Figures

1. Sample output from command ls -E
   /usr/lpp/Printsrv/bin ........ 2 5 2
2. Sample output from command ls -nE
   /usr/lpp/Printsrv/bin ........ 2 5 3
3. Sample output from command ls -E
   /usr/lpp/Printsrv/lib ........ 2 5 3
4. Sample output from command ls -nE
   /usr/lpp/Printsrv/lib ........ 2 5 4
5. Building and using a keyword string 265
<table>
<thead>
<tr>
<th>Table Number</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Documents for Infoprint Server</td>
<td>xi</td>
</tr>
<tr>
<td>2</td>
<td>Documents for IBM transform products</td>
<td>xii</td>
</tr>
<tr>
<td>3</td>
<td>Documents for Ricoh products</td>
<td>xii</td>
</tr>
<tr>
<td>4</td>
<td>Infoprint Server reason codes</td>
<td>201</td>
</tr>
<tr>
<td>5</td>
<td>NetSpool abend reason codes</td>
<td>237</td>
</tr>
<tr>
<td>6</td>
<td>SNA sense codes for Function Management Data (FMD)</td>
<td>239</td>
</tr>
<tr>
<td>7</td>
<td>SNA sense codes for BIND</td>
<td>239</td>
</tr>
<tr>
<td>8</td>
<td>Printer Inventory Manager return codes</td>
<td>241</td>
</tr>
<tr>
<td>9</td>
<td>Printer Inventory Manager reason codes</td>
<td>241</td>
</tr>
<tr>
<td>10</td>
<td>NetSpool print job identification</td>
<td>244</td>
</tr>
<tr>
<td>11</td>
<td>Infoprint Server functions and corresponding Infoprint Server components</td>
<td>245</td>
</tr>
<tr>
<td>12</td>
<td>General location of abend information and system dumps</td>
<td>248</td>
</tr>
<tr>
<td>13</td>
<td>General location of messages</td>
<td>249</td>
</tr>
<tr>
<td>14</td>
<td>Installation problems with Infoprint Central</td>
<td>259</td>
</tr>
<tr>
<td>15</td>
<td>Browser problems with Infoprint Central</td>
<td>260</td>
</tr>
<tr>
<td>16</td>
<td>Other problems with Infoprint Central</td>
<td>260</td>
</tr>
<tr>
<td>17</td>
<td>Component identification numbers</td>
<td>266</td>
</tr>
<tr>
<td>18</td>
<td>Examples of modifier keywords: Description of incorrect document</td>
<td>271</td>
</tr>
<tr>
<td>19</td>
<td>Examples of modifier keywords: Description of incorrect part</td>
<td>271</td>
</tr>
<tr>
<td>20</td>
<td>Examples of modifier keywords: Description of incorrect output</td>
<td>272</td>
</tr>
</tbody>
</table>
About this publication

This publication helps you troubleshoot difficulties with Infoprint Server, which is a separately priced feature of z/OS®. This publication applies to z/OS Version 2 Release 1.

This publication 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.

**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 publication

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 publication if you are a system programmer, a system analyst, or an application programmer responsible for diagnosing problems in Infoprint Server.

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

How to read syntax diagrams

This section explains the general notations that this document uses in syntax diagrams. For ease of reading, this document 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><strong>Apostrophes</strong></td>
<td>String</td>
<td>As shown</td>
<td>SEND '123'</td>
</tr>
<tr>
<td><strong>Bold</strong></td>
<td>Keyword</td>
<td>As shown</td>
<td>CLASS</td>
</tr>
<tr>
<td><strong>Braces</strong></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><strong>Brackets</strong></td>
<td>Optional item</td>
<td>One item or no items</td>
<td>aopstop [now]</td>
</tr>
<tr>
<td><strong>Comma</strong></td>
<td>Separator</td>
<td>As shown</td>
<td>DISPLAY C,K</td>
</tr>
<tr>
<td><strong>Ellipsis</strong></td>
<td>Repeatable item</td>
<td>One or more items</td>
<td>filename ...</td>
</tr>
<tr>
<td><strong>Lowercase</strong></td>
<td>Item the system defines</td>
<td>As shown, in lowercase</td>
<td>lp</td>
</tr>
</tbody>
</table>
This notation: Means: You enter:

For example:

This document shows: You enter:

<table>
<thead>
<tr>
<th>Notation</th>
<th>Means:</th>
<th>You enter:</th>
<th>This document shows:</th>
<th>You enter:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowercase italic</td>
<td>Variable item</td>
<td>A value for the item</td>
<td>MOUNT devnum</td>
<td>MOUNT A30</td>
</tr>
<tr>
<td>Parentheses</td>
<td>List of items</td>
<td>The parentheses and one or more items from the list</td>
<td>(GT10,GT12)</td>
<td>(GT10,GT12)</td>
</tr>
<tr>
<td>Special characters</td>
<td>Various symbols</td>
<td>As shown</td>
<td>%filter-options</td>
<td>%filter-options</td>
</tr>
<tr>
<td>Underline</td>
<td>Default</td>
<td>The item, or you can omit it</td>
<td>K T REF</td>
<td>K T</td>
</tr>
<tr>
<td>Uppercase</td>
<td>Item the system defines</td>
<td>As shown, in uppercase</td>
<td>PRMODE</td>
<td>PRMODE</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>
<td>ls</td>
<td>lp</td>
</tr>
<tr>
<td>Vertical bar in braces</td>
<td>Required choice</td>
<td>One item</td>
<td>{NOW</td>
<td>FOREVER}</td>
</tr>
<tr>
<td>Vertical bar in brackets</td>
<td>Optional choice</td>
<td>One item or no items</td>
<td>[PORTNO</td>
<td>PORTQUEUE]</td>
</tr>
</tbody>
</table>

Where to find more information

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

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 depends on your z/OS operating system, for example: ZOSV2R1. 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

This section lists documents that can help you migrate from previous releases of z/OS and from IP PrintWay™ basic mode to IP PrintWay extended mode.

<table>
<thead>
<tr>
<th>Document</th>
<th>Form number</th>
</tr>
</thead>
<tbody>
<tr>
<td>z/OS Migration</td>
<td>GA32-0889</td>
</tr>
</tbody>
</table>

Describes the tasks required to migrate to z/OS V2R1. Includes the migration tasks for Infoprint Server.
### Documents

This section lists related documents that can help you use Infoprint Server and transform products. For documents for all z/OS products, see [z/OS Information Roadmap](#).

**Table 1. Documents for Infoprint Server**

<table>
<thead>
<tr>
<th>Document</th>
<th>Form number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>z/OS Summary of Message and Interface Changes</strong></td>
<td>SA23-2300</td>
</tr>
<tr>
<td>Describes new and changed messages and interfaces in z/OS V2R1. Includes the messages and interfaces for Infoprint Server.</td>
<td></td>
</tr>
<tr>
<td><strong>z/OS Infoprint Server Customization</strong></td>
<td>SA38-0691</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 V2R1.</td>
<td></td>
</tr>
<tr>
<td><strong>z/OS Infoprint Server Introduction</strong></td>
<td>SA38-0692</td>
</tr>
<tr>
<td>Introduces Infoprint Server. This document contains printing scenarios that show how you can use Infoprint Server in your installation.</td>
<td></td>
</tr>
<tr>
<td><strong>z/OS Infoprint Server Customization</strong></td>
<td>SA38-0691</td>
</tr>
<tr>
<td>Describes customization tasks for Infoprint Server. This document 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><strong>z/OS Infoprint Server Operation and Administration</strong></td>
<td>SA38-0693</td>
</tr>
<tr>
<td>Describes operator procedures and administrative tasks for Infoprint Server. This document 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><strong>z/OS Infoprint Server Printer Inventory for PSF</strong></td>
<td>SA38-0694</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><strong>z/OS Infoprint Server User’s Guide</strong></td>
<td>SA38-0695</td>
</tr>
<tr>
<td>Describes user tasks for Infoprint Server. This document 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>
</tbody>
</table>
Table 1. Documents for Infoprint Server (continued)

<table>
<thead>
<tr>
<th>Document</th>
<th>Form number</th>
</tr>
</thead>
<tbody>
<tr>
<td>z/OS Infoprint Server Messages and Diagnosis</td>
<td>GA32-0927</td>
</tr>
<tr>
<td>Describes messages from Infoprint Server. This document also describes how to use Infoprint Server tracing facilities to diagnose and report errors.</td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Documents for IBM transform products

<table>
<thead>
<tr>
<th>Document</th>
<th>Form number</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM Infoprint Transforms to AFP for z/OS</td>
<td>G550-0443</td>
</tr>
<tr>
<td>Describes IBM Infoprint Transforms to AFP for z/OS (5655-N60)</td>
<td></td>
</tr>
<tr>
<td>IBM Print Transforms from AFP for Infoprint Server for z/OS</td>
<td>G325-2634</td>
</tr>
<tr>
<td>Describes these products:</td>
<td></td>
</tr>
<tr>
<td>• IBM Print Transform from AFP to PCL for Infoprint Server for z/OS (5655-TF2)</td>
<td></td>
</tr>
<tr>
<td>• IBM Print Transform from AFP to PDF for Infoprint Server for z/OS (5655-TF1)</td>
<td></td>
</tr>
<tr>
<td>• IBM Print Transform from AFP to PostScript for Infoprint Server for z/OS (5655-TF3)</td>
<td></td>
</tr>
<tr>
<td>IBM Infoprint XT for z/OS</td>
<td>GI11-9492</td>
</tr>
<tr>
<td>Describes IBM Infoprint XT for z/OS (5655-O15)</td>
<td></td>
</tr>
</tbody>
</table>

Table 3. Documents for Ricoh products

<table>
<thead>
<tr>
<th>Ricoh Document</th>
</tr>
</thead>
<tbody>
<tr>
<td>InfoPrint Transform Manager for AIX®, Linux, and Windows</td>
</tr>
<tr>
<td>Describes InfoPrint Transform Manager for AIX, Linux, and Windows</td>
</tr>
<tr>
<td>InfoPrint Transform Manager for AIX, Linux, and Windows: afp2pdf Transform Installation and User’s Guide</td>
</tr>
<tr>
<td>Describes the InfoPrint Transform Manager for Linux AFP to PDF transform</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

This information 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.

Chapter 1, “IP PrintWay basic mode (ANF) messages and codes” and Chapter 3, “NetSpool (API) messages and codes” also list the abend reason codes for the IP PrintWay basic mode and NetSpool components of Infoprint Server. The code entries provide:

Explanation
The explanation gives more information about the condition that caused the component to abend.

System action
The system action specifies whether the component is to attempt to restart automatically or is to continue to terminate.

System programmer response
If present, the system programmer response provides a suggested action for recovering from the error condition.

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, write messages to the Infoprint Server common message log if your installation has customized it. In addition, PSF for z/OS can write messages in the common message log. Infoprint Central lets authorized users view messages in the common message log for selected print jobs and 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 the `aopd.conf` file (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 files 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 publication. The code explanations in this publication either tell you how to interpret these codes, or refer you to another publication that contains the information you need.
How to send your comments to IBM

We appreciate your input on this publication. Feel free to comment on the clarity, accuracy, and completeness of the information or provide any other feedback that you have.

Use one of the following methods to send your comments:
1. Send an email to mhvrdfs@us.ibm.com.
3. Mail the comments to the following address:
   IBM Corporation
   Attention: MHVRDFS Reader Comments
   Department H6MA, Building 707
   2455 South Road
   Poughkeepsie, NY 12601-5400
   US
4. Fax the comments to us, as follows:
   From the United States and Canada: 1+845+432-9405
   From all other countries: Your international access code +1+845+432-9405

Include the following information:
• Your name and address
• Your email address
• Your telephone or fax number
• The publication title and order number:
  z/OS V2R1.0 Infoprint Server Messages and Diagnosis
  GA32-0927-00
• The topic and page number related to your comment.
• The text of your comment.

When you send comments to IBM, you grant IBM a nonexclusive right to use or distribute your comments in any way appropriate without incurring any obligation to you.

IBM or any other organization uses the personal information that you supply to contact you only about the issues that you submit.

If you have a technical problem

Do not use the feedback methods that are listed for sending comments. Instead, take one of the following actions:
• Contact your IBM service representative.
• Call IBM technical support.
Summary of changes

This section describes the release enhancements that were made.

z/OS Version 2 Release 1

Refer to the following publications for specific enhancements for z/OS Version 2 Release 1:

- [z/OS Summary of Message and Interface Changes](#), SA23-2300
- [z/OS Introduction and Release Guide](#), GA32-0887
- [z/OS Planning for Installation](#), GA32-0890
- [z/OS Migration](#), GA32-0889
Chapter 1. IP PrintWay basic mode (ANF) 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.

ANF message format

Messages have this format:

ANF \( s \) \( nnnn \) \( t \)

\( ANF \): Identifies IP PrintWay basic mode messages.

\( s \): Source code:

- \( H \): The message is from an IP PrintWay health check.
- \( M \): The message is from IP PrintWay basic mode.

\( nnnn \): Three to four-digit message number.

\( t \): Type code:

- \( I \): This is an information message.
- \( W \): A warning situation occurred.
- \( A \): Operator action is required.
- \( E \): An error occurred.

Messages

ANFH001E  IP PrintWay basic mode is running. IP PrintWay extended mode is the preferred mode.

Explanation: The IBM Health Checker Check (IBMINFOPRINT, INFOPRINT_PRINTWAY_MODE) function detected a printing mode that is not preferred.

This check found IP PrintWay basic mode is currently running or was running at some time during this IPL of the z/OS system. IBM encourages you to use IP PrintWay extended mode instead of basic mode to print your output. IBM functionally stabilized IP PrintWay basic mode in z/OS V1R5 and plans to add new function only to IP PrintWay extended mode.

System action: The system continues processing.

Operator response: Notify the system programmer that this problem was reported.

System programmer response: Evaluate your printing needs to determine if IP PrintWay extended mode can meet the needs of your installation. If possible, migrate to IP PrintWay extended mode.

Note: Some installations might need to continue to use IP PrintWay basic mode.

For information about IP PrintWay extended mode, see:

- z/OS Infoprint Server Introduction
- z/OS Infoprint Server Customization
- z/OS Infoprint Server Operation and Administration
- z/OS Infoprint Server User's Guide

Problem determination: Not applicable.

Source: Infoprint Server

Module: ANFXHCCK

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFH002I  IP PrintWay extended mode is running.

Explanation: The IBM Health Checker Check (IBMINFOPRINT, INFOPRINT_PRINTWAY_MODE) function found no exceptions. IP PrintWay extended mode is currently running or was running at some time during this IPL of the z/OS system.
ANFH003I  IP PrintWay basic mode and extended mode are both running. IP PrintWay extended mode is the preferred mode.

Explanation: The IBM Health Checker Check (IBMINFOPRINT, INFOPRINT_PRINTWAY_MODE) function found that IP PrintWay basic mode and extended mode are currently running or were running at some time during this IPL of the z/OS system.

IBM encourages you to use IP PrintWay extended mode instead of basic mode to print your output. IBM functionally stabilized IP PrintWay basic mode in z/OS V1R5 and plans to add new function only to IP PrintWay extended mode.

System action: The system continues processing.
Operator response: Notify the system programmer that this problem was reported.
System programmer response: Evaluate your printing needs to determine if you can migrate completely to IP PrintWay extended mode.

Note: Some installations might need to continue to use IP PrintWay basic mode.

For information about IP PrintWay extended mode, see:
- z/OS Infoprint Server Introduction
- z/OS Infoprint Server Customization
- z/OS Infoprint Server Operation and Administration
- z/OS Infoprint Server User’s Guide

For information about how to migrate from IP PrintWay basic mode to extended mode, see the migration actions in z/OS Infoprint Server Customization.

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

ANFMI000I  IP PrintWay is not running.

Explanation: The IBM Health Checker Check (IBMINFOPRINT, INFOPRINT_PRINTWAY_MODE) function found that IP PrintWay is not running.

If you decide to use IP PrintWay to print output to printers in your TCP/IP or SNA network, IBM encourages you to use IP PrintWay extended mode instead of basic mode to print your output. IBM functionally stabilized IP PrintWay basic mode in z/OS V1R5 and plans to add new function only to IP PrintWay extended mode.

For information about IP PrintWay, see:
- z/OS Infoprint Server Introduction
- z/OS Infoprint Server Customization
- z/OS Infoprint Server Operation and Administration
- z/OS Infoprint Server User’s Guide

System action: The system continues processing.
Operator response: None.
System programmer response: None.

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

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.
### 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/LINKLIST 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/LINKLIST).

**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 from storage *msgtabl*

**Explanation:** IP PrintWay basic mode could not delete the message table from storage during termination.

In the message text, *msgtabl* is the message table name that could not be deleted.

**System action:** Termination continues.

**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.

### ANFM009I Unable to delete message table token *tokennm*

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

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

**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.

ANFM010S 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.

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 0E91. If IP PrintWay does not abend, you can ignore this message. However, if you want IP PrintWay to avoid writing this message at all, 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

4 z/OS V2R1.0 Infoprint Server Messages and Diagnosis
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 285.

**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**  
**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, *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**  
**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, *jobname* is the job name, an FSS name, or an FSA name. *storagesize* is the storage size requested by the GETMAIN macro. *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  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, jobname is either a job name, an FSS name, or an FSA name. 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  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, 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:  The Functional Subsystem Application (FSA) for the indicated FSA name has been terminated.

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.
**ANFM028I**  
jobname (modulename) detected system completion code 'systemcompletioncode', IP PrintWay abend reason code 'abendreasoncode'

**Explanation:** An abend occurred.

In the message text:

- **jobname**  
  A job name, an FSS name, or an FSA name.

- **modulename**  
  Name of the ESTAI routine.

- **systemcompletioncode**  
  System completion code.

- **abendreasoncode**  
  IP PrintWay abend reason code.

**System action:** The IP PrintWay FSA ends.

**Operator response:** Restart the IP PrintWay FSA.

**System programmer response:** Look up the IP PrintWay abend reason code in "IP PrintWay basic mode system completion code and abend reason codes" on page 53.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**ANFM030I**  
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:** Abend processing continues.

**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. Save the SVC dump that the ESTAI routine provides and send it to IBM support for analysis.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**ANFM031I**  
jobname The IP PrintWay command('command') was not processed, tracing is not active

**Explanation:** The command was not processed because tracing 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.

**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.
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: Not applicable.

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.

ANFM034I  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.

ANFM035I  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.

ANFM036I  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.
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 the keyword is accepted or the command continues processing 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.

---

**ANFM048I**  
*jobname* A duplicate keyword (*keyword*) was entered for the IP PrintWay command (*command*)

**Explanation:** You entered a 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.

ANFM049I 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. 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 An unsupported parameter(parameter) was specified for keyword(keyword) in the IP PrintWay command(command)

Explanation: You typed an incorrect keyword parameter.

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

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

Operator response: Type the command again with the correct 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.
ANFM064I  jobname The parameter(\textit{parameter}) is mutually exclusive with another parameter specified in keyword(\textit{keyword}) in the IP PrintWay command(\textit{command})

Explanation: You typed two mutually exclusive parameters in the indicated keyword.

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

ANFM065I  jobname A delimiter was found where an IP PrintWay parameter was expected - \textit{commandtext}

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

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

ANFM066I  jobname A duplicate parameter(\textit{parameter}) was entered for keyword(\textit{keyword}) in the IP PrintWay command(\textit{command})

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

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

ANFM067I  jobname No parameters were specified for keyword(\textit{keyword}) in the IP PrintWay command(\textit{command})

Explanation: You entered a keyword without its required parameters.

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

ANFM068I  jobname An unbalanced parenthesis was encountered in the IP PrintWay command - \textit{commandtext}

Explanation: An ending parenthesis is missing from a command. \textit{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.

**Problem determination:** None.

**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,prt(nnn),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.

**Problem determination:** None.

**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.

**Problem determination:** None.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

### ANFM085I

**jobname** An FSA name cannot be specified for the IP PrintWay command (command)

**Explanation:** You entered a command with an FSA name, but the FSA name parameter is not valid with this command.

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

\textbf{System action:} IP PrintWay basic mode ignores the
command and processes the next command entered.

\textbf{Operator response:} Type the command again without
an FSA name.

\textbf{System programmer response:} None.

\textbf{Problem determination:} Not applicable.

\textbf{Source:} Infoprint Server

\textbf{Module:} Not applicable.

\textbf{Routing code:} Not applicable.

\textbf{Descriptor code:} Not applicable.

\textbf{Automation:} Not applicable.

\begin{verbatim}
ANFM086I  jobname An FSA name is required for the
          IP PrintWay command(command)

Explanation: You entered a command without an FSA
name, but an FSA name parameter is required with this
command.

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

\textbf{System action:} IP PrintWay basic mode ignores the
command and processes the next command entered.

\textbf{Operator response:} Type the command again with an
FSA name.

\textbf{System programmer response:} None.

\textbf{Problem determination:} Not applicable.

\textbf{Source:} Infoprint Server

\textbf{Module:} Not applicable.

\textbf{Routing code:} Not applicable.

\textbf{Descriptor code:} Not applicable.

\textbf{Automation:} Not applicable.
\end{verbatim}

\begin{verbatim}
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, \textit{jobname} is a job name, an FSS
name, or an FSA name. \textit{command} is the \textit{IP PrintWay}
basic mode command. \textit{parameter} is the \textit{IP PrintWay}
basic mode keyword parameter.

\textbf{System action:} IP PrintWay basic mode ignores the
command and processes the next command entered.

\textbf{Operator response:} Type the command again without
an FSA name.

\textbf{System programmer response:} None.

\textbf{Problem determination:} Not applicable.

\textbf{Source:} Infoprint Server

\textbf{Module:} Not applicable.

\textbf{Routing code:} Not applicable.

\textbf{Descriptor code:} Not applicable.

\textbf{Automation:} Not applicable.
\end{verbatim}

\begin{verbatim}
ANFM091I  jobname Not enough storage is available
          to process command queues - storage
          requested = storagerequested, return code
          = (retcode)

Explanation: Additional storage was required to
process the command queues, but this storage was not
available. The return code is from the GETMAIN
macro.

In the message text, \textit{jobname} is a job name, an FSS
name, or an FSA name. \textit{storagerequested} is the amount of
storage requested. \textit{retcode} is the return code from
request.

\textbf{System action:} IP PrintWay basic mode ignores the
command and processes the next command.

\textbf{Operator response:} Inform your system programmer
that this error occurred.

\textbf{System programmer response:} Increase the REGION
parameter on the startup procedure.

\textbf{Problem determination:} Not applicable.

\textbf{Source:} Infoprint Server

\textbf{Module:} Not applicable.

\textbf{Routing code:} Not applicable.

\textbf{Descriptor code:} Not applicable.

\textbf{Automation:} Not applicable.
\end{verbatim}

\begin{verbatim}
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, \textit{jobname} is a job name, an FSS
name, or an FSA name. \textit{retcode} is the return code from
request.

\textbf{System action:} The operator interface is terminated
with a dump.
\end{verbatim}
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.

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.

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

Explanation: The IP PrintWay basic mode ESTAI routine received a return code of 8 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, in decimal.

**System action:** Abend processing continues.

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

**System programmer response:** If the reason code is 11 (x"0B"), 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 5, 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 information about the SDUMP reason codes in 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.

---

**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 53. **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 for assistance.

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 The Inventory Server by the name of inventory is not started. IP PrintWay will not start until the Printer Inventory server is running.

Explanation: The Printer Inventory Manager is not started. IP PrintWay basic mode will not start until the Printer Inventory Manager is running. The Printer Inventory Manager is required for IP PrintWay basic mode to format and deliver print.

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

System action: IP PrintWay basic mode does not start.

Operator response: Start the Printer Inventory Manager manually, or change the name of the Printer Inventory in the PARM parameter on the IP PrintWay basic mode EXEC statement to the correct name. For more information about the Printer Inventory Manager, 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.

ANFM109I 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.

Problem determination: Not applicable.

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

ANFM112I Connection with the Inventory Server with the name of inventory was lost.

Explanation: The connection with the Printer Inventory Manager was lost. IP PrintWay basic mode looked for a Printer Inventory with the name given in the message text.

In the message text, inventory is the name of the Printer Inventory with which IP PrintWay basic mode lost contact.

System action: IP PrintWay basic mode ends abnormally.

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.
The EXEC parm value of INV= that identifies the name of the Inventory server was not found. The writer cannot be started.

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: None.

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.

Data set: The time value 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.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

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.

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.
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.
**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:** 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.

---

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

**Explanation:** The printer definition or the PROTOPTNS 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 PROTOPTNS 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.

---

**ANFM133I Data set: dsname The middle of a spanned record was found with no previous beginning, the data set is held**

**Explanation:** IP PrintWay basic mode found a spanned record middle segment, but was not currently processing a spanned record.

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.

---

**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.

---

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 04

**Explanation:** The operator requested a dump, but the dump request completed with a return code of 04, indicating that only a partial dump was done.

**System action:** Processing continues.

**Operator response:** None.

**System programmer response:** Allow more space for the dump data sets.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
ANFM139I  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.

ANFM140I  Data set: dname  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, dname 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.

ANFM141I  Data set: dname  Successful Transmission
Explanation: The NOTIFY parameter caused notification for this data set to be sent, and its transmission worked.
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.

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 node nodeid on the NOTIFY parameter is not valid
Explanation: The NOTIFY parameter indicated this node, and it is not valid.
In the message text, nodeid is the name of the user's node.
System action: Processing continues.
Operator response: None.
System programmer response: None.
User response: Specify the NOTIFY keyword with a valid node.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM144I  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.

User response: Specify the NOTIFY keyword with an accessible user.

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.

ANFM145I 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.

ANFM146I A NOTIFY error was received - code = errorb

Explanation: The NOTIFY parameter failed with the indicated code. It indicates a 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, \textit{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:** \textit{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, \textit{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:** \textit{dsname} **The BDS user exit \textit{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: \textit{dsname} is the data set name. \textit{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:** \textit{dsname} **The EDS user exit \textit{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: \textit{dsname} is the data set name. \textit{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:** \textit{dsname} **The record user exit \textit{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: \textit{dsname} is the data set name. \textit{record} is the name of the Record exit as specified in the printer definition.
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.
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.

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.

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.

Problem determination: Not applicable.

Source: Infoprint Server
ANFM162I  Data set: datasetname A bad key was detected by the inventory server. The data set is held. Entry name = printer-name

Explanation: The Printer Inventory Manager was called with a bad key.
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: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM163I  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, 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.
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: Create an FSS definition for the IP PrintWay basic mode 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 AOXVTM module returned a return code of 4.
System action:  Processing continues.
Operator response:  Notify the system programmer that this error occurred.
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.

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 and release the data set from the system hold queue.
System programmer response:  Code a HOSTNAME in either the hlq.TCPPIDATA data set or in the /etc/resolv.conf file.
Problem determination:  Not applicable.
Source:  Infoprint Server
Module:  Not applicable.
RoutingModule:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

ANFM170I  Data set: dsname 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, dsname 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:  Make sure that the HOSTNAME specified in either the hlq.TCPPIDATA data set or in the /etc/resolv.conf file.
Problem determination:  Not applicable.
Source:  Infoprint Server
Module:  Not applicable.
RoutingModule:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

ANFM171I  Data set: dsname 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, dsname 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 ISP 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 ISP 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.

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 was 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.
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.

ANFM690I 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.

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**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.

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**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.

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**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.

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**ANFM699I** FSS: `fsaname` The queue manager has stopped

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

In the message text, `fsaname` is the FSS name from the FSS definition.

**System action:** Queue manager continues termination.

**Operator response:** None.
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 email 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 email 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 email addresses of the email 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 email address is incorrect, correct the address in the printer definition in the Infoprint Server Printer Inventory or in one of the email JCL parameters or email job attributes.

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 email 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 email 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 email addresses of the email recipients.

System action: IP PrintWay basic mode continues processing.

Operator response: None.

System programmer 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 email address is incorrect, correct the address in the printer definition in the Infoprint Server Printer Inventory or in one of the email JCL parameters or email 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.
**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 in z/OS Communications Server: IP Sockets Application Programming Interface Guide and Reference for the cause.

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**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:
- *datasetname* Name of the data set
- *ipaddress* Printer's IP address or host name
- *errno* TCP/IP ERRNO returned from BIND

Also see “Common Infoprint Server problems” on page 254 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.

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**ANFM1102T** 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 basic mode either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay basic mode 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.

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**Problem determination:** Not applicable.
ANFM1104I Data set: datasetname IP address: ipaddress
The TCP/IP SOCKET CONNECT call failed with an ERRNO value of (errno)

Explanation: The TCP/IP CONNECT failed for the target address.

In the message text:
datasetname Name of the data set
ipaddress Printer's IP address or host name
errno TCP/IP ERRNO returned from CONNECT

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.

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 the target address.

In the message text:
datasetname Name of the data set
ipaddress Printer's IP address or host name
errno TCP/IP ERRNO returned from IOCTL

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.

ANFM1106I Data set: datasetname IP address: ipaddress
The TCP/IP SET SOCKET OPTION call failed with an ERRNO value of (errno)

Explanation: The TCP/IP SETSOCKOPT 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 SETSOCKOPT

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.

Problem determination: Not applicable.

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

ANFM1107I 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 is the name of the data set.
ipaddress is Printer's IP address or host name.
errno is 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: 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.

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
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM1109I 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 failed.

In the message text, datasetname is the name of the data set.
errno is the TCP/IP ERRNO returned from RECEIVE.

Also see “Common Infoprint Server problems” on page 254 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: 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.
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](https://www.ibm.com/support/docview.ws?rs=0&uid=swg27046016) for the cause.

**Problem determination:** Not applicable.

---

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.
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.

ANFM1114I 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.

ANFM1115I Data set: datasetname The OPEN call failed for the translate table

Explanation: The last data set in the search order could not be opened.

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.

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 data set has exceeded the hyperspace allocation for this FSA

Explanation: The hiperspace 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. 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: Increase the hiperspace 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 hiperspace size. After you change the hiperspace 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.
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.

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: Specify the translation TRANSLATETABLE or XLATETABLE option with a valid name of a data set. This search order is used:
1. translate_table_name.language_name
2. tcpip_hlq.translate_table_name.language_name
3. tcpip_hlq_name.STANDARD.language_name

Or check the IP PrintWay basic mode message log data set for 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.

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.

ANFM1165I Data set: datasetname The CC LPR option was specified for a PostScript data set, or a PostScript data set has carriage control

Explanation: The transmission protocol LPR option CC was specified for a data set that is PostScript, or a PostScript data set has been detected as having carriage control characters in it. These are incompatible formats.

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: Print the data set as either a PostScript data set or as a data set with carriage control.

Problem determination: Not applicable.

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

---

**ANFM1172I**  
**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.

**Operator response:** None.

**System programmer response:** Make sure that the data set being transmitted contains valid EBCDIC 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.

---

**ANFM1173I**  
**Dataset** *datasetname*  
During EBCDIC DBCS conversion to ASCII, the second double-byte character: *firstchar 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.

---

**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 email 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](https://www.ibm.com/docs/en/zeos/10.5.0?topic=infoprint-server-operation-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 one was specified. Verify that the output is correct.

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

**System action:** IP PrintWay basic mode attempts to retransmit the data set to the printer. 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. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool. 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](https://www.ibm.com/docs/en/zeos/10.5.0?topic=infoprint-server-operation-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.
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.

Automation: Not applicable.

ANFM1194I Data set: datasetname 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.

ANFM1195I 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.
### ANFM11971 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.

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### ANFM12001 Data set: `datasetname` 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`

**Explanation:** IP PrintWay received an error when it sent the LPR RECEIVE A PRINT JOB command to the LPD. Some possible reasons for the error are:

- The print queue specified in the printer definition or in JCL is not correct.
- The network connection is not working.
- The LPD accepts print jobs only from ports in the well-known port ranges of 721 to 731.
- IP PrintWay is sending the print job to the Infoprint Server LPD on the z/OS system so that the data can be transformed, but the Infoprint Server LPD is not configured to receive print jobs at port 515. (IP PrintWay always sends print jobs to LPDs listening at port 515.) In this case, the target host in the message is the host name or IP address of the z/OS system and the queue name is the name of the Infoprint Server printer definition.
- IP PrintWay is sending the print job to InfoPrint Manager for AIX, but the InfoPrint Manager LPD is not authorized to receive print jobs from the z/OS host.

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.

---

### ANFM11981 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++]\(^\text{Programming Guide}\) 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 `Dataset 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.
Operator response: None.

System programmer response: See the message log for the possible related error messages and correct the error based on the messages.

Check these items:
• Verify that the print queue name is correct and that the print queue is running on the target host. If the print queue name is not correct, edit the printer definition or the JCL to specify the correct queue name.
• Check that the printer is turned on.
• Ping the printer to make sure the network connection is working.
• 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.
• If the target host is the z/OS system and the queue name is the name of the Infoprint Server printer definition, make sure that the Infoprint Server LPD is listening at port 515. For information about how to configure the Infoprint Server LPD to listen at port 515, see z/OS Infoprint Server Customization.
• If the target host is InfoPrint Manager for AIX, make sure that the host name or IP address of the z/OS system is specified in file etc/hosts.lpd on the AIX system. You can use this AIX command to add the z/OS system to the etc/hosts.lpd file:
smit mkhostslpd nnn.nnn.nnn.nnn

where nnn.nnn.nnn.nnn is the host name or IP address of the z/OS system.

Problem determination: Not applicable.

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

ANFM1201I 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

Explanation: One of these conditions occurred after IP PrintWay basic mode sent all the data for a print job to the LPD:
• The LPD returned a non-zero return code in response to the null byte that IP PrintWay sent after sending all the data. See the IP PrintWay message log for any related error messages.
• The IP PrintWay response timeout value expired before the LPD responded. This situation can occur when IP PrintWay sends a large print job to the printer’s LPD. It can also occur when IP PrintWay sends a large print job to the Print Interface LPD to be transformed to another data format.

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: 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.
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.

ANFM1203I Data set: datasetname The data set had an error on receiving an ACK from the LPD, after sending the control file
Target host: target host Print queue: print queue

Explanation: A non-zero return code was received from the LPD after the control file had been sent. Error messages pertaining to the error might have been sent. See the message log for the related messages. The non-zero return code was in response to the null byte sent after the control file was sent to the LPD.

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

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.

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 to the printer. 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. If the final 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.
ANFM1210I  Data set: datasetname The buffer limit for
the EDS exit is exceeded.

Explanation: The End Data Set (EDS) exit created
more records than can fit into the buffer for the trailer
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 EDS 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.

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.
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

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].

Problem determination: Not applicable.

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

ANFM1656I 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: 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.

Problem determination: Not applicable.
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.

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 – 00000EA1
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 200 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
<table>
<thead>
<tr>
<th>Code</th>
<th>Explanation</th>
<th>System action</th>
<th>System programmer response</th>
</tr>
</thead>
<tbody>
<tr>
<td>001C</td>
<td>The ATTACH call for QSCAN failed.</td>
<td>IP PrintWay basic mode terminates abnormally.</td>
<td>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.</td>
</tr>
<tr>
<td>0020</td>
<td>IP PrintWay basic mode detected an FSI order that was not valid.</td>
<td>IP PrintWay basic mode terminates abnormally.</td>
<td>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.</td>
</tr>
<tr>
<td>0024</td>
<td>The FSI RELDS request failed.</td>
<td>IP PrintWay basic mode terminates abnormally.</td>
<td>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.</td>
</tr>
<tr>
<td>0028</td>
<td>The FSI CHKPT request failed.</td>
<td>IP PrintWay basic mode terminates abnormally.</td>
<td>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.</td>
</tr>
<tr>
<td>0030</td>
<td>The request to disconnect the FSS level FSI failed.</td>
<td>IP PrintWay basic mode terminates abnormally.</td>
<td>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.</td>
</tr>
<tr>
<td>0034</td>
<td>The FREEMAIN macro for the FSS level courier control blocks failed.</td>
<td>IP PrintWay basic mode terminates abnormally.</td>
<td>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.</td>
</tr>
<tr>
<td>0038</td>
<td>The ESTAI macro to cancel ESTAI failed.</td>
<td>IP PrintWay basic mode terminates abnormally.</td>
<td>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.</td>
</tr>
</tbody>
</table>
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.

0048
Explanation: 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.

0060
Explanation: 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.

0063
Explanation: 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.

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 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 logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0076
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.
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.

0102
Explanation: The GETMAIN call below the 16 megabyte line for FSA related control blocks 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.

0103
Explanation: The MODCB macro for sequential read 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.

0104
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: 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.

0105
Explanation: The MODCB macro for direct read 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.

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.

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**010B**

**Explanation:**  The OPEN 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.

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**010C**

**Explanation:**  The IEFSSREQ macro requesting JES3 level information 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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**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.

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**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.
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.

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.

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.

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.

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.

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 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.

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.

02A1
Explanation: No record was passed from the FSA.
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.

02A2
Explanation:  The MODCB call 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.

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 system 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 ANFLGHPR.
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 ANFLDBCS.
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.
Chapter 1. IP PrintWay basic mode (ANF) messages and codes

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 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.

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.

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.

09B1
Explanation: An error occurred in traversing the CIB data processing command. 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.
09B2

**Explanation:** An error occurred in traversing the CIB data processing printer name. 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.

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.
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.
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.
<table>
<thead>
<tr>
<th>Code</th>
<th>Explanation</th>
<th>System action</th>
<th>System programmer response</th>
</tr>
</thead>
<tbody>
<tr>
<td>0D08</td>
<td>A pseudo-subpool block does not exist.</td>
<td>IP PrintWay basic mode terminates abnormally.</td>
<td>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.</td>
</tr>
<tr>
<td>0D09</td>
<td>A pseudo-subpool chain does not exist.</td>
<td>IP PrintWay basic mode terminates abnormally.</td>
<td>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.</td>
</tr>
<tr>
<td>0D0A</td>
<td>A request for page-fixed storage failed. A non-zero return code was received from PGFIXP.</td>
<td>IP PrintWay basic mode terminates abnormally.</td>
<td>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.</td>
</tr>
<tr>
<td>0D0B</td>
<td>The GETMAIN call failed when getting storage for a new control block.</td>
<td>IP PrintWay basic mode terminates abnormally.</td>
<td>To determine why the macro failed or returned unexpected results, see the information for your operating system that explains system macros.</td>
</tr>
<tr>
<td>0D10</td>
<td>The type of FREEMAIN request received by IP PrintWay basic mode was not valid.</td>
<td>IP PrintWay basic mode terminates abnormally.</td>
<td>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.</td>
</tr>
<tr>
<td>0D11</td>
<td>An element to be freed was not in use.</td>
<td>IP PrintWay basic mode terminates abnormally.</td>
<td>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.</td>
</tr>
<tr>
<td>0D12</td>
<td>No pseudo-subpool storage blocks exist.</td>
<td>IP PrintWay basic mode terminates abnormally.</td>
<td>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.</td>
</tr>
<tr>
<td>0D13</td>
<td>No element storage blocks exist.</td>
<td>IP PrintWay basic mode terminates abnormally.</td>
<td>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.</td>
</tr>
<tr>
<td>0D14</td>
<td>The correct element storage-block chain could not be located.</td>
<td>IP PrintWay basic mode terminates abnormally.</td>
<td>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.</td>
</tr>
<tr>
<td>0D15</td>
<td>The element address was not in the bounds of any of the storage blocks.</td>
<td>IP PrintWay basic mode terminates abnormally.</td>
<td>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.</td>
</tr>
</tbody>
</table>
**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.

---

**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.

---

**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.

---

**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.

---

**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.

---

**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.

---

**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.

---

**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.

---

**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:** 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.
**System programmer response:** Correct the Begin Data Set exit.

---

**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:

AOP\{sn\}nnn message_text \[(program:daemon)\]

AOP  Identifies Infoprint Server messages.

s  Optional source code:

H  The message is from an Infoprint Server health check.
IM  The message is from the Infoprint Server ISPF panels.
S  The message is from the Print Interface subsystem.

If the source code is not present, the message is from another component of Infoprint Server.

nnn  Three to four-digit message number.

t  Severity code:

E  An error occurred.
I  Information message.
S  A severe error occurred.
T  A situation occurred that caused the program to end.
W  A warning situation occurred.

message_text  The message text.

d daemon

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] [system:name] [inventory:name]
[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.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>date</td>
<td>The date the message was written.</td>
</tr>
<tr>
<td>dsn</td>
<td>The fully qualified data set name that JES assigns. The document name is the last qualifier. The # symbol 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 &quot;file.lwp&quot;, this field contains &quot;FILE#LWP&quot;. This field might not contain the system ID, which is the first qualifier in a fully qualified data set name.</td>
</tr>
<tr>
<td>filename</td>
<td>The name of the file to be printed. Blanks are converted to an underscore (_).</td>
</tr>
<tr>
<td>fsa</td>
<td>The name of the JES functional subsystem application (FSA) for the PSF printer.</td>
</tr>
<tr>
<td>inventory</td>
<td>The name of the Printer Inventory.</td>
</tr>
<tr>
<td>jes_jobname</td>
<td>The job name, or the name of the job submitter or owner:</td>
</tr>
<tr>
<td></td>
<td>• For a batch job, the name of the job that created the print job.</td>
</tr>
<tr>
<td></td>
<td>• For print requests submitted from remote systems (such as Windows), the first 8 characters of the logon name used on the remote system. A # symbol in the name replaces a character (such as a period) that z/OS does not allow in the job name.</td>
</tr>
<tr>
<td></td>
<td>• 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.</td>
</tr>
<tr>
<td>job</td>
<td>The job ID.</td>
</tr>
<tr>
<td></td>
<td>• A job ID with a PS prefix indicates that Infoprint Server created the output data set on the JES spool. (Your installation can specify a different job prefix in the job-prefix attribute in the Infoprint Server configuration file, aopd.conf, or the system configuration definition.)</td>
</tr>
<tr>
<td></td>
<td>• 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.</td>
</tr>
<tr>
<td></td>
<td>• Job submitters can specify the sysout-job-id job attribute to override the job ID.</td>
</tr>
<tr>
<td>job_selection_rule</td>
<td>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.</td>
</tr>
<tr>
<td>luname</td>
<td>The NetSpool logical unit (LU) name for the printer.</td>
</tr>
<tr>
<td>msg</td>
<td>The message number and text.</td>
</tr>
<tr>
<td>output_device</td>
<td>An identifier of the IP PrintWay extended mode printer where the print job printed or is scheduled to print, in one of these formats:</td>
</tr>
<tr>
<td></td>
<td>direct_sockets://hostname:port</td>
</tr>
<tr>
<td></td>
<td>The hostname and port number of the IP PrintWay printer.</td>
</tr>
<tr>
<td></td>
<td>lpr://hostname/queue</td>
</tr>
<tr>
<td></td>
<td>The hostname and print queue name of the IP PrintWay printer.</td>
</tr>
<tr>
<td></td>
<td>mailto:</td>
</tr>
<tr>
<td></td>
<td>An indication that the output data set is to be sent to an email destination.</td>
</tr>
</tbody>
</table>
vtam://luname
The VTAM logical unit (LU) name of the IP PrintWay 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

fsa_name
The name of the JES functional subsystem application (FSA) for the PSF printer.

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.
  aopd.JEStatusDaemon
              The Printer Inventory Manager status daemon.
  aopd.JESScavenger
              The Printer Inventory Manager scavenger daemon.
  aopfinvd   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 email destinations.
  aopsapd    The SAP callback daemon. It handles callback notification for the SAP Output Management System (OMS).
  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.
  aopsabd    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.
InfoprintCentral
lp  The lp command.
PSF_z/OS  PSF for z/OS
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 or the name of a program that used the Infoprint Server application programming interface (API).
system  The 1-8 character name for the MVS system.
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

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 Ip 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 Ipstat -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.

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

System action: Processing continues.
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.

AOP003E  objectname [errormsgno] errmsgtext

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. errormsgno errmsgtext 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 errormsgno. If you did not specify objectname, contact your system programmer for assistance.
Operator response: Not applicable.
System programmer response: See the description for message errormsgno.

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 (AOPOPOPER) and administrators (AOPADMIN), enter:
  /usr/lpp/Printsrv/bin/aopsetup aopoper 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. The user identifier (UID) for the user should be different from other UIDs in the installation.

Note: If you use the AOPSTART procedure to start Infoprint Server, check the user ID that is associated with this procedure.
- 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.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**AOP007I** Job infoprint-jobid [(zos-jobid)] spooled to printer-name.

**Explanation:** Infoprint Server created a print job and successfully allocated at least one document on the JES spool. If an error occurs processing a document, Infoprint Server issues a separate message for each document.

In the message text:

- infoprint-jobid: The ID of the print job that Infoprint Server assigned.
- zos-jobid: The ID of the print job that JES assigned.
- printer-name: The name of the printer to which the job was submitted. The printer name is the name assigned to the printer definition for the printer in the Infoprint Server Printer Inventory.

**System action:** Processing continues.

**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.

**AOP008E** Option option argument missing.

**Explanation:** A request was submitted with an option that is missing a required argument.

**System action:** The request was not completed.

**User response:** For the lp, lpstat, or cancel command, view the appropriate man page for the correct options. For other requests, see the necessary documentation. Enter the request again with the required argument.

**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.

**AOP009E** Option: "option" is not valid.

**Explanation:** 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.

**System action:** The request was not completed.

**User response:** Reenter the command with the correct options character. If you are not entering an incorrect options character, contact the system programmer.

For the lp, lpstat, or cancel command, view the appropriate man page for the correct options. For other requests, see z/OS Infoprint Server User's Guide.

**Operator response:** Not applicable.

**System programmer response:** Check the printer definition associated with the print job for the cause of the error. If the printer definition did not cause the error, review the filtering options and verify that the correct options are specified.
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.

AOP010E  Dynamic allocation of data set dsname failed: return code retcode, error code errorcode, info code infocode.

Explanation:  A Dynamic Allocation error has occurred. An error occurred attempting to dynamically allocate a data set.

In the message text:
dcname  The data set name.
retcode  The Dynamic Allocation return code.
errorcode  The Dynamic Allocation error code.
infocode  The Dynamic Allocation information code.

System action:  The print request was not completed.
User response:  Notify your system programmer that this error occurred.
Operator response:  Not applicable.
System programmer response:  See Dynamic Allocation diagnostic information in the z/OS MVS Programming: Authorized Assembler Services Guide.

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:
dcname  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:  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.

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 lpsat 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.

AOP017E  No jobs found for user userid.
Explanation:  A query jobs request (for example: 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
Module:  Not applicable.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

AOP018E  No jobs found for printer printer-name.
Explanation:  A query jobs request (for example: 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
Module:  Not applicable.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

AOP019E  attributename attributevalue exceeds the maximum value maximumvalue supported by printer printer-name.
Explanation:  attributevalue specified for attributename in the print request (for example: 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
Module:  Not applicable.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

AOP020E  Printer printer-name does not support attribute-name attribute-value.
Explanation:  The value of an Infoprint Server job attribute was specified correctly. However, the printer definition for the selected printer does not permit that value. For example, the lp command might have specified the duplex=tumble attribute. However, the
printer definition indicates that the printer does not support the **tumble** option.

In the message text:

- **printer-name**: Name of the printer definition that you requested or that Infoprint Server selected to print the file. This printer definition is defined in the Infoprint Server Printer Inventory.
- **attribute-name**: Name of the Infoprint Server job attribute whose value is not supported. If you used z/OS JCL to submit the request, you might have specified a JCL parameter that corresponds to this job attribute. Or, Infoprint Server might have internally specified this job attribute.
- **attribute-value**: The attribute value that is not supported.

If **attribute-name** is "document-format", this means that the printer definition does not accept files with the specified data format. For example, if **attribute-value** is "modca-p", this means that the printer definition does not accept the MO:DCA-P (AFP) data format. If **attribute-value** is "other", Infoprint Server might not have been able to detect the data format of your file. Infoprint Server automatically detects the data format unless you specify the **document-format** job attribute.

**System action**: The request was not completed.

**User response**: If you specified the **attribute-name** attribute or a corresponding JCL parameter that printer definition **printer-name** supports. Contact your administrator to determine, or change, the attribute values that are supported in the printer definition.

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.


**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](https://www.ibm.com/support/knowledgecenter/ST45GR_14.1.0/com.ibm.zos.zosinfoprint.info/admin/ch000000.html).

**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* and *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.
Automation: 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.
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 must have completed spooling and 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, do one of these:
- IP PrintWay basic mode: 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.
- IP PrintWay extended mode: Use Infoprint Central to delete the data set.
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

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 z/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.

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**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:** Submit the request again with a matching value for **stringvalue**.

**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.

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**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:** 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.
AOP035E  [optionsource] Expecting stringvalue1 but found stringvalue2.

Explanation: Print Interface expected to find stringvalue1 in this context, but instead found stringvalue2. 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.

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.

AOP036E  [optionsource] stringvalue is shorter than the minimum length of minimumlength.

Explanation: stringvalue is shorter than the acceptable minimum length 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.

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.

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. For example, if \texttt{optionsource} is “-o”, the error occurred in the -o option. If \texttt{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 \texttt{value1}. If \texttt{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.

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AOP039E \texttt{optionsource} value1 exceeds the maximum value maximumvalue.

Explanation: value1 exceeds the acceptable maximum value maximumvalue.

In the message text, \texttt{optionsource} identifies where the error occurred. For example, if \texttt{optionsource} is “-o”, the error occurred in the -o option. If \texttt{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 \texttt{value1}. If \texttt{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.

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AOP040E \texttt{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, \texttt{optionsource} identifies where the error occurred. For example, if \texttt{optionsource} is “-o”, the error occurred in the -o option. If \texttt{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 \texttt{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.

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AOP041E \texttt{optionsource} The maximum number of values is maximumnum.

Explanation: A request was sent with more than the maximum number of values maximumnum.

In the message text, \texttt{optionsource} identifies where the error occurred. For example, if \texttt{optionsource} is “-o”, the error occurred in the -o option. If \texttt{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 \texttt{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.
AOP042E  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.

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 aopoper 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: AOP047E 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 z/OS Infoprint Server Customization
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

Another possible message text is:
aopd: AOP047E Bind() failed in TCPListen::TCPListen(const IPAddress&) at ./src/tcpconnect.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. 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 or, if dynamic configuration is enabled, in the system configuration definition.
   • 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.

Another possible message text is:
aopoutd: AOP047E bad allocation
This message text indicates that IP PrintWay extended mode (daemon `aopoutd`) requested more memory than is available. Try these possible solutions:

1. Increase the region size for Infoprint Server daemons. For information about how to increase the region size, see [z/OS Infoprint Server Customization](https://www.ibm.com/support/knowledgecenter/SSJJQJ_7.1.0/com.ibm.zos.v2r1iefs/infoprint/infoprint.html)
   
   After you increase the region size, stop and restart Infoprint Server. When Infoprint Server starts again, it automatically attempts to print the job again.

2. If the print job still does not print, increase the default heap size. To do this, edit the `aopstart` EXEC to specify the following environment variable:
   
   ```c
   n=n+1; env.n='CEE_RUNOPTS=HEAP(32M,8M)'
   ```
   
   For information about how to edit the `aopstart` EXEC, see [z/OS Infoprint Server Customization](https://www.ibm.com/support/knowledgecenter/SSJJQJ_7.1.0/com.ibm.zos.v2r1iefs/infoprint/infoprint.html)

   After you edit the `aopstart` EXEC, stop and restart Infoprint Server. When Infoprint Server starts again, it automatically attempts to print the job again.

If the problem 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.

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### 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: `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: `printer-ip-address` job attribute. For more information, see [z/OS Infoprint Server Customization](https://www.ibm.com/support/knowledgecenter/SSJJQJ_7.1.0/com.ibm.zos.v2r1iefs/infoprint/infoprint.html)

**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.
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.

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 the system programmer.

Operator response: Not applicable.

System programmer response: Start the Printer Inventory. For example, use the AOPSTART procedure to start the Printer Inventory.

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: 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/Printsv/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 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.

AOP055E  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.

AOP056E  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: None.
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: None.
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: If Infoprint Server wrote the message when it started and attribute_name1 is "hardcopy-messages" and value is "list", Infoprint Server continues processing but ignores the hardcopy-messages=list attribute and does not write any additional messages to the hardcopy log.
If the pidu command wrote the message, the pidu command was not accepted.
User response: Either do not specify value for attribute_name1, or supply a value for attribute_name2.
For information about attribute_name1 and attribute_name2, see z/OS Infoprint Server Customization
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.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: 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.
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 filename `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.

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](https://www.ibm.com/support/docview.wss?uid=swg27005183). 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 are 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.

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 275.

Problem determination: Not applicable.

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

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, afpxpcl.) If the DLL for the transform daemon (for example, afpxpcl.dll) 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.
AOP070E  A timeout occurred in resource_id.
Explanation:  The request failed because it exceeded a time limit associated with the resource identified in the message.
System action:  The request was not completed.
User response:  Notify your system programmer.
Operator response:  Not applicable.
System programmer response:  Increase the time limit associated with the named resource.
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 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.

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
AOP075I  Daemon daemon was started successfully.
Explanation: The daemon was started successfully.
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

AOP076E  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.

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

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

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.
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.

AOP083E  A object_class object_name already exists.

Explanation: An attempt was made to create an 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 (aopsdbd), 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: 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.
**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.

**Descriptor code:** Not applicable.

**Automation:** 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.

---

**AOP088I** object_class object_name was renamed to new_name.

**Explanation:** As requested, object object_class object_name was renamed as indicated.

**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.

---

**AOP089E** address: The connection was lost.

**Explanation:** An active connection to the specified address was unexpectedly terminated due to a network failure, a software error, or user action.

**System action:** Activity on the connection is terminated.

**User response:** Retry the request that caused the error. If errors persist, notify your system programmer.

**Operator response:** Not applicable.

**System programmer response:** Use network problem determination procedures to determine if the failure is network-related or is caused by the machine at address. If the problem is not network-related and the software causing the message is IBM-supplied, or if the problem appears to be caused by the Infoprint Server component sending the message, contact your service representative.
representative in the IBM Support Center, or use your electronic link with IBM service for assistance. Otherwise, contact the vendor of the software causing the message.

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

AOP090E  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 userid is your user ID, ask the data set owner to grant you read access to the data set.
If userid is *NONE*, Infoprint Server could not authenticate your z/OS user ID. You must resubmit the job in one of these ways so that your z/OS user ID can be authenticated:
- Use the lp, afp2pcl, afpxpcl, afp2ps, afpxps, afp2pdf, or afpxpdf command
- Use SAP R/3, using the Infoprint Server SAP Output Management System (OMS)
- Use the Windows SMB protocol
- Use the AOPPRINT or AOPBATCH JCL procedure
- Use z/OS job control language (JCL) to submit a print job to the Infoprint Server subsystem or to IP PrintWay extended mode
If you cannot resubmit the job in one of these ways, the data set owner must grant universal read access to the data set.
Operator response: Not applicable.
System programmer response: 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 The update of component_type component_name was not performed because it would cause the following error for object_type object_name: message

Explanation: You attempted to modify a component in the Infoprint Server Printer Inventory. This component is included in another object in the Printer Inventory. Infoprint Server could not update the component because an error would result in the object that includes this component.

In the message text:
component_type Type of component that you attempted to modify.
component_name Name of the component that you attempted to modify.
object_type Type of object in the Printer Inventory that would have an error if the component were modified.
object_name Name of the object that would have an error if the component were modified.
message Message that describes the error that would result if the component were modified.

System action: The component was not modified in the Printer Inventory.
User response: None.
Operator response: Not applicable.
System programmer response: Correct the problem indicated in message message, and then modify the component. To correct the problem, you might need to 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.

AOP097E The component_type object 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**: Type of component you attempted to delete.
- **component_name**: Name of the component you attempted to delete.

**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.

**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, **status 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.

**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.
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:** 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 aopippdxp) 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 attribute. 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 attribute in the aopd.conf file or, if dynamic configuration is enabled, in the system configuration definition. For information about the ipp-port-number attribute, see [z/OS Infoprint Server Customization](#).

If you see message E0C511I 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, 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** The Infoprint Server LPD (AOPLPD) failed to read an LPD command.

**Explanation:** The Infoprint Server LPD (daemon aoplpd) 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.

---

**AOP103E** 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.

AOP104E Resubmit for filtering is not permitted in the printer named DFLTNTRY

Explanation: You must not select the IP PrintWay basic mode Resubmit for filtering option in the printer definition named DFLTNTRY. IP PrintWay uses the printer definition named DFLTNTRY 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.

AOP106E Transform transform_class connection refused. [errmsgno errmsgtext]

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 errmsgtext

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.

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.
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 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, which is specified in the inventory attribute 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: Notify your system programmer that this error occurred.
System programmer response: Edit the start-daemons attribute in the Infoprint Server configuration file (aopd.conf) to specify the subd value. Then, start Infoprint Server so that the Print Interface subsystem starts. You do not need to first stop Infoprint Server.

For example, enter this MVS command to start Infoprint Server:
START AOPSTART

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

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 Infoprint Server print jobs.

User response: Contact the Infoprint Server operator.

Operator response: Stop and restart Infoprint Server daemons. 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.

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 data set on the JES spool, if any, is probably incomplete.

This situation can occur when:

• The document contains no data.
• 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 in the print job that had the error.

**System action:** Processing continues, but the document is not printed. However, other documents in the same job might print.

**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.

---

**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.

**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:

- aopfiltre.so
- /usr/lpp/Printsrv/lib/afpxpcl.dll

**System action:** None.

**User response:** None.

**Operator response:** None.

**System programmer response:** None.

---

**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.

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Chapter 2. Infoprint Server (AOP) messages and codes  109
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. As a result, Infoprint Central cannot display information in the Infoprint Server Print Job History table for older print jobs.

Consider increasing the maximum size of the Historical Inventory so that it can hold historical information for the number of days specified in the log-retention attribute.

In the message text:

size-limit
Maximum size, in megabytes, of the Historical Inventory specified in the max-historical-inventory-size attribute.

objects
The number of objects that are currently stored in the Historical Inventory. Each object contains information about one or more documents (data sets) in a print job.

System action: Infoprint Server deletes information for the oldest print job from the Historical Inventory.

User response: None.
Operator response: None.
System programmer response: Consider increasing the maximum size of the Historical Inventory in the max-historical-inventory-size attribute. For information about this attribute, see z/OS Infoprint Server Customization.

Problem determination: 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
IBM-supplied code pages, see information about code set converters in the 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, change the ascii-codepage and ebcdic-codepage attributes in the Infoprint Server configuration file (aopd.conf) or, if dynamic configuration is enabled, in the system configuration definition. For information about how to create conversion tables, see information about code set conversion utilities in the 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.

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.

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. However, the Historical Inventory is already larger than the maximum size you specified. Infoprint Server cannot reduce the size of the Historical Inventory.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
Inventory, but the Historical Inventory will not grow any larger than its current size. Message AOP121I 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.

**Explanation:** This document was deleted from the JES 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.

**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.

---

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.
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.

**Operator response:** Use the AOPSTOP procedure or the z/OS UNIX aopstop command to stop all Infoprint Server daemons, and notify the system programmer that this error occurred. Then use the AOPSTART procedure or the z/OS UNIX aopstart command to restart Infoprint Server daemons.

**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.

---

### 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 data base 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.

---

### AOP139E Console name console is already in use.

**Change the console name 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. This console name was specified in the console-name attribute, 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 75.
**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:** If dynamic configuration is enabled, specify a unique name in the console-name attribute in the system configuration definition. Then start Infoprint Server again so that the aopssid daemon attempts to start again. You do not need to first stop any Infoprint Server daemons.

If dynamic configuration is not enabled, specify a unique name in the console-name attribute in the Infoprint Server configuration file (aopd.conf). Then stop all Infoprint Server daemons and restart Infoprint Server.

For information about the console-name attribute, how to edit the system configuration definition, and how to edit the aopd.conf file, see [z/OS Infoprint Server Customization](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.

---

**Problem 1: AOP141I Traceroute did not complete. Try again using a greater number of seconds, or contact your network administrator.**

**Explanation:** You requested that Infoprint Central run the traceroute command to trace the connection from z/OS to a TCP/IP-connected printer, but the trace was not completed. You might not have specified enough time for the traceroute command to finish.

**System action:** Processing continues.

**User response:** Select a greater number of seconds for the traceroute command and resubmit it so that it has more time to run and you get the information that you need. If it still is not completed, contact your network administrator. There might be a problem with the network.

**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 2: AOP142E Configuration file filename does not exist.**

**Explanation:** The required Infoprint Server configuration file was not found. In the message 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 filename is correct.

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Chapter 2. Infoprint Server (AOP) messages and codes 115
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 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.

AOP143E filename: Attribute attribute is missing.
Explanation: A configuration file does not contain the required attributes.
In the message text:
filename Name of the file that is missing the attribute
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 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.

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.

When the Infoprint Server feature is not enabled, you can only use the Infoprint Server Printer Inventory for PSF function. For information about the Printer Inventory for PSF function, see z/OS Infoprint Server Printer Inventory for PSF.

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.

When the Infoprint Server feature is not enabled, you can only use the Infoprint Server Printer Inventory for PSF function. For information about the Printer Inventory for PSF function, see [OS Infoprint Server Printer Inventory for PSF](#).

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:

- 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.

AOP148E  The `database` version of the Printer Inventory cannot be reformatted.

Explanation: Infoprint Server could not reformat the Infoprint Server Printer Inventory because the version in the current Printer Inventory is not supported.

In the message text:

- `database` - The full path name of the Printer Inventory that Infoprint Server is trying to reformat.
- `version` - The version found in the Printer Inventory.

System action: Infoprint Server ends.

User response: Notify your system programmer.

Operator response: Notify your system programmer.

System programmer response: Collect diagnostic information in the `base-directory/aopreformat.log` file and any other error messages. The `base-directory` is usually the `/var/Printsrv` directory. However, your installation might have specified a different `base-directory` attribute in the Infoprint Server configuration file (`aopd.conf`).

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.

AOP149E  The `base-directory` file system has insufficient space to reformat the Printer Inventory. A total of `nnn` MB of free space is needed.

Explanation: Infoprint Server cannot reformat the Printer Inventory because the file system does not contain sufficient space.

In the message text:

- `base-directory` - The directory that contains the Printer Inventory files.
- `nnn` - The number of megabytes of free space that is required to reformat the Printer Inventory.

System action: Infoprint Server ends.

User response: Notify your system programmer.

Operator response: Notify your system programmer.
System programmer response: Configure the base-directory file system specified in the message to contain the amount of free space indicated in the message. Then start Infoprint Server again. For more information, see z/OS Migration.

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

AOP150I The Printer Inventory has been reformatted.
Explanation: The reformat of the Infoprint Server Printer Inventory has completed successfully.
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.

AOP151E The Printer Inventory could not be reformatted.
Explanation: The reformat of the Infoprint Server Printer Inventory failed.
System action: Infoprint Server ends.
User response: Notify your system programmer.
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.

AOP152E The Printer Inventory must be reformatted before Infoprint Server can start.
Explanation: When you start Infoprint Server, the Printer Inventory is automatically reformatted to Version 2 format. A problem might have occurred that prevented Infoprint Server from reformating the Printer Inventory.
System action: Infoprint Server ends.
User response: Notify your system programmer.
Operator response: Notify your system programmer.
System programmer response: Try to start Infoprint Server again to reformat the Printer Inventory. If the problem 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.

AOP153W You cannot modify or replace the system configuration because dynamic configuration is not enabled.
Explanation: You issued the pidu modify or force-create command to modify or replace the system configuration definition in the Printer Inventory. The pidu command failed because the dynamic configuration function is not enabled in Infoprint Server and these commands are allowed only when dynamic configuration is enabled.
System action: The system configuration definition was not modified.
User response: None.
Operator response: None.
System programmer response: Collect diagnostic information in the base-directory/aopreformat.log file and any other error messages. The base-directory is usually the /var/Printsrv directory. However, your installation might have specified a different base directory in the base-directory attribute in the Infoprint Server configuration file (aopd.conf).
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
User response: If you want to enable dynamic configuration so that you can modify and replace the system configuration definition, notify your system programmer.

Operator response: None.

System programmer response: For information about dynamic configuration and how to enable it, 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.

AOP154I The document is no longer in this print job. The document is in output group output-group.

Explanation: The document has been removed from this print job and is now associated with JES output group output-group. This situation occurs when the operator changes one or more of the JES output-group criteria (such as, class, destination, or forms) for the document while the print job is on the JES spool. JES removes the document from its original print job because all documents in a print job must have the same output-group criteria.

System action: Infoprint Server continues to print the other documents in 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.

AOP155I Another program is processing this document. IP PrintWay cannot select it until it becomes available.

Explanation: IP PrintWay tried to acquire the document (output data set) on the JES spool. However, another process has already acquired it.

System action: IP PrintWay processes the print job again after the retry interval expires. When all the retries are attempted, IP PrintWay retains 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: 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.

AOP156W The Historical Inventory is not large enough to contain print job job-name, job-identifier, and all documents in the print job. Consider increasing the maximum size of the Historical Inventory.

Explanation: Infoprint Server could not store information about a print job and all its documents in the Historical Inventory because of insufficient space in the Historical Inventory. This situation can occur when a print job contains a very large number of documents. As a result, Infoprint Central cannot display information for this print job in the Infoprint Server Print Job History table.

Consider increasing the maximum size of the Historical Inventory so that it can hold historical information for print jobs with a large number of documents.

In the message text:

job-name Name of the print job.

job-identifier Job ID of the print job.

System action: Infoprint Server deleted information about the print job from the Historical Inventory.

User response: None.

Operator response: None.

System programmer response: Consider increasing the maximum size of the Historical Inventory in the max-historical-inventory-size attribute. For information about this 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.
AOP157E  The Printer Inventory file-name file is missing.
Explanation: A required Printer Inventory file is missing. In the message text:
  file-name     Name of the missing file.
System action: Infoprint Server does not start.
User response: None.
Operator response: Notify the system programmer that this error occurred.
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.

AOP159E  The Printer Inventory cannot be reformatted because file-name version does not exist.
Explanation: A required Printer Inventory file is missing. In the message text:
  file-name     Name of the missing file.
  version       Version of the missing file.
System action: Infoprint Server does not start.
User response: None.
Operator response: Notify the system programmer that this error occurred.
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.

AOP160I  An empty Printer Inventory inventory-filename inventory-version was created.
Explanation: Infoprint Server created an empty Printer Inventory. The Printer Inventory does not contain any printer definitions or other types of definitions. If this is the first time you have started Infoprint Server, use the Infoprint Server ISPF panels or the Printer Inventory Definition Utility (PIDU) to create printer definitions and other definitions. Otherwise, you should restore a backup copy of the latest Printer Inventory.
In the message text:
  inventory-filename     The name of the Printer Inventory file that Infoprint Server created.
  inventory-version      The version of the Printer Inventory that Infoprint Server created.
System action: Infoprint Server continues processing.
User response: None.
Operator response: If this is not the first time you have started Infoprint Server, ask your system programmer to restore a backup copy of the Printer Inventory.
System programmer response: Restore the latest backup copy of the Printer Inventory that you created with the pidu command. The backup copy can contain any version of the Printer Inventory. When you restore the backup copy, Infoprint Server creates definitions in the format that Infoprint Server supports.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP161W  Infoprint Server could not add health checks to the Health Checker because macro failed with return code retcode and reason code reasoncode.
Explanation: An error occurred when Infoprint Server tried to add Infoprint Server health checks (IBMINFOPRINT) to the IBM Health Checker for z/OS.
In the message text:
  macro     The macro that failed.
  retcode    The return code from the macro.
  reasoncode The reason code from the macro.
System action: Infoprint Server continues processing.
The IBMINFOPRINT health checks might not run.

**User response:** None.

**Operator response:** Notify your system programmer.

**System programmer response:** If you do not use the IBM Health Checker, you can ignore this message.

If you use the IBM Health Checker, correct the problem. For information about the return code and reason code in the message text:

- For the HZSCHECK macro, see [IBM Health Checker for z/OS: User’s Guide](#).
- For the CSVDYNEX macro, see [z/OS MVS Programming: Authorized Assembler Services Reference](#).

In addition, look for other messages in the console log that might indicate the reason for the failure.

After you correct the problem, restart Infoprint Server to add the health checks. You can use these MVS commands to stop and restart Infoprint Server:

```
START AOPSTOP
START AOPSTART
```

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP162I** Adding Infoprint Server health checks failed because the Health Checker component is not active. Enter this command to start Health Checker:

```
START HZSPROC
```

**Explanation:** Infoprint Server could not add Infoprint Server health checks (IBMINFOPRINT) to the IBM Health Checker for z/OS because the Health Checker is not running.

**System action:** Infoprint Server continues processing. The IBMINFOPRINT health checks cannot run until you start the Health Checker.

**User response:** None.

**Operator response:** Notify your system programmer.

**System programmer response:** If you do not use the Health Checker, you can ignore this message.

If you use the Health Checker, enter this console command to start it:

```
START HZSPROC
```

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP164I** Diagnostic information for JES SSI

```
return code return-code reason code reason-code [additional-information]
```

**Explanation:** Infoprint Server made a call to the JES subsystem interface (SSI), and the SSI returned an unexpected result. This message can occur during normal processing or because a problem exists. This message contains information that can help diagnose a problem if one exists. If a problem exists, the message log usually contains another error message.

In the message text:

- `nn` The SSI call.
- `return-code` The return code from the SSI call.
reason-code  The reason code from the SSI call.
additional-information Additional information from the SSI call.

System action:  Infoprint Server continues processing.
User response:  None.
Operator response:  Notify your system programmer.
System programmer response:  If other messages in the message log indicate a problem, use the information in this message to help diagnose the problem. Otherwise, you can ignore this message.
For information about the reason code and additional information in the message, see z/OS MVS Using the Subsystem Interface.

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

AOP166E  JES2 secondary subsystem jes-name is not defined to MVS. Correct the jes-name attribute in the aopd.conf configuration file, then restart Infoprint Server.

Explanation:  The JES2 secondary subsystem specified in the aopd.conf configuration file is defined to MVS but is not active.

In the message text:
jes-name  Is the name of the JES2 secondary subsystem.

System action:  Infoprint Server ends.
User response:  None.
Operator response:  Notify your system programmer.
System programmer response:  Correct the jes-name attribute in the aopd.conf configuration file. Then restart Infoprint Server. For information about the jes-name attribute and how to edit the aopd.conf file, 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.

AOP167I  Infoprint Server is processing jobs and output from JES secondary subsystem jes-name.

Explanation:  Infoprint Server has successfully connected to the JES2 secondary subsystem specified in the aopd.conf configuration file. This message is for information only.

In the message text:
jes-name  Is the name of the JES2 secondary subsystem.

System action:  Infoprint Server 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.
AOP168E Infoprint Server is ending because JES2 secondary subsystem jes-name ended.

Explanation: Infoprint Server has been working with a JES2 secondary subsystem. However, the JES2 secondary subsystem is ending and Infoprint Server can no longer continue.

In the message text:

jes-name Is the name of the JES2 secondary subsystem.

System action: Infoprint Server ends.
User response: None.
Operator response: Notify your system programmer.
System programmer response: Restart the JES2 secondary subsystem specified in the message text. Then restart Infoprint Server.

If you want to work with the JES2 or JES3 primary subsystem, comment out the jes-name attribute in the aopd.conf configuration file before you restart Infoprint Server.

For information about the jes-name attribute and how to edit the aopd.conf file, 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.

AOP170I The document was removed from this print job.

Explanation: The document was removed from the print job. The document might have been moved to another print job or deleted from the JES spool.

System action: Infoprint Server 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.

AOP171I diagnostic-information

Explanation: This message contains information that can help diagnose a problem if an error occurs later. It does not indicate that a problem exists.

In the message text:
diagnostic-information Diagnostic information

System action: Infoprint Server 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.

AOP169I Infoprint Server is connecting to JES2 secondary subsystem jes-name.

Explanation: Infoprint Server is connecting to the JES2 secondary subsystem specified in the message text. This message is for information only.

In the message text:

jes-name Is the name of the JES2 secondary subsystem.

System action: Infoprint Server 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.

AOP172E SAF access authorization check failed with SAF_RC=saf-retcode

Explanation: Infoprint Server issued the system
authorization facility (SAF) RACROUTE REQUEST=FASTAUTH macro to verify that the program trying to access the Printer Inventory has access to the AOP.ADF profile in the PRINTSRV class. The RACROUTE return code or reason code indicates a problem with RACF configuration.

In the message text:

saf-retcode
SAF return code in hexadecimal format.

racf-retcode
RACF return code in hexadecimal format.

racf-reasoncode
RACF reason code in hexadecimal format.

System action: Infoprint Server does not allow access to the Printer Inventory.

User response: Notify the system programmer that this error occurred.

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

System programmer response: To fix the problem, look up the RACROUTE REQUEST=FASTAUTH return codes and reason codes in z/OS Security Server RACROUTE Macro Reference.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP173E Inventory caller for request type type (nn) is not authorized to access Printer Inventory.

Explanation: A program has requested to read or update the Printer Inventory. However, the program is not APF authorized, and the user who started the program is not authorized to access the Printer Inventory. For example, the user might have no access to the Printer Inventory, or the user might have READ access to the Printer Inventory but is requesting to update the Printer Inventory.

In the message text:

type
Type of request made.

nn Request number.

access
Type of access that is required: READ or UPDATE.

AOP174E Inventory caller for request type type (nn) is not authorized to access system configuration.

Explanation: A program has requested to read or update the system configuration definition in the Printer Inventory. However, the user who started the program is not authorized to access the system configuration definition. For example, the user might have no access to the system configuration definition, or the user might have READ access to the system configuration definition but is requesting to update the system configuration definition.

In the message text:

type
Type of request made.

nn Request number.

access
Type of access that is required: READ or UPDATE.

System action: Infoprint Server does not allow the program to access the system configuration definition.

User response: Notify the system programmer that this error occurred.

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

System programmer response: Look for another message that indicates which program attempted to access the system configuration definition. To allow the...
program to access the system configuration definition, give the user who started the program the required access to the AOP:CONFIGURATION profile in the PRINTSRV class. If the AOP:CONFIGURATION profile does not exist, you can give the user the required access to the AOP:ADMINISTRATOR profile.

For information about the AOP:CONFIGURATION and AOP:ADMINISTRATOR profiles, 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.

AOP175W Internal error in source. Request = request, return code = return-code, reason code = reason-code.

Explanation: An internal error occurred in an Infoprint Server module. If another error occurs, the information in this message can help IBM diagnose the problem.

In the message text:

source
Name of the module that detected the error.
request
Type of request being processed.
return-code
Internal return code.
reason-code
Internal reason code.

System action: Processing continues.
User response: None.
Operator response: None.
System programmer response: None.

AOP176E RACROUTE LIST CLASS(class) failed with SAF_RC = saf-retcode, RACF_RC = racf-retcode, RACF_RSN = racf-reasoncode.

Explanation: Infoprint Server issued the system authorization facility (SAF) RACROUTE LIST macro to verify that the program trying to access the Printer Inventory has access to the AOP:CONFIGURATION or AOP:ADMINISTRATOR profile in the PRINTSRV class. The RACROUTE return code or reason code indicates a problem with RACF configuration.

In the message text:

class
RACF class name.
saf-retcode
SAF return code in hexadecimal format.
racf-retcode
RACF return code in hexadecimal format.
racf-reasoncode
RACF reason code in hexadecimal format.

System action: Infoprint Server does not allow access to the Printer Inventory.
User response: Notify the system programmer that this error occurred. After the problem is fixed, try to access the Printer Inventory again.
Operator response: Notify the system programmer that this error occurred.
System programmer response: To diagnose the problem, look up the RACROUTE LIST return code and reason code in z/OS Security Server RACROUTE Macro Reference. After you fix the problem, the user can try to access the Printer Inventory again.

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

AOP177W The system configuration cannot be created, renamed or deleted.

Explanation: You issued a pidu create, rename, or delete command to create, rename, or delete the system configuration definition in the Printer Inventory. However, these pidu commands are not allowed for the system configuration definition.

If dynamic configuration is enabled, you can use the pidu modify command (or the Infoprint Server ISPF panels) to modify attributes in the system configuration definition, and you can use the pidu force-create command.
to replace the system configuration definition. You can also use the pidu command.

**System action:** The pidu command was not accepted.

**User response:** For information about:
- Editing the system configuration definition using the ISPF panels, see [z/OS Infoprint Server Customization](#).
- The pidu command, see [z/OS Infoprint Server Operation and Administration](#).

**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.

---

**AOP178W** You are not authorized to access the Printer Inventory.

**Explanation:** You requested to read or update the Printer Inventory. However, you do not have the required RACF authorization.

In the message text:

*access*  
Type of access that is required: READ or UPDATE.

**System action:** The request to read or update the Printer Inventory was not accepted.

**User response:** Notify the system programmer that this error occurred. After the problem is corrected, try the request again.

**Operator response:** Notify the system programmer that this error occurred.

**System programmer response:** Give the user the required access to the AOP.ADMINISTRATOR profile in the PRINTSRV class. For information about the AOP.CONFIGURATION and AOP.ADMINISTRATOR profiles, 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.

---

**AOP179W** You are not authorized to access the system configuration.

**Explanation:** You requested to read or update the system configuration definition in the Printer Inventory. However, you do not have the required RACF authorization.

In the message text:

*access*  
Type of access that is required: READ or UPDATE.

**System action:** The request to read or update the system configuration definition was not accepted.

**User response:** Notify the system programmer that this error occurred.

**Operator response:** Notify the system programmer that this error occurred.

**System programmer response:** Give the user the required access to the AOP.CONFIGURATION profile in the PRINTSRV class. If the AOP.CONFIGURATION profile is not defined, you can give the user access to the AOP.ADMINISTRATOR profile instead. For information about the AOP.CONFIGURATION and AOP ADMINISTRATOR profiles, 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.

---

**AOP180E** Cross-system coupling facility (XCF) request failed with return code return-code, reason code reason-code, group group, member member, source source-code.

**Explanation:** Infoprint Server issued an XCF macro that failed. If *macro* is:
- IXCJOIN: Infoprint Server requested to join an XCF group.
- IXCQUERY: Infoprint Server requested information about an XCF group.

In the message text:

*macro*  
XCF macro name.

*return-code*  
Return code from the XCF macro, in hexadecimal.

*reason-code*  
Reason code from the XCF macro, in hexadecimal.
**group**

XCF group name.

**member**

Usually, the XCF member name of the Infoprint Server daemon or command issuing the request. However, if **macro** is **IXCQUERY**, **return-code** is 8, and **reason-code** is 10, **member** is instead the name of the daemon that Infoprint Server is requesting information about.

**source-code**

A code that identifies where Infoprint Server detected the problem. This code can help IBM diagnose the problem.

**System action:**

- If **macro** is:
  - **XCFJOIN**: Infoprint Server ends or the Infoprint Server daemon ends.
  - **XCFQUERY**: Processing continues.

**User response:** Notify the system programmer that this error occurred.

**Operator response:** Notify the system programmer that this error occurred.

**System programmer response:** Look up the return and reason codes for the XCF macro in *z/OS MVS Programming: Sysplex Services Reference*.

After the problem is corrected, if **macro** is “XCFJOIN”, start Infoprint Server again.

If you cannot correct the 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.

---

**AOP184I**

A cross-system coupling facility (XCF) message is ignored: message

**Explanation:** The cross-system coupling facility (XCF) component of z/OS sent a signal or message that Infoprint Server could not interpret. The message from XCF might be useful for diagnostic purposes if a subsequent error occurs.

In the message text:

**message**

Message from XCF.

**System action:** Processing continues.

**User response:** None.

**Operator response:** None.

**System programmer response:** If another error occurs, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance. Send this message and the subsequent error messages to IBM.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP185E**

AOPLCMPL did not load. Load return code is **return-code** and reason code is **reason-code**.

**Explanation:** Infoprint Server could not load the system logger exit AOPLCMPL. This error means that Infoprint Server was not installed correctly.

In the message text:

**return-code**

Hexadecimal return code from the LOAD macro.

**reason-code**

Hexadecimal reason code from the LOAD macro.

**System action:** Infoprint Server continues processing. However, if you have set up a system logger log stream for Infoprint Server messages, Infoprint Server cannot write messages to the log stream.

**User response:** Not applicable.

**Operator response:** Notify the system programmer that this error occurred. Restart Infoprint Server after AOPLCMPL is available.

**System programmer response:** Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance. When AOPLCMPL is available, restart Infoprint Server.

**Tip:** If you have set up a log stream for Infoprint Server messages, request that Infoprint Server write messages to the z/OS UNIX file system until you fix the problem. Use the Infoprint Server ISPF panels to edit the system configuration definition. Edit these fields and save the panel:

- Clear the log stream name in the Log stream name field.
- Specify a value greater than 0 in the Log retention field.

When you save the Infoprint Server System Configuration ISPF panel, Infoprint Server automatically starts writing messages to the z/OS UNIX file system. After the problem is fixed, edit these fields again and save the panel:
Specify the log stream name in the Log stream name field.

Set the Log retention field to its original value.

When you save the Infoprint Server System Configuration ISPF panel, Infoprint Server automatically starts writing messages to the log stream.

For information about the LOAD return code and reason code, 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.

AOP186E user is not authorized to access log stream log-stream.

Explanation: Infoprint Server tried to access the system logger log stream to read or write messages. However, the user did not have the required authorization to the RACF resource profile that protects the log stream:

- The user who starts Infoprint Server must have UPDATE access.
- The user who uses the aoplogu command to read messages must have READ access.

In the message text:

user
ID of the user who is not authorized. If the type of required access is UPDATE, this is the ID of the user who started Infoprint Server.

access
Type of access required to the RACF resource profile: READ or UPDATE.

log-stream
Name of the log stream.

System action: Infoprint Server continues processing, but if the required access is UPDATE, messages are lost until the problem is corrected.

User response: Notify the system programmer that this error occurred.

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

System programmer response: Look for another message from RACF (for example, message ICH408I) that includes the name of the log stream profile and give the user ID the required access to that profile. When the user has the required access, Infoprint Server automatically starts writing messages to the log stream.

Tip: To request that Infoprint Server write messages to the z/OS Unix file system instead of to the system logger while you fix the problem, use the Infoprint Server ISPF panels to edit the system configuration definition. Edit these fields and save the panel:

- Clear the log stream name in the Log stream name field.
- Specify a value greater than 0 in the Log retention field.
- Set the Log retention field to its original value.

When you save the Infoprint Server System Configuration ISPF panel, Infoprint Server automatically starts writing messages to the z/OS UNIX file system. After the problem is fixed, edit these fields again and save the panel:

- Specify the log stream name in the Log stream name field.
- Set the Log retention field to its original value.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP187E log-stream is not a valid log stream name.

Explanation: The log stream for Infoprint Server messages that is specified in the system configuration definition is not defined to the system logger. You must define the log stream to the MVS system logger before you specify the log stream name in the system configuration definition.

In the message text:

log-stream
Name of the log stream specified in the system configuration definition.

System action: Infoprint Server continues processing, but messages are lost until the problem is corrected.

User response: Notify the system programmer that this error occurred.

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

System programmer response: Look for another message from RACF (for example, message ICH408I) that includes the name of the log stream profile and give the user ID the required access to that profile. When the user has the required access, Infoprint Server automatically starts writing messages to the log stream.
definition and correct the name in the **Log stream name** field (logstream-name attribute) if necessary. When you correct the name and save the Infoprint Server System Configuration ISPF panel, Infoprint Server automatically starts writing messages to the specified log stream.

If the log stream name is correct in the message text, make sure that the log stream is defined correctly to the system logger. You can use the MVS DISPLAY LOGGER command to display the status of log stream. For information about the DISPLAY LOGGER command, see [z/OS MVS System Commands](#).

For information about how to define the log stream to the logger, see [z/OS Infoprint Server Customization](#).

When the log stream is defined correctly, Infoprint Server automatically starts writing messages to the log stream.

**Tip:** To request that Infoprint Server write messages to the z/OS Unix file system instead of to the system logger while you fix the problem, use the Infoprint Server ISPF panels to edit the system configuration definition. Edit these fields and save the panel:
- Clear the log stream name in the **Log stream name** field.
- Specify a value greater than 0 in the **Log retention** field.

When you save the Infoprint Server System Configuration ISPF panel, Infoprint Server automatically starts writing messages to the log stream.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

---

**AOP188E**  
Log stream *log-stream* is in use on another system.

**Explanation:** Another system in the sysplex is using a system logger log stream with the same name. If a log stream is a DASD-only log stream, only one system in a sysplex can write to it.

In the message text:
Descriptor code: Not applicable.
Automation: Not applicable.

AOP189E System logger macro request for log stream log-stream failed with return code return-code, reason code reason-code.

Explanation: The system logger macro to connect to, read, or write to the Infoprint Server log stream for messages failed.

In the message text:

macro
System logger macro, for example:
• IXGBRWSE, which indicates a browse request
• IXGCONN REQUEST=CONNECT, which indicates a connect request
• IXGWRITE REQUEST=WRITE, which indicates a write request

log-stream
Name of the log stream.

return-code
Hexadecimal return code from the macro.

reason-code
Hexadecimal reason code from the macro.

System action: Infoprint Server continues processing, but if the macro is IXGCONN or IXGWRITE, messages are lost until the problem is corrected.

User response: Notify the system programmer that this error occurred.

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

System programmer response: For an explanation of the return code and reason code for the macro, see z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG.

After you correct the problem, Infoprint Server automatically starts writing messages to the log stream.

Tip: To request that Infoprint Server write messages to the z/OS Unix file system instead of to the system logger while you fix the problem, use the Infoprint Server ISPF panels to edit the system configuration definition. Edit these fields and save the panel:
• Clear the log stream name in the Log stream name field.
• Specify a value greater than 0 in the Log retention field.

When you save the Infoprint Server System Configuration ISPF panel, Infoprint Server automatically starts writing messages to the z/OS UNIX file system. After the problem is fixed, edit these fields again and save the panel:
• Specify the log stream name in the Log stream name field.
• Set the Log retention field to its original value.

When you save the Infoprint Server System Configuration ISPF panel, Infoprint Server automatically starts writing messages to the log stream.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.

Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP190W System logger macro request for log stream log-stream was successful, but with return code return-code, reason code reason-code.

Explanation: The Infoprint Server request to the system logger was successful. However, the system logger macro returned a return code and reason code that might indicate a problem.

In the message text:

macro
The system logger macro, for example:
• IXGBRWSE, which indicates a browse request
• IXGCONN REQUEST=CONNECT, which indicates a connect request
• IXGWRITE REQUEST=WRITE, which indicates a write request

log-stream
Name of the log stream.

return-code
Hexadecimal return code from the system logger.

reason-code
Hexadecimal reason code from the system logger.

System action: Infoprint Server continues processing.

User response: Notify the system programmer that this error occurred.

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

System programmer response: If the problem persists, use the return code and reason code in this message to help diagnose the problem. For an explanation of the return code and reason code for the macro, see z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
AOP191I  File *filename* contains one or more attributes that have been migrated to the Printer Inventory. The attributes in the file are ignored.

Explanation: You have enabled the Infoprint Server dynamic configuration function and restarted Infoprint Server. When Infoprint Server started, it created a system configuration definition in the Printer Inventory and migrated some or all attributes in this file to the definition. Infoprint Server no longer uses the migrated attributes in the file. To change the migrated attributes, you must now edit the attributes in the system configuration definition.

In the message text:

*filename*  Name of the Infoprint Server configuration file.

If the file name is *aopmsg.conf*, all attributes were migrated to the system configuration definition in the Printer Inventory.

If the file name is *aopd.conf*, only these attributes were migrated to the system configuration definition in the Printer Inventory:

- ascii-codepage
- console-name
- ebcdic-codepage
- ipp-port-number
- job-prefix
- lpd-port-number
- log-retention
- max-historical-inventory-size
- smf-recording
- snmp-community

System action: Processing continues. Infoprint Server ignores the attributes that were migrated.

User response: Not applicable.

Operator response: Notify the system programmer that this message was received.

System programmer response: To avoid confusion, comment out or delete the migrated attributes in the file.

Tips:

- To comment out an attribute, type a pound sign (#) in the first column of the line with the attribute. Be careful to comment out or delete only the migrated attributes.

- If the file is *aopmsg.conf*, you can delete the file because all attributes have been migrated.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP192E  The Configuration object is missing in the inventory.

Explanation: The Infoprint Server dynamic configuration function is enabled, but the required system configuration definition has been deleted from the Printer Inventory.

System action: Infoprint Server does not start successfully.

User response: Not applicable.

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

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

Tip: To continue processing while you correct the problem, disable the dynamic configuration function and restart Infoprint Server. To disable dynamic configuration, specify "dynamic-configuration=no" in the Infoprint Server configuration file (*aopd.conf*). For information about the *aopd.conf* file, 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.

AOP193E  The system logger address space is not available.

Explanation: You have defined a system logger log stream for Infoprint Server messages. However, the system logger address space is not started.

System action: Infoprint Server continues processing, but messages are lost until the problem is corrected.

User response: Not applicable.

Operator response: Notify the system programmer that this error occurred.
System programmer response: Start or restart the system logger address space. For information about how to start the system logger, see **z/OS MVS Setting Up a Sysplex**.

When the address space is started, Infoprint Server automatically starts writing messages to the log stream.

Tip: To request that Infoprint Server write messages to the z/OS Unix file system instead of to the system logger while you fix the problem, use the Infoprint Server ISPF panels to edit the system configuration definition. Edit these fields and save the panel:

- Clear the log stream name in the Log stream name field.
- Specify a value greater than 0 in the Log retention field.

When you save the Infoprint Server System Configuration ISPF panel, Infoprint Server automatically starts writing messages to the z/OS UNIX file system. After the problem is fixed, edit these fields again and save the panel:

- Specify the log stream name in the Log stream name field.
- Set the Log retention field to its original value.

Problem determination: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

---

**AOP195E** Member *member* is already active in cross-system coupling facility (XCF) group *group*.

Explanation: Infoprint Server issued an IXCJOIN macro to join a cross-system coupling facility (XCF) group. The IXCJOIN macro failed with a return code of 8 and a reason code of 8, which indicates that the XCF group name is already active in the sysplex. This situation occurs when another instance of Infoprint Server is already running in the sysplex and is using the same XCF group name. The XCF group name must be unique in a sysplex.

In the message text:

- *member* XCF member name, which identifies the daemon that is trying to join the XCF group. AOPIBM00 is the member name for daemon aopd.

- *group* XCF group name in format: AOPPPPP[Q]:

**System action:** Infoprint Server does not start.

**User response:** Notify the system programmer that this error occurred.

**Operator response:** Notify the system programmer that this error occurred.

**System programmer response:** Specify a unique XCF group qualifier in the xcf-group-qualifier attribute in the Infoprint Server configuration file, aopd.conf. The qualifier must be unique for each Infoprint Server with the same Printer Inventory name in a sysplex. As an alternative, you can specify a unique Printer Inventory name in the inventory attribute in the aopd.conf file.

To list all currently defined XCF groups or to display the members of the group named named in the message text, you can use the MVS DISPLAY XCF command. For example, to display the members of XCF group AOPAOP1, enter this command:

```
DISPLAY XCF,GROUP,AOPAOP1
```

For information about the DISPLAY XCF command, see **z/OS MVS System Commands**.

For more information about the xcf-group-qualifier and inventory attributes, see **z/OS Infoprint Server Customization**.

After the problem is corrected, start Infoprint Server again.

---

**AOP998E** Could not retrieve message, cat=*catalog_name*, set=*setnum*, num=*msgnum*.

Explanation: Message msgnum from set setnum could not be retrieved from message catalog catalog_name. This problem might be caused by Print Interface trying to access a catalog that has been edited and therefore has changed information or missing messages.

This problem might also occur if you export the...
_CEE_ENVFILE_ environment variable in your
/etc/profile file. IBM suggests that you do not use this
environment variable because it can supersede shell
environment variables such as NLSPATH. For more
information about the _CEE_ENVFILE_ environment
variable, see _z/OS UNIX System Services Command
Reference_.

**System action:** Processing continues.
**User response:** Contact your system programmer.
**Operator response:** Not applicable.
**System programmer response:** Verify that the catalog
name listed in the message is the catalog that was
installed with the product and not one that has been
altered. If Print Interface is trying to access the correct
message catalog, 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.

---

AOP2028I A transform message was generated:

**Explanation:** The data stream transform sent a
message.
In the message text:

message Message from the transform.

**System action:** The severity of the error determines
whether Infoprint Server continues processing the
document.

**User response:** If the transform message indicates an
error in the input data stream, correct the error and
submit the transform or print request again.

**Operator response:** Not applicable.

**System programmer response:** If the transform
message indicates a transform problem, correct the
problem and submit the transform or print request again.

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

---

AOP2029E The transform detected an error or
degradation in the input datastream, or
an error or degradation occurred while
transforming the document. No output
was produced.

**Explanation:** A transform error occurred.
**System action:** The transform request was not
completed. No output was produced.
**User response:** If there is an error in the input data
stream, correct the error and submit the transform or
print request again. If the input data stream is correct,
notify the system programmer that this error occurred.

To continue processing the document when this error
occurs, resubmit the print or transform request
specifying the _fail-on-transform-error=no_ job attribute.
For information about the _fail-on-transform-error_ job
attribute, see _z/OS Infoprint Server User’s Guide_.

**Operator response:** Not applicable.

**System programmer response:** For information about
the transform problem, see any associated messages
from the transform. After you correct the problem, you
might need to restart the Infoprint Server Transform
Manager.

To continue processing documents when this type of
error occurs, do one of these:

- Set the _AOP_FAIL_ON_ERROR -> no_ environment
variable for the transform class in the transform
configuration file, _aopxfd.conf_. For information
about the environment variable, see the
documentation for the transform.

- Set the _Fail on error_ field to _No_ 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.

---

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, /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.

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

AOP2802E No remote transform exists for document-format to output-format

Explanation: Infoprint Server could not transform the document from the input document format to the requested output format because Infoprint Transform Manager for Linux does not provide a transform for these formats.

In the message text:

document-format
The format of the input document. The user specified this format in the document-format job attribute, or Infoprint Server determined it by inspecting the input data stream.

output-format
The format of the output document. The user or administrator specified this format in the output-format transform attribute, or Infoprint Server used the default of mo:dca-p.

System action: The data was not transformed.
User response: If you specified the remotexf command:

- Make sure that Infoprint Transform Manager for Linux provides a transform for data format of your document.
- If the input format in the message is not correct, specify the document-format job attribute.
- If the output format in the message is not correct, specify the output-format transform attribute. For example, to transform an AFP document (MO:DCA-P) to PDF format, specify in the Filter field:

  aoprxf.so -xf output-format=pdf

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

AOP3001E IP PrintWay could not load the exit-type user 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 75.

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 z/OS file system (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 suggests 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
- zFS file systems, see z/OS Distributed File Service zFS Administration

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 XTPPRLEN 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 75.
System action: Processing continues. The job failed on this attempt.
User response: None.
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.

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 75.
System action: Processing continues. The job failed on this attempt.
User response: None.
Operator response: Notify your system programmer.
**System programmer response:** Correct the user exit. See [z/OS Infoprint Server Customization](#) for information about how to code the Record exit.

**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 75.

**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 75.

**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 75.

**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 75.

**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.
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 75.

**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 75.

**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 75.

**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.

---

**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 75.

**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.
**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 75.

**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.

---

**AOP3011I**  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 75.

**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://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 “Format of messages in the Infoprint Server common message log” on page 75.

**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 75.

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 75.

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 75.

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.
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 75.

**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:

**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 75.

**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 `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, `printer-uri` is the alternate printer where the printer 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.
The host name and print queue name of the printer.

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

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 75.

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 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 75.

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 75.

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.

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 75.

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.

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 75.

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.
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 75.

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.

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 75.

System action: Processing continues.

User 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 75.

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: If the name of the printer definition is incorrect, correct the name in the FSSDATA parameter on the OUTPUT JCL statement and rerun the job. Or, ask your administrator to create a printer definition with this name and then ask the operator to release the print job.

Operator response: Tell the job submitter that this error occurred. Delete the print job from the JES spool if the job submitter resubmits it. Or release the print job after the administrator creates the printer definition.

System programmer response: Create a printer definition in the Infoprint Server Printer Inventory if requested.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
AOP3209I The IP PrintWay job selection rule definition was changed in the Printer Inventory.

Explanation: The administrator changed the job selection rule definition in the Printer Inventory. IP PrintWay extended mode uses the changed rule.

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 75.

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.

AOP3210I The IP PrintWay job selection rule manager started.

Explanation: The IP PrintWay extended mode job selection rule manager is active.

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 75.

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.

AOP3212E IP PrintWay stopped using the job selection rule due to a terminating error.

Explanation: The job selection rule is no longer active. Check for additional messages to determine the problem.

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 75.

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.

AOP3213I No record exists in the Printer Inventory for the print job to be processed.

Explanation: The print job does not exist in the Printer Inventory and cannot be processed. This situation might indicate that a logic error exists in 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 75.

System action: Processing ends for this print job.

User response: If the job still exists on the JES spool, use Infoprint Central to release the print job. IP PrintWay extended mode will attempt to print the print job. If the problem occurs again, notify your system programmer that this error occurred.

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.
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 75.

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.

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 75.

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.

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 return code and reason code from the SJFREQ macro for each SJF service, see z/OS MVS Programming: Authorized Assembler Services Reference SET-WTO, SA23-1375.

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: AOPWSMD

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP3218I Load of module ANFFHC failed. The return code is return-code. The reason code is reason-code.

Explanation: Check (IBMINFOPRINT, INFOPRINT_PRINTWAY_MODE) was unable to determine which mode of IP PrintWay is running because the load of module ANFFHC failed.

In the message text:
- `return-code` is the hexadecimal return code from the LOAD macro.
- `reason-code` is the hexadecimal reason code from the LOAD macro.

System action: Processing continues.

User response: Notify the system programmer that this error occurred.

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

System programmer response: Check that module ANFFHC is in SYS1.LINKLIB. If not, apply the PTF for APAR OA26577. For information about the LOAD return code and reason code, see z/OS MVS System Codes. 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: AOPWSMD

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP3219I Call of module ANFFHC failed. The return code is return-code.

Explanation: Check (IBMINFOPRINT, INFOPRINT_PRINTWAY_MODE) was unable to determine which mode of IP PrintWay is running because the call to module ANFFHC failed.

In the message text, `return-code` is the hexadecimal return code from the call to ANFFHC. 0 indicates that ANFFHC did not return a code.

System action: Processing continues.

User response: Notify the system programmer that this error occurred.

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

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: AOPWSMD

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
AOP3220I The document cannot be printed because it has been removed from the print job.

Explanation: IP PrintWay extended mode processed a document, but that document is no longer on the JES spool. IP PrintWay extended mode cannot send the document to the printer. The operator might have deleted the document from the JES spool after IP PrintWay extended mode processed it but before it was sent to the printer.

System action: Processing continues. IP PrintWay extended mode sends other documents in the print job to the printer.

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.

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 75.

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 75.

System action: Processing continues.

User response: None.
AOP3407I  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 75.

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.

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 75.

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.

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 75.

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.

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 75.

System action:  Processing continues.
User response:  None.
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 75.

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.

AOP3414I 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 75.

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.

AOP3415I The print job is no longer retained
because the retention period expired.

Explanation: The print job is no longer retained on the
JES spool because the retention period expired.

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 75.

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.

AOP3416I 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 75.

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.

AOP3417I IP PrintWay rejected the print job. The print job remains on the JES spool.

Explanation: IP PrintWay extended mode cannot hold the document on 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 75.

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 75.

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 75.

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 75.

System action:  The print job is not 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.

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 75.

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.

AOP3501I  IP PrintWay created the printer in the Printer Inventory.

Explanation:  IP PrintWay extended mode created an internal record for this printer in the Printer Inventory. Typically this occurs because the administrator created a printer definition for the printer or a print job started printing on the printer. As a result, Infoprint Central will 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 75.

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.

AOP3502I The administrator added printer definition printer-definition for this printer.
Explanation: The administrator created a printer definition in the Printer Inventory for this printer.
In the message text, printer-definition is the definition for the added 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.

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: Not applicable.
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 75.
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 75.
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.

AOP3506I The printer was already started.
Explanation: The operator selected the Start action to start the printer, but the printer is already started.
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.
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.

AOP3507I The printer was already stopped.
Explanation: The operator selected the Stop action to stop the printer, but the printer is already stopped.
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.

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 75.

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:
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 75.

**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.

AOP3510I IP PrintWay restored the printer `printer-uri`. 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_socket://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`

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 75.

**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 return-code, reason code is reason-code.

Explanation: IP PrintWay extended mode cannot load the forms control buffer (FCB) that is required to format the document. Some possible reasons for this error are:
- The FCB name is incorrect on the OUTPUT JCL statement or in the printer definition.
- The SYS1.IMAGELIB data set is not in the system LNKLST and is not a sanctioned step library.
- The SYS1.IMAGELIB data set is not APF-authorized.

In the message text:
forms-control-buffer
The name of the forms control buffer (FCB). The FCB was specified on the OUTPUT JCL statement or in the printer definition.
return-code
The hexadecimal return code from the LOAD macro.
reason-code
The hexadecimal 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 75.

System action: The document was not printed. IP PrintWay extended mode retains the failed print job on the JES spool if retention is requested in the printer definition.

User response: None.
Operator response: Notify your system programmer that this error occurred.
System programmer response: Check these items:
- The name of the FCB is specified correctly on the OUTPUT JCL statement or in the printer definition.
- SYS1.IMAGELIB is in the system LNKLST or is a sanctioned step library. Specify SYS1.IMAGELIB in the STEPLIB environment variable in the aopstart EXEC and also in the STEPLIBLIST sanction list in the BPXPRMxx PARMLIB member.
- SYS1.IMAGELIB is APF-authorized.

For information about:
- Return and reason codes in the message text, see z/OS MVS System Codes.
- The STEPLIB environment variable and how to specify it in the aopstart EXEC, see z/OS Infoprint Server Customization.
- The STEPLIBLIST facility, see z/OS UNIX System Services Planning.
- How to AFP-authorize SYS1.IMAGELIB, 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.

AOP3601I The carriage control character is not defined. The line will be printed with a single carriage return and with line feed.

Explanation: IP PrintWay extended mode detected a carriage control value that is not supported. The line is printed with a carriage return and a line feed. IP PrintWay extended mode cannot determine what formatting is required.

In the message text, character is the unsupported carriage control character.

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 75.

System action: Processing continues.
User response: Modify the carriage control value 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.
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 75.

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: Determine the cause of the I/O error if an I/O error is indicated.

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 75.

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 75.

System action: IP PrintWay extended mode retains the print job on the JES spool if retention was requested in the printer definition.

User response: Resubmit the print job, if necessary, after the administrator corrects the code pages in the printer definition.

Operator response: Notify your administrator that this error occurred. After the administrator corrects the code pages in the printer definition, 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 code page 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”. Use the Infoprint Server...
ISPF panels to correct the code page names in the **Document code page** or **Printer code page** fields 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.

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**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.

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**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 that 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.

**System programmer response:** Look up the return code and `errno` in the **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`) or, if dynamic...

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**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 75.

**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:** 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**. 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`) or, if dynamic...
configuration is enabled, in the system configuration definition.

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 75.
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.

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 75.
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.

AOP3611E The print job will not be processed because it 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 75.
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 75.
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 75.
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 75.
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 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 75.
System action: IP PrintWay extended mode processes the print job again after the retry interval expires. When all the retries are attempted, IP PrintWay extended mode retains 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.

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**AOP3616I** 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.

- **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

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 75.

**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.

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**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**
  - 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

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 75.

System action: IP PrintWay extended mode does not print the print job on the new printer. The current job will fail on the current printer.

User response: Resubmit the print job.

Operator response: Resubmit 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.

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 "Format of messages in the Infoprint Server common message log" on page 75.

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.
AOP3802I  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: None.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3803E  The LPR RECEIVE A PRINT JOB command did not work because a print queue that is not valid was specified, or the LPD accepts print jobs only on ports 721 to 731, or a connection failed.

Explanation: IP PrintWay received an error when it sent the LPR RECEIVE A PRINT JOB command to the LPD. Some possible reasons for the error are:
• The print queue specified in the printer definition or in JCL is not correct.
• The network connection is not working.
• The LPD accepts print jobs only from ports in the well-known port ranges of 721 to 731.
• IP PrintWay is sending the print job to InfoPrint Manager for AIX, but the InfoPrint Manager LPD is not authorized to receive print jobs from the z/OS 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: See the message log for the possible related error messages and correct the error based on the messages.

Check these items:
• Verify that the print queue name is correct. If the print queue name is not correct, edit the printer definition or the JCL to specify the correct queue name.
• Check that the printer is turned on.
• Ping the printer to make sure the network connection is working.
• 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.
• If the target host is InfoPrint Manager for AIX, make sure that the host name or IP address of the z/OS system is specified in file etc/hosts.lpd on the AIX system. You can use this AIX command to add the z/OS system to the etc/hosts.lpd file:
smit mkhostsldp nnn.nnn.nnn.nnn

where nnn.nnn.nnn.nnn is the host name or IP address of the z/OS system.

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 PJL 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 75.

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 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 75.

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: If the print job was canceled due to an error and it is retained on the JES spool, you can start the print job again from Infoprint Central after the
problem is corrected. The print job resumes printing from the last page that printed successfully, if requested in the printer definition. If the print job is not retained, ask the job submitter to resubmit 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.

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 75.

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 75.

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.

AOP3855W 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 75.

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.

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 75.

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.

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 75.

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, 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.

Automation: 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 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 75.

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 afpxpcl.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 IBM Print Transforms from AFP for Infoprint Server 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.

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 75.

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.

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 75.

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.
User response: Notify your system programmer that this error occurred.
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.
AOP3903E  An unknown error has occurred. The return code is 0x<code>. The reason code is 0x<code>.

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.

The problem might be one of these:
- The APPL ID that you specified to Infoprint Server is spelled incorrectly.
- The APPL ID is not defined in VTAM.
- Another application is using the same APPL ID.

The <code> 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 75.

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 that you specified to Infoprint Server is spelled correctly.
- The APPL ID is defined in VTAM.
- Another application is not using the same APPL ID.

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 0x<code>. The reason code is 0x<code>.

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 <code> 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 75.

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 AOXVTM is not in SYS1.LINKLIB, specify the library that contains AOXVTM in the STEPLIB environment variable in the <code> 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 or the applid attribute is not specified. To print on VTAM-controlled printers, you must create a VTAM APPL statement for IP PrintWay and specify the APPL ID either in the
AOP_APPLID environment variable or in the applid configuration attribute.

The aplogu 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 75.

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 the APPL ID in the AOP_APPLID environment variable in the apstart EXEC or, if dynamic configuration is enabled, in the applid attribute in the system configuration definition. For information about the AOP_APPLID environment variable and the applid 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.

AOP3909E A VTAM error has occurred. The VTAM request code is 0xc0d3. The VTAM feedback code is 0xc0d3. The VTAM system sense code is 0xc0d3. The VTAM RPL return code is 0xc0d3. 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:
- The IP PrintWay connection timeout value expired before IP PrintWay could connect to the printer.
- The printer might be turned off.
- The printer LU name might be incorrect in the printer definition.
- The printer LU name might not be defined in VTAM.
- The printer logmode name might not be an entry in the VTAM logon-mode table. The logmode table is specified in the MODETAB parameter of the VTAM resource definition statement for the printer LU.

The aplogu 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 75.

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. Make sure that
the printer is turned on, the printer LU and logmode names are correct in the printer definition, and that the printer LU and logmode names are defined in VTAM. 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.

AOP3910E 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 that you specified to Infoprint Server is spelled incorrectly.
• 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 75.

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 is spelled correctly, is defined to VTAM, and is not used by another application. The APPL ID is specified either in the AOP_APPLID environment variable in the aopstart EXEC or, if dynamic configuration is enabled, in the applid attribute in the system configuration definition. If you run IP PrintWay in a sysplex, also make sure the APPL ID is unique for IP PrintWay on each system. For information about the AOP_APPLID environment variable and the applid attribute, 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.

AOP3911E 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 75.

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 75.

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.

AOP3913E AOPITX 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. You might have moved module AOPITX from SYS1.LINKLIB to a library that is not specified in the STEPLIB environment variable or is not defined to the STEPLIBLIST facility.

In the message text, code is the hexadecimal return code or 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 75.

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: If AOPITX is not in SYS1.LINKLIB, specify the library that contains AOPITX 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 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.

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 75.

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.

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 75.

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 75.

System action: The job failed on this attempt.

User response: Contact your system programmer.

Operator response: None.

System programmer response: Change your JCL or the fields on the Allocation panel of the printer definition to direct the print job to IP PrintWay basic mode instead of IP PrintWay extended mode. Or, apply PTF UA15500 for the VTAM protocol.

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 email.

In the message text:

bcc-addresses
Email addresses of the blind copy recipients (other recipients cannot see a blind copy recipient).

cc-addresses
Email addresses of the copy recipients.

from-address
An optional descriptive name, followed by the email address of the sender.

reply-address
Email address that recipients can reply to.

subject
Subject of the email.

to-addresses
Email addresses of the recipients.

An email address can be an alias name defined to z/OS UNIX sendmail. An alias name represents one or more real email 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.
**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.

**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.
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.

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.

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.

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:  Make sure that the printer starts. If the printer does not start, 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.

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.
AOP4012I  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.

AOP4013I  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 is repeated. If the printer is not repeated, 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. 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.

AOP4016I Infoprint Central accepted a request from userid to start the LU.

Explanation: From Infoprint Central, a user asked to start 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 start the LU.
User response: None.
Operator response: Make sure that the LU starts. If the LU does not start, 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.

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.
AOP4021I  Infoprint Central did not modify the document due to an error.

Explanation: Infoprint Central did not modify the document as a user requested.

System action: Processing continues.

User response: Try to modify 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.

AOP4026I  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, 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, 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.
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.

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**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 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.

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**AOP4030I** Infoprint Central accepted a request from *userid* to space the printer backward
*number* pages from the start of the data set.

**Explanation:** From Infoprint Central, a user asked to space the printer backward 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 backward from the start of the data set.

**System action:** Infoprint Central tries to space the 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.
AOP4031 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 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 backward from the end of the data set.

System action: Infoprint Central tries to space the printer backward the correct number of pages from the end of the data set.

User response: None.

Operator response: Make sure that the printer spaces backward the correct number of pages from the end of the data set. If the printer does not space backward 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.

AOP4033 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.

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

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.

AOP4040E You do not have permission to communicate with Infoprint Server.

Explanation: The user who is logged in to Infoprint Central is not permitted to access Infoprint Server files or directories.

System action: Infoprint Central continues, but most Infoprint Central actions fail.

User response: Notify the system programmer that this error occurred.

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

System programmer response: To fix this problem try restarting the Infoprint Central daemon, aopssid. For example, run these MVS START commands to stop the daemon and restart Infoprint Server:

```
START AOPSTOP,OPTIONS='-d ssid'
START AOPSTART
```

If the problem persists after you restart the aopssid daemon, run the aopsetup shell script to set the correct permissions for Infoprint Server directories. For information about how to run aopsetup, see z/OS Infoprint Server Customization.

If the problem continues to persist, contact your service representative at the IBM Support Center, or use your electronic link with IBM for assistance.

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 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.

System action: Infoprint Central tries to stop the printer and hold the current print job.

User response: None.
**AOP5000E** The OpenPrinter function failed.

**Explanation:** The Infoprint Server Port Monitor tried to use the Windows OpenPrinter function, but the OpenPrinter function failed.

**System action:** The Infoprint Server Port Monitor stops processing the request.

**User response:** Try the request again. If the problem persists, contact your Windows administrator.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server Port Monitor for Windows.

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOP5001I** Enter a name for the Infoprint port.

**Explanation:** The user did not enter a name for the new Infoprint Port Monitor port. A port name is required.

**System action:** The Infoprint Server Port Monitor waits.

**User response:** Try the request again. If the problem persists, contact your Windows administrator.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server Port Monitor for Windows.

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOP5002I** The port has been deleted.

**Explanation:** The user added a new Infoprint Port Monitor port but did not configure it.

**System action:** The Infoprint Port Monitor for Windows deletes the new Infoprint port.

**User response:** None.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server Port Monitor for Windows.

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOP5003E** The ClosePrinter function failed.

**Explanation:** The Infoprint Server Port Monitor tried to use the Windows ClosePrinter function, but the ClosePrinter function failed.

**System action:** The Infoprint Port Monitor for Windows stops processing the request.

**User response:** Try the request again. If the problem persists, contact your Windows administrator.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server Port Monitor for Windows.

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOP5004I** Enter the host name of the z/OS system in Host Name.

**Explanation:** On the Infoprint Port Monitor Configuration window, the user did not enter the host name or IP address of the z/OS system. The host name is required.

**System action:** The Infoprint Port Monitor for Windows waits.

**User response:** Enter the host name or IP address of the z/OS system in the Host Name field.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server Port Monitor for Windows.

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOP5005I** Enter the port number of the Infoprint Server LPD in Host Port.

**Explanation:** On the Infoprint Port Monitor Configuration window, the user did not enter the port number of the Infoprint Server line printer daemon (LPD). The port number is required.

**System action:** The Infoprint Port Monitor for Windows waits.

**User response:** Enter the port number where the LPD is listening in the Host Port field. The usual port number is 515.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server Port Monitor for Windows.

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**AOP5006I** Click Get Printer List. Then select the printer you want to use from the Printer Selection list.

**Explanation:** On the Infoprint Port Monitor Configuration window, the user clicked OK without selecting a z/OS printer.

**System action:** The Infoprint Port Monitor for Windows waits.

**User response:** Follow the instructions in the message text.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server Port Monitor for Windows.

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**AOP5007I** Port name already exists.

**Explanation:** The user entered a port name that another Windows port uses. The port name must be unique in the Windows system.

**System action:** The Infoprint Port Monitor for Windows waits.

**User response:** Enter a different port name and click OK.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server Port Monitor for Windows.

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**AOP5008I** The port number must be an integer.

**Explanation:** On the Infoprint Port Monitor Configuration window, the user entered an alphabetic port number in the Host Port field. The port number must be an integer.

**System action:** The Infoprint Port Monitor for Windows waits.

**User response:** Enter the port number where the Infoprint Server line printer daemon (LPD) is listening. The usual port number is 515.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server Port Monitor for Windows.

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**AOP5050E** Registry error: registry-function failed.

**Explanation:** The Infoprint Server Port Monitor for Windows tried to update the Windows registry, but the Windows registry function failed.

In the message text, registry-function is the name of the Windows registry function that failed.

**System action:** The Infoprint Port Monitor for Windows stops processing the request.

**User response:** Try the request again. If the problem persists, contact your Windows administrator.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server Port Monitor for Windows.

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
**AOP5051E Communication protocol error.**

**Explanation:** The Infoprint Server Port Monitor for Windows could not connect to the z/OS system where Infoprint Server is running. The network might be experiencing problems, the z/OS host name in the Host Name field might be incorrect, or the port number in the Host Port field might be incorrect.

**System action:** The Infoprint Port Monitor for Windows stops processing the request. If the Port Monitor is configuring a port, the port is not configured. If the Port Monitor is sending a print job to the z/OS system, the file is not sent.

**User response:** If you are adding a Windows printer, make sure that the host name and port number for the z/OS system are correct on the Infoprint Port Monitor Configuration page. Then click "Get Printer List". If the problem persists, look at the other messages in the Windows event log to determine the problem, or contact your Windows administrator.

**Operator response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server Port Monitor for Windows.

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**AOP5052E The Infoprint Server LPD prematurely closed the connection.**

**Explanation:** The Infoprint Server line printer daemon (LPD) unexpectedly closed the network connection with the Infoprint Port Monitor.

**System action:** The Infoprint Port Monitor for Windows stops processing the request. If the Port Monitor is configuring a port, the port is not configured. If the Port Monitor is sending a print job to the z/OS system, the file is not sent.

**User response:** Try the request again. If the problem persists, contact your z/OS administrator.

**Operator response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server Port Monitor for Windows.

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**AOP5053E Communication error: TCP-function failed.**

**Explanation:** The Infoprint Server Port Monitor for Windows could not connect to the z/OS system where Infoprint Server is running. The network might be experiencing problems.

In the message text, TCP-function is the name of the Windows TCP/IP function that failed.

**System action:** The Infoprint Port Monitor for Windows stops processing the request. If the Port Monitor is configuring a port, the port is not configured. If the Port Monitor is sending a print job to the z/OS system, the file is not sent.

**User response:** If the problem persists, look at the other messages in the Windows event log to determine the problem, or contact your Windows administrator.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server Port Monitor for Windows.

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**AOP5054E Port list error.**

**Explanation:** The Infoprint Server Port Monitor for Windows could not get a list of Windows ports. This message indicates a Windows problem.

**System action:** The Infoprint Port Monitor for Windows stops processing the request.

**User response:** Try the request again. If the problem persists, contact your Windows administrator.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Source:** Infoprint Server Port Monitor for Windows.

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
AOPH1501E  The Infoprint Server base directory contains Version 2 Printer Inventory files.

Explanation:  File master.v2db was found in the Infoprint Server base directory. This file indicates that Infoprint Server has reformatted the Version 1 Printer Inventory and created a Version 2 Printer Inventory on z/OS V1R12 (or later). The Version 1 Printer Inventory and the Version 2 Printer Inventory both exist in the Infoprint Server base directory. However, Infoprint Server on z/OS releases prior to z/OS V1R12 use only the Version 1 Printer Inventory.

Before you start Infoprint Server on z/OS V1R12 (or later) again, IBM suggests that you remove file master.v2db so that Infoprint Server creates a new Version 2 Printer Inventory. Any changes that the administrator has made in the Version 1 Printer Inventory after falling back to a release prior to z/OS V1R12 will be included in the new Version 2 Printer Inventory. However, if you want to keep any changes that the administrator made in the Version 2 Printer Inventory before falling back, do not remove file master.v2db. If file master.v2db exists, Infoprint Server on z/OS V1R12 (and later) does not create a new Version 2 Printer Inventory.

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.

AOPH1502I  The Infoprint Server base directory does not contain Version 2 Printer Inventory files.

Explanation:  No Version 2 Printer Inventory files were found in the Infoprint Server base directory. Either you have not yet started Infoprint Server on z/OS V1R12 (or later), or you have removed the Version 2 Printer Inventory files.

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.

AOPH1503I  ENV/NA

Explanation:  The Printer Inventory is not available. This indicates that Infoprint Server has not been started on this system.

System action:  Processing continues.
User response:  Report this problem to the system programmer.
Operator response:  Report this problem to the system programmer.
System programmer response:  Start Infoprint Server before running this check.
For information about additional migration actions, see z/OS Migration.
Problem determination:  Not applicable.
Source:  Infoprint Server
Module:  Not applicable.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

AOPH1504E  Health Check was unable to complete.

Explanation:  An error prevented the health check from completing.

System action:  Processing continues.
User response:  Report this problem to the system programmer.
AOPH1511E The Infoprint Server file system has insufficient space to reformat the Printer Inventory when you migrate to z/OS V1R12.

Explanation: The Infoprint Server file system does not have enough available space for the Version 2 Printer Inventory. The first time you start Infoprint Server on z/OS V1R12 (or later), Infoprint Server attempts to reformat the Version 1 Printer Inventory and create a Version 2 Printer Inventory. If insufficient space exists, Infoprint Server does not start.

The minimum available space that is required is 2 times the space that the Version 1 Printer Inventory files currently use. (Version 1 Printer Inventory files have extension .db.)

The health check produced a report that identifies the Infoprint Server file system with its total available space and used space plus the minimum available space required to create the Version 2 Printer Inventory. An “N” in the “S” (Status) column indicates that the Version 2 Printer Inventory already exists.

System action: Processing continues. However, if you do not increase the available space, Infoprint Server cannot start on z/OS V1R12 (or later).

User response: Report this problem to the system programmer.

Operator response: Report this problem to the system programmer.

System programmer response: Examine the report that the health check produced.

- An “E” in the “S” (Status) column indicates that the file system does not have enough available space.
- An “N” in the “S” (Status) column indicates that file master.v2db exists. The amount of available space was not checked because Version 2 Printer Inventory files already exist.

After you increase the space in the file system, run this check again to verify that enough available space exists.

For more information, see Infoprint Server information in z/OS Migration.
AOPH1514I  File master.v2db was found in the Infoprint Server base directory. This file indicates that Infoprint Server has already created the Version 2 Printer Inventory on z/OS V1R12. Therefore, there is no need to check that available space exists for the Version 2 Printer Inventory. The health check produced a report that identifies the Infoprint Server base directory. An “N” in the “S” (Status) column indicates that the base directory contains file master.v2db.

Explanation: Same as message text.

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.

AOPIM000 - AOPIM999
Explanation: These messages are displayed by the Infoprint Server ISPF panels. For an explanation of the messages, press the ISPF HELP function key when the message is displayed on the ISPF panel. You can find some messages in this book as well.

AOPIM006  Option not enabled
Explanation: You selected the ISPF panel option to view or edit the system configuration definition in the Printer Inventory. However, dynamic configuration is not enabled in Infoprint Server.

System action: Processing continues.
User response: Notify your system programmer that this error occurred. Select this option again after dynamic configuration is enabled.
Operator response: None.
System programmer response: For more information about dynamic configuration and how to enable it, 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.

AOPH1515I  The Printer Inventory is not available. This indicates that Infoprint Server has not been started on this system.

Explanation: The Printer Inventory is not available. This indicates that Infoprint Server has not been started on this system.

System action: Processing continues.
User response: Report this problem to the system programmer.
Operator response: Report this problem to the system programmer.

AOPIM011  An incorrect call to AOPICDMN was issued, indicating a panel error.

Explanation: A panel script error occurred when you selected an option to display an ISPF panel. The panel script has either been changed or is corrupted.

System action: Processing stops.
User response: Report this problem to the system programmer.
Operator response: None.
AOPIM016 A system call during initialization encountered an error.
Explanation: You entered an option to display an ISPF panel. However, the panel setup received a non-zero return code when trying to initialize an environment variable.
System action: The request was not completed.
User response: Contact the IBM Support Center, or use your electronic link with IBM service for assistance.
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.

AOPIM019 Not authorized
Explanation: You selected the ISPF panel option to view or edit the system configuration definition in the Printer Inventory. However, you do not have the required authorization to view or edit the system configuration definition.
System action: Processing continues.
User response: Notify your system programmer that this error occurred.
Operator response: None.
System programmer response: For information about the required authorization, 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.

AOPIM021 You are not authorized to read the Printer Inventory.
Explanation: You selected the ISPF panel option to view the Infoprint Server Printer Inventory. However, you do not have the required authorization to view the Printer Inventory.
System action: The request was not completed.
User response: Ask your administrator to give you read access to the Printer Inventory.
Operator response: Not applicable.
System programmer response: Give the user read access 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.

AOPIM022 System error errmsg
Explanation: A system error has occurred while processing the request. errmsg is a message that gives more information about the system error.
System action: The request was not completed.
User response: Notify your system programmer that this error occurred.
Operator response: None.
System programmer response: See the description for message errmsg.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOPIM023 The Printer Inventory is not started or is inaccessible. errmsg
Explanation: An error was encountered because the Printer Inventory is not started or is not accessible.
errmsg is a message that gives more information about the error.

System action: The request was not completed.

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

Operator response: None.

System programmer response: See the description for message errmsg.

Problem determination: Not applicable.

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.
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 information.

Problem determination:  Not applicable.

Source:  Infoprint Server

Module:  Not applicable.

Routing code:  Not applicable.

Descriptor code:  Not applicable.

Automation:  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.
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.

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**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.

**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.

---

**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.

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.
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-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.

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-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.

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: 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.
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](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.

**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.

**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.
<table>
<thead>
<tr>
<th>System action</th>
<th>The Print Interface subsystem is not activated.</th>
</tr>
</thead>
<tbody>
<tr>
<td>User response</td>
<td>None.</td>
</tr>
<tr>
<td>Operator response</td>
<td>Enter the z/OS UNIX <code>aopstart</code> 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.</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>

**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.
AOPS025S  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 for information.
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 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 for more 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.

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 for more information.
Problem determination:  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 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.

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 for information.

Problem determination: Not applicable.

Source: Infoprint Server

Module: Not applicable.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOPS203S  Allocation connect failed.

Explanation: The Print Interface subsystem allocation client could not connect to the Print Interface subsystem server. The subsystem server might be 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.

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.
Automation: Not applicable.

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.

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.
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.

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.
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.

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 z/OS Infoprint Server Messages and Diagnosis.
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 200.

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

AOPS701E 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 200.

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

AOPS702E Subsystem server has terminated. result = reason code

Explanation: The Print Interface subsystem server ended.

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 200.

Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
**User response:** Notify your system programmer that this error occurred. Resubmit the job after the Print Interface subsystem is restarted.

**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.

**System programmer response:** Follow the system programmer response for the reason code in [Infoprint Server system completion code and reason codes](#).

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**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 – 0000EA1**

Indicates that IP PrintWay basic mode issued the abend. See [IP PrintWay basic mode system completion code and abend reason codes](#) on page 53 for an explanation of these codes.

**0000FFFF – 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:

00\text{xxyyzz}

\text{xx} \quad \text{Specifies the type or error:}
\begin{itemize}
  \item X'08' \quad \text{warning}
  \item X'0C' \quad \text{environmental error}
  \item X'10' \quad \text{system error}
  \item X'14' \quad \text{logic error}
\end{itemize}

\text{yy and zz} \quad \text{Describe the reason for the error. Look up these hexadecimal values in Table 4.}

Table 4. Infoprint Server reason codes

<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 aopstart command or the AOPSTART procedure to restart the Print Interface subsystem, resubmit the print job.</td>
</tr>
<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>Reason code (hex)</td>
<td>Explanation</td>
<td>User or system programmer response</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------</td>
<td>------------------------------------</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 75.

### 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**: Severity code:
  - A: Operator action is required.
  - E: An error occurred.
  - I: Information message.
  - S: A severe error occurred.
  - W: A warning situation occurred.
- **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 75.

### Messages

<table>
<thead>
<tr>
<th>Message</th>
<th>Description</th>
</tr>
</thead>
</table>
| **API0800I jobname.identifier STARTING NETSPool** | **Explanation**: NetSpool has been 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. |
| **API0801I jobname.identifier TERMINATING NETSPool** | **Explanation**: NetSpool is stopping.  
**System action**: NetSpool 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. |
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/support/docdisplay?rs=5034&sk=1-00088-00&docType=Hnw&product=Infoprint%20Server&version=1.11&lang=en&docName=infoprint_customization).  

**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/support/docdisplay?rs=5034&sk=1-00088-00&docType=Hnw&product=Infoprint%20Server&version=1.11&lang=en&docName=infoprint_customization).  

**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.

---

**API0812E** jobname.identifier  The parameter specified for the keyword is not valid: keyword.

**Explanation:** The EXEC statement for the NetSpool task contains a keyword with an incorrect or missing value. This message might be displayed in English even when other messages are translated into a language other than English.

**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/support/docdisplay?rs=5034&sk=1-00088-00&docType=Hnw&product=Infoprint%20Server&version=1.11&lang=en&docName=infoprint_customization).  

**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/support/docdisplay?rs=5034&sk=1-00088-00&docType=Hnw&product=Infoprint%20Server&version=1.11&lang=en&docName=infoprint_customization).  

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.
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.

---

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.

API0828E 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.
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](Infoprint Server Customization).

**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].

**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].

**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.
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.
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.
**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/support/knowledgecenter/SSEPGG_1.13.1/com.ibm.zos.v1r13.ssepgg.doc/welcome.html).

**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.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API0902E** *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/support/knowledgecenter/SSG522_1.6.0/com.ibm.zos.v1r6.ssg522.doc/errutil.html). For information about set_dub_default see [z/OS UNIX System Services Programming: Assembler Callable Services Reference](https://www.ibm.com/support/knowledgecenter/SSG522_1.6.0/com.ibm.zos.v1r6.ssg522.doc/errutil.html).

**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  CEEPI 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 CEEPII. 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. Sometimes the enclave return code is a C errno. 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 API0908E might appear. For information about the feedback code, see z/OS Language Environment Debugging Guide and z/OS Language Environment Runtime Messages.

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 close failed for luname = printerlu. R15 = calrc

Explanation: The NetSpool call to close the iconv code conversion session failed. The data cannot be converted into PCL data and sent to the printer.

System action: NetSpool continues processing jobs for other printers.

Operator response: None.

System programmer response: For information about the R15 and CEEPII call_sub return codes, see z/OS Language Environment Programming Guide. 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 API0908E 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. Document codepage = document cp  Printer codepage = printer cp  R15 = calrc

Explanation: The NetSpool call to convert data using iconv failed. Data cannot be converted into PCL data.

System action: NetSpool returns negative response 081C0002 and terminates the job. NetSpool continues processing jobs for other printers.

Operator response: None.

System programmer response: Verify that the document and printer code pages in the message are correct and that they are valid iconv code pages for this installation.

For information about the R15 and CEEPII call_sub return codes, see z/OS Language Environment Programming Guide. 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 API0908E might appear.

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: 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.

API0908 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  A print job failed for NetSpool LU slu-name. The UNIX socket connection command uss-cmd failed with an errno value of errno. 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 X'FFFFF000', the errno gives the reason for the error. If the errno is X'00000000', the NetSpool daemon aopnetd 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 aopnetd and correct the problem.

If you receive this message with sock_cmds="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 start Infoprint Server 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.

For information about the socket command 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 or z/OS Communications Server: IP Sockets Application Programming Interface Guide and Reference.

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 aopnetd. See messages logged by the NetSpool daemon aopnetd for the full message.

In the message text:

slu-name
The NetSpool LU name of the printer. This is the VTAM secondary LU name.
error

The first 150 bytes of the error message.

**System action:** NetSpool ends the job.

**Operator response:** None.

**System programmer response:** For more information, look up the error message in z/OS Infoprint Server Messages and Diagnosis. If job attributes are included in the data stream, run a trace to verify the job attributes that NetSpool received.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API0922E jobname.identifier**  A print job failed for NetSpool LU slu-name. The following error was detected while spooling the print job: error.

**Explanation:** The job was ended because of an error detected by the NetSpool daemon aopnetd while spooling the job to JES. See messages logged by the NetSpool daemon aopnetd for the full message.

In the message text:

slu-name

The NetSpool LU name of the printer. This is the VTAM secondary LU name.

error

The first 150 bytes of the error message.

**System action:** NetSpool ends the job.

**Operator response:** None.

**System programmer response:** For more information, look up the error in z/OS Infoprint Server Messages and Diagnosis. If job attributes are included in the data stream, run a trace to verify the job attributes that NetSpool received.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API0923E jobname.identifier**  The path of the base directory in the Infoprint Server configuration file contains an error.

**Explanation:** NetSpool uses the base directory specified 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 = errno, , 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.

erro

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 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 `aopnd` 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:

`slu-name`  
The NetSpool LU name of the printer. This is the VTAM secondary LU name.

`path`  
The path of the directory.

**System action:** NetSpool ends the job.

**Operator response:** None.

**System programmer response:** Make sure the user ID associated with the NetSpool started task is a z/OS UNIX ID and has permission to read and write to the Infoprint Server base directory. The base directory is specified 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.

**API0927E** `jobname.identifier` Unix System Service command: `uss-cmd` failed with `errno = errno, Return_value = return value, Return_code = return code, Reason_code = reason code`.

**Explanation:** An OPEN command or other z/OS UNIX command failed. In the message text:

`uss-cmd`  
The UNIX System Services command that failed.

`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.

**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`.

214 z/OS V2R1.0 Infoprint Server Messages and Diagnosis
Run the `aopsetup` shell script 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.

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**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 specified 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 start the NetSpool daemon. For example, use the AOPSTART procedure to start the 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.

**User response:** To determine the error and correct the...
input data, see the NetSpool SCS information in z/OS Infoprint Server User’s Guide 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 302. 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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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 information in z/OS Infoprint Server User’s Guide and 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 302. 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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API0953E jobname.identifier 3270 data stream parameter is not valid.

Explanation: NetSpool detected an unsupported or incorrect parameter for an 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’10050000’.

User response: To determine the error and correct the input data, see the NetSpool 3270 information in z/OS Infoprint Server User’s Guide and 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 302. 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.
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 302. 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 302. 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.
Descriptor code: Not applicable.
Automation: 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.

API0958E jobname.identifier An error occurred while processing page format parameters.

Explanation: An error occurred while NetSpool was processing page format parameters either from the printer inventory or SCS command. The message is followed by additional messages that explain the problem: API0959E, API0960E, and API0961E.

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

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

### API0962E  
**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.

---

### API0963E  
**jobname.identifier**  
An error occurred while processing a job attribute text string:
  
  **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 302". 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.

---

### 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 302. 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.

---

**Explanation**: The length field in the job attribute text string is not valid. 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 302. 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.

---

**Explanation**: The incorrect owner attribute is shown in hexadecimal format.

**System action**: See message API0966E.

**User response**: See message API0966E.

**Operator response**: None.

**System programmer response**: See message API0966E.

**Problem determination**: Not applicable.

**Source**: Infoprint Server

**Module**: Not applicable.

**Routing code**: Not applicable.

**Descriptor code**: Not applicable.

**Automation**: Not applicable.

---

**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.

API0969E 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.


Explanation: NetSpool module APIJRTRY discovered that an event in its internal EWB queue has been reused. NetSpool cannot retry the action for the socket, which has become ready. This message can indicate a logic problem in NetSpool.

If you receive this message together with message API0971W, 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.

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.
**API0973I** NetSpool diagnostic information for module : variable = X value

**Explanation:** The diagnostic information in this message can help IBM determine the cause of an unexpected condition.

In the message text:
- `module` is the name of a NetSpool module.
- `variable` is the name of a NetSpool internal variable.
- `value` is the hexadecimal value of the variable.

**System action:** Processing continues.

**User response:** Notify the system programmer.

**Operator response:** Notify the system programmer.

**System programmer response:** Provide the information in this message to 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.

---

**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.

---

**API1003I** *jobname.identifier lu-name — LU IS WAITING.*

**Explanation:** The indicated VTAM LU could not be started because either the LU is not active in VTAM or because it is started by another instance of NetSpool. NetSpool periodically (every 60 seconds) attempts to start the LU.

**System action:** Processing continues.

**Operator response:** To start the LU, activate it in VTAM. To stop the LU, enter the LUNAME DEL command. If the LU is started by another instance of NetSpool, stop it in the other instance of NetSpool and then activate it in VTAM again. For information about the operator commands used to start and stop 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.

---

**API1005I** *jobname.identifier Display of LUs in the WAITING state.*

**Explanation:** The operator requested the display of all VTAM 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](https://www.ibm.com/support/docview.wss?uid=swg21288673).

**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](https://www.ibm.com/support/docview.wss?uid=swg21288673). 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.

---

**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:** Place 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](https://www.ibm.com/support/docview.wss?uid=swg21288673), “Printer Inventory Manager return codes and reason codes,” on page 241.

**System action:** NetSpool terminates.

**Operator response:** None.

**System programmer response:** Correct the Printer Inventory parameter for this NetSpool instance. Verify library permissions to the Printer Inventory Manager.

**Problem determination:** Not applicable.

**Source:** Infoprint Server

**Module:** Not applicable.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
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=xxxxx 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 “Printer Inventory Manager return codes and reason codes,” on page 241.

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.
**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 241](#).

**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:** Not applicable.

**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 241](#).

**System action:** NetSpool will continue to process with previously cached information from the Printer Inventory.

**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.

---

**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 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.

API1034I jobname.identifier  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.
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.

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.
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.

API1061I  jobname.identifier  Full tracing is active for NetSpool.
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.

API1061I  jobname.identifier  Full tracing is active for all LUs.
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
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
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.

---

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
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

---

API2001E jobname.identifier FAILED TO LOAD MESSAGE TABLE name.

Explanation: Messaging could not load the message table into storage. Either the table was not found in the STEPLIB/LINKLIST concatenation or the available virtual storage was not sufficient to load the table.
System action: Messaging is not available. The task is terminated.
Operator response: Select the correct language when starting the NetSpool task.
System programmer response: Make sure that the correct 3-character language code is in the startup JCL and that the message table is in a library in the load module library search list (STEPLIB/LINKLIST). The message table is named APIMTxxx, where xxx is the language code.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

---

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.
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.

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:  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.

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.

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.

API2009E  jobname.identifier  FAILED TO LOAD MESSAGE I/O MODULE name.

Explanation:  Messaging could not load the message I/O program into storage. Either the module was not found in the STEPLIB/LINKLIST or the available virtual storage was not sufficient to load the module.

System action:  Messaging is not available. The task is terminated.
Operator response:  Notify the system programmer.
System programmer response:  Make sure that APIMSGIO, the message I/O module, is in a library in the load module library search list (STEPLIB/LINKLIST).

Problem determination:  Not applicable.

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

**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 301

**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.

**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 301

**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.

**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.
**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 301.

**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.

---

**API4013E 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 API4901I indicates where the error occurred. For more information, see Chapter 9, “Using NetSpool diagnostic tools,” on page 301.

**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.

---

**API4017E 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 API4901I indicates where the error occurred. For more information, see Chapter 9, “Using NetSpool diagnostic tools,” on page 301.

**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**  Too many values are specified for this keyword

**Explanation:** A keyword in the trace options data set contains too many values. Message API4901I indicates where the error occurred. For more information, see Chapter 9, “Using NetSpool diagnostic tools,” on page 301.

**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**  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 API4901I indicates where the error occurred. For more information, see Chapter 9, “Using NetSpool diagnostic tools,” on page 301.

**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.
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.

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 during startup of NetSpool, NetSpool ends 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.
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.
Problem determination: Not applicable.
Source: Infoprint Server
Module: Not applicable.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API5008E 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.
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 displayed, reduce the size of the internal trace storage using the PAGECOUNT trace options parameter, or trace fewer LUs. Enter the DISPLAY TRACE NetSpool command to verify the trace status.
Operator response: If the error occurred when using the trace options data set, notify the system programmer. If the error occurred when the NetSpool TRACE command was displayed, reduce the size of the internal trace storage using the PAGECOUNT trace options parameter, or trace fewer LUs. Enter the DISPLAY TRACE NetSpool command to verify the trace status.
System programmer response: Reduce the size of the internal trace storage using the PAGECOUNT trace options parameter or trace fewer LUs. 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.

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.
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**  All 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 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.

---

**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 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.

---

**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 external and internal 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 237.

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>iconv open failed</td>
</tr>
<tr>
<td>X'0522'</td>
<td>iconv conv failed</td>
</tr>
<tr>
<td>X'0523'</td>
<td>iconv 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](https://www.ibm.com/support/docview.ws/docid/396255). Also, see the NetSpool SCS information in [z/OS Infoprint Server User’s Guide](https://www.ibm.com/support/docview.ws/docid/396255) 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 239](#) and in [Table 7 on page 239](#)
### 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 section 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 (decimal)</th>
<th>Return code (hexadecimal)</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>X'4'</td>
<td>The requested object was not found in the Printer Inventory.</td>
</tr>
<tr>
<td>8</td>
<td>X'8'</td>
<td>The inventory client has incorrectly coded parameters.</td>
</tr>
<tr>
<td>12</td>
<td>X'C'</td>
<td>An error occurred at the Printer Inventory Manager while processing the request. The system log will contain a message indicating the reason for the failure.</td>
</tr>
<tr>
<td>16</td>
<td>X'10'</td>
<td>An API error occurred. For the reason codes, see Table 9</td>
</tr>
</tbody>
</table>

Table 9. Printer Inventory Manager reason codes

<table>
<thead>
<tr>
<th>Reason code (decimal)</th>
<th>Reason code (hexadecimal)</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>X'4'</td>
<td>Connection token is not valid.</td>
</tr>
<tr>
<td>8</td>
<td>X'8'</td>
<td>The connection to the Printer Inventory Manager was lost.</td>
</tr>
<tr>
<td>12</td>
<td>X'C'</td>
<td>Client side storage was unavailable. It might help to increase the region size for the inventory client.</td>
</tr>
<tr>
<td>16</td>
<td>X'10'</td>
<td>The query token is not valid.</td>
</tr>
<tr>
<td>20</td>
<td>X'14'</td>
<td>Data that was not valid was supplied to the Printer Inventory Manager.</td>
</tr>
<tr>
<td>24</td>
<td>X'18'</td>
<td>The request type was not valid. The most likely cause is running different maintenance levels between the client and the Printer Inventory Manager.</td>
</tr>
<tr>
<td>28</td>
<td>X'1C'</td>
<td>An abend occurred during extract.</td>
</tr>
<tr>
<td>32</td>
<td>X'20'</td>
<td>Multiple asynchronous fetches were sent.</td>
</tr>
<tr>
<td>36</td>
<td>X'24'</td>
<td>A service was requested that is not allowed.</td>
</tr>
<tr>
<td>40</td>
<td>X'28'</td>
<td>The service call was interrupted.</td>
</tr>
<tr>
<td>44</td>
<td>X'2C'</td>
<td>A mismatched parameter list was coded.</td>
</tr>
<tr>
<td>48</td>
<td>X'30'</td>
<td>The client is not authorized to do the specified action.</td>
</tr>
<tr>
<td>52</td>
<td>X'34'</td>
<td>Server-side storage is not available. It might be helpful to increase the amount of storage available to the Printer Inventory Manager.</td>
</tr>
<tr>
<td>134610948</td>
<td>X'08060004'</td>
<td>The Printer Inventory could not be found. You might be running on a system where Infoprint Server is not installed.</td>
</tr>
<tr>
<td>Reason code (decimal)</td>
<td>Reason code (hexadecimal)</td>
<td>Meaning</td>
</tr>
<tr>
<td>-----------------------</td>
<td>--------------------------</td>
<td>---------</td>
</tr>
<tr>
<td><code>nnnnnnnnn</code></td>
<td><code>X'0x06yyyy'</code></td>
<td>The Printer Inventory could not be loaded. You might be running on a system where Infoprint Server is not installed. The high-order halfword of this reason code is the abend code from LOAD. The low-order halfword is the reason code for the abend.</td>
</tr>
</tbody>
</table>
Chapter 5. Using the Infoprint Server diagnostic process

If you have problems with Infoprint Server, use these sections before calling your IBM service representative:

- “Determining which component to troubleshoot” helps you narrow the source of the problem
- “Diagnosis roadmap” on page 245 helps you match functions to their components
- “Detecting printer definition errors” on page 246 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 248 helps you find information that your IBM service representative might ask you to locate
- “Checking permissions settings” on page 250 helps you determine if you have a problem with permissions
- “Common Infoprint Server problems” on page 254 helps you correct common problems
- “Diagnosing problems with z/OS UNIX sendmail” on page 258 helps you with sendmail
- “Diagnosing problems in Infoprint Central” on page 259 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>“ANF message format” on page 1</td>
</tr>
<tr>
<td>AOP</td>
<td>Infoprint Server (including IP PrintWay extended mode)</td>
<td>“AOP message format” on page 75</td>
</tr>
</tbody>
</table>
This message prefix:
Comes from this component: For messages format, see:
API NetSpool started task “API message format” on page 203

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 238.

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 241.

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 SYSPUT 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 (aolpdp) 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>
<thead>
<tr>
<th>Table 10</th>
<th>NetSpool print job identification</th>
</tr>
</thead>
<tbody>
<tr>
<td>This information:</td>
<td>Comes from this area:</td>
</tr>
<tr>
<td>Job ID</td>
<td>Infoprint Server</td>
</tr>
</tbody>
</table>

Table 10. NetSpool print job identification
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>Job name</td>
<td>One of these:</td>
</tr>
<tr>
<td></td>
<td>1. <code>sysout-job-name</code></td>
</tr>
<tr>
<td></td>
<td>job attribute embedded in print data</td>
</tr>
<tr>
<td></td>
<td>2. <code>owner</code></td>
</tr>
<tr>
<td></td>
<td>job attribute embedded in print data</td>
</tr>
<tr>
<td></td>
<td>3. <code>Default owner</code></td>
</tr>
<tr>
<td></td>
<td>field in printer definition</td>
</tr>
<tr>
<td></td>
<td>4. NetSpool started task member name</td>
</tr>
<tr>
<td>Owner attribute in Infoprint Central, Infoprint Server print job view</td>
<td>One of these:</td>
</tr>
<tr>
<td></td>
<td>1. <code>owner</code></td>
</tr>
<tr>
<td></td>
<td>job attribute embedded in print data</td>
</tr>
<tr>
<td></td>
<td>2. <code>Default owner</code></td>
</tr>
<tr>
<td></td>
<td>field in printer definition</td>
</tr>
<tr>
<td></td>
<td>3. ID of user who started Infoprint Server daemons</td>
</tr>
<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>JES data set name: user ID field</td>
<td>ID of user who started Infoprint Server daemons</td>
</tr>
<tr>
<td>JES data set name: job name field</td>
<td>One of these:</td>
</tr>
<tr>
<td></td>
<td>1. <code>sysout-job-name</code></td>
</tr>
<tr>
<td></td>
<td>job attribute embedded in print data</td>
</tr>
<tr>
<td></td>
<td>2. <code>owner</code></td>
</tr>
<tr>
<td></td>
<td>job attribute embedded in print data</td>
</tr>
<tr>
<td></td>
<td>3. <code>Default owner</code></td>
</tr>
<tr>
<td></td>
<td>field in printer definition</td>
</tr>
<tr>
<td></td>
<td>4. NetSpool started task member name</td>
</tr>
<tr>
<td>JES data set name: job ID field</td>
<td>System-generated</td>
</tr>
<tr>
<td>JES data set name: data set name field</td>
<td>System-generated</td>
</tr>
<tr>
<td>JES data set name: data set suffix field</td>
<td>One of these:</td>
</tr>
<tr>
<td></td>
<td>1. <code>sysout-dataset-name</code></td>
</tr>
<tr>
<td></td>
<td>job attribute embedded in print data</td>
</tr>
<tr>
<td></td>
<td>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>259, 280</td>
</tr>
</tbody>
</table>
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>Build a Printer Inventory of printer definitions and components.</td>
<td>Printer Inventory Manager</td>
<td>275</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>275</td>
</tr>
<tr>
<td>Print from local system with z/OS UNIX commands or with the AOPPRINT JCL procedure.</td>
<td>Printer Inventory Manager, Print Interface</td>
<td>275</td>
</tr>
<tr>
<td>Print from VTAM applications such as CICS and IMS.</td>
<td>Printer Inventory Manager, NetSpool started task, NetSpool daemon</td>
<td>275 301</td>
</tr>
<tr>
<td>Print on printers in a TCP/IP network using one of these TCP/IP protocols: • LPR to LPD • Direct sockets printing • Internet Printing Protocol (IPP)</td>
<td>Printer Inventory Manager, IP PrintWay basic mode, IP PrintWay extended mode</td>
<td>275 285</td>
</tr>
<tr>
<td>Print on VTAM-controlled printers.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Send print output to email 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>275</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>275</td>
</tr>
<tr>
<td>Store system configuration information in the Printer Inventory for PSF.</td>
<td>Printer Inventory Manager</td>
<td>275</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. The common message log can also contain messages from IBM transforms. For information about where a transform writes messages, see the documentation for the transform.

The administrator can specify how many days worth of messages to keep in the common message log. For information about how to set up the common message log, 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 basic mode 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 275.

Table 12 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 12. General location of abend information and system dumps

<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,afpxpdf, lp, pidu, remotexf</td>
</tr>
<tr>
<td>The home directory</td>
<td>You ran the AOPBATCH or AOPPRINT JCL procedure.</td>
<td></td>
</tr>
</tbody>
</table>
Table 12. General location of abend information and system dumps (continued)

<table>
<thead>
<tr>
<th>General location of abend information and system dumps</th>
<th>Areas and conditions</th>
<th>Notes</th>
</tr>
</thead>
</table>
| The Language Environment CEEDUMP directory             | 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  
For more information about CEEDUMPs, see z/OS Language Environment Debugging Guide | 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, aopxfd.conf | 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, aopxfd.conf. |
| /var/Printsrv/xfd and /var/Printsrv/xf_sockets subdirectories | You used Infoprint transforms. |       |
| InfoPrint Manager server                               | You used InfoPrint Manager. |       |
| InfoPrint Transform Manager for Linux server           | You used InfoPrint Transform Manager for Linux. |       |

Table 13 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>
<tr>
<td>Coaxial Printer Support</td>
<td>• CEEDUMPs</td>
</tr>
<tr>
<td></td>
<td>• Common message log</td>
</tr>
<tr>
<td></td>
<td>• Console log</td>
</tr>
<tr>
<td>Infoprint Central</td>
<td>• /usr/lpp/internet/server_root/logs/httpd-errors.date</td>
</tr>
</tbody>
</table>
Table 13. General location of messages (continued)

<table>
<thead>
<tr>
<th>Component</th>
<th>General location of messages</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP PrintWay basic mode</td>
<td>• Console log</td>
</tr>
<tr>
<td></td>
<td>• IP PrintWay message log data set</td>
</tr>
<tr>
<td>IP PrintWay extended mode</td>
<td>• CEEDUMPs</td>
</tr>
<tr>
<td></td>
<td>• Common message log</td>
</tr>
<tr>
<td></td>
<td>• Console log</td>
</tr>
<tr>
<td>ISPF panels</td>
<td>• Messages displayed on panel</td>
</tr>
<tr>
<td>NetSpool daemon (aopnetd)</td>
<td>• CEEDUMPs</td>
</tr>
<tr>
<td></td>
<td>• Common message log</td>
</tr>
<tr>
<td></td>
<td>• Console log</td>
</tr>
<tr>
<td>NetSpool started task</td>
<td>• Common message log</td>
</tr>
<tr>
<td></td>
<td>• Console log</td>
</tr>
<tr>
<td></td>
<td>• NetSpool message log data set</td>
</tr>
<tr>
<td>Print Interface</td>
<td>• CEEDUMPs</td>
</tr>
<tr>
<td></td>
<td>• Common message log</td>
</tr>
<tr>
<td></td>
<td>• Console log</td>
</tr>
<tr>
<td>Transforms - InfoPrint Manager</td>
<td>• Common message log</td>
</tr>
<tr>
<td></td>
<td>• Current working directory</td>
</tr>
<tr>
<td></td>
<td>• InfoPrint Manager server</td>
</tr>
<tr>
<td>Transforms - Infoprint Server Transform Manager</td>
<td>• CEEDUMPs</td>
</tr>
<tr>
<td></td>
<td>• Common message log</td>
</tr>
<tr>
<td></td>
<td>• Page at the end of the transformed output</td>
</tr>
<tr>
<td></td>
<td>• stderr in /var/Printsrv/xfd and /var/Printsrv/xfd_sockets</td>
</tr>
<tr>
<td>Transforms - InfoPrint Transform Manager for Linux</td>
<td>• Common message log</td>
</tr>
<tr>
<td></td>
<td>• Current working directory</td>
</tr>
<tr>
<td></td>
<td>• InfoPrint Transform Manager log on the Linux system</td>
</tr>
<tr>
<td></td>
<td>• Page at the end of the transformed output</td>
</tr>
</tbody>
</table>

Checking permissions settings

In some cases, you might encounter problems that you can solve by checking permissions settings and by running the `aopsetup` shell script 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`
For example, if you defined RACF group AOPOPER for operators and group AOPADMIN for administrators, enter on the z/OS UNIX command line:

```
/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:

- `OMVSKERN` 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

drwxr-xr-x 2 OMVSKERN OMVSGRP 928 ... IBM
-rwxr-xr-x aps- 2 OMVSKERN OMVSGRP 4022272 ... aop.so
-drwxr-xr-x aps- 2 OMVSKERN OMVSGRP 3526656 ... aopapi.dll
-drwxr-xr-x aps- 2 OMVSKERN OMVSGRP 32768 ... aopapi2.dll
-drwxr-xr-x aps- 2 OMVSKERN OMVSGRP 516096 ... aopcentral.so
-drwxr-xr-x aps- 2 OMVSKERN OMVSGRP 352256 ... aopcop.dll
-drwxr-xr-x aps- 2 OMVSKERN OMVSGRP 987136 ... aopdb.so
-drwxr-xr-x aps- 2 OMVSKERN OMVSGRP 2023424 ... aopapi1.dll
-drwxr-xr-x aps- 2 OMVSKERN OMVSGRP 16384 ... aopfiltr.so
-drwxr-xr-x aps- 2 OMVSKERN OMVSGRP 229376 ... aopform.dll
-drwxr-xr-x aps- 2 OMVSKERN OMVSGRP 1097728 ... aoprx.so
-drwxr-xr-x aps- 2 OMVSKERN OMVSGRP 290816 ... libm_client.so
-drwxr-xr-x aps- 2 OMVSKERN OMVSGRP 19962 ... libaopapi.a
-drwxr-xr-x aps- 2 OMVSKERN OMVSGRP 3158016 ... libaopjni.so
-drwxr-xr-x aps- 2 OMVSKERN OMVSGRP 4132864 ... libip.so
-drwxr-xr-x aps- 2 OMVSKERN OMVSGRP 24576 ... lpd_compat.so

Figure 3. Sample output from command ls -E /usr/lpp/Printsrv/lib

drwxr-xr-x 2 OMVKERN OMVSGRP 928 ... IBM
-drwxr-xr-x aps- 2 OMVKERN OMVSGRP 4022272 ... aop.so
-drwxr-xr-x aps- 2 OMVKERN OMVSGRP 3526656 ... aopapi.dll
-drwxr-xr-x aps- 2 OMVKERN OMVSGRP 32768 ... aopapi2.dll
-drwxr-xr-x aps- 2 OMVKERN OMVSGRP 516096 ... aopcentral.so
-drwxr-xr-x aps- 2 OMVKERN OMVSGRP 352256 ... aopcop.dll
-drwxr-xr-x aps- 2 OMVKERN OMVSGRP 987136 ... aopdb.so
-drwxr-xr-x aps- 2 OMVKERN OMVSGRP 2023424 ... aopapi1.dll
-drwxr-xr-x aps- 2 OMVKERN OMVSGRP 16384 ... aopfiltr.so
-drwxr-xr-x aps- 2 OMVKERN OMVSGRP 229376 ... aopform.dll
-drwxr-xr-x aps- 2 OMVKERN OMVSGRP 1097728 ... aoprx.so
-drwxr-xr-x aps- 2 OMVKERN OMVSGRP 290816 ... libm_client.so
-drwxr-xr-x aps- 2 OMVKERN OMVSGRP 19962 ... libaopapi.a
-drwxr-xr-x aps- 2 OMVKERN OMVSGRP 3158016 ... libaopjni.so
-drwxr-xr-x aps- 2 OMVKERN OMVSGRP 4132864 ... libip.so
-drwxr-xr-x aps- 2 OMVKERN OMVSGRP 24576 ... lpd_compat.so
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 ANFMMSG 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 0025 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.

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 `afpxpdf` 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 (BPX0INIT 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. The setstack command is not formally supported by IBM. However, you can download it from the web at

http://www.ibm.com/systems/z/os/zos/features/unix/

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 Customization].

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*.

```assembler
:WSCST DEVCCLASS=TRANSFORM.
 :TRANSMFROMBL.
 :SPACE
 :DATA = '20'x.
 :CARRTN
 :DATA = '0D'x.
 :FORMFEED
 :DATA = '0C'x.
 :LINEFEED
 :DATA = '0A'x.
 :EWSCT.
```

**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 email protocol is selected in the printer definition, IP PrintWay uses the z/OS UNIX sendmail function to send the emails. Sendmail is a component of z/OS Communications Server. For information about sendmail, see these publications and website 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 publication [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.
- The [Sendmail Consortium](http://www.sendmail.org) website at [http://www.sendmail.org](http://www.sendmail.org)

Sendmail is a very powerful program and can be complicated to set up. Therefore, if emails 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
    ```
  - All directories in the path of an alias file are readable and executable by everyone but writeable only by the owner.
- If an email 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 email 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 emails 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 emails.

• If an email 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`


### 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](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 275.

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](z/OS Infoprint Server Customization). |
### Table 14. Installation problems with Infoprint Central (continued)

<table>
<thead>
<tr>
<th>If you have this problem:</th>
<th>Make sure:</th>
</tr>
</thead>
<tbody>
<tr>
<td>JavaScript errors</td>
<td>The directives are in the correct location in the HTTP Server <code>httpd.conf</code> file. For information about how to specify directives, see <code>z/OS Infoprint Server Customization</code>.</td>
</tr>
<tr>
<td>Date or time information is wrong</td>
<td>The value in the TZ environment variable is set to the same value in the HTTP Server <code>httpd.envvars</code> file and in either the <code>aopstart</code> EXEC or the AOPSTART procedure.</td>
</tr>
</tbody>
</table>

### 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. |
### Table 16. Other problems with Infoprint Central (continued)

<table>
<thead>
<tr>
<th>If you have this problem:</th>
<th>Do this:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Timeout errors</strong></td>
<td>Narrow the search in Infoprint Central by specifying more precise search values, increase the HTTP Server's timeout value (<strong>OutputTimeout</strong> directive), or decrease the maximum number of objects that Infoprint Central displays after a search (<strong>AOPLIMIT</strong> environment variable).</td>
</tr>
<tr>
<td><strong>Infinite loop in Netscape with Find Printer Definitions</strong></td>
<td>Widen the web browser window slightly.</td>
</tr>
</tbody>
</table>
| **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). |
| **An action could not be performed because of an Infoprint Server logic error** | Look in the z/OS HTTP Server log file, **httpd-errors.date**. If the log contains a message in this format:  

```
----IPA/Penguin Error:----  
message="...."  
```

For example:

```
message="DeviceControlFactory:  
{timeout=200 snmp_readCommunityName="public"...
```

1. Make sure that the required jar files (**ipa.jar**, **modelplugin.jar**, **penguin.jar**, and **snmp.jar**) are installed in the default directory (**usr/lpp/Printsrv/classes**) or in the directory specified in the CLASSPATH statement.  
If the files specified in the CLASSPATH statement are installed in the default directory, comment out the CLASSPATH statement and restart the z/OS HTTP Server.  
2. Check the CLASSPATH syntax and spelling. Also make sure that no trailing space characters exist.  
**Tip:** Use the **ishell** facility to browse the /etc/httpd.envvars file. While browsing the file turn hex on. Remove any trailing X'40' data in the statements.  
3. Remove any directories from the CLASSPATH statement that Infoprint Central does not require, and restart the z/OS HTTP Server.  
4. Make sure that Java™ 5.0 or Java 6.0 is installed and that **JAVA_HOME** is set correctly.  
5. If the Infoprint Central trace is turned on (**AOPTRACEON=1** in /etc/httpd.envvars), make sure that the permissions are set correctly for the trace file. **AOPTRACEDIR** specifies the directory where trace files are created. 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. |
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 data base called the IBM Software Support Facility. To search this data base, 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 275
   - Chapter 8, “Using IP PrintWay basic mode diagnostic tools,” on page 285
   - Chapter 9, “Using NetSpool diagnostic tools,” on page 301

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 265 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 section.
- 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 265. After reviewing this figure, see "Component identification number" on page 265 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>569504002</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>267</td>
</tr>
<tr>
<td>LOOP</td>
<td>Uncontrolled program looping</td>
<td>267</td>
</tr>
<tr>
<td>WAIT</td>
<td>Unexpected program suspension</td>
<td>268</td>
</tr>
<tr>
<td>MSGx</td>
<td>An error signaled by or associated with messages</td>
<td>268</td>
</tr>
<tr>
<td>INCORROUT</td>
<td>Incorrect or missing output unrelated to a message</td>
<td>269</td>
</tr>
<tr>
<td>PERFM</td>
<td>Performance degradation (use this keyword only when no other keyword seems applicable)</td>
<td>269</td>
</tr>
<tr>
<td>DOC</td>
<td>Documentation problem</td>
<td>270</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 270.

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 275, “Starting a NetSpool trace” on page 302.
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 268.

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 270.

**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.

   569504004 WAIT

2. The format of the keyword string might now be:

3. To determine which module contains the problem, see “Module keyword” on page 270.

**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.

| 569504004 MSGANFM700I |

2. The format of the keyword string might now be:

| 569504004 INCORROUT |

**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 271 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 publication. 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 publication.

**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, APIPPPFT) 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 ABENDBC3 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>
<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>
<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 272.
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 for z/OS 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
   - 770 represents the z/OS V1R12 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 APIPPPFT DIRECT 770

---

**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

For information about how to submit information for an APAR to IBM, ask your IBM service representative.
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 \texttt{lp}, \texttt{lpsstat}, and \texttt{cancel} commands
- NetSpool daemon \texttt{aopnexit}
- 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 component ID shown in Table 17 on page 266.

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:

\textbf{AOPTRACEON}

Set this variable to any value to turn tracing on. Unset this variable to turn tracing off.

\textbf{Tip:} Setting this variable to any value, even to Off, turns tracing on.

\textbf{Examples:}

\begin{verbatim}
AOPTRACEON=1
AOPTRACEON=ON
\end{verbatim}

If AOPTRACEON is turned on, Infoprint Server traces all daemons that were started after the variable was set. "Tracing Infoprint Server daemons" on page 277 explains how to limit the trace to a specific Infoprint Server daemon.

Depending on the Infoprint Server component you are using, you can add these environment variables to scale the size of the trace:

\textbf{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:**

```plaintext
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:

  ```plaintext
  export | grep AOPTRACEON
  ```

**Results:**

---

276  
*z/OS V2R1.0 Infoprint Server Messages and Diagnosis*
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:
     \[ \text{START AOPSTOP,OPTIONS='-'d \ lpd'} \]
   - Enter the z/OS UNIX aopstop command to stop the daemon:
     \[ \text{aopstop -d \ lpd} \]

   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:
     \[ \text{AOPTRACEON=1} \]

     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:
     \[ \text{START AOPSTART} \]

     - 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.

     \[ \text{export AOPTRACEON=1} \]
     \[ \text{aopstart} \]
**Tip:** To set AOPTRACEON only for one command, set the variable on the same line as the command:

```
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:
     ```
     START AOPSTOP,OPTIONS='\-d \lpd'
     ```
   - Enter the z/OS UNIX `aopstop` command to stop the daemon:
     ```
     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:
        ```
        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:
        ```
        unset AOPTRACEON
        ```
     b. Restart the daemon:
        ```
        aopstart
        ```

---

**Examples**

**Tracing IP PrintWay extended mode daemons:**

1. Enter the MVS START command to run the AOPSTOP JCL procedure to stop the daemons:
   ```
   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:
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.

   **Example:**
   ```
   AOPTRACEON=1
   AOPTRACEDIR=/mydirectory/trace
   ```

```
_______________________________________________________
```

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`. To comment out an environment variable, you can change the equal sign to another value.

   **Example:**
   ```
   AOPTRACEON#1
   AOPTRACEDIR#/mydirectory/trace
   ```

```
_______________________________________________________
```

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:

```bash
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:

```bash
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, `afpxpcl` 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 IBM Print Transforms from AFP for Infoprint Server for z/OS.

**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.

---

**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—an HFS or a z/OS file system (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 z/OS file system (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 internal errors. 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 275.

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,l

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 275.
**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 suggests that internal tracing always be turned on. For more information, see “Starting a trace at IP PrintWay basic mode initialization” on page 288.

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 299.

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 288.
- 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 309.
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.

   ```plaintext
   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 basic mode transmission queue
   6 PrintWay Message View IP PrintWay basic mode message log
   Infoprint Server Configuration
   7 ISPF Change ISPF panel configuration
   8 System Manage system configuration
   _______________________________________________________
   ```

2. On the FSA, FSS, Pool, and Job Selection Rule Management panel, type 5 on the option line to list FSSs.

   ```plaintext
   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. For normal processing, select 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.

   ![Infoprint Server: Printer Inventory Manager panel](image)

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](image)

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.

```
Edit IP PrintWay FSA
Command ==> ____________________________________________________________
FSA Name... PRT630 Description : __________________________________________ (extend)
Trace mode .. 3 1. None 2. Internal 3. No printing 4. Full
```

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 288.
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:

Syntax

{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.

fss_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.

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.

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
Traceoff

Specifies that tracing is to be stopped. This is a required parameter.

fsa_name

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.

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.

When you use IPCS to view or print GTF trace data, specify USR event ID XFD1.

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:

  MODI FSS1,TRACEOFF
  MODI FSS1,TRACEOFF,PRT001
  MODI 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,TRACEOFF,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 the [Appendix A, “Starting the Generalized Trace Facility (GTF),” on page 309](#).

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,TRACEOFF
      MODIFY FSS1,TRACEOFF,PRT001
      MODIFY FSS1,TRACEOFF,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 296.

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 309.

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.
MODIFY FSS1,TRACEON,,MODE=FULL

Respond again to message ANFM020A with this command:
MODIFY 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.
MODIFY FSS1,TRACEOFF
MODIFY FSS1,TRACEOFF,PRT001
MODIFY 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 309.

4. Start FSA PRT001.

5. To start tracing FSA PRT001, enter this MODIFY command:
   
   ```plaintext
   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:
   
   ```plaintext
   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 Panel]

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.

| Command =>____________________________________________________________ |
| / Confirm delete requests |
| 7 Trace Printer Inventory ISPF internals |
| TSFP trace directory . . /var/Printsrv/trace |
| Configuration file . . /etc/Printsrv/aopd.conf |
| NL$ path . . . . . . /usr/lpp/Printsrv/SL/IN |
| Language . . . . . . En US |
| LP Command: |
| Default printer . . lp1 |
| IP PrintWay basic mode: |
| 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`
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 275.

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.
• 5647A010P: 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 275.

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 307.

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.

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 309

### 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 aopnded. See “Tracing Infoprint Server” on page 275
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 "zos infoprint server customization"

This example shows the syntax of the PARM parameter when TRACE=ON is specified:

```
//APIPPAAA EXEC PGM=APIPPAAA,
   PARM=(LUCLASS=&LUCLASS,INV=&INV,TRACE=ON)
```

Trace options data set statement

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
```

Trace options data set

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

Parameters in the trace options data set

These trace options can be specified in the trace options data set. Specify at least one trace option:

**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 NetSpool 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.

**Guidelines:**

1. 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=nnn**

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.

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:

```
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.

**Guidelines:**

1. 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=nnn**

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=(NETSPool)
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

Accessible publications for this product are offered through the z/OS Information Center, which is available at [http://www.ibm.com/systems/z/os/zos/bkserv/](http://www.ibm.com/systems/z/os/zos/bkserv/). If you experience any accessibility problems with the z/OS Information Center, send an email to mhvrcfs@us.ibm.com or write to the following address:

IBM Corporation  
Attention: MHVRCFS Reader Comments  
Department H6MA, Building 707  
2455 South Road  
Poughkeepsie, NY 12601-5400  
US

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.
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**Minimum supported hardware**

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## Index

### Special characters

- `/var/Printsrv/ipp.out` file 284
- `var/Printsrv/trace directory` 275

### A

- abend code
  - finding 248
  - Infoprint Server 200
  - IP PrintWay basic mode 53
- ABENDX keyword 267
- accessibility 311
  - contact IBM 311
  - features 311
- ANFM messages 1
- AOP messages 75
- AOPDUMPON environment variable 284
- aoplugu –d command 283
- aoplugu command 75
- AOPPRINT, tracing 279
- AOPTRACEBYTES environment variable 276
- AOPTRACEDIR environment variable 276
- AOPTRACE_MAXFILES environment variable 276
- AOPTRACE environment variable 275
- AOPTRACE_DATA environment variable 275
- AOPTRACE_FILTER environment variable 276
- AOPTRACE_MSGLOG environment variable 276
- APARs
  - initiating 273
  - IP PrintWay 285
  - NetSpool 301
  - preparing 263, 273
  - Print Interface 275
  - Printer Inventory Manager 275
  - searching 264, 273
  - SNMP subagent 275
  - submitting 274
  - transform interface 275
  - Windows client 275
- API messages 203
- Applid field 258
- AS/400 printing problem 257
- assistive technologies 311

### B

- BPXF024I error message 255
- BPOXINIT error message 255
- building a keyword string 263, 264
- building a search argument 273

### C

- checking permissions 250
- Coaxial Printer Support, tracing 286
- codes 200
- commands
  - aoplugu 75
  - aoplugu –d 283

- commands (continued)
  - dumps 283
  - hinvu –d 283
  - MODIFY command
    - IP PrintWay basic mode 291, 293
    - NetSpool 306, 307
  - sdbu –d 283
  - TRACEON command, IP PrintWay basic mode 292
- common message log 75, 247
- component IDs 265
- components, Infoprint Server 243
  - determining which to troubleshoot 243
  - error message prefix 243
  - trace facilities 245
- copies, multiple (error) 255
- CSV0028I error message 258
- CSV0031 error message 258

### D

- data base of problem fixes 263
- searching 264, 273
- developing a keyword string 263
- diagnosing problems in Infoprint Central 259
- diagnosis overview 243
- DOC keyword 270
- dump command
  - PIDU 283
  - dumps
    - common message log 283
    - finding 248
    - Historical Inventory 283
    - Infoprint Central 283
    - IP PrintWay basic mode 299
    - NetSpool 307
    - Printer Inventory 283
    - SVC, IP PrintWay basic mode 299
    - SVC, NetSpool 307
    - z/OS abend, IP PrintWay basic mode 299

### E

- econreset error 254
- EDC8115I error message 90
- email protocol, diagnosing problems with 258
- empty file 255
- environment variables 275, 284
- error file 281
- error message prefix 243
- EXEC statement, NetSpool 304
- external trace
  - IP PrintWay basic mode
    - description 286
    - starting at initialization 288
    - starting dynamically 291
  - NetSpool
    - description 302
    - starting 303
F
FAC event identifier  303
FD1 event identifier  287
FD2 event identifier  303
finding
  abends, dumps, messages  248
  transform stderr  281
font parameter, incorrect  255
FSAs, tracing  286
full trace without print records, IP PrintWay basic mode  286
full trace, IP PrintWay basic mode  286

G
Generalized Trace Facility (GTF)  309
IP PrintWay basic mode external traces  286
NetSpool external traces  302
parameters  309
procedure  309
starting  309
starting procedures
  IP PrintWay basic mode  287
  NetSpool  303
viewing and printing trace data
  IP PrintWay  295
  NetSpool  307

H
hinvu –d command  283
HP LaserJet printer  254

I
IBM Software Support Facility  263
searching  273
identifier for job not displayed on spool  256
INCORROUT keyword  269, 271
Infoprint Central
  diagnosing problems  259
  tracing  280
Infoprint Server components  243
  determining which to troubleshoot  243
  error message prefix  243
  Infoprint Server, tracing  275
Interactive Problem Control System (IPCS)  295
internal trace
  IP PrintWay basic mode
    description  286
    starting at initialization  288
    starting dynamically  291
  NetSpool
description  301
starting  303
IP PrintWay
  component ID  265, 285
  message logs  247
  sendmail, diagnosing problems with  258
IP PrintWay basic mode
  AOXVTM not found  258
dumps  299
external traces  286
full trace  286
full trace without print records  286
ISPF panel logic tracing  298
IP PrintWay basic mode (continued)
  reason codes  54
  starting GTF  287
  starting traces  287
  starting traces, examples  295
  stopping a trace  293
  SVC dump  299
  tracing considerations  287
  z/OS abend dump  299
IP PrintWay extended mode
  trace example  278
  tracing  275
  IPP server trace information  284
  ISPF panel administrator error  256
  ISPF panel diagnostic tools  282
  ISPF panels
    IP PrintWay basic mode trace parameters  288
    starting ISPF trace  282
    stopping ISPF trace  282
    tracing processing in  282

J
job identifier not displayed  256
JOBNAME parameter, in GTF  303

K
keyboard
  navigation  311
  PF keys  311
  shortcut keys  311
keywords  264
  INCORROUT modifiers  271
  module  270
  release level  272
  type-of-failure  266
    ABENDx  267
    DOC  270
    INCORROUT  269
    LOOP  267
    MSGx  268
    PERFIM  269
    WAIT  268

L
LOOP keyword  267
Ip command error  256

M
maintenance level keywords  272
message log
  common message log xiii
  IP PrintWay  247
  IP PrintWay basic mode xiii
  NetSpool xiii
  transform daemon xiv
  messages  248
  migration information x
MODIFY command
  IP PrintWay basic mode  291, 293
  NetSpool  305, 306, 307
  module keyword  270
trace options data set (continued)
parameters 304
syntax 305
trace options data set statement 304
TRACEOPT DD statement 304
traces
considerations
IP PrintWay 287
NetSpool 302
daemon 277
external IP PrintWay basic mode 286
external trace
NetSpool 302
FSAs 286
full trace without print records, IP PrintWay basic mode 286
full trace, IP PrintWay basic mode 286
generalized trace facility 286
internal wrap, IP PrintWay basic mode 286
IP PrintWay basic mode ISPF panel logic 298
IP PrintWay basic mode traces 285
ISPF panel logic 282
NetSpool traces 301
parameters, IP PrintWay basic mode
ISPF panels 288
MODIFY command 292
parameters, IP PrintWay basic mode 288
starting at initialization, IP PrintWay basic mode 288
starting IP PrintWay basic mode trace, examples 295
starting, IP PrintWay basic mode 287
stopping IP PrintWay basic mode trace 293
stopping IP PrintWay basic mode trace dynamically 293
TRACEOFF command 294
TRACEON command, IP PrintWay basic mode 292
using environment variables 275
tracing
AOPPRINT started procedure 279
cancel 279
Coaxial Printer Support 286
Infoprint Central 280
Infoprint Server 275
IP PrintWay basic mode 285
IP PrintWay extended mode 275
Ip 279
Ipstat 279
Print Interface 275
Printer Inventory Manager 275
SMB support 279
transform interface 275
Windows client 275
transform daemon
message log xiv
transform interface
component ID 266
tracing 275
transform stderr, finding 281
transforms error file 281
troubleshooting (continued)
error message prefix 243
font parameter 255
HP LaserJet printer 254
ISPF panel error 256
job identifier not displayed on spool 256
lp command error 256
Module AOXVTM not found 258
NetSpool 244
NetSpool close error 255
NetSpool page-formatting values ignored 257
output error, incorrect or partial 254, 255
performance problems 254
Print Interface 244
printer definitions 246
Printer Inventory Manager
return codes 244
U
unset command, used to stop tracing 278
usage considerations
IP PrintWay basic mode trace 287
NetSpool trace 302
user interface
ISPF 311
TSO/E 311
USR parameter, in GTF 287, 303
V
variables, environment 275
viewing and printing trace data
IP PrintWay 295
NetSpool 307
VTAM applications using NetSpool, determining printer
definition 246
VTAM printer support in IP PrintWay, tracing 286
W
WAIT keyword 268
Windows client
component ID 266
tracing 275
Z
z/OS abend dump, IP PrintWay basic mode 299