrintWay basic mode attempted to send a data set to a VTAM-controlled printer.

In the message text, datasetname is the name of the data set and code is a code that can help the IBM service representative diagnose the error.

System action: IP PrintWay basic mode attempts to retransmit the data set. If this is the final retry, or if no retries are requested, IP PrintWay basic mode retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set.

Operator response: Notify your system programmer that this error occurred.

System programmer response: This message indicates a possible logic problem. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM1653I  Data set: datasetname The SNA TERMINATE PRINTER call failed with a return code = code

Explanation: An error occurred when IP PrintWay basic mode attempted to send a data set to a VTAM-controlled printer.

In the message text, datasetname is the name of the data set and code is a code that can help the IBM service representative diagnose the error.

System action: IP PrintWay basic mode attempts to retransmit the data set. If this is the final retry, or if no retries are requested, IP PrintWay basic mode retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set.

Operator response: Notify your system programmer that this error occurred.

System programmer response: This message indicates a possible logic problem. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
ANFM1654I  Data set: *datasetname* A VTAM error has occurred:

The VTAM request code = *code*
The VTAM feedback code = *code*
The VTAM system sense code = *code*
The VTAM RPL return code = *code*
The VTAM LU name = *luname*

Explanation:  An error occurred while IP PrintWay basic mode was sending a data set to a VTAM-controlled printer.

If the VTAM RPL return code = 16 and the VTAM system sense code = 083A, the IP PrintWay basic mode connection timeout value expired before IP PrintWay basic mode could connect to the printer. The printer might be turned off.

In the message text, *code* is the code from VTAM and *luname* is the logical unit name of the VTAM-controlled printer, which is specified in the printer definition in the Printer Inventory.

System action:  IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

Operator response:  Notify your system programmer that this error occurred.

System programmer response:  If the Connection timeout value expires repeatedly when the printer is turned on, increase the value in the Connection timeout field in the printer definition. For information about the VTAM codes, see [z/OS Communications Server: IP and SNA Codes](https://www.ibm.com/support/docview.wss?uid=swg21178586).

Problem determination:  Not applicable.

Source:  Infoprint Server
Module:  Not applicable.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

ANFM1656I  Data set: *datasetname* A VTAM OPEN error has occurred:

The return code = *code*
The reason code = *code*

Explanation:  A VTAM error occurred while IP PrintWay basic mode was trying to send a data set to a VTAM-controlled printer.

In the message text, *datasetname* is the name of the data set and *code* is the return code or reason code from VTAM.

System action:  IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

Operator response:  Notify your system programmer that this error occurred.

System programmer response:  For information about the VTAM return code, see [z/OS Communications Server: IP and SNA Codes](https://www.ibm.com/support/docview.wss?uid=swg21178586).

Problem determination:  Not applicable.

Source:  Infoprint Server
Module:  Not applicable.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

ANFM1655I  Data set: *datasetname* A VTAM STATE error has occurred:  The state is *state*.

Explanation:  An error occurred while IP PrintWay basic mode was sending a data set to a VTAM-controlled printer.

In the message text, *datasetname* is the name of the data set and *state* is the state from VTAM.

System action:  IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

Operator response:  Notify your system programmer that this error occurred.

System programmer response:  For information about the VTAM state, see [z/OS Communications Server: IP and SNA Codes](https://www.ibm.com/support/docview.wss?uid=swg21178586).

Problem determination:  Not applicable.

Source:  Infoprint Server
Module:  Not applicable.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

ANFM1657I  Data set: *datasetname* The transmission was successful but was canceled at the printer.

Explanation:  The operator canceled the print job at the printer after all data had been transmitted. In the
message text, *datasetname* is the name of the data set.

**System action:** IP PrintWay basic mode deleted the data set from the JES spool. IP PrintWay basic mode processing continues.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

ANFM1658I Data set: *datasetname* The transmission failed because the timeout timer expired, there is a possible intervention at the printer.

**Explanation:** The data set could not be completely transmitted to the printer because the time specified in the Response timeout field of the printer definition in the Printer Inventory expired. This message can occur if the printer requires intervention, such as when the printer is out of paper, or if the printer is offline.

In the message text, *datasetname* is the name of the data set at the time of the error.

**System action:** IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

**Operator response:** Notify the system programmer that this error occurred.

**System programmer response:** See the system programmer response for IP PrintWay basic mode message ANF1654I.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

ANFM1700E Data set: *datasetname* The function failed while processing data set *datasetname* with the message *message*.

**Explanation:** A print function failed.

In the message text, *function* is the function that failed. *datasetname* is the name of the data set that IP PrintWay basic mode was processing at the time of the error. *message* is the message that contains more information about the error.

**System action:** See the system action for message *message*.

**Operator response:** None.

**System programmer response:** See the system programmer response for message *message*.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

ANFM1659I Data set: *datasetname* The SNA attachment function code at the time of the error: *functioncode*

**Explanation:** An associated message identifies the SNA error that occurred.

In the message text, *datasetname* is the name of the data set at the time of the error, *functioncode* is an IP PrintWay basic mode code that identifies the IP PrintWay basic mode function at the time of the error. This code can help IBM determine the cause of the error.

**System action:** IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

**Operator response:** Notify the system programmer that this error occurred.

**System programmer response:** See the system programmer response for IP PrintWay basic mode message ANF1654I.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
ANFM1704W  The destination printer-url does not support the attributes {attribute-list}.

Explanation:  IP PrintWay basic mode used the Internet Printing Protocol (IPP) to transmit a data set to the indicated printer. The printer, however, does not support all of the IPP job attributes that IP PrintWay basic mode sent with the data set. The job submitter might have specified the IPP job attributes, or Infoprint Server might have generated the IPP job attributes from corresponding Infoprint Server job attributes, JCL parameters, or printer attributes specified in the printer definition for the target printer.

In the message text, printer-url is the Uniform Resource Locator (URL) of the target printer. attribute-list is the list of unsupported IPP job attributes.

System action:  The printer accepted the print request, but ignored the listed IPP job attributes. The output might not print as expected.

Operator response:  None.

System programmer response:  None.

Problem determination:  Not applicable.

Source:  Infoprint Server

Module:  Not applicable.

Routing code:  Not applicable.

Descriptor code:  Not applicable.

Automation:  Not applicable.

IP PrintWay basic mode system completion code and abend reason codes

The system completion code for abends that Infoprint Server issues is: 09B. The reason code indicates whether IP PrintWay basic mode issued the abend:

00000000 – 0000FFFF
Indicates that IP PrintWay basic mode issued the abend. See this section for an explanation of these codes.

0000FFFF – 00FFFFFF
Indicates that another component of Infoprint Server issued the abend. See "Infoprint Server system completion code and reason codes" on page 177 for an explanation of these codes.

IP PrintWay basic mode displays message ANFM102I with the system completion code and the associated abend reason codes. This section describes the last two bytes of the abend reason code.

0004
Explanation:  The ESTAI call to establish ESTAI failed.
System action:  IP PrintWay basic mode terminates abnormally.
System programmer response:  This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0008
Explanation:  GETMAIN call failed for FSS-related control blocks.
System action:  IP PrintWay basic mode terminates abnormally.
System programmer response:  Increase the size on the REGION parameter of the EXEC statement in the IP PrintWay basic mode startup procedure.

0009
Explanation:  GETMAIN for TCP/IP global workarea failed.
System action:  IP PrintWay basic mode terminates abnormally.
System programmer response:  Increase the size on the REGION parameter of the EXEC statement in the IP PrintWay basic mode startup procedure.

000A
Explanation:  INITAPI failed for TCP/IP sockets interface.
System action:  IP PrintWay basic mode terminates abnormally.
System programmer response:  This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
000B
Explanation: GETMAIN for TCP/IP task area failed.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: Increase the size on the REGION parameter of the EXEC statement in the IP PrintWay basic mode startup procedure.

000C
Explanation: A parameter was not valid or no parameter was passed on the MVS START command.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

000D
Explanation: The GETMAIN call to trace the control blocks below the 16 megabyte line failed.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: Increase the size on the REGION parameter of the EXEC statement in the IP PrintWay basic mode startup procedure.

0010
Explanation: The FSS level FSI connect request failed.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0014
Explanation: An incorrect parameter was specified on the START command.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

001C
Explanation: The ATTACH call for QSCAN failed.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0020
Explanation: IP PrintWay basic mode detected an FSI order that was not valid.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0024
Explanation: The FSI RELDS request failed.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0028
Explanation: The FSI CHKPT request failed.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

002C
Explanation: The FREE request is not valid.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
Explaination: The request to disconnect the FSS level FSI failed.

System action: IP PrintWay basic mode terminates abnormally.

System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Explaination: The FREEMAIN macro for the FSS level courier control blocks failed.

System action: IP PrintWay basic mode terminates abnormally.

System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Explaination: The ESTAI macro to cancel ESTAI failed.

System action: IP PrintWay basic mode terminates abnormally.

System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Explaination: The load of module AOXVTM failed. IP PrintWay basic mode attempts to load AOXVTM if an APPL ID is specified in the FSS definition for IP PrintWay basic mode in the Printer Inventory. Module AOXVTM is part of Coax Printer Support V1.1 (5697-F51).

System action: IP PrintWay basic mode terminates abnormally.

System programmer response: Either install Coax Printer Support or remove the APPL ID statement from the FSS definition. You must restart the IP PrintWay basic mode FSS to pick up changes to the FSS definition.

Explaination: An incorrect subsystem name was specified on the START command.

System action: IP PrintWay basic mode terminates abnormally.

System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Explaination: Call to the data base included an incorrect length field.

System action: IP PrintWay basic mode terminates abnormally.

System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Explaination: Call to the data base encountered a bad token.

System action: IP PrintWay basic mode terminates abnormally.

System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Explaination: Call to the data base encountered an incorrect length field.

System action: IP PrintWay basic mode terminates abnormally.

System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Explaination: Call to the data base encountered a bad token.

System action: IP PrintWay basic mode terminates abnormally.

System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0073

Explanation: The DETACH call for the FSA subtask failed.

System action: IP PrintWay basic mode terminates abnormally.

System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0074

Explanation: The Queue Manager component failed.

System action: IP PrintWay basic mode terminates abnormally.

System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0076

Explanation: The ATTACH call for the FSA subtask failed.

System action: IP PrintWay basic mode terminates abnormally.

System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0079

Explanation: SDUMP request for STOP FSS order DUMP option returned an incorrect return code.

System action: IP PrintWay basic mode terminates abnormally.

System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

007A

Explanation: A STOP FSS order with the ABEND and DUMP options was received.

System action: IP PrintWay basic mode terminates abnormally.

System programmer response: This abend was requested by the operator. None.

007B

Explanation: IP PrintWay basic mode received a STOP FSS order with the ABEND and NODUMP options.

System action: IP PrintWay basic mode terminates abnormally.

System programmer response: This abend was requested by the operator. None.

00D2

Explanation: A failure occurred in SJF FIND when finding the default output SWB.

System action: IP PrintWay basic mode terminates abnormally.

System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

00D3

Explanation: A failure occurred in SJF FIND when finding the output SWB.

System action: IP PrintWay basic mode terminates abnormally.

System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

00D4

Explanation: A failure occurred in the SJF RETRIEVE when obtaining the keyword parameters.

System action: IP PrintWay basic mode terminates abnormally.

System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
00D5
Explanation: An incorrect matrix pointer was received as a parameter.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

00D6
Explanation: The SJF parameter and the matrix lengths do not match.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

00D7
Explanation: A failure occurred in module or macro SJFREQ GETSWB.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0100
Explanation: The MODCB macro for initialization of the ACB transmission queue failed.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0101
Explanation: The GENCB macro for initialization of transmission queue RPL failed.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
0106
Explanation: The GET call of the transmission-queue record failed.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0107
Explanation: The ERASE action of the transmission-queue record failed.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0108
Explanation: The FSS-FSA connection failed.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0109
Explanation: The CLOSE action of the transmission queue failed.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

010A
Explanation: The ENDREQ call to the transmission queue failed.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0116
Explanation: The GETMAIN operation failed.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: Increase the size on the REGION parameter of the EXEC statement in the IP PrintWay basic mode startup procedure.

0118
Explanation: The FSI SEND request (to inform JES that FSA initialization was not successful) failed.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
**System programmer response:**  This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

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**0120**

**Explanation:**  The FSI SEND request to reply to the order failed.

**System action:**  IP PrintWay basic mode terminates abnormally.

**System programmer response:**  This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

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**0121**

**Explanation:**  The state for the change state request is incorrect.

**System action:**  IP PrintWay basic mode terminates abnormally.

**System programmer response:**  This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

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**0122**

**Explanation:**  The FREEMAIN of storage kept across restarts failed.

**System action:**  IP PrintWay basic mode terminates abnormally.

**System programmer response:**  This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

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**0124**

**Explanation:**  The FSI GETDS request to acquire a data set failed.

**System action:**  IP PrintWay basic mode terminates abnormally.

**System programmer response:**  This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

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**0144**

**Explanation:**  An error occurred while IP PrintWay basic mode was getting a record from JES.

**System action:**  IP PrintWay basic mode terminates abnormally.

**System programmer response:**  This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

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**0145**

**Explanation:**  The GETMAIN call failed.

**System action:**  IP PrintWay basic mode terminates abnormally.

**System programmer response:**  Increase the size on the REGION parameter of the EXEC statement in the IP PrintWay basic mode startup procedure.

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**0158**

**Explanation:**  “Stop device” order with the ABEND and NODUMP options was received. No SDUMP will be generated.

**System action:**  IP PrintWay basic mode terminates abnormally.

**System programmer response:**  This abend was requested by the operator. None.

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**0160**

**Explanation:**  An FSA-level FSI disconnect request failed.

**System action:**  IP PrintWay basic mode terminates abnormally.

**System programmer response:**  This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

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**0164**

**Explanation:**  FREEMAIN for the FSA-level courier control blocks failed.

**System action:**  IP PrintWay basic mode terminates abnormally.

**System programmer response:**  This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
016C
Explanation: The WTO call failed for an FSA initialization-failure message.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0170
Explanation: A TIMEP macro error occurred.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0184
Explanation: FSI SEND request failed.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0198
Explanation: “Stop device” order with the ABEND and DUMP options was received.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This abend was requested by the operator. None.

01BC
Explanation: SDUMP request for the “stop device” order with DUMP option returned an incorrect return code.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

01D8
Explanation: “Stop FSA” order with ABEND and DUMP options specified was received.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This abend was requested by the operator. None.

01DC
Explanation: “Stop FSA” order with ABEND and NODUMP options specified was received.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This abend was requested by the operator. None.

01F0
Explanation: SDUMP request for “stop FSA” order with DUMP option returned an incorrect return code.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0201
Explanation: The ATTACH call to the timer subtask failed.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: Make sure that the data in the IP PrintWay basic mode transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0202
Explanation: The MODCB call for initialization of the transmission queue failed.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: Make sure that the data in the IP PrintWay basic mode transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
0203
**Explanation:** The GENCB call for initialization of the transmission queue failed.
**System action:** IP PrintWay basic mode terminates abnormally.
**System programmer response:** Make sure that the data in the IP PrintWay basic mode transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0204
**Explanation:** The MODCB call for sequential read of the transmission queue failed.
**System action:** IP PrintWay basic mode terminates abnormally.
**System programmer response:** Make sure that the data in the IP PrintWay basic mode transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0205
**Explanation:** An I/O error occurred during the sequential read of the transmission queue.
**System action:** IP PrintWay basic mode terminates abnormally.
**System programmer response:** Make sure that you have used the ANFQINIT job to initialize the IP PrintWay transmission-queue data set before running IP PrintWay basic mode.
If the transmission-queue data set contains queue entries when IP PrintWay is not running, the data set has probably been corrupted. In this case, delete the transmission-queue data set, use the ANFDEAL job to allocate the data set again, and use the ANFQINIT job to initialize it.

For information about how to allocate and initialize the transmission-queue data set, see [z/OS Infoprint Server Customization](#).

If the transmission-queue data set has been initialized and the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0206
**Explanation:** The MODCB call for direct read of the transmission queue failed after the data set was posted.
**System action:** IP PrintWay basic mode terminates abnormally.
**System programmer response:** Make sure that the data in the IP PrintWay basic mode transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0207
**Explanation:** The MODCB call for direct read of the transmission queue failed when checking data to post.
**System action:** IP PrintWay basic mode terminates abnormally.
**System programmer response:** Make sure that the data in the IP PrintWay basic mode transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0208
**Explanation:** The PUT call for the transmission queue record failed, locking the record.
**System action:** IP PrintWay basic mode terminates abnormally.
**System programmer response:** Make sure that the data in the IP PrintWay basic mode transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0209
**Explanation:** The MODCB call for direct read of transmission queue failed, for cleanup.
**System action:** IP PrintWay basic mode terminates abnormally.
**System programmer response:** Make sure that the data in the IP PrintWay basic mode transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

020A
**Explanation:** The GET call to the transmission-queue record failed, for cleanup.
**System action:** IP PrintWay basic mode terminates abnormally.
**System programmer response:** Make sure that the data in the IP PrintWay basic mode transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**020B**

**Explanation:** The PUT call of the transmission-queue record failed, for clearing leftover lock.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** Make sure that the data in the IP PrintWay basic mode transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**020C**

**Explanation:** The ERASE of the transmission-queue record failed.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** Make sure that the data in the IP PrintWay basic mode transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**020D**

**Explanation:** The CLOSE of the transmission queue failed.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** Make sure that the data in the IP PrintWay basic mode transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**020E**

**Explanation:** The GET call for direct read of transmission-queue record failed.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** Make sure that the data in the IP PrintWay basic mode transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**020F**

**Explanation:** The GET call for direct read of transmission-queue record failed—I/O error.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** Make sure that the data in the IP PrintWay basic mode transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**0210**

**Explanation:** The OPEN call to the transmission queue failed.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** Make sure that the data in the IP PrintWay basic mode transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**0211**

**Explanation:** The ERASE of the record of the transmission queue failed while releasing the data set.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** Make sure that the data in the IP PrintWay basic mode transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**0212**

**Explanation:** The PUT of the record to the transmission queue failed while updating status for requeue.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** Make sure that the data in the IP PrintWay basic mode transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
0213
Explanation: The ENDREQ call to the transmission queue failed.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: Make sure that the data in the IP PrintWay basic mode transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0214
Explanation: Status ECB posted with incorrect code.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0250
Explanation: A dynamic allocation failure occurred.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

02A3
Explanation: The GENCB for the initialization of the transmission queue failed.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: Make sure that the data in the IP PrintWay basic mode transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

02A4
Explanation: The MODCB call for the record put into the transmission queue failed.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: Make sure that the data in the IP PrintWay basic mode transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

02A5
Explanation: The PUT of the record to the transmission queue failed.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: Check the z/OS system log for data management messages (with IEC message IDs) that pertain to the IP PrintWay transmission-queue data set (the default name is ANF.QUEUE). If these messages report I/O errors or end of volume conditions, correct the problem.
Make sure that the data in the IP PrintWay basic mode transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

02A6
Explanation: The transmission queue staging module attempted to exit while jobs were still on its staging queue.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay
basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

02A7
Explanation: The CLOSE call to the transmission queue failed.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: Make sure that the data in the IP PrintWay basic mode transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

02A9
Explanation: The OPEN call to the transmission queue failed.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: Make sure that the data in the IP PrintWay basic mode transmission-queue data set has not been corrupted. If the data is valid, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0300
Explanation: The LPR buffer pointer is pointing outside the buffer range.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0301
Explanation: A select logic error has occurred.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0302
Explanation: The record length is too long for the translation buffer.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0303
Explanation: The SWRITE call for hiperspace received a non-zero return code.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0304
Explanation: The hiperspace buffer and the number of blocks to write to hiperspace do not match.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0305
Explanation: The GET call from hiperspace received a non-zero return code.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0306
Explanation: The RELEASE of hiperspace extended area received a non-zero return code.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
0307
Explanation: The remaining space in the hiperspace area is not as large as the buffer.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0308
Explanation: Data exists in hiperspace when it all should have been sent.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0309
Explanation: A non-zero return code was received from ANFLGHP.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0310
Explanation: An incorrect DBCS translate option was received by ANFLDBC.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0311
Explanation: An incorrect carriage control type was received.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0312
Explanation: The length of the cc buffer was exceeded.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0313
Explanation: The storage being used to construct the LPD control file has been exceeded.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0400
Explanation: There was an error writing to the IP PrintWay basic mode message file.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0500
Explanation: ANFFSNA detected that an IP PrintWay basic mode installation-written exit provided a record that is greater than 32K.
System action: IP PrintWay basic mode terminates abnormally.
**System programmer response:** Correct the error in the IP PrintWay basic mode Begin Record, Record, or End Record exit. For information about how to write IP PrintWay basic mode exits, see [z/OS Infoprint Server Customization](#).

**0502**

**Explanation:** Module ANFFSNA detected an internal timer error.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**0503**

**Explanation:** Module ANFSLINE detected an internal timer error.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**0506**

**Explanation:** Module ANFSLINE detected that a product is disabled or a service is not available.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**0507**

**Explanation:** Module ANFSLINE detected a state error in module AOVVTM.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**0508**

**Explanation:** Module ANFFSA detected a state error in module AOXVTM.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**0509**

**Explanation:** Module ANFFSNA detected that a product is disabled or a service is not available.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**0600**

**Explanation:** The OBTAIN macro for storage failed in module COPSPAWN.S.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**0601**

**Explanation:** The ATTACH macro for module AOPSPAWN failed in module COPSPAWN.S.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**0602**

**Explanation:** The ATTACH macro for a TCB failed in module COPSPAWN.S.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

### 0603
**Explanation:** The WAIT macro for a task ECB failed in module COPSPAWN.S.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** Make sure that module AOPSPAWN is in SYS1.LINKLIB. If module AOPSPAWN is present, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

### 0604
**Explanation:** The OBTAIN macro for storage failed in module COPOPEN.S.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

### 09B3
**Explanation:** An error occurred in traversing the CIB data-processing keyword. The CIB contains the information specified in the MODIFY command for IP PrintWay basic mode.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

### 09B4
**Explanation:** An error occurred in traversing the CIB data-processing parameter. The CIB contains the information specified in the MODIFY command for IP PrintWay basic mode.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

### 09B8
**Explanation:** The printer name in an internal command list has a length of zero. A printer name is required.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

### 09B9
**Explanation:** An incorrect parameter code was found in the internal command list.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
09C0
Explanation: The incorrect interface block ID is not 'IPB'.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

09C1
Explanation: The incorrect interface request block ID is not 'IRB'.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

09C2
Explanation: The incorrect queue header ID is not 'QH'.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

09C4
Explanation: The incorrect common control block ID is not 'CCB'.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

09C5
Explanation: The incorrect FSA level control block ID is not 'SAB'.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

09C6
Explanation: The incorrect FSA queue element ID is not 'SAE'.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

09C7
Explanation: The incorrect FSS queue control block ID is not 'SAQ'.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

09C9
Explanation: The queue request contained in the IRB is not valid.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

09CA
Explanation: The request contained in the IRB is not valid.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
09D5
Explanation: The MVS DETACH call did not succeed in detaching ANFZCMND.

System action: IP PrintWay basic mode terminates abnormally.

System programmer response: To determine why the macro failed or returned unexpected results, see the information for your operating system that explains system macros.

09D6
Explanation: The MVS FREEMAIN macro failed to release ANFZCMND storage.

System action: IP PrintWay basic mode terminates abnormally.

System programmer response: To determine why FREEMAIN failed or returned unexpected results, see the z/OS information that explains system macros. If FREEMAIN reported that the storage requested to be freed is not owned by IP PrintWay basic mode, this indicates an IP PrintWay basic mode logic error. If it is a logic error, consult your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

09D7
Explanation: The ATTACH call failed.

System action: IP PrintWay basic mode terminates abnormally.

System programmer response: To determine why the macro failed or returned unexpected results, see the information for your operating system that explains system macros.

09E0
Explanation: No free queue headers.

System action: IP PrintWay basic mode terminates abnormally.

System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

09F0
Explanation: ANFZFORC received an incorrect command.

System action: IP PrintWay basic mode terminates abnormally.

System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

09FE
Explanation: The QEDIT macro failed.

System action: IP PrintWay basic mode terminates abnormally.

System programmer response: To determine why the macro failed or returned unexpected results, see the information for your operating system that explains system macros.

0D00
Explanation: Incorrect parameter list.

System action: IP PrintWay basic mode terminates abnormally.

System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D01
Explanation: An element is not available in the new storage block.

System action: IP PrintWay basic mode terminates abnormally.

System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D03
Explanation: An element is not available in the initial storage block.

System action: IP PrintWay basic mode terminates abnormally.

System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D04
Explanation: An element is not available in the new chain of storage blocks.

System action: IP PrintWay basic mode terminates abnormally.
**System programmer response:** This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

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**0D05**

**Explanation:** The GETMAIN module sent a non-zero return code.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** Increase the size on the REGION parameter of the EXEC statement in the IP PrintWay basic mode startup procedure.

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**0D06**

**Explanation:** Storage is not available in a new pseudo-subpool block.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

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**0D07**

**Explanation:** A request for page-fixed storage crosses a 4K byte boundary.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

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**0D08**

**Explanation:** A pseudo-subpool block does not exist.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

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**0D09**

**Explanation:** A pseudo-subpool chain does not exist.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

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**0D0A**

**Explanation:** A request for page-fixed storage failed. A non-zero return code was received from PGFIXP.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** To determine why the macro failed or returned unexpected results, see the information for your operating system that explains system macros.

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**0D0B**

**Explanation:** The GETMAIN call failed when getting storage for a new control block.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** Increase the size on the REGION parameter of the EXEC statement in the IP PrintWay basic mode startup procedure.

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**0D10**

**Explanation:** The type of FREEMAIN request received by IP PrintWay basic mode was not valid.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

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**0D11**

**Explanation:** An element to be freed was not in use.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
0D12
Explanation: No pseudo-subpool storage blocks exist.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D13
Explanation: No element storage blocks exist.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D14
Explanation: The correct element storage-block chain could not be located.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D15
Explanation: The element address was not in the bounds of any of the storage blocks.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D16
Explanation: A page free of specified storage failed. A non-zero return code was received from PGFREEP.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D17
Explanation: The storage block chain for the specified pseudo subpool could not be found.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D18
Explanation: A non-zero return code was received from the system FREEMAIN macro.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: To determine why the macro failed or returned unexpected results, see the information for your operating system that explains system macros. If FREEMAIN reported that the storage requested to be freed is not owned by IP PrintWay basic mode, this indicates a IP PrintWay basic mode logic error. If it is a logic error, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D19
Explanation: The free element counter for the storage-management control block structure indicates how many free elements are available. A free element was expected, but not found, in the storage-management control block structure.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D20
Explanation: The ANFXRETN macro sent this abend code for termination on a particular reason code as specified on the DUMP JCL parameter.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This abend was requested. None.
0D21
Explanation: The request for element-type memory exceeds the maximum memory allowed.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D22
Explanation: The CEEPIPI service sent a non-zero return code.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0EA0
Explanation: The Begin Data Set exit specified a document header length greater than 292 bytes in field XTP_DOC_HEADER_LENGTH.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: Correct the Begin Data Set exit.

0EA1
Explanation: The Begin Data Set exit specified a document trailer length greater than 292 bytes in field XTP_DOC_TRAILER_LENGTH.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: None.

0EA2
Explanation: The Begin Data Set exit exceeded the document header area in storage.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: Correct the Begin Data Set exit.

0EA3
Explanation: The Begin Data Set exit exceeded the document trailer area in storage.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: Correct the Begin Data Set exit.

0EA4
Explanation: The Begin Data Set exit changed field XTP_DOC_HEADER_PTR, which points to the document header area.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: Correct the Begin Data Set exit.

0EA5
Explanation: The Begin Data Set exit changed field XTP_DOC_TRAILER_PTR, which points to the document trailer area.
System action: Correct the Begin Data Set exit.
System programmer response: None.

0E50
Explanation: The operator terminated the IP PrintWay basic mode FSS using the MVS MODIFY FORCE command.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: None.

0E90
Explanation: The hiperspace initialization failed.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0E91
Explanation: The INITAPI call failed. TCP/IP might not be started, or the TCP/IP job name specified in the TCPIPJOBNAME statement in the TCPIP.DATA data set is not valid, or the job name is a symbolic name. IP PrintWay does not support symbolic names.
**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** Make sure that TCP/IP has been started. The TCP/IP job name that IP PrintWay basic mode uses must match the job name of TCP/IP that is running on the system. You can find the TCP/IP job name that IP PrintWay basic mode uses in the IP PrintWay basic mode FSS definition. If no IP PrintWay basic mode FSS definition exists, or if no TCP/IP name is specified in the FSS definition, IP PrintWay basic mode uses the name TCPIP as the default name.

If the job name is symbolic, do one of these:

- Specify the TCP/IP job name in the IP PrintWay FSS definition. IP PrintWay uses this TCP/IP name instead of the one specified in the TCPIPJOBNAME statement. However, because the TCPIPJOBNAME statement contains a symbolic name, IP PrintWay writes message ANFM016I Invalid TCP/IP jobname to the console for each IP PrintWay functional subsystem (FSS). You can ignore this message.
- Create a new TCPIP.DATA data set for IP PrintWay’s use. In the new data set, replace the symbolic TCP/IP job name with the actual TCP/IP job name. Specify the new TCPIP.DATA data set in the SYSTCPD DD statement in the IP PrintWay startup procedure. In this case, IP PrintWay does not write message ANFM016I to the console.

If you want to change the TCP/IP job name that IP PrintWay basic mode uses, use the Infoprint Server ISPF panels to create an IP PrintWay FSS definition for the IP PrintWay basic mode FSS and specify the TCP/IP job name in the TCP/IP job name field. Then, restart the IP PrintWay basic mode FSS to pick up the change. For more information, see [z/OS Infoprint Server Customization](#).

If the TCP/IP job names match, this IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

---

### 0E92

**Explanation:** A bad IP address was encountered when trying to connect to TCP/IP.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** Start TCP/IP if it is not already started. If TCP/IP is already started, this reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

---

### 0E93

**Explanation:** A state machine error has occurred.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

---

### 0E94

**Explanation:** A select logic error has occurred.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

---

### 0E95

**Explanation:** A TIME macro error has occurred.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

---

### 0E96

**Explanation:** A select logic error has occurred.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

---

### 0E97

**Explanation:** A select logic error has occurred.

**System action:** IP PrintWay basic mode terminates abnormally.

**System programmer response:** This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
0E98
Explanation: The TCP/IP GETHOSTID call failed.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: If the error condition persists, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0E99
Explanation: A CEEPIPI failure has occurred at LOAD.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0E9A
Explanation: A CEEPIPI failure has occurred at initialization.
System action: IP PrintWay basic mode terminates abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
Chapter 2. Infoprint Server (AOP) messages and codes

This chapter describes the messages and codes for all components of Infoprint Server except IP PrintWay basic mode and the NetSpool started task.

Tip: Use the ISPF help function for information about ISPF panel messages.

AOP message format

Messages have this format:

```
AOPnnnt message_text [(program:daemon)]
```

**AOP** Identifies Infoprint Server messages

**nnnn** The message number

**t** The severity of the message:

<table>
<thead>
<tr>
<th>Code</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>An error occurred.</td>
</tr>
<tr>
<td>I</td>
<td>Information message.</td>
</tr>
<tr>
<td>S</td>
<td>A severe error occurred.</td>
</tr>
<tr>
<td>T</td>
<td>A situation occurred that caused the program to end.</td>
</tr>
<tr>
<td>W</td>
<td>A warning situation occurred.</td>
</tr>
</tbody>
</table>

**message_text**

The message text.

**program:**

The name of the Infoprint Server daemon that issued the message. The daemon name is present only if the message was written by a daemon to the console or to the NetSpool or IP PrintWay log data set. For the possible daemon names, see "Format of messages in the Infoprint Server common message log."

Format of messages in the Infoprint Server common message log

Infoprint Server administrators can use the `aoplogu` command to select messages from the Infoprint Server common message log in a particular time range and copy them to a file or view them on the terminal. For information about the `aoplogu` command, see [z/OS Infoprint Server Operation and Administration](#).

The `aoplogu` command returns messages in this format:

```
date time priority:level user:id [job:id] [filename:name] [dsn:name] [output_device:name] [job_selection_rule:name] [fsa:name] [luname:name] [jes_jobname:name] [program:name] msg:message
```

For example:

```
```

The optional items start with a tag that identifies them.

**Field**  **Description**

**date**  The date the message was written.
dsn  The fully qualified data set name that JES assigns. The document name is
the last qualifier. A pound sign (#) in the document name replaces any
character that JES does not allow in a document name. For example, if the
last 8 characters of the document name are file.lwp, this field contains
FILE#LWP. This field might not contain the system ID, which is the first
qualifier in a fully qualified data set name.

filename
The name of the file to be printed. Blanks are converted to an underscore
(_).

fsa  The name of the JES functional subsystem application (FSA) for the PSF
printer.

jes_jobname
The job name, or the name of the job submitter or owner:
• For a batch job, the name of the job that created the print job.
• For print requests submitted from remote systems (such as Windows),
  the first 8 characters of the logon name used on the remote system. A
  pound sign (#) in the name replaces a character (such as a period) that
  z/OS does not allow in the job name.
• For print requests submitted from VTAM applications (such as CICS®
  or IMS™), the owner name in the data stream, the default owner in the
  printer definition, or the name of the NetSpool startup procedure.

job  The job ID.
• A job ID with a PS prefix indicates that either Print Interface or NetSpool
  created the output data set on the JES spool. (Your installation can
  specify a different job prefix in the Infoprint Server configuration file.)
• A job ID with a JOB, STC, or TSU prefix indicates that either JES or the
  Print Interface subsystem created the output data set on the JES spool.
• Job submitters can specify the sysout-job-id job attribute to override the
  job ID.

job_selection_rule
The name of an IP PrintWay job selection rule that IP PrintWay extended
mode used to select the print job from the JES spool for processing.

luname  The NetSpool logical unit (LU) name for the printer.

msg  The message number and text.

output_device
An identifier of the IP PrintWay extended mode printer where the print job
printed or is scheduled to print, in one of these formats:

  direct_sockets://hostname:port
    The hostname and port number of the printer.

  lpr://hostname/queue
    The hostname and print queue name of the printer.

  mailto:
    An indication that the output data set is to be sent to an e-mail
    destination instead of to a printer.

  vtam://luname
    The VTAM logical unit (LU) name of the printer.
The Uniform Resource Identifier (URI) of the Internet Printing Protocol (IPP) server running in the printer. Examples are:

ipp://myprinter.xyz.com
http://myprinter.xyz.com:631

Priority
The severity of the message:
- action: A terminating situation occurred.
- error: An error occurred.
- info: This is an information message.
- severe: A severe error occurred.
- warning: A warning situation occurred.

Program
The name of the Infoprint Server daemon, command, or program that issued the message:
- aopd: The Printer Inventory Manager daemon.
- aophinvd: The Historical Inventory daemon. It maintains information about Infoprint Server print jobs that are not on the JES spool.
- aopippdxp: The IPP Server daemon. It processes print requests from remote clients that use the Internet Printing Protocol (IPP).
- aoplogd: The log daemon. It manages the Infoprint Server common message log.
- aoplpd: The line printer daemon (LPD). It processes print requests from remote clients that use the TCP/IP line printer requester (LPR) protocol.
- aopnetd: The NetSpool daemon. Together with the NetSpool started task, it processes print requests from VTAM applications such as CICS and IMS.
- aopoutd: An IP PrintWay extended mode daemon. It sends output to remote printers in the TCP/IP network and to e-mail destinations.
- aopsdbd: The search data base daemon. It manages the Printer Inventory search data base that Infoprint Central uses.
- aopsnmpd: The SNMP subagent daemon. It provides printer status information for PSF-controlled printers to the z/OS SNMP agent for viewing with an SNMP manager.
- aopssid: The Infoprint Central daemon. It communicates with JES.
- aopsubd: The Print Interface subsystem daemon. It processes output data sets that specify the Print Interface subsystem on the SUBSYS parameter of the DD statement.
- aopwsmd: An IP PrintWay extended mode daemon. It uses the IP PrintWay job selection rules in the Printer Inventory to select output data sets from the JES spool.
- aopxfd: The Infoprint Server Transform Manager daemon. It manages other transform daemons, which transform data from one format to another.

Cancel
The cancel command.

Infoprint Central
Infoprint Central

Ip
The Ip command.

NetSpool started task
The name of the NetSpool started task. Together with the
NetSpool daemon, it processes print requests from VTAM applications such as CICS and IMS.

**other values** The name of an Infoprint Server program.

**time** The time that Infoprint Server wrote the message, followed by the time zone. For information about time zones, see [z/OS UNIX System Services Command Reference](#).

**user** The z/OS user ID or the name of the user who submitted the print job, the z/OS user ID of the user who did the Infoprint Central action on the print job, or the z/OS user ID of the user who started the Infoprint Server daemons.

---

**Messages**

**AOPIM000 - AOPIM999**

**Explanation:** These messages are displayed by the Infoprint Server ISPF panels. For an explanation, see the online help provided on the ISPF panel.

**AOP001E** Printer *printer-name* is not defined.

**Explanation:** The print request requested a printer definition that is not defined in the Infoprint Server Printer Inventory. The printer definition name might have been specified on a command, such as the `lp` or `lpr` command, or in the SUBSYS parameter on the DD statement.

In the message text, *printer-name* is the name of the requested printer definition. `lp1` is the name of the Infoprint Server default printer definition, which is used if no other printer definition name is specified.

**System action:** The request was not completed.

**User response:** Make sure that you have spelled the name of the printer definition correctly, using the correct uppercase and lowercase characters. If you specify the name of the printer definition in the SUBSYS parameter of a DD JCL statement, enclose the printer definition name in single quotation marks if it contains lowercase characters.

If the name is `lp1`, specify the name of the printer definition on the print command or in the SUBSYS parameter on the DD JCL statement. If you use the `lp` command, you can instead specify the name of the printer definition in the PRINTER or LPDEST environment variable.

You can run the z/OS UNIX `lpstat -p` command to get a list of available printers in the Printer Inventory. If an appropriate printer definition exists, enter the command or run the job again, specifying that printer. Otherwise, ask your administrator to define an appropriate printer.

**Operator response:** Not applicable.

**System programmer response:** Define a printer in the Printer Inventory if requested.

**Problem determination:** Not applicable.

**AOP002I** Job *jobid* has completed processing or has been deleted.

**Explanation:** All data sets allocated on the system spool for the print job with job ID *jobid* have completed processing. After this message, the job ID and final status of the data set is reported. The final status can be **completed**, **failed**, or **purged**.

- **completed** The file has been processed successfully.
- **failed** Processing has failed.
- **purged** The file was deleted before printing.

For completed or failed data sets, the files remain on the JES spool for one of these reasons:

- Your administrator has specified that files should be retained after transmission to a LAN printer or to a print server. The file will be removed from the spool when the retention period expires.
- An error caused the data set to be retained on the spool.

Data sets are removed from the spool for reasons such as:

- The data set finished printing.
- The data set was transmitted to a remote system or printer for printing. In this case, the data set might not yet be finished printing, or a transmission failure might have occurred.
- The operator deleted the data set from the system spool.
- The system programmer off-loaded all SYSOUT data sets from the JES spool.
AOP003E  objectname: [ermsgno] ermsgtext

Explanation: A file error, filter error, or system error has occurred. objectname is the name of the file, filter program, sendmail command, printer address, or other object in error. ermsgno ermsgtext is the message number, if available, and the message text generated by a system program or by the filter program.

System action: The request was not completed.

User response: If you specified objectname, make sure that the name is valid. Also, see the description for message ermsgno. If you did not specify objectname, contact your system programmer for assistance.

Operator response: Not applicable.

System programmer response: See the description for message ermsgno.

• If objectname is a printer address and the error message indicates a TCP/IP connection error, ping the printer to check that the printer is turned on and the TCP/IP network is working.
• If an Infoprint Server module could not be found, make sure that the LIBPATH environment variable is set correctly in the aopstart EXEC.
• If the error text indicates a RACF® error, a SAF error, or a permission error, run the aopsetup EXEC to set permissions. For example, if you use the default group names for Infoprint Server operators (AOPOPER) and administrators (AOPADMIN), enter:
  /usr/lpp/Printsrv/bin/aopsetup aooper aopadmin

For more information about the aopstart and aopsetup EXECs, see z/OS Infoprint Server Customization.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP004E  A system error occurred during processing.

Explanation: A system error has occurred during the processing of the request. This message might be followed by message AOP047E, which contains diagnostic information.

System action: The request was not completed.

User response: Notify your system programmer that this error occurred.

Operator response: Not applicable.

System programmer response: Look for other messages that indicate the reason for the failure on the terminal where Infoprint Server was started or in the console log.

• If a message indicates a RACF or SAF error (such as, message EDC5164I):
  • Make sure the user ID that starts Infoprint Server is a valid z/OS UNIX user ID. The user ID must have an OMVS segment, the default group for the user ID must have an OMVS segment with a group identifier (GID), and the user ID must have a home directory.
  • Make sure that the password for the user ID that starts Infoprint Server has not expired.
  • Run the aopsetup shell script to set up the correct z/OS UNIX permissions for Infoprint Server directories and executable files.

For information about how to set up security for Infoprint Server and how to run the aopsetup shell script, see z/OS Infoprint Server Customization.

• If you cannot correct the problem, contact the IBM Support Center, or use your electronic link with IBM service for assistance.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP006E  Job ID: jobid is not valid.

Explanation: A request was submitted with a job ID that is not valid.

System action: The request was not completed.

User response: Submit the request with a valid job ID.

Operator response: Not applicable.

System programmer response: Not applicable.
<table>
<thead>
<tr>
<th>Message Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOP007I</td>
<td>Job jobid successfully spooled to printer-name.</td>
</tr>
<tr>
<td>Explanation:</td>
<td>Job jobid has been allocated on the JES spool.</td>
</tr>
<tr>
<td>System action:</td>
<td>The job is allocated on the JES spool.</td>
</tr>
<tr>
<td>User response:</td>
<td>None.</td>
</tr>
<tr>
<td>Operator response:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Problem determination:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Source:</td>
<td>Infoprint Server</td>
</tr>
<tr>
<td>Module:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Routing code:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Descriptor code:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Automation:</td>
<td>Not applicable.</td>
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</tbody>
</table>

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<thead>
<tr>
<th>Message Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOP008E</td>
<td>Option &quot;option&quot; is not valid.</td>
</tr>
<tr>
<td>Explanation:</td>
<td>This message can be sent by most commands and filters. It indicates that the user specified an option character with the command, with the filter-options attribute, or on the filter defined for the printer. The message is usually preceded by the program that sends it. The message is often followed by the usage message for the command or filter.</td>
</tr>
<tr>
<td>System action:</td>
<td>The request was not completed.</td>
</tr>
<tr>
<td>User response:</td>
<td>Reenter the command with the correct options character. If you are not entering an incorrect options character, contact the system programmer.</td>
</tr>
<tr>
<td>Operator response:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Problem determination:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Source:</td>
<td>Infoprint Server</td>
</tr>
<tr>
<td>Module:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Routing code:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Descriptor code:</td>
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<tr>
<td>Automation:</td>
<td>Not applicable.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Message Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOP009E</td>
<td>Dynamic allocation of data set dsname failed: return code retcode, error code errorcode, info code infocode.</td>
</tr>
<tr>
<td>Explanation:</td>
<td>A Dynamic Allocation error has occurred.</td>
</tr>
<tr>
<td>System action:</td>
<td>The print request was not completed.</td>
</tr>
<tr>
<td>User response:</td>
<td>Notify your system programmer that this error occurred.</td>
</tr>
<tr>
<td>Operator response:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Problem determination:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Source:</td>
<td>Infoprint Server</td>
</tr>
<tr>
<td>Module:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Routing code:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Descriptor code:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Automation:</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>
AOP011E  Data set dsname is not found.
Explanation:  The data set does not exist or is not cataloged.
In the message text, dsname is the name of the data set.
System action:  The request was not completed.
User response:  Catalog the data set or specify the correct data set name.
Operator response:  Not applicable.
System programmer response:  Mount the volume that contains the data set.
Problem determination:  Not applicable.
Source:  Infoprint Server
Module:  Not applicable.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

AOP012E  Data set dsname is not accessible because volume volser is not mounted.
Explanation:  The volume on which the data set resides is not currently mounted.
In the message text:
  dsname  The name of the data set.
  volser  Specifies the serial number of the magnetic tape or DASD volume to contain the data set.
System action:  The request was not completed.
User response:  Notify your system programmer that this error has occurred.
Operator response:  Not applicable.
System programmer response:  Contact the IBM Support Center, or use your electronic link with IBM service for assistance.
Problem determination:  Not applicable.
Source:  Infoprint Server
Module:  Not applicable.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

AOP014E  Job jobid is not found.
Explanation:  The job jobid specified in the request was not found.
System action:  The request was not completed.
User response:  Use the lpstat command to display job IDs known to the system. Submit the request again with a valid job ID specified.
Operator response:  Not applicable.
System programmer response:  Not applicable.
Problem determination:  Not applicable.
Source:  Infoprint Server
Module:  Not applicable.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

AOP015E  Unknown exception occurred.
Explanation:  Print Interface received an exception of unknown value.
System action:  The request was not completed.
User response:  Notify your system programmer that this error occurred.
Operator response:  Not applicable.
System programmer response:  Contact the IBM Support Center, or use your electronic link with IBM service for assistance.
Problem determination:  Not applicable.
Source:  Infoprint Server
Module:  Not applicable.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

AOP016I  Job jobid on printer printer-name successfully cancelled.
Explanation:  The cancel request for job jobid was successfully completed.
System action:  The job was canceled.
User response:  None.
Operator response:  Not applicable.
System programmer response:  Not applicable.
Problem determination:  Not applicable.
Source:  Infoprint Server
Module:  Not applicable.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

**AOP017E**  
**Message:** No jobs found for user userid.

**Explanation:** A query jobs request (for example: \texttt{lpstat -u userid}) did not find any jobs for userid.

**System action:** Processing continues.

**User response:** None.

**Operator response:** Not applicable.

**System programmer response:** Not applicable.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

---

**AOP018E**  
**Message:** No jobs found for printer printer-name.

**Explanation:** A query jobs request (for example: \texttt{lpstat -p printer-name}) did not find any jobs for printer-name.

**System action:** Processing continues.

**User response:** None.

**Operator response:** Not applicable.

**System programmer response:** Not applicable.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

---

**AOP019E**  
**Message:** \texttt{attributename attributevalue} exceeds the maximum value maximumvalue supported by printer printer-name.

**Explanation:** \texttt{attributevalue} specified for \texttt{attributename} in the print request (for example: \texttt{lp -o attributename=attributevalue}) exceeds the maximum value (maximumvalue) allowed by the destination printer definition (printer-name). For example, the copies attribute in the print request exceeds the maximum copies defined in the printer definition.

**System action:** The request was not completed.

**User response:** Submit the request again with attributevalue less than or equal to maximumvalue.

**Operator response:** Not applicable.

**System programmer response:** Not applicable.

**Problem determination:** Not applicable.

**Source:** Infoprint Server
If attribute-name is “document-format”, resubmit your print request to a printer that your administrator says accepts the data format indicated in attribute-value. Or, your administrator might be able to specify a data transform in the printer definition to transform your data format to one that the printer supports.

If you think that Infoprint Server did not accurately detect the data format of your data, make sure that your data is not corrupted and make sure that the logical record length (LRECL) specified on the DD statement, if one is used, is correct. In some cases, you might be able to correct the problem by specifying the data format in the Infoprint Server document-format job attribute. For example, if you use JCL to print the data set, you can specify the document-format attribute in the PRTATTRS parameter on the OUTPUT JCL statement.

For information about Infoprint Server job attributes and the PRTATTRS JCL parameter, see z/OS Infoprint Server User's Guide.

Operator response: Not applicable.

System programmer response: If you want the printer definition to accept the attribute-value, use the Infoprint Server ISPF panels to change the supported data formats or other supported values in the printer definition. For information about how to control the validation that Infoprint Server does, see z/OS Infoprint Server Operation and Administration.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP021E    output descriptor failed:
                 errorparameter, return code retcode,
                 reason code reasoncode.

Explanation: The system OUTADD macro detected an error when Print Interface attempted to add the print job on the JES spool. An error was detected in a parameter in the output descriptor. The message text contains the parameter in error, return code, and reason code from the OUTADD macro.

System action: The request was not completed.
User response: Correct the attribute on the print request that corresponds to the errorparameter. Or, notify your system programmer that this error occurred.
Operator response: Not applicable.
System programmer response: Correct the attribute in the printer definition that corresponds to the errorparameter. If the error persists, contact the IBM Support Center, or use your electronic link with IBM service for assistance.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP022W    objectname: errmsgno errmsgtext

Explanation: An error has occurred with object name objectname. objectname is the name of the file, filter program, or other object in error. errmsgno errmsgtext are the message number and message text generated by a system program or by the filter program.

System action: Processing continues.

User response: If you specified objectname, make sure that the name is valid. Also, see the description for message errmsgno. If you did not specify objectname, contact your system programmer for assistance.

Operator response: Not applicable.
System programmer response: See the description for message errmsgno.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP023E    System job limit exceeded.

Explanation: A print request was not accepted because the number of job IDs is at the system limit.

System action: The request was not completed.

User response: Enter your print request again. If the error persists, notify your system programmer that this error occurred.

Operator response: Not applicable.
System programmer response: Reduce the total number of jobs currently in the system.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
AOP024E    LPD received an unsupported request identifier reqid.

Explanation: The line printer daemon (lpd) received a client request that contained a control file with a control code that is not defined by Request For Comments (RFC) 1179.

In the message text, reqid identifies the control code.

System action: The request was not completed.

User response: Notify your system programmer that this error occurred.

Operator response: Not applicable.

System programmer response: Make sure that the line printer requestor (lpr) on the client system creates control files that contain only control codes that are defined by RFC 1179.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP025E    A write operation failed for the SYSOUT data set.

Explanation: The print request failed because the attempt to write the SYSOUT data set to the JES spool failed.

System action: The request was not completed.

User response: Notify your system programmer that this error occurred.

Operator response: Not applicable.

System programmer response: Investigate why the write attempt failed. For example, the JES spool might be full, or the size limit of a JES SYSOUT data set might have been exceeded.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP026E    Job jobid on printer printer-name could not be cancelled.

Explanation: A cancel request for job jobid failed and the job could not be deleted from the JES spool. To cancel a print job, the job cannot already be selected for processing.

In the message text, printer-name is the name of the printer definition to which the job was directed.

System action: The request was not completed.

User response: To cancel a print job printed to a LAN printer in your TCP/IP or SNA network, ask your IP PrintWay operator to cancel it.

Operator response: To cancel a print job transmitted to a LAN printer using IP PrintWay and already selected for processing, use the Infoprint Server ISPF panels to delete the transmission-queue entry for the data set. For information, see z/OS Infoprint Server Operation and Administration.

System programmer response: Not applicable.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP027E    This program is not APF-authorized. It must be made APF-authorized.

Explanation: The program indicated before the message number is not running APF-authorized. This is most likely due to an error during installation.

System action: The request was not completed.

User response: Notify your system programmer that this error occurred.

Operator response: Not applicable.

System programmer response: Do not use NFS to mount the bin directory (for example, /usr/lpp/Printsrv/bin) that contains Print Interface executables because this action bypasses APF-authorization.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
AOP028E  [optionsource:] attributename is ambiguous for: attributelist

Explanation: The attribute attributename is an abbreviation for any one of the attributes listed in attributelist.

In the message text, optionsource identifies where the error occurred. For example, if optionsource is “-o”, the error occurred in the -o option. If optionsource is the name of an attributes file, the error occurred in the named attributes file.

System action: The request was not completed.

User response: Correct the attribute name, specifying enough characters in the attribute name to make the name unique. Then enter your print request again.

Operator response: Not applicable.

System programmer response: Not applicable.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP029E  SYSOUT data set allocation failed. JES may be down-level.

Explanation: The print request was not allocated on the JES spool. This might have occurred because JES is not at the required level.

System action: The request was not completed.

User response: Notify your system programmer that this error occurred.

Operator response: Not applicable.

System programmer response: Make sure that JES is at required level, as documented in [2/OS Infoprint Server Customization]. If JES is at the required level, investigate why the SYSOUT data set allocation failed. For example, the JES spool might be full, or the system might have exceeded the maximum number of SYSOUT data sets allowed on the spool.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP030E  SYSOUT data set allocation failed. Confirm printdestination.

Explanation: An error occurred during allocation of an output data set on the JES spool.

In the message text, printdestination is either the destination name or the destination node specified in the printer definition for the printer in the Printer Inventory.

System action: The request was not completed.

User response: Notify your system programmer or administrator that this error occurred. After the error is corrected, enter your print request again.

Operator response: Not applicable.

System programmer response: Change printdestination in the printer definition to a valid value. You can use Infoprint Server ISPF panels to list all printer definitions in the Printer Inventory with the value in error. If printdestination is a valid value, contact the IBM Support Center, or use your electronic link with IBM service for assistance.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP032E  [optionsource:] The attribute name attributename is not valid.

Explanation: The attribute named attributename is not valid. The problem might be that a JCL parameter, such as FSSDATA or PRTATTRS, specified a job attribute that is not valid. For example: FSSDATA='myprinter' instead of FSSDATA='printer=myprinter'.

In the message text, optionsource generally identifies where the error occurred.

For example, if optionsource is:
• The name of an attributes file, the error occurred in the named attributes file
• “FSSDATA”, the error occurred in the FSSDATA parameter on the OUTPUT JCL statement
• “job-attributes”, the error occurred in a job attribute
• “-o”, the error occurred in the -o option
• “PRTATTRS”, the error occurred in the PRTATTRS parameter on the OUTPUT JCL statement

System action: If the FSSDATA or PRTATTRS JCL parameter contains an incorrect attribute, IP PrintWay rejects the print job and does not process it. The print job remains on the JES spool with a status of “rejected” so that IP PrintWay does not attempt to process the
print job again until the operator releases it.

If the -o option, an attributes file, or the LPD control file contains an incorrect attribute, Infoprint Server does not write the print job to the JES spool.

**User response:** Submit the request again with a valid attribute assignment.

**Operator response:** If the print job is on the JES spool, delete it.

**System programmer response:** Not applicable.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOP033E** [optionsource:] Unmatched stringvalue.

**Explanation:** Print Interface expected a matching value for stringvalue but did not find one.

In the message text, optionsource identifies where the error occurred. For example, if optionsource is "-o", the error occurred in the -o option. If optionsource is the name of an attributes file, the error occurred in the named attributes file.

**System action:** The request was not completed.

**User response:** Correct the error and submit the request.

**Operator response:** Not applicable.

**System programmer response:** Not applicable.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP034E** [optionsource:] The value stringvalue is not valid.

**Explanation:** The value stringvalue is not valid for optionsource.

In the message text, optionsource identifies where the error occurred. For example, if optionsource is "-o", the error occurred in the -o option. If optionsource is the name of an attributes file, the error occurred in the named attributes file. If optionsource is printer-uri, the Uniform Resource Identifier (URI) specified in the printer definition is not valid.

**System action:** The request was not completed.

**User response:** Submit the request again with the correct value. If optionsource is the name of an Infoprint Server configuration file, notify your system programmer that this error occurred.

**Operator response:** If the print job is on the JES spool, delete it.

**System programmer response:** If the error occurred in an Infoprint Server configuration file, correct the error.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP036E [optionsource:] stringvalue is shorter than the minimum length of minimumlength.

Explanation: stringvalue is shorter than the acceptable minimum length of minimumlength.

In the message text, optionsource identifies where the error occurred. For example, if optionsource is "-o", the error occurred in the -o option. If optionsource is the name of an attributes file, the error occurred in the named attributes file.

System action: The request was not completed.
User response: Submit the request again with the correct value for stringvalue. If optionsource is the name of an Infoprint Server configuration file, notify your system programmer that this error occurred.
Operator response: Not applicable.

System programmer response: If the error occurred in an Infoprint Server configuration file, correct the error.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP038E [optionsource:] value1 is less than the minimum value minimumvalue.

Explanation: value1 is less than the acceptable minimum value minimumvalue.

In the message text, optionsource identifies where the error occurred. For example, if optionsource is "-o", the error occurred in the -o option. If optionsource is the name of an attributes file, the error occurred in the named attributes file.

System action: The request was not completed.
User response: Submit the request again with the correct value for value1. If optionsource is the name of an Infoprint Server configuration file, notify your system programmer that this error occurred.
Operator response: Not applicable.

System programmer response: If the error occurred in an Infoprint Server configuration file, correct the error.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP037E [optionsource:] stringvalue is longer than the maximum length of maximumlength.

Explanation: stringvalue is longer than the acceptable maximum length maximumlength.

In the message text, optionsource identifies where the error occurred. For example, if optionsource is "-o", the error occurred in the -o option. If optionsource is the name of an attributes file, the error occurred in the named attributes file.

System action: The request was not completed.
User response: Submit the request again with the correct value for stringvalue. If optionsource is the name of an Infoprint Server configuration file, notify your system programmer that this error occurred.
Operator response: Not applicable.

System programmer response: If the error occurred in an Infoprint Server configuration file, correct the error.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP039E [optionsource:] value1 exceeds the maximum value maximumvalue.

Explanation: value1 exceeds the acceptable maximum value maximumvalue.

In the message text, optionsource identifies where the error occurred. For example, if optionsource is "-o", the error occurred in the -o option. If optionsource is the name of an attributes file, the error occurred in the named attributes file.

System action: The request was not completed.
User response: Submit the request again with the correct value for value1. If optionsource is the name of an Infoprint Server configuration file, notify your system programmer that this error occurred.
Operator response: Not applicable.

System programmer response: If the error occurred in an Infoprint Server configuration file, correct the error.
Operator response: Not applicable.

System programmer response: If the error occurred in an Infoprint Server configuration file, correct the error.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP040E [optionsource:] The minimum number of values is minimumnum.

Explanation: A request was sent with less than the minimum number of values minimumnum.

In the message text, optionsource identifies where the error occurred. For example, if optionsource is "-o", the error occurred in the -o option. If optionsource is the name of an attributes file, the error occurred in the named attributes file.

System action: The request was not completed.

User response: Submit the request again with the correct number of values. If optionsource is the name of an Infoprint Server configuration file, notify your system programmer that this error occurred.

Operator response: Not applicable.

System programmer response: If the error occurred in an Infoprint Server configuration file, correct the error.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP041E source file: exceeds the maximum value maximumvalue allowed by printer printer-name.

Explanation: The size of the job submitted for printing, including all files in the job and all copies, exceeds the maximum size print job allowed for the selected printer. The administrator defines the maximum size allowed in the printer definition in the Printer Inventory.

In the message text, source file is the name of the document that is too large to print, maximumvalue is the number of bytes allowed in the printer definition, and printer-name is the name of the selected printer.

System action: The print request was not completed.

User response: Make the print job smaller or select another printer, and submit your print request again. Or ask your administrator to increase the maximum job size allowed for this printer in the printer definition.

Operator response: Not applicable.

System programmer response: To increase the size limit for jobs submitted to this printer, use Infoprint Server ISPF panels to edit the printer definition. In the printer definition, specify the maximum number of bytes allowed.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP042E The nesting level for attributes files has been exceeded.

Explanation: The attributes file refers to an attributes file that also refers to an attributes file. The number of these nested attributes files has exceeded 16 files.

System action: The print request was not completed.
User response: Change the attributes files to limit the number of nested attributes files to 16, and submit your print request again.

Operator response: Not applicable.
System programmer response: Not applicable.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP044I Shutdown complete.
Explanation: The daemon named before the message number has shut down.
System action: The named daemon has shut down.
Operator response: If you want to restart the daemon, enter this MVS command to run the AOPSTART JCL procedure:
START AOPSTART
System programmer response: Not applicable.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP045E attributename1 required when attributename2 specified.
Explanation: When you specify attribute attributename2 on the lp command, you must also specify attribute attributename1.
System action: The print request was not completed.
User response: Correct the attributes, and submit the print request again.
Operator response: Not applicable.
System programmer response: Not applicable.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP046E You are not permitted to cancel job jobid.
Explanation: You are not the same user who submitted the job.
System action: The job was not canceled.
User response: To cancel a print job submitted by another user, contact your system operator.
Operator response: Not applicable.
System programmer response: Not applicable.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP047E exception-information
Explanation: This message is displayed with message AOP004E and contains diagnostic information that might be helpful in solving the problem.
System action: The request is not completed.
User response: Contact your system programmer.
Operator response: Not applicable.
System programmer response: Use the information in this message to find the source of the problem.
If you cannot identify the cause of the problem, contact the IBM Support Center, or use your electronic link with IBM service for assistance.
If the exception-information in the message indicates a problem with permissions (for example, message EDC5139I Operation not permitted.), run the aopsetup shell script. For example, if you use the default group names for Infoprint Server operators (AOPOPER) and administrators (AOPADMIN), enter:
/usr/lpp/Printsrv/bin/aopsetup aooper aopadmin
For more information about aopsetup, see z/OS Infoprint Server Customization.

If the exception-information in the message is EDC5164I SAF/RACF error., make sure:
• The user ID that starts Infoprint Server is a valid z/OS UNIX user ID. The user ID must have an OMVS segment, the default group for the user ID must have an OMVS segment with a group identifier (GID), and the user ID must have a home directory.
• The password for the user ID that starts Infoprint Server has not expired.
One possible message text is:

```
aopd: A0P047E Cannot allocate memory
```

This message indicates that the daemon (aopd) requested more memory than was available. Check these:

1. The region size might be too small. For information about setting the region size for daemons, see:\n   [z/OS Infoprint Server Customization](http://www.ibm.com/support/docview.wss?uid=swg21248446)

2. The Infoprint Server Inventory databases might be corrupted, causing Infoprint Server to request an unreasonable amount of memory. For information about restoring the inventory databases from backups, see [z/OS Infoprint Server Customization](http://www.ibm.com/support/docview.wss?uid=swg21248446)

Another possible message text is:

```
aoplpd: A0P047E Bind() failed in TCPListener::TCPListener(const IPAddress&): TCPListener.cpp 98:
EDC8115I Address already in use. errno2=0x744c7247
```

This message text indicates that the Infoprint Server LPD (aoplpd) attempted to use a port that is already used by another process. The process could be another instance of aoplpd that was started earlier, the standard MVS LPD (shipped with TCP/IP), or another process if the port is not 515. Check these:

1. From a z/OS UNIX System Services shell, logged in as root or superuser (UID=0), enter the `ps` command to determine whether an aoplpd process is already running:

   ```
   ps -ef | grep aoplpd
   ```

   If so, enter the `aopstop` or `kill` command to end this process:

   ```
   aopstop -d lpd
   kill process_id
   ```

   Then restart aoplpd. For example, enter this MVS command to run the AOPSTART JCL procedure:

   ```
   START AOPSTART
   ```

2. If the `ps` command does not show aoplpd already running, enter these commands to determine if any other process is listening at the same port:

   ```
   onetstat | grep port
   ```

   `port` is the port number specified in the `lpd-port-number` attribute in the `aopd.conf` file. If the result shows the port in a Listen state, determine which process is using the port and do one of these:
   - Stop the process using the port.
   - Change the port number at which aoplpd listens in the `lpd-port-number` attribute in the `aopd.conf` file.
   - Configure TCP/IP with two stacks so that the MVS LPD and aoplpd can both listen at port 515.

3. Check the TCP/IP configuration file, `hlq.PROFILE.TCPIP`, to determine whether the port is reserved. Port numbers specified in the `PORT` statement are reserved. If you want aoplpd to listen at port 515, comment out the line in `hlq.PROFILE.TCPIP` that lists port 515.

For more information about how to customize TCP/IP and the Print Interface LPD, see [z/OS Infoprint Server Customization](http://www.ibm.com/support/docview.wss?uid=swg21248446)

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**AOP048E**  
**hostname:** Unknown host.

**Explanation:** Infoprint Server tried to resolve the printer’s host name, but the `gethostbyname()` function could not resolve it. This situation can occur for one of these reasons:

- The Domain Name Server (DNS) is not accessible from z/OS.
- No DNS entry exists for this host name.
- This host name is spelled incorrectly in the printer definition.
- This host name is spelled incorrectly in the DEST=IP: parameter on the JCL statement or in the `printer-ip-address` job attribute.

IP PrintWay extended mode requires that your DNS be able to map a host name to an IP address if the host name is specified in a printer definition, DEST=IP: JCL parameter, or in the `printer-ip-address` job attribute. If an IP address is specified (in a printer definition, DEST=IP: JCL parameter, or in the `printer-ip-address` job attribute) and the IP address maps to a host name in the DNS, the DNS must also map the host name to an IP address. IP PrintWay extended mode also requires that the DNS be able to do reverse lookup (from IP address to host name) if the host name or IP address is specified in a printer definition, DEST=IP: JCL parameter, or in the `printer-ip-address` job attribute. For more information, see [z/OS Infoprint Server Customization](http://www.ibm.com/support/docview.wss?uid=swg21248446)

**System action:** If this message is received for a print job request, IP PrintWay rejects the print job. The print job remains on the JES spool with a status of “rejected” so that IP PrintWay does not attempt to process the print job again until the operator releases it.

If you see this message when IP PrintWay extended mode starts, or when the administrator creates a printer definition, IP PrintWay does not create an internal
representation of the printer. Therefore, Infoprint Central cannot display this printer.

**User response:** If you specified this host name in the print request, make sure that the host name is correct. After you correct the host name, resubmit the print job. If you did not specify the host name in the print request, or if the host name is correct, contact the system programmer.

**Operator response:** Do one of these after the problem is corrected:
- If the job submitter corrected the host name and resubmitted the print job, delete the rejected print job.
- If the administrator corrected the host name in the printer definition or in the DNS, release the print job.

**System programmer response:** If the host name is incorrect in the printer definition, correct it. When you correct the host name, you receive this message again because IP PrintWay tries to resolve the host name one more time. You can ignore the second AOP048E message.

If the host name is correct in the printer definition, verify that the DNS is accessible and functioning and that there is a DNS entry for this host name. If no DNS entry exists, create an entry. After you create a DNS entry, Infoprint Central can display the printer after someone submits a print job to it or after the administrator modifies any field in the printer definition.

After you correct the problem, ask the operator to release the print job that was rejected.

**Tip:** To find printer definitions that contain the host name, use the Infoprint Server ISPF panels: enter the host name in the IP Address field on the Select Printer Definitions panel.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP050E** Cannot connect to inventory inventory.

**Explanation:** The Printer Inventory inventory is not currently active.

**System action:** The print request is not completed.

**User response:** Wait until the Printer Inventory is active, or contact your system programmer.

**Operator response:** Not applicable.

**System programmer response:** Start the Printer Inventory using the z/OS UNIX aopstart command or the AOPSTART procedure.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP051I** All daemons started successfully.

**Explanation:** All daemons started successfully. This message is for information only.

**System action:** Processing continues.

**User response:** None.

**Operator response:** Not applicable.

**System programmer response:** None.

**Problem determination:** None.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP049E** Insufficient CSA/ECSA storage available. number bytes required.

**Explanation:** There was no subpool 241 storage available to the program.

**System action:** Infoprint Server does not initialize.

**Operator response:** Not applicable.

**System programmer response:** If all programs are consuming normal amounts of common storage, increase the storage amount specified in SYS1.PARMLIB (IEASYSxx) and re-run initial program load (IPL) at a convenient time. Infoprint Server common storage area (CSA) requirements depend upon system load but are generally modest. 64 K of ECSA (extended common storage area) should be more than enough.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
AOP052E  A filter name must be supplied.

Explanation: You must specify a filter name with the filter command. No filter name was specified.

System action: The print request is not completed.

User response: If you are using the filter command directly, specify a filter name. For more information, see cfilter.h and cfilter.c in the /usr/lpp/Printsrv/samples/ directory. If the message is coming from an installation-supplied program, contact the system programmer.

Operator response: Not applicable.

System programmer response: If you are using the filter command directly, specify a filter name. Use the filter man pages for more information. If the message is coming from an installation-supplied program, make sure the installation-supplied program is generating a filter name with a filter command.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP053E  program-name exited with status status.

Explanation: The specified program ended with a non-zero status.

System action: Processing continues.

User response: The current output request might be incomplete. Verify the request and resend it. If the problem recurs, contact the system programmer.

Operator response: Not applicable.

System programmer response: If the error was sent by the transform daemon (aopxfd) and the program named is an IBM-supplied transformer, contact the IBM Support Center, or use your electronic link with IBM service for assistance. Otherwise, treat the problem as originating with program-name.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP054E  program-name was terminated because of signal signal_number.

Explanation: The specified program was ended because it received the specified signal.

System action: The named program terminates.

User response: The current output request might be incomplete. Verify the request and resend it. If the problem recurs, contact the system programmer.

Operator response: Not applicable.

System programmer response: If no user entered the kill command against the program, and if the error was sent by the transform daemon (aopxfd), and if the program named is an IBM-supplied transformer, contact the IBM Support Center, or use your electronic link with IBM service for assistance. Otherwise, treat the problem as originating with program-name.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP055E  A protocol error occurred: message | data.

Explanation: If this message was displayed in message AOP003E, message was received and was not valid.

This error might have occurred in the HTTP protocol when IP PrintWay attempted to transmit data to a printer using the Internet Printing Protocol (IPP).

In the message text, message is a message, data is the HTTP protocol data that has an error.

System action: The request is not completed.

IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

User response: Notify your system programmer.

Operator response: Not applicable.

System programmer response: If this message is contained in message AOP003E, that message indicates the source of the error. If this message is not contained in message AOP003E or if the source is an IBM-supplied program, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
Otherwise, treat the problem as originating with the named source.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP056E**  
filename was not spooled.

**Explanation:** The specified filename was not spooled. Messages that follow indicate the reason.

**System action:** The request is terminated.

**User response:** See other messages sent with this one.

**Operator response:** Not applicable.

**System programmer response:** See other messages sent with this one.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP057E**  
attribute_name1 also requires attribute_name2.

**Explanation:** The first specified attribute requires that a value also be supplied for the second specified attribute.

**System action:** The request is terminated.

**User response:** Supply a value for attribute_name2.

**Operator response:** Not applicable.

**System programmer response:** Make sure the user supplies a value for attribute_name2.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP058E**  
attribute_spec cannot be specified with attribute_name.

**Explanation:** The specified attribute specification is not valid for the specified attribute.

**System action:** The request is terminated.

**User response:** Either do not set attribute_spec for this attribute, or do not supply a value for attribute_name.

**Operator response:** Not applicable.

**System programmer response:** Not applicable.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP059E**  
When attribute_name1 is value, then attribute_name2 is required.

**Explanation:** The specified second attribute must be set if the first attribute has the value indicated.

**System action:** The request is terminated.

**User response:** Either do not specify value for attribute_name1, or supply a value for attribute_name2.

**Operator response:** Not applicable.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP060E**  
When attribute_name1 is value, then attribute_name2 cannot be specified.

**Explanation:** A value of value for attribute_name1 precludes specifying attribute_name2.

**System action:** The request is terminated.

**User response:** Either do not specify value for attribute_name1, or do not supply a value for attribute_name2.

**Operator response:** Not applicable.

**System programmer response:** None.

**Problem determination:** Not applicable.
AOP061W  object_class object_name is not found.
Explanation:  This message is sent by the Print Inventory Definition Utility (PIDU). The indicated object was not found in the Printer Inventory.
System action:  The request is terminated.
User response:  Check that you requested the right printer for your print job. If not, re-enter the request with the right printer. If so, contact your system programmer.
Operator response:  Not applicable.
System programmer response:  If the indicated object is a printer definition, either create the printer definition in the Printer Inventory, or re-enter the request with a different printer definition. If the indicated object is part of a printer definition, change the printer definition to include a valid object.
Problem determination:  Not applicable.
Source:  Infoprint Server
Module:  Not applicable.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

AOP062I  object_class object_name was created.
Explanation:  This informational message is sent by the Print Inventory Definition Utility (PIDU). The indicated object was created in the Printer Inventory as requested.
System action:  Processing continues.
User response:  None.
Operator response:  Not applicable.
System programmer response:  None.
Problem determination:  Not applicable.
Source:  Infoprint Server
Module:  Not applicable.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

AOP063I  object_class object_name was replaced.
Explanation:  This informational message is sent by the Print Inventory Definition Utility (PIDU). The indicated object was replaced in the Printer Inventory as requested.
System action:  Processing continues.
User response:  None.
Operator response:  Not applicable.
System programmer response:  None.
Problem determination:  Not applicable.
Source:  Infoprint Server
Module:  Not applicable.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

AOP064I  object_class object_name was deleted.
Explanation:  This informational message is sent by the Print Inventory Definition Utility (PIDU). The indicated object was deleted from the Printer Inventory as requested.
System action:  Processing continues.
User response:  None.
Operator response:  Not applicable.
System programmer response:  None.
Problem determination:  Not applicable.
Source:  Infoprint Server
Module:  Not applicable.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

AOP065I  count definitions were exported to filename.
Explanation:  The specified number of printer definitions were exported to file name filename.
System action:  Processing continues.
User response:  None.
Operator response:  Not applicable.
System programmer response:  None.
Problem determination:  Not applicable.
Source:  Infoprint Server
Module:  Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP066E  attribute_name is not supported in a predicate.

Explanation: The type of this attribute precludes its use in predicates.

System action: The request is terminated.
User response: Specify a typed attribute name.
Operator response: Not applicable.
System programmer response: Specify a typed attribute name.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

System programmer response: Verify that the OSNMPD daemon is active and available and that the community name matches if it has been overridden. Otherwise contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance. If possible, recreate the error with the Infoprint Server trace active. For more information about the Infoprint Server trace facility, see "Tracing Infoprint Server" on page 255.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP067E  Connection to the host SNMP agent failed, retcode = retcode.

Explanation: The Infoprint Server SNMP printer subagent (AOPSNMPD) failed to connect to the z/OS Communications Server SNMP agent (OSNMPD). Common causes might be:
- OSNMPD might not be active. For instructions about starting OSNMPD, see z/OS Communications Server [IP Configuration Reference]. This error returns return code −2.
- The default community name (public) has been overridden in either the OSNMPD daemon or the AOPSNMPD daemon, creating a mismatch. This error returns return code −2.
- Another instance of the AOPSNMPD daemon is active.

If the return code is greater than −90, its values will be documented in the header file /usr/lpp/tcpip/snmp/include/snmp_dpi.h

Other return code values are:
−90  failed on mkDPIopen
−91  failed on pDPIpacket
−92  no response to DPI-register

System action: The AOPSNMPD daemon is not started.
Operator response: Contact your system programmer.

AOP068W  filename: contains duplicate entry "transform_class."

Explanation: The transform class transform_class appears multiple times in filename.

System action:
User response: None.
Operator response: Not applicable.
System programmer response: Make sure that the transform class specified appears only once.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP069E  Connection to transform class transform_class failed.

Explanation: Some print data requires transformation from one data format to another, such as from PCL to AFP, from PostScript to AFP or from PDF to AFP. For such data sets, Print Interface sends the print data to a transform process for conversion prior to writing the data to the JES spool. This error message indicates that communication with the transform process was either never established or failed before the transform completed.

In the message text, transform_class is the name of the transform (such as, pcl2afp) concatenated with the class specified in the -c filter option (such as, letter_240). For example, pcl2afp_letter_240.

System action: The transform request was not completed.
**User response:** Submit the request with a valid -c filter option. If the -c option is valid, notify your administrator.

**Operator response:** Not applicable.

**System programmer response:** Make sure that a valid transform class is specified in the -c filter option in the printer definition. The transform class must be defined in the transform configuration file, aopxfd.conf. If you change the configuration file, stop and restart the Infoprint Server Transform Manager daemon to pick up the changes.

Also, make sure that you have installed the requested transform and have correctly specified the name of the transform daemon in the transform configuration file. The name of the transform is the first part of the class_name (for example, afp2pcl.) If the transform daemon for the transform (for example, afp2pcld) is not installed, you also receive message EDC5129I on the console.

View the /var/Printsrv/xfd/transform_class.#.stderr file for an indication of the cause of the transform failure.

If the problem persists, contact your IBM service representative.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**AOP071E** Expected operand operand_id is missing.

**Explanation:** A request was submitted without a required operand, which is identified in the message.

**System action:** The request was not completed.

**User response:** If you entered the command from the command line, submit the request with the required operand. If you did not enter the command missing the operand, notify your administrator.

**Operator response:** Not applicable.

**System programmer response:** Add the required operand to the printer definition.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**AOP072E** Use of this product is not enabled.

**Explanation:** This product is not enabled for use. It must be enabled in SYS1.PARMLIB.

**System action:** The program terminates.

**Operator response:** Not applicable.

**System programmer response:** Enable the product in the IFAPRDxx member of SYS1.PARMLIB. For information, see z/OS Planning for Installation.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**AOP073E** inventory: function function_number failed with return code retcode reason code reasoncode.

**Explanation:** The Printer Inventory function function_number failed for the Printer Inventory indicated in inventory.

**System action:** The request terminates.

**User response:** Contact your system programmer.

**Operator response:** Not applicable.

**System programmer response:** Contact your service representative in the IBM Support Center, or use your
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

**AOP074E** Invalid API function call, function call.
Job has not been created.

Explanation: This message involves the application programming interface (API) library that is shipped with Infoprint Server. The API lets customers develop their own printing applications.

Message AOP074E is sent when a programmer uses an API function in error. For example, calling WritePrintFile() or ClosePrintFile() before calling CreatePrintFile(). A print file must be created before it can be written to or closed.

System action: The API does not run, and no print file is created.

User response: If you are the application programmer using the API, rewrite the code to eliminate the error. If you are not the application programmer, notify your system programmer of this error.

Operator response: Not applicable.
System programmer response: Have the application developer rewrite the code that uses the API to eliminate the error.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

**AOP075I** Daemon daemon was started successfully.

Explanation: The daemon was started successfully.

The start of daemon daemon failed.

Explanation: The daemon could not be started. In the message text, daemon is the name of the daemon.

If another error message indicates a RACF or SAF error, the file permissions might not be set correctly or the user ID that started Infoprint Server might not be a valid z/OS UNIX user ID.

System action: The request terminates.

User response: Contact your system programmer.

Operator response: Not applicable.
System programmer response: Look for other messages that indicate the reason for the failure on the terminal where Infoprint Server was started or in the console log.

If a message indicates a RACF or SAF error (such as, message EDC5164I):
- Make sure that the user ID that starts Infoprint Server is a valid z/OS UNIX user ID. The user ID must have an OMVS segment, the default group for the user ID must have an OMVS segment with a group identifier (GID), and the user ID must have a home directory.
- Make sure that the password for the user ID that starts Infoprint Server has not expired.
- Run the aopsetup shell script to set up the correct z/OS UNIX permissions for Infoprint Server directories and executable files.

For information about how to set up security for Infoprint Server and how to run the aopsetup shell script, see z/OS Infoprint Server Customization.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

**AOP077I** Daemon daemon is already started.

Explanation: The daemon is already active and cannot be started again.

In the message text, daemon is the name of the daemon.
System action: The request to start the daemon again has no effect on the system.
User response: None.
Operator response: Not applicable.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP078W Daemon daemon is not running.
Explanation: An attempt was made to stop a daemon that is not running.
In the message text, daemon is the name of the daemon.
System action: The request has no effect on the system.
User response: None.
Operator response: Not applicable.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP079I A shutdown of daemon daemon has been initiated.
Explanation: The system has begun to end the daemon. The termination is not complete until message AOP044I, which indicates daemon termination, is displayed.
In the message text, daemon is the name of the daemon.
System action: Not applicable.
User response: None.
Operator response: Not applicable.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP080E Unexpected signal signal_number received.
Explanation: A daemon received an unexpected signal it cannot process.
System action: The daemon terminates abnormally.
User response: Notify your system programmer.
Operator response: Not applicable.
System programmer response: Restart the daemon.
If the error condition persists, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP081E Start of Java virtual machine failed with return code retcode.
Explanation: This message is sent when the Internet Printing Protocol (IPP) server component of Print Interface fails to start the Java™ virtual machine. Because the IPP server uses Java to process IPP operations, the server must create a Java environment (that is, the Java virtual machine) to use Java services. The most common reasons for failure in starting the Java virtual machine are:

• The Java library libjava.a is not APF-authorized. This library must be APF-authorized before continuing.
• The Java files were not installed in the default directory, and the JAVA_HOME environment variable does not specify the directory where the Java files were installed.

System action: Print Interface does not process the print data set.
User response: Contact the system programmer.
Operator response: Not applicable.
System programmer response: Make sure that the Java library (libjava.a) is APF-authorized. If Java files were not installed in the default directory, specify the directory that contains the Java files in the JAVA_HOME environment variable in the aopstart EXEC. Have the user resubmit the print job.
If the error condition persists, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
AOP082E You are not authorized to run this utility.

Explanation: The user does not have correct authority to run the Printer Inventory Definition Utility (PIDU).

System action: PIDU terminates.
User response: Notify your system programmer.
Operator response: Not applicable.

System programmer response: To permit the user to run PIDU, give the user either READ or UPDATE access to the AOP.ADMINISTRATOR profile in the PRINTSRV class. The user must also be a member of the AOPADMIN group. For more information, see z/OS Infoprint Server Customization.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP083E A object_class named object_name already exists.

Explanation: An attempt was made to create a new inventory object that would conflict with an existing object.

System action: The new inventory object is not created.
User response: If you need the new object, give it a class and name that do not conflict with an existing object.
Operator response: Not applicable.

System programmer response: If the message refers to the Infoprint Server search database daemon (aopsd), the search database files are not consistent. The program might have failed. To correct the inconsistency, run the z/OS UNIX sdbu -z command to create the search database. For information about creating the search database, see z/OS Infoprint Server Customization.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP084E A object_class object_name is already defined with attribute_spec.

Explanation: The object of class object_class named object_name already exists in the inventory, and its attribute_spec prevents the definition of the current object.

System action: The new object is not created.
User response: Choose values for the attribute that do not conflict with those of the named object_class object_name.
Operator response: Not applicable.

System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP085E Inclusion of object_class1 object_name1 failed for object_class2 object_name2.

Explanation: While building the object of type object_class2 named object_name2 from the Printer Inventory, the object of type object_class1 named object_name1 was not found. The object will be treated as not found until object_class1 object_name1 is defined.

System action: The request which tried to process object_class2 named object_name2 fails.
User response: If you want to create a new object that contains object_class1 object_name1 in its definition, you must first create object_class1 object_name1.
Operator response: Not applicable.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
AOP086I  GTF tracing started.
Explanation: Printer Inventory interface GTF tracing was started.
System action: Processing continues.
User response: None.
Operator response: Not applicable.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP087I  GTF tracing stopped.
Explanation: Printer Inventory interface GTF tracing has stopped.
System action: Processing continues.
User response: None.
Operator response: Not applicable.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP088E  attributename: A value is required.
Explanation: A value is required for attributename to complete the request.
System action: The request is terminated.
User response: Supply a value for attributename and resend the request.
Operator response: Not applicable.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
AOP091I  Connected to name.
Explanation: The utility has connected to the inventory or host name.
System action: None.
User response: None.
Operator response: Not applicable.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP092E userid is not authorized to access dsname
Explanation: The user (userid) is not authorized to access the data set.
In the message text:
userid  The z/OS user ID of the job submitter or "NONE". "NONE" means that either no z/OS user ID was associated with the print job or that the z/OS user ID could not be authenticated.
access  The type of access to the data set.
   The access type is READ.
dsname  The name of the data set.
System action: The print request is not completed.
User response: If the user ID is "NONE", you must use a job submission method in which the job submitter has an authenticated z/OS user ID, or the data set owner must grant universal read access to the data set.
Job submission methods that can authenticate a z/OS user ID include:
• The lp, afp2pcl, afp2ps, and afp2pdf commands
• SAP R/3, using the Infoprint Server SAP Output Management System (OMS)
• Windows SMB protocol
• The AOPPRINT and AOPBATCH JCL procedures
• z/OS job control language (JCL) that submits a print job to the Infoprint Server subsystem or to IP PrintWay extended mode
If the user ID in the message text is your user ID, ask the data set owner to grant you read access to the data set.
Operator response: Not applicable.
System programmer response: Not applicable.
Problem determination: Not applicable.

AOP093E The token token is invalid.
Explanation: The token passed to the API is incorrect.
System action: Not applicable.
User response: Notify your application or system programmer.
Operator response: Not applicable.
System programmer response: The token is dumped in hex. Look for a token being used before it is initialized (for example, with CreatePrintFile()) or after it has been invalidated (for example, with AbortPrintFile()).
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP094E functionname:nnnnnnnnnn bytes of buffer storage were required, nnnnnnnnn were provided.
Explanation: The buffer that the caller provides to an API function is not large enough to satisfy the request.
System action: Not applicable.
User response: Notify your application or system programmer.
Operator response: Not applicable.
System programmer response: Use the BufferSizeRequired() function to determine the size of the buffer required and change the program using the API to supply a buffer at least that size. Consider modifying the program so that it checks for ErrorNumber() == AOP_BUFFER_OVERFLOW and dynamically allocates the buffer size required.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
AOP095E   API Initialization failed.

Explanation: The API could not be initialized and there was not enough storage to describe the reason better.

System action: Not applicable.

User response: Increase the amount of storage available for the application or notify your application or system programmer.

Operator response: Not applicable.

System programmer response: Increase the amount of storage available for the application.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP097E   The component_type component_name is in use and may not be deleted.

Explanation: You attempted to delete a component from the Infoprint Server Printer Inventory. This component is included in one or more objects in the Printer Inventory. Infoprint Server can delete a component only if no other objects include it.

In the message text:

component_type
component_name
object_type
object_name
message

Type of component you attempted to delete.
Name of the component you attempted to delete.
Type of object in the Printer Inventory that would have an error if the component were modified.
Name of the object that would have an error if the component were modified.
Message that describes the error that would result if the component were modified.

System action: The component was not deleted from the Printer Inventory.

User response: None.

Operator response: Not applicable.

System programmer response: Remove the component from the objects that include it, and then delete the component. To find the objects that include the component, use the Infoprint Server ISPF panels to list all components of the same component type and use the P action to show the other objects that include the component. As an alternative, you can use the pidu command to display objects that include the component. For more information about how to use the Infoprint Server ISPF panels and the pidu command, see z/OS Infoprint Server Operation and Administration.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
AOP098E  The object_type object object_name requires component_type component_name and was not created or updated.

Explanation: You attempted to create or modify an object in the Infoprint Server Printer Inventory. However, this object includes a component that does not exist in the Printer Inventory. You must create the component before you can include it in another object.

In the message text:
- object_type: Type of object you attempted to create or modify.
- object_name: Name of the object you attempted to create or modify.
- component_type: Type of component that does not exist in the Printer Inventory.
- component_name: Name of the component that does not exist in the Printer Inventory.

System action: The object was not created or modified in the Printer Inventory.

User response: None.

Operator response: Not applicable.

System programmer response: Verify the spelling of the component name. Because component names are case-sensitive, use the correct uppercase and lowercase letters. If the component name is spelled correctly, create the component that the object includes, and then create or modify the object that includes the component.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP099E  The URI scheme scheme is not supported.

Explanation: The Uniform Resource Identifier (URI) for the printer, which is specified in the printer definition for the target printer, is not valid. Start the URI with a valid scheme, for example http: or ipp:.

In the message text, scheme is the first part of the URI value as specified in the printer definition.

System action: IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

User response: None.

Operator response: Not applicable.

System programmer response: Use the Infoprint Server ISPF panels to correct the value specified in the URL field of the printer definition for the target printer. The URL field is displayed on the IPP Protocol panel.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP100E  The target printer-uri responded with scheme status code.

Explanation: IP PrintWay used the Internet Printing Protocol (IPP) to send a data set to the target printer, and the printer reported an error.

In the message text, printer-uri is the Uniform Resource Identifier (URI) of the target printer as specified in the printer definition. scheme is either HTTP or IPP. code is either the message or code returned by the target printer.

System action: IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

User response: None.

Operator response: Not applicable.

System programmer response: Look up the status codes in either RFC 2068 for HTTP or RFC 2566 for IPP.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP101E  Internet Printing Protocol (IPP) server failed to establish server socket at port portnumber [message].

Explanation: The Infoprint Server IPP server (daemon aopippd) encountered an error when it attempted to establish a server socket connection at the requested port.

In the message text, portnumber is the port number at which the IPP server attempted to establish a connection. This port number is specified in the
**ipp-port-number** field in the Infoprint Server configuration file, **aopd.conf**. The default port is 631. *message* is a message that contains additional error information.

**System action:** The IPP server cannot accept any print requests from remote IPP clients.

**Operator response:** Not applicable.

**System programmer response:** Verify that the port number in the message is correct and available to the IPP server. Look up *message* for more information about the error. If *message* indicates that the port number (that is, the address) is already in use, either stop the other process that is using the port number or specify another port for the IPP server in the **ipp-port-number** field in the Infoprint Server configuration file, **aopd.conf**. For information about the configuration file, see [Customization](z/OS Infoprint Server Customization).

If you see message **EDC5111I** Permission denied, make sure that the port is not reserved for any other process in the TCP/IP profile data set. For example, if you see this line in the PORT or PORTRANGE statement, delete it or comment it out (the semicolon in the first column indicates the line is a comment):

```
; 631 TCP process-name
```

After correcting the problem, you must stop and restart the IPP server so that the IPP server attempts to establish a server socket connection again. You can use these MVS commands to stop and restart the IPP Server:

```
START AOPSTOP,OPTIONS='-d ippd'
START AOPSTART
```

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP102E**  
DEST, CLASS, and FORMS printer selection is not permitted in the printer named DLFTNTRY

**Explanation:** You must not select the **Use DEST, CLASS, and FORMS** for **IP PrintWay printer selection** option in the printer definition named **DLFTNTRY**. **IP PrintWay** uses the printer definition named **DLFTNTRY** to obtain default values for certain attributes when it prints a data set submitted with the **DEST=IP:** parameter and no **FSSDATA=printer** parameter on an **OUTPUT JCL** statement.

**System action:** Infoprint Server did not create the printer definition in its Printer Inventory.

**User response:** If you used ISPF panels to create the printer definition, either deselect the **Use DEST, CLASS, and FORMS** for **IP PrintWay printer selection** field in the printer definition or change the name of the printer definition, and save the printer definition again. If you used the **pidu** command to create the printer definition, either remove the **dcf-routing** attribute or change the name of the printer definition, and enter the command again.

**Operator response:** Not applicable.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP103E**  
The Infoprint Server LPD (AOPLPD) failed to read an LPD command.

**Explanation:** The Infoprint Server LPD (daemon **aoiplpd**) failed when it attempted to read an LPD command.

**System action:** The Infoprint Server LPD did not allocate an output data set on the JES spool. Processing continues.

**User response:** Resubmit the print request.

**Operator response:** Not applicable.

**System programmer response:** If this message occurs often, it might indicate a network problem between the submitting client and the Infoprint Server host system. Investigate and correct the source of the problem.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP104E**  
Resubmit for filtering is not permitted in the printer named DLFTNTRY

**Explanation:** You must not select the **IP PrintWay** basic mode **Resubmit for filtering** option in the printer definition named **DLFTNTRY**. **IP PrintWay** uses the printer definition named **DLFTNTRY** to obtain default values for certain attributes when it prints a data set submitted with the **DEST=IP:** parameter and no **FSSDATA=printer** parameter on an **OUTPUT JCL**
statement. If you run IP PrintWay basic mode, you must set the Resubmit for filtering option in the printer definition for the printer, not in the default printer definition.

System action: Infoprint Server did not create the printer definition in its Printer Inventory.

User response: If you used ISPF panels to create the printer definition, either deselect the Resubmit for filtering field in the printer definition or change the name of the printer definition, and save the printer definition again. If you used the pidu command to create the printer definition, either remove the resubmit-for-filtering attribute or change the name of the printer definition, and enter the command again.

Operator response: Not applicable.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP105E printer-uri The response-timeout was exceeded; the printer may require intervention.

Explanation: The data set could not be completely transmitted to the printer because the time specified in the Response timeout field of the printer definition in the Printer Inventory expired.

In the message text, printer-uri is the Uniform Resource Identifier (URI) for the printer.

System action: IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

Operator response: Correct the problem at the printer.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP106E Transform transform_class connection refused. [errmsgno] errmsgtxt

Explanation: The Infoprint Server Transform Manager attempted to connect to a transform daemon. The connection attempt failed probably due to a failure that occurred during initialization of the transform daemon.

In the message text:

transform_class The name of the transform concatenated with the transform class that was requested in the -c option.

errmsgno errmsgtxt The message number, if available, and the message text generated by a system program.

System action: The transform was not done.

User response: Notify your system programmer.

Operator response: Not applicable.

System programmer response: View the /var/Printsrv/xfd/transform_class#.stderr file for the cause of the failure to initialize the transform daemon. A probable error is that an AFP resource library is not specified correctly in the transform configuration file, aopxfd.conf. If you change the transform configuration file, stop and restart the Infoprint Server Transform Manager daemon to pick up the changes.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP107E Subsystem function request failed - insufficient resources.

Explanation: The Print Interface subsystem did not have sufficient resources to process a data set that was submitted to Infoprint Server using the SUBSYS JCL parameter on a DD statement. One possible reason for this error is that the job step contained a large number of DD JCL statements.

In the message text:

function The name of the function that the subsystem was doing when the error occurred. Possible values are: allocate, open, close, put, and unallocate.

System action: The Print Interface subsystem does not allocate output data sets on the JES spool for any data sets in the job step.

User response: Reduce the number of resources required by the job step, and rerun the job. For
example, decrease the number of DD JCL statements.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP108E Subsystem function request failed - system error, reason = reason code

Explanation: A z/OS system error occurred while Infoprint Server was processing a data set that was submitted to Infoprint Server with the SUBSYS JCL parameter on the DD statement.

In the message text:

function The name of the function that Infoprint Server was doing when the error occurred. Possible values are: allocate, open, close, put, and unallocate.

reason code A code that indicates the reason for the error, in the format: 00xxyyzz.

System action: If the function is allocate, open, close, or put, the Print Interface subsystem does not allocate output data sets on the JES spool for any data sets in the job step. If the function is unallocate, the Print Interface subsystem might have allocated an output data set on the JES spool for this data set.

User response: Resubmit the job after the error is corrected.

Operator response: Notify your system programmer that this error occurred.

System programmer response: If the function is allocate, open, close, or unallocate, save the associated dump in case you need to contact your IBM service representative. Follow the system programmer response for the reason code in [Infoprint Server system completion code and reason codes] on page 177.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP109E Subsystem disconnect request received - step cancelled.

Explanation: Either the operator stopped the Print Interface subsystem or the Print Interface subsystem ended abnormally.

System action: The Print Interface subsystem does not allocate any output data sets on the JES spool for this job step.

User response: Notify the operator that this error occurred. Resubmit the job after the operator restarts the Print Interface subsystem.

Operator response: If you did not stop the Print Interface subsystem, notify your system programmer that this error occurred. Enter the z/OS UNIX aopstart command or run the AOPSTART procedure to restart Infoprint Server daemons after the problem is corrected.

System programmer response: If the operator did not stop the Print Interface subsystem, the system log contains another message that indicates the error that caused the subsystem to end abnormally. Follow the system programmer response for that message.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP110E Cannot connect to subsystem subsystem.

Explanation: The Print Interface subsystem is not active.

In the message text:

subsystem Name of the Print Interface subsystem specified in the Infoprint Server configuration file, aopd.conf.

System action: The print request is not completed.

User response: Notify your system programmer that this error occurred. Resubmit the job after the Print Interface subsystem has been started.

Operator response: Enter the z/OS UNIX aopstart command or run the AOPSTART procedure to start the Print Interface subsystem.

System programmer response: Make sure that the start-daemons attribute in the Infoprint Server configuration file aopd.conf specifies the subd value so that the Print Interface subsystem daemon starts. Then, ask the operator to start Infoprint Server daemons.

Problem determination: Not applicable.
AOP111E The inventory name subsystem is not valid as a subsystem name.

Explanation: The Print Interface subsystem is not active.

In the message text:

subsystem Name of the Print Interface subsystem specified in the Infoprint Server configuration file, aopd.conf.

System action: The Print Interface subsystem is not started.

User response: None.

Operator response: Notify your system programmer that this error occurred. After the problem is corrected, stop and restart all Infoprint Server daemons, IP PrintWay, and NetSpool. You might also have to stop and restart PSF.

For information about how to stop and start Infoprint Server daemons, IP PrintWay, and NetSpool, see z/OS Infoprint Server Operation and Administration.

System programmer response: Change the value in the inventory attribute in the Infoprint Server configuration file (aopd.conf) to specify a valid subsystem name. Make sure that the first character of the name is an uppercase letter. Because the subsystem name is also the name of the Printer Inventory, you also need to change the name of the inventory on the IP PrintWay and NetSpool startup procedures. If PSF uses the Printer Inventory, you also need to change the name on the PSF startup procedures. Do these steps:
1. Change the name in the configuration file and startup procedures.
2. Stop all Infoprint Server daemons, IP PrintWay, NetSpool, and (optional) PSF.
3. Restart the Infoprint Server daemons.
4. Restart IP PrintWay, NetSpool, and PSF.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP112W You are not authorized to write to the printer inventory.

Explanation: You requested to write to the Infoprint Server Printer Inventory. However, you are not authorized to write to the Printer Inventory.

System action: The function is not done.

User response: Ask your administrator to give you RACF authorization to write to the Printer Inventory, or ask an Infoprint Server administrator to do the function.

Operator response: Not applicable.

System programmer response: If you want this user to do the function, authorize the user to write to the Printer Inventory. For information about how to authorize users, see z/OS Infoprint Server Customization.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP113E NetSpool is not active.

Explanation: You selected an action on a NetSpool logical unit. This action requires that the NetSpool component of Infoprint Server is started. However, NetSpool is not started.

System action: The function is not done.

User response: Ask your administrator to start a NetSpool task.

Operator response: Not applicable.

System programmer response: Start a NetSpool task. For information about how to start NetSpool, see z/OS Infoprint Server Operation and Administration.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP114E Search DB connection failed.

Explanation: The Infoprint Server search database daemon, aopsdbd, failed. Infoprint Server cannot record information about printers and print jobs that Infoprint Central requires.

System action: Processing continues. However,
Infoprint Central reports a logic error when the operator tries to find print jobs or printers.

**User response:** Contact the Infoprint Server operator.

**Operator response:** Notify your system programmer that this error occurred.

**System programmer response:** Follow the procedure in [z/OS Infoprint Server Customization](https://www.ibm.com) to recover the search database.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP115E** Historical Inventory connection failed.

**Explanation:** The Infoprint Server Historical Inventory daemon, `aphinvd`, failed. Infoprint Server cannot record information about historical print jobs, that is, print jobs that could not be spooled or that have completed and are no longer on the JES spool.

**System action:** Processing continues. However, Infoprint Central reports a logic error when the operator tries to find Infoprint Server print jobs.

**User response:** Contact the Infoprint Server operator.

**Operator response:** Notify your system programmer.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP116E** The Printer Inventory does not contain printer pool definition `printer-pool-name`.

**Explanation:** The printer pool definition associated with the LU name for the Netspool print request is not defined in the Infoprint Server Printer Inventory.

In the message text, `printer-pool-name` is the name of the requested printer pool definition.

**System action:** Infoprint Server stops processing the print request.

**User response:** No response is necessary.

**Operator response:** Notify your system programmer.

**System programmer response:** This error indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP117W** Job `jobid` document `document-name` did not successfully complete spooling.

**Explanation:** Infoprint Server did not finish writing all the data to the JES spool for this document because an unexpected error occurred. The print job on the JES spool is probably incomplete. This situation can occur when the job submitter cancels a print request while Infoprint Server is writing the data to the JES spool.

In the message text:

- `jobid` The ID of the print job.
- `document-name` The name of the document.

**System action:** The print job is held.

**User response:** Either delete the print job or release it for printing.

**Operator response:** Either delete the print job or release it for printing.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP118I** Job `jobid` document `document-name` started spooling to `printer-definition`.

**Explanation:** Infoprint Server started writing the document to the JES spool.

In the message text:

- `jobid` The ID of the print job.
- `document-name` The name of the document to be printed.
- `printer-definition` The name of the printer definition for the printer.

**System action:** None.
Chapter 2. Infoprint Server (AOP) messages and codes

111

User response: None.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP119I Job jobid document document-name completed spooling with status status.

Explanation: Infoprint Server finished writing the document to the JES spool.
In the message text:
  jobid     The ID of the print job.
document-name     The name of the document to be printed.
status     The status of the print job. Possible values for status are:
  not-spooled     An error prevented the document from being written to the JES spool.
  held     The document was successfully written to the JES spool but is in the held state. Either the job submitter or the printer definition requested the hold.
  pending     The document was successfully written to the JES spool and is ready to print.

System action: None.
User response: None.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP120I Job jobid document document-name started spooling to printer-definition with transform transform.

Explanation: Infoprint Server started writing the document to the JES spool. As the document is written to the spool, it is being transformed to another data stream format.
In the message text:
  jobid     The ID of the print job.
document-name     The name of the document to be printed.
printer-definition     The specified printer.
transform     The path to the transform DLL (Dynamic Link Library). Examples are:
  aopfiltr.so
  /usr/lpp/Printsrv/lib/afp2pcl.dll

System action: None.
User response: None.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP121I Historical Inventory has reached the size limit of size-limit MB with objects objects currently stored.

Explanation: The Historical Inventory, which contains information about print jobs that have been completed and are no longer on the JES spool, has reached its maximum size. The size-limit is specified in the max-historical-inventory-size attribute in the Infoprint Server configuration file, aopd.conf.
In the message text:
  size-limit     The maximum size in megabytes specified in the max-historical-inventory-size attribute.
  objects     The number of objects stored in the Historical Inventory. Each object contains information about one or more documents (data sets) in a print job.

System action: For each new print job, the oldest print job will be discarded from the Historical Inventory.
User response: None.
Operator response: None.
System programmer response: None. To increase the size limit of the Historical Inventory, increase the value in the max-historical-inventory-size attribute.
For more information, see [z/OS Infoprint Server](#) Customization.

### Problem determination: Not applicable.

### Source: Infoprint Server

### Module: Not applicable.

### Routing code: Not applicable.

### Descriptor code: Not applicable.

### Automation: Not applicable.

**AOP123I** NetSpool might not be active.

**Explanation:** You selected an action on a NetSpool logical unit. This action requires that the NetSpool component of Infoprint Server be started. However, Infoprint Central cannot determine whether NetSpool is started. This situation can occur when more than one NetSpool task is running on the same z/OS system.

### System action: The function is not done.

### User response: If your installation runs more than one NetSpool task on the same system, use NetSpool operator commands instead of Infoprint Central to do actions on NetSpool logical units. For information about NetSpool commands, see [z/OS Infoprint Server](#) Operation and Administration.

### Operator response: Not applicable.

### System programmer response: If you want operators to use Infoprint Central to work with NetSpool logical units, run only one NetSpool task.

### Problem determination: Not applicable.

### Source: Infoprint Server

### Module: Not applicable.

### Routing code: Not applicable.

### Descriptor code: Not applicable.

### Automation: Not applicable.

**AOP124E** ICONV open failed for codesets: `to-code-page` from-code-page with an `errno` string of: `errno`

**Explanation:** Infoprint Server used the iconv utility to convert data between the code pages specified in the message text. The iconv utility detected an error. Typically an error occurs when either (1) the document code page or the printer code page specified in the printer definition or configuration file is incorrect or (2) a conversion table for the code pages does not exist.

In the message text:

- `to-code-page` The name of the target code page.
- `from-code-page` The name of the source code page.

- `errno` The error description.

**System action:** The print request is not completed.

**User response:** Resubmit the print job after the administrator corrects the problem.

**Operator response:** Notify your administrator that this error occurred. After the problem is fixed, you can use Infoprint Central to release the print job if it has been retained on the JES spool. Otherwise, ask the job submitter to resubmit the job.

**System programmer response:** Make sure the code page names are valid for your level of z/OS. For IBM-supplied code pages, see information about code set converters in [z/OS XL C/C++ Programming Guide](#). If one of the code pages is a custom code page, make sure that a conversion table exists to convert between the code pages.

If the code page names are not correct, change them in the Document code page and Printer code page fields in the printer definition in the Printer Inventory, or in the ascii-codepage and ebcdic-codepage attributes in the Infoprint Server configuration file, aopd.conf. For information about how to create conversion tables, see information about code set conversion utilities in [z/OS XL C/C++ Programming Guide](#).

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**AOP126E** An inventory request exceeded the maximum size.

**Explanation:** An Infoprint Server internal processing limit was exceeded. This is probably due to an unusually large number of objects specified in a print request. For example, if one print job contains many documents, the Printer Inventory limit for a print job might have been exceeded.

**System action:** The request fails.

**User response:** Retry the request with fewer objects in the request. If you submitted an `lp` command with many documents, reduce the number of documents in the `lp` command. If a batch job contains many output data sets, print the output data sets in separate jobs if possible.

**Operator response:** Not applicable.

**System programmer response:** This message can indicate a logic problem in Infoprint Server.

Contact your service representative in the IBM Support
Center, or use your electronic link with IBM service for assistance.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOP127I** The number of objects found exceeds the limit that z/OS Infoprint Central can display. If necessary, narrow your search or ask your administrator to increase the limit.

**Explanation:** You specified search criteria to find objects such as print jobs or printers. However, the number of objects that meet the search criteria exceeds the limit of objects that Infoprint Central is allowed to display. The administrator can specify the maximum limit in the AOPLIMIT environment variable. The default value for AOPLIMIT is 250 objects.

The `aoplogu` command provides more information in fields before the message text. For information about the contents of these fields, see “Format of messages in the Infoprint Server common message log” on page 77.

**System action:** Infoprint Central displays the maximum number of objects.

**User response:** If Infoprint Central does not return the object you are looking for, narrow your search by specifying additional search values or more specific search values. If you need to see more objects than the maximum limit allows, ask your administrator to increase the limit.

**Operator response:** Not applicable.

**System programmer response:** If this situation occurs repeatedly, increase the value in the AOPLIMIT environment variable. If you increase the limit, you might also need to increase the timeout value in the `OutputTimeout` directive to prevent the z/OS HTTP Server from timing out before Infoprint Central can display any objects. For information about how to set the AOPLIMIT environment variable in the z/OS HTTP Server environment variables file (`httpd.envvars`) and the `OutputTimeout` directive in the z/OS HTTP Server configuration file (`httpd.conf`), see `z/OS Infoprint Server Customization`.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOP128I** The current size of the Historical Inventory is larger than the maximum size you requested. The size of the Historical Inventory cannot be reduced.

**Explanation:** You specified a maximum size for the Historical Inventory in the `max-historical-inventory-size` attribute in the Infoprint Server configuration file, `aopd.conf`. However, the Historical Inventory is already larger than the maximum size you specified. Infoprint Server cannot reduce the size of the Historical Inventory, but the Historical Inventory will not grow any larger than its current size. Message AOP127I indicates the current size of the Historical Inventory.

**System action:** The current size of the Historical Inventory is maintained.

**User response:** None.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP129I** The document was not found on the JES spool. It completed processing or was deleted.

**Explanation:** This document is no longer on the JES spool because it finished processing or was deleted. Infoprint Server cannot determine if the document printed successfully. This situation can occur when a document is completed or is deleted while Infoprint Server is not running.

**System action:** Processing continues.

**User response:** None.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
AOP130I The document was deleted. In a sysplex, the document might have been deleted after it was processed on another system.

**Explanation:** This document was deleted from the JES spool. Someone might have deleted the print job. If IP PrintWay extended mode is running on another system in a sysplex, IP PrintWay might have deleted the print job after it was processed on the other system.

**System action:** Processing of this print job ends.

**User response:** None.

**Operator response:** Check the message log for the print job to determine what caused the problem. In a sysplex, also look at the messages for the print job on the other systems where IP PrintWay extended mode is running.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

AOP131I The document was held.

**Explanation:** This document was held on the JES spool. For example, the operator or job owner might have used Infoprint Central, SDSF, or a JES command to hold the document.

**System action:** Processing continues.

**User response:** None.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

AOP132I The document completed successfully.

**Explanation:** This document finished processing and was sent successfully to the printer. If the document was sent to an IBM AFP printer that Print Services Facility™ (PSF) controls, the document has finished printing successfully. If the document was sent to a remote printer that IP PrintWay controls, the document might not have finished printing yet. Although the document was sent successfully to the printer, some errors might have occurred during formatting of the data.

**System action:** The document remains on the JES spool until all documents in the print job finish processing. IP PrintWay retains the document on the JES spool if a retention time is specified in the printer definition.

**User response:** None.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

AOP133I The document completed with errors.

**Explanation:** The document finished processing. However, errors prevented the document from printing successfully. The error might have occurred while the document was being sent to the printer. In this case, part of the document might have printed.

**System action:** The document remains on the JES spool until all documents in the print job finish processing. If IP PrintWay processed the document, it retains the document on the JES spool if a retention time is specified in the printer definition.

**User response:** None.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

AOP134E The stop of daemon daemon failed.

**Explanation:** Infoprint Server could not stop the specified daemon. The daemon did not respond to the normal terminate signal and is in an abnormal state that a system programmer needs to diagnose and fix.
In the message text, daemon is the name of the daemon.

System action: Processing continues. If this error occurred while Infoprint Server daemons are being stopped, this daemon keeps running. If this error occurred while Infoprint Server daemons are being started, other daemons are started, but the functions that the specified daemon supports are not available. Examples: If the daemon is aophinvd, Infoprint Central cannot display historical job information. If the daemon is aopsdbd, Infoprint Central cannot do searches.

Operator response: Enter the z/OS UNIX aopstop command or run the AOPSTOP procedure to stop all daemons. You might need to use the force option of the aopstop command or AOPSTOP procedure. After you successfully stop all daemons, enter the z/OS UNIX aopstart command or run the AOPSTART procedure to restart Infoprint Server. For more information about how to start and stop daemons, see z/OS Infoprint Server Operation and Administration.

System programmer response: If the error condition persists, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP135I An abrupt shutdown of daemon daemon has been initiated.

Explanation: Infoprint Server has started an “abrupt” termination of the specified daemon. When the termination is complete, you see message AOP044I.

In the message text, daemon is the name of the daemon.

System action: Processing continues.

User response: None.

Operator response: Not applicable.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP136I A destructive shutdown of daemon daemon has been initiated.

Explanation: Infoprint Server has started a potentially “destructive” shutdown of the specified daemon. The daemon stops immediately.

A “destructive” shutdown can cause inconsistent or corrupted Infoprint Server inventory files. If this message has been issued for the aopd, aophinvd, or aopsdbd daemon, the databases the daemons manage might be corrupted.

In the message text, daemon is the name of the daemon.

System action: Infoprint Server stops the specified daemon immediately.

User response: None.

Operator response: Notify your system programmer. Then use the AOPSTART procedure or z/OS UNIX aopstart command to restart Infoprint Server daemons.

System programmer response: Before the operator starts the Infoprint Server daemons again, set the AOPVALIDATEDB=1 environment variable to request that Infoprint Server check databases for validity. You can set the AOPVALIDATEDB variable in the aopstart EXEC, in the AOPSTART procedure’s STDENV data set, or in the environment for the aopstart command. For information about how to edit the aopstart EXEC and the STDENV data set, see z/OS Infoprint Server Operation and Administration.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP137E Required Infoprint Server daemon daemon is not running. Stop all daemons and restart.

Explanation: A required daemon is not running. This error occurs when Infoprint Server daemons are being started.

In the message text, daemon is the name of the daemon.

System action: The other Infoprint Server daemons are started, but the functions that the specified daemon supports are not available. Examples: If the daemon is aophinvd, Infoprint Central cannot display historical job information. If the daemon is aopsdbd, Infoprint Central cannot do searches.

User response: None.
**System programmer response:** Before the operator restarts the Infoprint Server daemons, set the AOPVALIDATEDB=1 environment variable to request that Infoprint Server check databases for validity. You can set the AOPVALIDATEDB variable in the `aopstart` EXEC, in the AOPSTART procedure’s STDENV data set, or in the environment for the `aopstart` command. For information about how to edit the `aopstart` EXEC and the AOPSTART procedure, see z/OS Infoprint Server Customization.

If the error condition persists, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOP138E** Database *filename* is corrupted. Take immediate recovery action. Diagnostic data: *data*

**Explanation:** While starting Infoprint Server daemons, Infoprint Server detected that one of its databases contains corrupted data. Before continuing to use Infoprint Server, you must recover this database.

In the message text:

*filename* Name of the database that contains corrupted data.

*data* Data that can help IBM solve the problem.

**System action:** Processing continues, but continued operation of Infoprint Server is likely to produce processing failures and other unexpected results.

**User response:** None.

**Operator response:** Notify your system programmer.

**System programmer response:** Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Save the file that contains corrupted data and the diagnostic information in this message. Follow the recovery procedures provided by your IBM service representative.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOP139E** Console name *console* is already in use. Change the console name in the `aopd.conf` configuration file and restart the `aopssid` daemon.

**Explanation:** The name of the extended MCS console that Infoprint Central uses to send commands to JES is already in use by another program. The console name must be unique. In a sysplex environment, the console name must be unique on all systems in the sysplex.

In the message text, *console* is the name of the extended MCS console. The console name was specified in the Infoprint Server configuration file (`aopd.conf`), or Infoprint Server used a default console name.

The `aoplogu` command provides more information in fields before the message text. For information about the contents of these fields, see “Format of messages in the Infoprint Server common message log” on page 77.

**System action:** The Infoprint Server `aopssid` daemon did not start. Therefore, you cannot use Infoprint Central.

**User response:** Notify your system programmer that this error occurred.

**Operator response:** Notify your system programmer that this error occurred.

**System programmer response:** Specify a unique console name in the `console-name` attribute in the Infoprint Server configuration file, `aopd.conf`. The default location of the configuration file is `/etc/Printsrv/aopd.conf`. Then start the `aopssid` daemon. For more information about the `console-name` attribute, see z/OS Infoprint Server Customization.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOP140E** When *attribute_name1* is *value1*, then *attribute_name2* must be *value2*.

**Explanation:** The values in two ISPF fields or two attributes are not compatible. This error can occur when you create or update an object in the Printer Inventory
using either the Infoprint Server ISPF panels or the Printer Inventory Definition Utility (pidu command).

In the message text:
- \( \text{attribute\_name1} \) is the name of the first attribute. The ISPF field has a similar name.
- \( \text{value1} \) is the value of the first attribute. If you did not specify the first attribute, this is the existing value or the default value of the attribute.
- \( \text{attribute\_name2} \) is the name of the second attribute. The ISPF field has a similar name.
- \( \text{value2} \) is the value of the second attribute. If you did not specify the second attribute, this is the existing value or the default value of the attribute.

**System action:** This object is not created or updated in the Printer Inventory.

**User response:** If you use the ISPF panels, change the value in one of the fields and save the definition. If you used the pidu command, change the value of one of the attributes and resubmit the pidu command to create or update this object.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOP142E Configuration file \texttt{filename} does not exist.**

**Explanation:** The required Infoprint Server configuration file was not found. In the message text, \( \text{filename} \) is the name of the configuration file.

**System action:** The data was not transformed.

**User response:** Contact your system programmer.

**Operator response:** None.

**System programmer response:** Make sure that the configuration file exists. If the file exists, make sure the environment variable that indicates the file location is specified correctly in the aopstart EXEC and in the file. If you are using InfoPrint Transform Manager for Linux and need information about the remote configuration file, see \texttt{z/OS Infoprint Server Customization}.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOP143E \texttt{filename}: Attribute \texttt{attribute} is missing.**

**Explanation:** A configuration file does not contain the required attributes.

In the message text:

- \( \text{filename} \) Name of the file that is missing the attribute
- \( \text{attribute} \) Name of the missing attribute

**System action:** The data was not transformed.

**User response:** Contact your system programmer.

**Operator response:** None.

**System programmer response:** Make sure that the configuration file contains the required attributes. For example, the IP address or the port number might be missing. If you are using InfoPrint Transform Manager for Linux and need information about the remote configuration file, see \texttt{z/OS Infoprint Server Customization}.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP144E You can specify only one input file to be transformed.

Explanation: You specified more than one file to be transformed, but only one is allowed.
System action: The data was not transformed.
User response: Resubmit the request with only one input file.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP145E The file system that contains directory directory_path is full. A total of xxx MB of free space is needed.

Explanation: To migrate to the new release, Infoprint Server temporarily requires more free space in the file system to convert the data from the previous release format to the new release format. The message indicates the number of megabytes of free space that Infoprint Server needs to convert the data. In the message text, directory_path is the name of the directory in the file system that needs the additional free space. The data was not converted.
System action: Processing stops. Infoprint Server ends.
User response: None.
Operator response: Notify the system programmer.
System programmer response: Make the specified amount of free space available in the file system, and then restart Infoprint Server.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP146I Infoprint Server is not enabled. Therefore, only some functions will be allowed.

Explanation: The Infoprint Server optional feature is not enabled. Some of the daemons that you requested to start in the start-daemons attribute of the Infoprint Server configuration file (aopd.conf) can be started only if Infoprint Server is enabled.
System action: Infoprint Server starts only those Infoprint Server daemons that are part of the Infoprint Server Printer Inventory for PSF function.
User response: Not applicable.
Operator response: Notify your system programmer.
System programmer response: Do one of these:
• If your installation purchased an Infoprint Server license, enable Infoprint Server. Then stop and restart Infoprint Server.
• If your installation did not purchase an Infoprint Server license, no action is required. However, to avoid this message in the future, delete the start-daemons attribute in the Infoprint Server configuration file (aopd.conf). The default location of this file is /etc/Printsrv/aopd.conf.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP147E This function is not allowed because Infoprint Server is not enabled.

Explanation: The Infoprint Server optional feature is not enabled. Infoprint Server supports the function you requested only when Infoprint Server is enabled.
System action: The function is not performed.
User response: Notify your system programmer.
Operator response: Notify your system programmer.
System programmer response: Do one of these:
Problem could not be retrieved from message catalog

Explanation: AOP998E

Automation: Descriptor
Module: Routing
Source: Problem

variables are correct. Then resubmit your print request to see the correct message.

Operator response: Not applicable.

System programmer response: Make sure that the settings of the NLSPATH and LANG environment variables are correct.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP2202E filename Incorrect file size.

Explanation: A resource file used by the PDF to AFP and PostScript to AFP transform daemon (ps2afpd.dll) has an incorrect size. This indicates that the transform resource file is not at the level that the transform daemon expects.

In the message text:

filename Name of the resource file

System action: The transform daemon ends.

User response: Not applicable.

Operator response: Notify your system programmer.

System programmer response: Reinstall the transform daemon (ps2afpd.dll) and resource file (filename) to make sure that they are both at the latest level. Also, make sure that only one file with the name filename exists in the transform resource directories.

The optional AOP_RESOURCE_PATH environment variable in the transform configuration file, aopxfd.conf, specifies the names of the transform resource directories. In addition, transform resource files can exist in the default transform resource directory,
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP2203E filename: Incorrect CRC.
Explanation: A resource file used by the PDF to AFP and PostScript to AFP transform daemon (ps2afpd.dll) has an incorrect cyclic redundancy check (CRC). This indicates that the transform resource file is not at the level the transform daemon expects.

In the message text:
filename Name of the resource file.

System action: The transform daemon ends.
User response: None.
Operator response: Notify your system programmer.
System programmer response: Reinstall the transform daemon (ps2afpd.dll) and resource file (filename) to make sure that they are both at the latest level. Also, make sure that only one file with the name filename exists in the transform resource directories.

The optional AOP_RESOURCE_PATH environment variable in the transform configuration file, aopxfd.conf, specifies the names of the transform resource directories. In addition, transform resource files can exist in the default transform resource directory, /usr/lpp/Printsrv/ps2afp. This default directory is always searched, whether or not the AOP_RESOURCE_PATH variable is specified. For more information about the AOP_RESOURCE_PATH variable, see z/OS Infoprint Server Customization.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP2801E The remote transform returned an error: error-message
Explanation: InfoPrint Transform Manager for Linux detected an error. A transform option might not be valid, or the data stream might contain an error. In the message text, error-message is an error message from InfoPrint Transform Manager for Linux.

System action: The data was not transformed.
User response: Correct the problem and resubmit the transform request. For information about the message in error-message and about the transform options, see InfoPrint Transform Manager for Linux.
Operator response: None.
System programmer response: If the message contains message FUY04001E, which indicates that Infoprint Server could not connect to InfoPrint Transform Manager for Linux, make sure that:
• The Infoprint Server remote transform configuration file, aopxFD.conf, contains the correct IP address (or host name) and port number for InfoPrint Transform Manager for Linux.
• The firewall lets the z/OS system communicate with InfoPrint Transform Manager for Linux using the TCP/IP protocol. For more information, see the section about customizing the firewall in z/OS Infoprint Server Customization.

Problem determination: Not applicable.
AOP3001E  IP PrintWay could not load the exit-type user exit exit-name. The load return code is retcode, and the reason code is reasoncode.

Explanation: IP PrintWay extended mode could not load the user exit.

In the message text:
- exit-type
  The exit type. For example: BDS (Begin Data Set exit), EDS (End Data Set exit), Record (Record exit), SMF, Routing.
- exit-name
  The exit name. If the exit type is BDS, EDS, or Record, this name was specified in the printer definition for the printer.
- retcode
  The return code from the LOAD macro.
- reason-code
  The reason code from the LOAD macro.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

User response: None.

Operator response: Notify your system programmer.

System programmer response: If the exit is a BDS, EDS, or Record exit, make sure that the name of the exit is correct. If the name is incorrect, use the Infoprint Server ISPF panels to correct it in the printer definition.

Make sure these requirements are met:
- The data set that contains the exit is APF-authorized.
- If the data set that contains the exit is not in the system LNKLST, the data set is named in the STEPLIB environment variable in the aopstart EXEC and is defined to the z/OS STEPLIBLIST facility:
  - Each data set in the STEPLIB environment variable must be separated by a colon.
- The STEPLIBLIST statement must be specified in the BPXPRMxx member of SYS1.PARMLIB.
- STEPLIBLIST names an HFS or zFS file that lists sanctioned step libraries.
- The HFS or zFS file that STEPLIBLIST names must contain the name of the data set that contains the exit. Each data set name must be on a separate line without quotation marks.
- The HFS or zFS file that STEPLIBLIST names must have execute permission for other. IBM recommends that UID 0 owns the file with permissions 755 or 555.

For more information about:
- BPXPRMxx member, see "z/OS MVS Initialization and Tuning Reference"
- STEPLIBLIST facility, see "z/OS UNIX System Services Planning"
- aopstart EXEC, see "z/OS Infoprint Server Customization"
- Return and reason codes in the message, see "z/OS MVS System Codes"

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3002E  User exit exit-name returned a record length of length, which is too large.

Explanation: The IP PrintWay extended mode user exit returned a record length in field XTPPRLNEN that is greater than 32K bytes.

In the message text:
- exit-name
  The name of the exit.
- length
  The length of the record.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing continues. The job failed on this attempt.

IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

User response: None.
Operator response: Notify your system programmer that this error occurred.

System programmer response: Correct the user exit.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP3003I  message-text

Explanation: You see the message from the user exit. The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see “Format of messages in the Infoprint Server common message log” on page 77.

System action: Processing continues.

User response: None.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP3004E  The value for XTPERLEN (length) is not valid. The record exit is exit-name.

Explanation: The IP PrintWay extended mode exit returned a length in field XTPERLEN that is not valid.

In the message text:

length  Is the value for XTPERLEN.
exit-name  The user exit name.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see “Format of messages in the Infoprint Server common message log” on page 77.

System action: Processing continues. The job failed on this attempt.

User response: None.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP3006I  IP PrintWay accepted the request to hold the print job.

Explanation: IP PrintWay extended mode accepted the request. The print job will be held.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see “Format of messages in the Infoprint Server common message log” on page 77.

System action: Processing continues.

User response: None.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP3008I  IP PrintWay accepted the request to release the print job.

Explanation: IP PrintWay extended mode accepted the request. The print job will be released.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see “Format of messages in the Infoprint Server common message log” on page 77.

System action: Processing continues.

User response: None.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
AOP3009I  IP PrintWay accepted the request to move the print job to printer printer-uri.

Explanation: IP PrintWay extended mode accepted the request. The print job will be moved to printer printer-uri.

In the message text, printer-uri is the printer to which the print job will be moved. The printer-uri has this format:

printer-uri
An identifier of the printer, in one of these formats:

direct_sockets://hostname:port
The host name and port number of the printer.

lpr://hostname/queue
The host name and print queue name of the printer.

vtam://luname
The VTAM logical unit (LU) name of the printer.

uri
The Uniform Resource Identifier (URI) of the Internet Printing Protocol (IPP) server running in the printer. Examples are:

ipp://myprinter.xyz.com
http://myprinter.xyz.com:631

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing continues.
User response: None.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3010I  IP PrintWay accepted the request to delete the print job.

Explanation: IP PrintWay extended mode accepted the request. The print job will be deleted.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing continues.
User response: None.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3011I  IP PrintWay accepted the request to start the printer.

Explanation: IP PrintWay extended mode accepted the request. The printer will be started.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing continues.
User response: None.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3012I  IP PrintWay accepted the request to stop the printer.

Explanation: IP PrintWay extended mode accepted the request. The printer will be stopped.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing continues.
User response: None.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
AOP3013I  IP PrintWay accepted the request to redirect this printer to printer printer-uri.

Explanation:  IP PrintWay extended mode accepted the request. The printer will be redirected to printer-uri.

In the message text, printer-uri is the printer to which the print job was redirected. The printer-uri has this format:

printer-uri
   An identifier of the printer, in one of these formats:
      direct_sockets://hostname:port
         The host name and port number of the printer.
      lpr://hostname/queue
         The host name and print queue name of the printer.
      vtam://luname
         The VTAM logical unit (LU) name of the printer.
      uri
         The Uniform Resource Identifier (URI) of the Internet Printing Protocol (IPP) server running in the printer. Examples are:
         ipp://myprinter.xyz.com
         http://myprinter.xyz.com:631

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action:  Processing continues.

User response:  None.

Operator response:  If the document is still on the spool and has not been acquired by another program, resubmit the hold request.

System programmer response:  None.

Problem determination:  Not applicable.

Source:  Infoprint Server

Module:  Not applicable.

Routing code:  Not applicable.

Descriptor code:  Not applicable.

Automation:  Not applicable.

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AOP3014I  IP PrintWay rejected the request to hold the print job.

Explanation:  IP PrintWay extended mode rejected the request. The print job will not be held. The possible reasons are that the print job is ready to be deleted, has already been deleted, or another program acquired the document.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action:  Processing continues.

User response:  None.

Operator response:  If the document is still on the spool and has not been acquired by another program, resubmit the hold request.

System programmer response:  None.

Problem determination:  Not applicable.

Source:  Infoprint Server

Module:  Not applicable.

Routing code:  Not applicable.

Descriptor code:  Not applicable.

Automation:  Not applicable.

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AOP3016I  IP PrintWay rejected the request to release the print job.

Explanation:  IP PrintWay extended mode rejected the request. The print job will not be released. The possible reasons are that the print job is processing, ready to be deleted, already deleted, or another program acquired the document.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action:  Processing continues.

User response:  None.

Operator response:  If the document is still on the spool and has not been acquired by another program, resubmit the release request.

System programmer response:  None.

Problem determination:  Not applicable.

Source:  Infoprint Server

Module:  Not applicable.

Routing code:  Not applicable.

Descriptor code:  Not applicable.

Automation:  Not applicable.
AOP3017I  IP PrintWay rejected the request to move the print job to printer printer-uri.

Explanation: IP PrintWay extended mode rejected the request. The possible reasons are that the print job was rejected, ready to be deleted, or already deleted. If the print job was rejected, you cannot move it.

In the message text, printer-uri is the printer where the print job was requested to be moved. The printer-uri has this format:

printer-uri
An identifier of the printer, in one of these formats:

direct_sockets://hostname:port
The host name and port number of the printer.
lpr://hostname/queue
The host name and print queue name of the printer.
vtam://lu
The VTAM logical unit (LU) name of the printer.
uri
The Uniform Resource Identifier (URI) of the Internet Printing Protocol (IPP) server running in the printer. Examples are:

ipp://myprinter.xyz.com
http://myprinter.xyz.com:631

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing continues.

User response: None.

Operator response: If the print job was rejected because it was sent to a printer that is not defined in the Printer Inventory (see message AOP3208E), the administrator can create a printer definition and release the print job, or the user can delete the print job and then resubmit it with a correct printer definition.

If the print job was rejected because no PRTQUEUE or PORTNO parameter was specified (see message AOP3203E), delete the print job and resubmit it.

If the print job was rejected because the DEST, CLASS, or FORMS JCL parameters do not match the printer definition (see message AOP3201E), you can change these parameters to match the printer definition and release the print job.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP3018I  IP PrintWay rejected the request to delete the print job.

Explanation: IP PrintWay extended mode rejected the request. The possible reason is the print job was already deleted.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing continues.

User response: None.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP3019I  IP PrintWay rejected the request to start the printer.

Explanation: IP PrintWay extended mode rejected the request. The printer will not be started.

IP PrintWay extended mode has no record that this printer exists. This can happen if someone started the printer and it finished processing all print jobs, and no printer definition exists for the printer in the Printer Inventory.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing continues.

User response: None.

Operator response: If you want to start this printer, ask your administrator to create a printer definition for the printer.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3020I  IP PrintWay rejected the request to stop the printer.

Explanation: IP PrintWay extended mode rejected the request. The printer will not be stopped.

IP PrintWay no longer has a record of the printer. This can happen when a print job finishes and no printer definition exists for the printer in the Printer Inventory.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing continues.
User response: None.
Operator response: If you want to stop this printer, ask your administrator to create a printer definition for the printer.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3021I  IP PrintWay rejected the request to redirect this printer to printer printer-uri.

Explanation: IP PrintWay extended mode rejected the request. Another printer or printers might already be redirected to this printer, the printer might be redirected to itself, the alternate printer to which you want to redirect this printer might be redirected to another printer, or IP PrintWay might not have a record for the printer.

In the message text, printer-uri is the printer where this printer was requested to be redirected. The printer-uri has this format:

printer-uri
An identifier of the printer, in one of these formats:

direct_sockets://hostname:port
The host name and port number of the printer.

lpr://hostname/queue
The host name and print queue name of the printer.

uri
The Uniform Resource Identifier (URI) of the Internet Printing Protocol (IPP) server running in the printer. Examples are:

ipp://myprinter.xyz.com
http://myprinter.xyz.com:631

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing continues.
User response: None.
Operator response: Make sure that you are not trying to redirect a printer to itself. If another printer or printers are already redirected to this printer, restore those printers first. If the alternate printer is redirected to another printer, restore that printer first. If none of these situations exist, refresh the Infoprint Central panel to see if a record of the printer exists. If no record exists, ask your administrator to create a printer definition for the printer in the Printer Inventory so you can use the redirect action.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3024I  IP PrintWay accepted the restore request to stop redirecting this printer to printer printer-uri.

Explanation: IP PrintWay extended mode accepted the restore request. Print jobs submitted to this printer will no longer be redirected to the alternate printer. Also print jobs that were submitted to this printer and redirected to the alternate printer but not yet printed are moved back to this printer. For example, jobs submitted to printer "A" that were moved to printer "B" because "A" was redirected are moved back to printer "A".

In the message text, printer-uri is the alternate printer to which the printer was redirected. The printer-uri has this format:

printer-uri
An identifier of the printer, in one of these formats:
The host name and port number of the printer.

\texttt{lpr://hostname/queue} 

The host name and print queue name of the printer.

\texttt{vtam://luname} 

The VTAM logical unit (LU) name of the printer.

\texttt{uri} 

The Uniform Resource Identifier (URI) of the Internet Printing Protocol (IPP) server running in the printer. Examples are:

- \texttt{ipp://myprinter.xyz.com}
- \texttt{http://myprinter.xyz.com:631}

The \texttt{aoplogu} command provides more information in fields before the message text. For information about the contents of these fields, see “Format of messages in the Infoprint Server common message log” on page 77.

System action: Processing continues.

User response: None.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

**AOP3200I** 

IP PrintWay started the job selection rule.

Explanation: The job selection rule was started by IP PrintWay extended mode.

The \texttt{aoplogu} command provides more information in fields before the message text. For information about the contents of these fields, see “Format of messages in the Infoprint Server common message log” on page 77.

System action: Processing continues.

User response: None.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

**AOP3025I** 

IP PrintWay rejected the restore request to stop redirecting this printer to printer \texttt{printer-uri}.

Explanation: IP PrintWay extended mode rejected the restore request. This printer is still redirected to the alternate printer.

IP PrintWay has no record that this printer exists. This can happen if someone restored the printer and it finished processing all print jobs, and no printer definition exists for the printer in the Printer Inventory.

In the message text, \texttt{printer-uri} is the alternate printer where the printer was redirected. The \texttt{printer-uri} has this format:

\texttt{printer-uri} 

An identifier of the printer, in one of these formats:

- \texttt{direct_sockets://hostname:port} 
  The host name and port number of the printer.
AOP3201E The DEST, CLASS, and FORMS JCL keywords do not match a printer definition in the Printer Inventory.

Explanation: IP PrintWay extended mode cannot find a printer definition in the Printer Inventory that matches the DEST, CLASS and FORMS JCL parameters for the print job. The job submitter might have specified incorrect DEST, CLASS, and FORMS values on the OUTPUT JCL statement. Or the printer definition in the Printer Inventory might be missing or have incorrect values.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: IP PrintWay extended mode rejected the print job and did not process it. The print job remains on the JES spool with a status of "rejected" so that IP PrintWay extended mode does not attempt to process the print job again until the operator releases it.

User response: If you specified incorrect DEST, CLASS, and FORMS values on the OUTPUT JCL statement for the print job, correct the JCL for the job.

Operator response:
- Correct the DEST, CLASS or FORMS values for the print job, if necessary, to match the same values in the printer definition for the printer. Then release the print job for printing. Or, delete the print job from the JES spool and ask the job submitter to resubmit the job with correct JCL.
- If no printer definition exists for the printer, ask your administrator to create one. If a printer definition does exist with matching DEST, CLASS, and FORMS values, but the Use DEST, CLASS, FORMS for IP PrintWay printer selection field is not selected, ask your administrator to select this field.

System programmer response: Edit the printer definition, if necessary, to correct the DEST, CLASS, or FORMS values. Or, create a new printer definition with DEST, CLASS and FORMS values that match the values specified in the JCL parameters. Make sure the Use DEST, CLASS, FORMS for IP PrintWay printer selection field in the printer definition is selected.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP3202W The PORTNO and PRTQUEUE JCL keywords were both specified. IP PrintWay uses the PORTNO value.

Explanation: IP PrintWay extended mode uses the PORTNO value when both PORTNO and PRTQUEUE parameters are used on the OUTPUT JCL statement.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing continues with the PORTNO value.

User response: Change your JCL to specify either the PORTNO or PRTQUEUE JCL parameters, but not both.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP3203E The DEST=IP JCL keyword was specified, but neither the PRTQUEUE nor PORTNO JCL keywords were specified.

Explanation: The DEST=IP: parameter was specified on the OUTPUT JCL statement for the data set. When the DEST=IP: parameter is specified, either the PRTQUEUE or PORTNO parameter is also required. However, neither parameter was specified.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: IP PrintWay extended mode rejected the print job and did not process it. The print job remains on the JES spool with a status of "rejected" so that IP PrintWay extended mode does not attempt to process the print job again until the operator releases it.

User response: Delete the print job, submit the data set again, and specify either the PRTQUEUE or PORTNO parameter.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.
Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP3204I IP PrintWay accepted the document from JES.

Explanation: IP PrintWay extended mode verified that the printer definition that the print job requested is in the Printer Inventory, and it accepted the document from JES for processing. IP PrintWay added the print job to the printer's queue.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: IP PrintWay processes the print job in the order that the print job was added to the printer's queue.

User response: None.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP3206I IP PrintWay stopped the job selection rule.

Explanation: IP PrintWay stopped using the job selection rule to select print jobs from the JES spool because the administrator deleted the job selection rule from the Printer Inventory, the operator stopped the job selection rule, or the operator stopped IP PrintWay extended mode.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing continues. If the operator stopped IP PrintWay extended mode, IP PrintWay automatically uses the job selection rule again when IP PrintWay is restarted.

User response: None.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP3205E The SAPI PUT/GET request returned return code retcode and reason code reason-code.

Explanation: IP PrintWay extended mode received a non-zero return code from Sysout Application Programming Interface (SAPI).

In the message text:
retcode The return code.
reason-code The reason the request was returned.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing continues.

User response: None.

Operator response: Check the return code and reason code for the appropriate action (see z/OS MVS Using the Subsystem Interface).

System programmer response: None.

AOP3207E SAPI returned return code retcode.

Explanation: IP PrintWay extended mode received a non-zero return code from Sysout Application Programming Interface (SAPI). No reason code is available for this type of return code from SAPI.

In the message text, retcode is the return code.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing continues.

User response: None.

Operator response: Check the return code for the
appropriate action (see z/OS MVS Using the Subsystem Interface).

System programmer response: None.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3208E The FSSDATA JCL keyword specified a printer definition, printer-definition, that is not defined in the Printer Inventory.

Explanation: The printer definition listed is not in the Printer Inventory.

In the message text, printer-definition is the specified printer definition.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: IP PrintWay extended mode rejected the print job. The print job remains on the JES spool with a status of "rejected" so that IP PrintWay extended mode does not attempt to process the print job again until the operator releases it.

User response: None.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
Chapter 2. Infoprint Server (AOP) messages and codes

The **aoplogu** command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

**System action:** Processing continues.

**User response:** None.

**Operator response:** None.

**System programmer response:** Fix the error and restart the job selection rule. To restart the job selection rule, do one of these:
- Use Infoprint Central to stop the job selection rule. Then use Infoprint Central to start the job selection rule.
- Use the ISPF panels to change any attribute in the job selection rule.
- Use the **pidu** command to change any attribute in the job selection rule.
- Run the AOPSTOP JCL procedure. Then run the AOPSTART JCL procedure.

Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOP3215E** The requested printer definition, **printer-definition**, is not an IP PrintWay printer definition. The printer type is **printer-type**.

**Explanation:** The printer definition in the Printer Inventory is not an IP PrintWay definition.

In the message text:
- **printer-definition** The name of the printer definition that IP PrintWay extended mode selected to print the print job. The job submitter might have specified this printer definition by name or might have specified the DEST, CLASS, and FORMS JCL values associated with the printer definition.
- **printer-type** The type of the printer: PSF-MVS, GENERAL, or UNKNOWN.

The **aoplogu** command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

**System action:** IP PrintWay extended mode rejected the print job and did not process it. The print job remains on the JES spool with a status of "rejected" so that IP PrintWay extended mode does not attempt to process the print job again until the operator releases it.

**User response:** Correct the OUTPUT JCL statement. Either specify the correct printer definition name in the FSSDATA parameter, or specify the correct values in the DEST, CLASS, and FORMS parameters. Then resubmit the print job. Or ask your administrator to change the type of the printer definition to IP PrintWay.

**Operator response:** Tell the user that this error occurred.

- If the user specified the incorrect printer definition name on the OUTPUT JCL statement, delete the print job and ask the job submitter to rerun the job.
- If the user specified incorrect DEST, CLASS, and FORMS values on the OUTPUT JCL statement, change the DEST, CLASS, and FORMS values and release the print job.
- If the type of printer definition is incorrect, ask your administrator to correct the printer definition and then release the print job.

**System programmer response:** Inspect the DEST, CLASS, and FORMS values of the output data set to...
determine which printer definition IP PrintWay extended mode selected to print the data set.

If the DEST, CLASS, and FORMS values on the JCL are incorrect and caused IP PrintWay extended mode to select the wrong printer definition, change the DEST, CLASS, and FORMS values of the output data set.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3216E  No document was found on the JES spool for the print job. In a sysplex, the document might have been deleted after it was processed on another system.

Explanation: IP PrintWay extended mode was processing a document that exists in Infoprint Server but no longer is on the JES spool. The job might have been deleted from the spool.

If IP PrintWay extended mode is running on another system in a sysplex, IP PrintWay might have deleted the print job after it was processed on the other system.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing of this print job ends.
User response: None.
Operator response: Check the message log for the print job to determine what caused the problem. In a sysplex, also look at the messages for the print job on the other systems where IP PrintWay extended mode is running.

System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3217E  IP PrintWay could not obtain the SWB from JES because the SJFREQ macro failed. The data set name is datasetname. The return code is 0xreturncode. The reason code is 0xreasoncode.

Explanation: IP PrintWay extended mode requested that JES return the Scheduler Work Block (SWB) associated with the data set, but an error occurred when JES invoked the SJFREQ macro. The SWB contains information about the data set, such as information that the job submitter specified in an OUTPUT JCL statement.

In the message text:
• datasetname is the name of the data set
• returncode is the SWB processing return code (field SSS2WRTN)
• reasoncode is the SWB processing reason code (field SSS2WRSN)

System action: IP PrintWay extended mode returns the print job to JES and does not attempt to process the print job again unless the operator releases it.
User response: If necessary, resubmit the print job after the problem is corrected.
Operator response: Notify your system programmer that this error occurred. After the problem is corrected, delete or release the print job.

System programmer response: The SWB processing reason code (field SSS2WRSN) identifies the SJF service that JES invoked using the SJFREQ macro and contains the return code and reason code from that service. For information about the format the SSS2WRSN field, see z/OS MVS Data Areas, Vol 5 (SSAG-XTLST), GA22-7585. For information about the return code and reason code from the SJFREQ macro for each SJF service, see z/OS MVS Programming, Authorized Assembler Services Reference SET-WTO, SA22-7612.

If you use JES exits to assign default values to data sets or to override values that a user specifies in an OUTPUT JCL statement, make sure that the values assigned by the JES exits are correct.

Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
AOP3401I IP PrintWay deleted the document from the JES spool.

Explanation: IP PrintWay extended mode deleted the document after it finished processing the print job.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing continues.
User response: None.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3402I IP PrintWay added the print job to the printer's queue.

Explanation: The print job was added to the printer's queue.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing continues.
User response: None.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3403I IP PrintWay removed the print job from the printer's queue.

Explanation: IP PrintWay extended mode removed the print job from the printer's queue. See other messages for the reason the print job was removed.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing continues.
User response: None.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3404I IP PrintWay deleted the print job and did not retain it on the JES spool.

Explanation: The print job was deleted from the JES spool.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing continues.
User response: None.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3405I IP PrintWay held the print job on the printer's queue.

Explanation: IP PrintWay extended mode held the print job because the operator requested the print job be held.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing continues.
User response: None.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3408I IP PrintWay cannot hold the print job.
Explanation: IP PrintWay extended mode could not hold the print job on the JES spool. The print job might have completed before IP PrintWay extended mode could hold it, or another program has acquired the data set.
If IP PrintWay extended mode is running on another system in a sysplex, IP PrintWay might be processing the print job on the other system. To hold a print job that IP PrintWay is processing, you must select the Hold action from the system where IP PrintWay is processing the print job.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.
System action: Processing continues. IP PrintWay does not hold the print job.
User response: None.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.

AOP3410I IP PrintWay stopped processing the print job on the printer.
Explanation: IP PrintWay extended mode stopped processing the print job because the operator held or deleted the print job or the operator moved the print job.
The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.
System action: Processing continues.
User response: None.
Operator response: None.
System programmer response: None.
Problem determination: None.

AOP3409I IP PrintWay reordered the print job on the printer’s queue because the priority of the print job changed.
Explanation: The print job was reordered on the printer queue because the operator changed the priority.
The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.
System action: Processing continues.
User response: None.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.

AOP3411I IP PrintWay released the print job on the printer.
Explanation: IP PrintWay extended mode released the print job because the operator did the release action. The print job is ready to print.
The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.
System action: Processing continues.
User response: None.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
IP PrintWay is retaining the print job on the JES spool for retain-time seconds until retain-time.

**Explanation:** IP PrintWay extended mode retained the print job on the JES spool after completion because retention was requested in the printer definition or on the OUTPUT JCL statement.

In the message text:
- `retain-time`: The number of seconds IP PrintWay extended mode will retain the print job.
- `retention-expiration-date`: The date and time when the retention time expires.

The `aoplogu` command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

**System action:** IP PrintWay extended mode will delete the print job from the JES spool when the retention time expires.

**User response:** None.

**Operator response:** If the print job is retained on the JES spool, you can use Infoprint Central to:
- Release the print job to print on the same printer.
- Release the print job after you correct the problem with the document or printer.
- Move the print job to another printer and release it.
- Hold the print job if you do not want IP PrintWay to delete the print job when its retention time expires.
- Delete the print job.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

IP PrintWay is no longer retaining the job.

**Explanation:** The print job is no longer retained on the JES spool. The operator might have held or deleted the print job.

The `aoplogu` command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

**System action:** Processing continues.

**User response:** None.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

IP PrintWay will retain the print job until you delete it.

**Explanation:** IP PrintWay extended mode retained the print job on the JES spool after it completed. IP PrintWay extended mode will not automatically delete the print job from the JES spool because the administrator or job submitter specified a retention period of FOREVER.

The `aoplogu` command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

**System action:** IP PrintWay extended mode deleted the print job from the JES spool. Processing continues.

**User response:** None.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

IP PrintWay is no longer retaining the job.

**Explanation:** The print job is no longer retained on the JES spool. The operator might have held or deleted the print job.

The `aoplogu` command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.
System action: Processing continues.
User response: None.
Operator response: Delete the print job from the JES spool when it is no longer needed.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3417I IP PrintWay rejected the print job. The print job remains on the JES spool.
Explanation: IP PrintWay extended mode cannot process the print job due to an error.
The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.
System action: The print job remains on the JES spool in the rejected state.
User response: See the other messages for the print job to determine the error and the appropriate response.
Operator response: See other messages for the print job to determine the error and the appropriate response. If the job submitter resubmits the print job, use Infoprint Central to delete the print job from the JES spool. Otherwise, release the print job after the problem is corrected.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3418I IP PrintWay cannot hold the document on the JES spool.
Explanation: IP PrintWay extended mode cannot hold the document on the JES spool as requested. Another process might have selected the print job, or the print job has been deleted.
If IP PrintWay extended mode is running on another system in a sysplex, IP PrintWay might be processing the print job on the other system. To hold a print job that IP PrintWay is processing, you must select the Hold action from the system where IP PrintWay is processing the print job.
The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.
System action: Processing continues.
User response: None.
Operator response: Try to hold the print job again if it is still on the JES spool. In a sysplex, select the Hold action from the system where IP PrintWay is processing the print job.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3419I IP PrintWay held the document on the JES spool.
Explanation: IP PrintWay extended mode held the document on the JES spool as requested.
The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.
System action: Processing continues.
User response: None.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3420I IP PrintWay cannot delete the print job because another program is processing it. Delete the print job from the system where it is being processed, or try again later.
Explanation: IP PrintWay could not delete the print job
as requested because another program is processing the print job.

If IP PrintWay extended mode is running on more than one system in a sysplex, IP PrintWay might be processing the print job on the other system. To delete a print job that IP PrintWay is processing, you must select the Delete action from the system where IP PrintWay is processing the print job.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see “Format of messages in the Infoprint Server common message log” on page 77.

System action: The print job is not deleted.
User response: None.
Operator response: If the print job is still on the JES spool, try selecting the Delete action again. In a sysplex, select the Delete action from the system where IP PrintWay is processing the print job.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3500I IP PrintWay deleted the printer from the Printer Inventory.

Explanation: IP PrintWay extended mode deleted an internal record for this printer in the Printer Inventory. Typically this occurs because no printer definition exists for the printer and the print job that was printing on the printer finished processing. As a result, Infoprint Central will no longer be able to find this printer and display information about it. IP PrintWay extended mode keeps an internal record for a printer only if a printer definition exists for the printer, a print job is processing on the printer, the printer is stopped, the printer is redirected to another printer, or another printer is redirected to it.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see “Format of messages in the Infoprint Server common message log” on page 77.

System action: Processing continues.
User response: None.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
AOP3503I Printer definition printer-definition is no longer a printer definition for this printer.

Explanation: The administrator deleted or modified the printer definition. For example, the administrator might have changed the host name.

In the message text, printer-definition is the deleted or modified printer definition.

System action: Processing continues.

User response: None.

Operator response: None.

System programmer response: None.

Problem determination: None.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP3504I IP PrintWay started the printer.

Explanation: IP PrintWay extended mode started the printer as requested.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing continues.

User response: None.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP3505I IP PrintWay stopped the printer.

Explanation: IP PrintWay extended mode stopped the printer as requested.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing continues.

User response: None.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3508I IP PrintWay redirected this printer to printer printer-uri.

Explanation: IP PrintWay extended mode redirected the printer to an alternate printer because the operator selected the Redirect action. IP PrintWay extended mode moved all print jobs on the printer's queue, except for the currently processing print job, to the queue of the alternate printer. IP PrintWay extended mode will redirect all print jobs that are submitted to this printer to the alternate printer until the operator selects the Restore action.

In the message text, printer-uri is the printer to which the print jobs were redirected. The printer-uri has this format:

printer-uri
An identifier of the printer, in one of these formats:

direct_sockets://hostname:port
The host name and port number of the printer.
lpr://hostname/queue
The host name and print queue name of the printer.
vtam://luname
The VTAM logical unit (LU) name of the printer.
uri
The Uniform Resource Identifier (URI) of the Internet Printing Protocol (IPP) server running in the printer. Examples are:

ipp://myprinter.xyz.com
http://myprinter.xyz.com:631

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing continues.
User response: None.
Operator response: When this printer is fixed, select the Restore action on Infoprint Central to restore printing on this printer.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3509I IP PrintWay redirected printer printer-uri to this printer.

Explanation: IP PrintWay extended mode redirected another printer to this printer because the operator selected the Redirect action. IP PrintWay extended mode moved all print jobs on the other printer's queue, except for the currently processing print job, to the queue of this printer.

In the message text, printer-uri is the printer from which the print jobs were redirected. The printer-uri has this format:

printer-uri
An identifier of the printer, in one of these formats:

direct_sockets://hostname:port
The host name and port number of the printer.
lpr://hostname/queue
The host name and print queue name of the printer.
vtam://luname
The VTAM logical unit (LU) name of the printer.
uri
The Uniform Resource Identifier (URI) of the Internet Printing Protocol (IPP) server running in the printer. Examples are:

ipp://myprinter.xyz.com
http://myprinter.xyz.com:631

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing continues.
User response: None.
Operator response: When the other printer is fixed, select the Restore action on Infoprint Central to restore printing on the other printer.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
AOP3510I  IP PrintWay restored this printer. Print jobs are no longer redirected to printer printer-uri.  

Explanation: IP PrintWay extended mode removed the redirection that was in effect for this printer because the operator selected the Restore action. IP PrintWay extended mode moved all print jobs that were originally submitted to this printer, except for the currently printing job, back to this printer's queue.  

In the message text, printer-uri is the name of the printer to which print jobs had been redirected. The printer-uri has this format:  

printer-uri  
An identifier of the printer, in one of these formats:  
   direct_sockets://hostname:port  
The host name and port number of the printer.  
   lpr://hostname/queue  
The host name and print queue name of the printer.  
   vtam://luname  
The VTAM logical unit (LU) name of the printer.  
   uri  
The Uniform Resource Identifier (URI) of the Internet Printing Protocol (IPP) server running in the printer. Examples are:  
   ipp://myprinter.xyz.com  
   http://myprinter.xyz.com:631  

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.  

System action: Processing continues.  
User response: None.  
Operator response: None.  
System programmer response: None.  
Problem determination: Not applicable.  
Source: Infoprint Server  
Module: Not applicable.  
Routing code: Not applicable.  
Descriptor code: Not applicable.  
Automation: Not applicable.  

AOP3511I  IP PrintWay restored printer printer-uri. Its print jobs are no longer redirected to this printer.  

Explanation: IP PrintWay extended mode removed the redirection that was in effect for another printer because the operator selected the Restore action. IP PrintWay extended mode moved all print jobs that had been originally submitted to the other printer, except for the currently printing job, from this printer's queue back to the other printer's queue.  

In the message text, printer-uri is the other printer that was restored. The printer-uri has this format:  

printer-uri  
An identifier of the printer, in one of these formats:  
   direct_sockets://hostname:port  
The host name and port number of the printer.  
   lpr://hostname/queue  
The host name and print queue name of the printer.  
   vtam://luname  
The VTAM logical unit (LU) name of the printer.  
   uri  
The Uniform Resource Identifier (URI) of the Internet Printing Protocol (IPP) server running in the printer. Examples are:  
   ipp://myprinter.xyz.com  
   http://myprinter.xyz.com:631  

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.  

System action: Processing continues.  
User response: None.  
Operator response: None.  
System programmer response: None.  
Problem determination: Not applicable.  
Source: Infoprint Server  
Module: Not applicable.  
Routing code: Not applicable.  
Descriptor code: Not applicable.  
Automation: Not applicable.  

AOP3600E  IP PrintWay cannot load FCB forms-control-buffer, return code is code, reason code is code.  

Explanation: IP PrintWay extended mode cannot load the FCB specified on the OUTPUT JCL statement or in the printer definition.  

In the message text, forms-control-buffer is the specified forms control buffer, and code is the hexadecimal return code or reason code.  

The aoplogu command provides more information in
The print request was not completed.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP3602I  The end of the document contains an incomplete transparent data record.

Explanation: IP PrintWay extended mode detected end of file before the end of a transparent data segment. Either there was an I/O error, or the length specified in the transparent data is incorrect.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing continues.

User response: Modify either the transparent data or the length of transparent data and resubmit the job.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP3603E  The document contains an incorrect transparent data record.

Explanation: IP PrintWay extended mode detected an error in a transparent data record.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: The print request was not completed.

User response: Correct the transparent data record, and resubmit the print request.

Operator response: Not applicable.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3604E The document contains an incorrect transparent data length.
Explanation: A transparent data record contains a length that is less than 0 or greater than 255.
System action: The print request was not completed.
User response: Correct the transparent data record, and resubmit the print request.
Operator response: Not applicable.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3605E The iconv utility did not open. The document code page is document-code-page. The printer code page is printer-code-page.
Explanation: The iconv utility did not open. Typically this error means that either the document code page or the printer code page specified in the printer definition is incorrect.
In the message text:
document-code-page
The name of the document code page.
printer-code-page
The name of the printer code page.
The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.
System action: The print request was not completed.
User response: None.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3606E The iconv utility did not complete the conversion. The return code is return-code.
Explanation: The iconv utility did not finish converting the data stream between EBCDIC and ASCII representation. In the message text, return-code is the return code.
System action: The print request was not completed.
User response: None.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3607E The Printer Inventory does not contain an entry for the component name specified in the PRTOPTNS JCL parameter or in the routing exit. The entry name is component-name.
Explanation: No component was found in the Infoprint Server Printer Inventory with the requested component name. A Processing, IP PrintWay Options, or Protocol
component with the requested name must exist in the Printer Inventory.

In the message text, component-name is the name of the component that was requested either in the PRTOPTNS JCL parameter of the OUTPUT statement or in the IP PrintWay Routing exit.

System action: The job is failed on this attempt.

User response: Make sure the component name specified in the PRTOPTNS JCL parameter is correct. After you correct it, resubmit the job.

Operator response: Notify your system programmer that this error occurred. After the administrator adds the missing components in the Printer Inventory or corrects the routing exit, use Infoprint Central to release the print job if it is retained on the JES spool. If the print job is not retained on the JES spool, ask the job submitter to resubmit the job.

System programmer response: Make sure the component name specified in the IP PrintWay Routing exit is correct. If the component name is correct, create a Processing, IP PrintWay Options, or Protocol component with that name in the Infoprint Server Printer Inventory. For information about how to create components for use with the PRTOPTNS JCL parameter, see z/OS Infoprint Server Operation and Administration.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP3609I IP PrintWay has started to process the print job.

Explanation: The print job is processing.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing continues.

User response: None.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP3608E IP PrintWay could not write an SMF record for the document because the __smf_record function failed with return code return-code and errno errno.

Explanation: The SMF type 6 record is not recorded. This error can occur when Infoprint Server does not have RACF authorization to write SMF records.

In the message text:

return-code The return code.
errno The error number.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: IP PrintWay extended mode does not write an SMF type 6 record.

User response: None.

Operator response: Notify your system programmer that this error occurred.

System programmer response: Look up the return code and errno in z/OS UNIX System Services Messages and Codes to determine the problem. Also, make sure that the AOPOPER group (or the group your installation defined for Infoprint Server operators) has READ access to the BPX.SMF profile in the RACF FACILITY class. For more information, see z/OS Infoprint Server Customization. If you do not want SMF type 6 records to be recorded, specify the smf-recording=no attribute in the Infoprint Server configuration file, aopd.conf.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP3610E The print job will not be processed because it is not in the pending state.

Explanation: The print job must be in the pending state for the print job to print.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: IP PrintWay extended mode does not process the print job.
AOP3611E  The print job will not be processed because the target printer is printer-uri1 but the print job is on printer printer-uri2.

Explanation: The print job is in the current printer queue and is ready to print but the job has been moved to another printer. The job is printing or scheduled to print on the other printer and will not be printed on this printer.

In the message text:

printer-uri1 The printer where the print job will now be printed.

printer-uri2 The printer where the print job was originally scheduled to print.

The printer-uri has this format:

printer-uri
An identifier of the printer, in one of these formats:

direct_sockets://hostname:port
The host name and port number of the printer.

lpr://hostname/queue
The host name and print queue name of the printer.

vtam://luname
The VTAM logical unit (LU) name of the printer.

uri
The Uniform Resource Identifier (URI) of the Internet Printing Protocol (IPP) server running in the printer. Examples are:

ipp://myprinter.xyz.com
http://myprinter.xyz.com:631

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing stops.

User response: None.

Operator response: The job must be moved if the current queued printer is incorrect and should print on the new target printer.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP3612I  IP PrintWay has started to process the document.

Explanation: IP PrintWay extended mode started to process the document.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing continues.

User response: None.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP3613I  The print job was completed successfully.

Explanation: All pages in the print job were successfully sent to the printer. If you also receive message AOP3852I, the printer reported that all pages in the print job finished printing.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing continues.

User response: None.
**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP3614I** The print job was completed but contained errors.

**Explanation:** IP PrintWay extended mode completed processing the print job but an error prevented one or more documents in the print job from printing. The `aoplogu` command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

**System action:** Processing continues.

**User response:** Correct the error if possible and resubmit the job.

**Operator response:** Look at the other messages for the print job to determine the error and response. If the print job was retained on the JES spool, try to correct the error and then use Infoprint Central to release the print job. If the print job was not retained, or if you cannot correct the error, ask the job submitter to resubmit the job.

**System programmer response:** Look at the other messages for the print job to determine the error and response.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP3615I** The print job was moved to printer `new-printer-uri` from printer `original-printer-uri`. It is no longer on this printer. The print job was not processed.

**Explanation:** The print job was moved from one printer to another. IP PrintWay extended mode will print the print job on the new printer instead of on the original printer.

In the message text:

- `new-printer-uri` - The printer to which the print job has been moved.
- `original-printer-uri` - The printer from which the print job has been moved.

The printer-uri has this format:

**printer-uri**

An identifier of the printer, in one of these formats:

- `direct_sockets://hostname:port` - The host name and port number of the printer.

---

**AOP3616I** IP PrintWay will process the document when the retry interval ends.

**Explanation:** An error occurred that prevented the document from printing, and retry is requested for the print job.

The `aoplogu` command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

**System action:** IP PrintWay extended mode will process the print job again after the retry interval expires. When all the retries are attempted, IP PrintWay extended mode will retain the print job if retention for failed print jobs is requested for the print job. If no retention is requested, IP PrintWay extended mode deletes the print job.

**User response:** See the operator response.

**Operator response:** Look at the other messages for the print job to determine what error occurred. Fix the error if possible. After the error is fixed, you can use Infoprint Central to release the print job so that IP PrintWay extended mode processes it again immediately, before the retry interval expires. If you cannot fix the error, you can either delete the print job or hold the print job on the JES spool until you can fix the error.

For information about how many retries have been attempted and the retry interval, use Infoprint Central to view properties of the print job. Retry information is in the Status section on the Infoprint Server Print Job Properties panel.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
The host name and print queue name of the printer.

- **vtam://luname**
  - The VTAM logical unit (LU) name of the printer.

- **uri**
  - The Uniform Resource Identifier (URI) of the Internet Printing Protocol (IPP) server running in the printer. Examples are:
    - `ipp://myprinter.xyz.com`

The `aoplogu` command provides more information in fields before the message text. For information about the contents of these fields, see the Infoprint Server common message log.

**System action:** Processing stops.

**User response:** None.

**Operator response:** To find the printer where the print job is to print or has printed, select the printer image in the Printer column on the Infoprint Server Print Jobs panel.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP3617E** The administrator made changes in the DNS, so the print job is no longer routed to this printer. The original printer was original-printer-uri. The new printer is new-printer-uri. The print job was not processed.

**Explanation:** A change to the host name for the original printer in the Domain Name Server occurred after the print job was submitted. This change caused the print job to be removed from the current printer. This print job will not print on the original printer.

In the message text:

- **original-printer-uri**
  - The original printer in the DNS.

- **new-printer-uri**
  - The new printer in the DNS.

The `printer-uri` has this format:

- **printer-uri**
  - An identifier of the printer, in one of these formats:
    - `direct_sockets://hostname:port`
    - `lpr://hostname/queue`
    - `vtam://luname`

The `aoplogu` command provides more information in fields before the message text. For information about the contents of these fields, see the Infoprint Server common message log.

**System action:** Processing continues.

**User response:** None.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

---

**AOP3618I** The transform transform-name started.

**Explanation:** IP PrintWay extended mode started a data stream transform to convert the data stream from one format to another.

In the message text, `transform-name` is the transform that was started. This transform is specified in the printer definition.

The `aoplogu` command provides more information in fields before the message text. For information about the contents of these fields, see the Infoprint Server common message log.

**System action:** Processing continues.

**User response:** None.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3800E The LPR/LPD processing received a failure acknowledgement while it was processing the print job.
Explanation: The possible reason can be a connection failure or a disconnection.
System action: The job failed on this attempt.
User response: Notify the operator that this error occurred.
Operator response: Check that the printer is turned on. Ping the printer to make sure the network connection is working.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3801E The LPR/LPD processing could not bind any local ports between 721 and 731 on host host-name for the print job.
Explanation: The TCP/IP BIND call failed for the target address for the well-known port range from 721 to 731.
In the message text, host-name is the name of the host.
System action: IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.
Operator response: None.
System programmer response: If the printer can accept print requests submitted from z/OS ports outside the port range 721 to 731, deselect the Restrict ports field in the printer definition.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3802E original-value was truncated to new-value for command command-code in the LPR control file for the print job.
Explanation: The value is truncated because it is too long to fit in the LPR control file in the command file.
In the message text:
original-value
   The original value.
new-value
   The new, truncated value.
command-code
   The name of the command in the LPR control file.
System action: Processing continues.
User response: None.
Operator response: None.
System programmer response: Correct the error based on the messages in the message log. Verify that

Chapter 2. Infoprint Server (AOP) messages and codes 147
the print queue is running on the target host and that the LPD can accept connections outside of port range 721 to 731. If the LPD requires that the z/OS port be between 721 to 731, select the Restrict ports LPR option in the printer definition. Check that the printer is turned on. Ping the printer to make sure the network connection is working.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP3804E** The LPR/LPD processing did not work for the print job to the target host.

**Explanation:** The final status indicator message for an LPR/LPD protocol job.

**System action:** The print job was not printed successfully.

**User response:** Check the associated messages for the print job and printer to determine the cause.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP3805I** Queue name queue1 overrides print queue name queue2.

**Explanation:** The administrator specified an alternate queue name for the printer or print server in the **Queue name override** field in the printer definition. IP PrintWay sent the print job to line printer daemon (LPD) using the alternate queue name.

In the message text:

- **queue1** is the queue name to which IP PrintWay sent the print job. This queue name was specified in the **Queue name override** field in the printer definition.
- **queue2** is the print queue name for the printer. This queue name was specified in the **Print queue name** field of the printer definition, in the **PRTQUEUE** parameter of the OUTPUT JCL statement, or in the **print-queue-name** job attribute. Infoprint Central displays this queue name in the **Print queue name** field for the printer.

**System action:** Processing continues.

**User response:** None.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP3850W** IP PrintWay is waiting for a printer problem to be corrected. The printer reported this error: message.

**Explanation:** The printer reported an error condition. For example, the printer might be out of paper or have a paper jam. IP PrintWay waits for the printer problem to be corrected before it sends data to the printer again.

In the message text, **message** contains the message that the printer returned. Typically, the message contains the PJL status code and an explanation of the code. For information about status codes, see *Printer Job Language Technical Reference Manual* published by Hewlett Packard.

The **aoplogu** command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

**System action:** IP PrintWay extended mode waits for a response from the printer for the time specified in the **Response timeout** field in the printer definition. When it receives a response, it resumes sending data to the printer and no duplicate pages are printed.

If the response timeout value specified in the printer definition expires before the printer responds, IP PrintWay retries the print job (if retries are requested) and duplicate pages might be printed.

**User response:** After the printer problem is corrected, resubmit the print job if necessary.

**Operator response:** Look at the error message from the printer and fix the printer problem. Restart the print job from the printer console if the printer does not start printing.

If you cannot fix the printer problem, cancel the print job from the printer console. After the printer problem is corrected, start the print job from Infoprint Central if the print job was retained on the JES spool, or ask the job submitter to resubmit the print job.

**System programmer response:** If the response timeout interval expires before the operator can fix the printer problem, consider specifying a higher value in
the **Response timeout** field in the printer definition. A high response timeout value (for example, 3 days) can prevent duplicate pages from being printed.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP3851E** The print job was canceled at the printer. The printer reported this message: *message*.

**Explanation:** IP PrintWay extended mode stopped printing the print job because someone canceled the print job from the printer console.

In the message text, *message* contains the message that the printer returned. Typically, the message contains the PJL status code and an explanation of the code. For information about status codes, see *Printer Job Language Technical Reference Manual* published by Hewlett Packard.

The `aoplogu` command provides more information in fields before the message text. For information about the contents of these fields, see “Format of messages in the Infoprint Server common message log” on page 77.

**System action:** IP PrintWay does not retry the print job. It retains the print job on the JES spool if retention is requested in the printer definition.

**User response:** After the problem is corrected, resubmit the print job if necessary.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP3852I** *number* pages in the print job printed successfully.

**Explanation:** The number of pages in the print job that the printer reported printed successfully. If the print job was moved to another printer, some of these pages might have printed on the original printer.

In the message text, *number* is the total number of pages that the printer reported were printed. It includes pages in all documents in the print job and pages that were successfully printed in previous failed attempts.

The `aoplogu` command provides more information in fields before the message text. For information about the contents of these fields, see “Format of messages in the Infoprint Server common message log” on page 77.

**System action:** None.

**User response:** None.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP3853I** The print job will start printing after page *number*.

**Explanation:** The print job will resume printing in the middle of the print job because an error occurred or because someone canceled the print job at the printer console and the operator restarted the print job.

In the message text, *number* is the last page that printed successfully.

The `aoplogu` command provides more information in fields before the message text. For information about the contents of these fields, see “Format of messages in the Infoprint Server common message log” on page 77.

**System action:** None.

**User response:** Look for duplicate pages near the page where the print job resumed printing. If you want IP PrintWay to resume printing at the beginning of the print job when an error occurs, ask your administrator to clear the **Restart printing after last successful page** field in the printer definition.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server
The printer does not support the PJL USTATUS PAGE command.

Explanation: IP PrintWay extended mode sent the Printer Job Language (PJL) USTATUS PAGE=ON command to the printer, but the printer did not set it. The printer might not support the PJL USTATUS PAGE command.

If an error occurs during printing, IP PrintWay extended mode cannot obtain information about the printer. Therefore:

- The print job is restarted from the beginning of the print job instead of from the last page that printed.
- The SMF type 6 record does not contain the correct number of printed pages.

However, if no error occurs, IP PrintWay can determine how many pages printed successfully.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing of the print job continues.

User response: None.

Operator response: Ask your administrator to contact the printer vendor.

System programmer response: Contact the printer vendor to correct the error.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

The printer does not support the PJL USTATUS DEVICE command.

Explanation: IP PrintWay extended mode sent the Printer Job Language (PJL) USTATUS DEVICE=ON command to the printer, but the printer did not set it. The printer might not support the PJL USTATUS DEVICE command.

If an error occurs during printing, IP PrintWay extended mode cannot obtain information about the printer. Therefore:

- If the printer needs intervention, IP PrintWay does not write a message. It waits for the response timeout interval and retries the print job.
- If someone cancels the print job from the console, IP PrintWay considers the print job to be successful.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing of the print job continues.

User response: None.

Operator response: Ask your administrator to contact the printer vendor.

System programmer response: Contact the printer vendor to correct the error.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

The printer does not support the PJL USTATUS JOB command.

Explanation: IP PrintWay extended mode sent the Printer Job Language (PJL) USTATUS JOB command to the printer, but the printer did not set it. The printer might not support the PJL USTATUS JOB command.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: IP PrintWay extended mode retries the print job. When all retries are completed, IP PrintWay retains the print job on the JES spool if retention is requested.

User response: After the problem is corrected, restart the print job if necessary.

Operator response: Ask your administrator to check that the printer supports the USTATUS JOB command. After the problem is corrected, the print job starts automatically when IP PrintWay retries the print job. However, you can start the print job immediately from Infoprint Central. If IP PrintWay has completed the print job and retained it on the JES spool, start the print job from Infoprint Central. If the print job is no longer on the JES spool, ask the job submitter to resubmit the print job.

System programmer response: If the printer does not support the PJL USTATUS JOB command, clear the
Record pages for accounting and Restart printing after last successful page fields in the printer definition. These fields require that the printer support the PJL USTATUS JOB command.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3857W The printer does not return information after each page prints.

Explanation: The printer accepted the Printer Job Language (PJL) USTATUS PAGE command, but it did not produce a page-by-page report.
If an error occurs during printing, IP PrintWay extended mode cannot determine the number of pages that printed successfully. Therefore:
• The print job is restarted from the beginning of the print job instead of from the last page that printed.
• The SMF type 6 record does not contain the correct number of printed pages.

However, if no error occurs, IP PrintWay can determine how many pages printed successfully.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: Processing of the print job continues.
User response: After the problem is corrected, resubmit the print job if necessary.
Operator response: Check the printer. After you correct the printer problem, the print job starts automatically when IP PrintWay retries the print job. However, you can start the print job immediately from Infoprint Central. If IP PrintWay has completed the print job and retained it on the JES spool, start the print job from Infoprint Central. If the print job is no longer on the JES spool, ask the job submitter to resubmit the print job.

If the printer does not need intervention, ask your print administrator to check whether the printer supports PJL. After the printer definition is corrected, start the print job from Infoprint Central, or ask the job submitter to resubmit the print job.

System programmer response: Check the printer documentation to see if the printer supports PJL. If it does not support PJL, clear the Record pages for accounting and Restart printing after last successful page fields in the printer definition. These fields require that the printer support PJL.

If you want to give the operator more time to correct a printer problem before IP PrintWay completes processing the print job, consider specifying a higher retry time (for example, 30 minutes) in the printer definition. Or, you can try to set a higher print timeout value from the printer's Web page. However, most printers do not let you specify a high timeout value.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.

AOP3858E The printer requires intervention or does not support PJL.

Explanation: IP PrintWay extended mode attempted to send a print job to the printer, but either the printer timed out or the response timeout value specified in the printer definition expired before IP PrintWay received a response from the printer. In most cases, the printer times out first because most printers have a timeout value of just a few minutes.

The problem might be one of these:
• The printer requires intervention. For example, the printer might be out of paper or have a paper jam.
• The printer does not support HP's Printer Job Language (PJL).

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: If retries are requested, IP PrintWay extended mode waits for the retry time specified in the printer definition and retries the print job. When all retries are completed, IP PrintWay retains the print job on the JES spool if retention is requested.
User response: After the problem is corrected, resubmit the print job if necessary.
Operator response: Check the printer. After you correct the printer problem, the print job starts automatically when IP PrintWay retries the print job. However, you can start the print job immediately from Infoprint Central. If IP PrintWay has completed the print job and retained it on the JES spool, start the print job from Infoprint Central. If the print job is no longer on the JES spool, ask the job submitter to resubmit the print job.

If the printer does not need intervention, ask your print administrator to check whether the printer supports PJL. After the printer definition is corrected, start the print job from Infoprint Central, or ask the job submitter to resubmit the print job.

System programmer response: Check the printer documentation to see if the printer supports PJL. If it does not support PJL, clear the Record pages for accounting and Restart printing after last successful page fields in the printer definition. These fields require that the printer support PJL.

If you want to give the operator more time to correct a printer problem before IP PrintWay completes processing the print job, consider specifying a higher retry time (for example, 30 minutes) in the printer definition. Or, you can try to set a higher print timeout value from the printer's Web page. However, most printers do not let you specify a high timeout value.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
**AOP3859E** The document must not contain a PJL JOB command when an IP PrintWay PJL option is selected.

**Explanation:** The document to be printed contains a PJL JOB command, but a PJL JOB command is not allowed when you select an IP PrintWay PJL option in the printer definition. The AFP to PCL transform that Infoprint Transforms from AFP for z/OS provides, or another application such as a printer driver, might have added the PJL JOB command.

The `aoplogu` command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

**System action:** IP PrintWay extended mode retries the print job. When all retries are completed, IP PrintWay retains the print job on the JES spool if retention is requested.

**User response:** Notify the system programmer that this error occurred. After the problem is corrected, resubmit the print job if necessary.

**Operator response:** Notify the system programmer that this error occurred. After the problem is corrected, restart the print job if necessary.

**System programmer response:** Do one or more of these:

- If the AFP to PCL transform created the document (filter `afp2pcl.dll` is specified in the printer definition), ask the administrator to set AOP_PJL->no in the Infoprint transform configuration (`aopxfd.conf`) so that the transform does not add a PJL JOB command. Then restart the Infoprint Server Transform Manager to pick up the changes, and ask the job submitter to resubmit the print job. For information about the transform configuration file, see `Infoprint Transforms from AFP for z/OS`.

- Update the printer definition so that these IP PrintWay PJL options are not selected: Record pages for accounting and Restart printing after last successful page. Then ask the operator to restart the print job using Infoprint Central. If the print job is no longer on the JES spool, ask the job submitter to resubmit the print job. For information about the PJL options, see `z/OS Infoprint Server Operation and Administration`.

- Update the application so that the PJL JOB command is not added in the original document. Then ask the job submitter to resubmit the print job.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOP3900E** The protocol protocol is not supported.

**Explanation:** IP PrintWay does not support the protocol listed.

The `aoplogu` command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

**System action:** The job failed on this attempt.

**User response:** Notify your system programmer that this error occurred.

**Operator response:** None.

**System programmer response:** Examine the printer definition to determine what protocol is configured in the protocol section. Verify that the protocol is correct for IP PrintWay and that the printer definition is an IP PrintWay printer definition.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOP3901E** The AOXVTM module could not get storage.

**Explanation:** An error occurred when IP PrintWay tried to send a data set to a VTAM-controlled printer.

The `aoplogu` command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

**System action:** IP PrintWay tries to retransmit the data set. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set.

**Operator response:** Notify your system programmer that this error occurred.

**System programmer response:** This message indicates a possible logic problem. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3902E No pointer to the VTAM parameter list was supplied.

Explanation: An error occurred when IP PrintWay tried to send a data set to a VTAM-controlled printer.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: IP PrintWay tries to retransmit the data set. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set.

Operator response: Notify your system programmer that this error occurred.

System programmer response: Make sure that the APPL ID specified in the AOP_APPLID environment variable in the aopstart EXEC is spelled correctly, is defined to VTAM, and is not used by another application. If you run IP PrintWay in a sysplex, make sure the APPL ID is unique for IP PrintWay on each system. For information about the AOP_APPLID environment variable, see z/OS Infoprint Server Customization. For information about the VTAM code and VTAM state, see z/OS Communications Server: IP and SNA Codes.

If the APPL ID is correct and is not used by another application, this message might indicate a logic problem. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3905E AOXVTM did not load. The return code is 0xcode. The reason code is 0xcode.

Explanation: An error occurred when IP PrintWay tried to send a data set to a VTAM-controlled printer.

In the message text, code is the hexadecimal return code or reason code from the LOAD macro.

The problem might be one of these:
• You did not install Coaxial Printer Support.
• You moved module AOXVTM from SYS1.LINKLIB to a library that is not specified in the STEPLIB environment variable or is not defined to the STEPLIBLIST facility.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: IP PrintWay tries to retransmit the data set. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set.

Operator response: Notify your system programmer that this error occurred.

System programmer response: Make sure that:
• You install Infoprint Coaxial Printer Support for z/OS, 5655-N62.
• If AOVVTM is not in SYS1.LINKLIB, specify the library that contains AOVVTM in the STEPLIB environment variable in the aopstart EXEC and define the library to the STEPLIBLIST facility.

For information about the STEPLIB environment variable and the STEPLIBLIST facility, see z/OS Infoprint Server Customization. For information about the codes, see z/OS MVS System Codes.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3906E No APPLID for IP PrintWay was found when the VTAM protocol was requested.

Explanation: An error occurred when IP PrintWay tried to send a data set to a VTAM-controlled printer.

The AOP_APPLID environment variable is not specified. To print on VTAM-controlled printers, you must create a VTAM APPL statement for IP PrintWay and specify the APPL ID in the AOP_APPLID environment variable.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see “Format of messages in the Infoprint Server common message log” on page 77.

System action: IP PrintWay tries to retransmit the data set. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set.

Operator response: Notify your system programmer that this error occurred.

System programmer response: Specify a printer LU name in the printer definition, and make sure the printer LU name is defined in VTAM. If you use the Printer Inventory Definition Utility (PIDU) to modify printer definitions, specify the printer-luname attribute on the pidu command.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3907E Specify a printer LU name for the VTAM protocol.

Explanation: The printer LU name is missing or incorrect in the Protocol section of the printer definition, or the name is not defined in VTAM.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see “Format of messages in the Infoprint Server common message log” on page 77.

System action: IP PrintWay tries to retransmit the data set. If this is the final retry, or if no retries are requested, IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set.

Operator response: Notify your system programmer that this error occurred.

System programmer response: Specify a printer LU name in the printer definition, and make sure the printer LU name is defined in VTAM. If you use the Printer Inventory Definition Utility (PIDU) to modify printer definitions, specify the printer-luname attribute on the pidu command.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3909E A VTAM error has occurred. The VTAM request code is 0xcode. The VTAM feedback code is 0xcode. The VTAM system sense code is 0xcode. The VTAM RPL return code is 0xcode. The VTAM LU name is luname. The VTAM logmode name is logmode.

Explanation: An error occurred while IP PrintWay was sending a data set to a VTAM-controlled printer.

In the message text:
• code is the hexadecimal code from VTAM.
• luname is the logical unit name of the VTAM-controlled printer, which is specified in the printer definition in the Printer Inventory.
• logmode is the name of the entry in the VTAM logon-mode table that the printer uses. The logmode name can be specified in the printer definition. If it is not specified in the printer definition, it is the name specified in the DLOGMOD parameter of the VTAM resource definition statement for the printer LU.

The problem might be one of these:
A VTAM STATE error has occurred. The return code is 0xcode. The state is 0xstate.

Explanation: An error occurred while IP PrintWay was sending a data set to a VTAM-controlled printer.

In the message text, code is the hexadecimal return code from VTAM and state is the state from VTAM.

The problem might be one of these:
- The APPL ID is spelled incorrectly in the aopstart EXEC.
- The APPL ID is not defined in VTAM.
- Another application is using the same APPL ID.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

Operator response: Notify your system programmer that this error occurred.

System programmer response: Make sure that the APPL ID specified in the AOP_APPLID environment variable in the aopstart EXEC is spelled correctly, is defined to VTAM, and is not used by another application. If you run IP PrintWay in a sysplex, make sure the APPL ID is unique for IP PrintWay on each system. For information about the AOP_APPLID environment variable, see z/OS Infoprint Server Customization. For information about the VTAM code and VTAM state, see z/OS Communications Server: IP and SNA Codes.

If the APPL ID is correct and is not used by another application, this message might indicate a logic problem. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

A VTAM OPEN error has occurred. The return code is 0xcode. The reason code is 0xcode.

Explanation: A VTAM error occurred while IP PrintWay was trying to send a data set to a VTAM-controlled printer.

In the message text, code is the hexadecimal return code or reason code from VTAM.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.
Operator response: Notify your system programmer that this error occurred.

System programmer response: For information about the VTAM codes, see z/OS Communications Server: IP and SNA Codes.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP3912I The transmission was successful but was canceled at the printer.

Explanation: The operator canceled the print job at the printer after all data had been transmitted.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: IP PrintWay retains the data set on the JES spool for the amount of time specified for failed transmissions and then deletes the data set.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP3914E The response timeout expired. Intervention might be needed at the printer. The function code is 0xcode.

Explanation: The data set could not be completely transmitted to the printer because the time specified in the Response timeout field of the printer definition in the Printer Inventory expired. This message can occur if the printer requires intervention, such as when the printer is out of paper, or if the printer is offline.

In the message text, code is the hexadecimal VTAM function code.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

Operator response: Correct the problem at the printer.

System programmer response: If the response timeout value expires repeatedly when the printer is turned on, increase the value in the Response timeout field in the printer definition. For information about the VTAM codes, see z/OS Communications Server: IP and SNA Codes.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3915E The connection timeout expired. Intervention might be needed at the printer.

Explanation: The data set could not be transmitted to the printer because the time specified in the Connection timeout field of the printer definition in the Printer Inventory expired. This message can occur if another job is printing or if the printer is turned off.

System action: IP PrintWay attempts to retransmit the document to the printer. If this is the last retry attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

Operator response: Correct the problem at the printer.

System programmer response: If the connection timeout value expires repeatedly when the printer is turned on, increase the value in the Connection timeout field in the printer definition.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3949E IP PrintWay extended mode does not support the VTAM protocol.

Explanation: You are using a version of IP PrintWay extended mode that does not support the VTAM protocol.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 77.

System action: The job failed on this attempt.

User response: Notify your system programmer that this error occurred.

Operator response: None.

System programmer response: This message indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3950E Print job job-name does not contain the mail-to-addresses attribute.

Explanation: The print job is detected to be an e-mail job and the mail-to-addresses cannot be determined.

In the message text, job-name is the name of the print job.

System action: The print job did not complete.

User response: Notify your system programmer that this error occurred.

Operator response: None.

System programmer response: This message indicates a possible logic error.

Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3951I IP PrintWay is sending the files in an e-mail with the following information:

From: from-address To: to-addresses
[Cc: cc-addresses] [Bcc: bcc-addresses]
[Reply-To: reply-address] Subject: subject.

Explanation: IP PrintWay will use z/OS UNIX sendmail to send the files as attachments in an e-mail.

In the message text:

bcc-addresses
E-mail addresses of the blind copy recipients (other recipients cannot see a blind copy recipient).

cc-addresses
E-mail addresses of the copy recipients.
from-address
  An optional descriptive name, followed by the
  e-mail address of the sender.

reply-address
  E-mail address that recipients can reply to.

subject
  Subject of the e-mail.

to-addresses
  E-mail addresses of the recipients.

An e-mail address can be an alias name defined to
z/OS UNIX sendmail. An alias name represents one or
more real e-mail addresses.

System action:  Processing continues.
User response:  None.
Operator response:  None.
System programmer response:  None.
Problem determination:  Not applicable.
Source:  Infoprint Server
Module:  Not applicable.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

AOP4001I  Infoprint Central accepted a request
from userid to delete the print job.

Explanation:  From Infoprint Central, a user asked to
delete the specified print job. Infoprint Central is
acknowledging the user’s request. In the message,
userid is the user who made the request. Another
message follows with the outcome of the request.

System action:  Infoprint Central tries to delete the
print job.
User response:  None.
Operator response:  None.
System programmer response:  None.
Problem determination:  Not applicable.
Source:  Infoprint Server
Module:  Not applicable.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

AOP4002I  Infoprint Central accepted a request
from userid to hold the print job.

Explanation:  From Infoprint Central, a user asked to
hold the specified print job. Infoprint Central is
acknowledging the user’s request. In the message,
userid is the user who made the request. Another
message follows with the outcome of the request.

System action:  Infoprint Central tries to hold the print
job.
User response:  None.
Operator response:  None.
System programmer response:  None.
Problem determination:  Not applicable.
Source:  Infoprint Server
Module:  Not applicable.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

AOP4003I  Infoprint Central accepted a request
from userid to release the print job.

Explanation:  From Infoprint Central, a user asked to
release the specified print job. Infoprint Central is
acknowledging the user’s request. In the message,
userid is the user who made the request. Another
message follows with the outcome of the request.

System action:  Infoprint Central tries to release the
print job.
User response:  None.
Operator response:  None.
System programmer response:  None.
Problem determination:  Not applicable.
Source:  Infoprint Server
Module:  Not applicable.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

AOP4004I  Infoprint Central accepted a request
from userid to set attributes.

Explanation:  From Infoprint Central, a user asked to
set one or more attributes. Infoprint Central is
acknowledging the user’s request. In the message,
userid is the user who made the request and attributes
are the specified attributes. For example:
destination=foreign, jes-priority=52,
process-mode=page. For print jobs, another message
follows with the outcome of the request.

**System action:** Infoprint Central tries to set the attributes.

**User response:** None.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOP4005I** Infoprint Central deleted the document.

**Explanation:** Infoprint Central deleted the document as a user requested.

**System action:** The document is deleted.

**User response:** None.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOP4006I** Infoprint Central held the document.

**Explanation:** Infoprint Central held the document as a user requested.

**System action:** The document is held.

**User response:** None.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOP4007I** Infoprint Central released the document.

**Explanation:** Infoprint Central released the document as a user requested.

**System action:** The document is released.

**User response:** None.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOP4008I** Infoprint Central modified the document.

**Explanation:** Infoprint Central modified the document as a user requested.

**System action:** The document is modified.

**User response:** None.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOP4009I** Infoprint Central accepted a request from *userid* to start the printer.

**Explanation:** From Infoprint Central, a user asked to start the printer. Infoprint Central is acknowledging the user’s request. In the message, *userid* is the user who made the request.

**System action:** Infoprint Central tries to start the printer.

**User response:** None.

**Operator response:** None.

**System programmer response:** For PSF printers, check the MVS system log for JES or PSF messages.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP4011I Infoprint Central accepted a request from userid to pause the printer.

Explanation: From Infoprint Central, a user asked to pause the printer. Infoprint Central is acknowledging the user’s request. In the message, userid is the user who made the request.

System action: Infoprint Central tries to pause the printer.
User response: None.
Operator response: Make sure that the printer is paused. If the printer is not paused, contact your system programmer.
System programmer response: For PSF printers, check the MVS system log for JES or PSF messages.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP4012I Infoprint Central accepted a request from userid to repeat the printer.

Explanation: From Infoprint Central, a user asked to repeat the printer. Infoprint Central is acknowledging the user’s request. In the message, userid is the user who made the request.

System action: Infoprint Central tries to repeat the printer.
User response: None.
Operator response: Make sure that the printer repeats. If the printer does not repeat, contact your system programmer.
System programmer response: For PSF printers, check the MVS system log for JES or PSF messages.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP4013I Infoprint Central accepted a request from userid to interrupt the printer.

Explanation: From Infoprint Central, a user asked to interrupt the printer. Infoprint Central is acknowledging the user’s request. In the message, userid is the user who made the request.

System action: Infoprint Central tries to interrupt the printer.
User response: None.
Operator response: Make sure that the printer is interrupted. If the printer is not interrupted, contact your system programmer.
System programmer response: For PSF printers, check the MVS system log for JES or PSF messages.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP4014I Infoprint Central accepted a request from userid to redirect the printer to printer.

Explanation: From Infoprint Central, a user asked to redirect the printer. Infoprint Central is acknowledging the user’s request. In the message, userid is the user who made the request, and printer is the printer where print jobs are to be sent. Another message follows with the outcome of the request.

System action: Infoprint Central tries to redirect the printer.
User response: None.
Operator response: Make sure that the printer is redirected. If the printer is not redirected, contact your system programmer.
System programmer response: If the printer is not redirected, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP4015I Infoprint Central accepted a request from userid to restore the printer.
Explanation: From Infoprint Central, a user asked to restore the printer. Infoprint Central is acknowledging the user's request. In the message, userid is the user who made the request. Another message follows with the outcome of the request.
System action: Infoprint Central tries to restore the printer.
User response: None.
Operator response: Make sure that the printer is restored. If the printer is not restored, contact your system programmer.
System programmer response: If the printer is not restored, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP4017I Infoprint Central accepted a request from userid to stop the LU.
Explanation: From Infoprint Central, a user asked to stop the logical unit (LU). Infoprint Central is acknowledging the user's request. In the message, userid is the user who made the request.
System action: Infoprint Central tries to stop the LU.
User response: None.
Operator response: Make sure that the LU stops. If the LU does not stop, contact your system programmer.
System programmer response: Check the MVS system log for NetSpool or VTAM messages.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP4018I Infoprint Central did not delete the document due to an error.
Explanation: Infoprint Central did not delete the document as a user requested.
System action: Processing continues.
User response: Try to delete the document again. If the problem persists, contact your system programmer.
Operator response: None.
System programmer response: For IP PrintWay jobs, check the Infoprint Server print job log for IP PrintWay messages. For JES jobs, check the MVS system log for JES messages.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP4019I Infoprint Central did not hold the document due to an error.
Explanation: Infoprint Central did not hold the document as a user requested.
System action: Processing continues.
User response: Try to hold the document again. If the problem persists, contact your system programmer.
Operator response: None.
System programmer response: For IP PrintWay jobs, check the Infoprint Server print job log for IP PrintWay messages. For JES jobs, check the MVS system log for JES messages.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
Operator response:  None.

System programmer response: For IP PrintWay jobs, check the Infoprint Server print job log for IP PrintWay messages. For JES jobs, check the MVS system log for JES messages.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP4020I Infoprint Central did not release the document due to an error.

Explanation: Infoprint Central did not release the document as a user requested.
System action: Processing continues.
User response: Try to release the document again. If the problem persists, contact your system programmer.
Operator response: None.
System programmer response: Check the MVS system log for JES messages.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP4021I Infoprint Central accepted a request from userid to move the print job to printer.

Explanation: From Infoprint Central, a user asked to move the specified print job. Infoprint Central is acknowledging the user's request. In the message, userid is the user who made the request, and printer is the printer where the print job is to be sent. Another message follows with the outcome of the request.
System action: Infoprint Central tries to move the print job.
User response: None.
Operator response: Make sure that the print job moves. If the print job does not move, contact your system programmer.
System programmer response: Check the Infoprint Server print job log for IP PrintWay messages.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP4022I Infoprint Central accepted a request from userid to space the printer forward number pages from the start of the data set.

Explanation: From Infoprint Central, a user asked to space the printer forward from the start of the data set. Infoprint Central is acknowledging the user's request. In the message, userid is the user who made the request, and number is the number of pages to space the printer forward from the start of the data set.
System action: Infoprint Central tries to space the printer forward the correct number of pages from the start of the data set.
User response: None.
Operator response: Make sure that the printer spaces forward the correct number of pages from the start of the data set. If the printer does not space forward the correct number of pages from the start of the data set, contact your system programmer.
System programmer response: Check the MVS system log for JES or PSF messages.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP4027I  Infoprint Central accepted a request from *userid* to space the printer forward *number* pages from the end of the data set.

Explanation: From Infoprint Central, a user asked to space the printer forward from the end of the data set. Infoprint Central is acknowledging the user's request. In the message, *userid* is the user who made the request, and *number* is the number of pages to space the printer forward from the end of the data set.

System action: Infoprint Central tries to space the printer forward the correct number of pages from the end of the data set.

User response: None.

Operator response: Make sure that the printer spaces forward the correct number of pages from the end of the data set. If the printer does not space forward the correct number of pages from the end of the data set, contact your system programmer.

System programmer response: Check the MVS system log for JES or PSF messages.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP4029I  Infoprint Central accepted a request from *userid* to space the printer forward *number* pages from the current page.

Explanation: From Infoprint Central, a user asked to space the printer forward from the current page. Infoprint Central is acknowledging the user's request. In the message, *userid* is the user who made the request, and *number* is the number of pages to space the printer forward from the current page.

System action: Infoprint Central tries to space the printer forward the correct number of pages from the current page.

User response: None.

Operator response: Make sure that the printer spaces forward the correct number of pages from the current page. If the printer does not space forward the correct number of pages from the current page, contact your system programmer.

System programmer response: Check the MVS system log for JES or PSF messages.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP4028I  Infoprint Central accepted a request from *userid* to space the printer forward *number* pages from the last checkpoint.

Explanation: From Infoprint Central, a user asked to space the printer forward from the last checkpoint. Infoprint Central is acknowledging the user's request. In the message, *userid* is the user who made the request, and *number* is the number of pages to space the printer forward from the last checkpoint.

System action: Infoprint Central tries to space the printer forward the correct number of pages from the last checkpoint.

User response: None.

Operator response: Make sure that the printer spaces forward the correct number of pages from the last checkpoint. If the printer does not space forward the correct number of pages from the last checkpoint, contact your system programmer.
printer backward the correct number of pages from the start of the data set.

User response: None.

Operator response: Make sure that the printer spaces backward the correct number of pages from the start of the data set. If the printer does not space backward the correct number of pages from the start of the data set, contact your system programmer.

System programmer response: Check the MVS system log for JES or PSF messages.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP4031I Infoprint Central accepted a request from userid to space the printer backward number pages from the end of the data set.

Explanation: From Infoprint Central, a user asked to space the printer backward from the last checkpoint. Infoprint Central is acknowledging the user's request. In the message, userid is the user who made the request, and number is the number of pages to space the printer backward from the last checkpoint.

System action: Infoprint Central tries to space the printer backward the correct number of pages from the last checkpoint.

User response: None.

Operator response: Make sure that the printer spaces backward the correct number of pages from the last checkpoint. If the printer does not space backward the correct number of pages from the last checkpoint, contact your system programmer.

System programmer response: Check the MVS system log for JES or PSF messages.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP4033I Infoprint Central accepted a request from userid to space the printer backward number pages from the current page.

Explanation: From Infoprint Central, a user asked to space the printer backward from the current page. Infoprint Central is acknowledging the user's request. In the message, userid is the user who made the request, and number is the number of pages to space the printer backward from the current page.

System action: Infoprint Central tries to space the printer backward the correct number of pages from the current page.

User response: None.

Operator response: Make sure that the printer spaces backward the correct number of pages from the current page. If the printer does not space backward the correct number of pages from the current page, contact your system programmer.

System programmer response: Check the MVS system log for JES or PSF messages.

Problem determination: Not applicable.
AOP4035I  Infoprint Central accepted a request from userid to stop the printer and complete the current print job.

Explanation: From Infoprint Central, a user asked to stop the printer and complete the current print job. Infoprint Central is acknowledging the user’s request. In the message, userid is the user who made the request. Another message follows with the outcome of the request.

System action: Infoprint Central tries to stop the printer and complete the current print job.

User response: None.

Operator response: Make sure that the printer stops and the current print job is completed. If the printer does not stop or the current print job is not completed, contact your system programmer.

System programmer response: For IP PrintWay printers, check the IP PrintWay printer log for IP PrintWay messages. For PSF printers, check the MVS system log for JES or PSF messages.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP4036I  Infoprint Central accepted a request from userid to stop the printer and hold the current print job.

Explanation: From Infoprint Central, a user asked to stop the printer and hold the current print job. Infoprint Central is acknowledging the user’s request. In the message, userid is the user who made the request. Another message follows with the outcome of the request.

System action: Infoprint Central tries to stop the printer and hold the current print job.

User response: None.

Operator response: Make sure that the printer stops and the current print job is held. If the printer does not stop or the current print job is not held, contact your system programmer.

System programmer response: Check the IP PrintWay printer log for IP PrintWay messages.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP4037I  Infoprint Central accepted a request from userid to stop the printer and delete the current print job.

Explanation: From Infoprint Central, a user asked to stop the printer and delete the current print job. Infoprint Central is acknowledging the user’s request. In the message, userid is the user who made the request. Another message follows with the outcome of the request.

System action: Infoprint Central tries to stop the printer and delete the current print job.

User response: None.

Operator response: Make sure that the printer stops and the current print job is deleted. If the printer does not stop or the current print job is not deleted, contact your system programmer.

System programmer response: For IP PrintWay printers, check the IP PrintWay printer log for IP PrintWay messages. For PSF printers, check the MVS system log for JES or PSF messages.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOPS002I  Subsystem established successfully.

Explanation: The Print Interface subsystem was defined and activated.

System action: Processing continues.

User response: None.

Operator response: None.

System programmer response: None.

Problem determination: None.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
AOPS004S Subsystem create failed, undefined reason code.

Explanation: The IEFSSVT REQUEST=CREATE macro to create the Print Interface subsystem returned an undefined reason code.

System action: The Print Interface subsystem is not activated.

User response: None.

Operator response: Notify your system programmer that this error occurred. Run the aopstart command or the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

System programmer response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, see the description of the IEFSSVT macro in z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG for information about IEFSSVT reason codes.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOPS005I Subsystem already active.

Explanation: The Print Interface subsystem was already active when the aopstart command or AOPSTART procedure was run.

System action: Processing continues.

User response: None.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOPS006E Subsystem query failed.

Explanation: The IEFSSI REQUEST=QUERY macro to query the Print Interface subsystem failed.

System action: The state of the Print Interface subsystem is not known. Job submitters might not be able to submit data sets to the Print Interface subsystem.

User response: None.

Operator response: Notify your system programmer that this error occurred. Enter the z/OS UNIX aopstart command or run the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

System programmer response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, see the description of the IEFSSI macro in z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG for more information.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOPS007E Subsystem exchange failed, no vector table.

Explanation: The IEFSSVT REQUEST=EXCHANGE macro failed because no vector table exists.

System action: The Print Interface subsystem is not activated.

User response: None.

Operator response: Notify your system programmer that this error occurred. Enter the z/OS UNIX aopstart command or run the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

System programmer response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, see the description of the IEFSSVT macro in z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG for more information.

Problem determination: Not applicable.
AOPS008E  Subsystem activate failed, unknown subsystem.

Explanation: The IEFSSI REQUEST=ACTIVATE macro to activate the Print Interface subsystem failed because the subsystem that Infoprint Server added no longer exists.

System action: The Print Interface subsystem is not activated.

User response: None.

Operator response: Notify your system programmer that this error occurred. Enter the z/OS UNIX aopstart command or run the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

System programmer response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, see the description of the IEFSSI macro in Z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG for information.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOPS009E  Subsystem activate failed, not dynamic.

Explanation: The IEFSSI REQUEST=ACTIVATE macro to activate the Print Interface subsystem failed because the subsystem was not dynamic.

System action: The Print Interface subsystem is not activated.

User response: None.

Operator response: Notify your system programmer that this error occurred. Enter the z/OS UNIX aopstart command or run the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

System programmer response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, see the description of the IEFSSI macro in Z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG for information.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOPS010E  Subsystem activate failed, bad token.

Explanation: The IEFSSI REQUEST=ACTIVATE macro to activate the Print Interface subsystem failed because the token returned by the IEFSSI REQUEST=QUERY macro was not a valid token.

System action: The Print Interface subsystem is not activated.

User response: None.

Operator response: Notify your system programmer that this error occurred. Enter the z/OS UNIX aopstart command or run the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

System programmer response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, see the description of the IEFSSI macro in Z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG for more information.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOPS011E  Subsystem activate failed, invalid name.

Explanation: The IEFSSI REQUEST=ACTIVATE macro to activate the Print Interface subsystem failed because the Print Interface subsystem name contains characters that the subsystem interface (SSI) does not allow.

Chapter 2. Infoprint Server (AOP) messages and codes 167
System action: The Print Interface subsystem is not activated.

User response: None.

Operator response: Notify your system programmer that this error occurred. Enter the z/OS UNIX aopstart command or run the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

System programmer response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

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AOPS012E Subsystem activate failed, parameter string too long.

Explanation: The IEFSSI REQUEST=ACTIVATE macro to activate the Print Interface subsystem failed because the parameter string was too long.

System action: The Print Interface subsystem is not activated.

User response: None.

Operator response: Notify your system programmer that this error occurred. Enter the z/OS UNIX aopstart command or run the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

System programmer response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

---

AOPS013S Subsystem activate failed, undefined reason code.

Explanation: The IEFSSI REQUEST=ACTIVATE macro to activate the Print Interface subsystem failed and returned an undefined reason code.

System action: The subsystem is not activated.

User response: None.

Operator response: Notify your system programmer that this error occurred. Enter the z/OS UNIX aopstart command or run the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

System programmer response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, see the description of the IEFSSI macro in z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXC for more information.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

---

AOPS014E Subsystem activate failed, no vector table.

Explanation: The IEFSSI REQUEST=ACTIVATE macro to activate the Print Interface subsystem failed because the vector table was undefined.

System action: The Print Interface subsystem is not activated.

User response: None.

Operator response: Notify your system programmer that this error occurred. Enter the z/OS UNIX aopstart command or run the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

System programmer response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, see the description of the IEFSSI macro in z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXC for more information.

Problem determination: Not applicable.
AOPS015S  Subsystem activate failed, system error.

Explanation: The IEFSSI REQUEST=ACTIVATE macro to activate the Print Interface subsystem failed because the subsystem interface (SSI) returned a system error.

System action: The Print Interface subsystem is not activated.

User response: None.

Operator response: Notify your system programmer that this error occurred. Enter the z/OS UNIX aopstart command or run the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

System programmer response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, see the description of the IEFSSI macro in z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG for more information.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOPS016E  Subsystem activate failed, SSI not available.

Explanation: The IEFSSI REQUEST=ACTIVATE macro failed because the subsystem interface (SSI) is not yet initialized.

System action: The Print Interface subsystem is not activated.

User response: None.

Operator response: Wait for the SSI to be initialized. Then enter the z/OS UNIX aopstart command or run the AOPSTART procedure to restart the Print Interface subsystem.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOPS017S  Subsystem activate failed, undefined return code.

Explanation: The IEFSSI REQUEST=ACTIVATE macro to activate the Print Interface subsystem failed because the subsystem interface (SSI) returned an undefined return code.

System action: The Print Interface subsystem is not activated.

User response: None.

Operator response: Notify your system programmer that this error occurred. Enter the z/OS UNIX aopstart command or run the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

System programmer response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, see the description of the IEFSSI macro in z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG for more information.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOPS019E  Subsystem create failed, unknown subsystem.

Explanation: The IEFSSVT REQUEST=CREATE macro to create the Print Interface subsystem vector table failed because the subsystem was not known.

System action: The Print Interface subsystem is not activated.

User response: None.

Operator response: Notify your system programmer that this error occurred. Enter the z/OS UNIX aopstart command or run the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.
**System programmer response:** This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, see the description of the IEFSSVT macro in [z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG](https://www.ibm.com) for more information.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOPS020E** Subsystem create failed, maximum vector tables exist.

**Explanation:** The IEFSSVT REQUEST=CREATE macro to create the Print Interface subsystem vector table failed because there were too many vector table entries.

**System action:** The Print Interface subsystem is not activated.

**User response:** Notify your system programmer that this error occurred. Enter the z/OS UNIX `aopstart` command or run the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

**Operator response:** None.

**System programmer response:** This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, see the description of the IEFSSVT macro in [z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG](https://www.ibm.com) for more information.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOPS021E** Subsystem create failed, storage unavailable.

**Explanation:** The IEFSSVT REQUEST=CREATE macro to create the Print Interface subsystem vector table failed because not enough storage was available.

**System action:** The Print Interface subsystem is not activated.

**User response:** None.

**Operator response:** Enter the z/OS UNIX `aopstart` command or run the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected. If the problem recurs, notify your system programmer that this error occurred.

**System programmer response:** For information, see the description of the IEFSSVT macro in [z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG](https://www.ibm.com).

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOPS022E** Subsystem create failed, input table too large.

**Explanation:** The IEFSSVT REQUEST=CREATE macro to create the Print Interface subsystem vector table failed because the MAXENTRIES value was smaller than the number of routines specified.

**System action:** The Print Interface subsystem is not activated.

**User response:** None.

**Operator response:** Notify your system programmer that this error occurred. Enter the z/OS UNIX `aopstart` command or run the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

**System programmer response:** This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
AOPS023E Subsystem create failed, MAXENTRIES value too big.

**Explanation:** The IEFSSVT REQUEST=CREATE macro to create the Print Interface subsystem vector table failed because the MAXENTRIES value was larger than the maximum allowed.

**System action:** The Print Interface subsystem is not activated.

**User response:** None.

**Operator response:** Notify your system programmer that this error occurred. Enter the z/OS UNIX aopstart command or run the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

**System programmer response:** This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

AOPS024E Subsystem create failed, load error.

**Explanation:** The IEFSSVT REQUEST=CREATE macro to create the Print Interface subsystem vector table failed because one or more of the functions was not found.

**System action:** The Print Interface subsystem is not activated.

**User response:** None.

**Operator response:** Notify your system programmer that this error occurred. Enter the z/OS UNIX aopstart command or run the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

**System programmer response:** This message indicates an installation error. Make sure that the Print Interface subsystem routines are in LPALIB.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

AOPS025E Subsystem create failed, system error.

**Explanation:** The IEFSSVT REQUEST=CREATE macro to create the Print Interface subsystem vector table failed with a system error.

**System action:** The Print Interface subsystem is not activated.

**User response:** None.

**Operator response:** Notify your system programmer that this error occurred. Enter the z/OS UNIX aopstart command or run the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

**System programmer response:** This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, see the description of the IEFSSVT macro in [z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG](http://www.ibm.com) for information.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

AOPS026E Subsystem create failed, SSI not available.

**Explanation:** The IEFSSVT REQUEST=CREATE macro to create the Print Interface subsystem vector table failed because the subsystem interface (SSI) was not yet ready.

**System action:** The Print Interface subsystem is not activated.

**User response:** None.

**Operator response:** Wait until the SSI is initialized. Then enter the z/OS UNIX aopstart command or run the AOPSTART procedure to restart the Print Interface subsystem.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
**AOPS027S**  Subsystem create failed, undefined return code.

**Explanation:** The IEFSSVT REQUEST=CREATE macro failed with a undefined return code.

**System action:** The Print Interface subsystem is not activated.

**User response:** None.

**Operator response:** Notify your system programmer that this error occurred. Enter the z/OS UNIX aopstart command or run the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

**System programmer response:** This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, see the description of the IEFSSVT macro in [z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG](https://www.ibm.com/support/knowledgecenter/SSEPGG_2.3.0/com.ibm.zos.v2r3.mp01z.web.topc.html) for more information.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOPS028E**  Subsystem exchange failed, vector table full.

**Explanation:** The IEFSSVT REQUEST=EXCHANGE macro failed because the maximum number of routines was already loaded, and no more could be loaded.

**System action:** The Print Interface subsystem is not activated.

**User response:** None.

**Operator response:** Notify your system programmer that this error occurred. Enter the z/OS UNIX aopstart command or run the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

**System programmer response:** This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, see the description of the IEFSSVT macro in [z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG](https://www.ibm.com/support/knowledgecenter/SSEPGG_2.3.0/com.ibm.zos.v2r3.mp01z.web.topc.html) for more information.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOPS029S**  Subsystem exchange failed, undefined reason code.

**Explanation:** The IEFSSVT REQUEST=EXCHANGE macro failed with an undefined reason code.

**System action:** The Print Interface subsystem is not activated.

**User response:** None.

**Operator response:** Notify your system programmer that this error occurred. Enter the z/OS UNIX aopstart command or run the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

**System programmer response:** This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, see the description of the IEFSSVT macro in [z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG](https://www.ibm.com/support/knowledgecenter/SSEPGG_2.3.0/com.ibm.zos.v2r3.mp01z.web.topc.html) for more information.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOPS030S**  Subsystem exchange failed, undefined return code.

**Explanation:** The IEFSSVT REQUEST=EXCHANGE macro failed with an undefined return code.

**System action:** The Print Interface subsystem is not activated.

**User response:** None.

**Operator response:** Notify your system programmer that this error occurred. Enter the z/OS UNIX aopstart command or run the AOPSTART procedure to restart the Print Interface subsystem after the problem is corrected.

**System programmer response:** This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Also, see the description of the IEFSSVT macro in [z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG](https://www.ibm.com/support/knowledgecenter/SSEPGG_2.3.0/com.ibm.zos.v2r3.mp01z.web.topc.html) for more information.

**Problem determination:** Not applicable.
Center, or use your electronic link with IBM service for assistance.

Also, see the description of the IEFSSVT macro in z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG for information.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOPS101E  Invalid DSNAME format, use &NAME

Explanation: The data set name coded in the DSNAME parameter on the DD JCL statement is in a format that the Print Interface subsystem does not support.

System action: The Print Interface subsystem does not create output data sets on the JES spool for any data sets in the job step.

User response: Code the DSNAME parameter in the format DSNAME=&name. Then resubmit the job.

Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOPS204E  Subsystem server is not started.

Explanation: The connection to the Print Interface subsystem could not be completed because the server is stopped.

System action: The Print Interface subsystem does not create output data sets on the JES spool for any data sets in the job step.

User response: Notify the operator that this problem occurred. Resubmit the job after the Print Interface subsystem has been started.

Operator response: Enter the z/OS UNIX aopstart command or run the AOPSTART procedure to restart the Print Interface subsystem.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOPS205E  Subsystem server token not available.

Explanation: The connection to the Print Interface subsystem has been lost because the Infoprint Server subsystem server has stopped.

System action: The Print Interface subsystem does not create output data sets on the JES spool for any data sets in the job step.

User response: Notify the operator that this problem occurred. Resubmit the job after the Print Interface subsystem has been started.

Operator response: Enter the z/OS UNIX aopstart command or run the AOPSTART procedure to restart the Print Interface subsystem.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.

Chapter 2. Infoprint Server (AOP) messages and codes  173
**AOPS206E  OUTPUT SWB not found.**

**Explanation:** The OUTPUT parameter was specified on the DD JCL statement, but the output statement was not found.

**System action:** The Print Interface subsystem does not create output data sets on the JES spool for any data sets in the job step.

**User response:** Notify your system programmer that this error occurred. Resubmit the job after the problem is corrected.

**Operator response:** None.

**System programmer response:** Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOPS208E  DD GETSWB failed.**

**Explanation:** The SWB for the DD JCL statement was found, but the GETSWB macro failed.

**System action:** The Print Interface subsystem does not create output data sets on the JES spool for any data sets in the job step.

**User response:** Notify your system programmer that this error occurred. Resubmit the job after the problem is corrected.

**Operator response:** None.

**System programmer response:** Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOPS207E  OUTPUT GETSWB failed.**

**Explanation:** The SWB for the OUTPUT JCL statement was found, but the GETSWB macro failed.

**System action:** The Print Interface subsystem does not create output data sets on the JES spool for any data sets in the job step.

**User response:** Notify your system programmer that this error occurred. Resubmit the job after the problem is corrected.

**Operator response:** None.

**System programmer response:** Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOPS209E  Invalid SUBSYS parameters.**

**Explanation:** You coded too many subparameters on the SUBSYS parameter.

**System action:** The Print Interface subsystem does not create output data sets on the JES spool for any data sets in the job step.

**User response:** Correct the SUBSYS parameter and resubmit the job. For information about how to code the SUBSYS parameter, see [z/OS Infoprint Server User's Guide](https://www.ibm.com/servers/z/os/support/infoprint/server/)

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** None.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOPS211I  Allocation was cancelled.**

**Explanation:** The CANCEL command was sent while the Print Interface subsystem was allocating the data set on the JES spool.

**System action:** The Print Interface subsystem does not create output data sets on the JES spool for any data sets in the job step.
User response: None.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOPS212S Allocation connect failed, no connection available.

Explanation: The internal connection table for Print Interface was full because the maximum number of data sets was already being processed.
System action: The Print Interface subsystem does not create output data sets on the JES spool for any data sets in the job step.
User response: Resubmit the job when the system is less busy.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOPS301E OPEN failed. result = reason code

Explanation: The Print Interface subsystem could not process the OPEN request from the subsystem interface (SSI) for the data set.
In the message text:
reason code A code that indicates the reason for the error, in the format: 00xxyyzz.
System action: The Print Interface subsystem does not create output data sets on the JES spool for any data sets in the job step.
User response: Notify your system programmer that this error occurred. Resubmit the job after the problem is corrected.
Operator response: None.
System programmer response: Follow the system programmer response for the reason code in "Infoprint Server system completion code and reason codes" on page 177.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOPS401E PUT failed. result = reason code

Explanation: The Print Interface subsystem could not process the PUT request from the subsystem interface (SSI) for the data set.
In the message text:
reason code A code that indicates the reason for the error, in the format: 00xxyyzz.
System action: The Print Interface subsystem does not create output data sets on the JES spool for any data sets in the job step.
User response: Notify your system programmer that this error occurred. Resubmit the job after the problem is corrected.
Operator response: None.
System programmer response: Follow the system programmer response for the reason code in "Infoprint Server system completion code and reason codes" on page 177.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOPS501E CLOSE failed. result = reason code

Explanation: The Print Interface subsystem could not process the CLOSE request from the subsystem interface (SSI) for the data set.
In the message text:
reason code A code that indicates the reason for the error, in the format: 00xxyyzz.
System action: The Print Interface subsystem does not create output data sets on the JES spool for any data sets in the job step.
User response: Notify your system programmer that this error occurred. Resubmit the job after the problem is corrected.
Operator response: None.
System programmer response: Follow the system programmer response for the reason code in "Infoprint Server system completion code and reason codes" on page 177.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
Operator response: None.

System programmer response: Follow the system programmer response for the reason code in "Infoprint Server system completion code and reason codes" on page 177.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOPS701E Disconnect failed. result = reason code

Explanation: The Print Interface subsystem could not process the disconnect request from the subsystem interface (SSI) for the data set.

In the message text:

reason code A code that indicates the reason for the error, in the format: 00xxyyz.

System action: The Print Interface subsystem does not create output data sets on the JES spool for any data sets in the job step.

User response: Notify your system programmer that this error occurred. Resubmit the job after the problem is corrected.

Operator response: None.

System programmer response: Follow the system programmer response for the reason code in "Infoprint Server system completion code and reason codes" on page 177.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOPS999T Invalid message request.

Explanation: A Print Interface function made an incorrect message request.

System action: The Print Interface subsystem does not create output data sets on the JES spool for any data sets in the job step.

User response: Notify your system programmer that this error occurred. Resubmit the job after the problem is corrected.

Operator response: None.

System programmer response: This error indicates a possible logic error. Save the associated dump. Then contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
Infoprint Server system completion code and reason codes

The system completion code for abends that Infoprint Server issues is: **09B**. The reason code indicates the component that issued the abend:

**00000000 – 000FFFF**
Indicates that IP PrintWay basic mode issued the abend. See "IP PrintWay basic mode system completion code and abend reason codes" on page 54 for an explanation of these codes.

**000FFFF – 00FFFFFF**
Indicates that another Infoprint Server component issued the abend. This section explains the codes.

This table lists the reason codes that are displayed in a message or as an abend reason code. These codes can help you determine why an error or abend occurred. The format of the reason code is:

00xxyyzz

*xx* Specifies the type or error:
- X'08' warning
- X'0C' environmental error
- X'10' system error
- X'14' logic error

*yy and zz* Describe the reason for the error. Look up these hexadecimal values in **Table 4**.

<table>
<thead>
<tr>
<th>Reason code (hex)</th>
<th>Explanation</th>
<th>User or system programmer response</th>
</tr>
</thead>
<tbody>
<tr>
<td>07 01, 02, 03, 04</td>
<td>Another message indicates the cause of the problem.</td>
<td>Read the other messages to see what action is necessary.</td>
</tr>
<tr>
<td>08 01, 02, 03, 04</td>
<td>Another message indicates the cause of the problem.</td>
<td>Read the other messages to see what action is necessary.</td>
</tr>
<tr>
<td>09 01, 02, 03, 04</td>
<td>Another message indicates the cause of the problem.</td>
<td>Read the other messages to see what action is necessary.</td>
</tr>
<tr>
<td>0A 01, 02, 03, 04</td>
<td>Another message indicates the cause of the problem.</td>
<td>Read the other messages to see what action is necessary.</td>
</tr>
<tr>
<td>0B 01, 02, 03, 04</td>
<td>Another message indicates the cause of the problem.</td>
<td>Read the other messages to see what action is necessary.</td>
</tr>
<tr>
<td>11 01</td>
<td>The Print Interface subsystem had an internal error. The Print Interface subsystem server has stopped and restarted.</td>
<td>Resubmit the print job. If the problem recurs, notify your system programmer or IBM service representative.</td>
</tr>
<tr>
<td>08</td>
<td>The Print Interface subsystem server is busy.</td>
<td>Resubmit the print job at a later time.</td>
</tr>
<tr>
<td>12 07, 08</td>
<td>The Print Interface subsystem was not running.</td>
<td>After the operator runs the <strong>aopstart</strong> command or the AOPSTART procedure to restart the Print Interface subsystem, resubmit the print job.</td>
</tr>
</tbody>
</table>
Table 4. Infoprint Server reason codes (continued)

<table>
<thead>
<tr>
<th>Reason code (hex)</th>
<th>Explanation</th>
<th>User or system programmer response</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 04</td>
<td>The Print Interface subsystem had an internal error. The Print Interface subsystem server has stopped and restarted.</td>
<td>Resubmit the print job. If the problem recurs, notify your system programmer or IBM service representative.</td>
</tr>
<tr>
<td>16 01</td>
<td>The region size is too small.</td>
<td>Increase the region size for the print job and resubmit it.</td>
</tr>
<tr>
<td>17 01</td>
<td>The application that created the output data used either an unsupported access method or access method function.</td>
<td>Change your application to use either the QSAM or BSAM access method. Use only the OPEN, CLOSE, and PUT functions. Resubmit the print job after the application has been changed.</td>
</tr>
<tr>
<td>07, 08</td>
<td>The Print Interface subsystem was not running.</td>
<td>Restart the Print Interface subsystem and resubmit the print job.</td>
</tr>
<tr>
<td>19 04</td>
<td>An error occurred on the application side.</td>
<td>Read the other messages to see what action is necessary.</td>
</tr>
<tr>
<td>1C 02</td>
<td>Another message indicates the cause of the problem.</td>
<td>Correct the error and resubmit the print job.</td>
</tr>
<tr>
<td>Other codes</td>
<td>A possible logic error exists.</td>
<td>Contact your service representative at the IBM Support Center, or use your electronic link with IBM for assistance.</td>
</tr>
</tbody>
</table>
Chapter 3. NetSpool (API) messages and codes

This chapter describes the messages, return codes, and sense codes that the NetSpool started task displays. The NetSpool daemon aopnetd issues messages with the AOP prefix. These messages are described in Chapter 2, “Infoprint Server (AOP) messages and codes,” on page 77.

API message format

Messages have an 8-character message identifier followed by jobname. identifier and message text:

APInnnnt jobname. identifier message_text

API Identifies NetSpool messages
nnnn The message number
 t The severity of the message:

<table>
<thead>
<tr>
<th>Code</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Operator action is required.</td>
</tr>
<tr>
<td>E</td>
<td>An error occurred.</td>
</tr>
<tr>
<td>I</td>
<td>Information message.</td>
</tr>
<tr>
<td>S</td>
<td>A severe error occurred.</td>
</tr>
<tr>
<td>W</td>
<td>A warning situation occurred.</td>
</tr>
</tbody>
</table>

jobname NetSpool job name or procedure name
identifier Identifier for the NetSpool procedure name

Infoprint Server administrators can use the aoplogu command to select messages from the Infoprint Server common message log in a particular time range and copy them to a file or view them on the terminal. For information about the aoplogu command, see z/OS Infoprint Server Operation and Administration. For information about the information returned by aoplogu, see “Format of messages in the Infoprint Server common message log” on page 77.

Messages

<table>
<thead>
<tr>
<th>API0800I jobname. identifier STARTING NETSPOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explanation: NetSpool has been started.</td>
</tr>
<tr>
<td>System action: Processing continues.</td>
</tr>
<tr>
<td>Operator response: None.</td>
</tr>
<tr>
<td>System programmer response: None.</td>
</tr>
<tr>
<td>Problem determination: Not applicable.</td>
</tr>
<tr>
<td>Source: Infoprint Server</td>
</tr>
<tr>
<td>Module: Not applicable.</td>
</tr>
<tr>
<td>Routing code: Not applicable.</td>
</tr>
<tr>
<td>Descriptor code: Not applicable.</td>
</tr>
<tr>
<td>Automation: Not applicable.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>API0801I jobname. identifier TERMINATING NETSPOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explanation: NetSpool is stopping.</td>
</tr>
<tr>
<td>System action: NetSpool stops.</td>
</tr>
<tr>
<td>Operator response: None.</td>
</tr>
<tr>
<td>System programmer response: None.</td>
</tr>
<tr>
<td>Problem determination: Not applicable.</td>
</tr>
<tr>
<td>Source: Infoprint Server</td>
</tr>
<tr>
<td>Module: Not applicable.</td>
</tr>
<tr>
<td>Routing code: Not applicable.</td>
</tr>
<tr>
<td>Descriptor code: Not applicable.</td>
</tr>
<tr>
<td>Automation: Not applicable.</td>
</tr>
</tbody>
</table>
**API0804E** *jobname.identifier*  The timer is not working.

**Explanation:**  A timer used by NetSpool is not working. This might indicate a programming error.

**System action:**  Processing continues.

**Operator response:**  Notify the system programmer.

**System programmer response:**  If this error results in system problems, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**Problem determination:**  Not applicable.

**Source:**  Infoprint Server

**Module:**  Not applicable.

**Routing code:**  Not applicable.

**Descriptor code:**  Not applicable.

**Automation:**  Not applicable.

---

**API0805I** *jobname.identifier*  tcb_id TASK ABNORMALLY TERMINATED

**Explanation:** A NetSpool ESTAE routine detected that a NetSpool task terminated abnormally.

**System action:** NetSpool processing terminates abnormally.

**Operator response:** Notify the system programmer.

**System programmer response:** Save the SDUMP if one was taken, and contact your service representative in the IBM Support Center.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API0806E** *jobname.identifier*  NO PARM FIELD IS SPECIFIED IN THE EXEC STATEMENT.

**Explanation:** The EXEC statement for NetSpool does not contain the required PARM field.

**System action:** NetSpool processing terminates abnormally.

**Operator response:** Notify the system programmer.

**System programmer response:** Correct the EXEC statement and restart the NetSpool task. For more information about the EXEC statement, see z/OS Infoprint Server Customization.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API0807E** *jobname.identifier*  THE PARM LIST IN THE EXEC STATEMENT ENDED ABNORMALLY

**Explanation:** The operating system was unable to create a parameter list for use by NetSpool. The PARM parameter on the EXEC statement in the NetSpool startup procedure might contain a coding error.

**System action:** NetSpool processing ends.

**Operator response:** Notify the system programmer.

**System programmer response:** Correct any coding errors in the PARM parameter of the EXEC statement in the NetSpool startup procedure. Restart the NetSpool task.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
**API0809E** `jobname.identifier` **THE KEYWORD IS TOO LONG:** `keyword`.

**Explanation:** The EXEC statement for NetSpool contains a keyword in the PARM field that is greater than eight characters.

**System action:** NetSpool processing ends abnormally.

**Operator response:** Notify the system programmer.

**System programmer response:** Correct the PARM field on the EXEC statement and restart the NetSpool task. For more information about the EXEC statement, see [z/OS Infoprint Server Customization](https://www.ibm.com/docs/en/systems/zos/infoprint?topic=infoprint-server).  

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API0810E** `jobname.identifier` **THE KEYWORD IS NOT VALID:** `keyword`.

**Explanation:** The EXEC statement for NetSpool contains an incorrect keyword in the PARM field.

**System action:** NetSpool processing ends abnormally.

**Operator response:** Notify the system programmer.

**System programmer response:** Correct the PARM field on the EXEC statement and restart the NetSpool task. For more information about the EXEC statement, see [z/OS Infoprint Server Customization](https://www.ibm.com/docs/en/systems/zos/infoprint?topic=infoprint-server).

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API0811I** `jobname.identifier` **ERROR WHILE TAKING SDUMP. REASON CODE = reasoncode**

**Explanation:** A NetSpool ESTAE routine attempted to take an SDUMP. The reason code indicates the reason for the failure.

**System action:** NetSpool processing terminates abnormally.

**Operator response:** Notify the system programmer.

**System programmer response:** If possible, correct the problem indicated in the reason code.

Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API0814E** `jobname.identifier` **No LUCLASS parameter is specified.**

**Explanation:** The PARM field on the EXEC statement does not specify an LUCLASS parameter. This parameter is required.

**System action:** NetSpool processing ends abnormally.

**Operator response:** Notify the system programmer.

**System programmer response:** Correct the PARM field on the EXEC statement and restart the NetSpool task. For more information about the EXEC statement, see [z/OS Infoprint Server Customization](https://www.ibm.com/docs/en/systems/zos/infoprint?topic=infoprint-server).

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

---

Chapter 3. NetSpool (API) messages and codes  181
NetSpool is unable to load module.

Explanation: An error occurred while the NetSpool program was loading the specified module.

System action: NetSpool processing ends abnormally.

Operator response: Notify the system programmer.

System programmer response: Make sure that the module is a member of a partitioned data set that was specified in the NetSpool startup procedure or that it is in the standard z/OS search order. Also, make sure that sufficient storage is available to load the module.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

An undetermined OPEN error occurred for LU, RC = rc.

Explanation: An attempt to open a VTAM LU failed for an unknown reason. The value returned in the ERROR field of the ACB is displayed in the rc portion of this message.

System action: NetSpool does not attempt to reopen the ACB for the VTAM LU.

Operator response: To determine the type of error that occurred, see the description of the OPEN macro, Completion Information section, in z/OS Infoprint Server: SNA Programming. Then contact the system programmer.

System programmer response: For error code 36 (24 hexadecimal), correct the specified APPL definition. For all other error codes, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

LU is in the process of being opened or closed.

Explanation: The specified VTAM LU is in the process of being opened or closed.

System action: NetSpool periodically (every 60 seconds) attempts to open the LU.

Operator response: Make sure the LU is not already being used by another application.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

LU is already in use by another application.

Explanation: NetSpool cannot open the requested VTAM LU because the LU is already open, indicating it is being used by another instance of NetSpool.

System action: NetSpool periodically (every 60 seconds) attempts to open the VTAM LU.
Operator response: To delete the LU from the list of
LUs selected by this instance of NetSpool, type the
LUNAME DEL command. This command will prevent
NetSpool from periodically attempting to open the LU.
For a description of the LUNAME DEL command, see
z/OS Infoprint Server Operation and Administration.

System programmer response: Make sure that the
LUCLASS parameter on the EXEC statement is correct
and that the LUCLASS parameter for the LU is correct
in the Printer Inventory. Also, make sure the specified
LU is not already being used by another application. For
information about the EXEC statement, see z/OS
Infoprint Server Customization. For information about
the Printer Inventory, see z/OS Infoprint Server
Operation and Administration.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API0827E jobname.identifier lu-name — LU was
improperly defined in VTAM definition
decks.

Explanation: A VTAM error occurred while the ACB
for this LU was being opened. The error indicates that
the VTAM definition statement is not an APPL statement
or that the APPL statement contains an inconsistent
parameter. For more information, see the explanation of
error codes 86 and 104 for the OPEN macro in z/OS
Communications Server: SNA Programming.

System action: NetSpool ignores the printer LU and
does not make additional attempts to open the ACB for
the printer LU.

Operator response: Notify the system programmer.
Use the LUNAME ADD command to start the printer LU
when the problem is corrected. For a description of the
LUNAME ADD command, see z/OS Infoprint Server
Operation and Administration.

System programmer response: Make sure that the
LU name parameter in the Printer Inventory is correct
and that an APPL statement exists for that LU name.
For information about creating an APPL statement for
an LU, see z/OS Infoprint Server Operation and
Administration.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API0829E jobname.identifier number LUs are not
recognized by VTAM.

Explanation: The indicated number of LUs are not
recognized by VTAM.

System action: NetSpool periodically (every 60
seconds) attempts to open the LUs.

Operator response: Make sure the LUs are defined to
VTAM and activated.

System programmer response: Make sure the
LUCLASS parameter on the EXEC statement for
NetSpool specifies the correct set of classes. Make sure
the LU names are correct and that APPL statements
exist for the LU names.

For information about the EXEC statement, see z/OS
Infoprint Server Customization. For information about
the Printer Inventory, see z/OS Infoprint Server
Operation and Administration.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API0829E jobname.identifier number LUs are in the
process of being opened or closed.

Explanation: The indicated number of LUs are in the
process of opening or closing.

System action: NetSpool periodically (every 60
seconds) attempts to open the LUs.

Operator response: Make sure the LUs are not
already being used by another application.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API0830E jobname.identifier number LUs are
already in use by another application.

Explanation: A connection request was received for
the indicated number of LUs, which are already active.

System action: NetSpool periodically (every 60
seconds) attempts to open the LUs.

Operator response: Notify the system programmer.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
seconds) attempts to open the LUs.

**Operator response:** Notify the system programmer.

**System programmer response:** Make sure the LUCLASS parameter on the EXEC statement specifies the correct classes. Also, make sure the LUs are not already in use by another application. For more information about the EXEC statement, see [z/OS Infoprint Server Customization](https://www.ibm.com/servers/eserver/zseries/zos/bkserv/infoprint.html)

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API0831E jobname.identifier** number LUs are improperly defined in VTAM definition deck.

**Explanation:** NetSpool attempted to start the indicated number of LUs, but a VTAM error occurred when NetSpool attempted to open the ACBs. The VTAM error indicates that the VTAM definition statement is not an APPL statement or that the APPL statement contains an inconsistent parameter. For more information, see the explanation of error codes 86 and 104 for the OPEN macro in [z/OS Communications Server: SNA Programming](https://www.ibm.com/servers/eserver/zseries/zos/bkserv/infoprint.html)

**System action:** NetSpool ignores the LUs.

**Operator response:** After you correct the problem, use the LUNAME ADD command to start the LUs.

**System programmer response:** Make sure that the LU names in the Printer Inventory are correct and that valid APPL statements exist for these LU names. For information about creating APPL statements for printer LUs, see [z/OS Infoprint Server Operation and Administration](https://www.ibm.com/servers/eserver/zseries/zos/bkserv/infoprint.html)

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API0833E jobname.identifier** VTAM is currently inactive.

**Explanation:** The VTAM support on the system is not active.

**System action:** NetSpool continues to run and periodically (every 60 seconds) retries the VTAM OPEN ACB command.

**Operator response:** Make sure VTAM is active before starting NetSpool.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API0834E jobname.identifier** VTAM is shutting down

**Explanation:** The VTAM support on the system is being shut down.

**System action:** NetSpool continues to run and periodically (every 60 seconds) retries the VTAM OPEN ACB command.

**Operator response:** Reactivate VTAM or stop the NetSpool task.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
API0835E  jobname.identifier  No VTAM exists on the system.

Explanation: The system contains no VTAM support.
System action: NetSpool processing ends abnormally.
Operator response: Notify the system programmer.
System programmer response: Make sure VTAM is installed before running NetSpool.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API0836E  jobname.identifier  An error in allocating storage occurred when opening a VTAM LU.

Explanation: NetSpool encountered a storage allocation error when opening a VTAM printer LU.
System action: NetSpool processing ends abnormally.
Operator response: Notify the system programmer.
System programmer response: Increase the storage allocation for NetSpool on the startup procedure. For more information, see [z/OS Infoprint Server Customization].
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API0838E  jobname.identifier  NetSpool command specified is not valid.

Explanation: The MODIFY NetSpool operator command entered is not valid.
System action: NetSpool waits for another command.
Operator response: Type a valid NetSpool operator command.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API0842I  jobname.identifier  lu-name ADD succeeded.

Explanation: The LU using the lu-name was added to the list of selected printer LUs, and the VTAM ACB was successfully opened.
System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API0843I  jobname.identifier  lu-name PURGE succeeded.

Explanation: The printer LU named lu-name was purged from the list of printer LUs, and the VTAM ACB was successfully closed.
System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API0850I  jobname.identifier  Command accepted

Explanation: The operator entered a valid operator command, and NetSpool will do the requested function.
System action: NetSpool ends processing if the operator entered the QUIT or KILL command.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API0900E jobname.identifier Load of module CEEPIPI failed. Abend code = code Abend reason code = reason code**

**Explanation:** The NetSpool LOAD of the module CEEPIPI failed.

**System action:** NetSpool ends processing abnormally.

**Operator response:** None.

**System programmer response:** Look up the system abend code given in the message. Determine the reason that the LOAD failed and correct the problem. A STEPLIB to the SCEERUN library that contains CEEPIPI might need to be added to the NetSpool startup procedure. For information about the abend code, see [z/OS MVS System Codes](https://www.ibm.com/docs/en/zos?topic=systems-codes). For information about the load module, see [z/OS UNIX System Services Messages and Codes](https://www.ibm.com/docs/en/zos?topic=unix-messages).

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API0901E jobname.identifier CEEPIPI Init-Sub call failed. Return code = return code**

**Explanation:** The NetSpool call to CEEPIPI to preinitialize the Language Environment® failed.

**System action:** NetSpool ends processing abnormally.

**Operator response:** None.

**System programmer response:** None.

**System programmer response:** For information about the return value, return code, and reason code, see [z/OS UNIX System Services Programming: Assembler Callable Services Reference](https://www.ibm.com/docs/en/zos?topic=unix-system-services)

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API0902E jobname.identifier ICONV open failed for luname = lu-name. Document codepage = codepage Printer codepage = codepage R15 = callrc**

**Explanation:** The NetSpool call to open an iconv code conversion session failed. The data cannot be converted into PCL data and sent to the printer.

**System action:** NetSpool returns negative response 081C0002 and terminates the job. NetSpool continues processing jobs for other printers.

**Operator response:** None.


**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API0903E jobname.identifier BPX1SDD set_dub_default failed. Return value = return value Return Code = return code Reason Code = reason code**

**Explanation:** The NetSpool call to set_dub_default (BPX1SDD) to set the dub default for the Language Environment failed.

**System action:** NetSpool ends processing abnormally.

**Operator response:** None.

**System programmer response:** For information about the return value, return code, and reason code, see [z/OS UNIX System Services Messages and Codes](https://www.ibm.com/docs/en/zos?topic=unix-messages)


**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
**Automation:** Not applicable.

**API0904E**

```
jobname.identifier  CEEPIPI Language Environment error information: Return code = return code Reason code = reason code Feedback code = feedback code
```

**Explanation:** The C Language Environment returned an error via CEEPIPI. This message is additional information for message API0903E, API0905E, or API0906E.

**System action:** See message API0903E, API0905E, or API0906E.

**Operator response:** None.

**System programmer response:** For information about the return code and reason code, see [z/OS UNIX System Services Messages and Codes](http://www.ibm.com/support/knowledgecenter/SSEPS8_7.1.0/com.ibm.doc.zoslangenv Messages_and_Codes_zx86_64.xml) Sometimes the enclave return code is a C error. There might also be relevant error messages in the Language Environment stdout file, usually SYSPRINT in the NetSpool startup procedure, which will decode the error. Message API0906E might appear. For information about the feedback code, see [z/OS Language Environment Debugging Guide](http://www.ibm.com/support/knowledgecenter/SSEPS8_7.1.0/com.ibm.doc.zoslangenv DebuggingGuide_zx86_64.xml) and [z/OS Language Environment Run-Time Messages](http://www.ibm.com/support/knowledgecenter/SSEPS8_7.1.0/com.ibm.doc.zoslangenv Messages_zx86_64.xml)

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**API0905E**

```
jobname.identifier  ICONV text conversion failed for luname = printerlu. Document codepage = document cp Printer codepage = printer cp R15 = callrc
```

**Explanation:** The NetSpool call to convert data using iconv failed. Data cannot be converted into PCL data. For information about iconv and valid code pages, see [z/OS XL C/C++ Run-Time Library Reference](http://www.ibm.com/support/knowledgecenter/SSEPS8_7.1.0/com.ibm.doc.zoslangenv C/ref_zx86_64.xml) More information about valid code sets is included in [z/OS XL C/C++ Programming Guide](http://www.ibm.com/support/knowledgecenter/SSEPS8_7.1.0/com.ibm.doc.zoslangenv ProgrammingGuide_zx86_64.xml)

**System action:** NetSpool continues processing jobs for other printers.

**Operator response:** None.

**System programmer response:** For information about the R15 and CEEPIPI call_sub return codes, see [z/OS Language Environment Programming Guide](http://www.ibm.com/support/knowledgecenter/SSEPS8_7.1.0/com.ibm.doc.zoslangenv ProgrammingGuide_zx86_64.xml)

Message API0904E is also displayed and gives any Language Environment error codes. There might also be relevant error messages in the Language Environment stdout file, usually SYSPRINT in the NetSpool startup procedure, which will decode the error. Message API0906E might appear.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**API0907E**

```
jobname.identifier  ICONV text conversion failed for luname = printerlu. In_bytesleft = in_bytesleft Out_bytesleft = out_bytesleft Next_unconverted_char = char
```

**Explanation:** This message is additional information for message API0905E.

The code point that could not be converted is next_unconverted_char in this message. The next location in the input buffer and output buffer is also given.
**System action:** See message API0905E.

**Operator response:** None.

**System programmer response:** See message API0905E.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API0908E**

**jobname.identifier**  
errno = errno strerror

**Explanation:** This message is additional information for message API0903E, API0905E, or API0906E. The message is displayed in the C Language Environment and gives the errno for the error encountered. The strerror is the meaning given for the errno.

**System action:** See message API0903E, API0905E, or API0906E.

**Operator response:** None.

**System programmer response:** See message API0903E, API0905E, or API0906E.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API0920E**

**jobname.identifier**  
Return value = return value  
Return code = return code  
Reason code = reason code

**Explanation:** The UNIX socket command failed. The last command issued is (uss-cmd) in the message. The command is a UNIX System Services Assembler Callable Service. If the return value is 'XFFFFFFFF', the errno gives the reason for the error. If the errno is 'X'00000000', the NetSpool daemon aopnd had an error and closed the connection early.

In the message text:

**slu-name**  
The NetSpool LU name of the printer. This is the VTAM secondary LU name.

**uss-cmd**  
Identifies the UNIX socket command.

**errno**  
The value of the errno.

**return value**  
The returned value of the UNIX socket command.

**return code**  
The return code of the UNIX socket command.

**reason code**  
The reason code of the UNIX socket command.

**System action:** NetSpool stops processing the print job.

**Operator response:** None.

**System programmer response:** Look for error messages issued by NetSpool daemon aopnd and correct the problem.

If you receive this message with sock_cmd='CONNECT' repeatedly, the NetSpool daemon might be down. Make sure that netd is specified in the start-daemons attribute in the Infoprint Server configuration file, aopd.conf. Then use the aopstart command or AOPSTART procedure to start the NetSpool daemon.

If errno = 127, you might not have enough sockets available. If you use transforms, the suggested maxsockets value is 200. For more information about maxsockets see [z/OS Infoprint Server Customization](https://www.ibm.com/support/docview.wss?uid=swg27014008).

For information about the socket command in the message, see [z/OS UNIX System Services Programming: Assembler Callable Services Reference](https://www.ibm.com/support/docview.wss?uid=swg27009083).


**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API0921E**

**jobname.identifier**  
A print job failed for NetSpool LU slu-name due to an error in the job attributes: error

**Explanation:** The job was ended because an error in the job attributes was found by the NetSpool daemon aopnd. See messages logged by the NetSpool daemon aopnd for the full message.

In the message text:
API0922E jobname.identifier The path of the base directory in the Infoprint Server configuration file contains an error.

Explanation: NetSpool uses the base directory configured in file aopd.conf. The base directory must be less than 96 characters for NetSpool to correctly connect to the NetSpool daemon aopnetd.

System action: The NetSpool task ends.

Operator response: None.

System programmer response: For information about specifying the base directory in file aopd.conf, see [z/OS Infoprint Server Customization]

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

API0924E jobname.identifier Unix System Service command: uss-cmd failed with errno = ermo, R15 = hex value, Return_value = return value, Return_code = return code, Reason code = reason code, User option = user option.

Explanation: A SELECT command or other z/OS UNIX command failed. The request that failed is uss-cmd in the message. It is a UNIX System Services Assembler Callable Service. The errno value (errno) gives the reason for the error.

In the message text:

uss-cmd Identifies the UNIX System Services command.

errno The value of the errno.

return value The returned value of the UNIX System Services command.

return code The return code of the UNIX System Services command.

reason code The reason code of the UNIX System Services command.

user option The user option of the UNIX System Services command.

System action: NetSpool ends.

Operator response: None.
System programmer response: For information about the uss-cmd in the message, see z/OS UNIX System Services Programming Tools. For information about the errno value (errno) in the message, see z/OS UNIX System Services Messages and Codes.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

API0925E jobname.identifier A print job failed for NetSpool LU slu-name. The socket descriptor returned was too long. Socket Descriptor = socket descriptor value.

Explanation: NetSpool does not create a print job because the socket descriptor for the connection to the NetSpool daemon aopnetd is too big.

In the message text:

slu-name
The NetSpool LU name of the printer. This is the VTAM secondary LU name.

socket descriptor value
The value of the Socket Descriptor.

System action: NetSpool ends the job.

Operator response: None.

System programmer response: NetSpool requires that the socket descriptor be less than 2047.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.


Explanation: The job was ended because NetSpool does not have permission to access the path directory defined in aopd.conf. Message API0920E is also issued.

In the message text:

path
The path of the directory.

System action: NetSpool continues.

Operator response: None.

System programmer response: For information about the uss-cmd in the message, see z/OS UNIX System Services Programming: Assembler Callable Services Reference. For information about the errno value (errno) in the message, see z/OS UNIX System Services Messages and Codes.

These actions might correct the problem:
- Make sure that the base-directory attribute in the Infoprint Server configuration file (aopd.conf) is correct. The default location of the configuration file is /etc/Printsrv/aopd.conf.
- Run the aopsetup EXEC to set permissions. For information about how to run aopsetup, see z/OS Infoprint Server Customization.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API0928E jobname.identifier The failing NetSpool started task Jobname path is: jobname.path.

Explanation: NetSpool could not create file jobname.path for the NetSpool started task.
System action: NetSpool continues.
Operator response: None.
System programmer response: See messages API0927E and API0930E for the reason that the file could not be created.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API0929E jobname.identifier NetSpool cannot access files in base-directory.

Explanation: NetSpool does not have permission to access the base directory in the Infoprint Server configuration file aopd.conf. Messages API0927E and API0928E are also issued.
System action: NetSpool continues.
Operator response: None.
System programmer response: Make sure the user ID associated with the NetSpool started task is a z/OS UNIX user and has permission to read and write to the Infoprint Server base directory. The base directory is configured in the Infoprint Server configuration file aopd.conf. Correct the access problem and then stop and restart the NetSpool task.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API0930E jobname.identifier The NetSpool daemon has not been started. Add netd to the start-daemons attribute in the aopd.conf file.

Explanation: The NetSpool daemon, aopnetd, has not been started. You must start the NetSpool daemon before you start the NetSpool task. Messages API0927E and API0928E are also issued.
System action: NetSpool continues. However, NetSpool cannot receive print data from VTAM applications until the problem is corrected.
User response: Notify the system programmer.
Operator response: None.
System programmer response: Add netd to the values in the start-daemons attribute in the Infoprint Server configuration file, aopd.conf. Then use the aopstart command or AOPSTART procedure to start the NetSpool daemon. After you start the NetSpool daemon, stop and restart the NetSpool task.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API0950E jobname.identifier SCS data stream contains a character that is not valid.

Explanation: NetSpool detected either an unsupported SCS command or data that was not valid in an SCS string. Message API0954I provides additional information about the error.
If message API0954I indicates that character X'19' is not valid, your input data stream is probably a 3270 data stream and not an SCS data stream. Because the NetSpool printer LU is defined as an LU type 1, NetSpool processes the data stream as an SCS data stream. If your data stream is actually a 3270 data stream, you must change the NetSpool LU type to type 0 or type 3 in the VTAM major node definitions and in the application's resource definitions.

System action: NetSpool returns a negative response. If the error was an unsupported SCS command, the sense code returned a response of X'10030000'. If the error was caused by data that was not valid in a DBCS Chapter 3. NetSpool (API) messages and codes 191
string in the SCS data, the sense code returned a response of 'X'10010000'.

**User response:** To determine the error and correct the input data, see the NetSpool SCS appendix in [z/OS Infoprint Server User’s Guide](https://www.ibm.com) and the information from message API0954I.

To help find an error in the input data stream, ask your system programmer to obtain a NetSpool external trace.

If the character that is not valid is 'X'19', change the NetSpool LU type from LU type 1 to LU type 0 or 3 in the VTAM major node definitions and in the application’s resource definitions.

**Operator response:** None.

**System programmer response:** For other errors, obtain a NetSpool external trace to help find an error in the input data stream. For information, see "Starting a NetSpool trace" on page 282 Then view or print the trace using the General Trace Facility (GTF) using event identifier FAC.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**API0951E jobname.identifier SCS control code parameter is missing or not valid.**

**Explanation:** NetSpool detected either an unsupported or a missing parameter for an SCS control code. Message API0954I provides additional information about the error.

**System action:** NetSpool returns a negative response with a sense code of 'X'10030000'.

**User response:** To determine the error and correct the input data, see the NetSpool SCS appendix in [z/OS Infoprint Server User’s Guide](https://www.ibm.com) and the information from message API0954I. To help find an error in the input data stream, ask your system programmer to obtain a NetSpool external trace.

**Operator response:** None.

**System programmer response:** Obtain a NetSpool external trace to help find an error in the input data stream. For information, see "Starting a NetSpool trace" on page 282 Then view or print the trace using the General Trace Facility (GTF) using event identifier FAC.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API0952E jobname.identifier 3270 data stream command or order is not valid.**

**Explanation:** NetSpool detected an unsupported or incorrect command or order in the 3270 data stream. Message API0954I provides additional information about the error.

**System action:** NetSpool returns a negative response with a sense code of 'X'10030000'.

**User response:** To determine the error and correct the input data, see the NetSpool 3270 appendix in [z/OS Infoprint Server User’s Guide](https://www.ibm.com) and the information from message API0954I. To help find an error in the input data stream, ask your system programmer to obtain a NetSpool external trace.

**Operator response:** None.

**System programmer response:** Obtain a NetSpool external trace to help find an error in the input data stream. For information, see "Starting a NetSpool trace" on page 282 Then view or print the trace using the General Trace Facility (GTF) using event identifier FAC.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
API0954I jobname.identifier  Code point: hex-value  
Offset: nnnn  LU: lu-name  

Explanation:  Additional information is provided about the error in the data stream. The code point is the hex value of the data in error. Offset is the decimal offset, if available, of the code point in the request unit (RU). If the offset is not available, nnnn is zero. LU is the printer LU name. A previous message indicates the error.

If the code point that is not valid is X'19', your input data stream is probably a 3270 data stream and not an SCS data stream. Because the NetSpool printer LU is defined as an LU type 1, NetSpool processes the data stream as an SCS data stream. If your data stream is actually a 3270 data stream, you must change the NetSpool LU type to type 0 or type 3 in the VTAM major node definitions and in the application’s resource definitions.

System action:  See a previous error message for the action taken by NetSpool.

User response:  Correct the error indicated in a previous error message. To help find an error in the input data stream, ask your system programmer to obtain a NetSpool external trace.

Operator response:  None.

System programmer response:  Obtain a NetSpool external trace to help find an error in the input data stream. For information, see “Starting a NetSpool trace” on page 282 Then view or print the trace using the General Trace Facility (GTF) using event identifier FAC.

Problem determination:  Not applicable.

Source:  Infoprint Server
Module:  Not applicable.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

API0955E jobname.identifier  Transparent data is incomplete at end of data set. LU: lu-name 

Explanation:  The end of file was reached before the end of the transparent data in the data stream. The transparent data length might be incorrect or the End-of-File rule for this LU might be ending the data set prematurely.

System action:  NetSpool returns a negative response with a sense code of X'10050000'.

User response:  Correct the input data if the transparent data length is incorrect. To help find an error in the input data stream, ask your system programmer to obtain a NetSpool external trace.

Operator response:  None.

System programmer response:  Obtain a NetSpool external trace to help find an error in the input data stream. For information, see “Starting a NetSpool trace” on page 282 Then view or print the trace using the General Trace Facility (GTF) using event identifier FAC.

Problem determination:  Not applicable.

Source:  Infoprint Server
Module:  Not applicable.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

API0956E jobname.identifier  NetSpool attempted to print a line above the top margin. PLU: plu-name  SLU: slu-name  

Explanation:  NetSpool attempted to print a line in an area that is above the line number specified as the top margin.

In the message text, plu-name is the VTAM primary logical unit name, which identifies the VTAM application that submitted the print request. slu-name is the VTAM secondary LU name, which identifies the NetSpool printer LU. The SLU name is the NetSpool LU name specified in the printer definition used to print the job.

System action:  NetSpool stops processing for this data set.

Operator response:  Notify the system programmer.

System programmer response:  Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Problem determination:  Not applicable.

Source:  Infoprint Server
Module:  Not applicable.
Routing code:  Not applicable.
API0957E jobname.identifier  NetSpool attempted to print characters before the left margin column. PLU: plu-name SLU: slu-name

Explanation: NetSpool attempted to print characters in an area that is to the left of the column number specified as the left margin.

In the message text, plu-name is the VTAM primary logical unit name, which identifies the VTAM application that submitted the print request. slu-name is the VTAM secondary LU name, which identifies the NetSpool printer LU. The SLU name is the NetSpool LU name specified in the printer definition used to print the job.

System action: NetSpool stops processing for this data set.

Operator response: Notify the system programmer.

System programmer response: Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

API0959E jobname.identifier  Set Horizontal Format or Set Vertical Format are not specified in the parameters. PLU: plu-name SLU: slu-name

Explanation: The page format parameters do not specify horizontal or vertical format.

In the message text, plu-name is the VTAM primary logical unit name, which identifies the VTAM application that submitted the print request. slu-name is the VTAM secondary LU name, which identifies the NetSpool printer LU. The SLU name is the NetSpool LU name specified in the printer definition used to print the job.

System action: NetSpool stops processing for this data set.

Operator response: Notify the system programmer.

System programmer response: Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

API0960E jobname.identifier  Set Horizontal Format parameter is not valid: Parameter type: type PLU: plu-name SLU: slu-name

Explanation: The parameter type (CNT, LM, RM, or HT) specifies the parameter in error.

In the message text, plu-name is the VTAM primary logical unit name, which identifies the VTAM application that submitted the print request. slu-name is the VTAM secondary LU name, which identifies the NetSpool printer LU. The SLU name is the NetSpool LU name specified in the printer definition used to print the job.

System action: NetSpool stops processing for this data set.

Operator response: Notify the system programmer.

System programmer response: Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
### API0961E jobname.identifier  Set Vertical Format parameter is not valid:  Parameter type: type PLU: plu-name  SLU: slu-name

**Explanation:** The parameter type (CNT, LM, RM, or HT) specifies the parameter in error.

In the message text, **plu-name** is the VTAM primary logical unit name, which identifies the VTAM application that submitted the print request. **slu-name** is the VTAM secondary LU name, which identifies the NetSpool printer LU. The SLU name is the NetSpool LU name specified in the printer definition used to print the job.

**System action:** NetSpool stops processing for this data set.

**Operator response:** Notify the system programmer.

**System programmer response:** Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

### API0963E jobname.identifier  An error occurred while processing a job attribute text string: type PLU: plu-name  SLU: slu-name

**Explanation:** An error occurred while NetSpool was processing the job attribute text string in the data stream. Additional messages explain the error.

In the message text:

**plu-name**

The VTAM primary logical unit name, which identifies the VTAM application that submitted the print request.

**slu-name**

The VTAM secondary LU name, which identifies the NetSpool printer LU. The SLU name is the NetSpool LU name specified in the printer definition used to print the job.

**System action:** NetSpool stops processing for this data set.

**User response:** Correct the application that sends the attribute data in the data stream. To help find an error in the input data stream, ask your system programmer to obtain a NetSpool external trace.

**Operator response:** None.

**System programmer response:** Obtain a NetSpool external trace to help find an error in the input data stream. For information, see "Starting a NetSpool trace" on page 282. Then view or print the trace using the General Trace Facility (GTF) using event identifier FAC.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

### API0962I jobname.identifier  The code point in error is used in 3270 data streams. It is not valid in SCS data streams in the LU type 1 session.

**Explanation:** The code point is not valid for SCS data streams in LU type 1 sessions. The character X'19' is valid only in 3270 data streams.

**System action:** NetSpool returns a negative response.

**User response:** Check the application to see if the output is intended for 3270 data streams instead of SCS data streams.

**Operator response:** None.

**System programmer response:** Change the NetSpool LU type from LU type 1 to LU type 0 or 3 in the VTAM major node definitions and in the application’s resource definitions, or change the application to format the print data for SCS data streams.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

### API0964E jobname.identifier  The continuation field in the job attribute text string is not valid.

**Explanation:** The continuation field in the job attribute text string is not X'F0' or X'F1'. Message API0968I provides additional information about the error.

**System action:** NetSpool stops processing for this data set.

**User response:** Correct the application that sends the attribute data in the data stream. To help find an error in the input data stream, ask your system programmer to obtain a NetSpool external trace.

**Operator response:** None.

**System programmer response:** Obtain a NetSpool external trace to help find an error in the input data stream. For information, see "Starting a NetSpool trace" on page 282. Then view or print the trace using the General Trace Facility (GTF) using event identifier FAC.
stream. For information, see "Starting a NetSpool trace" on page 282. Then view or print the trace using the General Trace Facility (GTF) using event identifier FAC.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**API0965E jobname.identifier** The length field in the job attribute text string is not valid.

**Explanation:** The length field in the job attribute text string is not a valid number. Each digit must be a value between X’F0’ and X’F9’. Message API0968I provides additional information about the error.

**System action:** NetSpool stops processing for this data set.

**User response:** Correct the application that sends the attribute data in the data stream. To help find an error in the input data stream, ask your system programmer to obtain a NetSpool external trace.

**Operator response:** None.

**System programmer response:** Obtain a NetSpool external trace to help find an error in the input data stream. For information, see "Starting a NetSpool trace" on page 282. Then view or print the trace using the General Trace Facility (GTF) using event identifier FAC.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**API0966E jobname.identifier** Hex display of job attribute text string: X’hex-data’.  

**Explanation:** This message is additional information for messages API0964E and API0965E. The header that contains the incorrect continuation field or length field is shown in hexadecimal format.

**System action:** See message API0964E or API0965E.

**User response:** See message API0964E or API0965E.

**Operator response:** None.

**System programmer response:** See message API0964E or API0965E.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**API0966I jobname.identifier** The owner attribute in the job attribute text string is not valid.

**Explanation:** The syntax of the owner attribute in the job attribute text string is not correct. The value might be too long or might be missing. Message API0967I provides additional information about the error.

**System action:** NetSpool stops processing for this data set.

**User response:** Correct the application that sends the attribute data in the data stream. To help find an error in the input data stream, ask your system programmer to obtain a NetSpool external trace.

**Operator response:** None.

**System programmer response:** See message API0966E or API0965E.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

Explanation: The document-codepage attribute in the job attribute text string is not valid.

Explanation: The document codepage attribute syntax is not correct. The attribute value might be too long or might be missing. A message follows that identifies the error.

System action: NetSpool stops processing for this data set.
Operator response: Notify the system programmer.
System programmer response: Correct the data in the data stream.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API0970I NetSpool recovered from an incorrect event counter.

Explanation: NetSpool corrected the number of events in an internal queue. This message can indicate a logic problem in NetSpool.

System action: Processing continues.
User response: Notify the system programmer.
Operator response: Notify the system programmer.
System programmer response: If this message occurs repeatedly, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API0971W NetSpool module APIPPQPD recovered from an unexpected condition. Socket: socket PLU: plu-name SLU: slu-name

Retry action: action-code
Diagnostics: error-information

Explanation: NetSpool module APIPPQPD received an unexpected request for the job. To process the request, it reused an event for a not-ready socket. This message can indicate a logic problem in NetSpool.

If you receive this message together with message API0972W, the same condition caused both messages.

In the message text:
- socket is the number of the UNIX socket in decimal.
- plu-name is the VTAM primary logical unit (LU) name. It identifies the VTAM application program that submitted the print request.
- slu-name is the VTAM secondary logical unit (LU) name. It identifies the NetSpool printer LU. This LU name is specified in the printer definition for the printer.
- action-code is an internal code that identifies the UNIX socket command to be retried.
- error-information is error information in hexadecimal that can help IBM diagnose the problem.

System action: Processing continues.
User response: Notify the system programmer.
Operator response: Notify the system programmer.
System programmer response: If this message occurs repeatedly, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
• slu-name is the VTAM secondary logical unit (LU) name. It identifies the NetSpool printer LU. This LU name is specified in the printer definition for the printer.
• action-code is an internal code that identifies the UNIX socket command to be retried.
• error-information is error information in hexadecimal that can help IBM diagnose the problem.

System action: Processing continues.
User response: Notify the system programmer.
Operator response: Notify the system programmer.
System programmer response: If this message occurs repeatedly, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1001I jobname.identifier lu-name — LU is NOT SELECTED.

Explanation: The indicated VTAM LU is not selected for processing by this instance of NetSpool. Verify that the printer logical unit using this LU name is in an LU class that was started. You can use Infoprint Central or the LUNAME ADD command to add this LU to the list of selected LUs.
System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1002I jobname.identifier lu-name — LU IS STARTED SESSION={ACTIVE | INACTIVE} {PRINTERNAME | POOLNAME}={name} LUTYPE={0 | 1 | 3} PLU={name} EOFRULE={EB | EC | ES | TIMER | STRING}.

Explanation: This message is displayed in response to DISPLAY LUNAME NetSpool operator command. The indicated VTAM LU name is started in NetSpool. The LU is either in a VTAM session or is ready to accept a request to establish a VTAM session. The rest of the message contains information that can help you diagnose problems with NetSpool LUs, VTAM definitions, and VTAM application programs. The information can include:
• SESSION=status
  The indicator of whether the VTAM session with NetSpool is currently established (ACTIVE) or not established (INACTIVE). The session status can help you diagnose problems when you are not sure if a primary logical unit (PLU) has established a session with the NetSpool printer LU.
• PRINTERNAME=printer-definition-name or POOLNAME=printer-pool-definition-name
  The name of the printer definition or printer pool definition for this LU. The printer definition name can help you diagnose problems when you need to determine which printer definition contains the NetSpool items associated with the LU, such as end-of-file rules and formatting options.
• LUTYPE=lu-type
  The type of LU (0, 1, or 3). For active sessions, you see the current LU type. For inactive sessions, you see the LU type of the previous session. If a session
has not been established, you do not see this information. The LU type can help you diagnose problems when you see a NetSpool data stream message or when you are trying to change the page format. NetSpool does not control page formatting for 3270 data streams (LU0 and LU3) or when netspool-formatting=none.

- **PLU=plu-name**
  The name of the primary logical unit. For active sessions, you see the current PLU name. For inactive sessions, you see the PLU name of the previous session. If a session has not been established, you do not see this information. The PLU name can help you diagnose problems when more than one VTAM application prints on the LU and a print request is in error.

- **EOFRULE=rule**
  The End of File rule that NetSpool is using (End-of-bracket (EB), End-of-chain (EC), End-of-session (ES), String, or Timer). The EOF rule can help you diagnose problems when jobs do not close on the spool or when print requests are separated into several jobs.

**System action:** Processing continues.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**API1004I jobname.identifier** Display of LUs in the STARTED state.

**Explanation:** The operator requested the display of all VTAM LUs started by this instance of NetSpool. Subsequent messages display the LUs that are either in a session with a VTAM application or are ready to accept a request from a VTAM application to establish a session. LUs are displayed in the order in which they were activated.

**System action:** Processing continues.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**API1005I jobname.identifier** Display of LUs in the WAITING state.

**Explanation:** The operator requested the display of all LUs that are in the WAITING state. Subsequent messages display the LUs that have been selected but could not be started because either they are not active in VTAM or because they are started by another instance of NetSpool. LUs are displayed in the order in which they were activated.

**System action:** Processing continues.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
API1006I  jobname.identifier  lu-name - LU is STOPPED.

Explanation: The indicated VTAM printer LU is STOPPED because the LUNAME DEL command has previously been displayed. This printer LU will not be used by this instance of NetSpool until an LUNAME ADD command is displayed.

System action: Processing continues.

Operator response: To start the printer LU, activate it in VTAM. To stop the printer LU, enter the LUNAME DEL command. If the printer LU is started by another instance of NetSpool, stop it in the other instance of NetSpool and then activate it in VTAM again. For more information about the operator commands used to start and stop printer LUs, see z/OS Infoprint Server Operation and Administration.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1007I  jobname.identifier  Display of LUs in the STOPPED state

Explanation: The operator requested the display of all printer LUs that are in the STOPPED state. Subsequent messages display the printer LUs that have been stopped by use of the LUNAME DEL command. These printer LUs will not be started by this instance of NetSpool until an LUNAME ADD command is displayed.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1008I  jobname.identifier  Display of SELECTED LUs

Explanation: The operator requested the display of all LUs that are selected by this instance of NetSpool. Subsequent messages display the status of the LUs. The status can be either STARTED or WAITING. For an explanation of the two states, see z/OS Infoprint Server Operation and Administration.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1009E  jobname.identifier  NetSpool is not running APF authorized.

Explanation: NetSpool must be running authorized to execute properly. NetSpool will terminate. The load library for NetSpool must be an APF-authorized library.

System action: NetSpool terminates.

Operator response: None.

System programmer response: Correct the NetSpool load libraries in an APF-authorized library. Also make sure that all libraries in the JOBLIB or STEPLIB are APF-authorized. Restart the NetSpool task.

Problem determination: Not applicable.

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1010E  jobname.identifier  NetSpool was not able to connect to the Printer Inventory.

Inventory return code = retcode,
Inventory reason code = reason code

Explanation: NetSpool must be able to connect to the Printer Inventory specified in the INV=xxxx startup parameter. The return code and reason code that the Printer Inventory Manager display indicate the reason for the failure. For explanations about Printer Inventory Manager return and reason codes, see Chapter 4, "Printer Inventory Manager return codes and reason codes," on page 217.

System action: NetSpool terminates.

Operator response: None.

System programmer response: Correct the Printer Inventory Manager error. Restart the NetSpool task.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1011E jobname.identifier NetSpool was not able to read printer printer-name from the Printer Inventory. Inventory return code = retcode Inventory reason code = reason code

Explanation: NetSpool was not able to read from the Printer Inventory specified in the INV=xxxx startup parameter. The return code and reason code that the Printer Inventory Manager display indicate the reason for the failure. For explanations about Printer Inventory Manager return and reason codes, see Chapter 4, "Printer Inventory Manager return codes and reason codes," on page 217.

System action: NetSpool terminates.
Operator response: None.
System programmer response: Correct the Printer Inventory Manager error. Restart the NetSpool task.

If the error condition persists, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1013E jobname.identifier Unable to access Printer Inventory during NetSpool initialization. NetSpool will terminate.

Explanation: An error occurred while attempting to read from the Printer Inventory during NetSpool initialization.

System action: NetSpool terminates
Operator response: None.
System programmer response: Examine previous NetSpool messages to determine the exact problem with accessing the Printer Inventory.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1014E jobname.identifier NetSpool will continue processing with previously cached printer definitions.

Explanation: An error occurred while attempting to read from the Printer Inventory. NetSpool will attempt to continue processing with previously cached printer definitions. If processing requires new printer definitions, you might experience processing errors.

System action: NetSpool continues processing.
Operator response: None.
System programmer response: Examine previous NetSpool messages to determine the exact problem with accessing the Printer Inventory.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1012E jobname.identifier INV startup parameter was not specified.

Explanation: NetSpool initialization parameter INV was not specified in the PARM field in the EXEC statement in the NetSpool startup procedure.

System action: NetSpool terminates.
Operator response: None.
System programmer response: Add the INV parameter to the PARM field in the EXEC statement in the NetSpool startup procedure and restart the NetSpool task. For more information about the NetSpool startup procedure, see z/OS Infoprint Server Customization.

Problem determination: Not applicable.
API1015I  jobname.identifier  NetSpool access to the inventory has been reestablished.

Explanation: NetSpool access to the Printer Inventory has been reestablished. NetSpool will now be able to access the current printer definitions again.

System action: NetSpool continues processing.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1016E  jobname.identifier  NetSpool was not able to open a query to the Printer Inventory. Inventory return code = retcode Inventory reason code = reason code

Explanation: NetSpool was not able to open a cursor from the Printer Inventory specified in the INV=xxxx startup parameter. The return code and reason code that the Printer Inventory Manager display indicate the reason for the failure. For explanations about Printer Inventory Manager return and reason codes, see Chapter 4, “Printer Inventory Manager return codes and reason codes,” on page 217.

System action: NetSpool terminates if this occurs during initialization. NetSpool will continue processing with the currently cached information from the Printer Inventory if NetSpool has completed initialization processing.
Operator response: None.
System programmer response: Correct the Printer Inventory Manager error. Restart the NetSpool task.
If the error condition persists, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1017E  jobname.identifier  NetSpool was not able to read printer name printer-name from the Printer Inventory. Inventory return code = retcode Inventory reason code = reason code

Explanation: NetSpool was not able to read from the Printer Inventory specified in the INV=xxxx startup parameter. The return code and reason code that the Printer Inventory Manager display indicate the reason for the failure. For explanations about Printer Inventory Manager return and reason codes, see Chapter 4, “Printer Inventory Manager return codes and reason codes,” on page 217.

System action: NetSpool continues processing.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1021I  jobname.identifier  NetSpool initialization is complete.

Explanation: NetSpool initialization is complete. NetSpool is now ready to accept commands and input data streams.

System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1030E  jobname.identifier  LUNAME lu-name is still in use. ADD of LUNAME was rejected.

Explanation: The indicated printer LU is already in use by this instance of NetSpool. The printer LU might
have been assigned to another printer at one time. To
force the LU to be freed from its previous session, enter
the LUNAME PURGE command.

System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1031E jobname.identifier  LUNAME lu-name was
not found in the Printer Inventory. ADD of LUNAME was rejected.

Explanation: The indicated LU name was not found in
the Printer Inventory in use by this instance of NetSpool.
System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1032E jobname.identifier  LUNAME lu-name was
not found. DEL of LUNAME was rejected.

Explanation: The indicated LU name was not found.
System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1033I jobname.identifier  LUNAME lu-name DEL
was successful.

Explanation: The indicated LU name was deleted
from this instance of NetSpool.
System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1034I jobname.identifier  LUNAME lu-name is
still active. The LU is now PENDING CLOSE.

Explanation: The indicated LU name currently has an
active session. It will be closed and deleted when the
session terminates. The LUNAME PURGE command
can be used to force NetSpool to terminate the session
immediately.
The VTAM VARY INACT command can also be used to
deactivate the session. When the LU is inactive, enter
the LUNAME DEL command again.
System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1035I  ADD of LUNAME lu-name was rejected.

Explanation: A previous processing error caused the
LUNAME ADD command to fail.
System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1036I jobname.identifier LUNAME lu-name is not a SELECTED luname. PURGE of LUNAME was rejected.
Explanation: The indicated LU name was not found in the list of active LUs for this instance of NetSpool.
System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1050I jobname.identifier lu-name—LU is PENDING CLOSE.
Explanation: The indicated VTAM LU is pending close. It will be closed when the current session is complete.
System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1051I jobname.identifier No LUs are currently SELECTED.
Explanation: No VTAM LUs are currently selected for processing by this instance of NetSpool. NetSpool automatically selects LUs that were defined in started LU classes. LU classes are started via the LUCLASS parameter on the NetSpool JCL PROC.
System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1052I jobname.identifier No LUs are currently WAITING.
Explanation: No VTAM LUs are currently waiting to be started. All selected LUs are already started.
System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1053I jobname.identifier No LUs are currently STARTED.
Explanation: No VTAM LUs are currently started by this instance of NetSpool. The DISPLAY WAITING command can be used to determine if NetSpool is currently attempting to start any LUs.
System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1054I jobname.identifier No LUs are currently STOPPED.
Explanation: No VTAM LUs currently are in a state of STOPPED by this instance of NetSpool. The DISPLAY WAITING command can be used to determine if NetSpool currently is attempting to start any VTAM LUs.
System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1060I jobname.identifier Tracing is not active.
Explanation: Tracing is not currently active for NetSpool. Use the TRACE ON command to activate internal or external tracing.
System action: Processing continues.
Operator response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1061I jobname.identifier Full tracing is active for program control.
Explanation: Internal and external tracing of NetSpool program control is active.
System action: Processing continues.
Operator response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1062I jobname.identifier Internal tracing is active for program control.
Explanation: Only internal tracing of NetSpool program control is active.
System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1063I jobname.identifier Full tracing is active for all LUs.
Explanation: External and internal tracing of all LUs being processed by NetSpool is active.
System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1064I jobname.identifier Internal tracing is active for all LUs.
Explanation: Only internal tracing of all LUs being processed by NetSpool is active.
System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1065I Full tracing is active for LU lu-name.
Explanation: External and internal tracing is active for the listed LU name.
System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
API1066I jobname.identifier Internal tracing is active for LU lu-name.

Explanation: Only internal tracing is active for the listed LU name.
System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server

API2002E jobname.identifier UNABLE TO CREATE MESSAGE TABLE TOKEN name.

Explanation: Messaging could not create the named token that contains the message table anchor.
System action: Messaging is not available. The task is terminated.
Operator response: Notify the system programmer.
System programmer response: Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API2003I jobname.identifier UNABLE TO RETRIEVE MESSAGE TABLE name.

Explanation: Messaging could not retrieve the named token that contains the message table anchor.
System action: NetSpool terminates.
Operator response: Notify the system programmer.
System programmer response: If the error condition persists, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API2004E jobname.identifier UNABLE TO DELETE MESSAGE TABLE FROM STORAGE name

Explanation: Messaging could not delete the message table from storage during termination.
System action: Termination continues.
Operator response: Notify the system programmer.
System programmer response: Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
Problem determination: Not applicable.
Chapter 3. NetSpool (API) messages and codes

Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API2005E jobname.identifier UNABLE TO DELETE MESSAGE TABLE TOKEN name

Explanation: Messaging could not delete the named token that contains the message table anchor.
System action: Not applicable.
Operator response: Notify the system programmer.
System programmer response: Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API2008E jobname.identifier UNABLE TO OBTAIN nnnn BYTES OF STORAGE FOR MESSAGE DCB.

Explanation: Messaging could not obtain storage below 16 megabytes for the message file DCB.
System action: Messaging terminated.
Operator response: Rerun in a larger region.
System programmer response: If the error condition persists, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API2006E jobname.identifier NETSPOOL INTERNAL ERROR TOKEN function code.

Explanation: An unknown function code was sent to messaging initialization routine. This is an internal error.
System action: The task is terminated.
Operator response: Notify the system programmer.
System programmer response: Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API2007E jobname.identifier UNABLE TO RETRIEVE MESSAGE TABLE TOKEN name

Explanation: Messaging could not retrieve the named token that contains the message table anchor.
System action: Messaging terminated.
Operator response: Notify the system programmer.
System programmer response: Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
Automation: Not applicable.

API2010I  jobname.identifier  UNABLE TO DELETE MESSAGE I/O MODULE FROM STORAGE name

Explanation: Messaging could not delete the message I/O module from storage during termination.

System action: The termination task continues.

Operator response: Notify the system programmer.

System programmer response: Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

API4001E  jobname.identifier  The trace options data set could not be opened.

Explanation: NetSpool could not open the trace options data set. Make sure that the name of the DD statement is correct and refers to the correct data set.

System action: NetSpool processing ends abnormally.

Operator response: Notify the system programmer.

System programmer response: Correct the error and restart the NetSpool task.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

API4002E  jobname.identifier  No data was found in trace options data set.

Explanation: No trace options were found in the trace options data set. Make sure that the correct data set is specified on the TRACEOPT DD statement in the NetSpool startup procedure.

System action: NetSpool processing ends abnormally.

Operator response: Notify the system programmer.

System programmer response: Create a valid data set and specify it in the TRACEOPT DD statement in the NetSpool startup procedure. Then, restart the NetSpool task.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

API4005E  jobname.identifier  A keyword is not valid.

Explanation: A keyword in the trace options data set is not valid. For more information, see Chapter 9, “Using NetSpool diagnostic tools,” on page 281.

System action: If this error occurs during startup of NetSpool, NetSpool ends abnormally.

Operator response: After the system programmer corrects the data set, restart the NetSpool task.

System programmer response: Correct the data set.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

API4006E  jobname.identifier  No value follows the keyword

Explanation: A keyword in the trace options data set does not contain a value after the equal sign. For more information, see Chapter 9, “Using NetSpool diagnostic tools,” on page 281.

System action: If this error occurs during startup of NetSpool, NetSpool ends abnormally.

Operator response: After the system programmer corrects the data set, restart the NetSpool task.

System programmer response: Correct the data set.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
API4007E  jobname.identifier  A list of values ended prematurely.

Explanation:  No matching right parentheses was found for the list of values in the trace options data set. For information about how to code a list of values, see Chapter 9, “Using NetSpool diagnostic tools,” on page 281.

System action:  If this error occurs during startup of NetSpool, NetSpool ends abnormally.

Operator response:  After the system programmer corrects the data set, restart the NetSpool task.

System programmer response:  Add a matching right parenthesis.

Problem determination:  Not applicable.

Source:  Infoprint Server
Module:  Not applicable.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

API4007E  jobname.identifier  The value is too long.

Explanation:  A value for a keyword in the trace options data set exceeds the maximum number of characters allowed. Message API4901E indicates where the error occurred. For more information, see Chapter 9, “Using NetSpool diagnostic tools,” on page 281.

System action:  If this error occurs during startup of NetSpool, NetSpool ends abnormally.

Operator response:  After the system programmer corrects the data set, restart the NetSpool task.

System programmer response:  Correct the data set.

Problem determination:  Not applicable.

Source:  Infoprint Server
Module:  Not applicable.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

API4007E  jobname.identifier  The numeric value is not valid.

Explanation:  A parameter in the trace options data set contains a value that is not numeric or is out of the valid range. Message API4901E indicates where the error occurred. For more information, see Chapter 9, “Using NetSpool diagnostic tools,” on page 281.

System action:  If this error occurs during startup of NetSpool, NetSpool ends abnormally.

Operator response:  After the system programmer corrects the data set, restart the NetSpool task.

System programmer response:  Correct the data set.

Problem determination:  Not applicable.

Source:  Infoprint Server
Module:  Not applicable.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

API4014E  jobname.identifier  Too many values are specified for this keyword.

Explanation:  A keyword in the trace options data set contains too many values. Message API4901E indicates where the error occurred. For more information, see Chapter 9, “Using NetSpool diagnostic tools,” on page 281.

System action:  If this error occurs during startup of NetSpool, NetSpool ends abnormally.

Operator response:  After the system programmer corrects the data set, restart the NetSpool task.

System programmer response:  Correct the data set.

Problem determination:  Not applicable.

Source:  Infoprint Server
Module:  Not applicable.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

API4018E  jobname.identifier  The value contains a character that is not valid.

Explanation:  The value for a parameter in the trace options data set contains an incorrect character. Message API4901E indicates where the error occurred. For more information, see Chapter 9, “Using NetSpool diagnostic tools,” on page 281.

System action:  If this error occurs during startup of NetSpool, NetSpool ends abnormally.
API4021E jobname.identifier  NetSpool could not find a printer definition for member name: printer-name.

Explanation: The printer definition for the indicated printer pool member name was not found in the Printer Inventory in use by this instance of NetSpool.
System action: NetSpool stops processing the data set.
Operator response: Notify the system programmer.
System programmer response: Make sure that the printer pool member name is correct and is included in the Printer Inventory.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API4102E jobname.identifier  GETMAIN failed for trace blocks.

Explanation: Not enough storage is available for NetSpool to provide tracing.
System action: NetSpool processing continues without tracing.
Operator response: Notify the system programmer.
System programmer response: Increase the size on the REGION parameter of the EXEC statement in the NetSpool startup procedure.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API4901I jobname.identifier  Record: nnnn, OFFSET: nn contains the error.

Explanation: NetSpool detected an error in the indicated trace options data set at the indicated offset. A previous message describes the error.
System action: If this error occurs during startup of NetSpool, NetSpool ends abnormally.
Operator response: After the system programmer corrects the data set, restart the NetSpool task.
System programmer response: Correct the data set.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API5000E jobname.identifier  NetSpool found a trace options error.

Explanation: NetSpool has detected an error in the trace options data set or in the TRACE operator command. Subsequent messages provide more specific information about the error.
System action: If this error occurs on the trace options data set during NetSpool initialization, NetSpool terminates abnormally. If this error occurs when the TRACE command is entered from the operator console, tracing of the NetSpool program control is started, but other trace options might not take effect.
Operator response: If the error is in the TRACE command entered from the operator console, correct the error indicated in the subsequent error message. Enter the DISPLAY TRACE NetSpool command to verify the trace status.
System programmer response: If the error is in the trace options data set, correct the error indicated in the subsequent error message and start NetSpool again.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API5001E jobname.identifier  A name following the LUNAME keyword is too long.

Explanation: NetSpool has detected an error in the trace options data set or in the TRACE operator command. An LU name specified with the LUNAME keyword is too long.
System action: If this error occurs on the trace options data set during NetSpool initialization, NetSpool terminates abnormally. If this error occurs when the TRACE command is entered from the operator console, tracing of the NetSpool program control is started, but other trace options might not take effect.
Operator response: If the error is in the TRACE command entered from the operator console, correct the error. Enter the DISPLAY TRACE NetSpool command to verify the trace status.
System programmer response: If the error is in the trace options data set, correct the error indicated in the subsequent error message and start NetSpool again.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
command to verify the trace status.

**System programmer response:** If the error is in the trace options data set, correct the error and start NetSpool again.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**API5002E** jobname.identifier  A parameter specified after the TYPE keyword is not valid.

**Explanation:** NetSpool has detected an error in the trace options data set or in the TRACE operator command. INTERNAL or FULL was not specified after the TYPE keyword.

**System action:** If this error occurs on the trace options data set during NetSpool initialization, NetSpool terminates abnormally. If this error occurs when the TRACE command is entered from the operator console, tracing of the NetSpool program control is started, but other trace options might not take effect.

**Operator response:** If the error is in the TRACE command entered from the operator console, correct the error. Enter the DISPLAY TRACE NetSpool command to verify the trace status.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**API5003I** jobname.identifier  NetSpool tracing is active.

**Explanation:** NetSpool internal tracing is active for the program control and the LUs specified in the trace options.

**System action:** Processing continues.

**Operator response:** Enter the DISPLAY TRACE NetSpool command to verify the trace status.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**API5004I** jobname.identifier  External tracing to GTF has started.

**Explanation:** NetSpool has started tracing externally to GTF for the program control and for the LUs specified in the trace options.

**System action:** Processing continues.

**Operator response:** Enter the DISPLAY TRACE NetSpool command to verify the trace status.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**API5005I** jobname.identifier  Issue the DISPLAY TRACE command to verify NetSpool tracing.

**Explanation:** NetSpool has prompted the operator to enter a DISPLAY TRACE command to verify the trace status of the NetSpool program control and the LUs.

**System action:** Processing continues.

**Operator response:** Enter the DISPLAY TRACE NetSpool command to verify the trace status.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**API5006I** jobname.identifier  External tracing to GTF has stopped.

**Explanation:** NetSpool has stopped tracing externally to GTF for the program control and the LUs, as specified in the trace options with the TRACE OFF operator command.
System action: Processing continues.
Operator response: Enter the DISPLAY TRACE NetSpool command to verify the trace status.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API5007I jobname.identifier GTF return code = retcode
Explanation: GTF has returned a non-zero return code while NetSpool was tracing externally. The return codes are:
4 inactive MVS GTF
8 incorrect length
10 incorrect FID
14 incorrect EID
18 no GTF buffer space
1C incorrect parameter address
20 data paged out
xx unknown GTF return code
System action: NetSpool processing continues. The action depends on the return code. For return codes 18 and 20, tracing continues to GTF. For all other return codes, NetSpool GTF tracing stops.
Operator response: Notify the system programmer.
System programmer response: For more information about the return codes, see [z/OS MVS Diagnosis: Tools and Service Aids](https://pubs.opengroup.org/onlinepubs/009695399/basedocs/zos/index.html).
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API5009E jobname.identifier Trace command is not valid.
Explanation: ON or OFF was not specified with the TRACE operator command.
System action: NetSpool processing continues. Tracing is not started or stopped.
Operator response: Enter the TRACE command with ON or OFF followed by a comma, if other options are specified. If no other options are specified, do not enter any other data on the command line.
System programmer response: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API5010E jobname.identifier lu-name specified in trace options is not being processed by NetSpool.
Explanation: The LU name specified after the LUNAME keyword in the trace options data set or in the TRACE operator command is not SELECTED by this instance of NetSpool. The LU is either not defined in the Printer Inventory or it is not in a “STARTED” or “WAITING” state. For more information about the status of the LUs, see [z/OS Infoprint Server Operation and Administration](https://pubs.opengroup.org/onlinepubs/009695399/basedocs/zos/index.html).
System action: If this error occurs in the trace options data set during NetSpool initialization, NetSpool terminates abnormally. If this error occurs when the
TRACE command is entered from the operator console, tracing of the NetSpool program control is active, but other trace options might not take effect.

**Operator response:** If the error is in the TRACE command entered from the operator console, correct the error. Enter the DISPLAY TRACE NetSpool command to verify the trace status.

**System programmer response:** If the error is in the trace options data set, correct the error and start NetSpool again.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API5011I jobname.identifier** NetSpool tracing has stopped.

**Explanation:** NetSpool has stopped tracing because a TRACE OFF command requested that all tracing be stopped.

**System action:** Processing continues. NetSpool internal and external tracing has stopped for all LUs.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API5012I jobname.identifier** NetSpool tracing for all LUs has stopped.

**Explanation:** NetSpool has stopped tracing because a TRACE OFF command requested that tracing for all LUs be stopped.

**System action:** Processing continues. NetSpool external tracing has stopped for the program control and all LUs.

**Operator response:** Enter the DISPLAY ALL NetSpool command to verify the trace status.

**System programmer response:** Enter the DISPLAY TRACE NetSpool command to verify the trace status.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API5013I jobname.identifier** NetSpool tracing for selected LUs has stopped.

**Explanation:** NetSpool has stopped tracing because a TRACE OFF command requested that tracing for selected LUs be stopped.

**System action:** Processing continues. NetSpool internal and external tracing has stopped for selected LUs.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**System abend code and reason codes**

The system abend code for abends that NetSpool displays is **8C3**.

NetSpool does not attempt to restart after an abend. NetSpool displays a reason code for each abend. Reason codes are listed in **Table 5 on page 213**.

In the event of an abend, you should capture the dump, save the abend information from the operator console, and report the error to the IBM Support Center.

*Table 5. NetSpool abend reason codes*

<table>
<thead>
<tr>
<th>Abend reason code</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>X'0500'</td>
<td>Unable to get storage</td>
</tr>
</tbody>
</table>
Table 5. NetSpool abend reason codes (continued)

<table>
<thead>
<tr>
<th>Abend reason code</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>X'0501'</td>
<td>Problem with Printer Inventory</td>
</tr>
<tr>
<td>X'0502'</td>
<td>Attach of subtask failed</td>
</tr>
<tr>
<td>X'0503'</td>
<td>Latch service failed</td>
</tr>
<tr>
<td>X'0504'</td>
<td>VTAM problem</td>
</tr>
<tr>
<td>X'0505'</td>
<td>Select logic error</td>
</tr>
<tr>
<td>X'0506'</td>
<td>Modeset failed</td>
</tr>
<tr>
<td>X'0507'</td>
<td>Initial building of printer definition block failed</td>
</tr>
<tr>
<td>X'0508'</td>
<td>Initial building of LU block failed</td>
</tr>
<tr>
<td>X'0509'</td>
<td>Incorrect function code in event block</td>
</tr>
<tr>
<td>X'0510'</td>
<td>Incorrect display function code</td>
</tr>
<tr>
<td>X'0511'</td>
<td>Incorrect LU type in session block</td>
</tr>
<tr>
<td>X'0512'</td>
<td>Incorrect PLU type in EOF rules</td>
</tr>
<tr>
<td>X'0513'</td>
<td>Incorrect object type in event block</td>
</tr>
<tr>
<td>X'0514'</td>
<td>Incorrect object type specified in parameter list when building printer definition block</td>
</tr>
<tr>
<td>X'0515'</td>
<td>Unable to find printer definition block to be deleted</td>
</tr>
<tr>
<td>X'0516'</td>
<td>SCS page format is not valid. It does not start with 2BC1 or 2BC2</td>
</tr>
<tr>
<td>X'0517'</td>
<td>Cannot load CEEPIPI</td>
</tr>
<tr>
<td>X'0518'</td>
<td>CEEPIPI isub failed</td>
</tr>
<tr>
<td>X'0519'</td>
<td>CEEPIPI call failed</td>
</tr>
<tr>
<td>X'0520'</td>
<td>CEEPIPI delete failed</td>
</tr>
<tr>
<td>X'0521'</td>
<td>conv open failed</td>
</tr>
<tr>
<td>X'0522'</td>
<td>conv conv failed</td>
</tr>
<tr>
<td>X'0523'</td>
<td>conv close failed</td>
</tr>
<tr>
<td>X'0524'</td>
<td>Dubthread failed</td>
</tr>
<tr>
<td>X'0525'</td>
<td>Dubprocess failed</td>
</tr>
<tr>
<td>X'0526'</td>
<td>Logic error during PCL conversion</td>
</tr>
<tr>
<td>X'0527'</td>
<td>Logic error during line data conversion</td>
</tr>
<tr>
<td>X'0528'</td>
<td>UNIX SELECT/SELECTEX error</td>
</tr>
</tbody>
</table>

SNA sense codes

When an error occurs on an input request, NetSpool returns a negative response or, in the case of a BIND request, NetSpool might return an UNBIND request. The negative response and the UNBIND request both include a sense code. These sense codes fall into two categories:

- General-use sense codes, which are described in z/OS Communications Server, IP and SNA Codes. Also, see the NetSpool SCS appendix in z/OS Infoprint Server User's Guide for information about SCS data stream errors that result in SNA sense codes.
- Implementation-specific sense codes, which are described in Table 6 on page 215 and in Table 7 on page 215.
Table 6. SNA sense codes for Function Management Data (FMD). NetSpool sends these sense codes on the response to an FMD (normal print data) request.

<table>
<thead>
<tr>
<th>Sense code</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>X'08120000'</td>
<td>Request not executable. The attempt to obtain storage with a GETMAIN macro failed.</td>
</tr>
<tr>
<td>X'081C0002'</td>
<td>Request not executable. An internal logic error was detected in a NetSpool printer LU.</td>
</tr>
<tr>
<td>X'081C0102'</td>
<td>Request not executable. The attempt to allocate an output data set on the JES spool failed.</td>
</tr>
<tr>
<td>X'081C0103'</td>
<td>Request not executable. An error was detected in the printer definition.</td>
</tr>
<tr>
<td>X'081C0106'</td>
<td>Request not executable. The attempt to close a data set failed.</td>
</tr>
<tr>
<td>X'081C0203'</td>
<td>Request not executable. An unexpected return code was returned by a NetSpool module.</td>
</tr>
<tr>
<td>X'081C0220'</td>
<td>Request not executable. An error was detected in the page-format information for this LU. Correct the Printer Inventory printer definition for this LU.</td>
</tr>
<tr>
<td>X'081C0301'</td>
<td>Request not executable. The attempt to load exit APIPPTD1 or APIUBF3 failed.</td>
</tr>
<tr>
<td>X'081C0302'</td>
<td>Request not executable. The attempt to load exit APIPPTD2 failed.</td>
</tr>
<tr>
<td>X'081C0303'</td>
<td>Request not executable. The attempt to load exit APIPPTD1 or APIUBF3 failed, because of an abend in the exit.</td>
</tr>
<tr>
<td>X'081C0304'</td>
<td>Request not executable. The attempt to load exit APIPPTD2 failed, because of an abend in the exit.</td>
</tr>
<tr>
<td>X'081C0305'</td>
<td>Request not executable. The attempt to load exit APIUGEX failed.</td>
</tr>
<tr>
<td>X'081C0306'</td>
<td>Request not executable. The attempt to load exit APIUGEX failed due to an abend in the exit.</td>
</tr>
<tr>
<td>X'081C0307'</td>
<td>Request not executable. The job attribute text string contained an error.</td>
</tr>
</tbody>
</table>

Table 7. SNA sense codes for BIND. NetSpool sends these sense codes on a BIND response or an UNBIND request when NetSpool rejects a BIND.

<table>
<thead>
<tr>
<th>Sense code</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>X'081C0190'</td>
<td>Request not executable. An error was detected in the end-of-file (EOF) rules information for this printer LU. Correct the Printer Inventory printer definition for this LU.</td>
</tr>
<tr>
<td>X'081C0192'</td>
<td>An installation-written exit, either APIPPTD1 or APIPPTD2, requested that the session be terminated.</td>
</tr>
</tbody>
</table>
Chapter 4. Printer Inventory Manager return codes and reason codes

This topic lists the return codes and reason codes that the Printer Inventory Manager sends to the other Infoprint Server components. These codes can help you determine why another component could not interface properly with the Printer Inventory Manager.

Where applicable, possible solutions are suggested. If no response is given, contact your service representative at the IBM Support Center, or use your electronic link with IBM for assistance.

Table 8. Printer Inventory Manager return codes

<table>
<thead>
<tr>
<th>Return code</th>
<th>Meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decimal</td>
<td>Hexadecimal</td>
</tr>
<tr>
<td>4</td>
<td>X’4’</td>
</tr>
<tr>
<td>8</td>
<td>X’8’</td>
</tr>
<tr>
<td>12</td>
<td>X’C’</td>
</tr>
<tr>
<td>16</td>
<td>X’10’</td>
</tr>
</tbody>
</table>

Table 9. Printer Inventory Manager reason codes

<table>
<thead>
<tr>
<th>Reason code</th>
<th>Meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decimal</td>
<td>Hexadecimal</td>
</tr>
<tr>
<td>4</td>
<td>X’4’</td>
</tr>
<tr>
<td>8</td>
<td>X’8’</td>
</tr>
<tr>
<td>12</td>
<td>X’C’</td>
</tr>
<tr>
<td>16</td>
<td>X’10’</td>
</tr>
<tr>
<td>20</td>
<td>X’14’</td>
</tr>
<tr>
<td>24</td>
<td>X’18’</td>
</tr>
<tr>
<td>28</td>
<td>X’1C’</td>
</tr>
<tr>
<td>32</td>
<td>X’20’</td>
</tr>
<tr>
<td>36</td>
<td>X’24’</td>
</tr>
<tr>
<td>40</td>
<td>X’28’</td>
</tr>
<tr>
<td>44</td>
<td>X’2C’</td>
</tr>
<tr>
<td>48</td>
<td>X’30’</td>
</tr>
<tr>
<td>52</td>
<td>X’34’</td>
</tr>
<tr>
<td>134610948</td>
<td>X’08060004’</td>
</tr>
<tr>
<td>nnnnnnnnnn</td>
<td>X’0x0yyyy’</td>
</tr>
</tbody>
</table>
**Part 2. Diagnosis**

**Chapter 5. Using the Infoprint Server diagnostic process**
- Determining which component to troubleshoot ........................................ 223
  - Error message prefix ................................................................. 223
  - SNA sense code ............................................................................. 224
  - Printer Inventory Manager return code and reason code ...................... 224
  - Application sending the print job ................................................... 224
  - Problem detected on JES spool ....................................................... 224
- Diagnosis roadmap .............................................................................. 225
- Detecting printer definition errors ........................................................ 226
  - Identifying which printer definition is involved in VTAM applications ...... 226
  - Querying printer definitions ............................................................ 227
  - Message logs .................................................................................. 227
- Finding abend information, system dumps, and messages ....................... 227
- Checking permissions settings .............................................................. 229
- Common Infoprint Server problems ...................................................... 232
- Diagnosing problems with z/OS UNIX sendmail ................................... 236
- Diagnosing problems in Infoprint Central ............................................. 238

**Chapter 6. Building a keyword string**
- Preparing to build the keyword string .................................................... 241
- The keywords .................................................................................... 241
  - Component identification number ..................................................... 243
    - Procedure ...................................................................................... 244
  - Type-of-failure keyword .................................................................... 244
    - ABENDx ....................................................................................... 245
      - Procedure .................................................................................. 245
    - LOOP ............................................................................................. 245
      - Procedure .................................................................................. 245
    - WAIT ............................................................................................. 246
      - Procedure .................................................................................. 246
    - MSGx ............................................................................................ 246
      - Procedure .................................................................................. 246
    - INCORROUT .................................................................................. 247
      - Procedure .................................................................................. 247
    - PERFM ........................................................................................... 247
      - Procedure .................................................................................. 247
    - DOC ............................................................................................... 248
      - Procedure .................................................................................. 248
  - Module keyword ................................................................................. 248
    - Procedure ...................................................................................... 248
  - INCORROUT modifier keywords ........................................................ 249
    - Procedure ...................................................................................... 249
  - Version, release, and maintenance level keywords .................................. 250
    - Procedure ...................................................................................... 250
- Search argument procedure .................................................................... 251
- Preparing APARs .................................................................................. 251

**Chapter 7. Using Infoprint Server diagnostic tools**
- Submitting APARs ................................................................................ 255
- Tracing Infoprint Server ........................................................................ 255
- Tracing Infoprint Server daemons ........................................................ 257
  - Examples ........................................................................................... 258

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These topics describe the diagnostic tools available for troubleshooting problems in Infoprint Server.
Chapter 5. Using the Infoprint Server diagnostic process

If you have problems with Infoprint Server, use these topics before calling your IBM service representative:

- "Determining which component to troubleshoot" helps you narrow the source of the problem
- "Diagnosis roadmap" on page 225 helps you match functions to their components
- "Detecting printer definition errors" on page 226 helps you narrow the source of a printer definition error, such as a missing or incorrect parameter
- "Finding abend information, system dumps, and messages" on page 227 helps you find information that your IBM service representative might ask you to locate
- "Checking permissions settings" on page 229 helps you determine if you have a problem with permissions
- "Common Infoprint Server problems" on page 232 helps you correct common problems
- "Diagnosing problems with z/OS UNIX sendmail" on page 236 helps you with sendmail
- "Diagnosing problems in Infoprint Central" on page 238 helps you with Infoprint Central

Your IBM service representative will provide further assistance.

Determining which component to troubleshoot

The components that make up Infoprint Server work together and separately to process and print data.

When data is not processed as expected (for example, output does not format as expected, or separator pages do not print as expected, or printer definitions cannot be accessed), it might not always be clear which components of Infoprint Server are involved. Finding the source of the problem usually requires figuring out which component of Infoprint Server to address. If you can isolate the correct component, you can more easily collect the messages, traces, and dumps that let your IBM service representative address your problem.

This section can help you do some preliminary diagnosis work by helping you identify the Infoprint Server component or components that you should concentrate your efforts on.

Error message prefix

If an error message is displayed, the message prefix identifies which component sent the message:

<table>
<thead>
<tr>
<th>This message prefix:</th>
<th>Comes from this component:</th>
<th>For messages format, see:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANFM</td>
<td>IP PrintWay basic mode</td>
<td>&quot;ANFM message format&quot; on page 3</td>
</tr>
<tr>
<td>AOP</td>
<td>Infoprint Server (including IP PrintWay extended mode)</td>
<td>&quot;AOP message format&quot; on page 77</td>
</tr>
<tr>
<td>API</td>
<td>NetSpool started task</td>
<td>&quot;API message format&quot; on page 179</td>
</tr>
</tbody>
</table>
SNA sense code

If an SNA sense code is displayed at the system operator console, NetSpool might be involved. Usually a NetSpool message is sent along with the sense code. For more information about SNA sense codes, see “SNA sense codes” on page 214.

Printer Inventory Manager return code and reason code

Some messages that NetSpool, Print Interface, and IP PrintWay send are followed by Printer Inventory Manager return and reason codes. The message text and codes describe a problem in the interface between the component and the Printer Inventory. For more information about Printer Inventory Manager return and reason codes, see Chapter 4, “Printer Inventory Manager return codes and reason codes,” on page 217.

Application sending the print job

The system administrator might need to determine which application sent the print job to the JES spool. If the job was sent from:
- A VTAM application, such as CICS or IMS, do NetSpool diagnosis.
- The local z/OS system, a Windows application, or a remote client using any of these TCP/IP printing protocols, do Print Interface diagnosis:
  - Line printer requester (LPR) to line printer daemon (LPD)
  - Internet Printing Protocol (IPP)
  - Server Message Block (SMB) protocol, supported by Windows

Problem detected on JES spool

To determine if the problem is in NetSpool or Print Interface (as opposed to IP PrintWay), examine the print job on the JES spool. If you detect problems with the print job while it is still on the JES spool, the problem probably is in NetSpool or Print Interface. Such an examination can isolate a number of NetSpool problems such as incorrect formatting or incorrect allocation parameters.

For Print Interface, you can also identify which component sent the data set by looking at the name of the SYSDUT data set. The name of the Print Interface startup procedure appears as the first qualifier of the data set name. The filename appears in the data set name, which is useful when printing from remote systems through Print Interface with the LPR to LPD protocol (aoplpd) or with the Internet Printing Protocol. However, when printing with z/OS UNIX commands, the jobname is the user ID.

Table 10 shows how NetSpool identifies print jobs on the JES spool.

Table 10. NetSpool print job identification

<table>
<thead>
<tr>
<th>This information:</th>
<th>Comes from this area:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job ID</td>
<td>Infoprint Server</td>
</tr>
<tr>
<td>Job name</td>
<td>One of these:</td>
</tr>
<tr>
<td></td>
<td>1. <strong>sysout-job-name</strong> job attribute embedded in print data</td>
</tr>
<tr>
<td></td>
<td>2. <strong>owner</strong> job attribute embedded in print data</td>
</tr>
<tr>
<td></td>
<td>3. <strong>Default owner</strong> field in printer definition</td>
</tr>
<tr>
<td></td>
<td>4. NetSpool started task member name</td>
</tr>
<tr>
<td>Owner attribute in</td>
<td>One of these:</td>
</tr>
<tr>
<td>Infoprint Central,</td>
<td>1. <strong>owner</strong> job attribute embedded in print data</td>
</tr>
<tr>
<td>Infoprint Server print</td>
<td>2. <strong>Default owner</strong> field in printer definition</td>
</tr>
<tr>
<td>job view</td>
<td>3. ID of user who started Infoprint Server daemons</td>
</tr>
</tbody>
</table>
Table 10. NetSpool print job identification (continued)

<table>
<thead>
<tr>
<th>This information:</th>
<th>Comes from this area:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Owner</strong> field in Infoprint Central, JES print job view</td>
<td>ID of user who started Infoprint Server daemons</td>
</tr>
<tr>
<td><strong>JES data set name</strong>: user ID field</td>
<td>ID of user who started Infoprint Server daemons</td>
</tr>
<tr>
<td><strong>JES data set name</strong>: job name field</td>
<td>One of these: 1. <em>sysout-job-name</em> job attribute embedded in print data 2. <em>owner</em> job attribute embedded in print data 3. Default <em>owner</em> field in printer definition 4. NetSpool started task member name</td>
</tr>
<tr>
<td><strong>JES data set name</strong>: job ID field</td>
<td>System-generated</td>
</tr>
<tr>
<td><strong>JES data set name</strong>: data set name field</td>
<td>System-generated</td>
</tr>
<tr>
<td><strong>JES data set name</strong>: data set suffix field</td>
<td>One of these: 1. <em>sysout-dataset-name</em> job attribute embedded in print data 2. VTAM PLU name of application that sent the data</td>
</tr>
</tbody>
</table>

**Diagnosis roadmap**

When you encounter a problem with Infoprint Server, your service representative in the IBM Support Center might request that you trace one or more components to provide additional information to help diagnose the difficulty.

There are several ways to trace Infoprint Server. Depending on which component or components you want to trace, you might need to do one or more of the procedures because different Infoprint Server components use different trace facilities.

This section can help you determine which diagnosis procedures you need to do, based on which function or component is causing a problem.

Table 11 lists the functions provided by Infoprint Server, the Infoprint Server components that you might want to trace, and where you can find information that describes the required tasks.

**Table 11. Infoprint Server functions and corresponding Infoprint Server components**

<table>
<thead>
<tr>
<th>Function</th>
<th>Components</th>
<th>See page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work with print jobs, printers, and NetSpool logical units (LUs); display printer definitions; check system status.</td>
<td>Infoprint Central</td>
<td>238 260</td>
</tr>
<tr>
<td>Build a Printer Inventory of printer definitions and components.</td>
<td>Printer Inventory Manager</td>
<td>255</td>
</tr>
<tr>
<td>Print from remote systems with one of these TCP/IP protocols:  • LPR to LPD  • Internet Printing Protocol (IPP)  • Server Message Block (SMB)</td>
<td>Printer Inventory Manager, Print Interface</td>
<td>255</td>
</tr>
<tr>
<td>Print from local system with z/OS UNIX commands or with the AOPPRINT JCL procedure.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chapter 5. Using the Infoprint Server diagnostic process 225
Table 11. Infoprint Server functions and corresponding Infoprint Server components (continued)

<table>
<thead>
<tr>
<th>Function</th>
<th>Components</th>
<th>See page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print from VTAM applications such as CICS and IMS.</td>
<td>Printer Inventory Manager, NetSpool started task, NetSpool daemon</td>
<td>255 281</td>
</tr>
<tr>
<td>Print on printers in a TCP/IP network using one of these TCP/IP protocols:</td>
<td>Printer Inventory Manager, IP PrintWay basic mode, IP PrintWay extended mode</td>
<td>255 265</td>
</tr>
<tr>
<td>- LPR to LPD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Direct sockets printing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Internet Printing Protocol (IPP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Print on VTAM-controlled printers.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Send print output to e-mail destinations.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>View printer characteristics and status of PSF printers that do not have internal SNMP agents.</td>
<td>Printer Inventory Manager, SNMP subagent</td>
<td>255</td>
</tr>
<tr>
<td>Print documents on a z/OS printer from a Windows system with the Infoprint Port Monitor.</td>
<td>Infoprint Port Monitor, Printer Inventory Manager, Print Interface</td>
<td>255</td>
</tr>
<tr>
<td>Store system configuration information in the Printer Inventory for PSF.</td>
<td>Printer Inventory Manager</td>
<td>255</td>
</tr>
</tbody>
</table>

Detecting printer definition errors

The components of Infoprint Server use the printer definitions in the Printer Inventory to format and direct print data sets into output.

You can identify and narrow your diagnosis of printer definitions several ways, depending on the failing component or on the interface you choose to use.

Identifying which printer definition is involved in VTAM applications

For print jobs that VTAM applications (using NetSpool) sent, you can determine which printer definition is involved through the LU names identified in messages and other output.

The primary LU (PLU), which is the application’s LU name, appears in messages and in the SYSOUT data set. The secondary LU (SLU), which is the printer’s LU name, appears in messages and in the printer definition. Both the PLU and the SLU also appear in the VTAM definitions.

The printer name in the printer definition being used by NetSpool also can appear in error messages.

To check which Printer Inventory NetSpool is using, see the INV= parameter on the NetSpool startup procedure JCL for the instance of NetSpool involved in the problem.

You can use Infoprint Central to find jobs. On the Work with Print Jobs panel, enter the LU name in the Submitted to field. For more information, see the online help for Infoprint Central and [z/OS Infoprint Server Operation and Administration](#).
You can use the DISPLAY command with LUNAME, SELECTED, or STARTED to see diagnostic information, including the printer name. This can help you diagnose problems with NetSpool LUs. For more information, see z/OS Infoprint Server Operation and Administration.

For more information about the NetSpool startup procedure, see z/OS Infoprint Server Customization.

For more information about NetSpool LU names and Printer Inventory printer definitions, see z/OS Infoprint Server Operation and Administration.

**Querying printer definitions**

To query printer definitions (for example, to make sure a printer definition has the correct LU class identified or the correct NetSpool end-of-file information), use the Infoprint Server ISPF panels or the Printer Inventory Definition Utility (PIDU) commands. For more information about InfoPrint Manager interfaces, see z/OS Infoprint Server Operation and Administration.

**Message logs**

The message logs are:

**Infoprint Server common message log**

Contains messages from all the components of Infoprint Server except for IP PrintWay basic mode and Infoprint transforms.

In the Infoprint Server configuration file (aopd.conf), you can specify how many days worth of messages to keep in the common message log. For information, see z/OS Infoprint Server Customization.

Infoprint Central lets authorized users view messages in the common message log for selected print jobs and IP PrintWay extended mode printers. In addition, Infoprint Server administrators can use the z/OS UNIX aoplogu command to select messages in a particular time range and copy them to a file or view them on the terminal. For information about the aoplogu command, see z/OS Infoprint Server Operation and Administration.

**IP PrintWay message log**

Contains relevant messages whenever IP PrintWay basic mode encounters printer definition problems.

**Finding abend information, system dumps, and messages**

This section shows, in general, where to find abend information, system dumps, and messages that the IBM service representative might ask you to locate. The exact locations depend on your particular installation and how jobs were submitted. In addition to this section, see Chapter 7, “Using Infoprint Server diagnostic tools,” on page 255.

Table 12 on page 228 shows, in general, where to find the abend information and system dumps that the IBM service representative might ask you to locate. However, dumps might not be available if Dump Analysis and Elimination (DAE) suppressed them.
<table>
<thead>
<tr>
<th>General location of abend information and system dumps</th>
<th>Areas and conditions</th>
<th>Notes®</th>
</tr>
</thead>
<tbody>
<tr>
<td>Console log</td>
<td>All Infoprint Server components.</td>
<td></td>
</tr>
<tr>
<td>/var/Printsrv directory</td>
<td>This is the default base directory for Infoprint Server.</td>
<td>Your installation might have specified a different base directory in the base-directory attribute in the Infoprint Server configuration file, aopd.conf.</td>
</tr>
<tr>
<td>The current working directory</td>
<td>You entered a z/OS UNIX command.</td>
<td>Examples: afp2pdf, lp, pidu, remotexf</td>
</tr>
<tr>
<td>The home directory</td>
<td>You ran the AOPBATCH or AOPPRINT JCL procedure.</td>
<td></td>
</tr>
<tr>
<td>The Language Environment CEEDUMP directory</td>
<td>Language Environment writes CEEDUMPs to one of these directories, in the specified order: 1. The directory found in the _CEE_DMPTARG environment variable, if found 2. The current working directory, if the directory is not the root directory (/) and if the Language Environment can write to the directory 3. The directory found in the TMPDIR environment variable, which indicates the location of a temporary directory if it is not /tmp 4. The /tmp directory</td>
<td>You can specify the _CEE_DMPTARG and TMPDIR environment variables in these locations: • The aopstart EXEC • Your .profile or the /etc/profile file, if you entered a z/OS UNIX command • The data set indicated in the STDENV DD statement in the AOPBATCH JCL procedure • The transform configuration file, aopxd.conf</td>
</tr>
<tr>
<td>/var/Printsrv/xfd and /var/Printsrv/xf_sockets subdirectories</td>
<td>You used Infoprint transforms.</td>
<td>For the PDF to AFP and the PostScript to AFP transform daemon (ps2afpd), the Language Environment cannot write to the current working directory. Therefore, it writes the dump to the /tmp directory unless you have specified the _CEE_DMPTARG or TMPDIR environment variable in the aopstart EXEC or in the transform configuration file, aopxd.conf.</td>
</tr>
<tr>
<td>InfoPrint Manager server</td>
<td>You used InfoPrint Manager.</td>
<td></td>
</tr>
<tr>
<td>InfoPrint Transform Manager for Linux server</td>
<td>You used InfoPrint Transform Manager for Linux.</td>
<td></td>
</tr>
</tbody>
</table>

Table 13 on page 229 shows, in general, where to find the messages that the IBM service representative might ask you to locate.
Table 13. General location of messages

<table>
<thead>
<tr>
<th>Component</th>
<th>General location of messages</th>
</tr>
</thead>
<tbody>
<tr>
<td>All components not listed below</td>
<td>• Console log</td>
</tr>
</tbody>
</table>
| Coaxial Printer Support | • CEEDUMPs  
| | • Common message log  
| | • Console log |
| Infoprint Central | • /usr/lpp/internet/server_root/logs/httpd-errors.date |
| IP PrintWay basic mode | • Console log  
| | • IP PrintWay message log data set |
| IP PrintWay extended mode | • CEEDUMPs  
| | • Common message log  
| | • Console log |
| ISPF panels | • Messages displayed on panel |
| NetSpool daemon (aopnetd) | • CEEDUMPs  
| | • Common message log  
| | • Console log |
| NetSpool started task | • Common message log  
| | • Console log  
| | • NetSpool message log data set |
| Print Interface | • CEEDUMPs  
| | • Common message log  
| | • Console log |
| Transforms - InfoPrint Manager | • Common message log (one message only)  
| | • Current® working directory  
| | • InfoPrint Manager server |
| Transforms - InfoPrint Server | • CEEDUMPs  
| Transform Manager (except Coaxial Printer Support) | • Common message log (one message only)  
| | • Page at the end of the transformed output  
| | • stderr in /var/Printsrv/xfd and /var/Printsrv/xf_sockets |
| Transforms - InfoPrint Transform Manager for Linux | • Common message log (one message only)  
| | • Current working directory  
| | • InfoPrint Transform Manager log on the Linux system  
| | • Page at the end of the transformed output |

Checking permissions settings

In some cases, you might encounter problems that you can solve by checking permissions settings and by running aopsetup to correct some of the settings. For example, you might have problems with permissions settings when you are moving from a test system to a production system, or when you are reinstalling Infoprint Server. Most permissions are set during the installation process.

In addition, you must run aopsetup in these situations:
- Before you start Infoprint Server daemons for the first time
- Whenever you move to a new z/OS release

Running `aopsetup` changes the permissions settings of these files in directory
`/usr/lpp/Printsrv/bin`:

- aopd
- aoplogu
- aopstart
- aopstop
- hinvu
- pidu
- sdbu

To run `aopsetup`, you run the `aopsetup` shell script. For example, if you defined
group AOPOPER for operators and group AOPADMIN for administrators, enter:

```
/usr/lpp/Printsrv/bin/aopsetup AOPOPER AOPADMIN
```

For more information about `aopsetup` and permissions settings, including the exact
steps and authority needed for running `aopsetup`, see `z/OS Infoprint Server
Customization`.

If your IBM service representative asks you to check permissions settings, you can
use these commands:

- `ls -E /usr/lpp/Printsrv/bin`
- `ls -nE /usr/lpp/Printsrv/bin`
- `ls -E /usr/lpp/Printsrv/lib`
- `ls -nE /usr/lpp/Printsrv/lib`

This section shows sample output from the commands. The samples show the
normal permissions settings of Infoprint Server directories and the files that user ID
0 should own. If you specified the AOPOPER and AOPADMIN groups in `aopsetup`,
your output from the commands should look similar to the sample output.

In the sample output:

- OMVS KERN is the owner ID. This name might be different in your installation.
- OMVSGRP is the group ID. This name might be different in your installation.
- AOPOPER is the RACF group for operators.
- AOPADMIN is the RACF group for administrators.

**Important**: The owner ID must have a UID of 0 (root). The `-n` option on the `ls`
command shows the UID of the owner ID.
Figure 1. Sample output from command ls -E /usr/lpp/Printsrv/bin

Figure 2. Sample output from command ls -nE /usr/lpp/Printsrv/bin

Chapter 5. Using the Infoprint Server diagnostic process 231
Common Infoprint Server problems

Customers have encountered certain common problems using Infoprint Server. These problems have straightforward fixes. If applicable, try these fixes before calling your IBM service representative.

Performance problems when printing to one printer from many printer definitions

Many customers have reported performance problems when printing output through many printer definitions when the Restrict ports field is selected in the printer definitions. Often, message ANFM1103I with errno 48 is found in the ANFMMMSG data set. The problem occurs when the eleven well-known ports 721-731 are exhausted, and TCP/IP enforces a two-minute wait before a port is reused.

To fix the problem, the administrator should deselect the Restrict ports field in the printer definition so that ports 1024 and above can be used. By default, Restrict ports is not selected.

Printing on an HP LaserJet printer

When printing on an HP LaserJet printer, the administrator should specify 8025 in the Line termination field in the printer definition to avoid incorrect output. If this value is not specified, the resulting output problems vary, but the most common is “stair stepping,” where each line is indented further than the previous line.

Lines truncated for PostScript, PCL, and PDF data on the JES3 spool

If a user puts ASCII PostScript, PCL, or PDF data on the JES3 spool...
spool, some data might be lost if you run IP PrintWay basic mode and JES truncates blanks to save spool space. An ASCII @ character is actually X'40' and is used frequently in PostScript.

This problem can happen only if you run JES3 for z/OS V1R4 or lower, or JES2 for z/OS V1R1 or lower:

• To fix this problem in JES3, set TRUNC=NO in the JES3 SYSOUT or BUFFER definition. YES is the default for both fields.
• To fix this problem in JES2, set BLNKTRNC=NO in the JES2 OUTCLASS definition. YES is the default.

Error issued for incorrect print queue name on HP printers with JetDirect cards
Message ANFM1109I with error number 54 (ECONNRESET) can be displayed after an error (such as output bin full). This problem occurs on Hewlett-Packard printers that have the JetDirect card when the Print queue name field in the printer definition is neither TEXT nor RAW. To correct the problem, change the print queue name to either TEXT or RAW.

Incorrect or partial output caused by incorrect printer information
A user might encounter incorrect output, partial or missing output, or partial output followed by a call for user intervention (printer becomes NOT READY). A common cause is a printer definition that specifies a port or port number when a print queue name is required. Specifying a port number implies direct sockets printing, which bypasses LPR/LPD processing, causing the described output errors.

Incorrect or partial output using a transform from AFP
A user might encounter incorrect or partial output if the print process has been interrupted during the generation of print output or an error occurred during print generation that interrupted the transform. This only happens when you are using a command to transform data, such as afp2pdf or pcl2afp, and the transform is interrupted.

Empty file using a transform from AFP
If a transform from AFP produces an empty file, the problem might be that the transform could not find the default font and could not write any error messages. The solution is for the administrator to specify a valid default font in the AOP_CHARS environment variable in the transform configuration file (aopxfd.conf). Also, to help diagnose the problem, the administrator can specify the -F filename option on the transform command to specify an output file for messages. This message file is created in the transform’s working directory. If the problem is a missing default font, the file contains a message about the error.

Cannot print multiple copies
If you have a problem printing multiple copies, deselect the Optimize copies field in the printer definition.

In addition, some line printer daemons do not support multiple copies through the standard LPD convention. The workaround is to use this JCL to generate multiple copies on the JES spool but then route them to the same printer:
//PWAYJOB4 JOB
//STEP1 EXEC PGM=USERA
//OUTDS1 OUTPUT CLASS=E,FORMS=WIDE,DEST=DEPT001
//DD1 DD SYSOUT=(,),OUTPUT=(*.OUTDS1,*.OUTDS1)

The number of JCL refer-backs (*.OUTDS1) is directly related to the number of SYSOUT data sets that are created.

Wrong font parameter passes to an AIX machine (JES3)
In JES3, if you use the Remote PSF LPR option to pass a JCL CHAR$ parameter to an AIX machine as an -ochars parameter, the wrong font name might pass through to AIX. To fix the problem, add U to the WS parameter of the JES3 DEVICE IO statement for that particular printer FSA.

Data set on JES spool never closes or closes after the wrong page
If you specify an incorrect end-of-file rule for a NetSpool job, the data set on the JES spool might never close or might close after the wrong page. Check the end-of-file rule for the printer definition associated with this printer LU, and verify that the rule is suitable for your application. For more information, see z/OS Infoprint Server Operation and Administration.

Error messages BPXF024I and EDC5112I received when starting Infoprint Server daemons
If you start Infoprint Server daemons using the /etc/rc facility, you can receive these error messages:
BPXF024I (BPXOINIT aoplpd: socket(AF_INET,SOCK_STREAM,0) failed in TCPSocket::TCPSocket(int&,int,int) at ./src/tcpsock.cpp 83:
EDC5112I Resource temporarily unavailable. errno2=0x74b30296

This error occurs because UNIX System Services runs commands in the /etc/rc file early in the IPL and TCP/IP might not be completely active before the Infoprint Server daemons start. To correct this problem, you can use the setstack command, which you can download from the Web at
under the section “Tools and Toys”, to make sure that TCP/IP is initialized before the aopstart command runs. For an example of how to specify the setstack command in /etc/rc, see z/OS Infoprint Server Operation and Administration.

lp command successfully spooled but unexpected output occurs
If you run the lp command in a UNIX System Services shell and the file is spooled successfully but the expected output is not generated, one of these might have happened:
• You might be running the wrong lp command. The Infoprint Server lp command is located in the /usr/lpp/Printsrv/bin directory. However, the standard UNIX System Services lp command is located in the /bin directory. You can use the whence command to determine the path of the command. To correct this problem, place the /usr/lpp/Printsrv/bin directory before the /bin directory in your PATH environment variable.
• If you are transforming AFP data, additional error messages might have been sent before the AOP007I message. Examine the message page for error information.
Infoprint Server job identifiers do not display on JES spool

You must use SDSF or a similar product to display the job identifiers that Infoprint Server assigns to output data sets on the JES spool. JES Display commands list internal job identifiers instead of the job identifiers that Infoprint Server assigns.

ISPF panel AOPIPP1 displays message 'NOT AUTHORIZED' and message AOPIM021

If you receive an ISPF message that you are not authorized when you attempt to use the Infoprint Server ISPF panels, your TSO user ID does not have the required RACF authority. Your TSO user ID, or one of the groups to which you belong, must have READ or UPDATE access to the AOP.ADMINISTRATOR profile in the PRINTSRV class. READ access is required to list and browse objects in the Printer Inventory, and UPDATE access is required to add, copy, and edit objects. If the AOP.ADMINISTRATOR profile is not defined, you must have READ access to the AOPADMIN profile in the FACILITY class. Typically, the AOPADMIN group has UPDATE access to the AOP.ADMINISTRATOR profile or READ access to the AOPADMIN profile.

Tip: To display the RACF groups that your user ID belongs to, enter the LISTUSER command. Output from the LISTUSER command is similar to:

USER=JOHN NAME=JOHNNIE, JOHN OWNER=JOHN CREATED=02.161
DEFAULT-GROUP=USER PASSDATE=03.300 PASS-INTERVAL=186
ATTRIBUTES=NONE

If the LISTUSER command displays only one group and the AOPADMIN group is not displayed, the SETROPTS parameter NOGRPLIST might be set. NOGRPLIST causes the LISTUSER command to check only the first group that your user ID belongs to. Other groups are not checked. Therefore, if your user belongs to multiple groups and AOPADMIN is not the first one, the AOPADMIN group is not displayed. A SETROPTS list display shows 'LIST OF GROUPS ACCESS CHECKING IS INACTIVE'. Enter SETROPTS GRPLIST so that the LISTUSER command can check all groups that your user ID belongs to.

Error when printing text data from an AS/400® system

If a user prints a text document from an AS/400 system using a workstation customization object of QSYS/QWPDEFAULT, Print Interface might not recognize the data format as text. One of these errors occur:

- If Other is not selected in the Data format field of the printer definition, Print Interface rejects the job.
- If Other is selected, data does not print as expected.

This problem occurs because the host print transform and workstation customization object QSYS/QWPDEFAULT on the AS/400 system inserts an initial null byte into the print file before sending it to Infoprint Server. The null byte prevents Print Interface from recognizing the data format as text.

To correct this problem, you can use this source to create a workstation customization object that does not insert an initial null byte. This source is the same as for the QSYS/QWPDEFAULT object, but with :INITPRT DATA='00'X. removed. For information...
about how to create a customization object, see Workstation Customization Programming V4R3.

```plaintext
:WSCST DEVCLASS=TRANSFORM.
  :TRNSFMTBL.
  :SPACE
    DATA = '20'X.
  :CARRTN
    DATA = '0D'X.
  :FORMFEED
    DATA = '0C'X.
  :LINEFEED
    DATA = '0A'X.
  :EWS CST.
```

**NetSpool page-formatting values ignored**

NetSpool uses page-formatting values, such as margins and line length, that are specified in the printer definition (in the Processing section under the heading Conversion between SCS and Line), only when NetSpool formats SCS data (for LU type 1 sessions) into line data. NetSpool does not use page-formatting values in the printer definition when it formats 3270 data (for LU type 0 and type 3 sessions) because NetSpool instead uses page-formatting information that is specified in the 3270 Write Control Characters (WCCs) in the 3270 data stream.

To change page-formatting values for 3270 data, the application programmer must change the WCCs generated by the VTAM application that creates the 3270 data.

**Error messages: CSV003I REQUESTED MODULE AOXVTM NOT FOUND and CSV0281 ABEND 806–04**

This message is received when an APPL ID is specified in the IP PrintWay FSS definition in the Printer Inventory, but Coaxial Printer Support is not installed. Coaxial Printer Support must be installed before the APPL ID is specified.

To correct this problem, remove the APPL ID from the Applid field in the FSS definition before you restart IP PrintWay. After you install Coaxial Printer Support, modify the FSS definition to specify the Applid field, and restart the IP PrintWay FSS.

**Diagnosing problems with z/OS UNIX sendmail**

When the e-mail protocol is selected in the printer definition, IP PrintWay uses the z/OS UNIX sendmail function to send the e-mails. Sendmail is a component of z/OS Communications Server. For information about sendmail, see these books and Web site in addition to the Infoprint Server information:

- z/OS Communications Server: IP Configuration Guide describes how to customize sendmail and the other components of z/OS Communications Server that sendmail requires.
- The industry-accepted book Sendmail published by O'Reilly & Associates, Inc. (ISBN 1–56592–222–0) describes the sendmail configuration file, how to set up sendmail aliases files, how to ensure security, and how to debug problems with your sendmail configuration.
- http://www.sendmail.org, a Web site maintained by the Sendmail Consortium as a resource for the freeware version of sendmail.
Sendmail is a very powerful program and can be complicated to set up. Therefore, if e-mails that IP PrintWay sends are not successfully received, verify that sendmail and other components of z/OS Communications Server are set up correctly before you call your IBM service representative.

Tips:

- If sendmail cannot find an alias name, make sure:
  - The alias name is correctly specified in the `/etc/aliases` file.
  - You run the sendmail `newaliases` command after you make any changes to the `/etc/aliases` file:
    ```
    /usr/sbin/newaliases
    ```
  - Alias files are readable by everyone but writeable only by the owner.
  - All directories in the path of an alias file are readable and executable by everyone but writeable only by the owner.

- If an e-mail sent to a remote address is not received, make sure your installation has not set up firewalls that prevent mail from being sent.

- If sendmail cannot deliver an e-mail to a remote address, sendmail notifies the owner of the sendmail alias name. If the remote address is specified directly in the printer definition or if no alias owner is specified, sendmail notifies the user ID assigned to the IP PrintWay startup procedure (IP PrintWay basic mode) or the user ID that started Infoprint Server daemons (IP PrintWay extended mode). This user ID is AOPSTC if your installation assigned the user ID suggested in z/OS Infoprint Server Customization to the IP PrintWay startup procedure (basic mode) or the AOPSTART startup procedure (extended mode).

  To receive mail, use the z/OS UNIX `mail` or `mailx` command. For information about these commands, see z/OS UNIX System Services Command Reference.

- If you do not receive messages from sendmail about undeliverable e-mails on a remote system:
  - Make sure your installation has not set up firewalls that prevent mail from being received by your system.
  - Make sure that sendmail has been started as a daemon. These commands switch to an effective UID of 0 and start sendmail as a daemon that checks its mail queue every minute:
    ```
    su
    /usr/sbin/sendmail -bd -q1m &
    ```
    To use the `su` command, you must be permitted to the BPX.SUPERUSER profile in the FACILITY class in RACF.
  - Ask your administrator to set suitable timeout values in the sendmail configuration file. The timeout values determine how long sendmail waits before it sends warning and failure messages about undeliverable e-mails.

- If an e-mail is not received, try running the `sendmail` command directly from the z/OS UNIX command line. Send a file to the same address list that is specified in the printer definition:
  ```
  sendmail address1,address2 <myfile
  ```

  The `sendmail` command is described in z/OS Communications Server: IP User's Guide and Commands.
Diagnosing problems in Infoprint Central

To set up, customize, and diagnose problems with Infoprint Central, see:
- The [Infoprint Central] information in [z/OS Infoprint Server Customization]
- The “Hints” and “Troubleshooting” sections in the online help for Infoprint Central

Infoprint Central writes error messages to the z/OS HTTP Server log file, `httpd-errors.date`. The default location is `/usr/lpp/internet/server_root/logs/httpd-errors.date`.

The service representative in the IBM Support Center might ask you to run a trace to aid in diagnosing the problem. Be sure to stop the z/OS HTTP Server and then restart it before you run the trace. For more information, see “Tracing Infoprint Server” on page 255.

In addition, try these fixes before calling your IBM service representative:

Table 14. Installation problems with Infoprint Central

<table>
<thead>
<tr>
<th>If you have this problem:</th>
<th>Make sure:</th>
</tr>
</thead>
<tbody>
<tr>
<td>z/OS HTTP Server does not start</td>
<td>Each directive is coded on one line in the HTTP Server <code>httpd.conf</code> and <code>httpd.envvars</code> files.</td>
</tr>
</tbody>
</table>
| Error 404 – Page not found or blank Web page | • The JCL in the z/OS HTTP Server points to the correct `httpd.conf` and `httpd.envvars` files if you start or stop the server from TSO.  
  • The directives are in the correct order and are grouped correctly in the HTTP Server `httpd.conf` file. For information about how to specify directives, see [z/OS Infoprint Server Customization]. |
| JavaScript™ errors                 | The directives are in the correct location in the HTTP Server `httpd.conf` file. For information about how to specify directives, see [z/OS Infoprint Server Customization]. |
| Date or time information is wrong  | The value in the TZ environment variable is set to the same value in the HTTP Server `httpd.envvars` file and in either the `aopstart` EXEC or the AOPSTART procedure. |

Table 15. Browser problems with Infoprint Central

<table>
<thead>
<tr>
<th>If you have this problem:</th>
<th>Make sure:</th>
</tr>
</thead>
<tbody>
<tr>
<td>JavaScript errors or incorrect Web page formats</td>
<td>You use the correct version of a supported Web browser.</td>
</tr>
</tbody>
</table>
| Incorrect or outdated information | • You customize the settings in the Web browser to retrieve the latest pages from the Web so that the Infoprint Central refresh function works correctly.  
  • You periodically refresh the Infoprint Central Web page to update the latest information. |
| Search criteria not saved          | You enable cookies in the Web browser.                                                                 |
| Unexpected information             | The value in the LC_ALL environment variable is set to the same value in the HTTP Server `httpd.envvars` file and in either the `aopstart` EXEC or the AOPSTART procedure. |
Table 16. Other problems with Infoprint Central

<table>
<thead>
<tr>
<th>If you have this problem:</th>
<th>Do this:</th>
</tr>
</thead>
</table>
| HTTP error or blank Web page | 1. Look in the z/OS HTTP Server log file, httpd-errors.date. If the log contains the message “Address Space Dirty”, the extended attributes that SMP/E set during installation might have been modified. During installation, SMP/E marks the aopcentral.so and aopeapi.dll files program-controlled. Use the z/OS UNIX extattr command to verify that these files are program-controlled:  
   /usr/lpp/Printsrv/lib/aopcentral.so  
   /usr/lpp/Printsrv/lib/aopeapi.dll  
   /usr/lpp/Printsrv/lib/aop.so  
   If you installed Infoprint Server in a directory other than /usr/lpp/Printsrv/lib, display the attributes of these files in that directory. If the problem persists, stop the server and look in the z/OS HTTP Server’s SYSOUT data sets on the HOLD queue for more information.  
   2. Clear the cache from the Web browser. For example, for Microsoft Internet Explorer, select Tools -> Internet Options -> General -> Delete Files -> Delete all offline content. |
| Timeout errors | Narrow the search in Infoprint Central by specifying more precise search values, increase the HTTP Server’s timeout value (OutputTimeout directive), or decrease the maximum number of objects that Infoprint Central displays after a search (AOPLIMIT environment variable). |
| Infinite loop in Netscape with Find Printer Definitions | Widen the Web browser window slightly. |
| Response is slow | • Start a separate z/OS HTTP Server that Infoprint Central uses exclusively.  
• Use the z/OS HTTP Server tuning parameters to tune it. |
| Incorrect national language characters in Location fields | Set the AOPCENTRAL_CODEPAGE environment variable (national language characters are those that are not encoded using the IBM-1047 code page). |
Chapter 6. Building a keyword string

Often a problem you encounter with Infoprint Server is one that other users have reported and that has been fixed. Records of such problems and their fixes are stored in an online database called the IBM Software Support Facility. To search this database, you can construct a keyword string, consisting of a concise series of terms, each of which describes one aspect of the problem. By constructing an accurate keyword string, you can help make the search quick, easy, and reliable.

Preparing to build the keyword string

Before you build a keyword string:

1. Make sure that the problem is in Infoprint Server. If you find that the problem results from a user or configuration error, see one of these for the correct procedure:
   - z/OS Infoprint Server Customization
   - z/OS Infoprint Server Operation and Administration
   - z/OS Infoprint Server User's Guide

2. If Infoprint Server has been changed since you last used it, examine the changes. If you suspect that the problem is due to incompatibilities between your program and the changed Infoprint Server program, note the area in which the incompatibility seems to be.

3. Correct all the problems reported in messages describing incorrect user data or resources.

4. Use the applicable diagnostic aids, such as traces and dumps, that might help you isolate the component that contains the problem. For a description of the aids available for each component of Infoprint Server, see:
   - Chapter 7, “Using Infoprint Server diagnostic tools,” on page 255
   - Chapter 8, “Using IP PrintWay basic mode diagnostic tools,” on page 265
   - Chapter 9, “Using NetSpool diagnostic tools,” on page 281

5. Note the sequence of events that led to the problem. This information might be useful in developing a keyword string and is needed if an authorized program analysis report (APAR) is required.

6. If you suspect a problem in the Infoprint Server program, see Figure 5 on page 243 for an explanation of the procedure for selecting keywords.

The keywords

Each keyword in a keyword string is a word or abbreviation describing one aspect of an Infoprint Server program problem. The first keyword gives the name of the Infoprint Server component in which the problem is thought to have occurred. By searching the IBM Software Support Facility with this keyword, you can find all the
APARs written for that component of Infoprint Server. By adding other keywords to the keyword string, you reduce the number of matches and increase the chances of finding a solution to your specific problem.

A complete string of keywords contains one keyword of each of these types:
- Component identification number
- Type of problem, with qualifiers
- Module or modifier
- Release and maintenance level

If one of these types does not seem to apply to your problem, you can go on to the next type. In general, however, do not start your search until you have a complete string of keywords.

Your search will be most successful if you:
- Use only the keywords presented and described in this topic.
- Spell the keywords exactly as they are spelled here.
- Follow the keyword procedures in the order shown.

Throughout these procedures, each keyword string is highlighted in **bold** type. Each section provides a partial keyword string describing what is known so far about the problem. For some keywords, you might need to add a specific piece of information, for example, by replacing the x of the MSGx keyword with the identifier of the message received. Continue to develop the keyword string until you are instructed to use it as a search argument.

The position of the keywords is not important. However, you do need to separate them with spaces.

The procedure for building and using a keyword string is diagrammed in Figure 5 on page 243. After reviewing this figure, see “Component identification number” on page 243 to begin building a keyword string.
Component identification number

The component identification number is the first keyword in a keyword string. Whenever you suspect that the problem is in a component of Infoprint Server, use the identification number for the affected component of Infoprint Server as the first keyword.

Figure 5. Building and using a keyword string
Procedure

To start a keyword string:

1. Begin the keyword string with the identification number for the Infoprint Server component. This table lists the identification numbers:

Table 17. Component identification numbers

<table>
<thead>
<tr>
<th>For this component or feature</th>
<th>Use this component ID:</th>
</tr>
</thead>
<tbody>
<tr>
<td>All components not listed below</td>
<td>5647A01OP</td>
</tr>
<tr>
<td>Coaxial Printer Support</td>
<td>5697F5103</td>
</tr>
<tr>
<td>IP PrintWay basic mode component</td>
<td>569504004</td>
</tr>
<tr>
<td>IP PrintWay extended mode</td>
<td>5647A01OP</td>
</tr>
<tr>
<td>NetSpool component (started task)</td>
<td>56950402</td>
</tr>
<tr>
<td>NetSpool component (aopnetd daemon)</td>
<td>5647A01OP</td>
</tr>
</tbody>
</table>

Notes:

a. To determine if IP PrintWay extended mode is running, enter this MVS operator command from the console:
   
   `d a,l`
   
   If aopoutd is active, IP PrintWay extended mode is running.

b. For information about transforms, see the documentation for the transforms.

2. To indicate the type of problem that occurred, see Type-of-failure keyword

Type-of-failure keyword

The type-of-failure keyword identifies the type of program problem. The seven possibilities are:

<table>
<thead>
<tr>
<th>Keyword</th>
<th>Description</th>
<th>See page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABENDx</td>
<td>Abnormal end of Infoprint Server or one of its components</td>
<td>245</td>
</tr>
<tr>
<td>LOOP</td>
<td>Uncontrolled program looping</td>
<td>245</td>
</tr>
<tr>
<td>WAIT</td>
<td>Unexpected program suspension</td>
<td>246</td>
</tr>
<tr>
<td>MSGx</td>
<td>An error signaled by or associated with messages</td>
<td>246</td>
</tr>
<tr>
<td>INCORROUT</td>
<td>Incorrect or missing output unrelated to a message</td>
<td>247</td>
</tr>
<tr>
<td>PERFMT</td>
<td>Performance degradation (use this keyword only when no other keyword seems applicable)</td>
<td>247</td>
</tr>
<tr>
<td>DOC</td>
<td>Documentation problem</td>
<td>248</td>
</tr>
</tbody>
</table>

Select the keyword that best describes the problem. If you are not certain which of two keywords to use, use the one listed first in the list. The following pages explain the situations that govern which type-of-failure keyword to use.
ABENDx

Use the ABENDx keyword when the host system, an Infoprint Server component, or any program that services Infoprint Server ends abnormally. If the abnormal end was forced by the host system or by the operator because of an endless loop or a prolonged wait state, do not use this keyword. In these situations, see the descriptions of the LOOP and WAIT keywords.

Procedure
To add an ABENDx keyword to the string:

1. Add the ABEND code (in a dump, the last 3 hexadecimal numerals in the system completion code) to the keyword. For example, if the abend code is 0C4, use ABEND0C4.

2. The format of the keyword string might now be:

   569504004 ABEND0C4

   The first keyword is the component ID, and the second is the type of error.

3. For help in determining which module failed, see “Module keyword” on page 248.

LOOP

Use the LOOP keyword if part of Infoprint Server seems to go into an endless loop. For instance, if part of the output repeats endlessly. If you suspect a loop, ask the operator to request a dump by using the z/OS system command DUMP, as described in [z/OS MVS System Commands] then cancel the Infoprint Server-started job. Whenever possible, the dump should contain the z/OS system trace table and the appropriate Infoprint Server component internal trace table.

Tip: Before requesting the dump, start the Generalized Trace Facility (GTF) with the SYS and JOBNAME options, to keep the trace overhead to a minimum. For details about how to obtain and print a GTF trace, see [z/OS MVS Diagnosis: Tools and Service Aids].

For an endlessly repeated message, first use the MSG keyword to conduct the search. If no match is found, use the LOOP keyword. If an intentional loop is used to wait for a resource, use the WAIT keyword rather than the LOOP keyword.

Procedure
If a component of Infoprint Server suspends activity for no clear reason, Infoprint Server might be in either a loop or a wait state. An example of a loop is a page of output that repeats endlessly.

To add a LOOP keyword to the string:

1. Run the job again and dump the address space for the failing component. Check the dump for a z/OS system internal trace table, an Infoprint Server component internal trace table, or both. If the trace tables are not contained in the dump and you are unable to determine whether the problem is a wait or a loop but you can recreate the problem, do these steps:

   a. Start the appropriate internal trace for the failing component. See “Tracing Infoprint Server” on page 255, “Starting a NetSpool trace” on page 282.
b. Redefine the trace table size to be as large as feasible.

c. Run the job again and request a dump using the z/OS system DUMP command. Make sure that the SDATA operand of the command contains RGN (region). If the job is not in a loop, see "WAIT" on page 246.

2. The format of the keyword string might now be:

   569504004 LOOP

   The first keyword specifies the component ID, and the second specifies the type of problem.

3. To determine which module contains the problem, see "Module keyword" on page 248.

WAIT

Use the WAIT keyword when the host system, a component of Infoprint Server, or a program that services Infoprint Server suspends activity, without sending a message. If you suspect a wait condition, ask the operator to request a dump by using the z/OS system command DUMP, as described in z/OS MVS System Commands. Make sure that the SDATA operand of the command contains RGN. Then cancel the Infoprint Server-started task.

This dump should contain the z/OS system trace table and the internal trace table for the affected Infoprint Server component.

Inspect the dump to see whether the wait bit is on in the program status word (PSW).

Do not use this keyword if the wait occurs after an abnormal end, as the result of an unanswered message, or because of an endless loop in an Infoprint Server component. Instead, use the ABEND or LOOP keywords.

Procedure
To add the WAIT keyword to the string:

1. Add the WAIT keyword to the string.

2. The format of the keyword string might now be:

   569504004 WAIT

3. To determine which module contains the problem, see "Module keyword" on page 248.

MSGx

Use the MSGx keyword when:

- A message was sent when it should not have been.
A message was not sent when it should have been.
A message contains incorrect or missing data.
The corrective action suggested in z/OS Infoprint Server Messages and Diagnosis does not correct the problem.

A set of characters in one of these forms, depending on the component in question, identifies each Infoprint Server message:

**ANFM**  IP PrintWay basic mode
**AOP**  All Infoprint Server components except IP PrintWay basic mode and the NetSpool started task
**API**  NetSpool started task

**Tip:** The Printer Inventory Manager does not send its own messages directly. Instead, the Printer Inventory Manager returns information to the component interfacing with it. That component in turn sends messages about the Printer Inventory Manager (such as missing data or lost connections).

**Procedure**
To add the MSGx keyword to the string:
1. Replace the x in the MSGx keyword with the message identifier. For example, if the message identifier is ANFM700I, the MSG keyword is:
   
   `MSGANFM700I`

2. The format of the keyword string might now be:
   
   `569504004 MSGANFM700I`

**INCORROUT**

Use the INCORROUT keyword when the output is not received or is not what you expected. Do not use this keyword for output that is repeated endlessly. In that case, use the LOOP keyword.

**Procedure**
To add the INCORROUT keyword to the string:
1. Make sure that the output really is incorrect, rather than merely undesirable in appearance.

2. The format of the keyword string might now be:
   
   `569504004 INCORROUT`

3. See “INCORROUT modifier keywords” on page 249 and select the correct keyword.

**PERFM**

Use the PERFM keyword when part of Infoprint Server performs below your expectations and the performance problem cannot be corrected by system tuning. Make sure that the application programs, the JCL, and the data set definitions have been thoroughly examined.
Procedure
To add the PERFM keyword to the string:
1. Add PERFM to the keyword string.

2. The format might now be:
   569504004 PERFM

DOC

Use the DOC keyword when a programming problem seems to have been caused because information in Infoprint Server information is vague, incorrect, or missing.

Procedure
To add the DOC keyword to the string:
1. After the DOC keyword, skip one space and add the order number of the book.
   Do not use hyphens. That is, rather than G544-5690-00, type G544569000.

2. The format of the keyword string might now be:
   569504004 DOC G544569000

3. If you find too many matches, add keywords unique to the documentation error you suspect. For example, add MSGx as a keyword if you are looking for a particular message because you suspect its contents are incorrect or unclear, or because it is not documented in z/OS Infoprint Server Messages and Diagnosis.

4. If the search is unsuccessful, replace the suffix numerals in the order number ("00" in the example above) with two asterisks, and search again. By including the asterisks, you are requesting a search for document errors in all the editions of a book.

Module keyword

The module keyword identifies the module related to the program problem.

Procedure
If you have a storage dump, do these steps to find the name of the module associated with the program problem (this is not necessarily the module containing the problem):

1. In the storage dump, find the instruction address at which the abend occurred, the supervisor call instruction (SVC) for the WAIT was sent, or the LOOP occurred.

2. Back up from that instruction until you find a 6- to 8-character module ID (for example, APIPPPF) followed by a module date. Include the module ID as part of the keyword string.
3. The format of the keyword string might now be:

569504002 ABEND8C3 RC0501 APIPPPFT

INCORROUT modifier keywords

This section describes the various keywords by which you can describe incorrect output. You can use these keywords to describe missing or extra data, or data that you did not specify. The three levels of keywords to use are:

- The first level describes the document. For example, a document in line format.
- The second level describes what part of the document was incorrect. For example, an image.
- The third level describes how the part was incorrect. For example, the image was the wrong size.

Procedure

To describe incorrect output:

1. Enter one keyword to describe the document in which the incorrect output occurred. For example, use a keyword from Table 18.

   Table 18. Examples of modifier keywords: Description of incorrect document

<table>
<thead>
<tr>
<th>Keyword example</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>LINE</td>
<td>The document consisted of line data.</td>
</tr>
<tr>
<td>PCL</td>
<td>The document consisted of PCL data.</td>
</tr>
<tr>
<td>PDF</td>
<td>The document consisted of PDF data.</td>
</tr>
<tr>
<td>TEXT</td>
<td>The document consisted of text data.</td>
</tr>
</tbody>
</table>

2. Enter one or more keywords to describe the part that is incorrect. For example, use a keyword from Table 19.

   Table 19. Examples of modifier keywords: Description of incorrect part

<table>
<thead>
<tr>
<th>Keyword example</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTENT</td>
<td>You did not get the content of the document as you expected.</td>
</tr>
<tr>
<td>MISSING</td>
<td>A part or parts of the document are missing from the output.</td>
</tr>
<tr>
<td>MARGIN</td>
<td>The side, top, or bottom margin is not what you specified.</td>
</tr>
<tr>
<td>HEADER PAGE</td>
<td>You did not get the header page you expected, or you got a header page you didn’t expect.</td>
</tr>
<tr>
<td>TRAILER PAGE</td>
<td>You did not get the trailer page you expected, or you got a header page you didn’t expect.</td>
</tr>
</tbody>
</table>

3. Enter one or more keywords to describe what is wrong with the part just named. For example, use a keyword from Table 20 on page 250.
Table 20. Examples of modifier keywords: Description of incorrect output

<table>
<thead>
<tr>
<th>Keyword example</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTENT</td>
<td>The content of the part was wrong.</td>
</tr>
<tr>
<td>DIRECTION</td>
<td>The rule direction was wrong.</td>
</tr>
<tr>
<td>EXTRA</td>
<td>An extra part was included in the output.</td>
</tr>
<tr>
<td>LENGTH</td>
<td>The rule length was wrong.</td>
</tr>
<tr>
<td>LINESPACE</td>
<td>The line spacing for a document, a page, or a text string was wrong.</td>
</tr>
<tr>
<td>MISSING</td>
<td>The part was missing from the output.</td>
</tr>
<tr>
<td>ORIENT</td>
<td>The orientation of the part was wrong.</td>
</tr>
<tr>
<td>POSITION</td>
<td>The position of the part was wrong.</td>
</tr>
<tr>
<td>REPEAT</td>
<td>The repetition of text or image cells was wrong.</td>
</tr>
<tr>
<td>SCALE</td>
<td>A scaling (double dot) error in an image occurred.</td>
</tr>
<tr>
<td>SIZE</td>
<td>The size of the part was wrong.</td>
</tr>
<tr>
<td>WEIGHT</td>
<td>The rule weight was wrong.</td>
</tr>
</tbody>
</table>

4. The format of the keyword string might now be:

569504004 INCORROUT LINE CONTENT EXTRA

This example describes the case of extra, identical copies of one or more sheets of data.

5. You can narrow the search by defining the incorrect output more precisely. For example:

569504004 INCORROUT LINE HEADER PAGE MISSING

This example shows an INCORROUT string for a line data page on which a requested header page did not print.

Version, release, and maintenance level keywords

The keywords of this type give exact details about the version, release, and maintenance level of the Infoprint Server component your installation is using. The System Modification Program/Extended (SMP/E) consolidated software inventory data set (CSI) contains the ID of the latest program temporary fix (PTF) that has been applied to your program. This ID, two letters and five numerals, gives the maintenance level of your program. For help in finding the PTF ID, see SMP/E User’s Guide.

Procedure

To get the maintenance level of your program:

1. Specify the Infoprint Server release number as a 3-digit code. For example:
   - 705 represents IP PrintWay basic mode
   - 730 represents the z/OS V1R8 level of Infoprint Server
2. From the CSI listing, specify the ID, preceded by the prefix UY, UW, or UZ, of the latest PTF applied to your Infoprint Server program. Use the PTF number as a keyword only if you suspect that the PTF has caused the problem.

3. The format of the keyword string might now be:

   569504002 WAIT APIPPF DIREC 730

Search argument procedure

You now have the information needed for an effective search of the problem listings in the IBM Software Support Facility. If you do not have access to the IBM Software Support Facility, consult your IBM Support Center.

To search the problem listings using a search tool such as Info Access:

1. Search the IBM Software Support Facility, using the full keyword string you have developed.

2. From the list of matches, skip any APAR fixes or PTFs that have already been applied to your system.

3. Compare each remaining APAR or PTF closing description with the problem symptoms you have observed.

4. If you find a match and a fix, apply the fix described in the APAR record, and test the fix.

5. If you find a match but no fix, ask your IBM representative to notify you when a fix becomes available.

6. If you find no match, broaden the search by dropping keywords one at a time from the right side of the search argument, and repeat the search.

7. If you still cannot find a match, consult your IBM Support Center.

Preparing APARs

If the diagnostic procedures described here have been followed, but the keyword search has been unsuccessful, then and only then is an authorized program analysis report (APAR) prepared.

Procedure

To prepare an APAR:

1. Initiating an APAR
If, after you have consulted your IBM Support Center for assistance, no fix for your problem is found, an IBM specialist will contact you to diagnose the problem in more detail. If the problem is a new one, the specialist will initiate an APAR. Be prepared to supply this information:

- Customer number
- Release level
- Current service level (the PTF list and list of APAR fixes applied)
- Keyword string or strings used to search IBM Software Support Facility
- Processing unit number: serial number, type, and model

2. Gathering information for an APAR

You might be asked to supply any or all of this information to describe the environment of the Infoprint Server problem:

- A description of the problem
- The SMP/E PTF identification number
- As small a segment of the input statements and data as is sufficient to reproduce the problem
- As small a segment of the output as is sufficient to illustrate the problem
- Any traces or storage dumps that you have used to diagnose the problem
- Terminal operator log (or the control statement listing from the library)
- A full listing of the JCL used
- Any printed output of data related to the job or data set in error, such as data set error messages
- A copy of the host system log
- For a WAIT problem (if possible), the program module that is waiting
- For a LOOP problem, the location of the loop or at least a partial trace of the loop
- For a DOC problem, the location of the error and a description of the problem it caused
- For a PERFM problem, a description of the actual performance and the expected performance, and the source of the performance specification

3. Submitting the information

When submitting information for an APAR to IBM, carefully pack and clearly identify any storage media that contain source programs, job stream data, data sets, or libraries.

**Note:** If you submit confidential information to IBM, mark the information confidential. IBM considers all information submitted to be non-confidential unless otherwise indicated.

Any storage media submitted must have this information attached and visible:

- The APAR number assigned by IBM. Each dump, and any other printed information, must show the APAR number.
- A list of the data sets on the storage media, including: application source program, JCL, and data.
- A description of how the storage media were made, including:
  - The JCL needed to get the information from the tape
  - The exact JCL listing or the list of commands used
- Labeling information used for the volume and its data sets
- The recording mode and density
- The attributes used for each data set
Chapter 7. Using Infoprint Server diagnostic tools

This chapter describes the Infoprint Server trace facility, which you can use to provide information to your service representative in the IBM Support Center.

The trace facility can be used to diagnose problems with:
- Infoprint Central
- IP PrintWay extended mode
- Infoprint Server ISPF panels
- The `lp`, `lpstat`, and `cancel` commands
- NetSpool daemon `aopnetd`
- Print Interface, including the Print Interface LPD and IPP server
- Printer Inventory Manager
- Simple Network Management Protocol (SNMP) subagent
- Transform Interface

Submitting APARs

Report any difficulties using Infoprint Server to your IBM Support Center. If an APAR is required, the Support Center can tell you where to send the required diagnostic information.

When submitting an APAR, use the appropriate component ID. For all components of Infoprint Server other than the NetSpool started task and IP PrintWay basic mode, the component ID is 5647A01OP.

Tip: The NetSpool started task and IP PrintWay basic mode each have their own component ID. All other components of Infoprint Server use the component ID listed above.

Tracing Infoprint Server

The service representative in the IBM Support Center might ask you to run a trace to aid in diagnosing a problem. If so, the representative will tell you how and where to send the trace information. You do not have to interpret the trace. Send it to your service representative.

These z/OS UNIX System Services environment variables control tracing:

**AOPTRACEON**
- Set this variable to any value to turn tracing on. Unset this variable to turn tracing off.
- **Tip:** Setting this variable to any value, even to Off, turns tracing on.
- **Examples:**
  - `AOPTRACEON=1`
  - `AOPTRACEON=OFF`

If `AOPTRACEON` is turned on, Infoprint Server traces all daemons that were started after the variable was set. "Tracing Infoprint Server daemons" on page 257 explains how to limit the trace to a specific Infoprint Server daemon.

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Depending on the Infoprint Server component you are using, you can add these environment variables to scale the size of the trace:

**AOPTRACEON_DATA**
- Includes socket data in the trace. The default is off.

**AOPTRACEON_FILTER**
- Includes IP PrintWay extended mode filter data in the trace. The default is off.

**AOPTRACEON_MSGLOG**
- Includes message logging data in the trace. The default is off.

**Examples:**
- AOPTRACEON=1 AOPTRACEON_DATA=1
- AOPTRACEON=ON AOPTRACEON_FILTER=1
- AOPTRACEON=ON AOPTRACEON_MSGLOG=ON

**AOPTRACEBYTES**
- Specify the maximum size of the trace file. This environment variable is optional. The default is 50 MB. If the size of the trace file exceeds the maximum size you specified, Infoprint Server creates a new trace file.

**Example:** AOPTRACEBYTES=25

**AOPTRACEDIR**
- Specify the directory where trace files are created. This environment variable is optional, except if you are tracing Infoprint Central. If this variable is not defined, trace files are created in default directory /var/Printsrv/trace/.

The requirements are:

**Except for Infoprint Central**
- The AOPADMIN group must have permission to write to the specified trace directory.

**For Infoprint Central**
- The user ID of the user who starts the z/OS HTTP Server must have permission to write to the specified trace directory, and the trace directory must exist.

**Example:** AOPTRACEDIR=/mydirectory/trace

**AOPTRACEMAXFILES**
- Specify the number of trace files to be kept for each instance of a process. This environment variable is optional. The default is 2 per process. If the number of trace files exceeds the number you specified, Infoprint Server deletes the oldest file. Each time you stop and restart Infoprint Server, it resets the number of trace files for each daemon.

**Example:** AOPTRACEMAXFILES=5

**Tips:**
- Tracing slows performance considerably. Turn tracing on for only as long as necessary to capture the error.
- If you want all trace files to be created in the same directory, either do not specify the AOPTRACEDIR variable (all trace files are created in the default directory), or specify the same directory in both the aopstart EXEC and any other process you are tracing.
• To find out if the AOPTRACEON variable is set in the z/OS UNIX shell, use the z/OS UNIX `export` and `grep` commands to look at the value of the AOPTRACEON variable:
  
  export | grep AOPTRACEON

Results:
– If AOPTRACEON is not set, the `export` and `grep` commands do not return any output.
– If AOPTRACEON is set, the `export` and `grep` commands return the AOPTRACEON value or AOPTRACEON="".

---

**Tracing Infoprint Server daemons**

This section describes how to trace processing in Infoprint Server daemons.

**Tip:** You cannot trace the `aophinvd`, `aoplogd`, and `aopsdbd` daemons individually. To trace these daemons, you must trace the Printer Inventory Manager daemon, `aopd`.

To start tracing one of the Infoprint Server daemons:

1. Stop the Infoprint Server daemon that you want to trace using one of these methods:
   - Enter the MVS START command to run the AOPSTOP JCL procedure to stop the daemon:
     
     START AOPSTOP,OPTIONS='-d lpd'
   - Enter the z/OS UNIX `aopstop` command to stop the daemon:
     
     aopstop -d lpd

   **Warning:** When you stop the IP PrintWay extended mode daemons, all printers that were stopped or redirected are reset. When IP PrintWay extended mode is restarted, those printers are no longer stopped or redirected.

2. Specify the AOPTRACEON environment variable and then restart the daemon, using one of these methods:
   - Specify AOPTRACEON in the AOPSTART JCL procedure. Create an MVS data set, named for example TRACE.ENV, with these DCB attributes:
     
     - RECFM=VB
     - LRECL=255

     In the data set, specify the AOPTRACEON variable. Start in the first column, and do not code any blank characters in the string or at the end of the line:
     
     AOPTRACEON=1

     Specify the TRACE.ENV data set in the AOPSTART JCL procedure:
     
     ///STDENV DD DSN=TRACE.ENV,DISP=SHR

     Then, enter the MVS START command to run the AOPSTART JCL procedure:
     
     START AOPSTART
   - Set the AOPTRACEON environment variable on the z/OS UNIX command line before entering the `aopstart` command. Use the `export` command to set AOPTRACEON, or specify AOPTRACEON on the same command line as
the aopstart command. When you specify AOPTRACEON on the same command line, the AOPTRACEON variable is set only for this instance of the aopstart command.

```bash
echo AOPTRACEON=1
aopstart
```

**Tip:** To set AOPTRACEON only for one command, set the variable on the same line as the command:

```bash
AOPTRACEON=1 aopstart
```

For information about how to edit the AOPSTART JCL procedure, see [z/OS Infoprint Server Customization](#).

**Tip:** You can add the other environment variables to scale the size of the trace, such as AOPTRACEON_DATA=1 or AOPTRACEON_FILTER=1.

---

### To stop tracing one of the Infoprint Server daemons:

1. Stop the daemon being traced using one of these methods:
   - Enter the MVS START command to run the AOPSTOP JCL procedure to stop the daemon:
     ```bash
     START AOPSTOP,OPTIONS='-d lpd'
     ```
   - Enter the z/OS UNIX aopstop command to stop the daemon:
     ```bash
     aopstop -d lpd
     ```

**Warning:** When you stop IP PrintWay extended mode daemons, all printers that were stopped or redirected are reset. When IP PrintWay extended mode is restarted, those printers are no longer stopped or redirected.

2. Unset the AOPTRACEON variable, and then restart the daemon. Use one of these methods:
   - If you use the AOPSTART JCL procedure to restart the daemon:
     a. Comment out the STDENV DD statement in the AOPSTART JCL procedure.
     b. Enter the MVS START command to run the AOPSTART JCL procedure:
        ```bash
        START AOPSTART
        ```
   - If you use the z/OS UNIX aopstart command to restart the daemon:
     a. Unset the AOPTRACEON variable. You need to unset AOPTRACEON only if it is set in the z/OS UNIX shell. The variable is set in the shell if you used the export command to set it.
        ```bash
        unset AOPTRACEON
        ```
     b. Restart the daemon:
        ```bash
        aopstart
        ```

### Examples

**Tracing IP PrintWay extended mode daemons:**

1. Enter the MVS START command to run the AOPSTOP JCL procedure to stop the daemons:
   ```bash
   START AOPSTOP,OPTIONS='-d outd'
   ```
2. Put AOPTRACEON=1 in the STDENV data set for the AOPSTART JCL procedure.

3. Enter the MVS START command to run the AOPSTART JCL procedure to restart the daemons:

START AOPSTART

**Tracing the NetSpool daemon:**

1. Enter the MVS START command to run the AOPSTOP JCL procedure to stop the daemon:

   START AOPSTOP,OPTIONS='-d netd'

2. Put AOPTRACEON=1 in the STDENV data set for the AOPSTART JCL procedure.

3. Enter the MVS START command to run the AOPSTART JCL procedure to restart the daemon:

   START AOPSTART

---

**Tracing the lp, lpstat, or cancel commands**

To trace the **lp**, **lpstat**, or **cancel** command:

1. Set the AOPTRACEON variable:

   ```
   export AOPTRACEON=1
   ```

2. Enter the **lp** command:

   ```
   lp ...
   ```

   **Tip:** To set AOPTRACEON only for one command, set the variable on the same line as the command:

   ```
   AOPTRACEON=1 lp ...
   ```

To stop tracing the **lp**, **lpstat**, or **cancel** command:

1. Unset the AOPTRACEON variable. You need to unset AOPTRACEON only if it is set in the z/OS UNIX shell. The variable is set in the shell if you used the `export` command to set it.

   ```
   unset AOPTRACEON
   ```

2. Reenter the command:

   ```
   lp ...
   ```

---

**Tracing the SMB support in DFS server**

**Turning trace on:** To trace the SMB support that the DFS™ server provides, add the AOPTRACEON=1 environment variable to the DFS environment variable file, named `envar`, for the DFSKERN daemon. To change the `envar` file, open `/opt/dfslocal/home/dfskern/envar`. For more information, see *Distributed File Server SMB Administration Guide and Reference*.

**Turning trace off:** To stop tracing the SMB support that the DFS server provides, comment out the AOPTRACEON=1 environment variable from the DFS environment variable file, named `envar`, for the DFSKERN daemon.
Tracing the AOPPRINT procedure

**Turning trace on:** To trace the AOPPRINT procedure, specify the AOPTRACEON=1 environment variable in the STDENV DD statement in the procedure. You can specify AOPTRACEON in-stream. Start in the first column, and do not code any blanks in the string or at the end of the line:

//STDENV DD *
AOPTRACEON=1

**Turning trace off:** To stop tracing the AOPPRINT procedure, comment out the AOPTRACEON=1 environment variable in the STDENV DD statement in the procedure:

//STDENV DD *
*AOPTRACEON=1

If the STDENV DD statement points to a data set, comment out the STDENV DD statement in the procedure.

Tracing Infoprint Central

**Turning trace on:**

1. Stop the z/OS HTTP Server.

2. Specify the AOPTRACEON=1 and the AOPTRACEDIR environment variables in the z/OS HTTP Server environment file, `httpd.envvars`. The user ID of the user who starts the z/OS HTTP Server must have permission to write to the trace directory specified in AOPTRACEDIR, and the trace directory must exist.

3. Restart the z/OS HTTP Server.

**Turning trace off:**

1. Stop the z/OS HTTP Server.

2. Comment out the AOPTRACEON=1 and the AOPTRACEDIR environment variables in the z/OS HTTP Server environment file, `httpd.envvars`.

3. Restart the z/OS HTTP Server.

Changing the trace directory

To change the trace directory when you trace an Infoprint Server daemon, specify the AOPTRACEDIR environment variable in the `aopstart` EXEC before you restart the daemon. For more information, see the comments in the `aopstart` EXEC. For information about how to edit the `aopstart` EXEC, see [z/OS Infoprint Server Customization](#).

To change the trace directory when you trace another Infoprint Server process, such as a command or the SMB support, specify the AOPTRACEDIR environment
variable together with the AOPTRACEON variable. For example, if you want to trace the lp command and direct trace files to /mydirectory/trace, enter these z/OS UNIX commands:

```
export AOPTRACEDIR=/mydirectory/trace
export AOPTRACEON=1
lp ...
```

To return to using the default trace directory, /var/Printsrv/trace, use the z/OS UNIX unset command:

```
unset AOPTRACEDIR
```

---

**Finding the trace file**

The trace facility creates a separate trace file for each Infoprint Server process traced:

- **Daemon** trace files are named:
  
  `userid.daemon_name.process_id.uniqueidentifier.tracefile#`

  For example:
  
  `MACBETH.aophinvd.pid66297.BA71F05F29707301.1`

- **Command** trace files (for example, the trace file for the lp command) are named:
  
  `userid.process_id.uniqueidentifier.tracefile#`

  For example:
  
  `MACBETH.pid50397251.BA71F08C5514A644.1`

The variables in the trace file names are:

- **userid**
  
  The TSO user ID of the person who initiated the trace.

- **daemon_name**
  
  The name of the daemon being traced, if applicable.

- **process_id**
  
  The ID of the process created in z/OS UNIX to create the trace.

- **unique identifier**
  
  The time the trace was created. This value is the result of the STCK (Store Clock) processing instruction. The value is displayed in hexadecimal format as a character string.

- **tracefile#**
  
  The number of the trace file. If the size of the trace file exceeds the maximum size specified in AOPTRACEBYTES, Infoprint Server creates a new file that has the same name (including the unique identifier) except that `tracefile#` is incremented by 1. If the number of trace files exceeds the number specified in AOPTRACEMAXFILES, Infoprint Server deletes the oldest file.

---

**Finding the transform stderr file**

If problems are encountered during program operation, the transforms produce error messages. The messages that indicate problems with the transforms or with transform configuration are directed to the system administrator. Some transforms write these messages to the transform's stderr file.
You can find a transform’s `stderr` file in the directory named `base-directory/xfd`, where `base-directory` is determined by the value of the `base-directory` attribute in the Infoprint Server configuration file, `aopd.conf`. The default base directory is named `/var/Printsrv`.

The `stderr` file-naming convention is:

```
transform_[class]#.stderr
```

- **transform**: Specifies the transform name, which is defined in the Infoprint Server Transform Manager configuration file, `aopxfd.conf`. For example, `afp2pcl` or `pcl2afp`.
- **class**: Specifies the transform class, which is specified in the `-c` option when the transform is called. Transform classes are defined in the Infoprint Server Transform Manager configuration file, `aopxfd.conf`.
- **#**: A unique number that the transform assigns. This number is incremented each time a new transform is started.

The transforms from AFP let you redirect `stderr` output with the `-F` transform option. For information about the `-F` option, see [Infoprint Transforms from AFP for z/OS](z/OS Infoprint Server Messages and Diagnosis).

**Tip**: To read the transform’s `stderr` file, you must be a member of the AOPADMIN group. For information about how to establish security for Infoprint Server administrators, see [z/OS Infoprint Server Customization](z/OS V1R8.0 Infoprint Server Messages and Diagnosis).

## ISPF trace

The Printer Inventory Manager can trace the processing in the Printer Inventory Manager panel modules during an interactive ISPF session. You can turn tracing on and off from an ISPF panel. Tracing is usually used only for short periods of time to diagnose problems and collect information to forward to your service representative at the IBM Support Center.

The Printer Inventory Manager writes the ISPF trace to a separate hierarchical flat file (HFS or zFS) for each ISPF session. If you turn tracing on and off during the same ISPF session, the Printer Inventory Manager appends trace records to the HFS or zFS file. The Printer Inventory Manager creates the trace file in directory `/var/Printsrv/trace`, unless you specify a different directory name when you start the trace. The name of the trace file that the Printer Inventory Manager creates is `userid.process_ID`:

- **userid**: Specifies the TSO user ID of the person who initiated the ISPF session.
- **process_ID**: Specifies the ID of the UNIX process that is started for the ISPF panel session.

### Setting the ISPF trace on and off

You can set the trace option on or off at any time during an ISPF session. To set the trace option on or off:

1. On the Infoprint Server: Printer Inventory Manager panel:
   a. Type 7 on the option line to select **7 Configure**.
   b. Press Enter.
2. On the Configuration panel:
   a. Select (with a slash [/]) or deselect the Trace Printer Inventory ISPF internals field.
   b. Specify the fully qualified name of an existing directory. To return to the default directory, clear the ISPF trace directory field.
   c. To save the trace option and name of the directory, and exit the panel, press the END function key or enter END on the command line.
   d. To save the trace options without closing the panel, press Enter.
   e. To close the panel without saving the trace options, enter CANCEL on the command line.

3. Be sure to turn tracing off when you are done. Tracing remains on during your next Infoprint Server ISPF session unless you turn tracing off.

Database diagnostic tools

Commands

You can use these commands to write the objects from various databases to a file:

<table>
<thead>
<tr>
<th>This command:</th>
<th>Causes the:</th>
</tr>
</thead>
<tbody>
<tr>
<td>aoplogu -d</td>
<td>Log daemon to dump the contents of the common message log database to the stdout file</td>
</tr>
</tbody>
</table>
**hinvu -d**
Historical Inventory daemon to dump the contents of its database to the **stdout** file

**pidu -c 'dump filename; '**
Printer Inventory Definition Utility (PIDU) to dump all the objects in the Printer Inventory to the file you specify

**sdbu -d**
Search daemon to dump the contents of all of its databases to the **stdout** file

You can redirect stdout to an HFS or zFS file. For example:

```
aoplogu -d > /tmp/log.dump
hinvu -d > /tmp/hinv.dump
sdbu -d > /tmp/sdb.dump
```

The **pidu** dump command writes to an HFS or zFS file or an MVS data set. It does not write to **stdout**. For example:

```
pidu -c 'dump /tmp/inventory.dump;'
```

**Environment variable**

The service representative in the IBM Support Center might ask you to set the AOPDUMPON environment variable to capture more detailed dump information for an internal error. If so, the representative will tell you how and where to set the variable, and where to send the dump information.

**Using IPP server diagnostic information**

The Print Interface IPP server writes diagnostic information to file **ipp.out** in the directory specified in the **base-directory** attribute in the Infoprint Server configuration file, **aopd.conf**. The default base directory is **/var/Printsrv**.

The IPP server always writes diagnostic information to the **ipp.out** file, regardless of whether the AOPTRACEON environment variable is set. If the AOPTRACEON variable is set, the IPP server also writes trace information to the **/var/Printsrv/trace** directory.
Chapter 8. Using IP PrintWay basic mode diagnostic tools

This chapter describes diagnostic tools you can use to collect information about software problems in IP PrintWay basic mode, including problems in Infoprint Coaxial Printer Support for z/OS, 5655-N62. These tools can provide useful information to your service representative in the IBM Support Center.

This chapter describes how to:
- Submit APARs
- Trace IP PrintWay basic mode
- Obtain dumps for IP PrintWay basic mode

Related information:
- For more information about z/OS diagnostic tools, see [z/OS MVS Diagnosis: Tools and Service Aids](#).
- For information about how to trace IP PrintWay extended mode, see [Chapter 7: Using Infoprint Server diagnostic tools](#) on page 255.

Submitting APARs

Report any difficulties using IP PrintWay to your IBM Support Center. If an APAR is required, the Support Center can tell you where to send the required diagnostic information.

When submitting an APAR, use one of these component IDs:
- **569504004**: IP PrintWay basic mode
- **5647A01OP**: IP PrintWay extended mode
- **5697F5103**: Coaxial Printer Support

To determine if IP PrintWay extended mode is running, enter this MVS operator command from the console:
```
d a,1
```

If `aopoutd` is active, IP PrintWay extended mode is running.

Tracing IP PrintWay basic mode

IP PrintWay basic mode provides these types of traces:
- An internal wrap trace
- An external trace using the Generalized Trace Facility (GTF)

You can start either trace at initialization time or dynamically while IP PrintWay is running.

The service representative in the IBM Support Center might ask you to run a trace to aid in diagnosing a problem. If so, the representative will tell you how and where to send the trace information. You do not have to interpret the trace. Send it to your service representative.

For information about how to trace IP PrintWay extended mode, see [Chapter 7: Using Infoprint Server diagnostic tools](#) on page 255.
IP PrintWay basic mode internal wrap trace

The IP PrintWay basic mode internal trace contains hexadecimal entries for most module entries and exits. Trace data is maintained in internal storage, and it wraps when the trace storage area is full. Because the internal trace wraps, it reflects only the most recent history of IP PrintWay processing. IBM recommends that internal tracing always be turned on. For more information, see "Starting a trace at IP PrintWay basic mode initialization" on page 268.

You can request an internal trace of one or more IP PrintWay functional subsystem applications (FSAs). When you request any external trace you receive an internal trace automatically.

The internal trace is maintained in internal storage and cannot be directed to an external data set. To see the trace, you must generate a memory dump of IP PrintWay internal storage. For more information about how to request a dump, see "Dumps for IP PrintWay basic mode" on page 279.

IP PrintWay maintains separate wrap traces for:

- The FSS. This trace has a fixed length of 1 K bytes (K equals 1024).
- Each FSA. This trace has a variable length from 4 K bytes to 3 996 K bytes. For information about specifying the size of the FSA internal trace table, see "Setting FSS trace options in the FSS definition in the Printer Inventory" on page 268.
- The Transmission Queue Manager component.
- The Operator Interface component.

IP PrintWay basic mode external traces

For an external trace, IP PrintWay uses the services of the z/OS Generalized Trace Facility (GTF). The trace produced by GTF can contain z/OS system-level information as well as information concerning IP PrintWay activity. For more information about GTF, see z/OS MVS Diagnosis: Tools and Service Aids.

You can start an external trace for the IP PrintWay FSS, as well as external traces for multiple FSAs. The number of FSAs that can be traced is limited to 16. Multiple external traces can be directed to a single GTF data set.

External tracing modes

You can request these modes of external traces. In this way, you can limit the amount of trace data.

- Full trace
  A full trace is the larger and more complete external trace. All IP PrintWay subcomponents are traced. Coaxial Printer Support, which drives VTAM-controlled printers, is also traced. All input records, TCP/IP commands, and VTAM commands are traced.

- Full, with no tracing of print records
  This trace provides the same information as the full trace. However, input records and TCP/IP commands are not traced. Coaxial Printer Support, which drives VTAM-controlled printers, is also traced. Tracing in Coaxial Printer Support is the same as with the full trace.

You request the tracing mode when you start the trace, either at initialization or using the MVS MODIFY operator command.
Tracing considerations
Consider these impacts when selecting the tracing mode:

- Processor usage and throughput
  The FSA full external trace affects processor performance. Do not start a full external trace during peak processor usage. All other traces affect processor performance, but the impact is not as significant.

- Timing Considerations
  Activating any of the traces causes the timing relationships to change, possibly causing the problems to “disappear” when tracing is active. This is especially true for the full external trace. If a problem “disappears” when tracing, specify a different tracing mode, for example, a full trace with no tracing of print records.

Starting an IP PrintWay basic mode trace
You can request internal and external tracing using one of these methods:

- Specify a trace option in the IP PrintWay FSS and FSA definitions in the Printer Inventory:
  - You can specify a trace option in the FSS definition to trace the IP PrintWay FSS and all FSAs in the FSS.
  - You can specify a trace option in the FSA definition to trace one IP PrintWay FSA.

After you specify a trace option in an FSS or FSA definition, you must start (or restart) the IP PrintWay FSS or FSA for the trace option to take effect. Tracing starts when the FSS or FSA is initialized.

- Enter the MVS MODIFY command:
  - You can start and stop tracing all FSAs in an IP PrintWay FSS. The FSS must be started, but the FSAs that you want to trace must not be running.
  - You can start and stop tracing one IP PrintWay FSA. The FSA you want to trace must be running.

Before you start any IP PrintWay external trace, you must start the Generalized Trace Facility (GTF).

Tip: To trace the IP PrintWay FSS, including the queue manager function in the FSS, you must request a trace in the IP PrintWay FSS definition in the Printer Inventory, and you must not select the Trace prompt feature in the FSS definition.

Starting the Generalized Trace Facility
You must start a GTF trace before starting an IP PrintWay external trace. IP PrintWay writes trace output to the GTF trace data set.

When you start GTF, specify these GTF parameters:

- The USR=(FD1) trace parameter
  Specify this parameter to obtain the trace entries produced by IP PrintWay.

- The JOBNAME=proc_name parameter
  Specify this parameter to limit the trace entries to those produced by programs running in the IP PrintWay FSS address space. proc_name is the name of the IP PrintWay startup procedure.

For an example of how to start GTF, see Appendix A, “Starting the Generalized Trace Facility (GTF),” on page 289.
Starting a trace at IP PrintWay basic mode initialization

You can specify a trace option in the IP PrintWay FSS definition and FSA definition to start tracing when the IP PrintWay FSS or an individual FSA is initialized.

Setting FSS trace options in the FSS definition in the Printer Inventory

Tracing options specified in the IP PrintWay FSS definition take effect the next time the FSS is started.

To set the trace options for an FSS:

1. On the Infoprint Server: Printer Inventory Manager panel:
   a. Type 4 on the option line to select 4 Other Definitions.
   b. Press Enter.

   Infoprint Server: Printer Inventory Manager
   Option => 4
   Printer Definitions
   1 Add Add a printer definition
   2 List List printer definitions
   3 Select Select printer definitions to list
   Other Functions
   4 Other Definitions Manage FSS, FSA, pool, and job selection definitions
   5 PrintWay Queue View IP PrintWay transmission queue
   6 PrintWay Message View IP PrintWay message log
   7 Configure Change panel configuration

2. On the FSA, FSS, Pool, and Job Selection Rule Management panel, type 5 on the option line to list FSSs.

   FSA, FSS, Pool, and Job Selection Rule Management
   Option => 5
   FSA
   1 Add Add an FSA
   2 List List FSAs
   3 Select Select FSAs to list
   FSS
   4 Add Add an FSS
   5 List List FSSs
   6 Select Select FSSs to list
   Pool of Printer Definitions
   7 Add Add a Pool
   8 List List Pools
   9 Select Select Pools to list
   Job Selection Rule
   10 Add Add a Job Selection Rule
   11 List List Job Selection Rules

3. On the FSS List panel:
   a. To change the trace options for an FSS, type E for “Edit” in the space in front of the FSS.
   b. Press Enter.
4. On the IP PrintWay FSS panel:
   a. Enter the number that corresponds to the desired trace mode in the Trace mode field. The default mode is none. The recommended mode for normal processing is Internal.
   b. Select (with a /) or deselect the Trace prompt field.
      If you select the Trace prompt field, message ANFM020A is displayed to the operator when the FSS starts. After the operator receives this message, the operator can enter the MVS MODIFY command to start tracing all FSAs in the FSS. Tracing of the FSAs start before any data sets are processed. The FSS, however, including the queue manager function, is not traced.
      If you do not select the Trace prompt field, the tracing requested in the Trace mode field starts as soon as the FSS starts. Therefore, if you select a trace in the Trace mode field, the FSS, including the queue manager function are traced.
   c. Enter a value for the Trace table size. Indicate the number, from 1 to 999, of 4 K pages of storage to allocate for each FSA trace table. For more information, see the help for the field.
   d. Exit the panel to save your changes, or enter cancel on the command line to exit without saving your changes.

5. Be sure to turn tracing off or return to Internal tracing mode when you are done. Tracing remains on during your next IP PrintWay session unless you turn tracing off. Do not trace IP PrintWay during peak processing time.

Setting FSA trace options in the FSA definition in the Printer Inventory
All FSAs set to the default trace mode of None will initialize with the same tracing mode set in the IP PrintWay FSS definition.

To change the trace mode for an individual FSA:
1. On the Infoprint Server: Printer Inventory Manager panel:
   a. Type 4 on the option line to select **4 Other Definitions**.
   b. Press Enter.

   ![Printer Inventory Manager Panel]

   **Option ==> 4**
   
   Printer Definitions
   1 Add Add a printer definition
   2 List List printer definitions
   3 Select Select printer definitions to list

   Other Functions
   4 Other Definitions Manage FSS, FSA, pool, and job selection definitions
   5 PrintWay Queue View IP PrintWay transmission queue
   6 PrintWay Message View IP PrintWay message log
   7 Configure Change panel configuration

2. On the FSA, FSS, Pool, and Job Selection Rule Management panel, type 2 on the option line to list FSAs.

   ![FSA, FSS, Pool, and Job Selection Rule Management Panel]

   **Option ==> 2**
   
   FSA
   1 Add Add an FSA
   2 List List FSAs
   3 Select Select FSAs to list

   FSS
   4 Add Add an FSS
   5 List List FSSs
   6 Select Select FSSs to list

   Pool of Printer Definitions
   7 Add Add a Pool
   8 List List Pools
   9 Select Select Pools to list

   Job Selection Rule
   10 Add Add a Job Selection Rule
   11 List List Job Selection Rules

3. On the FSA List panel:
   a. To change the trace options for an FSA, type E for “Edit” in the space in front of the FSA.
   b. Press Enter.
4. On the IP PrintWay FSA panel, select the **Trace mode**. The change will take effect the next time that FSA is started.

5. Exit the panel to save your changes, or enter **cancel** on the command line to exit without saving your changes.

6. Return tracing to the default mode of **None** when you are done. Trace options remain set during your next IP PrintWay session unless you change them.

---

**Starting a trace dynamically using the MODIFY operator command**

You can use the MVS MODIFY command to start FSA traces dynamically, that is, while IP PrintWay basic mode is running. You can start an external or internal trace for (1) one FSA or for (2) all FSAs in the FSS that have not yet been started:

- To start an external trace for one FSA, specify the name of the FSA on the MODIFY command. The FSA must be started. Otherwise, the MODIFY command is rejected. Tracing begins immediately if the FSA is idle, or tracing begins when the next data set is processed.
- To start an external trace for all FSAs managed by the FSS that have *not yet been started*, do not specify any FSA name on the MODIFY command. Tracing begins for each FSA when the FSA is started.

**Tip:** When you use the MODIFY command to start a trace dynamically, the trace does *not* trace FSS processing. To trace processing of the FSS, including IP PrintWay queue manager processing, you must specify the trace in the IP PrintWay FSS definition in the Printer Inventory and start tracing at initialization without using the trace prompt option. For more information, see **“Starting a trace at IP PrintWay basic mode initialization” on page 268.**

If you enter multiple MODIFY commands during IP PrintWay processing, each command overrides *all* parameters of the previous command if they both affect...
tracing of the same FSA(s). Thus, to change only one characteristic of a trace, re-specify values for the other parameters.

Use this syntax for the MODIFY or F command:

```plaintext
{MODIFY | F} fss_name,TRACEON
[, fsa_name]
[ ,MODE=FULL | FULLNOPRT | INTERNAL]
```

**Tip:** The **fsa_name** is a positional parameter. If you omit it, and you want to specify the **MODE** parameter, enter a comma after TRACEON to indicate the FSA name is omitted.

**fss_name**  
Specifies the name of the FSS for which tracing is to be started. This is a required parameter.

**fsa_name** parameter must match either:

- In a JES2 environment, the name in the JES FSS(fss_name) statement
- In a JES3 environment, the FSSNAME parameter of the JES FSSDEF statement

For information about JES statements, see [z/OS Infoprint Server Customization](https://www.ibm.com/support/docviewynchronously?rs=58866&contextId=DOC-128652&uid=swg27022429).

**TRACEON**  
Specifies that tracing is to begin. This is a required parameter.

**fsa_name**  
Specifies the name of an FSA for which tracing is to begin. This is an optional parameter.

**fsa_name** must match either:

- In a JES2 environment, the JES PRTnnnn statement
- In a JES3 environment, the JNAME parameter of the JES DEVICE statement

For more information about JES statements, see [z/OS Infoprint Server Customization](https://www.ibm.com/support/docviewynchronously?rs=58866&contextId=DOC-128652&uid=swg27022429).

If this parameter is omitted, tracing begins for all FSAs that have not yet started.

**Example:** This example shows how to start an internal trace for all FSAs that have not yet started.

```
MODIFY fss_name,TRACEON,,MODE=INTERNAL
```

**MODE=FULL | FULLNOPRT | INTERNAL**  
The **MODE** parameter specifies the tracing mode:

- **FULL**  
  Requests a full external and internal trace.
- **FULLNOPRT**  
  Requests a full external and internal trace, without tracing of record processing.
- **INTERNAL**  
  Requests only internal tracing. INTERNAL is the default. Internal tracing also occurs whenever external tracing is turned on. Therefore, specify MODE=INTERNAL only when you want internal tracing without external tracing.
**Tip:** If you specify MODE=INTERNAL for a particular FSA, all external tracing stops. If you specify MODE=INTERNAL without an FSA name, IP PrintWay does no external tracing for FSAs that have not started yet, even if external tracing is requested in the startup procedure for an FSA.

**Example:** This example shows how to start an internal trace for the FSA named PRT001. Start FSA PRT001 before you enter this command.

```
MODIFY PRINTWAY,TRACEON,PRT001,MODE=INTERNAL
```

---

**Stopping an IP PrintWay basic mode trace**

You can stop an IP PrintWay FSA trace by using one of these methods:

- Enter the MVS MODIFY TRACEOFF operator command for the FSA.
- Select the None option in the Trace mode field of the IP PrintWay FSA definition in the Printer Inventory. You must restart the IP PrintWay FSA for the new trace option to take effect.

You can stop an IP PrintWay FSS trace by specifying the None option in the Trace mode field of the FSS definition in the Printer Inventory. You must restart IP PrintWay FSS for the new trace option to take effect.

---

**Stopping a trace using the MODIFY operator command**

Use the MVS MODIFY command to stop tracing an FSA without stopping IP PrintWay basic mode. You can also use the MVS MODIFY command to stop any future tracing of FSAs in the FSS.

- To stop an external trace for an FSA, specify the name of the FSA on the MODIFY command. Tracing of the FSA stops when the FSA is idle or before the next data set is processed.
- To stop future external trace for all FSAs that are managed by an IP PrintWay FSS and that have not yet been started, do not specify any FSA name on the MODIFY command.

Use this syntax to stop a trace with the MODIFY or F command:

```
{MODIFY | F} fss_name,TRACEOFF[,fsa_name]
```

- **fss_name** Specifies the name of the IP PrintWay FSS. This is a required parameter.
  - *fss_name* must match either:
    - In a JES2 environment, the name in the JES FSS(*fss_name*) statement
    - In a JES3 environment, the FSSNAME parameter of the JES FSSDEF statement

  For information about the JES parameters, see [z/OS Infoprint Server Customization](https://www.ibm.com/docs/en/infoprint-server)

- **TRACEOFF** Specifies that tracing is to be stopped. This is a required parameter.
Specifies the name of a specific FSA for which tracing is to be stopped. This is an optional parameter.

`fsa_name` must match either:
- In a JES2 environment, the JES PRTnnnn statement
- In a JES3 environment, the JNAME parameter of the JES DEVICE statement

For more information about the JES statements, see [z/OS InfoPrint Server Customization](https://www.ibm.com/support/knowledgecenter/SSEK6A_19.1.0/com.ibm.zos.v1r10.bk1201e/dizmserv20.htm).

If `fsa_name` is not specified, tracing is not done for any FSAs that start after you enter the command, whether or not a trace option is specified in the FSS definition or the FSA definition in the Printer Inventory.

**Examples:**
- This example shows how to stop tracing the FSA named PRT001.
  ```
  MODIFY FSS1,TRACEOFF,PRT001
  ```
- This example shows how to stop tracing FSAs managed by FSS1 that have not yet started. Any tracing that has already started continues.
  ```
  MODIFY FSS1,TRACEOFF
  ```

**Stopping a trace in the FSS and FSA definitions in the Printer Inventory**

You can stop tracing an IP PrintWay FSS and FSAs by editing the IP PrintWay FSS and FSA definitions in the Printer Inventory.

To stop a trace:

1. If you want to stop tracing an FSA, stop that FSA.

2. If you want to stop tracing the FSS, stop the FSS.

3. If you want to stop tracing the FSS, select `None` in the **Trace mode** field in the FSS definition in the Printer Inventory. Because `None` is the default value, you do not need to create an FSS definition in the Printer Inventory to select this value.

4. If you want to stop tracing an FSA, select `None` in the **Trace mode** field in the FSA definition in the Printer Inventory. Because `None` is the default value, you do not need to create an FSA definition in the Printer Inventory to select this value.

5. Restart each FSA.

**Viewing and printing GTF trace data**

You can view and print GTF trace data sets using the Interactive Problem Control System (IPCS). For more information about using IPCS, see [z/OS MVS IPCS User's Guide](https://www.ibm.com/support/knowledgecenter/SSEPG2_9.1.0/ippchp/ipcs.htm).
When you use IPCS to view or print GTF trace data, specify USR event ID X'FD1'.

Examples of tracing IP PrintWay basic mode

The examples in this section show how to start and stop internal and external IP PrintWay basic mode tracing.

Starting an internal trace for an FSS and all FSAs at IP PrintWay initialization

Do these steps to start an IP PrintWay internal trace of the FSS and all FSAs in the FSS at IP PrintWay initialization. This example assumes that the FSA names are PRT001 and PRT002, and the FSS name is FSS1.

1. In the IP PrintWay FSS definition for FSS1 in the Printer Inventory, select the Internal option in the Trace mode field.

2. In the IP PrintWay FSA definitions for PRT001 and PRT002, select either None or Internal in the Trace mode field. Because None is the default value, you do not need to create FSA definitions to select this value.

3. Stop all IP PrintWay FSAs in the FSS so that IP PrintWay picks up the changes in the FSS definition.

4. Start the IP PrintWay FSAs, for example FSA PRT001 and FSA PRT002.

5. Return tracing to the default mode of None when you are done. Trace options remain set during your next IP PrintWay session unless you change them.

To stop tracing dynamically:

- Enter the MODIFY operator command for the FSS and for each FSA:

```
MODIFY FSS1,TRACEOFF
MODIFY FSS1,TRACEOFF,PRT001
MODIFY FSS1,TRACEOFF,PRT002
```

Starting an internal trace for one FSA dynamically

Do these steps to start an IP PrintWay internal trace for one IP PrintWay FSA dynamically while IP PrintWay is running. This example assumes that the FSA name is PRT001 and the FSS name is FSS1.

1. If an IP PrintWay FSS definition exists in the Printer Inventory, select None for the Trace mode field. This is the default value so you do not need to create an FSS definition to specify the None value.

2. If an IP PrintWay FSA definition exists for the FSA, select None for the Trace mode field. This is the default value so an FSA definition is not required.

3. Start the IP PrintWay FSA.
4. To start the trace, enter this MODIFY command:

   MODIFY FSS1,TRACEON,PRT001,MODE=INTERNAL

   Internal tracing of the FSA begins when the FSA is idle or at the next data set boundary.

   To stop tracing:
   • Enter this MODIFY operator command:
     MODIFY FSS1,TRACEFF,PRT001

---

Starting an external and internal trace for an FSS and all FSAs at IP PrintWay initialization

Do these steps to start a full external trace of the FSS and all FSAs in the FSS at IP PrintWay initialization. This example assumes that the FSA names are PRT001 and PRT002, and the FSS name is FSS1.

1. In the IP PrintWay FSS definition for FSS1 in the Printer Inventory, select the Full option in the Trace mode field. Do not select the Trace prompt field.

2. In IP PrintWay FSA definitions for PRT001 and PRT002 in the Printer Inventory, select either the None or Full option in the Trace mode field. Because None is the default value, you do not need to create FSA definitions to specify this value.

3. Stop all IP PrintWay FSAs in the FSS so that IP PrintWay picks up the changes in the FSS definition.

4. Start GTF as described in Appendix A, "Starting the Generalized Trace Facility (GTF)," on page 289.

5. Start the FSAs you want to trace. IP PrintWay starts tracing the FSS when it is initialized and starts tracing each FSA when the FSA is started.

To stop tracing:
1. Enter the MODIFY operator command for the FSS and for each FSA:

   MODIFY FSS1,TRACEFF
   MODIFY FSS1,TRACEFF,PRT001
   MODIFY FSS1,TRACEFF,PRT002

2. Stop GTF by entering: P GTF
Starting an external and internal trace of all FSAs at IP PrintWay initialization, with prompting

Do these steps to start an external trace of all FSAs in an FSS at IP PrintWay initialization and prompt the operator for tracing parameters. This example assumes that the FSA names are PRT001 and PRT002, and the FSS name is FSS1.

Tip: This trace traces only FSA processing. It does not trace FSS processing. For an example of how to trace processing of the FSS, including IP PrintWay queue manager processing, see "Starting an external and internal trace for an FSS and all FSAs at IP PrintWay initialization" on page 276.

1. In the IP PrintWay FSS definition in the Printer Inventory, select the Trace prompt field. Select the None option in the Trace mode field. You can specify the type of trace you want with the MVS MODIFY command before the trace starts.

2. Start GTF as described in Appendix A, "Starting the Generalized Trace Facility (GTF)," on page 289.

3. In response to message ANFM020A, enter this MODIFY command at the console if you want a full external trace. You cannot specify the name of an FSA in the MODIFY command because no FSAs have been started yet.

   MODIF\(Y\) FSS1,TRACEON,,MODE=FULL

   Respond again to message ANFM020A with this command:

   MODIF\(Y\) FSS1,U

   Tracing begins for each FSA in the FSS when the FSA starts. If you want to start an FSA but not trace it, enter the MODIFY command to stop tracing that FSA after the FSA starts.

To stop tracing:

1. Enter the MVS MODIFY operator command for the FSS and again for each FSA that has been started. The first MODIFY command shown makes sure that tracing does not start for any FSAs that are started after this time.

   MODIF\(Y\) FSS1,TRACEOFF
   MODIF\(Y\) FSS1,TRACEOFF,PRT001
   MODIF\(Y\) FSS1,TRACEOFF,PRT002

2. Stop GTF by entering: P GTF

Starting an external and internal trace of an FSA dynamically

Do these steps to start an external trace or an IP PrintWay FSA dynamically. This example assumes that the FSA name is PRT001 and the FSS name is FSS1.

1. If an IP PrintWay FSS definition exists in the Printer Inventory, select None in the Trace mode field. This is the default value, so you do not have to create an FSS definition to select the None value.
2. If an IP PrintWay FSA definition exists for the FSA in the Printer Inventory, select None in the Trace mode field. This is the default value, so you do not have to create an FSA definition to specify the none value.

3. Start GTF as described in Appendix A, "Starting the Generalized Trace Facility (GTF)," on page 289.

4. Start FSA PRT001.

5. To start tracing FSA PRT001, enter this MODIFY command:
   
   ```
   MODIFY FSS1,TRACEON,PRT001,MODE=FULL
   ```
   
   Tracing begins when the FSA is idle or at the next data set boundary.

To stop tracing:

1. Enter this MODIFY operator command to stop tracing FSA PRT001:
   
   ```
   MODIFY FSS1,TRACEOFF,PRT001
   ```

2. Stop GTF by entering: P GTF

---

**Tracing IP PrintWay basic mode ISPF panel logic**

When the IP PrintWay ISPF panels do not perform as expected, you might want to trace panel logic.

To trace IP PrintWay ISPF panel logic:

1. On the Infoprint Server: Printer Inventory Manager panel:
   a. Type 7 on the option line to select 7 Configure.
   b. Press Enter.

   ```
   Infoprint Server: Printer Inventory Manager
   Option ===> 7
   ```
   
   Printer Definitions
   1 Add Add a printer definition
   2 List List printer definitions
   3 Select Select printer definitions to list

   Other Functions
   4 Other Definitions Manage FSS, FSA, pool, and job selection definitions
   5 PrintWay Queue View IP PrintWay transmission queue
   6 PrintWay Message View IP PrintWay message log
   7 Configure Change panel configuration

2. On the Configuration panel:
   a. Select (with a slash [/]) or deselect the Trace Printer Inventory ISPF internals field. This option turns on ISPF panel logic tracing for both Printer Inventory panels and IP PrintWay panels.
b. Specify the name of the IP PrintWay trace data set file in the field **Trace data set** under the heading IP PrintWay. The default name is `USERID.ANFISPF.TRACE`. To return to the default directory, clear the ISPF trace directory field.

c. To save the trace option and name of the directory, and exit the panel, press the END function key or enter END on the command line.

d. To save the trace options without closing the panel, press Enter.

e. To close the panel without saving the trace options, enter CANCEL on the command line.

```
Configuration
Command ==>____________________________________________________________
/ Confirm delete requests
7 Trace Printer Inventory ISPF internals
ISPF trace directory. /var/Printsrv/trace
Printer Inventory:
  Configuration file . /etc/Printsrv/aopd.conf
  NLS path . . . . . . . /usr/lpp/Printsrv/SL/N
  Language . . . . . . EN_US
  Default printer. . LP1

IP PrintWay:
  Message log. . . . ANF.MESSAGE
  Trace data set . . USER1.ANFISPF.TRACE
```

### Dumps for IP PrintWay basic mode

IP PrintWay basic mode produces dumps under these conditions:

- A standard z/OS abend dump is produced when IP PrintWay basic mode abends. IP PrintWay also sends a message containing an abend reason code.
- When the operator sets a SLIP trap or enters the DUMP command, IP PrintWay produces an SVC dump.

### z/OS abend dump

z/OS automatically produces a standard z/OS abend dump during an abend if the IP PrintWay startup procedure contains a SYSUDUMP, SYSABEND, or SYSMDUMP DD statement. For help in reading a standard z/OS dump and using it to solve an IP PrintWay problem, see the diagnosis information for z/OS.

### SVC dump

An SVC dump is recorded on SYS1.DUMPxx and can be caused by IP PrintWay abending or by the system operator entering the DUMP command. You can use the IPCS program to format dumps and then view them at a display terminal or print them. See [z/OS MVS IPCS User's Guide](https://www.ibm.com/support/knowledgecenter/SSD65U_2.1.1/zos/memp_zos IPCS.html).
Chapter 9. Using NetSpool diagnostic tools

This chapter describes NetSpool diagnostic tools that you can use to collect information about problems with the NetSpool started task. These tools can provide useful information to your service representative in the IBM Support Center.

For information about how to trace the NetSpool daemon aopnetd, see "Tracing Infoprint Server" on page 255.

This chapter describes:
- Submitting APARs
- NetSpool trace facility
- NetSpool dumps

Submitting APARs

Report any difficulties using NetSpool to your IBM Support Center. If an APAR is required, the Support Center can tell you where to send the required diagnostic information.

When submitting an APAR, use one of these component IDs:
- 569504002: Problems in the NetSpool started task.
- 5647A01OP: Problems in the NetSpool daemon aopnetd.

NetSpool traces

NetSpool provides these types of traces:
- An internal wrap trace
- An external trace using the Generalized Trace Facility (GTF)

You can start either trace at initialization time or dynamically (while NetSpool is running).

For information about how to trace the NetSpool daemon aopnetd, see "Tracing Infoprint Server" on page 255.

The service representative in the IBM Support Center might ask you to run a trace to aid in diagnosing a problem. If so, the representative will tell you how and where to send the trace information. You do not have to interpret the trace. Send it to your service representative.

NetSpool internal wrap trace

The NetSpool internal trace contains hexadecimal entries for most module entries and exits. Trace data is maintained in internal storage and wraps when the trace storage area is full. Because the internal trace wraps, it reflects only the most recent history of NetSpool processing.

You can request internal tracing of NetSpool's program control and the printer LUs processed by NetSpool. When you request a full trace, you automatically receive an internal trace. For each printer LU that is externally traced, a corresponding internal trace is provided.
The internal trace is maintained in internal storage and cannot be directed to an external data set. To see the trace, you must generate a memory dump of the NetSpool internal storage. For more information about how to request a dump, see “Dumps” on page 287.

NetSpool maintains separate wrap traces for:

- NetSpool's program control.
  This includes NetSpool's startup, operator command processing, starting and stopping printer LU sessions, VTAM interfacing, and Printer Inventory tasks.
- Each printer LU’s processing of data.
  This includes the SCS and 3270 commands, orders, data flow processed by NetSpool, and record output.

For each trace, you can select a length from 4 K to 3996 K.

**NetSpool external trace**

For an external trace, NetSpool uses the services of the z/OS Generalized Trace Facility (GTF). The trace produced by GTF can contain z/OS system-level information as well as information concerning NetSpool activity. For more information about GTF, see [z/OS MVS Diagnosis: Tools and Service Aids](https://www.ibm.com/support/docview.wss?uid=swg21076122).

You can request an external trace of NetSpool's program control and one or more printer LUs.

**Tracing considerations**

If you are concerned about processor usage, throughput, timing, or storage, you might want to consider:

- **Processor usage and throughput**
  The full trace affects processor performance. Do not start a full trace during peak processor usage. All other traces affect processor performance, but the impact is not as significant.
- **Timing considerations**
  Activating any of the traces causes the timing relationships to change. The problems might disappear when tracing is active, especially if a full trace has been activated. If a problem disappears when you are tracing, specify different trace options. For example, limit the tracing to one printer LU.
- **Storage considerations**
  Tracing each printer LU requires a minimum additional storage of 6 K bytes above the 16 megabyte line. More storage is required if your trace options specify a PAGECOUNT that is greater than one. If you defined multiple printers in the Printer Inventory, you should consider tracing only the printer LUs that are needed to diagnose the problem.

**Starting a NetSpool trace**

You can request internal and external tracing in two ways:

- **The NetSpool startup procedure**
  By specifying parameters in the startup procedure, you can start tracing when NetSpool is started.
- **The MVS MODIFY command**
  By using the MVS MODIFY operator command, you can start and stop a trace while NetSpool is running.
Tip: Before you start any NetSpool external trace, you must start the Generalized Trace Facility (GTF).

Starting the Generalized Trace Facility (GTF)

You must start a GTF trace before starting a NetSpool external trace. When you start an external trace at NetSpool initialization, start GTF before starting NetSpool. NetSpool writes trace output to the GTF trace data set.

When you start GTF, specify these GTF parameters:

- The `USR=(FAC,FD2)` parameter
  Specify this parameter with two event identifiers (FAC and FD2) to obtain these trace entries:
  - FAC causes NetSpool to trace the input data stream, end-of-file rules, data set allocation parameters, and so on. The NetSpool user or system programmer can use this trace information to diagnose problems related to the input data stream or to attributes defined in the Printer Inventory for a NetSpool printer LU.
    To obtain this trace information, also specify the LUNAME parameter either in the NetSpool trace options data set or on the MVS MODIFY command you use to start the NetSpool trace. If you know which LU is failing, specify the LU name in the LUNAME parameter to limit the amount of trace information and make the trace easier to read.
  - FD2 traces causes NetSpool to trace program control flow, control blocks, and so on. This trace information can help diagnose many types of problems.

- The `JOBNAME=proc_name` parameter
  Specify this parameter to limit the trace entries to those produced by tasks running in the NetSpool address space. `proc_name` is the name of the NetSpool startup procedure.

For an example of how to start GTF, see Appendix A, “Starting the Generalized Trace Facility (GTF),” on page 289.

Starting a trace at NetSpool initialization

You can specify the `TRACE=ON` parameter on the EXEC statement and include a TRACEOPT DD statement in the NetSpool startup procedure to start tracing when the NetSpool is initialized. For a description of the startup procedure, see z/OS Infoprint Server Customization.

To change a NetSpool startup procedure after NetSpool has already started, stop the NetSpool program. Change the statements in the startup procedure and start NetSpool. See z/OS Infoprint Server Customization.

You can also trace the NetSpool daemon `apnetd`. See Tracing Infoprint Server on page 255.

Trace parameter on the EXEC statement

Specify the `TRACE=ON` parameter with the PARM parameter on the EXEC statement. For a description of the other parameters you can specify on the PARM parameter, see z/OS Infoprint Server Customization.

This example shows the syntax of the PARM parameter when `TRACE=ON` is specified:
Add a TRACEOPT DD statement to the NetSpool startup procedure and specify the name of the trace options data set. Specify DISP=SHR to allow more than one instance of NetSpool to use the data set. This statement is required if TRACE=ON is included in the EXEC statement.

This example shows the syntax of the TRACEOPT DD statement:

```
//TRACEOPT DD DSN=dsname,DISP=SHR
```

The trace options data set can be either a member of a partitioned data set (PDS) or a sequential data set with these attributes:
- Record format (RECFM) of fixed block (FB)
- Logical record length (LRECL) of 80

These trace options can be specified in the trace options data set. Specify at least one trace option:

**TYPE=**FULL | INTERNAL

- FULL Requests an external trace to GTF and a corresponding internal wrap trace for the program control and each printer LU specified for tracing.
- INTERNAL Requests an internal wrap trace for the program control and each printer LU specified for tracing.

**LUNAME=**ALL | (lu-name1[,lu-name2,...])

- ALL Requests tracing all NetSpool printer LUs defined in the Printer Inventory.
- (lu-name1[,lu-name2,...]) Requests tracing specific NetSpool printer LUs defined in the Printer Inventory.

**Recommendations:**
1. IBM recommends that you specify the LUNAME parameter so that additional information related to NetSpool printer LUs is traced.
2. If you know which NetSpool printer LU is failing, specify that LU name in this parameter so that the amount of trace information is limited and easier to read.
3. Tracing NetSpool printer LUs increases the above-the-16 M-line storage requirement for NetSpool. Therefore, trace only the printer LUs necessary for diagnosing the problem.
trace table. NetSpool allocates storage for the trace tables above the 16-megabyte line. Values from 1 to 999 are valid. The default is 12 (48 K bytes) for tracing NetSpool program control and 12 for each printer LU traced if PAGECOUNT is not specified. This allocation occurs only if NetSpool tracing is active.

Use this syntax to specify the trace options in the trace options data set as specified in the TRACEOPT DD statement:

```
Syntax
[TYPE=FULL | INTERNAL]
[,LUNAME=ALL | (lu-name1[,lu-name2...])]
[,PAGECOUNT=nnn]
```

For example, if you want to do full tracing of printer LUs LUPRT101 and LUPRT102, and you want the size of the internal trace storage to be 24 K for each printer LU and the NetSpool program control, specify this in the trace options data set:

```
TYPE=FULL,LUNAME=(LUPRT101,LUPRT102),PAGECOUNT=6
```

When NetSpool tracing is active, you can display the tracing status of the program control and each printer LU by entering this NetSpool command:

```
Syntax
F jobname.identifier,DISPLAY TRACE
```

Starting and stopping a trace dynamically using NetSpool operator commands

You can enter a NetSpool operator command to start or stop NetSpool tracing after NetSpool has started. If tracing is already started, you can also start tracing additional printer LUs or selectively stop printer LUs that are being traced. Once a trace has started for NetSpool program control or for a printer LU, its trace options cannot be modified. If you need to change the trace options for a specific printer LU, you must stop the trace for that printer and start it again.

To start tracing, enter the MVS MODIFY command and options:

```
Syntax
F jobname.identifier,TRACE ON
[,TYPE=FULL | INTERNAL]
[,LUNAME=ALL | (lu-name1[,lu-name2...])]
[,PAGECOUNT=nnn]
```

**TYPE=FULL | INTERNAL**

Specifies the type of trace to start. INTERNAL is the default value if TYPE is not specified.

**FULL** Requests an external trace to GTF and a corresponding internal wrap trace for the program control and each printer LU specified for tracing.
INTERNAL
Requests an internal wrap trace for the program control and each printer LU specified for tracing.

LUNAME=ALL | (lu-name1[,lu-name2,...])
Specifies the printer LUs to be traced. The program control is also traced. If LUNAME is not specified, only NetSpool program control is traced.

ALL Requests tracing all NetSpool printer LUs defined in the Printer Inventory.

(lu-name1[,lu-name2,...]) Requests tracing specific NetSpool printer LUs defined in the Printer Inventory.

Recommendations:
1. IBM recommends that you specify the LUNAME parameter so that additional information related to NetSpool printer LUs is traced.
2. If you know which NetSpool printer LU is failing, specify that LU name in this parameter so that the amount of trace information is limited and easier to read.
3. Tracing NetSpool printer LUs increases the above-the-16 M-line storage requirement for NetSpool. Therefore, trace only the printer LUs necessary for diagnosing the problem.

PAGECOUNT=n.nn
Specifies the number of 4 K pages of storage to allocate for each internal trace table. NetSpool allocates storage for the trace tables above the 16-megabyte line. Values from 1 to 999 are valid. The default is 12 (48 K bytes) for tracing NetSpool program control and 12 for each printer LU traced if PAGECOUNT is not specified. This allocation occurs only if NetSpool tracing is active.

To start NetSpool full tracing for the program control and LUPRT101 and LUPRT102, enter the MVS MODIFY command, as in this example:

F jobname.identifier,TRACE ON,TYPE=FULL,LUNAME=(LUPRT101,LUPRT102),PAGECOUNT=4

To stop a NetSpool trace, enter the MVS MODIFY command:

```
Syntax
F jobname.identifier,TRACE OFF[,LUNAME=ALL | (lu-name1[,lu-name2...])]
```

LUNAME=ALL | (lu-name1[,lu-name2,...])
Specifies the printer LUs for which tracing is to be stopped. If LUNAME is not specified, all NetSpool tracing is stopped.

ALL Requests tracing is to be stopped for all NetSpool printer LUs defined in the Printer Inventory. Tracing for program control continues.

(lu-name1[,lu-name2,...]) Requests tracing is to be stopped for specific NetSpool printer LUs defined in the Printer Inventory.

To stop NetSpool full tracing for the program control and LUPRT101 and LUPRT102, enter the MVS MODIFY command, as in this example:

F jobname.identifier,TRACE OFF,LUNAME=LUPRT101,LUPRT102
When NetSpool tracing is active, you can display the tracing status of the program control and each printer LU by entering the MVS MODIFY command:

**Syntax**

```
F jobname.identifier,DISPLAY TRACE
```

For example, to display the tracing status of the program control and printer LUPRT101, enter:

```
F jobname.identifier,DISPLAY LUPRT101
```

**Viewing and printing GTF trace data**

You can view and print GTF trace data sets using the Interactive Problem Control System (IPCS). For more information about how to use IPCS, see [z/OS MVS IPCS User's Guide](#).

When you use IPCS to view or print GTF trace data, specify these NetSpool USR event IDs: X'FAC' and X'FD2'.

**Dumps**

Dumps containing information useful to NetSpool diagnosis are produced under these conditions:

- A standard z/OS SVC dump is produced when NetSpool abends.
- When the operator sets a SLIP trap or enters the DUMP command, NetSpool produces an SVC dump.

An SVC dump is recorded on SYS1.DUMPxx and can be caused by NetSpool abending or by the system operator entering the DUMP command. You can use the IPCS program to format dumps and then view them at a display terminal or print them. See [z/OS MVS IPCS User's Guide](#).
Appendix A. Starting the Generalized Trace Facility (GTF)

You must start a GTF trace before starting a NetSpool or IP PrintWay basic mode external trace. When you start an external trace at NetSpool or IP PrintWay basic mode initialization, start GTF before starting the program component. Both NetSpool and IP PrintWay basic mode write trace output to the GTF trace data set.

When you start GTF, specify these GTF parameters:

**USR=(event_id)**
- For IP PrintWay basic mode tracing, specify USR=(FD1)
- For NetSpool tracing, specify USR=(FAC,FD2)

Specify this trace parameter to obtain the trace entries produced by IP PrintWay basic mode or NetSpool.

**JOBNAME=proc_name**
Specify this parameter to limit the trace entries to those produced by tasks running in the IP PrintWay basic mode or NetSpool startup procedure. 
*proc_name* is the name of the startup procedure.

You must start GTF before starting an external IP PrintWay basic mode or NetSpool trace. To start GTF:

1. Enter:
   ```
   S GTF.identifier,devname,volserial,(TIME=YES)
   ```
   - *identifier* Specifies the user name for this GTF session
   - *devname* Specifies the device number or type of output device to contain the trace data set
   - *volserial* Specifies the serial number of the magnetic tape or DASD volume to contain the trace data set
   - **TIME=YES** Specifies that GTF is to time-stamp every record
   
   GTF responds: “xx AHL100A SPECIFY TRACE OPTIONS”

2. Enter:
   ```
   R xx,TRACE=USRP,JOBNAMEP
   ```
   The USRP parameter is optional. Specify it only if you want to limit the trace entries to those produced by a single component (NetSpool or IP PrintWay basic mode).
   
   GTF responds: “xx AHL101A SPECIFY TRACE EVENT KEYWORDS—USR=,JOBNAME=”

3. For IP PrintWay basic mode tracing, enter:
   ```
   R xx,USR=(FD1),JOBNAME=(PRINTWAY)
   ```
   In the USR parameter, specify FD1 to limit the trace entries to the ones from IP PrintWay basic mode.
   In the JOBNAME parameter, specify the name of the IP PrintWay basic mode startup procedure.
   
   For NetSpool tracing, enter:
   ```
   R xx,USR=(FAC,FD2),JOBNAME=(NETPOOL)
In the USR parameter, specify FAC and FD2 to limit the trace entries to those produced by NetSpool.
In the JOBNAME parameter, specify the name of the NetSpool startup procedure.
GTF responds: “xx AHL102A CONTINUE TRACE DEFINITIONS or REPLY END”

4. Enter:
   R xx,END
   GTF responds with either of these:
   • AHL103I Trace Options Selected – USR=(FD2),Jobname=(NETSPOOL)
   • AHL103I Trace Options Selected – USR=(FD1),Jobname=(PRINTWAY)
   Plus:
   xx AHL125A RESPECIFY Trace Options or Enter U

5. Enter:
   R xx,U
   GTF responds: “AHL031A GTF Initialization Complete”

6. After tracing is complete, to stop GTF, enter:
   P GTF.identifier
Appendix B. Accessibility

Accessibility features help a user who has a physical disability, such as restricted mobility or limited vision, to use software products successfully. The major accessibility features in z/OS enable users to:

- Use assistive technologies such as screen readers and screen magnifier software
- Operate specific or equivalent features using only the keyboard
- Customize display attributes such as color, contrast, and font size

Using assistive technologies

Assistive technology products, such as screen readers, function with the user interfaces found in z/OS. Consult the assistive technology documentation for specific information when using such products to access z/OS interfaces.

Keyboard navigation of the user interface

Users can access z/OS user interfaces using TSO/E or ISPF. Refer to z/OS TSO/E Primer, z/OS TSO/E User's Guide, and z/OS ISPF User's Guide Vol I for information about accessing TSO/E and ISPF interfaces. These guides describe how to use TSO/E and ISPF, including the use of keyboard shortcuts or function keys (PF keys). Each guide includes the default settings for the PF keys and explains how to modify their functions.

z/OS information

z/OS information is accessible using screen readers with the BookServer/Library Server versions of z/OS books in the Internet library at: http://www.ibm.com/servers/eserver/zseries/zos/bkserv/
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This section lists information that can help you to configure and use Infoprint Server.

### Infoprint Server

<table>
<thead>
<tr>
<th>Title</th>
<th>Order number</th>
</tr>
</thead>
<tbody>
<tr>
<td>z/OS Infoprint Server Customization</td>
<td>S544-5744</td>
</tr>
<tr>
<td>z/OS Infoprint Server Introduction</td>
<td>S544-5742</td>
</tr>
<tr>
<td>z/OS Infoprint Server Messages and Diagnosis</td>
<td>G544-5747</td>
</tr>
<tr>
<td>z/OS Infoprint Server Operation and Administration</td>
<td>S544-5745</td>
</tr>
<tr>
<td>z/OS Infoprint Server Printer Inventory for PSF</td>
<td>S510-7703</td>
</tr>
<tr>
<td>z/OS Infoprint Server User's Guide</td>
<td>S544-5746</td>
</tr>
<tr>
<td>ABCs of z/OS System Programming Volume 7</td>
<td>SG24-6987</td>
</tr>
</tbody>
</table>

### Infoprint transforms for z/OS

<table>
<thead>
<tr>
<th>Title</th>
<th>Order number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infoprint Transforms to AFP for z/OS</td>
<td>G550-0443</td>
</tr>
<tr>
<td>Infoprint Transforms from AFP for z/OS</td>
<td>G550-0444</td>
</tr>
<tr>
<td>Infoprint XML Extender for z/OS</td>
<td>S544-5855</td>
</tr>
<tr>
<td>Infoprint XT Extender for z/OS: Customization and Usage</td>
<td>S544-5879</td>
</tr>
</tbody>
</table>

### Print Services Facility (PSF) for z/OS

<table>
<thead>
<tr>
<th>Title</th>
<th>Order number</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFP Conversion and Indexing Facility User's Guide</td>
<td>S550-0436</td>
</tr>
<tr>
<td>IBM AFP Fonts: Font Summary for AFP Font Collection</td>
<td>S544-5633</td>
</tr>
<tr>
<td>PSF for z/OS: AFP Download Plus</td>
<td>S550-0433</td>
</tr>
<tr>
<td>PSF for z/OS: Customization</td>
<td>S550-0427</td>
</tr>
<tr>
<td>PSF for z/OS: Diagnosis</td>
<td>G550-0428</td>
</tr>
<tr>
<td>PSF for z/OS: Introduction</td>
<td>G550-0430</td>
</tr>
<tr>
<td>PSF for z/OS: Messages and Codes</td>
<td>G550-0432</td>
</tr>
<tr>
<td>PSF for z/OS: User's Guide</td>
<td>S550-0435</td>
</tr>
</tbody>
</table>

### z/OS

<table>
<thead>
<tr>
<th>Title</th>
<th>Order number</th>
</tr>
</thead>
<tbody>
<tr>
<td>z/OS XL C/C++ Programming Guide</td>
<td>SC09-4765</td>
</tr>
<tr>
<td>z/OS XL C/C++ Run-Time Library Reference</td>
<td>SA22-7821</td>
</tr>
<tr>
<td>z/OS Communications Server: IP and SNA Codes</td>
<td>SC31-8791</td>
</tr>
<tr>
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<td>Order number</td>
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<tr>
<td>z/OS Communications Server: IP Sockets Application Programming</td>
<td>SC31-8788</td>
</tr>
<tr>
<td>Interface Guide and Reference</td>
<td></td>
</tr>
<tr>
<td>z/OS Communications Server: IP Configuration Guide</td>
<td>SC31-8775</td>
</tr>
<tr>
<td>z/OS Communications Server: IP Configuration Reference</td>
<td>SC31-8776</td>
</tr>
<tr>
<td>z/OS Communications Server: New Function Summary</td>
<td>GC31-8771</td>
</tr>
<tr>
<td>z/OS Communications Server: IPv6 Network and Application Design Guide</td>
<td>SC31-8885</td>
</tr>
<tr>
<td>z/OS Communications Server: SNA Diagnosis Vol 1, Techniques and</td>
<td>GC31-6850</td>
</tr>
<tr>
<td>Procedures</td>
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</tr>
<tr>
<td>z/OS Communications Server: SNA Diagnosis Vol 2, FFST Dumps and the</td>
<td>GC31-6851</td>
</tr>
<tr>
<td>VIT</td>
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</tr>
<tr>
<td>z/OS Communications Server: SNA Messages</td>
<td>SC31-8790</td>
</tr>
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<td>z/OS Communications Server: SNA Network Implementation Guide</td>
<td>SC31-8777</td>
</tr>
<tr>
<td>z/OS Communications Server: SNA Operation</td>
<td>SC31-8779</td>
</tr>
<tr>
<td>z/OS Communications Server: SNA Programming</td>
<td>SC31-8829</td>
</tr>
<tr>
<td>z/OS Communications Server: SNA Resource Definition Reference</td>
<td>SC31-8778</td>
</tr>
<tr>
<td>z/OS Distributed File Service SMB Administration</td>
<td>SC24-5918</td>
</tr>
<tr>
<td>z/OS HTTP Server Planning, Installing, and Using</td>
<td>SC34-4826</td>
</tr>
<tr>
<td>z/OS Information Roadmap</td>
<td>SA22-7500</td>
</tr>
<tr>
<td>z/OS JES2 Commands</td>
<td>SA22-7526</td>
</tr>
<tr>
<td>z/OS JES2 Initialization and Tuning Guide</td>
<td>SA22-7532</td>
</tr>
<tr>
<td>z/OS JES2 Initialization and Tuning Reference</td>
<td>SA22-7533</td>
</tr>
<tr>
<td>z/OS JES3 Commands</td>
<td>SA22-7540</td>
</tr>
<tr>
<td>z/OS JES3 Initialization and Tuning Guide</td>
<td>SA22-7549</td>
</tr>
<tr>
<td>z/OS JES3 Initialization and Tuning Reference</td>
<td>SA22-7550</td>
</tr>
<tr>
<td>z/OS Language Environment Debugging Guide</td>
<td>GA22-7560</td>
</tr>
<tr>
<td>z/OS Language Environment Run-Time Messages</td>
<td>SA22-7566</td>
</tr>
<tr>
<td>z/OS Language Environment Programming Guide</td>
<td>SA22-7561</td>
</tr>
<tr>
<td>z/OS MVS Diagnosis: Tools and Service Aids</td>
<td>GA22-7589</td>
</tr>
<tr>
<td>z/OS MVS Initialization and Tuning Guide</td>
<td>SA22-7591</td>
</tr>
<tr>
<td>z/OS MVS Initialization and Tuning Reference</td>
<td>SA22-7592</td>
</tr>
<tr>
<td>z/OS MVS JCL Reference</td>
<td>SA22-7597</td>
</tr>
<tr>
<td>z/OS MVS Planning: Workload Management</td>
<td>SA22-7602</td>
</tr>
<tr>
<td>z/OS MVS Product Management</td>
<td>SA22-7603</td>
</tr>
<tr>
<td>z/OS MVS Programming: Authorized Assembler Services Reference</td>
<td>SA22-7609</td>
</tr>
<tr>
<td>ALE-DYN</td>
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<tr>
<td>z/OS MVS Programming: Authorized Assembler Services Reference</td>
<td>SA22-7610</td>
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<tr>
<td>EDT-IXG</td>
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<tr>
<td>z/OS MVS Programming: Authorized Assembler Services Reference</td>
<td>SA22-7611</td>
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<tr>
<td>LLA-SDL</td>
<td></td>
</tr>
<tr>
<td>z/OS MVS Programming: Authorized Assembler Services Reference</td>
<td>SA22-7612</td>
</tr>
<tr>
<td>SET-WTO</td>
<td></td>
</tr>
<tr>
<td>z/OS MVS System Codes</td>
<td>SA22-7626</td>
</tr>
<tr>
<td>z/OS Planning for Installation</td>
<td>GA22-7504</td>
</tr>
</tbody>
</table>
### z/OS Titles

<table>
<thead>
<tr>
<th>Title</th>
<th>Order number</th>
</tr>
</thead>
<tbody>
<tr>
<td>z/OS Program Directory</td>
<td>GI10-0670</td>
</tr>
<tr>
<td>z/OS SDSF Operation and Customization</td>
<td>SA22-7670</td>
</tr>
<tr>
<td>z/OS Security Server RACF Security Administrator's Guide</td>
<td>SA22-7683</td>
</tr>
<tr>
<td>z/OS Summary of Message and Interface Changes</td>
<td>SA22-7505</td>
</tr>
<tr>
<td>z/OS UNIX System Services Command Reference</td>
<td>SA22-7802</td>
</tr>
<tr>
<td>z/OS UNIX System Services Messages and Codes</td>
<td>SA22-7807</td>
</tr>
<tr>
<td>z/OS UNIX System Services Planning</td>
<td>GA22-7800</td>
</tr>
<tr>
<td>z/OS UNIX System Services User’s Guide</td>
<td>SA22-7801</td>
</tr>
</tbody>
</table>

### CICS Titles

<table>
<thead>
<tr>
<th>Title</th>
<th>Order number</th>
</tr>
</thead>
<tbody>
<tr>
<td>CICS Customization Guide</td>
<td>SC34-6227</td>
</tr>
<tr>
<td>CICS Diagnosis Reference</td>
<td>LY33-6102</td>
</tr>
<tr>
<td>CICS Resource Definition Guide</td>
<td>SC34-6228</td>
</tr>
<tr>
<td>CICS Supplied Transactions</td>
<td>SC34-6230</td>
</tr>
</tbody>
</table>

### IMS/ESA Titles

<table>
<thead>
<tr>
<th>Title</th>
<th>Order number</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMS Version 8: Administration Guide: System</td>
<td>SC27-1284</td>
</tr>
<tr>
<td>IMS Version 8: Administration Guide: Transaction Manager</td>
<td>SC27-1285</td>
</tr>
</tbody>
</table>

### 3270 and SNA data streams

<table>
<thead>
<tr>
<th>Title</th>
<th>Order number</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM 3270 Information Display System Data Stream Programmer’s Reference</td>
<td>GA23-0059</td>
</tr>
<tr>
<td>IBM 3270 Information Display System 3274 Control Unit Description and Programmer’s Reference</td>
<td>GA23-0061</td>
</tr>
<tr>
<td>IBM 3270 Information Display System Reference Summary</td>
<td>GX20-1878</td>
</tr>
<tr>
<td>IBM 3270 Kanji Data Streams</td>
<td>GA18-2980</td>
</tr>
<tr>
<td>IPDS and SCS Technical Reference</td>
<td>S544-5312</td>
</tr>
<tr>
<td>Systems Network Architecture: Sessions Between Logical Units</td>
<td>GC20-1868</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Title</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AFP: Programming Guide and Line Data Reference</td>
<td></td>
</tr>
<tr>
<td>Data Stream and Object Architectures: Bar Code Object Content Architecture Reference</td>
<td></td>
</tr>
<tr>
<td>Data Stream and Object Architectures: IOCA Reference</td>
<td></td>
</tr>
<tr>
<td>Title</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>InfoPrint Manager: Reference</td>
<td></td>
</tr>
<tr>
<td>InfoPrint Manager for AIX: Procedures</td>
<td></td>
</tr>
<tr>
<td>InfoPrint Manager for Windows: Procedures</td>
<td></td>
</tr>
<tr>
<td>InfoPrint Transform Manager for Linux</td>
<td></td>
</tr>
<tr>
<td>InfoPrint Transform Manager for Linux: afp2pdf Transform Installation and User's Guide</td>
<td></td>
</tr>
</tbody>
</table>
Index

Special characters
/var/Printsrv/ipp.out file 264
/var/Printsrv/trace directory 255

A
abend code
  finding 227
  Infoprint Server 177
  IP PrintWay basic mode 54
ABENDx keyword 245
accessibility 291
ANFM messages 3
AOP messages 77
AOPDUMPON environment variable 264
aoplogu –d command 263
aoplogu command 77
AOPPRINT, tracing 260
AOPTRACEDIR environment variable 256
AOPTRACEDIR environment variable 266
AOPTRACEBYTES environment variable 256
AOPTRACEBYTES environment variable 266
AOPTRACEMAXFILES environment variable 256
AOPTRACEMAXFILES environment variable 266
AOPTRACEON environment variable 255
AOPTRACEON environment variable 255
AOPTRACEON_DATA environment variable 256
AOPTRACEON_DATA environment variable 256
AOPTRACEON_FILTER environment variable 256
AOPTRACEON_FILTER environment variable 256
AOPTRACEON_MSGLOG environment variable 256
AOPTRACEON_MSGLOG environment variable 256
APARs
  initiating 251
  IP PrintWay 265
  NetSpool 281
  preparing 241, 251
  Print Interface 255
  Printer Inventory Manager 255
  searching 241, 251
  SNMP subagent 255
  submitting 252
  transform interface 255
  Windows client 255
APplid messages 179
APplid field 236
AS/400 printing problem 235

B
BPXF024I error message 234
BPXOINIT error message 234
building a keyword string 241
building a search argument 251

C
checking permissions 229
Coaxial Printer Support, tracing 266
codes 177
commands
  aoplogu 77
  aoplogu –d 263
dumps 263
commands (continued)
  hinvu –d 263
  MODIFY command
    IP PrintWay basic mode 271, 273
    NetSpool 285, 287
  sdru –d 263
  TRACEON command, IP PrintWay basic mode 272
common message log 77, 227
component IDs 243
components, Infoprint Server 223
determining which to troubleshoot 223
trace facilities 225
copies, multiple (error) 233
CSV0028I error message 236
CSV003I error message 236

D
data base of problem fixes 241
  searching 241, 251
developing a keyword string 241
diagnosing problems in Infoprint Central 238
diagnosis overview 223
disability 291
DOC keyword 248
dump command
  PIDU 263
dumps
  common message log 263
  finding 227
  Historical Inventory 263
  Infoprint Central 263
  IP PrintWay basic mode 279
  NetSpool 287
  Printer Inventory 263
  SVC, IP PrintWay basic mode 279
  SVC, NetSpool 287
z/OS abend, IP PrintWay basic mode 279

e-mail protocol, diagnosing problems with 236
econnreset error 233
EDC8115I error message 91
empty file 233
environment variables 255, 264
error file 261
error message prefix 223
EXEC statement, NetSpool 283
external trace
  IP PrintWay basic mode
    description 266
    starting at initialization 268
    starting dynamically 271
  NetSpool
description 282

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external trace (continued)
    NetSpool (continued)
        starting 283

F
  FAC event identifier 283
  FD1 event identifier 267
  FD2 event identifier 283
  finding
      abends, dumps, messages 227
      transform stderr 261
  font parameter, incorrect 234
  FSAs, tracing 266
  full trace without print records, IP PrintWay basic mode 266
  full trace, IP PrintWay basic mode 266

G
  Generalized Trace Facility (GTF) 289
  IP PrintWay basic mode external traces 266
  NetSpool external traces 282
  parameters 289
  procedure 289
  starting 289
  starting procedures
      IP PrintWay basic mode 267
      NetSpool 283
  viewing and printing trace data
      IP PrintWay 274
      NetSpool 287

H
  hinvu –d command 263
  HP LaserJet printer 232

I
  IBM Software Support Facility 241
  searching 251
  identifier for job not displayed on spool 235
  INCORROUT keyword 247, 249
  Infoprint Central
      diagnosing problems 238
      tracing 260
  Infoprint Server components 223
      determining which to troubleshoot 223
      error message prefix 223
  Infoprint Server, tracing 255
  Interactive Problem Control System (IPCS) 274
  internal trace
      IP PrintWay basic mode
          description 266
          starting at initialization 268
          starting dynamically 271
      NetSpool
          description 281
          starting 283

IP PrintWay
  component ID 243, 265
  message logs 227
  sendmail, diagnosing problems with 236
IP PrintWay basic mode
  AOXVTM not found 236
  dumps 279
  external traces 266
  full trace 266
  full trace without print records 266
  ISPF panel logic tracing 278
  reason codes 54
  starting GTF 267
  starting traces 267
  starting traces, examples 275
  stopping a trace 273
  SVC dump 279
  tracing considerations 267
  z/OS abend dump 279
IP PrintWay extended mode
  trace example 258
  tracing 255
IPP server trace information 264
ISPF panel administrator error 235
ISPF panel diagnostic tools 262
ISPF panels
    IP PrintWay basic mode trace parameters 268
    starting ISPF trace 262
    stopping ISPF trace 262
    tracing processing in 262

J
  job identifier not displayed 235
  JOBNAME parameter, in GTF 283

K
  keyboard 291
  keywords 241
    INCORROUT modifiers 249
    module 248
    release level 250
    type-of-failure 244
      ABENDx 245
      DOC 248
      INCORROUT 247
      LOOP 245
      MSGx 246
      PERF 247
      WAIT 246

L
  LookAt message retrieval tool xiii
  LOOP keyword 245
  Ip command error 234
M
maintenance level keywords 250
message log
  common message log xviii
  IP PrintWay 227
  IP PrintWay basic mode xviii
  NetSpool xviii
  transform daemon xix
message retrieval tool, LookAt xiii
messages 227
migration information xv
MODIFY command
  IP PrintWay basic mode 271, 273
  NetSpool 285, 287
module keyword 248
MSGx keyword 246
MVS MODIFY command
  IP PrintWay basic mode 271, 273
  NetSpool 285, 287

N
NetSpool 224
close error 234
  component ID 243, 281
diagnostic tools 281
dumps 287
  external trace 282
  internal wrap trace 281
page-formatting values ignored for 3270 data 236
printer definitions 226
reason codes 213
SNA sense codes 214, 224
starting GTF 283
starting trace at initialization 283
starting trace dynamically 285
starting tracing 282
stopping trace dynamically 285, 286
SVC dump 287
trace descriptions 281
trace options data set 284
  trace options data set statement 284
  tracing considerations 282
not authorized error on ISPF panels 235

O
output error, incorrect or partial 233
overview
  diagnosis 223

P
PERFM keyword 247
performance problems 232
permissions 229
PIDU (Printer Inventory Definition Utility)
  dump command 263
preparing APARs 241, 251
Print Interface (continued)
  component ID 255
  tracing 255
printer definitions 226
  IP PrintWay 227
  NetSpool 226
  querying 227
  VTAM, used by 226
Printer Inventory
dumps 263
Printer Inventory Definition Utility (PIDU)
dump command 263
Printer Inventory Manager 226
  component ID 255
  ISPF panel logic tracing 262
  reason codes 217
  return codes 217, 224
problems in Infoprint Central 238
PSP bucket xiv
publications 297

R
reason codes
  Infoprint Server 177
  IP PrintWay basic mode 54
  NetSpool 213
  Printer Inventory Manager 217
release level keywords 250
return codes
  Printer Inventory Manager 217

S
sdbu –d command 263
search argument 251
sendmail, diagnosing problems with 236
shortcut keys 291
SMB support tracing 259
SNA sense codes 214, 224
SNMP subagent
  component ID 255
starting
  generalized trace facility 267, 283, 289
  IP PrintWay basic mode external trace at initialization 276
  IP PrintWay basic mode external trace at initialization, with prompting 277
  IP PrintWay basic mode external trace dynamically 277
  IP PrintWay basic mode internal trace at initialization 275
  IP PrintWay basic mode internal trace at initialization, with prompting 277
  IP PrintWay basic mode internal trace dynamically 275, 277
  IP PrintWay basic mode ISPF panel tracing 278
  IP PrintWay basic mode trace at initialization 268
  IP PrintWay basic mode trace dynamically 271
  IP PrintWay basic mode trace, examples 275
starting (continued)

- IP PrintWay basic mode trace, through ISPF panels 268
- IP PrintWay basic mode tracing 267
- ISPF panel logic trace 262
- ISPF trace 262
- NetSpool trace 282
- NetSpool trace at initialization 283
- NetSpool trace dynamically 285
- Print Interface tracing 257
- Printer Inventory Manager tracing 257
- transform interface tracing 257
- Windows client tracing 257

stopping

- IP PrintWay basic mode internal traces 275
- IP PrintWay basic mode ISPF panel logic tracing 278
- IP PrintWay basic mode trace 274
- IP PrintWay basic mode traces 273
- ISPF panel logic trace 262
- ISPF trace 262
- NetSpool trace dynamically 285, 286

storage considerations

- NetSpool trace 282
- system dumps 227

T

timing considerations

- IP PrintWay basic mode trace 267
- NetSpool trace 282
- trace facilities 225
- trace options data set 284
  - example 285
  - parameters 284
  - syntax 285
- trace options data set statement 284
- TRACEOPT DD statement 284

traces (continued)

- starting IP PrintWay basic mode trace, examples 275
- starting, IP PrintWay basic mode 267
- stopping IP PrintWay basic mode trace 273
- stopping IP PrintWay basic mode trace dynamically 273
- TRACEOFF command 273
- TRACEON command, IP PrintWay basic mode 272

using environment variables 255

tracing

- AOPPRINT started procedure 260
- cancel 259
- Coaxial Printer Support 266
- Infoprint Central 260
- Infoprint Server 255
- IP PrintWay basic mode 265
- IP PrintWay extended mode 255
- lp 259
- lpstat 259
- Print Interface 255
- Printer Inventory Manager 255
- SMB support 259
- transform interface 255
- Windows client 255

transform daemon

- message log xix

transform interface

- component ID 255
- tracing 255

transform stderr, finding 261

transforms error file 261

troubleshooting 223

- AS/400 printing problem 235
- choosing component 225
- common errors 232
- copies, multiple (error) 233
- determining which component 223
- econnreset error 233
- empty file 233
- error message BPXF024I 234
- error message EDC5112I 234
- error message prefix 223
- font parameter 234
- HP LaserJet printer 232
- ISPF panel error 235
- job identifier not displayed on spool 235
- Ip command error 234
- Module AOVVTM not found 236
- NetSpool 224
- NetSpool close error 234
- NetSpool page-formatting values ignored 236
- output error, incorrect or partial 233
- performance problems 232
- Print Interface 224
- printer definitions 226
- Printer Inventory Manager
  - return codes 224
- truncated lines 232
- truncated lines 232
unset command, used to stop tracing 258
usage considerations
  IP PrintWay basic mode trace 267
  NetSpool trace 282
USR parameter, in GTF 267, 283

variables, environment 255
viewing and printing trace data
  IP PrintWay 274
  NetSpool 287
VTAM applications using NetSpool, determining printer
definition 226
VTAM printer support in IP PrintWay, tracing 266

WAIT keyword 246
Windows client
  component ID 255
  tracing 255

z/OS abend dump, IP PrintWay basic mode 279