Note

Before using this information and the product it supports, read the information in "Notices" on page 315.

This edition applies to these IBM products:
• Version 2 Release 2 of z/OS (5650-ZOS)
• Version 2 Release 1 of Infoprint Coaxial Printer Support for z/OS (5655-N62)

This edition applies to all subsequent releases and modifications until otherwise indicated in new editions.

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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 2.

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 type the entire command.

Table 1. Syntax notation

<table>
<thead>
<tr>
<th>This notation:</th>
<th>Means:</th>
<th>You enter:</th>
<th>For example:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apostrophes</td>
<td>String</td>
<td>As shown</td>
<td>SEND '123'</td>
</tr>
<tr>
<td>Bold</td>
<td>Keyword</td>
<td>As shown</td>
<td>CLASS</td>
</tr>
<tr>
<td>Braces</td>
<td>List of items</td>
<td>The braces and one or more items from the list</td>
<td>{GT10 GT12}</td>
</tr>
<tr>
<td>Brackets</td>
<td>Optional item</td>
<td>One item or no items</td>
<td>aopstop [now]</td>
</tr>
<tr>
<td>Comma</td>
<td>Separator</td>
<td>As shown</td>
<td>DISPLAY C,K</td>
</tr>
<tr>
<td>Ellipsis</td>
<td>Repeatable item</td>
<td>One or more items</td>
<td>filename ...</td>
</tr>
</tbody>
</table>
Table 1. Syntax notation (continued)

<table>
<thead>
<tr>
<th>This notation:</th>
<th>Means:</th>
<th>You enter:</th>
<th>For example:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowercase Item the system defines</td>
<td>As shown, in lowercase</td>
<td>lp</td>
<td>lp</td>
</tr>
<tr>
<td>Lowercase italics Variable item</td>
<td>A value for the item</td>
<td>MOUNT devnum</td>
<td>MOUNT A30</td>
</tr>
<tr>
<td>Parentheses 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 Various symbols</td>
<td>As shown</td>
<td>%filter-options</td>
<td>%filter-options</td>
</tr>
<tr>
<td>Underline Default</td>
<td>The item, or you can omit it</td>
<td>K T REF</td>
<td>K T</td>
</tr>
<tr>
<td>Uppercase Item the system defines</td>
<td>As shown, in uppercase</td>
<td>PRMODE</td>
<td>PRMODE</td>
</tr>
<tr>
<td>Vertical bar UNIX pipe (the output of the first is input to the second)</td>
<td>1s</td>
<td>1p</td>
<td>1s</td>
</tr>
<tr>
<td>Vertical bar in braces Required choice</td>
<td>One item</td>
<td>{NOW</td>
<td>FOREVER}</td>
</tr>
<tr>
<td>Vertical bar in brackets Optional choice</td>
<td>One item or no items</td>
<td>[PORTNO</td>
<td>PRTQUEUE]</td>
</tr>
</tbody>
</table>

Where to find more information

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

Preventive Service Planning information

Before you install Infoprint Server, review the current Preventive Service Planning (PSP) information, also called the PSP bucket. You also periodically review the current PSP information. The PSP upgrade ID depends on your z/OS operating system; for example, ZOSV2R2. 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 before installation.

Infoprint Server migration information

This table lists documents that can help you upgrade 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>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>z/OS Migration</td>
<td>GA32-0889</td>
<td>Describes the tasks that are required to upgrade to z/OS V2R2. Includes the migration tasks for Infoprint Server.</td>
</tr>
</tbody>
</table>
### Documents

These tables list 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>
<thead>
<tr>
<th>Document</th>
<th>Form number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>z/OS Summary of Message and Interface Changes</td>
<td>SA23-2300</td>
<td>Describes new and changed messages and interfaces in z/OS V2R2. Includes the messages and interfaces for Infoprint Server.</td>
</tr>
<tr>
<td>z/OS Infoprint Server Customization</td>
<td>SA38-0691</td>
<td>Describes the tasks that are required to migrate to IP PrintWay extended mode from IP PrintWay basic mode. Also, describes the tasks that are required to use the new functions that are introduced in z/OS V2R2.</td>
</tr>
</tbody>
</table>

#### Table 2. Documents for Infoprint Server

<table>
<thead>
<tr>
<th>Document</th>
<th>Form number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>z/OS Infoprint Server Introduction</td>
<td>SA38-0692</td>
<td>Introduces Infoprint Server. This document contains printing scenarios that show how you can use Infoprint Server in your installation.</td>
</tr>
<tr>
<td>z/OS Infoprint Server Customization</td>
<td>SA38-0691</td>
<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>
</tr>
<tr>
<td>z/OS Infoprint Server Operation and Administration</td>
<td>SA38-0693</td>
<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 by using either ISPF panels or the Printer Inventory Definition Utility (PIDU) program and define NetSpool printer LUs to VTAM®.</td>
</tr>
<tr>
<td>z/OS Infoprint Server Printer Inventory for PSF</td>
<td>SA38-0694</td>
<td>Describes the Printer Inventory for PSF for PSF customers who do not purchase an Infoprint Server license. It describes the tasks that are 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>
</tr>
<tr>
<td>z/OS Infoprint Server User’s Guide</td>
<td>SA38-0695</td>
<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>
</tr>
<tr>
<td>z/OS Infoprint Server Messages and Diagnosis</td>
<td>GA32-0927</td>
<td>Describes messages from Infoprint Server. This document also describes how to use Infoprint Server tracing facilities to diagnose and report errors.</td>
</tr>
</tbody>
</table>
Table 3. Documents for IBM transform products

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

Table 4. Documents for Ricoh products

<table>
<thead>
<tr>
<th>Ricoh Document</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>InfoPrint Transform Manager for AIX®, Linux, and Windows: Planning and Installing</td>
<td>Describes InfoPrint Transform Manager and provides installation and configuration information about the product</td>
</tr>
<tr>
<td>InfoPrint Transform Manager for Linux: afp2pdf Transform Installation and User’s Guide</td>
<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 general help system and help for individual web pages, select the question mark (?) on the title bar.

The man command provides online help for z/OS UNIX commands. The syntax is:

```
man command_name
```

TSO/E provides online help for the AOPCMND command. The syntax is:

```
HELP AOPCMND
```

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 cause 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,” on page 1 and Chapter 3, “NetSpool (API) messages and codes,” on page 205 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 abend to occur.

System action
The system action specifies whether the component attempts to restart automatically or continues to end processing.

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 customized it. In addition, PSF for z/OS can write messages in the common message log. Authorized users can use Infoprint Central to 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 in the xfd subdirectory under the base directory that is defined in the aopd.conf file (usually /var/Printsrv/). The file name 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 explain 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.
2. Send an email from the "Contact us" web page for z/OS (http://www.ibm.com/systems/z/os/zos/webqs.html).

Include the following information:
• Your name and address.
• Your email address.
• Your telephone or fax number.
• The publication title and order number:
  z/OS V2R2 Infoprint Server Messages and Diagnosis
  GA32-0927-01
• The topic and page number that is 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 the comments in any way appropriate without incurring any obligation to you.

IBM or any other organizations use 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.
• Visit the IBM Support Portal at z/OS Support Portal (http://www-947.ibm.com/systems/support/z/os/)
Summary of changes

This section describes the release enhancements that were made.

z/OS Version 2 Release 2

The following changes are made for z/OS Version 2 Release 2.

New

• These messages are new:
  - “AOP031E” on page 86
  - “AOP182W” on page 127
  - “AOP194I” on page 132
  - “AOP196I” on page 133
  - “AOP197I” on page 133
  - “AOP198E” on page 133
  - “AOP199E” on page 134
  - "09C completion code" on page 203 is new.

Changed

• These messages are changed:
  - “ANFM020A” on page 5
  - “AOP001E” on page 78
  - “AOP044I” on page 90
  - “AOP047E” on page 90
  - “AOP050E” on page 92
  - “AOP078W” on page 98
  - “AOP083E” on page 99
  - “AOP101E” on page 104
  - “AOP114E” on page 108
  - “AOP115E” on page 108
  - “AOP127I” on page 111
  - “AOP137E” on page 114
  - “AOP173E” on page 124
  - “AOP192E” on page 131
  - “AOP195E” on page 132
  - “AOP3504I” on page 155
  - “AOP3505I” on page 155
  - “AOP1514I” on page 188
  - “API0930E” on page 217
  - “0D22” on page 72 abend reason code is updated with a tip.

• API messages contain a message identifier followed by jobname.identifier. However, in this document, API messages are only shown with the message identifier and message text; the jobname.identifier is not shown. See “API message format” on page 205 for a description of jobname.identifier.
The name of the IPP server daemon is changed from aopipdxp to aopippd throughout the publication. For example, see “Format of messages in the Infoprint Server common message log” on page 75.

A note for the Language Environment CEEDUMP directory in Table 14 on page 250 is updated.

The message location for Infoprint Central is updated in Table 15 on page 251 and “Diagnosing problems in Infoprint Central” on page 260.

The filter command is no longer APF-authorized. “Checking permissions settings” on page 252 is updated.

The name of the HTTP server that z/OS supports is now called the IBM HTTP Server - Powered by Apache. The Apache server has a different name for the HTTP environment variables file. This change affects “Diagnosing problems in Infoprint Central” on page 260 and “Tracing Infoprint Central” on page 282.

Only Java™ Technology Edition V7.1 is supported in Infoprint Server V2R2. See Table 18 on page 262.

The MVS operator command to use to determine whether IP PrintWay extended mode is running is updated in “Component identification number” on page 267.

The examples in the procedure for getting the maintenance level of your program are updated in “Version, release, and maintenance level keywords” on page 274.

The example for AOPTRACEBYTES and requirements for AOPTRACEDIR in “Tracing Infoprint Server” on page 277 are updated.

“Tracing Infoprint Server daemons” on page 279 is updated.

The examples in “Tracing Infoprint Central” on page 282 are updated.

The trace file in “ISPF trace” on page 284 is updated.

Deleted

Message AOP067E is deleted.

References to the aophinvd, aoplogd, and aopsvbd daemons are removed from:
- “Format of messages in the Infoprint Server common message log” on page 75
- “Checking permissions settings” on page 252
- “Tracing Infoprint Server daemons” on page 279
- “Finding the trace file” on page 283

References to “snmp-community”, “Simple Network Management Protocol (SNMP) subagent”, “SNMP”, and “SNMP subagent” are removed from messages and:
- “Format of messages in the Infoprint Server common message log” on page 75
- “Checking permissions settings” on page 252
- “Chapter 7, “Using Infoprint Server diagnostic tools,” on page 277”

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
- z/OS Introduction and Release Guide
- z/OS Planning for Installation
- z/OS Migration
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:

ANFsnmnt

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.

nnn 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 that IP PrintWay basic mode is 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 whether 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

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.

Module: ANFXHCCCK

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFH002I IP PrintWay extended mode is running.
**ANFH003I • ANFM004I**

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

**System action:** The system continues processing.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Module:** ANFXHCCK

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**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:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Module:** ANFXHCCK

**Source:** Infoprint Server

**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.

**Module:** Not applicable.

**Source:** Infoprint Server

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

ANFM005S Failed to load message table msgtabl
Explanation: IP PrintWay basic mode cannot 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 stopped.
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.
Module: Not applicable.
Source: Infoprint Server

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

ANFM006S Unable to create message table token tokennm
Explanation: IP PrintWay basic mode cannot create the named token that contains the message table anchor.

In the message text, tokennm is the message token name that cannot be created.
System action: Message processing is not available. IP PrintWay basic mode is stopped.
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.
Module: Not applicable.
Source: Infoprint Server

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

ANFM007I Unable to retrieve message table token tokennm
Explanation: IP PrintWay basic mode cannot retrieve the named token that contains the message table anchor.

In the message text, tokennm is the message token name that cannot 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.
Module: Not applicable.
Source: Infoprint Server

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 cannot delete the message table from storage during termination.

In the message text, msgtabl is the message table name that cannot 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.
Module: Not applicable.
Source: Infoprint Server

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

ANFM009I Unable to delete message table token tokennm
Explanation: IP PrintWay basic mode cannot delete the named token that contains the message table anchor.

In the message text, tokennm is the message token name that cannot be deleted.
System action: Termination continues.
ANFM010S  •  ANFM016I

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

ANFM012S  Unable to obtain <stgsize> bytes of storage for message DCB
Explanation:  IP PrintWay basic mode cannot obtain storage below 16 MB for the message file DCB.
In the message text, <stgsize> is the amount of storage requested.
System action:  PrintWay ends.
Operator response:  Notify your system programmer of this error.
System programmer response:  Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
Problem determination:  Not applicable.
Module:  Not applicable.
Source:  Infoprint Server
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

ANFM011S  Unable to retrieve message table token <tokennm>
Explanation:  IP PrintWay basic mode cannot retrieve the named token that contains the message table anchor.
In the message text, <tokennm> is the message token name that cannot 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.
Module:  Not applicable.

ANFM016I  Invalid TCP/IP jobname
Explanation:  The TCP/IP job name that is 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, an IP PrintWay abend occurs.
Operator response:  If an IP PrintWay abend does not occur, ignore this message. If an IP PrintWay abend occurs, notify your system programmer.
System programmer response:  If an IP PrintWay abend occurs, follow the instructions for abend code 0E91. If an IP PrintWay abend does not occur, 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 to 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.

**Problem determination:** Not applicable.
**Module:** Not applicable.
**Source:** Infoprint Server
**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 or the IP PrintWay FSS definition in the Printer Inventory specifies the PROMPT for the operator interface. IP PrintWay basic mode is not 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 is 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 287.

**System programmer response:** None.
**Problem determination:** Not applicable.
**Module:** Not applicable.
**Source:** Infoprint Server
**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 is 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.
**Module:** Not applicable.
**Source:** Infoprint Server
**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 that is 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 that is 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 needs to be increased. Increase the REGION parameter that is used in the IP PrintWay startup procedure.

**Problem determination:** Not applicable.
**Module:** Not applicable.
**Source:** Infoprint Server
**Routing code:** Not applicable.
**Descriptor code:** Not applicable.
**Automation:** Not applicable.
**ANFM023I • ANFM027I**

**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 that are described in the accompanying messages to determine an appropriate response.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**ANFM024I**  
*jobname* The IP PrintWay operator interface is being terminated,  
*module*(modulename) has terminated

**Explanation:** An abend occurred in a module that 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 in which an abend occurred and which an abend occurred again.

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

**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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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

**Explanation:** The operator 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 is stopped.

**System action:** The Functional Subsystem Application (FSA) for the indicated FSA name is stopped.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** None.

**Module:** Not applicable.

**Source:** Infoprint Server

**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.
Module: Not applicable.
Source: Infoprint Server
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.
Module: Not applicable.
Source: Infoprint Server
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.
Module: Not applicable.
Source: Infoprint Server
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 that is 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: Start the named FSA and then type the command again.

System programmer response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

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.

Module: Not applicable.

Source: Infoprint Server

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 with a valid keyword.

System programmer response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

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 entered an IP PrintWay basic mode FORCE command with the MVS MODIFY command for an FSA that is already stopping.

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 is discarded by IP PrintWay basic mode. The termination processing already in progress completes to get the results that the discarded MODIFY FORCE command desires.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

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 is the last position that is checked before it is decided that a correct command is not present.

In the message text, jobname is a job name, an FSS name, or an FSA name. data are alphanumeric characters.
**ANFM039I**  
jobname The status of the IP PrintWay command(command) is status

**Explanation:**  
The IP PrintWay basic mode command is accepted or the command is 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 that are 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.

**Module:** Not applicable.

**Source:** Infoprint Server

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

**Operator response:**  
None.

**System programmer response:**  
None.

**Problem determination:**  
Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
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Operator response: Type the correct format of the command.
System programmer response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
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 that is checked before the keyword is determined to be 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.
Module: Not applicable.
Source: Infoprint Server
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 correct format of the command.
System programmer response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM061I  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.
Module: Not applicable.
Source: Infoprint Server
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.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
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ANFM064I  jobname The parameter parameter is mutually exclusive with another parameter specified in keyword keyword in the IP PrintWay command command.

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

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

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM065I  jobname A delimiter was found where an parameter parameter was expected in keyword keyword in the IP PrintWay command command.

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

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

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM069I  jobname No parameters were specified for keyword keyword in the IP PrintWay command command.

Explanation: You entered a keyword without its required parameters.

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

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM070I  jobname An unbalanced parenthesis was encountered in the IP PrintWay command command.

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

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

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

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

**System programmer response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**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 need to enter it as command,.prt(nnnn),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.

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

**System programmer response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

ANFM083I  jobname An FSA name cannot be specified for an IP PrintWay command during initialization.

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

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

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

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

**System programmer response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

ANFM085I  jobname The format of FSA name (fsaname) is not valid in IP PrintWay command (command)

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

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

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

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

**System programmer response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**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, or an FSA name. \textit{command} is the 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 without an FSA name.

\textbf{System programmer response:} None.

\textbf{Problem determination:} Not applicable.

\textbf{Module:} Not applicable.

\textbf{Source:} Infoprint Server

\textbf{Routing code:} Not applicable.

\textbf{Descriptor code:} Not applicable.

\textbf{Automation:} Not applicable.

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

\textbf{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 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{Module:} Not applicable.

\textbf{Source:} Infoprint Server

\textbf{Routing code:} Not applicable.

\textbf{Descriptor code:} Not applicable.

\textbf{Automation:} Not applicable.

**ANFM087I** \textit{jobname} An FSA name cannot be specified with the IP PrintWay command(\textit{command}) with parameter(\textit{parameter})

\textbf{Explanation:} The FSA name was specified for a command, but the parameter that is 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 IP PrintWay basic mode Command. \textit{parameter} is the 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{Module:} Not applicable.

\textbf{Source:} Infoprint Server

\textbf{Routing code:} Not applicable.

\textbf{Descriptor code:} Not applicable.

\textbf{Automation:} Not applicable.

**ANFM091I** \textit{jobname} Not enough storage is available to process command queues - storage requested = \textit{storagerequested}, return code = \textit{retcode}

\textbf{Explanation:} More storage is required to process the command queues, but this storage is 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{Module:} Not applicable.

\textbf{Source:} Infoprint Server

\textbf{Routing code:} Not applicable.

\textbf{Descriptor code:} Not applicable.

\textbf{Automation:} Not applicable.

**ANFM092I** \textit{jobname} The IP PrintWay QEDIT request was unsuccessful - return code = \textit{retcode}

\textbf{Explanation:} An MVS QEDIT request to change the number of requests that can be queued for this FSS was unsuccessful. The return code is the code that is 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 the request.

\textbf{System action:} The operator interface is stopped with a dump.

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

Module: Not applicable.

Source: Infoprint Server

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.

Module: Not applicable.

Source: Infoprint Server

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) suppressed the dump because a previous similar dump 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 "IP PrintWay basic mode system completion code and abend reason codes" on page 53. `modulename` is the name of the ESTAI module.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**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 an 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**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 stopped for the FSA on which the error occurred, or processing is stopped 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**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 that is 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 0 - 59, and HH is a value 0 - 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 deletes the data set from the JES spool.

**Operator response:** None.

**System programmer response:** None.

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

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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

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

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

**System action:** Abend processing continues.

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

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

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

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**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 cleaning up the VSAM transmission-queue data set, it encountered an error 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**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.

**Module:** Not applicable.

**Source:** Infoprint Server

**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 does 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 PARM parameter on the EXEC statement, see [z/OS Infoprint Server Customization](http://www.ibm.com/systems/mz/infoprintserver). For more information about the Printer Inventory Manager, see [z/OS Infoprint Server Operation and Administration](http://www.ibm.com/systems/mz/infoprintserver).

**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.

**Module:** Not applicable.

**Source:** Infoprint Server

**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](http://www.ibm.com/systems/mz/infoprintserver).

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**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:** The load failed for module AOPDBPKG. The high-order halfword is the abend code. The low-order halfword 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 SYSLINKLIB. Look up the message's return and reason codes in [z/OS MVS System Codes](http://www.ibm.com/systems/mz/mvs) 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**ANFM113I** 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:

```
PARAM=(INV='xxxx')
```

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

**System action:** IP PrintWay basic mode does not start.
ANFM114I  •  ANFM117I

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.

Module:  Not applicable.

Source:  Infoprint Server

Routing code:  Not applicable.

Descriptor code:  Not applicable.

Automation:  Not applicable.

---

**ANFM114I**  Data set: *datasetname* The time value *timeval* specified with the keyword is not valid, the data set is released.

**Explanation:** For the data set named, the time value that is 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 0 - 59. HH is a value 0 - 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.

**Module:**  Not applicable.

**Source:**  Infoprint Server

**Routing code:**  Not applicable.

**Descriptor code:**  Not applicable.

**Automation:**  Not applicable.

---

**ANFM115I**  The INV= string was not found on the EXEC parameter statement in the writer procedure.

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

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

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

**System action:** IP PrintWay basic mode does not start.

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

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

**Problem determination:**  Not applicable.

**Module:**  Not applicable.

**Source:**  Infoprint Server

**Routing code:**  Not applicable.

**Descriptor code:**  Not applicable.

**Automation:**  Not applicable.

---

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

**Explanation:**  The INV= statement on the PARM parameter on the EXEC statement has a name that is not valid. The name of the Printer Inventory must be 1-4 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.

**Module:**  Not applicable.

**Source:**  Infoprint Server

**Routing code:**  Not applicable.

**Descriptor code:**  Not applicable.

**Automation:**  Not applicable.

---

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

**Explanation:**  The call to BPX1SSD cannot 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.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM122I  FSS: fsname IP PrintWay must be started by JES

Explanation: IP PrintWay basic mode was started by some means other than JES.
In the message text, fsname is the FSS name from FSS definition.
System action: The FSS ends.
Operator response: None.
System programmer response: Start IP PrintWay basic mode by using the appropriate JES command.

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

ANFM123I  FSS: fsname IP PrintWay requires the FSI to run above the line

Explanation: Your FSI is set up to run below the 16 MB line, but IP PrintWay basic mode requires it to run above the line.
In the message text, fsname 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.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

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

Explanation: The named module encountered an initialization error.
In the message text, fsaname is the FSA name. modname is the name of failing module.
System action: The FSA ends.
Operator response: None.
System programmer response: If the error condition persists, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
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 cannot find a printer definition with the form name, class, and destination that is specified in the JCL for this data set. Therefore, the data set is held by the system.
In the message text, dsname is the data set name.
System action: IP PrintWay releases the data set back...
to JES and requests that the system hold it.

Operator response: Notify your system programmer of this error.

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

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

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

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

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

Explanation: The printer definition or the PRTOPTNS parameter in the OUTPUT JCL statement contains the name of an options component, but IP PrintWay basic mode cannot 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 that is 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.

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 options component or to modify the printer definition.

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

Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
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.
Module: Not applicable.
Source: Infoprint Server
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.
Module: 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 32 K.
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 32 K.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM136I Data set: dsname No end of a spanned record was found, the data set is held

Explanation: A spanned record was started but not ended.
In the message text, dsname is the data set name.
System action: IP PrintWay releases the data set back to JES and requests that the system hold it.
Operator response: Notify your system programmer of this error.
To attempt to transmit the data set again, release the data set from hold status.
System programmer response: See the JES I/O error message to determine an appropriate action.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

ANFM137I IP PrintWay is terminating due to the requested ABEND

Explanation: The operator requested an abend.
System action: IP PrintWay basic mode ends the requested level with an abend.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
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.
Module: Not applicable.
Source: Infoprint Server
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.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
ANFM140I  Data set: dsname  Writing of an IP PrintWay SMF6 record failed

Explanation:  A data set completed, and IP PrintWay basic mode attempted to write an SMF6 record but was unable to write the SMF record.

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

System action:  Processing continues.

Operator response:  None.

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

Problem determination:  Not applicable.

Module:  Not applicable.

Source:  Infoprint Server

Routing code:  Not applicable.

Descriptor code:  Not applicable.

Automation:  Not applicable.

ANFM141I  Data set: dsname  Successful Transmission

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

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

System action:  Processing continues.

Operator response:  None.

System programmer response:  None.

Problem determination:  Not applicable.

Module:  Not applicable.

Source:  Infoprint Server

Routing code:  Not applicable.

Descriptor code:  Not applicable.

Automation:  Not applicable.

ANFM142I  Data set: dsname  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, dsname is the data set name.

System action:  Processing continues.

Operator response:  None.

System programmer response:  None.

Problem determination:  Not applicable.

Module:  Not applicable.

Source:  Infoprint Server

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.

Module:  Not applicable.

Source:  Infoprint Server

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.

Operator response:  None.

System programmer response:  None.

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

Problem determination:  Not applicable.

Module:  Not applicable.

Source:  Infoprint Server

Routing code:  Not applicable.

Descriptor code:  Not applicable.

Automation:  Not applicable.
The NOTIFY command failed - code = \textit{errorb}

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

In the message text, \textit{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.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

A NOTIFY error was received - code = \textit{errorb}

Explanation: The NOTIFY command failed with the indicated code. It indicates a logic error.

In the message text, \textit{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.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

A NOTIFY error was received - code = \textit{errorb}

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 might 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.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
ANFM150I Data set: dsname IP was specified on the OUTPUT statement, but the PRTQUEUE keyword was not specified, the data set is released

Explanation: The DEST=IP: parameter was specified on the OUTPUT statement in the JCL for the data set. However, the required PRTQUEUE parameter was not also specified.

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

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

Operator response: None.

System programmer response: None.

User response: Submit the data set again and specify the PRTQUEUE parameter.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM152I Data set: dsname The BDS user exit bdsexit was not found

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

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

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

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

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

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

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

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

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

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

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

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

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

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

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

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

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

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

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

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
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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.

Module:  Not applicable.

Source:  Infoprint Server

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:  An IP PrintWay basic mode FSA attempted to acquire storage but failed. Sufficient storage might be unavailable because IP PrintWay basic mode 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 the job submitter specifies a retain time in the RETAINS and RETAINF parameters on the OUTPUT JCL statement or the printer definition that is 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 tries the transmission again. If IP PrintWay basic mode already attempted the requested number of retransmissions, IP PrintWay basic mode retains the data set on the JES spool for the amount of time that is 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 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 that are retained on the JES spool. Consider deleting entries with a status of S before you delete entries with a status of F. Also, consider deleting data sets that are 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 that are 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.

Module:  Not applicable.

Source:  Infoprint Server

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 only the PORTNO value when both PORTNO and PRTQUEUE JCL keywords are specified on the OUTPUT statement. This message is for information only.

System action:  Processing continues with the PORTNO value.

Operator response:  None.

System programmer response:  None.

Problem determination:  Not applicable.

Module:  Not applicable.

Source:  Infoprint Server

Routing code:  Not applicable.

Descriptor code:  Not applicable.

Automation:  Not applicable.

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

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

In the message text, datasetname is the data set at the time of the error. printer-name is the printer that is specified for the data set.
ANFM159I • ANFM162I

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

ANFM160I Data set: datasetname No Printer Inventory entry was found for the options name specified either through JCL or the Routing exit. The data set is held. Entry name = componentname

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

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

System action: The data set is held by the system.
Operator response: None.
System programmer response: Correct the component name in the PRTOPTNS JCL parameter or in the Routing exit. If the component name is correct, create a Processing, IP PrintWay basic mode Options, or Protocol component with that name in the Infoprint Server Printer Inventory. For information about how to create components for the PRTOPTNS parameter, see [z/OS Infoprint Server Operation and Administration]

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

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 that is specified for the data set.

System action: The data set is held.
System programmer response: Find and fix the error, and then reset the data set. This problem can be caused by routing exit processing in which the Route name was changed from DEST, CLASS, and FORMS to a printer definition name, but the Routing Type was not changed.

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

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

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

ANFM165I Data set: datasetname The VTAM feature is not enabled or the APPLID is not coded on the FSS definition, the data set is held.
Explanation: IP PrintWay basic mode attempted to transmit a data set to a VTAM controlled printer. To print on VTAM controlled printers, 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 FSS and specify the name of the VTAM APPL statement for IP PrintWay basic mode.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
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.
Module: Not applicable.
Source: Infoprint Server
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 APPLID 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 FSS to pick up changes to the FSS definition in the Printer Inventory.

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

For information about the VTAM return code, see z/OS V2R2.0 Communications Server: IP and SNA Codes.

Problem determination: Not applicable.

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

ANFM170I 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 ISPF panels to list all printer definitions with the incorrect type identified in the message text and attempt to determine which printer definition caused this problem.

If the DEST, CLASS, and FORMS values on the JCL are incorrect and caused IP PrintWay basic mode to select the wrong printer definition, change the DEST, CLASS, and FORMS values of the output data set. Otherwise, use the Infoprint Server ISPF panels or the Printer Inventory Definition Utility (PIDU) to change the type of the printer definition. The type must be IP PrintWay basic mode.

Problem determination: Not applicable.

Module: Not applicable.
Source: Infoprint Server
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 is 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.
Module: Not applicable.
Source: Infoprint Server
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 is successfully transmitted.
In the message text, dsname is the data set name. host is the target host. queue is the target print queue.
System action: The queue manager module continues processing normally.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
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 is successfully transmitted.
In the message text, dsname is the data set name. host is the target host. queue is the target print queue.
System action: The queue manager module continues processing normally.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
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 uses 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.
Module: Not applicable.
Source: Infoprint Server
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 that is specified for the data set 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 is 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.
Module: Not applicable.
Source: Infoprint Server
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 that are associated with this I/O error to determine the correct response.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

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 is 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.

Module: Not applicable.

Source: Infoprint Server

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 retransmissions).

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 because of 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.

Module: Not applicable.

Source: Infoprint Server

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.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

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

**Explanation:** The entry in the transmission queue for the listed data set is 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

ANFM699I FSS: *fssname* The queue manager has stopped

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

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

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

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

ANFM700I Data set: *dsname* The data set has been acquired by *fssname*

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

In the message text, *dsname* is the data set name. *fssname* is the FSS name.

**System action:** A subsequent attempt is made to transmit the data set.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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

**Explanation:** The listed data set is 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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

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

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 because of 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.
Module: Not applicable.
Source: Infoprint Server
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.

In the message text, dsname is the data set name, and addresses is the list of email addresses of the email recipients.

System action: Sendmail attempts to send the email to the recipients. IP PrintWay basic mode continues processing.
Operator response: None.
System programmer response: None.

Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
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 run 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.
Module: Not applicable.
Source: Infoprint Server
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 V2R2.0 Communications Server: IP Sockets Application Programming Interface Guide and Reference for the cause.

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

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

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

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

System action: IP PrintWay attempts to retransmit the document to the printer. If this is the last retransmission 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 V2R2.0 Communications Server: IP Sockets Application Programming Interface Guide and Reference for the cause.

Problem determination: Not applicable.

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

**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 retransmission attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool.

Operator response: None.

System programmer response: Check the return and reason code in z/OS MVS System Codes to determine the cause of the problem.

Problem determination: Not applicable.

Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: 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 retransmission 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.
Operate response: Notify your system programmer of this error.

System programmer response: Look up the ERRNO value in z/OS V2R2.0 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 because of heavy network traffic, consider increasing the value in the Connection timeout field in the printer definition in the Printer Inventory.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

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 retransmission 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 V2R2.0 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.
to the printer because of heavy network traffic, consider increasing the value in the Connection timeout field in the printer definition in the Printer Inventory.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**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** Name of the data set
- **ipaddress** Printer’s IP address or host name
- **errno** TCP/IP ERRNO returned from SOCKET

**System action:** IP PrintWay attempts to retransmit the document to the printer. If this is the last retransmission 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 V2R2.0 Communications Server: IP Sockets Application Programming Interface Guide and Reference](http://example.com) for the cause.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**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 255 for more information about this message.

**System action:** IP PrintWay attempts to retransmit the document to the printer. If this is the last retransmission 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 V2R2.0 Communications Server: IP Sockets Application Programming Interface Guide and Reference](http://example.com) for the cause. If the ERRNO value is 54 and the printer is an HP printer with a JetDirect card, see "Common Infoprint Server problems" on page 255 for more information.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
ANFM1110I  Data set: datasetname The data set received a TCP/IP SOCKET SEND error with an ERRNO value of (errno)

Explanation: The TCP/IP SEND function failed.

In the message text, datasetname is the name of the data set at time of the error. errno is the TCP/IP ERRNO returned from SEND.

System action: IP PrintWay attempts to retransmit the document to the printer. If this is the last retransmission 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 V2R2.0 Communications Server: IP Sockets Application Programming Interface Guide and Reference for the cause.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

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

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

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

System action: IP PrintWay attempts to retransmit the document to the printer. If this is the last retransmission 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.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
| ANFM1113I | Data set: *datasetname* The end of data set was found before the SBCS or DBCS translate table could be read for the data set |
| Explanation: The end of the data set was found before IP PrintWay basic mode read the translate table. |
| In the message text, *datasetname* is the name of the data set. |
| **System action:** IP PrintWay attempts to retransmit the document to the printer. If this is the last retransmission 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. |
| **Module:** Not applicable. |
| **Source:** Infoprint Server |
| **Routing code:** Not applicable. |
| **Descriptor code:** Not applicable. |
| **Automation:** Not applicable. |

| ANFM1115I | Data set: *datasetname* A record greater than 256 bytes for a fixed block data set or greater than 260 bytes for a variable blocked data set was returned on a GET macro for the SBCS translate table data set |
| Explanation: A single-byte data set translate table must not be larger than 256 bytes. |
| In the message text, *datasetname* is the name of the data set. |
| **System action:** IP PrintWay attempts to retransmit the document to the printer. If this is the last retransmission 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. |
| **Module:** Not applicable. |
| **Source:** Infoprint Server |
| **Routing code:** Not applicable. |
| **Descriptor code:** Not applicable. |
| **Automation:** Not applicable. |

| ANFM1114I | Data set: *datasetname* The SYNAD exit executed indicating an error for the SBCS or DBCS translate table |
| Explanation: The SYNAD exit was called, indicating an I/O error. |
| In the message text, *datasetname* is the name of the data set. |
| **System action:** IP PrintWay attempts to retransmit the document to the printer. If this is the last retransmission 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. |
| **Module:** Not applicable. |
| **Source:** Infoprint Server |
| **Routing code:** Not applicable. |
| **Descriptor code:** Not applicable. |
| **Automation:** Not applicable. |

| ANFM1116I | Data set: *datasetname* The OPEN call failed for the translate table |
| Explanation: The last data set in the search order cannot 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 retransmission attempt, IP PrintWay either deletes the print job from the JES spool or retains it on the JES spool. When the retention time expires, IP PrintWay automatically deletes the print job from the JES spool. |
| **Operator response:** None. |
| **System programmer response:** For the data set search order, see z/OS Infoprint Server Operation and Administration. One of these data sets must be cataloged on the system. |
| **Problem determination:** Not applicable. |
| **Module:** Not applicable. |
| **Source:** Infoprint Server |
| **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 hyperspace request is 524,288 blocks.

System action: IP PrintWay attempts to retransmit the document to the printer. If this is the last retransmission 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.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

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

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

System action: IP PrintWay attempts to retransmit the document to the printer. If this is the last retransmission 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.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
ANFM1120I  The host name of the system where IP PrintWay is running: hostname

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

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

ANFM1120I  host name invalid.

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

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

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

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

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 that is 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 message ANFM1120I displays the correct host name.

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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

ANFM1158I  The default single byte translate table could not be loaded.

**Explanation:** The default single-byte translation table cannot be loaded from disk.

**System action:** IP PrintWay attempts to retransmit the document to the printer. If this is the last retransmission 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

ANFM1158I  The default single byte translate table could not be loaded.

**Explanation:** The default single-byte translation table cannot be loaded from disk.

**System action:** IP PrintWay attempts to retransmit the document to the printer. If this is the last retransmission 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
ANFM1160I  ANFM1165I

System action: IP PrintWay attempts to retransmit the document to the printer. If this is the last retransmission 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 by 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.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

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

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

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

System action: The FSA continues processing.

Operator response: None.

System programmer response: Look up the ERRNO in the [z/OS V2R2.0 Communications Server: IP Sockets Application Programming Interface Guide and Reference] to determine the cause of the error.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

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 is 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 retransmission 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.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

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

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

System action: None.
Operator response: None.
System programmer response: Verify that the printed output is correct.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
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 retransmission 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.
Module: Not applicable.
Source: Infoprint Server
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 cannot 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 retransmission 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.
Module: Not applicable.
Source: Infoprint Server
ANFM1171I - ANFM1174I

Module: Not applicable.
Source: Infoprint Server
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 that is 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 retransmission 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.

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

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

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

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

System action: IP PrintWay attempts to retransmit the document to the printer. If this is the last retransmission 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 V2R2 Infoprint Server Operation and Administration. One of these data sets must be cataloged on the system. Verify that the CONVXLAT program created the double-byte translate table data set that is specified by the table search hierarchy. For more information about CONVXLAT, see z/OS V2R2.0 Communications Server: IP Configuration Reference.

Problem determination: Not applicable.

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

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

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

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

System action: The erroneous character is translated by 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 by 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 that is 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.

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

ANFM1174I  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 secondchar is the second character of a double-byte character in the data set.
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 by 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 by 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 that is being transmitted to see whether 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.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

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

Explanation: The double-byte translation table cannot be loaded from disk. See previous messages for indication of an allocation error.

System action: IP PrintWay attempts to retransmit the document to the printer. If this is the last retransmission 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 option TRANSLATETABLE or XLATETABLE with a valid name for a translate table. For the data set search order, see z/OS Infoprint Server Operation and Administration. One of the data sets in the search order must be cataloged on the system.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

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

Explanation: A value was entered in the Maximum document size field of the printer definition but the data set is larger than the size specified. This field specifies the maximum document size to send to the printer or 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 retransmission, or if no retransmissions are requested, IP PrintWay basic mode retains the data set on the JES spool for the amount of time that is 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 completed all retransmissions. For more information, see z/OS Infoprint Server Operation and Administration.

Operator response: None.

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

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

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

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

System action: None.

Operator response: None.

System programmer response: Verify that the printed output is correct.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
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 that are associated with the failed job contain 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 retransmission 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.
Module: Not applicable.
Source: Infoprint Server
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.
Module: Not applicable.
Source: Infoprint Server
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 that is created by the IEBIMAGE program.

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

**ANFM1196I** Data set: `datasetname` The OPEN call failed for SYS1.IMAGELIB

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

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

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

System programmer response: Make sure the SYS1.IMAGELIB is cataloged on the system.

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

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

Explanation: The formatting option Use FCB was specified for a PostScript data set. These are incompatible options.
In the message text, *datasetname* is the name of the data set.

**System action:** IP PrintWay attempts to retransmit the document to the printer. If this is the last retransmission 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 that is selected in the Formatting field of the printer definition.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**ANFM1198I**

**Data set:** *datasetname* There was an error loading one of the ICONV tables:

ICONV return code = *errno* document code page = *coded character set name*

**Printer code page** = *coded character set name*

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

**System action:** IP PrintWay attempts to retransmit the document to the printer. If this is the last retransmission 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 [IBM Programming Guide](https://www.ibm.com) sections “Code Set Converters Supplied” and “Universal Coded Character Set Converters”. To correct a job that IP PrintWay basic mode is processing, use Infoprint Server ISPF panels to update the IP PrintWay basic mode transmission queue record for the data set. Specify a valid coded character set name in the translation options section of the queue record. Also, use Infoprint Server ISPF panels to correct the coded character set names in the *Document code page* and *Printer code page* fields in the printer definition in the Printer Inventory. The document code page might be specified in the FSS definition for IP PrintWay basic mode in the Printer Inventory instead of in the printer definition.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**ANFM1200I**

**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 that is 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 - 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 retransmission 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 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 that the network connection is working.
- If the LPD requires that the z/OS port is in the range 721 - 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](https://www.ibm.com/support/knowledgecenter/SS5DLA_zosinfoprint/infoprint/infoprint/customize/infoprintcustomize0003.html).
- 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:
  ```sh
smit mkhosts lpd 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**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 nonzero return code in response to the null byte that IP PrintWay sent after it sent 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 retransmission 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 is 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](https://www.ibm.com/support/knowledgecenter/SS5DLA_zosinfoprint/infoprint/infoprint/customize/infoprintcustomize0003.html) and [z/OS MVS Planning: Workload Management](https://www.ibm.com/support/knowledgecenter/SS5DLA_zosinfoprint/infoprint/infoprint/customize/infoprintcustomize0003.html).

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**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 nonzero return code from the RECEIVE CONTROL FILE command. Error messages that pertain to the error might be sent. See the message log for the related messages.

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

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

Module: Not applicable.

Source: Infoprint Server

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 nonzero return code was received from the LPD after the control file is sent. Error messages that pertain to the error might be sent. See the message log for the related messages. The nonzero 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, and print queue is the target print queue.

System action: IP PrintWay attempts to retransmit the document to the printer. If this is the last retransmission 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.

Module: Not applicable.

Source: Infoprint Server

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 nonzero return code from the RECEIVE DATA FILE command. Error messages that pertain to the error might be sent. For the related messages, see the message log.

System action: None.

Operator response: None.

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

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
necessary, and also retransmit the data set if IP PrintWay basic mode completed all retransmissions. For more information, see z/OS Infoprint Server Operation and Administration.

Operator response: None.

System programmer response: Verify that the LPD accepts the RECEIVE CONTROL FILE FIRST command. Not all LPDs support this command.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

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

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

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

System action: IP PrintWay attempts to retransmit the document to the printer. If this is the last retransmission 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.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

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

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

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

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

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 32 K. 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 retransmission, or if no retransmissions are requested, IP PrintWay basic mode retains the data set on the JES spool for the amount of time that is specified for failed transmissions and then deletes the data set.

Operator response: None.

System programmer response: Correct the BDS exit and ask the job submitter to resubmit the job.

User response: Resubmit the job after the problem is fixed.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: 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 32 K. 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 retransmission, or if no retransmissions are requested, IP PrintWay basic mode retains the data set on the JES spool for the amount of time that is specified for failed transmissions and then deletes the data set.

**Operator response:** None.

**System programmer response:** Correct the EDS exit and ask the job submitter to resubmit the job.

**User response:** Resubmit the job after the problem is fixed.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**ANFM1608I**  FSS/FSA: *fss/fsaname* External tracing has stopped

**Explanation:** External trace records are no longer being generated.

In the message text, *fss/fsaname* is the FSS name from the FSS definition or FSA name.

**System action:** Tracing stops.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
**ANFM1610I • ANFM1651I**

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**ANFM1610I** FSS/FSA: ```fss/fsaname``` GTF return code = *retcode*

**Explanation:** Generalized Trace Facility (GTF) 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

This message might be received validly when you are starting a trace. If the message is received, GTF was NOT started with the correct USR event IDs. You must specify USR=FD1 to GTF when it is started.

In the message text, ```fss/fsaname``` is the FSS name from the FSS definition or FSA name. *retcode* is the GTF return code.

**System action:** The action depends on the return code. For return codes 18 and 20, tracing continues to GTF. For all other return codes, GTF tracing stops.

**Operator response:** None.

**System programmer response:** For more information about the return codes, see [z/OS MVS Diagnosis: Tools and Service Aids](https://www.ibm.com/docs/en/zos?topic=anfm1610).

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**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 retransmission, or if no retransmissions are requested, IP PrintWay basic mode retains the data set on the JES spool for the amount of time that is 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**ANFM1650I** Data set: ```datasetname``` The SNA PRINTWAY basic mode attempted to send a data set to a VTAM controlled printer.

**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 retransmission, or if no retransmissions are requested, IP PrintWay basic mode retains the data set on the JES spool for the amount of time that is 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**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 retransmission, or if no retransmissions are requested, IP PrintWay basic mode retains the data set on the JES spool for the amount of time that is 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.

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

ANFM1653I  Data set: datasetname The SNA END
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 retransmission, or if no retransmissions are requested, IP PrintWay basic mode retains the data set on the JES spool for the amount of time that is 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.

Module:  Not applicable.
Source:  Infoprint Server
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 connected 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 retransmission 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 V2R2.0 Communications Server: IP and SNA Code.

Problem determination:  Not applicable.

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

ANFM1655I  Data set: datasetname A VTAM STATE error has occurred: The state is state

Explanation:  An error occurred while IP PrintWay basic mode was sending a data set to a VTAM controlled printer.

In the message text, state is the state of the VTAM printer.

Problem determination:  Not applicable.
ANFM1656I • ANFM1658I

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 retransmission 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.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

ANFM1656I Data set: datasetname A VTAM OPEN error has occurred: The return code = code  
The reason code = code  

Explanation: A VTAM error occurred while IP PrintWay basic mode was trying to send a data set to a VTAM controlled printer.

In the message text, datasetname is the name of the data set and code is the return code or reason code from VTAM.

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

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

System programmer response: For information about the VTAM return code, see z/OS V2R2.0 Communications Server: IP and SNA Codes.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

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 was not 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 retransmission 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.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
**ANFM1659I** Data set: `datasetname` The SNA attachment function code at the time of the error: `functioncode`

**Explanation:** An associated message identifies the SNA error that occurred.

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

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**ANFM1704W** The destination `printer-url` does not support the attributes `{attribute-list}`.

**Explanation:** IP PrintWay basic mode used the Internet Printing Protocol (IPP) to transmit a data set to the indicated printer. The printer, however, does not support all of the IPP job attributes that IP PrintWay basic mode sent with the data set. The job submitter might specify the IPP job attributes, or Infoprint Server might generate the IPP job attributes from corresponding Infoprint Server job attributes, JCL parameters, or printer attributes that are 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**ANFM1700E** Data set: `datasetname` The function `function` failed while processing data set `datasetname` with the message `message`.

**Explanation:** A print function failed.

In the message text, `function` is the function that failed. `datasetname` is the name of the data set that IP PrintWay basic mode was processing at the time of the error. `message` is the message that contains more information about the error.

**System action:** See the system action for message `message`.

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**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.
IP PrintWay basic mode displays message ANFM102I with the system completion code and the associated abend reason codes. This section describes the last 2 bytes of the abend reason code.

0004
Explanation: The ESTAI call to establish ESTAI failed.
System action: IP PrintWay basic mode ends 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 ends 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 ends 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 socket interface.
System action: IP PrintWay basic mode ends 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 ends 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 ends 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 MB line failed.
System action: IP PrintWay basic mode ends 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 ends abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0014
Explanation: An incorrect parameter was specified on the START command.
**001C**  
**Explanation:** The ATTACH call for QSCAN failed.  
**System action:** IP PrintWay basic mode ends 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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**0020**  
**Explanation:** IP PrintWay basic mode detected an FSI order that was not valid.  
**System action:** IP PrintWay basic mode ends abnormally.  
**System programmer response:** This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

---

**0024**  
**Explanation:** The FSI RELDS request failed.  
**System action:** IP PrintWay basic mode ends 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.

---

**0028**  
**Explanation:** The FSI CHKPT request failed.  
**System action:** IP PrintWay basic mode ends 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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**0030**  
**Explanation:** The request to disconnect the FSS level FSI failed.  
**System action:** IP PrintWay basic mode ends 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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**0034**  
**Explanation:** The FREEMAIN macro for the FSS level courier control blocks failed.  
**System action:** IP PrintWay basic mode ends 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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**0038**  
**Explanation:** The ESTAI macro to cancel ESTAI failed.  
**System action:** IP PrintWay basic mode ends 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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**0039**  
**Explanation:** The load of module AOXVTM failed. IP PrintWay basic mode attempts to load AOXVTM if an APPL ID is specified in the FSS definition for IP PrintWay basic mode in the Printer Inventory. Module AOXVTM is part of Coax Printer Support V1.1 (5697-F51).  
**System action:** IP PrintWay basic mode ends abnormally.
System programmer response: Either install Coax
Print 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.

Explanation: An incorrect subsystem name was
specified on the START command.
System action: IP PrintWay basic mode ends
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.

Explanation: Call to the data base included an
incorrect length field.
System action: IP PrintWay basic mode ends
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.

Explanation: Call to the database encountered a bad
token.
System action: IP PrintWay basic mode ends
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.

Explanation: The DETACH call for the FSA subtask
failed.
System action: IP PrintWay basic mode ends
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.

Explanation: The Queue Manager component failed.
System action: IP PrintWay basic mode ends
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 ATTACH call for the FSA subtask
failed.
System action: IP PrintWay basic mode ends
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.

Explanation: SDUMP request for STOP FSS order
DUMP option returned an incorrect return code.
System action: IP PrintWay basic mode ends
abnormally.
System programmer response: This IP PrintWay basic
mode abend reason code indicates a possible system
007A

**Explanation:** A STOP FSS order with the ABEND and DUMP options was received.

**System action:** IP PrintWay basic mode ends 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 ends 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 ends 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 ends 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 ends 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 ends 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 ends 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 ends 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 ends 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 ends 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 MB line for FSA-related control blocks failed.
System action: IP PrintWay basic mode ends 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 ends 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 ends 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 ends 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 ends 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 ends 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 ends 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 ends 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 ends abnormally.
010B

**Explanation:** The OPEN call to the transmission queue failed.

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

010C

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

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

**System programmer response:** This IP PrintWay basic mode abend reason code indicates a possible system error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0116

**Explanation:** The GETMAIN operation failed.

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

**System programmer response:** Increase the size on the REGION parameter of the EXEC statement in the IP PrintWay basic mode startup procedure.

0118

**Explanation:** The FSI SEND request (to inform JES that FSA initialization was not successful) failed.

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

0121

**Explanation:** The state for the change state request is incorrect.

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

0122

**Explanation:** The FREEMAIN of storage kept across restarts failed.

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

0124

**Explanation:** The FSI GETDS request to acquire a data set failed.

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

0144
Explanation: An error occurred while IP PrintWay basic mode was getting a record from JES.
System action: IP PrintWay basic mode ends 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 ends 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 is generated.
System action: IP PrintWay basic mode ends 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 ends 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 ends 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 ends 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 ends 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 ends 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 ends 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 ends 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 ends 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 ends 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 ends 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 ends abnormally.

System programmer response: Make sure that you used the ANFQINIT job to initialize the IP PrintWay transmission-queue data set before you run IP PrintWay basic mode.

If the transmission-queue data set contains queue entries when IP PrintWay is not running, the data set is probably 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 is 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.

0202

Explanation: The MODCB call for initialization of the transmission queue failed.

System action: IP PrintWay basic mode ends abnormally.

System programmer response: Make sure that you used the ANFQINIT job to initialize the IP PrintWay transmission-queue data set before you run IP PrintWay basic mode.

If the transmission-queue data set contains queue entries when IP PrintWay is not running, the data set is probably 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 is 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 ends abnormally.

System programmer response: Make sure that the data in the IP PrintWay basic mode transmission-queue data set is not 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 ends abnormally.

System programmer response: Make sure that the data in the IP PrintWay basic mode transmission-queue data set is not 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 ends abnormally.

System programmer response: Make sure that the data in the IP PrintWay basic mode transmission-queue data set is not 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 ends abnormally.

System programmer response: Make sure that the data in the IP PrintWay basic mode transmission-queue data set is not 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 ends abnormally.

System programmer response: Make sure that the data in the IP PrintWay basic mode transmission-queue data set is not 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 ends abnormally.

System programmer response: Make sure that the data in the IP PrintWay basic mode transmission-queue data set is not 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 ends abnormally.

System programmer response: Make sure that the data in the IP PrintWay basic mode transmission-queue data set is not 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 ends abnormally.

System programmer response: Make sure that the data in the IP PrintWay basic mode transmission-queue data set is not 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 ends abnormally.
System programmer response: Make sure that the data in the IP PrintWay basic mode transmission-queue data set is not 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 ends abnormally.
System programmer response: Make sure that the data in the IP PrintWay basic mode transmission-queue data set is not 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 ends abnormally.
System programmer response: Make sure that the data in the IP PrintWay basic mode transmission-queue data set is not 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 ends abnormally.
System programmer response: Make sure that the data in the IP PrintWay basic mode transmission-queue data set is not 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 ends abnormally.
System programmer response: Make sure that the data in the IP PrintWay basic mode transmission-queue data set is not 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 ENDFREQ call to the transmission queue failed.
System action: IP PrintWay basic mode ends abnormally.
System programmer response: Make sure that the data in the IP PrintWay basic mode transmission-queue data set is not 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 ends 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 ends 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 ends abnormally.
System programmer response: This IP PrintWay basic
02A2  •  0300

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 ends abnormally.

System programmer response:  Make sure that the data in the IP PrintWay basic mode transmission-queue data set is not 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 ends abnormally.

System programmer response:  Make sure that the data in the IP PrintWay basic mode transmission-queue data set is not 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 ends abnormally.

System programmer response:  Make sure that the data in the IP PrintWay basic mode transmission-queue data set is not 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 ends 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.

02A6

Explanation:  The transmission queue staging module attempted to exit while jobs were still on its staging queue.

System action:  IP PrintWay basic mode ends 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 ends abnormally.

System programmer response:  Make sure that the data in the IP PrintWay basic mode transmission-queue data set is not 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 ends abnormally.

System programmer response:  Make sure that the data in the IP PrintWay basic mode transmission-queue data set is not 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 ends 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 occurred.

System action: IP PrintWay basic mode ends 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 ends 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 nonzero return code.

System action: IP PrintWay basic mode ends 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 ends 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 nonzero return code.

System action: IP PrintWay basic mode ends 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.

0306
Explanation: The RELEASE of hiperspace extended area received a nonzero return code.

System action: IP PrintWay basic mode ends 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 ends 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 ends 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 nonzero return code was received from ANFLGHPR.

System action: IP PrintWay basic mode ends 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 ends 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 ends 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 ends 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 used to construct the LPD control file was exceeded.
System action: IP PrintWay basic mode ends 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 32 KB.
System action: IP PrintWay basic mode ends 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 ends 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 ANFFSLINE detected an internal timer error.
System action: IP PrintWay basic mode ends 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 ANFFSLINE detected that a product is disabled or a service is not available.
System action: IP PrintWay basic mode ends abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
0507
Explanation: Module ANFSLINE detected a state error in module AOXVTM.

System action: IP PrintWay basic mode ends abnormally.

System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0508
Explanation: Module ANFFSA detected a state error in module AOXVTM.

System action: IP PrintWay basic mode ends 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 ends 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 ends 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 ends 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 ends 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 that is specified in the MODIFY command for IP PrintWay basic mode.

System action: IP PrintWay basic mode ends 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 that is specified in the MODIFY command for IP PrintWay basic mode.

System action: IP PrintWay basic mode ends 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 that is specified in the MODIFY command for IP PrintWay basic mode.

System action: IP PrintWay basic mode ends 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 that is specified in the MODIFY command for IP PrintWay basic mode.

System action: IP PrintWay basic mode ends 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 ends 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 ends 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 ends 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 ends 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 ends 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 ends 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 ends 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 ends 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 ends 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 that is contained in the IRB is not valid.

**System action:** IP PrintWay basic mode ends 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 that is contained in the IRB is not valid.

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

**System programmer response:** This IP PrintWay basic
mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

09F0
Explanation: ANFZFORC received an incorrect command.
System action: IP PrintWay basic mode ends 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 ends 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 ends 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 ends 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 ends abnormally.
Chapter 1. IP PrintWay basic mode (ANF) messages and codes

0D08
Explanation: A pseudo-subpool block does not exist.
System action: IP PrintWay basic mode ends 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.

0D09
Explanation: A pseudo-subpool chain does not exist.
System action: IP PrintWay basic mode ends 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.

0D0A
Explanation: A request for page-fixed storage failed. A nonzero return code was received from PGFIXP.
System action: IP PrintWay basic mode ends 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.

0D0B
Explanation: The GETMAIN call failed when getting storage for a new control block.
System action: IP PrintWay basic mode ends abnormally.
System programmer response: Increase the size on the REGION parameter of the EXEC statement in the IP PrintWay basic mode startup procedure.

0D10
Explanation: The type of FREEMAIN request that was received by IP PrintWay basic mode was not valid.
System action: IP PrintWay basic mode ends 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.

0D11
Explanation: An element to be freed was not in use.
System action: IP PrintWay basic mode ends abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D12
Explanation: No pseudo-subpool storage blocks exist.
System action: IP PrintWay basic mode ends abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D13
Explanation: No element storage blocks exist.
System action: IP PrintWay basic mode ends abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D14
Explanation: The correct element storage-block chain cannot be located.
System action: IP PrintWay basic mode ends abnormally.
System programmer response: This IP PrintWay basic mode abend reason code indicates a possible logic error. Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

0D15
Explanation: The element address was not in the bounds of any of the storage blocks.
System action: IP PrintWay basic mode ends 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.
OD16  •  0EA0

Support Center, or use your electronic link with IBM service for assistance.

OD16
Explanation: A page free of specified storage failed. A nonzero return code was received from PGMFREEP.
System action: IP PrintWay basic mode ends 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.

OD17
Explanation: The storage block chain for the specified pseudo subpool cannot be found.
System action: IP PrintWay basic mode ends 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.

OD18
Explanation: A nonzero return code was received from the system FREEMAIN macro.
System action: IP PrintWay basic mode ends 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 an 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.

OD19
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 ends 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.

Tip: Save the job log for the IP PrintWay basic address space because it might contain a CEEDUMP snapshot that can help with problem determination.

0EA0
Explanation: The Begin Data Set exit specified a document header length greater than 292 bytes in field XTP_DOC_HEADER_LENGTH.
System action: IP PrintWay basic mode ends abnormally.
System programmer response: Correct the Begin Data Set exit.
**0EA1**

**Explanation:** The Begin Data Set exit specified a document trailer length greater than 292 bytes in field XTP_DOC_TRAILER_LENGTH.

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

**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 ends 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 ends 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 ends 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.

---

**0E90**

**Explanation:** The hiperspace initialization failed.

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

**System programmer response:** None.

---

**0E91**

**Explanation:** The INITAPI call failed. TCP/IP might not be started, or the TCP/IP job name that is 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 ends abnormally.

**System programmer response:** Make sure that TCP/IP is 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 TCP/IP 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 TCPIP.DATA data set for IP PrintWay to 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 SYSCTPD 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](https://www.ibm.com/support/knowledgecenter/SSDTHY_7.1.0/com.ibm.zos.zosinfoprint_server/). If the TCP/IP job names match, this IP PrintWay basic mode abend reason code indicates a possible logic error.
### 0E92

**Explanation:** A bad IP address was encountered when trying to connect to TCP/IP.

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

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

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

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

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

**System action:** IP PrintWay basic mode ends 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 ends 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 occurred at LOAD.

**System action:** IP PrintWay basic mode ends 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 occurred at initialization.

**System action:** IP PrintWay basic mode ends 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[s][nnnn 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.

nnnn 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.

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:
For example:

5/19/13 17:04:13 (UTC-7) priority:info user:OMVSID system:SYS1 inventory:AOP1
job:PS000469 output_device:lpr://myprinter.xyz.com/RAW
program:aopoutd msg:AOP3613I The print job was completed successfully.

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 file.lwp, this field contains FILE#LWP. This field might not contain the system ID, which is the first qualifier in a fully qualified data set name.</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 that is 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: direct_sockets://hostname:port The hostname and port number of the IP PrintWay printer.</td>
</tr>
</tbody>
</table>
**lpr://hostname/queue**
The hostname and print queue name of the IP PrintWay printer.

**mailto:**
An indication that the output data set is to be sent to an email destination.

**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 that is running in the printer. Examples are:

- ipp://myprinter.xyz.com

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

**priority**
The severity of the message:

- **action** A situation occurred that ended processing.
- **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.JESSStatusDaemon** The Printer Inventory Manager status daemon.
- **aopd.JESScaverger** The Printer Inventory Manager scavenger daemon.
- **aopippd** The IPP Server daemon. It processes print requests from remote clients that use the Internet Printing Protocol (IPP).
- **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 Internet Protocol network and to email destinations.
- **aopsapd** The SAP callback daemon. It handles callback notification for the SAP Output Management System (OMS).
- **aopssid** The Infoprint Central daemon. It communicates with JES.
- **aopssubd** The Print Interface subsystem daemon. It processes output data sets that specify the Print Interface subsystem on the SUBSYS parameter of the DD statement.
AOP001E

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
Infoprint Central

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 specified a printer definition that is not defined in the Infoprint Server Printer Inventory or is defined in the Printer Inventory but its matching output device object is not built yet.

The printer definition name might be specified on a command, such as the lp, lpr, or AOPCMDN 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.

Operator response: Not applicable.

System programmer response: Define a printer in the Printer Inventory if requested.

User response: Make sure that you spelled the name of the printer definition correctly, and used the correct uppercase and lowercase characters. If you specify the name of the printer definition in the SUBSYS parameter of a DD JCL statement, enclose the printer definition name in single quotation marks if it contains lowercase characters.

If the name is lp1, specify the name of the printer definition on the print command or in the SUBSYS parameter on the DD JCL statement. If you use the lp command, you can instead specify the name of the printer definition in the PRINTER or LPDEST environment variable.

You can run the z/OS UNIX lpstat -p command to get a list of available printers in the Printer Inventory.

• If a definition for the printer that you specified exists but IP PrintWay was recently restarted, wait for the matching output device object to be built, and then enter the command or run the job again.

• If another appropriate printer definition exists, enter the command or run the job again, specifying that printer.
• Otherwise, ask your administrator to define an appropriate printer.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**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 completed processing. After this message, the job ID and final status of the data set is reported. The final status can be one of these:

- **completed** The file was processed successfully.
- **failed** Processing failed.
- **purged** The file was deleted before printing.

For completed or failed data sets, the files remain on the JES spool for one of these reasons:

- Your administrator specified that files are retained after transmission to a LAN printer or to a print server. The file is 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 be finished printing, or a transmission failure might have occurred.
- The operator deleted the data set from the system spool.
- The system programmer offloaded all SYSOUT data sets from the JES spool.

**System action:** Processing continues.

**Operator response:** Not applicable.

**System programmer response:** Not applicable.

**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.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

AOP004E A system error occurred during processing.

**Explanation:** A system error occurred during the processing of the request. This message might be followed by message AOP0047E, which contains diagnostic information.

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

**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 must be different from other UIDs in the installation.

  Note: If you use a JCL 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 is 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.

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

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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.

Operator response: Not applicable.

System programmer response: Not applicable.

User response: Submit the request with a valid job ID.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP007I  Job `infoprint-jobid` (z/OS `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 that 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 that is assigned to the printer definition for the printer in the Infoprint Server Printer Inventory.

System action: Processing continues.

Operator response: Not applicable.

System programmer response: Not applicable.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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.

Operator response: Not applicable.

System programmer response: Not applicable.

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.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.
**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 that is defined for the printer. The message is typically 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.
**Operator response:** Not applicable.
**System programmer response:** Check the printer definition that is associated with the print job for the cause of the error. If the printer definition did not cause the error, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
**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 the [z/OS Infoprint Server User’s Guide](https://www.ibm.com/support/knowledgecenter/en/SSLVMB_5.2.0/com.ibm.zos.v5r2.doc/infoprint4zusg/infoprint4zusg.html).

**Problem determination:** Not applicable.
**Module:** Not applicable.
**Source:** Infoprint Server.
**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 occurred. An error occurred attempting to dynamically allocate a data set.

In the message text:
- `dsname` The name of the data set.
- `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.
**Operator response:** Not applicable.

**User response:** Notify your system programmer that this error occurred.
**Problem determination:** Not applicable.
**Module:** Not applicable.
**Source:** Infoprint Server.
**Routing code:** Not applicable.
**Descriptor code:** Not applicable.
**Automation:** Not applicable.

**AOP011E** Data set dsname is not found.

**Explanation:** The data set does not exist or is not cataloged.

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

**System action:** The request was not completed.
**Operator response:** Not applicable.
**System programmer response:** Mount the volume that contains the data set.
**User response:** Catalog the data set or specify the correct data set name.
**Problem determination:** Not applicable.
**Module:** Not applicable.
**Source:** Infoprint Server.
**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 is located is not currently mounted.

In the message text:
- `dsname` The name of the data set.
- `volser` Specifies the serial number of the magnetic tape or DASD volume to contain the data set.

**System action:** The request was not completed.
**Operator response:** Not applicable.
**System programmer response:** Mount the volume that contains the data set.
**User response:** Notify your system programmer that this error occurred.
**Problem determination:** Not applicable.
**Module:** Not applicable.
**Source:** Infoprint Server.
**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.
Operator response:  Not applicable.
System programmer response:  Not applicable.
User response:  Use the lpstat command to display job IDs known to the system. Submit the request again with a valid job ID specified.
Problem determination:  Not applicable.
Module:  Not applicable.
Source:  Infoprint Server.
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.
Operator response:  Not applicable.
System programmer response:  Contact the IBM Support Center, or use your electronic link with IBM service for assistance.
User response:  Notify your system programmer that this error occurred.
Problem determination:  Not applicable.
Module:  Not applicable.
Source:  Infoprint Server.
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.
Operator response:  Not applicable.
System programmer response:  Not applicable.
User response:  None.
Problem determination:  Not applicable.
Module:  Not applicable.
Source:  Infoprint Server.
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.
Operator response:  Not applicable.
System programmer response:  Not applicable.
User response:  None.
Problem determination:  Not applicable.
Module:  Not applicable.
Source:  Infoprint Server.
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.
Operator response:  Not applicable.
System programmer response:  Not applicable.
User response:  None.
Problem determination:  Not applicable.
Module:  Not applicable.
Source:  Infoprint Server.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
AOP019E  attribute-name attribute-value exceeds the maximum value maximum-value supported by printer printer-name.

Explanation:  attribute-value specified for attribute-name in the print request (for example: lp -o attribute-name=attribute-value) exceeds the maximum value (maximum-value) allowed by the destination printer definition (printer-name). For example, the copies attribute in the print request exceeds the maximum copies that are defined in the printer definition.

System action:  The request was not completed.

Automation:  Not applicable.

System programmer response:  Not applicable.

User response:  Submit the request again with attribute-value less than or equal to maximum-value.

Problem determination:  Not applicable.

Module:  Not applicable.

Source:  InfoPrint Server.

Routing code:  Not applicable.

Descriptor code:  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 specify the duplex=tumble attribute. However, the printer definition indicates that the printer does not support the tumble option.

In the message text:

Printer

Name of the printer 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 of the InfoPrint Server job attribute whose value is not supported. If you used z/OS JCL to submit the request, you might specify a JCL parameter that corresponds to this job attribute. Or, InfoPrint Server might internally specify 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 be 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.

Operator response:  Not applicable.

System programmer response:  If you want the printer definition to accept the attribute-value, use the InfoPrint Server ISPF panels to change the supported data formats or other supported values in the printer definition. For information about how to control the validation that InfoPrint Server does, see z/OS InfoPrint Server Operation and Administration.

User response:  If you specified the attribute-name attribute or a corresponding JCL parameter, specify a value for the attribute or 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 that is indicated in attribute-value. Or, your administrator might be able to specify a data transform in the printer definition to transform your data format to one that the printer supports.

If you think that InfoPrint Server did not accurately detect the data format of your data, make sure that your data is not corrupted and make sure that the logical record length (LRECL) specified on the DD statement, if one is used, is correct. In some cases, you might be able to correct the problem by specifying the data format in the InfoPrint Server document-format job attribute. For example, if you use JCL to print the data set, you can specify the document-format attribute in the PRTATTRS parameter on the OUTPUT JCL statement.

For information about InfoPrint Server job attributes and the PRTATTRS JCL parameter, see z/OS InfoPrint Server User’s Guide.

Problem determination:  Not applicable.

Module:  Not applicable.

Source:  InfoPrint Server.

Routing code:  Not applicable.

Descriptor code:  Not applicable.

Automation:  Not applicable.

AOP021E  Output descriptor failed: error parameter, return code retcode, reason code reencode.
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.
Operator response: Not applicable.
System programmer response: Correct the attribute in the printer definition that corresponds to the error parameter. If the error persists, contact the IBM Support Center, or use your electronic link with IBM service for assistance.
User response: Correct the attribute on the print request that corresponds to the error parameter. Or, notify your system programmer that this error occurred.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP022W objectname errmsgno errmsgtext
Explanation: An error occurred with object name objectname. objectname is the name of the file, filter program, or other object in error. errmsgno errmsgtext are the message number and message text that is generated by a system program or by the filter program.
System action: Processing continues.
Operator response: Not applicable.
System programmer response: See the description for message errmsgno.
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.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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.
Operator response: Not applicable.
System programmer response: Reduce the total number of jobs currently in the system.
User response: Enter your print request again. If the error persists, notify your system programmer that this error occurred.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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.
In the message text, reqid identifies the control code.
System action: The request was not completed.
Operator response: Not applicable.
System programmer response: Make sure that the line printer requester (lpr) on the client system creates control files that contain only control codes that are defined by RFC 1179.
User response: Notify your system programmer that this error occurred.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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.
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 be exceeded.
AOP026E  Job jobid on printer printer-name could not be cancelled.

Explanation: A cancel request for job jobid failed and the job cannot be deleted from the JES spool. To cancel a print job, the job must complete 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.

Operator response: To cancel a print job that is transmitted to a LAN printer with IP PrintWay and is 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 the z/OS Infoprint Server Operation and Administration.
- IP PrintWay extended mode: Use Infoprint Central to delete the data set.

System programmer response: Not applicable.

User response: To cancel a print job that is printed to a LAN printer in your TCP/IP or SNA network, ask your IP PrintWay operator to cancel it.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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 that is indicated before the message number is not running APF-authorized. This is most likely because of an error during installation.

System action: The request was not completed.

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...

AOP028E  [optionsource] attributename is ambiguous for: attributelist

Explanation: The attribute attributename is an abbreviation for any one of the attributes that are 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.

Operator response: Not applicable.

System programmer response: Not applicable.

User response: Correct the attribute name, specifying enough characters in the attribute name to make the name unique. Then, enter your print request again.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP029E  SYSOUT data set allocation failed. JES may be down-level.

Explanation: The print request was not allocated on the JES spool. This might occur because JES is not at the required level.

System action: The request was not completed.

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 exceed the maximum number of SYSOUT data sets allowed on the spool.

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

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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 that is specified in the printer definition for the printer in the Printer Inventory.

System action: The request was not completed.

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.

User response: Notify your system programmer or administrator that this error occurred. After the error is corrected, enter your print request again.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP031E  Environment variable file filename has incorrect attributes.

Explanation: The aopdemon command specifies a variable file that might modify the daemon's environment. To avoid unauthorized changes to the daemon's environment, any variable file that aopdemon processes must be owned by UID=0 and writable only by the owner.

In the message text, filename is the name of the optional variable file that is specified in the aopdemon command.

System action: The requested daemon is not started.

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

System programmer response: Either change the ownership and permissions of the variable file so that it is owned by UID=0 and writable only by the owner, or supply another variable file with the correct ownership and permissions.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: The aopdemon command.

Routing code: Not applicable.

Descriptor code: Not applicble.

Automation: Not applicable.

AOP032E  [optionsource] The attribute name attributename is not valid.

Explanation: The attribute that is 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.

Operator response: If the print job is on the JES spool, delete it.

System programmer response: Not applicable.

User response: Submit the request again with a valid attribute assignment.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

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.
Operator response: Not applicable.
System programmer response: Not applicable.
User response: Submit the request again with a matching value for stringvalue.

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

AOP034E [optionsource] The value stringvalue is not valid.
Explanation: The value stringvalue is not valid for optionsource.

In the message text, optionsource identifies where the error occurred. For example, if optionsource is "-o", the error occurred in the -o option. If optionsource is the name of an attributes file, the error occurred in the named attributes file. If optionsource is printer-uri, the Uniform Resource Identifier (URI) specified in the printer definition is not valid.

System action: The request was not completed.
Operator response: Not applicable.
System programmer response: Not applicable.
User response: Submit the request again with the correct value. If optionsource is the name of an Infoprint Server configuration file, notify your system programmer that this error occurred.

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

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.

Operator response: If the print job is on the JES spool, delete it.

System programmer response: If the error occurred in an Infoprint Server configuration file, correct the error.

User response: Submit the request again with the correct value. If optionsource is the name of an Infoprint Server configuration file, notify your system programmer that this error occurred.

Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
<table>
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<tr>
<td>AOP036E</td>
<td>[optionsource] stringvalue is shorter than the minimum length of minimumlength.</td>
<td>stringvalue is shorter than the acceptable minimum length of minimumlength.</td>
<td>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.</td>
<td>The request was not completed.</td>
<td>Not applicable.</td>
<td>If the error occurred in an Infoprint Server configuration file, correct the error.</td>
<td>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.</td>
<td>Not applicable.</td>
<td>Not applicable</td>
<td>Infoprint Server</td>
<td>Not applicable</td>
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<tr>
<td>AOP037E</td>
<td>[optionsource] stringvalue is longer than the maximum length of maximumlength.</td>
<td>stringvalue is longer than the acceptable maximum length maximumlength.</td>
<td>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.</td>
<td>The request was not completed.</td>
<td>Not applicable.</td>
<td>If the error occurred in an Infoprint Server configuration file, correct the error.</td>
<td>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.</td>
<td>Not applicable.</td>
<td>Not applicable</td>
<td>Infoprint Server</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>AOP038E</td>
<td>[optionsource] value1 is less than the minimum value minimumvalue.</td>
<td>value1 is less than the acceptable minimum value minimumvalue.</td>
<td>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.</td>
<td>The request was not completed.</td>
<td>Not applicable.</td>
<td>If the error occurred in an Infoprint Server configuration file, correct the error.</td>
<td>Submit the request again with the correct value for value1. If optionsource is the name of an Infoprint Server configuration file, notify your system programmer that this error occurred.</td>
<td>Not applicable.</td>
<td>Not applicable</td>
<td>Infoprint Server</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>AOP039E</td>
<td>[optionsource] value1 exceeds the maximum value maximumvalue.</td>
<td>value1 exceeds the acceptable maximum value maximumvalue.</td>
<td>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.</td>
<td>The request was not completed.</td>
<td>Not applicable.</td>
<td>If the error occurred in an Infoprint Server configuration file, correct the error.</td>
<td>Submit the request again with the correct value for value1. If optionsource is the name of an Infoprint Server configuration file, notify your system programmer that this error occurred.</td>
<td>Not applicable.</td>
<td>Not applicable</td>
<td>Infoprint Server</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
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</table>
### AOP040E

**Message:**
A[optionsource] The minimum number of values is minimumnum.

**Explanation:**
A request was sent with less than the minimum number of values minimumnum.

In the message text, optionsource identifies where the error occurred. For example, if optionsource is “-o”, the error occurred in the -o option. If optionsource is the name of an attributes file, the error occurred in the named attributes file.

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

**Operator response:**
Not applicable.

**System programmer response:**
If the error occurred in an Infoprint Server configuration file, correct the error.

**User response:**
Submit the request again with the correct number of values. If optionsource is the name of an attributes file, notify your system programmer that this error occurred.

**Problem determination:**
Not applicable.

**Module:**
Not applicable.

**Source:**
Infoprint Server.

**Routing code:**
Not applicable.

**Descriptor code:**
Not applicable.

**Automation:**
Not applicable.

### AOP041E

**Message:**
A[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, 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.

**Operator response:**
Not applicable.

**System programmer response:**
If the error occurred in an Infoprint Server configuration file, correct the error.

**User response:**
Submit the request again with the correct number of values. If optionsource is the name of an attributes file, notify your system programmer that this error occurred.

**Problem determination:**
Not applicable.

**Module:**
Not applicable.

**Source:**
Infoprint Server.

**Routing code:**
Not applicable.

**Descriptor code:**
Not applicable.

**Automation:**
Not applicable.

### AOP042E

**Message:**
source file exceeds the maximum value maximumvalue allowed by printer printer-name.

**Explanation:**
The size of the job that is submitted for printing, including all files in the job and all copies, exceeds the maximum size print job that is allowed for the selected printer. The administrator defines the maximum size that is 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.

**Operator response:**
Not applicable.

**System programmer response:**
To increase the size limit for jobs that are 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.

**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 that is allowed for this printer in the printer definition.

**Problem determination:**
Not applicable.

**Module:**
Not applicable.

**Source:**
Infoprint Server.

**Routing code:**
Not applicable.

**Descriptor code:**
Not applicable.

**Automation:**
Not applicable.

### AOP043E

**Message:**
The nesting level for attributes files has been exceeded.

**Explanation:**
The attributes file refers to an attributes file that also refers to an attributes file. The number of these nested attributes files exceeds 16 files.

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

**Operator response:**
Not applicable.

**System programmer response:**
Not applicable.

**User response:**
Change the attributes files to limit the number of nested attributes files to 16, and submit your print request again.

**Problem determination:**
Not applicable.

**Module:**
Not applicable.

**Source:**
Infoprint Server.

**Routing code:**
Not applicable.

**Descriptor code:**
Not applicable.

**Automation:**
Not applicable.
AOP044I • AOP047E

Automation: Not applicable.

AOP044I Shutdown complete. (program: daemon)
Explanation: The daemon that is named at the end of the message was shut down.
System action: The named daemon was shut down.
Operator response: Restart the daemon if you want to.
System programmer response: Not applicable.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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.
Operator response: Not applicable.
System programmer response: Not applicable.
User response: Correct the attributes, and submit the print request again.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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.
Operator response: Not applicable.
System programmer response: Not applicable.
User response: To cancel a print job that is submitted by another user, contact your system operator.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.

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.
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.
User response: Correct the attributes, and submit the print request again.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

For more information about aopsetup, see z/OS Infoprint Server Customization.

If the exception-information in the message indicates a problem with permissions (for example, message EDC5139I Operation not permitted.), run the aopsetup shell script. For example, if you use the default group names for Infoprint Server operators (AOPOPER) and administrators (AOPADMIN), enter:
/usr/lpp/Printsrv/bin/aopsetup aooper aopadmin

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 is not expired.

One possible message text is:
aopd: AOP047E Cannot allocate memory

The message indicates that the aopd daemon 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:
aoplpd: AOP047E Bind() failed in TCPLlistener::TCPLlistener(const IPAddress&) at ./src/tcpconnect.cpp 98:
EDC8115I Address already in use. errno2=0x744c7247

90 z/OS V2R2 Infoprint Server Messages and Diagnosis
The message text indicates that the Infoprint Server LPD (aoplpd) attempted to use a port that is already used by another process. The process might be another instance of aoplpd that was started earlier, the standard MVS LPD (included with TCP/IP), or another process if the port is not 515. Check these:

1. From a z/OS UNIX System Services shell, enter one of these commands to determine whether an aoplpd process is already running:
   - If you are logged in as root or superuser (UID=0):
     ```bash
     ps -ef | grep aoplpd
     ```
   - If `dynamic-configuration=yes`:
     ```bash
     aopstat | grep aoplpd
     ```

2. If `aoplpd` is already running, enter the `aopstop` or `kill` command to end this process:
   ```bash
   aopstop -d lpd
   kill process_id
   ```

Then restart `aoplpd`. For example, enter this MVS command to run the AOPSTART JCL procedure:
```bash
START AOPSTART
```

3. If `aoplpd` is not already running, enter these commands to determine whether any other process is listening at the same port:
   ```bash
   onetstat | grep port
   ```

`port` is the port number that is 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 that uses 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.

4. Check the TCP/IP configuration file, `hlq.PROFILE.TCPIP`, to determine whether the port is reserved. Port numbers that are 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:

```
AOP047E bad allocation
```

The 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.

AOP048E

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, specify the following environment variable, and then stop and restart Infoprint Server.

```bash
_CEE_RUNOPTS=HEAP(32M,8M)
```

When Infoprint Server starts again, it automatically attempts to print the job again. For information about how to specify environment variables, see z/OS Infoprint Server Customization.

If the problem persists, contact the IBM Support Center, or use your electronic link with IBM service for assistance.

**User response:** Contact your system programmer.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

AOP048E **hostname: Unknown host.**

**Explanation:** Infoprint Server tried to resolve the printer's host name, but the `gethostbyname()` function cannot resolve it. This situation can occur for one of these reasons:

- The Domain Name Server (DNS) is not accessible from z/OS.
- No DNS entry exists for this host name.
- This host name is spelled incorrectly in the printer definition.
- This host name is spelled incorrectly in the DEST=IP: parameter on the JCL statement or in the `printer-ip-address` job attribute.

IP PrintWay extended mode requires that your DNS is 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 is able to do reverse lookup (from IP address to host name) if the host name or IP address is specified in a printer definition, DEST=IP: JCL parameter, or in the `printer-ip-address` job attribute. For more information, see z/OS Infoprint Server Customization.
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**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.

**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.

**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.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

AOP050E Cannot connect to inventory inventory, return code return-code, reason code reason-code.

**Explanation:** The Printer Inventory inventory is not currently active.

**System action:** The print request is not completed.

**Operator response:** None.

**System programmer response:** Start the Printer Inventory.

**User response:** Wait until the Printer Inventory is active, or contact the system programmer.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**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.

**Operator response:** Not applicable.

**System programmer response:** None.
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.
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 that the installation-supplied program is generating a filter name with a filter command.
User response: If you are using the filter command directly, specify a filter name. For more information, see cfilter.h and cfilter.c in the /usr/lpp/Printsrv/samples/ directory. If the message is coming from an installation-supplied program, contact the system programmer.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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 nonzero status.
System action: Processing continues.
Operator response: Not applicable.
System programmer response: If the error was sent by the transform daemon (aopxfd) and the named program 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.
User response: The current output request might be incomplete. Verify the request and resend it. If the problem recurs, contact the system programmer.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP054E  A protocol error occurred: message | data.
Explanation: If this message was displayed in message AOP003E, message was received and was not valid.
This error might occur in the HTTP protocol when IP PrintWay attempts to transmit data to a printer by using the Internet Printing Protocol (IPP).
In the message text, message is a message and data is the HTTP protocol data that has an error.
System action: The request is not completed.
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.

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

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**AOP056E**

**filename was not spooled.**

**Explanation:** The specified file name was not spooled. Messages that follow indicate the reason.

**System action:** The request is ended.

**Operator response:** Not applicable.

**System programmer response:** See other messages that are sent with this one.

**User response:** See other messages that are sent with this one.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**AOP057E**

**attribute_name1 also requires attribute_name2.**

**Explanation:** The first specified attribute requires that a value also be supplied for the second specified attribute.

**System action:** The request is ended.

**Operator response:** Not applicable.

**System programmer response:** Make sure the user supplies a value for **attribute_name2**.

**User response:** Supply a value for **attribute_name2**.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**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 ended.

**Operator response:** Not applicable.

**System programmer response:** Not applicable.

**User response:** Either do not set **attribute_spec** for this attribute, or do not supply a value for **attribute_name**.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**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 **pdu** command wrote the message, the **pdu** command was not accepted.

**Operator response:** Not applicable.

**System programmer response:** None.

**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](#).

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
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 ended.

**Operator response:** Not applicable.

**System programmer response:** None.

**User response:** Either do not specify `value` for `attribute_name1`, or do not supply a value for `attribute_name2`.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

Object class `object_class` object name `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 ended.

**Operator response:** Not applicable.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

Object class `object_class` object name `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.

**Operator response:** Not applicable.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

Object class `object_class` object name `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.

**Operator response:** Not applicable.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

Object class `object_class` object name `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.

**Operator response:** Not applicable.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
AOP065I count definitions were exported to filename.

Explanation: The specified number of printer definitions were exported to file name filename.

System action: Processing continues.

Operator response: Not applicable.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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 before 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.

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 installed the requested transform and 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.

User response: Submit the request with a valid -c filter option. If the -c option is valid, notify your administrator.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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 ended.

Operator response: Not applicable.

System programmer response: Not applicable.

User response: Specify a typed attribute name.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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:

Operator response: Not applicable.

System programmer response: Make sure that the transform class specified appears only once.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.
AOP070E  A timeout occurred in resource_id.

Explanation: The request failed because it exceeded a time limit that is associated with the resource identified in the message.

System action: The request was not completed.

Operator response: Not applicable.

System programmer response: Increase the time limit that is associated with the named resource.

User response: Notify your system programmer.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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.

Operator response: Not applicable.

System programmer response: Add the required operand to the printer definition.

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 that is missing the operand, notify your administrator.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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 ends.

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.

Module: Not applicable.

Source: Infoprint Server.

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 ends.

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.

User response: Contact your system programmer.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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 included with Infoprint Server. With the API, customers can 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.

Operator response: Not applicable.

System programmer response: Have the application developer rewrite the code that uses the API to eliminate the error.

User response: If you are the application programmer who is using the API, rewrite the code to eliminate the error. If you are not the application programmer, notify your system programmer of this error.

Problem determination: Not applicable.

Module: Not applicable.
AOP075I • AOP078W

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

AOP076E  The start of daemon daemon failed.
Explanation: The daemon cannot 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 ends.
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 is 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.
User response: Contact your system programmer.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP077I  Daemon daemon is already started.
Explanation: The daemon is already active and cannot be started again.
In the message text, daemon is the name of the daemon.
System action: The request to start the daemon again has no effect on the system.
Operator response: Not applicable.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP078W  Daemon daemon is not running.
Explanation: An attempt was made to stop a daemon that is not running. For example, you can see this message if you use the aopstop command when the Operating mode field is set to z/OS 2.2 on the ISPF System Configuration panel.
In the message text, daemon is the name of the daemon.
System action: The request has no effect on the system.
Operator response: Not applicable.
System programmer response: None.
User response: If the Operating mode field is set to z/OS 2.2 on the ISPF System Configuration panel, use the aopsend command to stop the daemon.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.

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AOP079I A shutdown of daemon daemon has been initiated.

Explanation: The system began to stop the daemon. The shutdown is not complete until message AOP044I, which indicates daemon shutdown, is displayed.
In the message text, daemon is the name of the daemon.

System action: Not applicable.
Operator response: Not applicable.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.

AOP080E Unexpected signal signal_number received.

Explanation: A daemon received an unexpected signal that it cannot process.

System action: The daemon stops abnormally.
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.
User response: Notify your system programmer.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.

AOP082E You are not authorized to run this utility.

Explanation: The user does not have correct authority to run the Printer Inventory Definition Utility (PIDU).

System action: PIDU stops.

AOP084E A object_class object_name is already defined with attribute_spec.

Explanation: The object of class object_class named object_name exists in the inventory, and its attribute_spec prevents the definition of the current object.

System action: The new object is not created.
Operator response: Not applicable.
System programmer response: None.
User response: Choose values for the attribute that do not conflict with those values of the named object_class object_name.
Problem determination: 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 is treated as not found until object_class1 object_name1 is defined.

System action: The request that tried to process object_class2 named object_name2 fails.

Operator response: Not applicable.

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.

Problem determination: Not applicable.

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

AOP087I GTF tracing started.

Explanation: Printer Inventory interface GTF tracing was started.

System action: Processing continues.

Operator response: Not applicable.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.
Source: Infoprint Server.
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.

Operator response: Not applicable.

User response: None.

Problem determination: None.

Module: Not applicable.
Source: Infoprint Server.
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 ended because of a network failure, a software error, or user action.

System action: Activity on the connection is ended.

Operator response: Not applicable.

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

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

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOP090E**

**Explanation:** A value is required for *attributename* to complete the request.

**System action:** The request is ended.

**Operator response:** Not applicable.

**System programmer response:** None.

**User response:** Supply a value for *attributename* and resend the request.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOP091I**

**Explanation:** The utility connected to the inventory or host *name*.

**System action:** None.

**Operator response:** Not applicable.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP092E**

**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 cannot 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.

**Operator response:** Not applicable.

**System programmer response:** Not applicable.

**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 cannot 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 by 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.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP093E**

**Explanation:** The token *token* is invalid.

**System action:** Not applicable.

**Operator response:** Not applicable.

**System programmer response:** The token is dumped in hex. Look for a token that is being used before it is initialized (for example, with CreatePrintFile()) or after...
it is invalidated (for example, with AbortPrintFile()).

**User response:** Notify your application or system programmer.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP094E**  
**Explanation:** The buffer that the caller provides to an API function is not large enough to satisfy the request.

**System action:** Not applicable.

**Operator response:** Not applicable.

**System programmer response:** Use the BufferSizeRequired() function to determine the size of the buffer that is required and change the program that uses 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.

**User response:** Notify your application or system programmer.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP095E**  
**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 cannot 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.

**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.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP096E**  
**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.

**System action:** The component was not deleted.

**Operator response:** Not applicable.

**System programmer response:** Increase the amount of storage available for the application.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
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.

**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. For more information about how to use the `pidu` command to display 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.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**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.

**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.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**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 retransmission 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 that is 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.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---
AOP100E The target printer-uri responded with scheme status code.

**Explanation:** IP PrintWay used the Internet Printing Protocol (IPP) to send a data set to the target printer, and the printer reported an error.

In the message text, `printer-uri` is the Uniform Resource Identifier (URI) of the target printer as specified in the printer definition. `scheme` is either HTTP or IPP. `code` is
either the message or code that is returned by the target printer.

**System action:** IP PrintWay attempts to retransmit the document to the printer. If this is the last retransmission 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:** Look up the status codes in either RFC 2068 for HTTP or RFC 2566 for IPP.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP101E** Internet Printing Protocol (IPP) server failed to establish server socket at port `portnumber [message]`.

**Explanation:** The Infoprint Server IPP server daemon (`aopippd`) encountered an error when it attempted to establish a server socket connection at the requested port.

In the message text, `portnumber` is the port number at which the IPP server attempted to establish a connection. This port number is specified in the `ipp-port-number` attribute. The default port is 631.

`message` is a message that contains more 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](https://www.ibm.com/support/knowledgecenter/en/SS4S72_2.1.0/com.ibm.zos.zos.messages/infoprint/server/01aop800000aop001a.htm).

If you see message E0C51111 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 that the line is a comment):

```
; 631 TCP process-name
```

After you correct the problem, stop and restart the IPP server so that the IPP server attempts to establish a server socket connection again. For information about how to start and stop the server, see [z/OS Infoprint Server Operation and Administration](https://www.ibm.com/support/knowledgecenter/en/SS4S72_2.1.0/com.ibm.zos.zos.messages/infoprint/server/01aop800000aop001a.htm).

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**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.

**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.

**User response:** Resubmit the print request.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**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 DFLTNTRY

**Explanation:** You must not select the Use DEST, CLASS, and FORMS for IP PrintWay printer selection option in the printer definition named DFLTNTRY. IP PrintWay uses the printer definition that is 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.

**System action:** Infoprint Server did not create the printer definition in its Printer Inventory.

**Operator response:** Not applicable.

**System programmer response:** None.
User response: If you used ISPF panels to create the printer definition, either clear 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.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

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

Explanation: You must not select the IP PrintWay basic mode Resubmit for filtering option in the printer definition named DLFTNTRY. IP PrintWay uses the printer definition that is named DLFTNTRY to obtain default values for certain attributes when it prints a data set submitted with the DEST=IP: parameter and no FSSDATA=printer parameter on an OUTPUT JCL statement. If you run IP PrintWay basic mode, you must set the Resubmit for filtering option in the printer definition for the printer, not in the default printer definition.

System action: Infoprint Server did not create the printer definition in its Printer Inventory.

Operator response: Not applicable.

System programmer response: None.

AOP106E Transform transform_class connection refused. [errmsgno] errmsgtxt

Explanation: The Infoprint Server Transform Manager attempted to connect to a transform daemon. The connection attempt failed, probably because of a failure that occurred during initialization of the transform daemon.

In the message text:

transform_class
The name of the transform that is concatenated with the transform class that was requested in the -c option.

errmsgno errmsgtxt
The message number, if available, and the message text that is generated by a system program.

System action: The transform was not done.

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.

User response: Notify your system programmer.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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 with 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 system 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.

Operator response: None.
System programmer response: None.
User response: None.

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

AOP108E Subsystem function request failed - system error, reason = reason code

Explanation: A z/OS system error occurred while Infoprint Server was processing a data set that was submitted to Infoprint Server with the SUBSYS JCL parameter on the DD statement.

In the message text:

function
The name of the function that Infoprint Server was doing when the error occurred. Possible values are: allocate, open, close, put, and unallocate.

reason code
A code that indicates the reason for the error, in the format: 00xxyyzz.

System action: If the function is allocate, open, close, or put, the Print Interface subsystem does not allocate output data sets on the JES spool for any data sets in the job step. If the function is unallocate, the Print Interface subsystem might allocate an output data set on the JES spool for this data set.

Operator response: Notify your system programmer that this error occurred.
System programmer response: If the function is allocate, open, close, or unallocate, save the associated dump in case you need to contact your IBM service representative. Follow the system programmer response for the reason code in "Infoprint Server system completion codes and reason codes" on page 201.
User response: Resubmit the job after the error is corrected.

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

AOP109E Subsystem disconnect request received - step cancelled.

Explanation: Either the operator stopped the Print Interface subsystem or the Print Interface subsystem ended abnormally.

System action: The Print Interface subsystem does not allocate any output data sets on the JES spool for this job step.

Operator response: If you did not stop the Print Interface subsystem, notify your system programmer that this error occurred. 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.
User response: Notify the operator that this error occurred. Resubmit the job after the operator restarts the Print Interface subsystem.

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

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 stop Infoprint Server first.

User response: Notify your system programmer that this error occurred. Resubmit the job after the Print Interface subsystem starts.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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 that is specified in the inventory attribute.

System action: The Print Interface subsystem is not started.

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 need 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.

User response: Notify your system programmer that this error occurred. Resubmit the job after the Print Interface subsystem starts.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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.

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.

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.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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.
AOP114E • AOP117W

System action: The function is not done.
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.
User response: Ask your administrator to start a NetSpool task.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP114E Search DB connection failed.

Explanation: The Infoprint Server search database threads running in aopd failed because of a serious problem. Infoprint Server cannot record information about printers and print jobs that Infoprint Central requires.
System action: Processing continues. However, Infoprint Central reports a logic error when the operator tries to find print jobs or printers.
Operator response: Notify your system programmer that this error occurred.
System programmer response: Follow the procedure in z/OS Infoprint Server Customization to recover the search database.
User response: Contact the Infoprint Server operator.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP115E Historical Inventory connection failed.

Explanation: The Infoprint Server Historical Inventory threads running in aopd failed because of a serious problem. Infoprint Server cannot record information about historical print jobs, that is, print jobs that cannot be spooled or that completed and are no longer on the JES spool.
System action: Processing continues. However, Infoprint Central reports a logic error when the operator tries to find Infoprint Server print jobs.
Operator response: Stop and restart Infoprint Server daemons. See z/OS Infoprint Server Operation and Administration.
System programmer response: None.
User response: Contact the Infoprint Server operator.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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 that is 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.
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.
User response: No response is necessary.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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.
Operator response: None.
System programmer response: None
User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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 is 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.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP119I Job jobid document document-name completed spooling with status status.
Explanation: Infoprint Server finished writing the document to the JES spool.
In the message text:
jobid
 The ID of the print job.
document-name
 The name of the document to be printed.
status
 The status of the print job. Possible values for status are:
not-spooled
 An error prevented the document from being written to the JES spool.
held
 The document was successfully written to the JES spool but is in the held state. Either the job submitter or the printer definition requested the hold.
pending
 The document was successfully written to the JES spool and is ready to print.

System action: None.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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 is 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 name of the printer definition for the printer.
transform
 The path to the transform DLL (Dynamic Link Library). Examples are:
aopfiltr.so
/usr/lpp/Printsrv/lib/afpxpcl.dll

System action: None.
Operator response: None.
System programmer response: None.
User response: None.
**AOP121I • AOP124E**

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**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 are completed and are no longer on the JES spool, 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 that are 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.

**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.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**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 that are 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 that is 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.

**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 is retained on the JES spool. Otherwise, ask the job submitter to resubmit the job.

**System programmer response:** Make sure that the code page names are valid for your level of z/OS. For IBM-supplied code pages, see information about code
set converters in [10/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 [10/OS XL C/C++ Programming Guide].

User response: Resubmit the print job after the administrator corrects the problem.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP126E An inventory request exceeded the maximum size.

Explanation: An Infoprint Server internal processing limit was exceeded. This is probably because of an unusually large number of objects that are specified in a print request. For example, if one print job contains many documents, the Printer Inventory limit for a print job might be exceeded.

System action: The request fails.

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.

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.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP127I The number of objects found exceeds the limit that 10/OS Infoprint Central can display. If necessary, narrow your search or ask your administrator to increase the limit.

Explanation: You specified search criteria to find objects such as print jobs or printers. However, the number of objects that meet the search criteria exceeds the limit of objects that Infoprint Central is allowed to display. The administrator can specify the maximum limit in the AOPLIMIT, AOPLIMIT_DOCS, and AOPLIMIT_JOBS environment variables.

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: Infoprint Central displays the maximum number of objects.

Operator response: Not applicable.

System programmer response: If this situation occurs repeatedly, increase the value in the AOPLIMIT, AOPLIMIT_DOCS, or AOPLIMIT_JOBS environment variable. If you increase the limit, you might also need to increase the timeout value in the OutputTimeout directive to prevent the HTTP server from timing out before Infoprint Central can display any objects. For information about how to set environment variables in the IBM HTTP Server - Powered by Apache environment variables file (bin/envvars) and the OutputTimeout directive in the HTTP server configuration file (conf/httpd.conf), see [10/OS Infoprint Server Customization].

User response: If Infoprint Central does not return the object that you are looking for, narrow your search by specifying additional search values or more specific search values. If you need to see more objects than the maximum limit allows, ask your administrator to increase the limit.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP128I The current size of the Historical Inventory is larger than the maximum size you requested. The size of the Historical Inventory cannot be reduced.

Explanation: You specified a maximum size for the Historical Inventory in the max-historical-inventory-size attribute. However, the Historical Inventory is already larger than the maximum size you specified.
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 whether 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.

Operator response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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 finished printing successfully. If the document was sent to a remote printer that IP PrintWay controls, the document might not be finished printing yet. Although the document was sent successfully to the printer, some errors might occur 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.

Operator response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
AOP133I   The document completed with errors.

Explanation: The document finished processing. However, errors prevented the document from printing successfully. The error might have occurred while the document was being sent to the printer. In this case, part of the document might have printed.

System action: The document remains on the JES spool until all documents in the print job finish processing. If IP PrintWay processed the document, it retains the document on the JES spool if a retention time is specified in the printer definition.

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

AOP134E   The stop of daemon daemon failed.

Explanation: Infoprint Server cannot 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.

Operator response: For more information about how to start and stop daemons, see /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.
Module: Not applicable.
Source: Infoprint Server.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP135I   An abrupt shutdown of daemon daemon has been initiated.

Explanation: Infoprint Server started an “abrupt” shutdown of the specified daemon. When the shutdown is complete, you see message AOP044I.

In the message text, daemon is the name of the daemon.

System action: Processing continues.

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

AOP136I   A destructive shutdown of daemon daemon has been initiated.

Explanation: Infoprint Server 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.

In the message text, daemon is the name of the daemon.

System action: Infoprint Server stops the specified daemon immediately.

Operator response: Notify your system programmer. Then, 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. For information about how to set environment variables, see /OS Infoprint Server Customization.

User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
**AOP137E • AOP139E**

**AOP137E** Infoprint Server daemon *daemon* is not running.

**Explanation:** A required daemon is not running. In the message text, *daemon* is the name of the daemon.

**System action:** The functions that the specified daemon supports are not available. For example, if the daemon is *aopssid*, Infoprint Central cannot process any requests that require access to JES or the Printer Inventory.

**Operator response:** Start the specified Infoprint Server daemon.

**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.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOP138E** Database *filename* is corrupted. Take immediate recovery action. Diagnostic data: *data*

**Explanation:** While starting Infoprint Server daemons, Infoprint Server detected that one of its databases contains corrupted data. Before continuing to use Infoprint Server, you must recover this database.

In the message text:

- *filename* Name of the database that contains corrupted data.
- *data* Data that can help IBM solve the problem.

**System action:** Processing continues, but continued operation of Infoprint Server is likely to produce processing failures and other unexpected results.

**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 that are provided by your IBM service representative.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOP139E** Console name *console* is already in use. Change the console name 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.

**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*.

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

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
AOP140E  When attribute_name1 is value1, then

  attribute_name2 must be value2.

Explanation:  The values in two ISPF fields or two
attributes are not compatible. This error can occur
when you create or update an object in the Printer
Inventory by using either the Infoprint Server ISPF
panels or the Printer Inventory Definition Utility (pidu
command).

In the message text:
  • attribute_name1 is the name of the first attribute. The
    ISPF field has a similar name.
  • value1 is the value of the first attribute. If you did
    not specify the first attribute, this is the existing
    value or the default value of the attribute.
  • attribute_name2 is the name of the second attribute.
    The ISPF field has a similar name.
  • value2 is the value of the second attribute. If you did
    not specify the second attribute, this is the existing
    value or the default value of the attribute.

System action:  This object is not created or updated in
the Printer Inventory.

Operator response:  None.

System programmer response:  None.

User response:  If you use the ISPF panels, change the
value in one of the fields and save the definition. If you
used the pidu command, change the value of one of the
attributes and resubmit the pidu command to create or
update this object.

Problem determination:  Not applicable.

Module:  Not applicable.

Source:  Infoprint Server.

Routing code:  Not applicable.

Descriptor code:  Not applicable.

Automation:  Not applicable.

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.

Operator response:  None.

System programmer response:  None.

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.

Problem determination:  Not applicable.

Module:  Not applicable.

Source:  Infoprint Server.

Routing code:  Not applicable.

Descriptor code:  Not applicable.

Automation:  Not applicable.

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.

Operator response:  None.

System programmer response:  Make sure that the
configuration file exists. If the file exists, make sure the
environment variable that indicates the file location is
specified correctly. If you are using InfoPrint Transform
Manager for Linux and need information about the
remote configuration file, see z/OS Infoprint Server
Customization.

User response:  Contact your system programmer.

Problem determination:  Not applicable.

Module:  Not applicable.

Source:  Infoprint Server.

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.

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

AOP144E • AOP147E

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.

Operator response: None.

System programmer response: None.

User response: Resubmit the request with only one input file.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP145E The file system that contains directory directory_path is full. A total of xxx MB of free space is needed.

Explanation: To upgrade 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.

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.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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 that you requested only when Infoprint Server is enabled.

System action: Infoprint Server starts only those Infoprint Server daemons that are part of the Infoprint Server Printer Inventory for PSF function.

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.

User response: Not applicable.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
System action: The function is not performed.
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.
User response: Notify your system programmer.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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 cannot 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.
Operator response: Notify your system programmer.
System programmer response: Configure the base-directory file system that is specified in the message to contain the amount of free space that is indicated in the message. Then, start Infoprint Server again. For more information, see [z/OS Migration]
User response: Notify your system programmer.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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.
Operator response: Notify your system programmer.
System programmer response: Configure the base-directory file system that is specified in the message to contain the amount of free space that is indicated in the message. Then, start Infoprint Server again. For more information, see [z/OS Migration]
User response: Notify your system programmer.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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 completed successfully.
System action: Processing continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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.

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 specify 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.

User response: Notify your system programmer.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP152W 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.

You can receive this message when you import a backup copy of the Printer Inventory that the pidu export or dump command created on another system where dynamic configuration is enabled. This is because the pidu export and dump commands create a force-create command for the system configuration definition when dynamic configuration is enabled. To import this system configuration definition on a system where dynamic configuration is not enabled, you must first enable dynamic configuration.

System action: The system configuration definition was not modified.

Operator response: None.

System programmer response: For information about dynamic configuration and how to enable it, see z/OS Infoprint Server Customization.

User response: If you want to enable dynamic configuration so that you can modify and replace the system configuration definition, notify your system programmer.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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.

You can receive this message when you import a backup copy of the Printer Inventory that the pidu export or dump command created on another system where dynamic configuration is enabled. This is because the pidu export and dump commands create a force-create command for the system configuration definition when dynamic configuration is enabled. To import this system configuration definition on a system where dynamic configuration is not enabled, you must first enable dynamic configuration.

System action: The system configuration definition was not modified.

Operator response: None.

System programmer response: For information about dynamic configuration and how to enable it, see z/OS Infoprint Server Customization.

User response: If you want to enable dynamic configuration so that you can modify and replace the system configuration definition, notify your system programmer.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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 is 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.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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 already acquired it.

System action: IP PrintWay processes the print job again after the retry interval expires. When all the retransmissions 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.

Operator response: None.
User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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.
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.

User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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 cannot 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 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.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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.

System action: Infoprint Server does not start.
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.

User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
**AOP160I**  An empty Printer Inventory

inventory-file-name 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 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 must restore a backup copy of the latest Printer Inventory.

In the message text:

inventory-file-name
  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.

Operator response: If this is not the first time you started Infoprint Server, ask your system programmer to restore a backup copy of the latest Printer Inventory.

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 ALE-DYN](#).

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.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
AOP162W

Infoprint Server could not add health checks because required modules are missing. Enter this command to refresh LNKLIST: F LLA,REFRESH. Then restart Infoprint Server.

Explanation: Infoprint Server cannot add Infoprint Server health checks (IBMINFOPRINT) to the IBM Health Checker for z/OS because required Infoprint Server modules are missing.

System action: Infoprint Server continues processing. The IBMINFOPRINT health checks cannot run.

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, enter this command to refresh LNKLIST:
F LLA,REFRESH

After you refresh the LNKLIST, restart Infoprint Server to add the health checks.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP164I

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 cannot 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.

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

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP165E

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 that is specified in the aopd.conf configuration file is not defined to MVS.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.
In the message text:

*jes-name*

Is the name of the JES2 secondary subsystem.

**System action:** Infoprint Server ends.

**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](https://www.ibm.com).  

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOP166E** JES2 secondary subsystem *jes-name* is not active. Restart JES2 *jes-name*, then restart Infoprint Server.

**Explanation:** The JES2 secondary subsystem that is 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.

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

**System programmer response:** Restart the JES2 secondary subsystem that is specified in the message text. Then, restart Infoprint Server.

If the JES2 secondary subsystem is started, make sure that the *jes-name* attribute in the aopd.conf configuration file is correct. For information about the *jes-name* attribute and how to edit the aopd.conf file, see [z/OS Infoprint Server Customization](https://www.ibm.com).  

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOP168E** Infoprint Server is ending because JES2 secondary subsystem *jes-name* ended.

**Explanation:** Infoprint Server is 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.

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

**System programmer response:** Restart the JES2 secondary subsystem that is 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](https://www.ibm.com).  

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.
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 jes-name attribute 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.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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 be moved to another print job or deleted from the JES spool.

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

AOP172E SAF access authorization check failed with SAF_RC=saf-retcode
RACF_RC=racf-retcode
RACF_RSN=racf-reasoncode.

Explanation: Infoprint Server issued the System Authorization Facility (SAF) RACROUTE REQUEST=FASTAUTH macro to verify that the program that is trying to access the Printer Inventory has access to the AOP.ADMINISTRATOR 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.
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.
User response: Notify the system programmer that this error occurred.

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

**Automation:** Not applicable.

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**AOP173E**

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

**Explanation:** A program requested to read or update the Printer Inventory. However, the user who started the program is not authorized to access the Printer Inventory. For example, the user might not have 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 that is made to the Printer Inventory.
- **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 Printer Inventory.

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

**System programmer response:** To allow the program to access the Printer Inventory, give the user who started the program 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.

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

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**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 not have 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.

**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 AOPCONFIGURATION profile in the PRINTSRV class. If the AOPCONFIGURATION profile does not exist, you can give the user the required access to the AOPADMINISTRATOR profile.

For information about the AOPCONFIGURATION and AOPADMINISTRATOR profiles, see z/OS Infoprint Server Customization.

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

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**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 that is being processed.
- **return-code**
  - Internal return code.
reason-code
Internal reason code.

System action: Processing continues.

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.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

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 that is trying to access the Printer Inventory has access to the AOPCONFIGURATION or AOPADMINISTRATOR 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.

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.

User response: Notify the system programmer that this error occurred. After the problem is fixed, try to access the Printer Inventory again.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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.

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

Operator response: None.

System programmer response: None.

User response: For information about:

- Editing the system configuration definition with the ISPF panels, see z/OS Infoprint Server Customization
- The **pidu** command, see z/OS Infoprint Server Operation and Administration

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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.

Operator response: Notify the system programmer that this error occurred.
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System programmer response: Give the user the required access to the AOP.ADMINISTRATOR profile in the PRINTSRV class. For information about the AOP.ADMINISTRATOR profile, see z/OS Infoprint Server Customization.

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

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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.

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.

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

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP180E Cross-system coupling facility (XCF) macro 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 that is 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.

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.

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

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.
AOP182W Cross-system coupling facility (XCF) macro request unsuccessful (return-code / reason-code) group group, member member—continuing.

Explanation: Infoprint Server issued an XCF macro that failed.

In the message text:
- macro
  - The name of the XCF macro.
- return-code
  - The hexadecimal return code from the XCF macro.
- reason-code
  - The hexadecimal reason code from the XCF macro.
- group
  - The XCF group name.
- member
  - If macro is IXCQUERY, return_code is 8, and reason_code is 10, the name of the daemon that Infoprint Server requested information about. Otherwise, the XCF member name of the Infoprint Server daemon or command that issued the request.

System action: The issuing daemon or command continues processing.

Operator response: Notify your system programmer or administrator that the error occurred.

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

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. Send this message and the subsequent error messages to IBM.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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 cannot 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 set up a system logger log stream for Infoprint Server messages, Infoprint Server cannot write messages to the log stream.

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 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.

User response: Not applicable.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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 that is 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.

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.

For information about how to set up security for the Infoprint Server log stream, see z/OS Infoprint Server Customization.

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:

1. Clear the log stream name in the Log stream name field.
2. 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:

1. Specify the log stream name in the Log stream name field.
2. 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.

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

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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 that is specified in the system configuration definition.
System action: Infoprint Server continues processing, but messages are lost until the problem is corrected.

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

System programmer response: Make sure that the log stream name is spelled correct in the Infoprint Server system configuration definition. Use the Infoprint Server ISPF panels to view the system configuration 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:

1. Clear the log stream name in the Log stream name field.
2. 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:

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

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

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.
When you save the Infoprint Server System Configuration ISPF panel, Infoprint Server automatically starts writing messages to the log stream.

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

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**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.

**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](https://publib.boulder.ibm.com/infocenter/zos/v2r2/).

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:

1. Clear the log stream name in the **Log stream name** field.
2. 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.

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

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**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.

**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](https://www.ibm.com/support/docview.wss?uid=swg22534351).

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

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** 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 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
- ebcict-codepage
- ipp-port-number
- job-prefix
- lpd-port-number
- log-retention
- max-historical-inventory-size
- smf-recording

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

**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:**
1. 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.
2. If the file is `aopmsg.conf`, you can delete the file because all attributes are migrated.

**User response:** Not applicable.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP192E** The Configuration object is missing in the inventory.

**Explanation:** The required system configuration definition does not exist in the Printer Inventory.

**System action:** Infoprint Server does not start successfully. Infoprint Server waits until the system configuration definition is created and then starts.

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

**System programmer response:** Run this command:

```
loadprinterinventory pidu_export
```

where `pidu_export` is the name of the PIDU export file.

If you do not have a PIDU export file, use the ISPF System Configuration panel or the Printer Inventory Definition Utility (PIDU) to edit and save the system configuration definition. See [z/OS Infoprint Server Operation and Administration](https://www.ibm.com/support/docview.wss?uid=swg21100894). Otherwise, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

**User response:** Not applicable.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
AOP193E  The system logger address space is not available.

Explanation: You 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.

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.

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

Explanation: An Infoprint Server process 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 a process named member is already active in the sysplex. This situation might occur 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, and each member name must be unique within its XCF group.

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 aoopd.
• group: XCF group name in format: AOPpppp[q]:
  • AOP: Infoprint Server identifier.
  • pppp: Printer Inventory name.
  • q: Optional one-character XCF group qualifier that is specified in the xcf-group-qualifier attribute in the Infoprint Server configuration file, aopd.conf.

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

Problem determination: Not applicable.

Module: Not applicable.

Source: Various commands, such as aopsend or aopstat.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP194I  No members are active in cross-system coupling facility (XCF) group group.

Explanation: The command that issued this message did not find the expected Infoprint Server daemons running in the named XCF group.

In the message text:
• AOP: Infoprint Server identifier.
Printer Inventory name.

Optional one-character XCF group qualifier that is specified in the `xcf-group-qualifier` attribute in the Infoprint Server configuration file, `aopd.conf`.

**System action:** The Infoprint Server process that is named `member` does not start.

**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 that is named in the message text, you can use the MVS `DISPLAY XCF` command or the `AOPSTAT` command. For example, to display the members of XCF group AOPAOP1, enter one of these commands:

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

or

```
START AOPSTAT
```

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**AOP196I** Request to action target has been sent to daemon `daemon` in XCF group `group`.

**Explanation:** The requested action is sent to the specified daemon for processing.

In the message text:

- **action** The requested action, for example, `start`.
- **target** The object of the requested action, for example, a printer name.
- **daemon** The name of the XCF member daemon that does the action.
- **group** The name of the XCF group.

**System action:** Not applicable.

**Operator response:** Not applicable.

**System programmer response:** Not applicable.

**User response:** Not applicable.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** The TSO/E `AOPCMND` command.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**AOP197I** Attribute `attribute` is not supported. Processing continues.

**Explanation:** You specified an attribute that is no longer supported.

**System action:** The unsupported attribute is ignored and processing continues.

**Operator response:** Do not specify the unsupported attribute.

**System programmer response:** Do not specify the unsupported attribute.

**User response:** Do not specify the unsupported attribute.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** The `aopd` daemon at startup or the `pidu` command.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**AOP198E** `AOPCMND` failed with `diagnostic_data`.

**Explanation:** There was an error in processing the `AOPCMND` command, probably because another service routine failed. The `diagnostic_data` describes the cause of the failure.

**System action:** Not applicable.

**Operator response:** Not applicable.

**System programmer response:** Not applicable.

**User response:** Not applicable.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** The TSO/E `AOPCMND` command.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
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**System action:** The requested XCF signal is not sent to the XCF daemon.

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

**System programmer response:** 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.

**User response:** None.

**Problem determination:** If `diagnostic_data` begins with `IXCxxxx`, see [z/OS MVS Programming: Sysplex Services Reference](#) under the description of the named macro for an explanation of the return code and reason code.

If `diagnostic_data` begins with `IKJSCAN` or `IKJPARS`, see [z/OS TSO/E Programming Services](#) for an explanation of the return code and reason code.

**Module:** Not applicable.

**Source:** The TSO/E AOPCMND command.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**Explanation:** A command specifies a parameter that requires another parameter, but the required parameter is missing. For example, the `aopstat` command specifies the `-lm` parameter, but not the `-m member` parameter.

**System action:** The command is not run.

**Operator response:** Reissue the command with all required parameters.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**Explanation:** A transform message was generated: `message`.

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

**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.

**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.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

---

**Explanation:** Message `msgnum` from set `setnum` cannot be retrieved from message catalog `catalog_name`. This problem might be caused by Print Interface trying to access a catalog that was edited and therefore changed information or is 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.

**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 was 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.

**User response:** Contact your system programmer.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** 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.

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.

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 that specifies 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.

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

AOP2203E  filename: Incorrect CRC.

Explanation: A resource file that is used by the PDF to AFP and PostScript to AFP transform daemon (ps2afpd.d11) 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.

Operator response: Notify your system programmer.

System programmer response: Reinstall the transform daemon (ps2afpd.d11) 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 the AOP_RESOURCE_PATH variable is specified. For more information about the AOP_RESOURCE_PATH variable, see z/OS Infoprint Server Customization.

User response: Not applicable.

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

AOP2203E  filename: Incorrect file size.

Explanation: A resource file that is used by the PDF to AFP and PostScript to AFP transform daemon (ps2afpd.d11) 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.

Operator response: Notify your system programmer.

System programmer response: Reinstall the transform daemon (ps2afpd.d11) 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 the AOP_Resource_PATH variable is specified. For more
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Information about the AOP_RESOURCE_PATH variable, see z/OS Infoprint Server Customization.

User response: Not applicable.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP2204W AOP_PAGE_BATCH_SIZE -> value out of range, ignored.

Explanation: The value in the AOP_PAGE_BATCH_SIZE environment variable is not 1 - 2147483647.

System action: The value in the AOP_PAGE_BATCH_SIZE environment variable is ignored. Processing continues with a default page batch size of 20.

Operator response: Notify your system programmer.

System programmer response: Specify a value 1 - 2147483647 in the AOP_PAGE_BATCH_SIZE environment variable. For more information about the AOP_PAGE_BATCH_SIZE variable, see z/OS Infoprint Server Customization.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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 cannot 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.

Operator response: None.

System programmer response: Make sure that the transform filter specified in the printer definition for the printer is correct. If the output format in this message is not correct, and you specify the aopxf.so filter in the printer definition, specify the -xf output-format attribute. For example, to transform an AFP document (MO:DCA-P) to PDF format, specify in the Filter field:
aopxf.so -xf output-format=pdf

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 on one line: remotexf -j "-xf 'output-format=pdf'" -o myfile.pdf myfile.afp
• If you did not specify the remotexf command, notify the system programmer that this error occurred.

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

AOP3001E IP PrintWay could not load the exit-type user exit exit-name. The load return code is retcode, and the reason code is reasoncode.

Explanation: IP PrintWay extended mode cannot 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 retransmission 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.
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 that 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 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
• Setting environment variables, 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

User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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 32 KB 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.

IP PrintWay attempts to retransmit the document to the printer. If this is the last retransmission 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 user exit.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

AOP3003I  message-text

**Explanation:** You see the message from the user exit.

The `aoplogu` command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 75.

**System action:** Processing continues.

**Operator response:** None.

**System programmer response:** Correct the user exit.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

AOP3004I  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.

**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.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**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 is 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.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**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 is 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.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**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.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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 is moved to printer printer-uri.

In the message text, printer-uri is the printer to which the print job is 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.
lpd://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 that is 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.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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 is 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.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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 is 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.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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 is 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.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  Not applicable.
Source:  Infoprint Server.
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 is 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 that is 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.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  Not applicable.
Source:  Infoprint Server.
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 is not held. The possible reasons are that the print job is ready to be deleted, is 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.
Operator response:  If the document is still on the spool and is not acquired by another program, resubmit the hold request.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  Not applicable.
Source:  Infoprint Server.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

AOP3016I  IP PrintWay rejected the request to release the print job.

Explanation:  IP PrintWay extended mode rejected the request. The print job is not 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.
Operator response: If the document is still on the spool and is not acquired by another program, resubmit the release request.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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.

tam://luname
The VTAM logical unit (LU) name of the printer.

uri The Uniform Resource Identifier (URI) of the Internet Printing Protocol (IPP) server that is 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.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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 is not 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
AOP3020I • AOP3021I

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.

Operator response: If you want to start this printer, ask your administrator to create a printer definition for the printer.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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 is not 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.

Operator response: If you want to stop this printer, ask your administrator to create a printer definition for the printer.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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 alternative 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.

vtam://luname
The VTAM logical unit (LU) name of the printer.

uri
The Uniform Resource Identifier (URI) of the Internet Printing Protocol (IPP) server that is 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.

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 alternative printer is redirected to another printer, restore that printer first. If none of these situations exist, refresh the Infoprint Central panel to see whether 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.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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 that are submitted to this printer are no longer redirected to the alternative printer. Also, print jobs that were submitted to this printer and redirected to the alternative 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 alternative 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 that is 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.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  Not applicable.

Source:  Infoprint Server.

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 alternative 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 alternative 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.
   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 that is 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.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  Not applicable.

Source:  Infoprint Server.

Routing code:  Not applicable.

Descriptor code:  Not applicable.

Automation:  Not applicable.
AOP3200I IP PrintWay started the job selection rule.

Explanation: The job selection rule was started by IP PrintWay extended mode.

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

AOP3201E The DEST, CLASS, and FORMS JCL keywords do not match a printer definition in the Printer Inventory.

Explanation: IP PrintWay extended mode cannot find a printer definition in the Printer Inventory that matches the DEST, CLASS, and FORMS JCL parameters for the print job. The job submitter might specify 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.
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 that are specified in the JCL parameters. Make sure the Use DEST, CLASS, FORMS for IP PrintWay printer selection field in the printer definition is selected.

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.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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.
Operator response: None.
System programmer response: None.
User response: Change your JCL to specify either the PORTNO or PRTQUEUE JCL parameters, but not both.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3203E The DEST=IP JCL keyword was specified, but neither the PRTQUEUE nor PORTNO JCL keywords were specified.

Explanation: The DEST=IP parameter was specified on the OUTPUT JCL statement for the data set. When
the DEST=IP: parameter is specified, either the
PRTQUEUE or PORTNO parameter is also required.
However, neither parameter was specified.

The aoplogu command provides more information in
fields before the message text. For information about
the contents of these fields, see “Format of messages in
the Infoprint Server common message log” on page 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.

Operator response: None.
System programmer response: None.
User response: Delete the print job, submit the data
set again, and specify either the PRTQUEUE or
PORTNO parameter.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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
nonzero 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.

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.
User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
AOP3207E  •  AOP3210I

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

AOP3207E  SAPI returned return code retcode.

Explanation: IP PrintWay extended mode received a nonzero 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.

Operator response: Check the return code for the appropriate action (see z/OS MVS Using the Subsystem Interface).

Problem determination: Not applicable.

Module: Not applicable.
Source: Infoprint Server.
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 that is 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.

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.

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.

Problem determination: Not applicable.

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

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

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

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.

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 specify this printer definition by name or might specify 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.
AOP3216E • AOP3217E

that IP PrintWay extended mode does not attempt to process the print job again until the operator releases it.

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.

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.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP3216E No document was found on the JES spool for the print job. In a sysplex, the document might have been deleted after it was processed on another system.

Explanation: IP PrintWay extended mode was processing a document that exists in Infoprint Server but no longer is on the JES spool. The job might be deleted from the spool.

If IP PrintWay extended mode is running on another system in a sysplex, IP PrintWay might delete 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.

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.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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 started 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.

Operator response: Notify your system programmer that this error occurred. After the problem is corrected, delete or release the print job.

System programmer response: The SWB processing reason code (field SSS2WRSN) identifies the SJF service that JES started with 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-WTC.

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.
User response: If necessary, resubmit the print job after the problem is corrected.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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.

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.

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

Problem determination: Not applicable.

Module: AOPWSMD

Source: Infoprint Server.

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.

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.

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

Problem determination: Not applicable.

Module: AOPWSMD

Source: Infoprint Server.

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 delete 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.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: 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.
AOP3402I  AOP3407I

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

AOP3406I  IP PrintWay deleted the print job and did not retain it on the JES spool.
Explanation: The print job was deleted from the JES spool.
The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 75.
System action: Processing continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

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

AOP3403I  IP PrintWay removed the print job from the printer's queue.
Explanation: IP PrintWay extended mode removed the print job from the printer's queue. See other messages for the reason the print job was removed.
The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 75.
System action: Processing continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
AOP3408I  IP PrintWay cannot hold the print job.

Explanation: IP PrintWay extended mode cannot hold the print job on the JES spool. The print job might complete before IP PrintWay extended mode can hold it, or another program acquires 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. IP PrintWay does not hold the print job.

Operator response: If the print job is still on the JES spool, select the Hold action again. In a sysplex, select the Hold action from the system where IP PrintWay is processing the print job.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP3411I  IP PrintWay released the print job on the printer.

Explanation: IP PrintWay extended mode released the print job because the operator did the release action. The print job is ready to print.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 75.

System action: Processing continues.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
AOP3413I  IP PrintWay is retaining the print job on the JES spool for retain-time seconds until retention-expiration-date.

Explanation: IP PrintWay extended mode retained the print job on the JES spool after completion because retention was requested in the printer definition or on the OUTPUT JCL statement.

In the message text:
- retain-time
  The number of seconds that IP PrintWay extended mode retains the print job.
- retention-expiration-date
  The date and time when the retention time expires.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 75.

System action: IP PrintWay extended mode deletes the print job from the JES spool when the retention time expires.

Operator response: If the print job is retained on the JES spool, you can use Infoprint Central to:
- Release the print job to print on the same printer.
- Release the print job after you correct the problem with the document or printer.
- Move the print job to another printer and release it.
- Hold the print job if you do not want IP PrintWay to delete the print job when its retention time expires.
- Delete the print job.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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.

Operator response: None.

System programmer response: None.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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 does 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.

Operator response: Delete the print job from the JES spool when it is no longer needed.

System programmer response: None.

User response: None.

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

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

Explanation: IP PrintWay extended mode cannot process the print job because of an error.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 75.

System action: The print job remains on the JES spool in the rejected state.

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.
User response: None.
Problem determination: Not applicable.

Module: Not applicable.
Source: Infoprint Server.
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 was 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.

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.
User response: None.
Problem determination: Not applicable.

Module: Not applicable.
Source: Infoprint Server.
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.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.

Module: Not applicable.
Source: Infoprint Server.
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 cannot 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.
**AOP3500I • AOP3502I**

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.

**Operator response:** If the print job is still on the JES spool, try selecting the Delete action again. In a sysplex, select the Delete action from the system where IP PrintWay is processing the print job.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**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 the administrator created a printer definition for the printer or a print job started printing on the printer. As a result, Infoprint Central is 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.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**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.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
AOP3503I Printer definition \textit{printer-definition} is no longer a printer definition for this printer.

\textbf{Explanation:} The administrator deleted or modified the printer definition. For example, the administrator might have changed the host name.

In the message text, \textit{printer-definition} is the deleted or modified printer definition.

\textbf{System action:} Processing continues.

\textbf{Operator response:} None.

\textbf{System programmer response:} None.

\textbf{User response:} None.

\textbf{Problem determination:} Not applicable.

\textbf{Module:} Not applicable.

\textbf{Source:} Infoprint Server.

\textbf{Routing code:} Not applicable.

\textbf{Descriptor code:} Not applicable.

\textbf{Automation:} Not applicable.

AOP3504I IP PrintWay started the printer as requested by \textit{user_ID}.

\textbf{Explanation:} IP PrintWay extended mode started the printer.

In the message text:

\textbf{\textit{user_ID}}

The user who requested the action.

The \texttt{aoplogu} command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 75.

\textbf{System action:} Processing continues.

\textbf{Operator response:} None.

\textbf{System programmer response:} None.

\textbf{User response:} None.

\textbf{Problem determination:} Not applicable.

\textbf{Module:} Not applicable.

\textbf{Source:} Infoprint Server.

\textbf{Routing code:} Not applicable.

\textbf{Descriptor code:} Not applicable.

\textbf{Automation:} Not applicable.

AOP3505I IP PrintWay stopped the printer as requested by \textit{user_ID}.

\textbf{Explanation:} IP PrintWay extended mode stopped the printer as requested.

In the message text:

\textbf{\textit{user_ID}}

The user who requested the action.

The \texttt{aoplogu} command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 75.

\textbf{System action:} Processing continues.

\textbf{Operator response:} None.

\textbf{System programmer response:} None.

\textbf{User response:} None.

\textbf{Problem determination:} Not applicable.

\textbf{Module:} Not applicable.

\textbf{Source:} Infoprint Server.

\textbf{Routing code:} Not applicable.

\textbf{Descriptor code:} Not applicable.

\textbf{Automation:} Not applicable.

AOP3506I The printer was already started.

\textbf{Explanation:} The operator selected the Start action to start the printer, but the printer is already started.

\textbf{System action:} Processing continues.

\textbf{Operator response:} None.

\textbf{System programmer response:} None.

\textbf{User response:} None.

\textbf{Problem determination:} Not applicable.

\textbf{Module:} Not applicable.

\textbf{Source:} Infoprint Server.

\textbf{Routing code:} Not applicable.

\textbf{Descriptor code:} Not applicable.

\textbf{Automation:} Not applicable.

AOP3507I The printer was already stopped.

\textbf{Explanation:} The operator selected the Stop action to stop the printer, but the printer is already stopped.

\textbf{System action:} Processing continues.

\textbf{Operator response:} None.

\textbf{System programmer response:} None.

\textbf{User response:} None.

\textbf{Problem determination:} Not applicable.

\textbf{Module:} Not applicable.

\textbf{Source:} Infoprint Server.

\textbf{Routing code:} Not applicable.

\textbf{Descriptor code:} Not applicable.

\textbf{Automation:} Not applicable.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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 alternative 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 alternative printer. IP PrintWay
extended mode will redirect all print jobs that are
submitted to this printer to the alternative 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
that is 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.

Operator response: When this printer is fixed, select
the Restore action on Infoprint Central to restore
printing on this printer.

System programmer response: None.
User response: None.

Problem determination: 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
that is 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.

Operator response: When the other printer is fixed,
select the Restore action on Infoprint Central to restore
printing on the other printer.

System programmer response: None.
User response: None.

Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
Routing code: Not applicable.
AOP3510I  IP PrintWay restored this printer. Print jobs are no longer redirected to printer printer-uri.

Explanation:  IP PrintWay extended mode removed the redirection that was in effect for this printer because the operator selected the Restore action. IP PrintWay extended mode moved all print jobs that were originally submitted to this printer, except for the currently printing job, back to this printer’s queue.

In the message text, printer-uri is the name of the printer to which print jobs are 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 that is 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.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  Not applicable.

Source:  Infoprint Server.

Routing code:  Not applicable.

Descriptor code:  Not applicable.

Automation:  Not applicable.  

---

AOP3511I  IP PrintWay restored printer printer-uri. Its print jobs are no longer redirected to this printer.

Explanation:  IP PrintWay extended mode removed the redirection that was in effect for another printer because the operator selected the Restore action. IP PrintWay extended mode moved all print jobs that were originally submitted to the other printer, except for the currently printing job, from this printer’s queue back to the other printer’s queue.

In the message text, printer-uri is the other printer that was restored. The printer-uri has this format:

printer-uri
An identifier of the printer, in one of these formats:

direct_sockets://hostname:port
The host name and port number of the printer.

lpr://hostname/queue
The host name and print queue name of the printer.

vtam://luname
The VTAM logical unit (LU) name of the printer.

uri
The Uniform Resource Identifier (URI) of the Internet Printing Protocol (IPP) server that is 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.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  Not applicable.

Source:  Infoprint Server.

Routing code:  Not applicable.

Descriptor code:  Not applicable.

Automation:  Not applicable.  

---
AOP3600E • AOP3602I

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 LNKLIST 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.

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 LNKLIST or is a sanctioned step library. Specify SYS1.IMAGELIB in the STEPLIB environment variable 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, 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.

User response:  None.

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

Operator response:  None.

System programmer response:  None.

User response:  Modify the carriage control value and resubmit the job.

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

Operator response:  None.

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

**User response:** Modify either the transparent data or the length of transparent data and resubmit the job.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**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.

**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 that the code page names are valid for your level of z/OS. For valid names, see "Universal Coded Character Set Converters" 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.

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

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**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.

**Operator response:** Not applicable.

**System programmer response:** None.

**User response:** Correct the transparent data record, and resubmit the print request.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**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 that is 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.

**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 that the code page names are valid for your level of z/OS. For valid names, see "Universal Coded Character Set Converters" 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.

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

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP3606E** The iconv utility did not complete the conversion. The return code is `return-code`.

**Explanation:** The iconv utility did not finish converting the data stream between EBCDIC and ASCII.
AOP3607E • AOP3609I

representation. In the message text, return-code is the return code.

System action: The print request was not completed.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3607E The Printer Inventory does not contain an entry for the component name specified in the PRTOPTS JCL parameter or in the routing exit. The entry name is component-name.

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

In the message text, component-name is the name of the component that was requested either in the PRTOPTS JCL parameter of the OUTPUT statement or in the IP PrintWay Routing exit.

System action: The job is failed on this attempt.
Operator response: Notify your system programmer that this error occurred. After the administrator adds the missing components in the Printer Inventory or corrects the routing exit, use Infoprint Central to release the print job if it is retained on the JES spool. If the print job is not retained on the JES spool, ask the job submitter to resubmit the job.
System programmer response: Make sure the component name that is 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 PRTOPTS JCL parameter, see z/OS Infoprint Server Operation and Administration.
User response: Make sure the component name that is specified in the PRTOPTS JCL parameter is correct. After you correct it, resubmit the job.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.

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

AOP3608E IP PrintWay could not write an SMF record for the document because the __smf_record function failed with return code return-code and errno errno.

Explanation: The SMF type 6 record is not recorded. This error can occur when Infoprint Server does not have RACF authorization to write SMF records.

In the message text:
return-code
The return code.
errno
The error number.

The aoplogu command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 75.
System action: IP PrintWay extended mode does not write an SMF type 6 record.
Operator response: Notify your system programmer that this error occurred.
System programmer response: Look up the return code and errno in z/OS UNIX System Services Messages and Codes to determine the problem. Also, make sure that the AOPOPER group (or the group your installation defined for Infoprint Server operators) has READ access to the BPX.SMF profile in the RACF FACILITY class. For more information, see z/OS Infoprint Server Customization. If you do not want SMF type 6 records to be recorded, specify the smf-recording=no attribute in the Infoprint Server configuration file (aopd.conf) or, if dynamic configuration is enabled, in the system configuration definition.
User response: None.
Problem determination: None.
Module: Not applicable.
Source: Infoprint Server.
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 printer where the print job is now to 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 that is 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.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP3611E** The print job will not be processed because the target printer is `printer-uri1` but the print job is on printer `printer-uri2`.

**Explanation:** The print job is in the current printer queue and is ready to print but the job was moved to another printer. The job is printing or scheduled to print on the other printer and cannot be printed on this printer.

In the message text:

- `printer-uri1`
  
  The printer where the print job is now to be printed.

- `printer-uri2`
  
  The printer where the print job was originally scheduled 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 stops.

**Operator response:** The job must be moved if the current queued printer is incorrect and must print on the new target printer.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**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.
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.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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.
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 transmissions have been tried and the retry interval, use Infoprint Central to view properties of the print job. Retransmission information is in the Status section on the Infoprint Server Print Job Properties panel.

System programmer response: None.
User response: See the operator response.
Problem determination: Not applicable.
Module: Not applicable.
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 prints 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 is moved.

original-printer-uri
The printer from which the print job is 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 that is 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.

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.

User response: None.

Problem determination: Not applicable.

AOP3617E The administrator made changes in the DNS, so the print job is no longer routed to this printer. The original printer was original-printer-uri. The new printer is new-printer-uri. The print job was not processed.

Explanation: A change to the host name for the original printer in the Domain Name Server occurred after the print job was submitted. This change caused the print job to be removed from the current printer. This print job does 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 that is 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: IP PrintWay extended mode does not print the print job on the new printer. The current job fails on the current printer.

Operator response: Resubmit the print job.

System programmer response: None.
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 73.

System action:  Processing continues.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  Not applicable.

Source:  Infoprint Server.

Routing code:  Not applicable.

Descriptor code:  Not applicable.

Automation:  Not applicable.

AOP3800I  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.

Operator response:  None.

System programmer response:  None.

User response:  None.

Problem determination:  Not applicable.

Module:  Not applicable.

Source:  Infoprint Server.

Routing code:  Not applicable.

Descriptor code:  Not applicable.

Automation:  Not applicable.
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 that is 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 721 - 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 retransmission 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.

**Problem determination:** Not applicable.

---

Queue name queue1 overrides print queue name queue2.

**Explanation:** The administrator specified an alternative 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) with the alternative 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.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.
AOP3850W IP PrintWay is waiting for a printer problem to be corrected. The printer reported this error: message.

Explanation: The printer reported an error condition. For example, the printer might be out of paper or have a paper jam. IP PrintWay waits for the printer problem to be corrected before it sends data to the printer again.

In the message text, message contains the message that the printer returned. Typically, the message contains the PJL status code and an explanation of the code. For information about status codes, see Printer Job Language Technical Reference Manual that is 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 that is 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 tries the print job again (if retransmissions are requested) and duplicate pages might be printed.

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.

User response: After the printer problem is corrected, resubmit the print job if necessary.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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 that is 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 try the print job again. It retains the print job on the JES spool if retention is requested in the printer definition.

Operator response: If the print job was canceled because of 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.

User response: After the problem is corrected, resubmit the print job if necessary.

System programmer response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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 be 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 `aoplgu` 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.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**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 resumes 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 `aoplgu` 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.

**Operator response:** None.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP3854W** The printer does not support the PJL USTATUS PAGE command.

**Explanation:** IP PrintWay extended mode sent the Printer Job Language (PJL) USTATUS PAGE=ON command to the printer, but the printer did not set it.

The printer might not support the PJL USTATUS PAGE command.

If an error occurs during printing, IP PrintWay extended mode cannot 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 `aoplgu` 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.

**Operator response:** Ask your administrator to contact the printer vendor.

**System programmer response:** Contact the printer vendor to correct the error.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**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 tries the print job again.
- 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.

**Operator response:** Ask your administrator to contact the printer vendor.

**System programmer response:** Contact the printer vendor to correct the error.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

AOP3856E  The printer does not support the PJL USTATUS JOB command.

**Explanation:** IP PrintWay extended mode sent the Printer Job Language (PJL) USTATUS JOB command to the printer, but the printer did not set it. The printer might not support the PJL USTATUS JOB command.

The `aoplogu` command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 75.

**System action:** IP PrintWay extended mode tries the print job again. When all retransmissions are completed, IP PrintWay retains the print job on the JES spool if retention is requested.

**Operator response:** Ask your administrator to check that the printer supports the USTATUS JOB command. After the problem is corrected, the print job starts automatically when IP PrintWay tries the print job again. However, you can start the print job immediately from Infoprint Central. If IP PrintWay completed the print job and retained it on the JES spool, start the print job from Infoprint Central. If the print job is no longer on the JES spool, ask the job submitter to resubmit the print job.

**System programmer response:** If the printer does not support the PJL USTATUS JOB command, clear the Record pages for accounting and Restart printing after last successful page fields in the printer definition. These fields require that the printer support the PJL USTATUS JOB command.

**User response:** After the problem is corrected, restart the print job if necessary.

**Problem determination:** Not applicable.

**Module:** 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 that is 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 retransmissions are requested, IP PrintWay extended mode waits for the retry time that is specified in the printer definition and tries the print job again. When all retransmissions are completed, IP PrintWay retains the print job on the JES spool if retention is requested.

**Operator response:** Check the printer. After you correct the printer problem, the print job starts automatically when IP PrintWay tries the print job again. However, you can start the print job immediately from Infoprint Central. If IP PrintWay completed the print job and retained it on the JES spool, start the print job from Infoprint Central. If the print job is no longer on the JES spool, ask the job submitter to resubmit the print job.

If the printer does not need intervention, ask your print administrator to check whether the printer supports PJL. After the printer definition is corrected, start the print job from Infoprint Central, or ask the job submitter to resubmit the print job.

**System programmer response:** Check the printer documentation to see whether 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, with most printers, you cannot specify a high timeout value.

**User response:** After the problem is corrected, resubmit the print job if necessary.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**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 that is 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.

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.

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

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP3903E  An unknown error has occurred. 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.

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 retransmission, or if no retransmissions are requested, IP PrintWay retains the data set on the JES spool for the amount of time that is 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.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
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 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 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 that 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](https://www.ibm.com). For information about the VTAM code and VTAM state, see [z/OS V2R2.0 Communications Server: IP and SNA Codes](https://www.ibm.com). 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.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

AOP3905E  
**AOXVTM did not load. The return code is 0xcode. The reason code is 0xcode.**

**Explanation:** An error occurred when IP PrintWay tried to send a data set to a VTAM controlled printer.

In the message text, `code` is the hexadecimal return code or reason code from the LOAD macro.

The problem might be one of these:

* You did not install Coaxial Printer Support.
* You moved module AOXVTM from SYS1.LINKLIB to a library that is not specified in the STEPLIB environment variable or is not defined to the STEPLIBLIST facility.

The `aoplogu` command provides more information in fields before the message text. For information about the contents of these fields, see "Format of messages in the Infoprint Server common message log" on page 75.

**System action:** IP PrintWay tries to retransmit the data set. If this is the final retransmission, or if no retransmissions are requested, IP PrintWay retains the data set on the JES spool for the amount of time that is 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 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](https://www.ibm.com).

**Problem determination:** Not applicable.

**Module:** 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 `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 retransmission, or if no retransmissions are requested, IP PrintWay retains the data set on the JES spool for the amount of time that is 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 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](https://www.ibm.com). For information about the codes, see [z/OS MVS System Codes](https://www.ibm.com).

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
AOP3907E Specify a printer LU name for the VTAM protocol.

Explanation: The printer LU name is missing or incorrect in the Protocol section of the printer definition, or the name is not defined in VTAM.

The `aoplogu` command provides more information in fields before the message text. For information about the contents of these fields, see “Format of messages in the Infoprint Server common message log” on page 75.

System action: IP PrintWay tries to retransmit the data set. If this is the final retransmission, or if no retransmissions are requested, IP PrintWay retains the data set on the JES spool for the amount of time that is specified for failed transmissions and then deletes the data set.

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

System programmer response: Specify a printer LU name in the printer definition, and make sure that the printer LU name is defined in VTAM. If you use the Printer Inventory Definition Utility (PIDU) to modify printer definitions, specify the `printer-luname` attribute on the `pidu` command.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP3909E A VTAM error has occurred. The VTAM request code is 0xcode. The VTAM feedback code is 0xcode. The VTAM system sense code is 0xcode. The VTAM RPL return code is 0xcode. The VTAM LU name is luname. The VTAM logmode name is logmode.

Explanation: An error occurred while IP PrintWay was sending a data set to a VTAM controlled printer.

In the message text:
- `code` is the hexadecimal code from VTAM.
- `luname` is the logical unit name of the VTAM controlled printer, which is specified in the printer definition in the Printer Inventory.
- `logmode` is the name of the entry in the VTAM logon-mode table that the printer uses. The logmode name can be specified in the printer definition. If it is not specified in the printer definition, it is the name specified in the DLOGMOD parameter of the VTAM resource definition statement for the printer LU.

The problem might be one of these:
- The IP PrintWay connection timeout value expired before IP PrintWay was able to 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 logon-mode table is specified in the MODETAB parameter of the VTAM resource definition statement for the printer LU.

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 retransmission 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 V2R2.0 Communications Server: IP and SNA Codes.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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 retransmission 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 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 that 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 V2R2.0 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.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOP3911E** A VTAM OPEN error has occurred. The return code is 0x`code`. The reason code is 0x`code`.

**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 retransmission 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 V2R2.0 Communications Server: IP and SNA Codes.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**AOP3912I** The transmission was successful but was canceled at the printer.

**Explanation:** The operator canceled the print job at the printer after all data was 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 that is specified for failed transmissions and then deletes the data set.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**AOP3913E** AOPITX 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. 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 retransmission, or if no retransmissions are requested, IP PrintWay retains the data set on the JES spool for the amount of time that is 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 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 V2R2.0 Communications Server: IP and SNA Codes.

Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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 cannot 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 retransmission 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.
Module: Not applicable.
Source: Infoprint Server.
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.
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.
User response: Contact your system programmer.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3950E Print job job-name does not contain the mail-to-addresses attribute.

Explanation: The print job is detected to be an email job and the mail-to-addresses cannot be determined.
In the message text, job-name is the name of the print job.
System action: The print job did not complete.
Operator response: None.
System programmer response: This message indicates a possible logic error.
Contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.
User response: Notify your system programmer that this error occurred.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP3950E AOP4001I

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.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
Routing code: Not applicable.
AOP4002I - AOP4006I

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.

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

AOP4006I Infoprint Central held the document.

Explanation: From Infoprint Central, a user asked to hold the specified print job. Infoprint Central is acknowledging the user's request. Another message follows with the outcome of the request.

System action: Infoprint Central holds the print job.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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.

Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
Chapter 2. Infoprint Server (AOP) messages and codes
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.

Operator response: Make sure that the printer repeats. If the printer does not repeat, contact your system programmer.

System programmer response: For PSF printers, check the MVS system log for JES or PSF messages.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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.

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.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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.

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.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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.

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.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
AOP4017I Infoprint Central accepted a request from userid to stop the LU.

Explanation: From Infoprint Central, a user asked to stop the logical unit (LU). Infoprint Central is acknowledging the user's request. In the message, userid is the user who made the request.

System action: Infoprint Central tries to stop the LU.

Operator response: Make sure that the LU stops. If the LU does not stop, contact your system programmer.

System programmer response: Check the MVS system log for NetSpool or VTAM messages.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP4021I 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.

Operator response: None.

System programmer response: Check the MVS system log for JES messages.

User response: Try to release the document again. If the problem persists, contact your system programmer.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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.

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.

User response: Try to hold the document again. If the problem persists, contact your system programmer.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP4020I 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.

Operator response: None.

System programmer response: Check the MVS system log for JES messages.

User response: Try to modify the document again. If the problem persists, contact your system programmer.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
AOP4022I  Infoprint Central accepted a request from userid to move the print job to printer.

Explanation: From Infoprint Central, a user asked to move the specified print job. Infoprint Central is acknowledging the user's request. In the message, userid is the user who made the request, and printer is the printer where the print job is to be sent. Another message follows with the outcome of the request.

System action: Infoprint Central tries to move the print job.

Operator response: Make sure that the print job moves. If the print job does not move, contact your system programmer.

System programmer response: Check the Infoprint Server print job log for IP PrintWay messages.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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.

Operator response: Make sure that the printer spaces forward the correct number of pages from the end of the data set. If the printer does not space forward the correct number of pages from the end of the data set, contact your system programmer.

System programmer response: Check the MVS system log for JES or PSF messages.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP4028I  Infoprint Central accepted a request from userid to space the printer forward number pages from the last checkpoint.

Explanation: From Infoprint Central, a user asked to space the printer forward from the last checkpoint. Infoprint Central is acknowledging the user's request. In the message, userid is the user who made the request, and number is the number of pages to space the printer forward from the last checkpoint.

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

Operator response: Make sure that the printer spaces forward the correct number of pages from the start of the data set. If the printer does not space forward the correct number of pages from the start of the data set, contact your system programmer.

System programmer response: Check the MVS system log for JES or PSF messages.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.
**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**AOP4029I** Infoprint Central accepted a request from *userid* to space the printer forward *number* pages from the current page.

**Explanation:** From Infoprint Central, a user asked to space the printer forward from the current page. Infoprint Central is acknowledging the user's request. In the message, *userid* is the user who made the request, and *number* is the number of pages to space the printer forward from the current page.

**System action:** Infoprint Central tries to space the printer forward the correct number of pages from the current page.

**Operator response:** Make sure that the printer spaces forward the correct number of pages from the start of the data set. If the printer does not space forward the correct number of pages from the start of the data set, contact your system programmer.

**System programmer response:** Check the MVS system log for JES or PSF messages.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**AOP4031I** Infoprint Central accepted a request from *userid* to space the printer backward *number* pages from the 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.

**System programmer response:** Check the MVS system log for JES or PSF messages.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server.

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**AOP4032I** Infoprint Central accepted a request from *userid* to space the printer backward *number* pages from the last checkpoint.

**Explanation:** From Infoprint Central, a user asked to...
space the printer backward from the last checkpoint. Infoprint Central is acknowledging the user's request. In the message, userid is the user who made the request, and number is the number of pages to space the printer backward from the last checkpoint.

System action: Infoprint Central tries to space the printer backward the correct number of pages from the last checkpoint.

Operator response: Make sure that the printer spaces backward the correct number of pages from the last checkpoint. If the printer does not space backward the correct number of pages from the last checkpoint, contact your system programmer.

System programmer response: Check the MVS system log for JES or PSF messages.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP4033I Infoprint Central accepted a request from userid to space the printer backward number pages from the current page.

Explanation: From Infoprint Central, a user asked to space the printer backward from the current page. Infoprint Central is acknowledging the user's request. In the message, userid is the user who made the request, and number is the number of pages to space the printer backward from the current page.

System action: Infoprint Central tries to space the printer backward the correct number of pages from the current page.

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.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOP4035I Infoprint Central accepted a request from userid to stop the printer and complete the current print job.

Explanation: From Infoprint Central, a user asked to stop the printer and complete the current print job. Infoprint Central is acknowledging the user's request. In the message, userid is the user who made the request. Another message follows with the outcome of the request.

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

Operator response: Make sure that the printer stops and the current print job is completed. If the printer does not stop or the current print job is not completed, contact your system programmer.

System programmer response: For IP PrintWay printers, check the IP PrintWay printer log for IP PrintWay messages. For PSF printers, check the MVS system log for JES or PSF messages.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

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.

Operator response: Make sure that the printer stops and the current print job is deleted. If the printer does not stop or the current print job is not deleted, contact your system programmer.

System programmer response: For IP PrintWay printers, check the IP PrintWay printer log for IP PrintWay messages. For PSF printers, check the MVS system log for JES or PSF messages.

User response: None.

Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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.
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.
User response: None.
Problem determination: 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 authorized to access Infoprint Server files or directories.

System action: Infoprint Central continues, but most Infoprint Central actions fail.
Operator response: Notify the system programmer that this error occurred.
System programmer response: None.
User response: Try the request again. If the problem persists, contact your Windows administrator.
Problem determination: Not applicable.

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.
Operator response: None.
System programmer response: None.
User response: Try the request again. If the problem persists, contact your Windows administrator.
Problem determination: Not applicable.

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.
Operator response: None.
System programmer response: None.
User response: Try the request again. If the problem persists, contact your Windows administrator.
Problem determination: Not applicable.

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AOP5002I  The port has been deleted.
Explanation:  The user added an Infoprint Port Monitor port but did not configure it.
System action:  The Infoprint Port Monitor for Windows deletes the new Infoprint port.
Operator response:  None.
System programmer response:  None.
User response:  None.
Problem determination:  Not applicable.
Module:  Not applicable.
Source:  Infoprint Server Port Monitor for Windows.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

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.
Operator response:  None.
System programmer response:  None.
User response:  Try the request again. If the problem persists, contact your Windows administrator.
Problem determination:  Not applicable.
Module:  Not applicable.
Source:  Infoprint Server Port Monitor for Windows.
Routing code:  Not applicable.
Descriptor code:  Not applicable.
Automation:  Not applicable.

AOP5004I  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.
Operator response:  None.
System programmer response:  None.
User response:  Enter the port number where the LPD is listening in the Host Port field. The usual port number is 515.
Problem determination:  Not applicable.
Module:  Not applicable.
Source:  Infoprint Server Port Monitor for Windows.
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.
Operator response:  None.
System programmer response:  None.
User response:  Follow the instructions in the message text.
Problem determination:  Not applicable.
Module:  Not applicable.
Source:  Infoprint Server Port Monitor for Windows.
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.
In the message text, name is the name of the port that the user entered.
System action: The Infoprint Port Monitor for Windows waits.
Operator response: None.
System programmer response: None.
User response: Enter a different port name and click OK.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server Port Monitor for Windows.
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.
Operator response: None.
System programmer response: None.
User response: Try the request again. If the problem persists, contact your Windows administrator.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server Port Monitor for Windows.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOP5051E  Communication protocol error.
Explanation: The Infoprint Server Port Monitor for Windows cannot 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.
Operator response: None.
System programmer response: None.
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, select 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.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server Port Monitor for Windows.
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.
Operator response: None.
System programmer response: None.
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, select 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.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server Port Monitor for Windows.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
configured. If the Port Monitor is sending a print job to the z/OS system, the file is not sent.

Operator response: None.

System programmer response: Make sure that the Infoprint Server LPD is running.

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

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server Port Monitor for Windows.

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 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 before 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 made in the Version 1 Printer Inventory after falling back to a release before z/OS V1R12 are 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.

Operator response: Report this problem to the system programmer.

System programmer response: Examine the report that this check produced. An “E” in the “S” (Status) column indicates that the master.v2db file exists in the indicated base directory. If wanted, remove file master.v2db from the base directory. To remove master.v2db, you must have an effective UID of 0 or be a member of the RACF AOPADMIN group.

For more information, see z/OS Migration.

User response: Report this problem to the system programmer.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.
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 did not yet start Infoprint Server on z/OS V1R12 (or later), or you removed the Version 2 Printer Inventory files.

System action: Processing continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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 was not started on this system.

System action: Processing continues.
Operator response: Report this problem to the system programmer.
System programmer response: Start Infoprint Server before running this check.

For information about more migration actions, see z/OS Migration.

User response: Report this problem to the system programmer.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

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 that 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 that is required to create the Version 2 Printer Inventory. An “N” in the “S” (Status) column indicates that the Version 2 Printer Inventory exists.

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

User response: Report this problem to the system programmer.

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

AOPH1512I The Infoprint Server file system has sufficient space to reformat the Printer Inventory when you migrate to z/OS V1R12. 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 that is required to create the Version 2 Printer Inventory. An "N" in the "S" (Status) column indicates that the Version 2 Printer Inventory exists.

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

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

AOPH1513I ENV/NA

AOPH1514I File master.v2db was found in the Infoprint Server base directory. This file indicates that Infoprint Server created the Version 2 Printer Inventory on z/OS V1R12 (or later). 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: The Infoprint Server file system has enough space for the Version 2 Printer Inventory. The first time you start Infoprint Server on z/OS V1R12, Infoprint Server attempts to reformat the Version 1 Printer Inventory and create the Version 2 Printer Inventory. If insufficient space exists, Infoprint Server does not start.

System action: Processing continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server.
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 is not started on this system.

System action: Processing continues.

Operator response: Report this problem to the system programmer.

System programmer response: Start Infoprint Server before running this check.

For information about more migration actions, see z/OS Migration.

User response: Report this problem to the system programmer.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

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.

Operator response: None.

System programmer response: For more information about dynamic configuration and how to enable it, see z/OS Infoprint Server Customization.

User response: Notify your system programmer that this error occurred. Select this option again after dynamic configuration is enabled.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server.

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
AOPIM019  •  AOPIM033

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.
Operator response: None.
System programmer response: For information about the required authorization, see z/OS Infoprint Server Customization.
User response: Notify your system programmer that this error occurred.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
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.
Operator response: None.
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.
User response: Ask your administrator to give you read access to the Printer Inventory.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOPIM022  System error errmsg
Explanation: A system error occurred while processing the request. errmsg is a message that gives more information about the system error.
System action: The request was not completed.
Operator response: None.
System programmer response: Correct the error that corresponds to return_code. See z/OS V2R2 ISPF Messages and Codes. If the error persists, contact the IBM Support Center, or use your electronic link with IBM service for assistance.
User response: Notify your system programmer that this error occurred.

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.
Operator response: None.
System programmer response: See the description for message errmsg.
User response: Notify your system programmer that this error occurred.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOPIM033  The list was not displayed because an ISPF table allocation error occurred with a return code of return_code.
Explanation: You selected an ISPF panel option to display a list. However, the list cannot be displayed because an error occurred with an ISPF return_code.
System action: The request was not completed.
Operator response: None.
System programmer response: See the description for return_code. See z/OS V2R2 ISPF Messages and Codes. If the error persists, contact the IBM Support Center, or use your electronic link with IBM service for assistance.
User response: Notify your system programmer that this error occurred.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOPS002I Subsystem established successfully.
Explanation: The Print Interface subsystem was defined and activated.
System action: Processing continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOPS002I Subsystem already active.
Explanation: The Print Interface subsystem was already active when the start command or JCL startup procedure was run.
System action: Processing continues.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

AOPS006E Subsystem query failed.
Explanation: The IEFSSI REQUEST=QUERY macro to query the Print Interface subsystem failed.
System action: The state of the Print Interface subsystem is not known. Job submitters might not be able to submit data sets to the Print Interface subsystem.
Operator response: Notify your system programmer that this error occurred. 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 MVS Programming: Authorized Assembler Services Reference EDT-IXG for more information.
User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
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.

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

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

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.

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

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

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.

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

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

AOPS010E  Subsystem activate failed, bad token.

Explanation: The IEFSSI REQUEST=ACTIVATE macro to activate the Print Interface subsystem failed because the token returned by the IEFSSI REQUEST=QUERY macro was not a valid token.

System action: The Print Interface subsystem is not activated.

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

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server
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.

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

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

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.

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

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

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.

Operator response: Notify your system programmer that this error occurred. 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 MVS Programming: Authorized Assembler Services Reference EDT-IXG for more information.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

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.

Operator response: Notify your system programmer that this error occurred. 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 MVS Programming: Authorized Assembler Services Reference EDT-IXG for more information.

User response: None.

Problem determination: Not applicable.

Module: Not applicable.
AOPS015S • AOPS019E

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**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.

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

**User response:** None.

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**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**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.

**Operator response:** Wait for the SSI to be initialized. Then, restart the Print Interface subsystem.

**System programmer response:** None.

**User response:** None.

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**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**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.

**Operator response:** Notify your system programmer that this error occurred. 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.
**AOPS020E • AOPS023E**

**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.

**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.

**User response:** Notify your system programmer that this error occurred. Restart the Print Interface subsystem after the problem is corrected.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**AOPS022E  Subsystem create failed, input table too large.**

**Explanation:** The IEFSSVT REQUEST=CREATE macro to create the Print Interface subsystem vector table failed because the MAXENTRIES value was smaller than the number of routines specified.

**System action:** The Print Interface subsystem is not activated.

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

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**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.

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

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
Center, or use your electronic link with IBM service for assistance.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**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.

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

---

**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.

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

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**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.

**Operator response:** Wait until the SSI is initialized. Then, restart the Print Interface subsystem.

**System programmer response:** None.

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**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.

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

**User response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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Also, see the description of the IEFSSVT macro in [z/OS MVS Programming: Authorized Assembler Services](http://www.ibm.com) for more information.
AOPS028E • AOPS101E

Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
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 can be loaded.
System action: The Print Interface subsystem is not activated.
Operator response: Notify your system programmer that this error occurred. 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 MVS Programming: Authorized Assembler Services Reference EDT-IXG for more information.
User response: None.

AOPS101E Invalid DSNAME format, use &&NAME
Explanation: The data set name that is 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.
Operator response: None.
System programmer response: None.
User response: Code the DSNAME parameter in the
format DSNAME=&amp;&name. Then, resubmit the job.

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

AOPS203S  Allocation connect failed.

Explanation: The Print Interface subsystem allocation client cannot 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.
Operator response: Restart the Print Interface subsystem.
System programmer response: None.
User response: Notify the operator that this problem occurred. Resubmit the job after the Print Interface subsystem is started.

Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
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 cannot 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.
Operator response: Restart the Print Interface subsystem.
System programmer response: None.
User response: Notify the operator that this problem occurred. Resubmit the job after the Print Interface subsystem is started.

Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
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 is lost because the Infoprint Server subsystem server 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.
Operator response: Restart the Print Interface subsystem.
System programmer response: None.
User response: Notify the operator that this problem occurred. Resubmit the job after the Print Interface subsystem is started.

Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
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.
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.
User response: Notify your system programmer that this error occurred. Resubmit the job after the problem is corrected.

Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
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.
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.
User response: Notify your system programmer that this error occurred. Resubmit the job after the problem is corrected.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
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.
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.
User response: Notify your system programmer that this error occurred. Resubmit the job after the problem is corrected.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
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.
Operator response: None.
System programmer response: None.
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.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
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.
Operator response: None.
System programmer response: None.
User response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
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.
Operator response: None.
System programmer response: None.
User response: Resubmit the job when the system is less busy.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
AOPS301E • AOPS701E

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

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AOPS301E  OPEN failed. result = reason code

Explanation: The Print Interface subsystem cannot 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.

Operator response: None.

System programmer response: Follow the system programmer response for the reason code in "Infoprint Server system completion codes and reason codes" on page 201.

User response: Notify your system programmer that this error occurred. Resubmit the job after the problem is corrected.

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

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AOPS401E  PUT failed. result = reason code

Explanation: The Print Interface subsystem cannot 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.

Operator response: None.

System programmer response: Follow the system programmer response for the reason code in "Infoprint Server system completion codes and reason codes" on page 201.

User response: Notify your system programmer that this error occurred. Resubmit the job after the problem is corrected.

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

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AOPS501E  CLOSE failed. result = reason code

Explanation: The Print Interface subsystem cannot 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.

Operator response: None.

System programmer response: Follow the system programmer response for the reason code in "Infoprint Server system completion codes and reason codes" on page 201.

User response: Notify your system programmer that this error occurred. Resubmit the job after the problem is corrected.

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

---

AOPS701E  Disconnect failed. result = reason code

Explanation: The Print Interface subsystem cannot process the disconnect request from the subsystem interface (SSI) for the data set.

In the message text:

reason code

A code that indicates the reason for the error, in the format: 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.

Operator response: None.

System programmer response: Follow the system programmer response for the reason code in "Infoprint Server system completion codes and reason codes" on page 201.

User response: Notify your system programmer that this error occurred. Resubmit the job after the problem is corrected.

Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
System programmer response: Follow the system programmer response for the reason code in "Infoprint Server system completion codes and reason codes."

User response: Notify your system programmer that this error occurred. Resubmit the job after the problem is corrected.

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

AOPS702S 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: 00xyyyzz.

System action: The Print Interface subsystem does not create output data sets on the JES spool for any data sets in the job step.

Operator response: 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 codes and reason codes."

User response: Notify your system programmer that this error occurred. Resubmit the job after the Print Interface subsystem is restarted.

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

AOPS999T Invalid message request.

Explanation: A Print Interface function made an incorrect message request.

System action: The Print Interface subsystem does not create output data sets on the JES spool for any data sets in the job step.

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.

User response: Notify your system programmer that this error occurred. Resubmit the job after the problem is corrected.

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

Infoprint Server system completion codes and reason codes

09B completion code

The system completion code for abends that Infoprint Server issues is 09B. The reason code indicates the component that issued the abend:

00000000 – 00000EA1
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.

Table 5 on page 202 describes the reason codes that are displayed in a message or as an abend reason code. These codes can help you determine why an error or abend occurred. The format of the reason code is:
00xxyyzz

**xx** Specifies the type or error:
- X'08'  warning
- X'0C'  environmental error
- X'10'  system error
- X'14'  logic error

**yy and zz**
Describes the reason for the error. See the hexadecimal values in Table 5.

Table 5. 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 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 later.</td>
</tr>
<tr>
<td>12 07, 08</td>
<td>The Print Interface subsystem was not running.</td>
<td>Start the <code>aopsubd</code> daemon and 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 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 is changed.</td>
</tr>
<tr>
<td>07, 08</td>
<td>The Print Interface subsystem was not running.</td>
<td>Restart the Print Interface subsystem and resubmit the print job.</td>
</tr>
<tr>
<td>19 04</td>
<td>An error occurred on the application side.</td>
<td>Read the other messages to see what action is necessary.</td>
</tr>
<tr>
<td>1C 02</td>
<td>Another message indicates the cause of the problem.</td>
<td>Correct the error and resubmit the print job.</td>
</tr>
</tbody>
</table>

**Other codes**
A possible logic error exists. Contact your service representative at the IBM Support Center, or use your electronic link with IBM for assistance.
09C completion code

The system completion code for abends that the AOPCMND command issues when the MVS Message Services macros fail is 09C. The reason code indicates information about the MVS macro:

- The high order byte indicates which MVS macro failed:
  - 01 BLDMPB
  - 02 UPDTMPB
  - 03 TRANMSG
  - 04 PUTLINE

For information about the BLDMPB, UPDTMPB, and TRANMSG macros, see z/OS MVS Programming: Authorized Assembler Services Guide. For information about the PUTLINE macro, see z/OS TSO/E Programming Services.

- The second byte is the reason code that the macro returned.
- The remaining halfword is the return code from the macro.

Contact your service representative at the IBM Support Center, or use your electronic link with IBM for assistance.
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:

```
APInnmnt 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.

**Note:** The `jobname.identifier` is not displayed as part of the message in this document. Only the message identifier and message text are shown.

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](https://www.ibm.com/support/docview.wss?uid=swg27033655). For information about the information that is returned by `aoplogu`, see “Format of messages in the Infoprint Server common message log” on page 75.

### Messages

<table>
<thead>
<tr>
<th>Code</th>
<th>Message</th>
<th>Explanation</th>
<th>System action</th>
<th>Operator response</th>
<th>System programmer response</th>
<th>Problem determination</th>
<th>Module</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>API0800I</td>
<td>STARTING NETSPOOL</td>
<td>NetSpool is started.</td>
<td>Processing continues.</td>
<td>None.</td>
<td>None.</td>
<td>Not applicable.</td>
<td>Not applicable.</td>
<td>Infoprint Server</td>
</tr>
<tr>
<td></td>
<td>Routing code</td>
<td>Not applicable.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Descriptor code</td>
<td>Not applicable.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Automation</td>
<td>Not applicable.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>API0801I</td>
<td>TERMINATING NETSPOOL</td>
<td>NetSpool is stopping.</td>
<td>NetSpool stops.</td>
<td>None.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Operator response</td>
<td>None.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>System programmer response</td>
<td>None.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

API0804E The timer is not working.
Explanation: A timer that is 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.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API0805I tcb_id TASK ABNORMALLY TERMINATED
Explanation: A NetSpool ESTAE routine detected that a NetSpool task ended abnormally.
System action: NetSpool processing ends 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.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API0806E 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 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.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API0807E 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.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API0808E NO KEYWORD IS SPECIFIED IN THE PARM FIELD IN THE EXEC STATEMENT.
Explanation: The EXEC statement for NetSpool does not contain a required keyword before the equal sign in the PARM list.
System action: NetSpool processing ends abnormally.
Operator response: None.
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.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API0809E THE KEYWORD IS TOO LONG:

keyword.

Explanation: The EXEC statement for NetSpool contains a keyword in the PARM field that is greater than 8 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.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API0810E 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.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API0814E 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.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
API0817E  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.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

API0823E  lu-name — An undetermined OPEN error occurred for LU, RC = rc.

Explanation: An attempt to open a VTAM LU failed for an unknown reason. The value that is returned in the ERROR field of the ACB is displayed in the rc portion of this message.

System action: NetSpool does not attempt to reopen the ACB for the VTAM LU.

Operator response: To determine the type of error that occurred, see the description of the OPEN macro, Completion Information section, in [z/OS V2R1.0 Communications Server: SNA Programming]. Then, contact the system programmer.

System programmer response: For error code 36 (24 hexadecimal), correct the specified APPL definition. For all other error codes, contact your service representative in the IBM Support Center, or use your electronic link with IBM service for assistance.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

API0825E  lu-name — LU is in the process of being opened or closed.

Explanation: The specified VTAM LU is being opened or closed.

System action: NetSpool periodically (every 60 seconds) attempts to open or close the LU.

Operator response: Make sure that the LU is not already being used by another application.

System programmer response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

API0826E  lu-name — 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 prevents 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 that 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.

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

API0827E  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 V2R1.0 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.

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

API0828E  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 that 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.

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

API0829E  number LUs are in the process of being opened or closed.

Explanation: The indicated number of LUs are being opened or closed.

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.

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

API0830E  number LUs are already in use by another application.

Explanation: A connection request was received for the indicated number of LUs, which are already active.

System action: NetSpool periodically (every 60 seconds) attempts to open the LUs.

Operator response: Notify the system programmer. 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: None.

Problem determination: Not applicable.

Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
seconds) attempts to open the LUs.

Operator response: Notify the system programmer.

System programmer response: Make sure that 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]

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

API0831E 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 V2R1.0 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.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API0832E SETLOGON failed for name

Explanation: An attempt was made to display a SETLOGON START command for an open ACB.

System action: NetSpool closes the ACB and periodically (every 60 seconds) tries the OPEN ACB and SETLOGON commands again.

Operator response: Notify the system programmer.

System programmer response: Make sure that enough storage is available for VTAM.

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

API0833E 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) tries the VTAM OPEN ACB command again.

Operator response: Make sure that VTAM is active before starting NetSpool.

System programmer response: None.

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

API0834E 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) tries the VTAM OPEN ACB command again.

Operator response: Reactivate VTAM or stop the NetSpool task.

System programmer response: None.

Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
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 that VTAM is installed before running NetSpool.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

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.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

NetSpool command specified is not valid.

Explanation: The MODIFY NetSpool operator command that is 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.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

Command accepted

Explanation: The operator entered a valid operator command, and NetSpool does 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.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
API0900E  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 that is 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.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

API0901E  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: Verify that modules APIIOPN, APIICNV, and APIICLS exist in SYS1.LINKLIB. For information about the return codes for CEEPIPI init_sub, see z/OS Language Environment Programming Guide.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

API0902E  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. For information about set_dub_default, see z/OS UNIX System Services Programming: Assembler Callable Services Reference.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

API0903E  ICONV open failed for luname = luname. Document codepage = codepage Printer codepage = codepage R15 = callrc

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

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

Operator response: None.

System programmer response: Verify that the document code page and the printer code page in the message text are correct and valid iconv code pages for this installation. For information about iconv and valid code pages, see z/OS XL C/C++ Runtime Library. More information about valid code sets is included in z/OS XL C/C++ Programming Guide. For information about the R15 and CEEPIPI call_sub return codes, see z/OS Language Environment Programming Guide.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
API0904E  CEEPIPI Language Environment error information:  
return code = return code  
reason code = reason code  
feedback code = feedback code

Explanation: The C Language Environment returned an error through CEEPIPI. This message is additional information for message API0903E, API0905E, or API0906E.

System action: See message API0903E, API0905E, or API0906E.

Operator response: None.

System programmer response: For information about the return code and reason code, see z/OS UNIX System Services Messages and Codes. 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 decodes 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.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

API0905E  ICONV text conversion failed for 
luname = printerlu.  Document codepage = document cp  
Printer codepage = printer cp  
R15 = callrc

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

System action: NetSpool continues processing jobs for other printers.

Operator response: None.

System programmer response: For information about the R15 and CEEPIPI call_sub return codes, see z/OS Language Environment Programming Guide. 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 decodes the error. Message API0908E might appear.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

API0906E  ICONV close failed for luname = 
printerlu.  R15 = callrc

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 CEEPIPI 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 decodes the error. Message API0908E might appear.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

API0907E  ICONV text conversion failed for 
luname = printerlu.  In_bytesleft = in_bytesleft  
Out_bytesleft = out_bytesleft  
Next_unconverted_char = char

Explanation: This message is additional information for message API0905E.

The code point that cannot be converted is next_unconverted_char in this message. The next location in the input buffer and output buffer is also given.

System action: See message API0905E.

Operator response: None.

System programmer response: See message API0905E.
**API0908E**  

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

```plaintext
API0908E  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 that is given for the errno.  

**System action:** See message API0903E, API0905E, or API0906E.  
**Operator response:** None.  
**System programmer response:** See message API0903E, API0905E, or API0906E.  

---

**API0920E**  

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 that is issued is (uss-cmd) in the message. The command is a UNIX System Services Assembler Callable Service. If the return value is X'FFFFFFFF', 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.

---

**API0921E**  

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 **faopnetd**. See messages that are 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.  
**attributes:** **error**

**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.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

---

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

error

Explanation: The job ended because an error was detected by the NetSpool daemon aopnetd while spooling the job to JES. See messages that are 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.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

---

API0924E 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.

errno
The value of the errno.

return value
The returned value of the UNIX System Services command.

return code
The return code of the UNIX System Services command.

reason code
The reason code of the UNIX System Services command.

user option
The user option of the UNIX System Services command.

System action: NetSpool ends.

Operator response: None.

System programmer response: For information about the uss-cmd in the message, see [z/OS UNIX System Services Programming Tools]. For information about the errno value (errno) in the message, see [z/OS UNIX System Services Messages and Codes].

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server
API0925E • API0927E

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

API0925E  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 large.

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 is less than 2047.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

API0926E  A print job failed for NetSpool LU
slu-name. NetSpool cannot access file in
base-directory: path

Explanation: The job was ended because NetSpool
does not have permission to access the path directory
that is defined in aopnd.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
aopnd.conf.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

API0927E  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 (aopnd.conf) is
correct. The default location of the configuration file
  is /etc/Printsrv/aopnd.conf.

• 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.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.
API0928E  The failing NetSpool started task
Jobname path is: jobname.path.

Explanation: NetSpool cannot create file jobname.path for the NetSpool started task.
System action: NetSpool continues.
Operator response: None.
System programmer response: See messages API0927E and API0930E because the file cannot be created.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API0929E  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.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API0930E  The NetSpool daemon has not been started.

Explanation: The NetSpool daemon, aopnetd, was not 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.
Operator response: None.
System programmer response: Add netd to the values in the start-daemons attribute in the Infoprint Server configuration file (aopd.conf), and then start the NetSpool daemon. After you start the NetSpool daemon, stop and restart the NetSpool task.
For more information about how to start and stop the NetSpool daemon and task, see z/OS Infoprint Server Operation and Administration.
User response: Notify the system programmer.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API0950E  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 a 3270 data stream, you must change the NetSpool LU type to type 0 or type 3 in the VTAM major node definitions and in the application's resource definitions.
System action: NetSpool returns a negative response. If the error was an unsupported SCS command, the sense code returned a response of X'10030000'. If the error was caused by data that was not valid in a DBCS string in the SCS data, the sense code returned a response of X'10010000'.
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 by using the General Trace Facility (GTF) with event identifier FAC.
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.

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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.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**API0951E**  
**SCS control code parameter is missing or not valid.**

**Explanation:** NetSpool detected either an unsupported or a missing parameter for an SCS control code. Message API0951E provides additional information about the error.

**System action:** NetSpool returns a negative response with a sense code of X'10050000'.

**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 by using the General Trace Facility (GTF) with event identifier FAC.

**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 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.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**API0952E**  
**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 API0952E provides additional information about the error.

**System action:** NetSpool returns a negative response with a sense code of X'10050000'.

**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 by using the General Trace Facility (GTF) with event identifier FAC.

**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 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.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

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**API0953E**  
**3270 data stream parameter is not valid.**

**Explanation:** NetSpool detected an unsupported or incorrect parameter for an order in the 3270 data stream. Message API0953E provides additional information about the error.

**System action:** NetSpool returns a negative response with a sense code of X'10050000'.

**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 by using the General Trace Facility (GTF) with event identifier FAC.

**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 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.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API0954I**  
**Code point: hex-value Offset: mmmm 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, \textit{nnn} 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 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.

\textbf{System action:} See a previous error message for the action that is taken by NetSpool.

\textbf{Operator response:} None.

\textbf{System programmer response:} If the code point 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 the application's resource definitions. Otherwise, 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 by using the General Trace Facility (GTF) with event identifier FAC.

\textbf{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.

\textbf{Problem determination:} Not applicable.

\textbf{Module:} Not applicable.

\textbf{Source:} Infoprint Server

\textbf{Routing code:} Not applicable.

\textbf{Descriptor code:} Not applicable.

\textbf{Automation:} Not applicable.

---

\textbf{API0955E} Transparent data is incomplete at end of data set. LU: \textit{lu-name}

\textbf{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.

\textbf{System action:} NetSpool returns a negative response with a sense code of X'10050000'.

\textbf{Operator 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.

\textbf{Problem determination:} Not applicable.

\textbf{Module:} Not applicable.

\textbf{Source:} Infoprint Server

\textbf{Routing code:} Not applicable.

\textbf{Descriptor code:} Not applicable.

\textbf{Automation:} Not applicable.

---

\textbf{API0957E} NetSpool attempted to print characters before the left margin column. PLU: \textit{plu-name} SLU: \textit{slu-name}

\textbf{Explanation:} NetSpool attempted to print characters in an area that is to the left of the column number that is specified as the left margin.

In the message text, \textit{plu-name} is the VTAM primary logical unit name, which identifies the VTAM application that submitted the print request. \textit{slu-name} is the VTAM secondary LU name, which identifies the NetSpool printer LU. The SLU name is the NetSpool LU name that is specified in the printer definition that is used to print the job.

\textbf{System action:} NetSpool stops processing for this data set.

\textbf{Operator response:} Notify the system programmer.

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

\textbf{Problem determination:} Not applicable.

\textbf{Module:} Not applicable.

\textbf{Source:} Infoprint Server

\textbf{Routing code:} Not applicable.

\textbf{Descriptor code:} Not applicable.

\textbf{Automation:} Not applicable.
API0958E • 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API0958E** 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 more 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API0959E** 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 that is specified in the printer definition that is 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API0960E** 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 that is specified in the printer definition that is 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API0961E** 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 that is specified in the printer definition that is used to print the job.

**System action:** NetSpool stops processing for this data set.

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

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

---

API0962I  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.

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.

User response: Check the application to see whether the output is intended for 3270 data streams instead of SCS data streams.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

---

API0964E  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.

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 by using the General Trace Facility (GTF) with event identifier FAC.

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.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

---

API0963E  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 that is specified in the printer definition that is used to print the job.

System action: NetSpool stops processing for this data set.

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 by using the General Trace Facility (GTF) with event identifier FAC.

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.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.
API0965E  The length field in the job attribute text string is not valid.

Explanation: The length field in the job attribute text string is not a valid number. Each digit must be a value between X'F0' and X'F9'. Message API0968I provides additional information about the error.

System action: NetSpool stops processing for this data set.

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 by using the General Trace Facility (GTF) with event identifier FAC.

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.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

API0966E  The owner attribute in the job attribute text string is not valid.

Explanation: The syntax of the owner attribute in the job attribute text string is not correct. The value might be too long or might be missing. Message API0967I provides additional information about the error.

System action: NetSpool stops processing for this data set.

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 by using the General Trace Facility (GTF) with event identifier FAC.

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.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

API0967I Hex display of owner attribute string: X'hex-data'.

Explanation: This message is additional information for message API0966E.

The incorrect owner attribute is shown in hexadecimal format.

System action: See message API0966E.

Operator response: None.

System programmer response: See message API0966E.

User response: See message API0966E.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

API0968I Hex display of job attribute text string header: X'hex-data'.

Explanation: This message is additional information for messages API0964E and API0965E.

The header that contains the incorrect continuation field or length field is shown in hexadecimal format.

System action: See message API0964E or API0965E.

Operator response: None.

System programmer response: See message API0964E or API0965E.

User response: See message API0964E or API0965E.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

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.

**Module:** Not applicable.

**Source:** Infoprint Server

**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.

**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.

**User response:** Notify the system programmer.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**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.

**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.

**User response:** Notify the system programmer.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**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 discovered that an event in its internal EWB queue was reused. NetSpool cannot try the action again for the socket, which is 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 tried again.
- **error-information** is error information in hexadecimal that can help IBM diagnose the problem.

**System action:** Processing continues.

**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.

**User response:** Notify the system programmer.

**Problem determination:** Not applicable.
**API0973I**  •  **API1002I**

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**API0973I**  NetSpool diagnostic information for

\[
\text{module} : \text{variable} = X \text{ value}
\]

**Explanation:** The diagnostic information in this message can help IBM determine the cause of an unexpected condition.

In the message text:
- \(\text{module}\) is the name of a NetSpool module.
- \(\text{variable}\) is the name of a NetSpool internal variable.
- \(\text{value}\) is the hexadecimal value of the variable.

**System action:** Processing continues.

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

**System programmer response:** Provide the information in this message to your IBM service representative.

**User response:** Notify the system programmer.

**Problem determination:** Not applicable.

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**API1002I**  \(\text{lu-name} — \text{LU IS STARTED}\)

| 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:

- \(\text{SESSION}=\text{status}\)
  The indicator of whether the VTAM session with NetSpool is 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) established a session with the NetSpool printer LU.

- \(\text{PRINTERNAME}=\text{printer-definition-name} \) or \(\text{POOLNAME}=\text{printer-pool-definition-name}\)
  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 that are associated with the LU, such as end-of-file rules and formatting options.

- \(\text{LUTYPE}=\text{lu-type}\)
  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 is not 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.

- \(\text{PLU}=\text{plu-name}\)
  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 is not 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.

- \(\text{EOFRULE}=\text{rule}\)
  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.

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API1003I  lu-name — LU IS WAITING.
Explanation: The indicated VTAM LU cannot 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 more information about the operator commands that are used to start and stop LUs, see z/OS Infoprint Server Operation and Administration.
Problem determination: None.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1005I Display of LUs in the WAITING state.
Explanation: The operator requested the display of all LUs that are in the WAITING state. Subsequent messages display the LUs that are selected but cannot 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.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1006I  lu-name - LU is STOPPED.
Explanation: The indicated VTAM printer LU is STOPPED because the LUNAME DEL command was previously displayed. This printer LU is not 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 that are used to start and stop printer LUs, see z/OS Infoprint Server Operation and Administration.
System programmer response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1004I Display of LUs in the STARTED state.
Explanation: The operator requested the display of all VTAM LUs started by this instance of NetSpool. Subsequent messages display the LUs that are either in a session with a VTAM application or are ready to accept a request from a VTAM application to establish a session. LUs are displayed in the order in which they were activated.
System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Module: Not applicable.
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 are stopped by use of the LUNAME DEL command. These printer LUs are not 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.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

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](#) 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.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

NetSpool is not running APF authorized.

Explanation: NetSpool must be running authorized to run properly. NetSpool stops. The load library for NetSpool must be an APF-authorized library.

System action: NetSpool stops.

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.

NetSpool was not able to read printer printer-name from the Printer Inventory.

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 displays 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 243.

System action: NetSpool stops.

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

---

API1012E INV startup parameter was not specified.

**Explanation:** NetSpool initialization parameter INV was not specified in the PARM field in the EXEC statement in the NetSpool startup procedure.

**System action:** NetSpool stops.
**Operator response:** None.
**System programmer response:** Add the INV parameter to the PARM field in the EXEC statement in the NetSpool startup procedure and restart the NetSpool task. For more information about the NetSpool startup procedure, see z/OS Infoprint Server Customization.

---

API1013E 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 stops.
**Operator response:** None.
**System programmer response:** Examine previous NetSpool messages to determine the exact problem with accessing the Printer Inventory.

---

API1014E NetSpool will continue processing with previously cached printer definitions.

**Explanation:** An error occurred while attempting to read from the Printer Inventory. NetSpool attempts 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:** None.

---

API1015I NetSpool access to the inventory has been reestablished.

**Explanation:** NetSpool access to the Printer Inventory is reestablished. NetSpool can access the current printer definitions again.

**System action:** NetSpool continues processing.
**Operator response:** None.
**System programmer response:** None.

---

API1016E 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 displays 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 243.

**System action:** NetSpool stops if this error occurs during initialization. NetSpool continues processing.
with the currently cached information from the Printer Inventory if NetSpool 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API1017E**  
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 displays 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 243.

**System action:** NetSpool continues to process with previously cached information from the Printer Inventory.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API1030E**  
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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API1031E**  
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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
API1032E  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.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1032E  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.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1033I  LUNAME lu-name DEL was successful.
Explanation: The indicated LU name was deleted from this instance of NetSpool.
System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1033I  LUNAME lu-name DEL was successful.
Explanation: The indicated LU name was deleted from this instance of NetSpool.
System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1034I  LUNAME lu-name is still active. The LU is now PENDING CLOSE.
Explanation: The indicated LU name currently has an active session. It is closed and deleted when the session ends. The LUNAME PURGE command can be used to force NetSpool to end 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.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1034I  LUNAME lu-name is still active. The LU is now PENDING CLOSE.
Explanation: The indicated LU name currently has an active session. It is closed and deleted when the session ends. The LUNAME PURGE command can be used to force NetSpool to end 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.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1035I  ADD of LUNAME lu-name was rejected.
Explanation: A previous processing error caused the LUNAME ADD command to fail.
System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1035I  ADD of LUNAME lu-name was rejected.
Explanation: A previous processing error caused the LUNAME ADD command to fail.
System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1036I  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.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1036I  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.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API1050I  lu-name—LU is PENDING CLOSE.
Explanation: The indicated VTAM LU is pending close. It is closed when the current session is complete.
System action: Processing continues.
Operator response: None.
System programmer response: None.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.
**Automation:** Not applicable.

**API1051I**  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 through the LUCLASS parameter on the NetSpool JCL PROC.

**System action:** Processing continues.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**API1052I**  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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**API1053I**  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 whether NetSpool is attempting to start any VTAM LUs.

**System action:** Processing continues.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**API1054I**  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 whether NetSpool is attempting to start any VTAM LUs.

**System action:** Processing continues.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**API1060I** 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

**API1061I** Full tracing is active for program control.

**Explanation:** Internal and external tracing of NetSpool program control is active.

**System action:** Processing continues.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.
API1062I Internal tracing is active for program control.

Explanation: Only internal tracing of NetSpool program control is active.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

API1063I 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.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

API1064I 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.

Module: Not applicable.

Source: Infoprint Server

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.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

API1066I 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.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

API2001E FAILED TO LOAD MESSAGE TABLE name.

Explanation: Messaging cannot 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 ended.

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.

Module: Not applicable.

Source: Infoprint Server
**API2002E • API2006E**

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

---

**API2002E UNABLE TO CREATE MESSAGE TABLE TOKEN name.**

**Explanation:** Messaging cannot create the named token that contains the message table anchor.

**System action:** Messaging is not available. The task is ended.

**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.
**Module:** Not applicable.
**Source:** Infoprint Server

---

**API2003I UNABLE TO RETRIEVE MESSAGE TABLE name.**

**Explanation:** Messaging cannot retrieve the named token that contains the message table anchor.

**System action:** NetSpool stops.

**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.
**Module:** Not applicable.
**Source:** Infoprint Server

---

**API2004E UNABLE TO DELETE MESSAGE TABLE FROM STORAGE name**

**Explanation:** Messaging cannot delete the message table from storage during shutdown.

**System action:** Shutdown 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.

---

**API2005E UNABLE TO DELETE MESSAGE TABLE TOKEN name**

**Explanation:** Messaging cannot delete the named token that contains the message table anchor.

**System action:** Not applicable.

**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.
**Module:** Not applicable.
**Source:** Infoprint Server

---

**API2006E 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 ended.

**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.
**Module:** Not applicable.
**Source:** Infoprint Server
API2007E UNABLE TO RETRIEVE MESSAGE TABLE TOKEN name

Explanation: Messaging cannot retrieve the named token that contains the message table anchor.

System action: Messaging is ended.

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.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

API2008E UNABLE TO OBTAIN nnnn BYTES OF STORAGE FOR MESSAGE DCB.

Explanation: Messaging cannot obtain storage below 16 MB for the message file DCB.

System action: Messaging is ended.

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.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

API2009E FAILED TO LOAD MESSAGE I/O MODULE name.

Explanation: Messaging cannot 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 ended.

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.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

API4001E The trace options data set could not be opened.

Explanation: NetSpool cannot open the trace options data set. Make sure that the name of the DD statement is correct and refers to the correct data set.

System action: NetSpool processing ends abnormally.

Operator response: Notify the system programmer.

System programmer response: Correct the error and restart the NetSpool task.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

API4002E 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.
API4005E  •  API4014E

**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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API4005E**  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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API4006E**  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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API4007E**  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 more information on 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API4013E**  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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API4014E**  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.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

---

**API4017E** 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 API4017E 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.

---

**API4018E** Too many values are specified for this keyword

Explanation: A keyword in the trace options data set contains too many values. Message API4018E 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.

---

**API4021E** 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.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

---

**API4102E** GETMAIN failed for trace blocks.

Explanation: Not enough storage is available for NetSpool to provide tracing.

System action: NetSpool processing continues without tracing.

Operator response: Notify the system programmer.

System programmer response: Increase the size on the REGION parameter of the EXEC statement in the NetSpool startup procedure.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

Routing code: Not applicable.

Descriptor code: Not applicable.

Automation: Not applicable.

---

**API4901I** Record: mmm, OFFSET: nn contains the error.

Explanation: NetSpool detected an error in the indicated trace options data set at the indicated offset. A previous message describes the error.

System action: If this error occurs during startup of NetSpool, NetSpool ends abnormally.

Operator response: After the system programmer corrects the data set, restart the NetSpool task.

System programmer response: Correct the data set.

Problem determination: Not applicable.
API5000E • API5003I

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

API5000E NetSpool found a trace options error.
Explanation: NetSpool detected an error in the trace options data set or in the TRACE operator command. Subsequent messages provide more specific information about the error.
System action: If this error occurs on the trace options data set during NetSpool initialization, NetSpool 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 that is 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 and start NetSpool again.
Problem determination: Not applicable.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API5002E A parameter specified after the TYPE keyword is not valid.
Explanation: NetSpool 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 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 that is 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.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
Descriptor code: Not applicable.
Automation: Not applicable.

API5003I 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.
Module: Not applicable.
Source: Infoprint Server
Routing code: Not applicable.
**API5004I** External tracing to GTF has started.

**Explanation:** NetSpool 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API5004I** External tracing to GTF has stopped.

**Explanation:** NetSpool stopped tracing externally to GTF for the program control and for 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API5004I** External tracing to GTF has started.

**Explanation:** NetSpool 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API5004I** External tracing to GTF has stopped.

**Explanation:** NetSpool 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API5004I** External tracing to GTF has started.

**Explanation:** NetSpool 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API5004I** External tracing to GTF has stopped.

**Explanation:** NetSpool 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API5004I** External tracing to GTF has started.

**Explanation:** NetSpool 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API5004I** External tracing to GTF has stopped.

**Explanation:** NetSpool 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API5004I** External tracing to GTF has started.

**Explanation:** NetSpool 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API5004I** External tracing to GTF has stopped.

**Explanation:** NetSpool 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API5004I** External tracing to GTF has started.

**Explanation:** NetSpool 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API5004I** External tracing to GTF has stopped.

**Explanation:** NetSpool 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

**API5004I** External tracing to GTF has started.

**Explanation:** NetSpool 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
DISPLAY TRACE NetSpool command to verify the trace status.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

API5009E 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:** None.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

API5010E *lu-name* specified in trace options is not being processed by NetSpool.

**Explanation:** The LU name that is 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 ends 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 that is 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.

---

API5011I All NetSpool tracing has stopped.

**Explanation:** NetSpool stopped tracing because a TRACE OFF command requested that all tracing is stopped.

**System action:** Processing continues. NetSpool external tracing 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.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.

---

API5012I NetSpool tracing for all LUs has stopped.

**Explanation:** NetSpool stopped tracing because a TRACE OFF command requested that tracing for all LUs is stopped.

**System action:** Processing continues. NetSpool internal and external tracing stopped for all LUs.

**Operator response:** None.

**System programmer response:** None.

**Problem determination:** Not applicable.

**Module:** Not applicable.

**Source:** Infoprint Server

**Routing code:** Not applicable.

**Descriptor code:** Not applicable.

**Automation:** Not applicable.
NetSpool tracing for selected LUs has stopped.

Explanation: NetSpool stopped tracing because a TRACE OFF command requested that tracing for selected LUs is stopped.

System action: Processing continues. NetSpool external and internal tracing stopped for selected LUs.

Operator response: None.

System programmer response: None.

Problem determination: Not applicable.

Module: Not applicable.

Source: Infoprint Server

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 6.

When an abend occurs, you can capture the dump, save the abend information from the operator console, and report the error to the IBM Support Center.

Table 6. 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>
<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>
</tbody>
</table>
Table 6. NetSpool abend reason codes (continued)

<table>
<thead>
<tr>
<th>Abend reason code</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<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 V2R2.0 Communications Server: IP and SNA Codes](#). Also, see the NetSpool SCS information in [z/OS Infoprint Server User's Guide](#) for information about SCS data stream errors that result in SNA sense codes.

- **Implementation-specific sense codes**, which are described in Table 7 and in [Table 8 on page 241](#).

Table 7. 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 because of 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 8. 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 is ended.</td>
</tr>
</tbody>
</table>
Chapter 4. Printer Inventory Manager return codes and reason codes

Table 9 and Table 10 list 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 cannot 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 9. 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 contains 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 10.</td>
</tr>
</tbody>
</table>

Table 10. 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 cannot 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>nnnnnnnnnnn</td>
<td>X'0x06yyyy'</td>
<td>The Printer Inventory cannot 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 247 helps you match functions to their components.
- "Detecting printer definition errors" on page 248 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 250 helps you find information that your IBM service representative might ask you to locate.
- "Checking permissions settings" on page 252 helps you determine whether you have a problem with permissions.
- "Common Infoprint Server problems" on page 255 helps you correct common problems.
- "Diagnosing problems with z/OS UNIX sendmail" on page 259 helps you with sendmail.
- "Diagnosing problems in Infoprint Central" on page 260 helps you with Infoprint Central.

Your IBM service representative can 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 help your IBM service representative address your problem.

This section helps you do some preliminary diagnosis work by helping you identify the Infoprint Server component or components that you can concentrate your efforts on.

Error message prefix

Table 11 identifies the component an error message comes from based on the error message prefix.

<table>
<thead>
<tr>
<th>Message prefix</th>
<th>Component message comes from</th>
<th>For messages format, see:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANFM</td>
<td>IP PrintWay basic mode</td>
<td>&quot;ANF message format&quot; on page 1</td>
</tr>
</tbody>
</table>
Table 11. Error message prefix identification of components (continued)

<table>
<thead>
<tr>
<th>Message prefix</th>
<th>Component message comes from</th>
<th>For messages format, see:</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOP</td>
<td>Infoprint Server (including IP PrintWay extended mode)</td>
<td>“AOP message format” on page 75</td>
</tr>
<tr>
<td>API</td>
<td>NetSpool started task</td>
<td>“API message format” on page 205</td>
</tr>
</tbody>
</table>

SNA sense code

If an SNA sense code is displayed at the system operator console, NetSpool might be involved. Usually a NetSpool message is sent along with the sense code. For more information about SNA sense codes, see “SNA sense codes” on page 240.

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 243.

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 with 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 whether 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 SYSOUT data set. The name of the Print Interface startup procedure appears as the first qualifier of the data set name. The file name appears in the data set name, which is useful when printing from remote systems through Print Interface with the LPR to LPD protocol (aoplpd) or with the Internet Printing Protocol. However, when printing with z/OS UNIX commands, the job name is the user ID.

Table 12 shows how NetSpool identifies print jobs on the JES spool.

Table 12. NetSpool print job identification

<table>
<thead>
<tr>
<th>This information:</th>
<th>Comes from this area:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job ID</td>
<td>Infoprint Server</td>
</tr>
</tbody>
</table>
Table 12. 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> job attribute that is embedded in print data</td>
</tr>
<tr>
<td></td>
<td>2. <code>owner</code> job attribute that is embedded in print data</td>
</tr>
<tr>
<td></td>
<td>3. <code>Default owner</code> 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> job attribute that is embedded in print data</td>
</tr>
<tr>
<td></td>
<td>2. <code>Default owner</code> field in printer definition</td>
</tr>
<tr>
<td></td>
<td>3. ID of user who started Infoprint Server daemons</td>
</tr>
<tr>
<td>Owner 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> job attribute that is embedded in print data</td>
</tr>
<tr>
<td></td>
<td>2. <code>owner</code> job attribute that is embedded in print data</td>
</tr>
<tr>
<td></td>
<td>3. <code>Default owner</code> 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> job attribute that is 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 13 lists the functions that are 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 13. 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>260, 282</td>
</tr>
</tbody>
</table>
Table 13. 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>277</td>
</tr>
<tr>
<td>Print from remote systems with one of these TCP/IP protocols:</td>
<td>Printer Inventory Manager, Print Interface</td>
<td>277</td>
</tr>
<tr>
<td>LPR to LPD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internet Printing Protocol (IPP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Server Message Block (SMB)</td>
<td></td>
<td></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>277</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>277 301</td>
</tr>
<tr>
<td>Print on printers in a Internet Protocol network by using one of these TCP/IP protocols:</td>
<td>Printer Inventory Manager, IP PrintWay basic mode, IP PrintWay extended mode</td>
<td>277 287</td>
</tr>
<tr>
<td>LPR to LPD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct sockets printing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internet Printing Protocol (IPP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Print on VTAM controlled printers.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Send print output to email destinations.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Print documents on a z/OS printer from a Windows system with the Infoprint Port Monitor for Windows.</td>
<td>Infoprint Port Monitor for Windows, Printer Inventory Manager, Print Interface</td>
<td>277</td>
</tr>
<tr>
<td>Store system configuration information in the Printer Inventory for PSF.</td>
<td>Printer Inventory Manager</td>
<td>277</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 that are 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 that is 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
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 that 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 277.

Table 14 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 14. 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 specify 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 14. 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 or the VARFILE DD statement in the AOPDEMON 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 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 15 shows, in general, where to find the messages that the IBM service representative might ask you to locate.

### Table 15. General location of messages

<table>
<thead>
<tr>
<th>Component</th>
<th>General location of messages</th>
</tr>
</thead>
<tbody>
<tr>
<td>All components that are not listed</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>
</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

---

**Table 15. General location of messages (continued)**

<table>
<thead>
<tr>
<th>Component</th>
<th>General location of messages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infoprint Central</td>
<td>- Error log that is specified by the IBM HTTP Server - Powered by Apache Errorlog directive: <code>server_root/logs/error_log</code></td>
</tr>
<tr>
<td>IP PrintWay basic mode</td>
<td>- Console log</td>
</tr>
<tr>
<td>IP PrintWay extended mode</td>
<td>- CEEDUMPs</td>
</tr>
<tr>
<td>ISPF panels</td>
<td>- Messages that are displayed on panel</td>
</tr>
<tr>
<td>NetSpool daemon <em>(aopnetd)</em></td>
<td>- CEEDUMPs</td>
</tr>
<tr>
<td>NetSpool started task</td>
<td>- Common message log</td>
</tr>
<tr>
<td>Print Interface</td>
<td>- CEEDUMPs</td>
</tr>
<tr>
<td>Transforms - InfoPrint Manager</td>
<td>- Common message log</td>
</tr>
<tr>
<td>Transforms - InfoPrint Server Transform Manager</td>
<td>- CEEDUMPs</td>
</tr>
<tr>
<td>Transforms - InfoPrint Transform Manager for Linux</td>
<td>- Common message log</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`
- `aoplogu`
- `aopsend`
- `aopstart`
- `aopstat`
- `aopstop`
- `hinvu`
- `pidu`
- `sdbu`

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 that is 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 owns. If you specified the AOPOPER and AOPADMIN groups in `aopsetup`, your output from the commands looks 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`

```
-dwxr-xr-x 2 OMVS KERN OMVSGRP 1376 ... IBM
-dwxr-xr-x 2 OMVS KERN OMVSGRP 1531904 ... aopd
-dwxr-xr-x 2 OMVS KERN OMVSGRP 20480 ... aopcstart
-dwxr-xr-x 2 OMVS KERN OMVSGRP 2158592 ... aopchkinv
-dwxr-xr-x 2 OMVS KERN OMVSGRP 2362816 ... aopoms
-dwxr-xr-x 2 OMVS KERN OMVSGRP 2453504 ... aopsapd
-dwxr-xr-x 2 OMVS KERN OMVSGRP 2625356 ... aopsetup
-dwxr-xr-x 2 OMVS KERN OMVSGRP 3194880 ... cancel
-dwxr-xr-x 2 OMVS KERN OMVSGRP 3203072 ... filter
-dwxr-xr-x 2 OMVS KERN OMVSGRP 3272704 ... hinvu
-dwxr-xr-x 2 OMVS KERN OMVSGRP 3362816 ... lp
-dwxr-xr-x 2 OMVS KERN OMVSGRP 3391488 ... sdbu
-dwxr-xr-x 2 OMVS KERN OMVSGRP 351296 ... aoplpd
-dwxr-xr-x 2 OMVS KERN OMVSGRP 3699392 ... aoplpd
-dwxr-xr-x 2 OMVS KERN OMVSGRP 3899392 ... aoplpd
-dwxr-xr-x 2 OMVS KERN OMVSGRP 390272 ... aoplpd
-dwxr-xr-x 2 OMVS KERN OMVSGRP 419040 ... aoplogu
-dwxr-xr-x 2 OMVS KERN OMVSGRP 483328 ... aopmig
-dwxr-xr-x 2 OMVS KERN OMVSGRP 483328 ... aopmig
-dwxr-xr-x 2 OMVS KERN OMVSGRP 512000 ... aopmig
```

Figure 2. Sample output from command `ls -nE /usr/lpp/Printsrv/bin`

```
-dwxr-xr-x 2 OMVS KERN OMVSGRP 1376 ... IBM
-dwxr-xr-x 2 OMVS KERN OMVSGRP 1531904 ... aopd
-dwxr-xr-x 2 OMVS KERN OMVSGRP 20480 ... aopcstart
-dwxr-xr-x 2 OMVS KERN OMVSGRP 2158592 ... aopchkinv
-dwxr-xr-x 2 OMVS KERN OMVSGRP 2362816 ... aopoms
-dwxr-xr-x 2 OMVS KERN OMVSGRP 2453504 ... aopsapd
-dwxr-xr-x 2 OMVS KERN OMVSGRP 2625356 ... aopsetup
-dwxr-xr-x 2 OMVS KERN OMVSGRP 3194880 ... cancel
-dwxr-xr-x 2 OMVS KERN OMVSGRP 3203072 ... filter
-dwxr-xr-x 2 OMVS KERN OMVSGRP 3272704 ... hinvu
-dwxr-xr-x 2 OMVS KERN OMVSGRP 3362816 ... lp
-dwxr-xr-x 2 OMVS KERN OMVSGRP 3391488 ... sdbu
-dwxr-xr-x 2 OMVS KERN OMVSGRP 351296 ... aoplpd
-dwxr-xr-x 2 OMVS KERN OMVSGRP 3699392 ... aoplpd
-dwxr-xr-x 2 OMVS KERN OMVSGRP 3899392 ... aoplpd
-dwxr-xr-x 2 OMVS KERN OMVSGRP 390272 ... aoplpd
-dwxr-xr-x 2 OMVS KERN OMVSGRP 419040 ... aoplogu
-dwxr-xr-x 2 OMVS KERN OMVSGRP 483328 ... aopmig
-dwxr-xr-x 2 OMVS KERN OMVSGRP 483328 ... aopmig
-dwxr-xr-x 2 OMVS KERN OMVSGRP 512000 ... aopmig
```
Common Infoprint Server problems

Customers encounter certain common problems with Infoprint Server. These problems have straightforward fixes. If applicable, try these fixes before you call your IBM service representative.

Performance problems when printing to one printer from many printer definitions

Many customers report performance problems when they are 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 11 well-known ports 721 - 731 are exhausted, and TCP/IP enforces a 2-minute wait before a port is reused.

To fix the problem, the administrator clears 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 specifies 0D25 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 not TEXT or 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 is interrupted during the generation of print output or an error occurred during print generation that interrupted the transform. This happens only 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 cannot find the default font and cannot 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, clear 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 CHARS 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 that is 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](http://www.ibm.com/).  

**Error messages BPXF024I and EDC5112I received when starting Infoprint Server daemons**

If you start Infoprint Server daemons by using the `/etc/rc` facility, you can receive these error messages:

```
BPXF024I (BPXOINIT aoplpd: socket(AF_INET,SOCK_STREAM,0) failed in
TCPsocket::TCPsocket (int&,int,int) at ./src/tcpsock.cpp 83:
EDC5112I Resource temporarily unavailable. errno2=0x74b30296
```

This error occurs because UNIX System Services runs commands in the `/etc/rc` file early in the IPL and TCP/IP might not be completely active before the Infoprint Server daemons start. To correct this problem, you can use the `setstack` command. The `setstack` command is not formally supported by IBM. However, you can download `setstack` from the [z/OS UNIX System Services Tools and Toys Web page](http://www.ibm.com/systems/z/os/zos/features/unix/bpxa1toy.html) 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](http://www.ibm.com/).

**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 in the `/usr/lpp/Printsrv/bin` directory. However, the standard UNIX System Services `lp` command is 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, more error messages might be 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 AOPIPPP1 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 `AOPADMINISTRATOR` 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:
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 by using a workstation customization object of QSYS/QWPDEFAULT, Print Interface might not recognize the data format as text. One of these errors occur:

- If **Other** is not selected in the **Data format** field of the printer definition, Print Interface rejects the job.
- If **Other** is selected, data does not print as expected.

This problem occurs because the host print transform and workstation customization object QSYS/QWPDEFAULT on the AS/400 system inserts an initial null byte into the print file before sending it to Infoprint Server. The null byte prevents Print Interface from recognizing the data format as text.

To correct this problem, you can use this source to create a workstation customization object that does not insert an initial null byte. This source is the same as for the QSYS/QWPDEFAULT object, but with :INITPRT DATA='00'X. removed. For information about how to create a customization object, see Workstation Customization Programming V4R3.

```plaintext
:WSCST DEVCLASS=TRANSFORM.
  :TRNSFRMTBL.
  :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 V2R2.0 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)

Sendmail is a 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:

1. 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 changes to the /etc/aliases file:
     ```
     /usr/sbin/newaliases
     ```
   - Alias files are readable by everyone but writable only by the owner.
   - All directories in the path of an alias file are readable and executable by everyone but writable only by the owner.

2. If an email sent to a remote address is not received, make sure that your installation does not set up firewalls that prevent mail from being sent.

3. 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.
4. If you do not receive messages from sendmail about undeliverable emails on a remote system:
   • Make sure that your installation does not set up firewalls that prevent mail from being received by your system.
   • Make sure that sendmail is 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 authorized 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.

5. 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
     ```

     The `sendmail` command is described in `z/OS V2R2.0 Communications Server: IP User's Guide and Commands`.

### Diagnosing problems in Infoprint Central

To set up, customize, and diagnose problems with Infoprint Central, see:

- The Infoprint Central information in `z/OS Infoprint Server Customization`
- The “Hints” and “Troubleshooting” sections in the online help for Infoprint Central

Infoprint Central writes error messages to the error log specified by the IBM HTTP Server - Powered by Apache Errorlog directive. The default location is `server_root/logs/error_log`.

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 HTTP server and then restart it before you run the trace. For more information, see “Tracing Infoprint Server” on page 277.

In addition, try the fixes in Table 16 [Table 16 on page 261] and Table 18 on page 262 before you call your IBM service representative.

#### Table 16. Installation problems with Infoprint Central

<table>
<thead>
<tr>
<th>If you have this problem:</th>
<th>Make sure:</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTTP server does not start</td>
<td>Each directive is coded on one line in the HTTP server configuration file (conf/httpd.conf) and environment variables file (bin/envvars).</td>
</tr>
</tbody>
</table>
### Table 16. 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>Error 404 – Page not found or blank web page</td>
<td></td>
</tr>
</tbody>
</table>
  • The JCL in the HTTP server points to the correct configuration file (`conf/httpd.conf`) and environment variables file (`bin/envvars`) if you start or stop the server from TSO. 
  • The directives are in the correct order and are grouped correctly in the HTTP server configuration file (`conf/httpd.conf`). For information about how to specify directives, see [z/OS Infoprint Server Customization](#). |
| JavaScript errors | The directives are in the correct location in the HTTP server configuration file (`conf/httpd.conf`). For information about how to specify directives, see [z/OS Infoprint Server Customization](#). |

### Table 17. Browser problems with Infoprint Central

<table>
<thead>
<tr>
<th>If you have this problem:</th>
<th>Make sure:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date or time information is wrong</td>
<td>Check your web browser settings.</td>
</tr>
<tr>
<td>JavaScript errors or incorrect web page formats</td>
<td>You use the correct version of a supported web browser.</td>
</tr>
<tr>
<td>Incorrect or outdated information</td>
<td></td>
</tr>
</tbody>
</table>
  • You customize the settings in the web browser to retrieve the most current pages from the web so that the Infoprint Central refresh function works correctly. 
  • You periodically refresh the Infoprint Central web page to update the most current information. |
| Search criteria not saved | You enable cookies in the web browser. |
| Unexpected information | The value for the LC_ALL environment variable in the HTTP server environment variables file (`bin/envvars`) must match the variable that is specified in the environment for the start command or the JCL startup procedure. |
### Table 18. 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 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 HTTP server's SYSOUT data sets on the HOLD queue for more information.  
2. Clear the cache from the web browser. |
| Timeout errors | Narrow the search in Infoprint Central by specifying more precise search values, increase the HTTP server's timeout value (`OutputTimeout` directive), or decrease the maximum number of objects that Infoprint Central displays after a search (`AOPLIMIT` environment variable). |
| Infinite loop in the web browser with Find Printer Definitions | Widen the web browser window slightly. |
| Response is slow | 1. Start a separate HTTP server that Infoprint Central uses exclusively.  
2. Use the HTTP server tuning parameters to tune it. |
<p>| Incorrect national language characters in Location fields | Set the <code>AOPCENTRAL_CODEPAGE</code> environment variable (national language characters are those that are not encoded with the IBM-1047 code page). |</p>
<table>
<thead>
<tr>
<th>If you have this problem:</th>
<th>Do this:</th>
</tr>
</thead>
</table>
| An action cannot be done because of an Infoprint Server logic error | Look in the HTTP server log file, httpd-errors.<em>date</em>. If the log contains a message in this format:  
---IPA/Penguin Error:---  
messagе="...."  
For example:  
messagе="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 that is 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 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 `bin/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 HTTP server.  
4. Make sure that Java 7.1 is installed and that JAVA_HOME is set correctly.  
5. If the Infoprint Central trace is turned on (AOPTRACEON=1 in the HTTP server `bin/envvars` environment variables file), 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 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 reported and that is fixed. Records of such problems and their fixes are stored in an online database that is called the IBM Software Support Facility. To search this database, you can construct a keyword string, consisting of a concise series of terms, each of which describes one aspect of the problem. By constructing an accurate keyword string, you can help make the search quick, easy, and reliable.

Preparing to build the keyword string

Before you build a keyword string:
1. Make sure that the problem is in Infoprint Server. If you find that the problem results from a user or configuration error, see one of these for the correct procedure:
   - z/OS Infoprint Server Customization
   - z/OS Infoprint Server Operation and Administration
   - z/OS Infoprint Server User's Guide
2. If Infoprint Server was changed since you last used it, examine the changes. If you suspect that the problem is because of 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 that describe 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 277
   - Chapter 8, “Using IP PrintWay basic mode diagnostic tools,” on page 287
   - 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 267 for an explanation of the procedure for selecting keywords.

The keywords

Each keyword in a keyword string is a word or abbreviation that describes 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 is most successful if you:
- Use only the keywords that are presented and described in this section.
- Spell the keywords exactly as they are spelled here.
- Follow the keyword procedures in the order shown.

Each section provides a partial keyword string that describes 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 MSG$x$ 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 267](#). After you review this figure, see “Component identification number” on page 267 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.
Procedure

To start a keyword string:

1. Begin the keyword string with the identification number for the Infoprint Server component. Table 19 lists the identification numbers.

Table 19. 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</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 whether IP PrintWay extended mode is running, enter this MVS operator command from the console:

   d a,aopoutd

   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. Table 20 shows the seven possibilities.

Table 20. Type-of-failure keywords

<table>
<thead>
<tr>
<th>Keyword</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>“ABENDx” on page 269</td>
<td>Abnormal end of Infoprint Server or one of its components</td>
</tr>
<tr>
<td>“LOOP” on page 269</td>
<td>Uncontrolled program looping</td>
</tr>
<tr>
<td>“WAIT” on page 270</td>
<td>Unexpected program suspension</td>
</tr>
<tr>
<td>“MSGx” on page 270</td>
<td>An error signaled by or associated with messages</td>
</tr>
<tr>
<td>“INCORROUT” on page 271</td>
<td>Incorrect or missing output unrelated to a message</td>
</tr>
<tr>
<td>“PERFM” on page 271</td>
<td>Performance degradation (use this keyword only when no other keyword seems applicable)</td>
</tr>
<tr>
<td>“DOC” on page 271</td>
<td>Documentation problem</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 272.

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 needs to 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 processing 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 re-create the problem, do these steps:
   a. Start the appropriate internal trace for the failing component. See "Tracing Infoprint Server" on page 277, "Starting a NetSpool trace" on page 302, "Starting an IP PrintWay basic mode trace" on page 289, and "Setting the ISPF trace on and off" on page 285 for information about starting internal traces for each component.
b. Redefine the trace table size to be as large as feasible.
c. Run the job again and request a dump by 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.”

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 272.

   **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](https://www.ibm.com/support/docview.wss?rs=5300&context=50000100&s微code=29e49122-620d-4a77-952b-8de0f2d939b1&format=usc&loc=en_US&locale=en_US). Make sure that the SDATA operand of the command contains RGN.

   Then, cancel the Infoprint Server-started task.

   This dump contains the z/OS system trace table and the internal trace table for the affected Infoprint Server component.

   Inspect the dump to see whether the wait bit is on in the program status word (PSW).

   Do not use this keyword if the wait occurs after an abnormal end, as the result of an unanswered message, or because of an endless loop in an Infoprint Server component. Instead, use the ABEND or LOOP keywords.

   **Procedure**

   To add the WAIT keyword to the string:
   1. Add the WAIT keyword to the string.
   2. The format of the keyword string might now be:
      569504004 WAIT
   3. To determine which module contains the problem, see “Module keyword” on page 272.

   **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](https://www.ibm.com/support/docview.wss?rs=5300&context=50000100&s微code=29e49122-620d-4a77-952b-8de0f2d939b1&format=usc&loc=en_US&locale=en_US) does not correct the problem.

   A set of characters in one of these forms, depending on the component in question, identifies each Infoprint Server message:

   **ANFM**
   IP PrintWay basic mode
AOP  All Infoprint Server components except IP PrintWay basic mode and the NetSpool started task

API  NetSpool started task

**Tip:** The Printer Inventory Manager does not send its own messages directly. Instead, the Printer Inventory Manager returns information to the component interfacing with it. That component in turn sends messages about the Printer Inventory Manager (such as missing data or lost connections).

**Procedure**

To add the MSGx keyword to the string:
1. Replace the `x` in the MSGx keyword with the message identifier. For example, if the message identifier is ANFM700I, the MSG keyword is MSGANFM700I.
2. The format of the keyword string might now be:
   ```plaintext
   569504004 MSGANFM700I
   ```

**INCORROUT**

Use the INCORROUT keyword when the output is not received or is not what you expected. Do not use this keyword for output that is repeated endlessly. In that case, use the LOOP keyword.

**Procedure**

To add the INCORROUT keyword to the string:
1. Make sure that the output really is incorrect, rather than merely undesirable in appearance.
2. The format of the keyword string might now be:
   ```plaintext
   569504004 INCORROUT
   ```
3. See “INCORROUT modifier keywords” on page 272, 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 are thoroughly examined.

**Procedure**

To add the PERFM keyword to the string:
1. Add PERFM to the keyword string.
2. The format might now be:
   ```plaintext
   569504004 PERFM
   ```

**DOC**

Use the DOC keyword when a programming problem seems to be caused by information in Infoprint Server information that 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 (the last two “00” in G544569000) 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 that is related to the program problem.

**Procedure**

If you have a storage dump, do these steps to find the name of the module that is associated with the program problem (this is not necessarily the module that contains 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 ABEND8C3 RC0501 APIPPPFT

**INCORROUT modifier keywords**

This section describes the various keywords by which you can describe incorrect output. You can use these keywords to describe missing or extra data, or data that you did not specify. The three levels of keywords to use are:

- The first level describes the document. For example, a document in line format.
- The second level describes what part of the document was incorrect. For example, an image.
- The third level describes how the part was incorrect. For example, the image was the wrong size.

**Procedure**

To describe incorrect output:

1. Enter one keyword to describe the document in which the incorrect output occurred. For example, use a keyword from Table 21.

   **Table 21. Examples of modifier keywords: Description of incorrect document**

<table>
<thead>
<tr>
<th>Keyword example</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>LINE</td>
<td>The document consisted of line data.</td>
</tr>
</tbody>
</table>
Table 21. Examples of modifier keywords: Description of incorrect document (continued)

<table>
<thead>
<tr>
<th>Keyword example</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<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 22.

Table 22. Examples of modifier keywords: Description of incorrect part

<table>
<thead>
<tr>
<th>Keyword example</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTENT</td>
<td>You did not get the content of the document as you expected.</td>
</tr>
<tr>
<td>MISSING</td>
<td>A part or parts of the document are missing from the output.</td>
</tr>
<tr>
<td>MARGIN</td>
<td>The side, top, or bottom margin is not what you specified.</td>
</tr>
<tr>
<td>HEADER PAGE</td>
<td>You did not get the header page that 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 that 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 named part. For example, use a keyword from Table 23.

Table 23. 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 is 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.

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
   - 7A0 represents the z/OS V2R2 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 caused the problem.
3. The format of the keyword string might now be: 569504002 WAIT APIPPPFT DIRECT 7A0

**Search argument procedure**

You now have the information that is 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 by using a search tool such as Info Access:

1. Search the IBM Software Support Facility, by using the full keyword string that you developed.
2. From the list of matches, skip any APAR fixes or PTFs that are already applied to your system.
3. Compare each remaining APAR or PTF closing description with the problem symptoms you observed.
4. If you find a match and a fix, apply the fix that is 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 are followed, but the keyword search is 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 contacted 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 initiates 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 that are 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 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 that is 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 `lp`, `lpstat`, and `cancel` commands
- NetSpool daemon `aopnetd`
- Print Interface, including the Print Interface LPD and IPP server
- Printer Inventory Manager
- Transform Interface

Submitting APARs

Report any difficulties you have 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 you submit an APAR, use the component ID shown in Table 19 on page 268.

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 tells you how and where to send the trace information. You do not have to interpret the trace. Send it to your service representative.

These z/OS UNIX System Services environment variables control tracing:

**AOPTRACEON**
- Set this variable to any value to turn on tracing. Unset this variable to turn tracing off.

**Tip:** Setting this variable to any value, even to Off, turns on tracing.

**Examples:**
- `AOPTRACEON=1`
- `AOPTRACEON=ON`

If `AOPTRACEON` is turned on, Infoprint Server traces all daemons that were started after the variable was set. "Tracing Infoprint Server daemons" on page 279 explains how to limit the trace to a specific Infoprint Server daemon.

Depending on the Infoprint Server component you are using, you can use these environment variables to optionally add data to the trace:

**AOPTRACEON_DATA**
- Includes socket data in the trace. The default is off.
**AOPTRACEON_FILTER**  
Includes IP PrintWay extended mode filter data in the trace. The default is off.

**AOPTRACEON_MSGLOG**  
Includes message logging data in the trace. The default is off.

**Examples:**  
AOPTRACEON=1 AOPTRACEON_DATA=1  
AOPTRACEON=ON AOPTRACEON_FILTER=1  
AOPTRACEON=ON AOPTRACEON_MSGLOG=ON

**AOPTRACEBYTES**  
Specify the maximum size of the trace file. This environment variable is optional. The default is 50 MB. If the size of the trace file exceeds the maximum size that you specified, Infoprint Server creates a new trace file.

**Example:**  
AOPTRACEBYTES=25000000

**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, and the trace directory must exist.

**For Infoprint Central**  
The user ID of the user who starts the IBM HTTP Server - Powered by Apache 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:**  
1. Tracing slows performance considerably. Turn tracing on for only the time necessary to capture the error.
2. 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.
3. To find out whether the AOPTRACEON variable is set in the z/OS UNIX shell, use the z/OS UNIX export and grep commands to look at the value of the AOPTRACEON variable:
   export | grep AOPTRACEON
Results:

- If AOPTRACEON is not set, the export and grep commands do not return any output.
- If AOPTRACEON is set, the export and grep commands return the AOPTRACEON value or AOPTRACEON="".

Tracing Infoprint Server daemons

This section describes how to trace processing in Infoprint Server daemons.

To start tracing one of the Infoprint Server daemons:

1. Stop the Infoprint Server daemon that you want to trace by 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 MVS STOP command to stop the daemon:
     STOP AOPLPD
   - Enter the z/OS UNIX aopstop command to stop the daemon:
     aopstop -d lpd

   Warning: When you stop the IP PrintWay extended mode daemons, all printers that were stopped or redirected are reset. When IP PrintWay extended mode is restarted, those printers are no longer stopped or redirected.

2. Specify the AOPTRACEON environment variable and then restart the daemon by using one of these methods:
   - Specify AOPTRACEON in the AOPSTART JCL procedure. Create an MVS data set; for example, named TRACE.ENV with these DCB attributes:
     - RECFM=VB
     - LRECL=255
     or
     - RECFM=FB
     - LRECL=80
   In the data set, specify the AOPTRACEON variable. Start in the first column, and do not code any blank characters in the string or at the end of the line:
     AOPTRACEON=1

   Specify the TRACE.ENV data set in the AOPSTART JCL procedure:
   //STDENV DD DSN=TRACE.ENV,DISP=SHR

   Then, enter the MVS START command to run the AOPSTART JCL procedure:
   START AOPSTART

   - Set the AOPTRACEON environment variable on the z/OS UNIX command line before you enter 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.
     export AOPTRACEON=1
     aopstart
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 use other environment variables to optionally add data to the trace, such as AOPTRACEON_DATA=1 or AOPTRACEON_FILTER=1.

To stop tracing one of the Infoprint Server daemons:

1. Stop the daemon that is being traced by 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

#### Turning on trace

To trace the `lp`, `lpstat`, or `cancel` command:
1. Set the AOPTRACEON variable:
   ```bash
   export AOPTRACEON=1
   ```
2. Enter the `lp` command:
   ```bash
   lp ...
   ```

   **Tip:** To set AOPTRACEON only for one command, set the variable on the
   same line as the command:
   ```bash
   AOPTRACEON=1 lp ...
   ```

#### Turning off trace

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.
   ```bash
   unset AOPTRACEON
   ```
2. Reenter the command:
   ```bash
   lp ...
   ```

### Tracing the SMB support in DFS server

#### Turning on trace

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 off trace

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 DFKERN daemon.
Tracing the AOPPRINT procedure

Turning on trace

To trace the AOPPRINT procedure, specify the AOPTRACEON=1 environment variable in the STDENV DD statement in the procedure. You can specify AOPTRACEON in-stream. Start in the first column, and do not code any blanks in the string or at the end of the line:

//STDENV DD *
AOPTRACEON=1

Turning off trace

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 on trace

1. Stop the IBM HTTP Server - Powered by Apache.
2. Specify the AOPTRACEON=1 and the AOPTRACEDIR environment variables in the HTTP server environment file, bin/envvars. The user ID of the user who starts the HTTP server must have permission to write to the trace directory specified in AOPTRACEDIR, and the trace directory must exist. For information about setting environment variables in the HTTP server environment file, see z/OS Infoprint Server Customization.

Example:

export AOPTRACEON=1
export AOPTRACEDIR=/mydirectory/trace

3. Restart the HTTP server.

Turning off trace

1. Stop the IBM HTTP Server - Powered by Apache.
2. Comment out the AOPTRACEON=1 and the AOPTRACEDIR environment variables in the HTTP server environment file, bin/envvars. To comment out an environment variable, use a # symbol at the beginning of the variable.

Example:

#export AOPTRACEON=1
#export AOPTRACEDIR=/mydirectory/trace

3. Restart the HTTP server.

Changing the trace directory

To change the trace directory when you trace an Infoprint Server daemon, specify the AOPTRACEDIR environment variable before you restart the daemon. For information about setting environment variables, 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.aopd.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 that is traced, if applicable.

- `process_id`

  The ID of the process that is 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 that is 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 that is 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 that is 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.uniqueidentifier.tracefile#:

- 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.
- uniqueidentifier
   The time the trace was created. The value is displayed in hexadecimal format as a character string.
- tracefile#
   The number of the trace file.
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.

   ![Infoprint Server: Printer Inventory Manager panel]
   Option ===> 7
   Printer Definitions
   1 Add Add a printer definition
   2 List List printer definitions
   3 Select Select printer definitions to list

   Other Functions
   4 Other Definitions Manage FSS, FSA, pool, and job selection definitions
   5 PrintWay Queue View IP PrintWay 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 Configuration panel:
   a. Select (with a slash [/]) or clear 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.

   ![Infoprint Server: ISPF Panel Configuration]
   Command ==>____________________________________________________________
   / Confirm delete requests
   7 Trace Printer Inventory ISPF internals
   TSPF trace directory .. /var/Printsrv/trace
   Configuration file . . . /etc/Printsrv/aopd.conf
   NLS path ........ /usr/lpp/Printsrv/SL/EN
   Language ......... En_US
   LP Command: Default printer . . . lp1
   IP PrintWay basic mode:
   Message log . . . . ANF.MESSAGE
   Trace data set . . . . USER1.ANFISPF.TRACE

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:
aoplogu -d
Log daemon to dump the contents of the common message log database to the stdout file.

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 tells 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 that is 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 that 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 277.

Submitting APARs

Report any difficulties that you have 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 you submit an APAR, use one of these component IDs:

- 569504004: IP PrintWay basic mode
- 5647A01OP: IP PrintWay extended mode
- 5697F5103: Coaxial Printer Support

To determine whether IP PrintWay extended mode is running, enter this MVS operator command from the console:

d a,1

If aopoutd is active, IP PrintWay extended mode is running.

Tracing IP PrintWay basic mode

IP PrintWay basic mode provides these types of traces:

- An internal wrap trace
- An external trace that uses 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 tells 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 277.

**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 is turned on. For more information, see “Starting a trace at IP PrintWay basic mode initialization” on page 290.

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 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 3996 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 290.
- 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 that is produced by GTF can contain z/OS system-level information and information that concerns 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, and 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 by using the MVS MODIFY operator command.

**Tracing considerations**
Consider these impacts when you select 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 by 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 you start 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 that are produced by IP PrintWay.

- **The JOBNAME=** proc_name parameter
  Specify this parameter to limit the trace entries to those that are 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 that are specified in the IP PrintWay FSS definition take effect the next time the FSS is started.

To set the trace options for an FSS:

1. On the Infoprint Server: Printer Inventory Manager panel:
   a. Type 4 on the option line to select 4 Other Definitions.
   b. Press Enter.

```
Infoprint Server: Printer Inventory Manager
Option ===> 4
Printer Definitions
   1 Add Add a printer definition
   2 List List printer definitions
   3 Select Select printer definitions to list
Other Functions
   4 Other Definitions Manage FSS, FSA, pool, and job selection definitions
   5 PrintWay Queue View IP PrintWay 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.

```
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 clear 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 that is 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, 1 - 999, of 4 KB 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 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.
2. On the FSA, FSS, Pool, and Job Selection Rule Management panel, type 2 on the option line to list FSAs.

3. On the FSA List panel:
   a. To change the trace options for an FSA, type E for “Edit” in the space in front of the FSA.
   b. Press Enter.

4. On the IP PrintWay FSA panel, select the Trace mode. The change will take effect the next time that FSA is started.
5. Exit the panel to save your changes, or enter cancel on the command line to exit without saving your changes.

6. Return tracing to the default mode of None when you are done. Trace options remain set during your next IP PrintWay session unless you change them.

**Starting a trace dynamically by 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 one FSA or for all FSAs in the FSS that are not yet 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 are not yet 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 290.

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 FSAs. Thus, to change only one characteristic of a trace, respecify 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 that 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 PRTnnn 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 are not yet started.

Example: This example shows how to start an internal trace for all FSAs that are 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 are 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 by 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 are not yet started, do not specify any FSA name on the MODIFY command.

Use this syntax to stop a trace with the MODIFY or F command:

**Syntax**

\{(MODIFY | F) \ fss\_name,TRACEOFF[,fsa\_name]\}

**fss\_name**

Specifies the name of the IP PrintWay FSS. This is a required parameter.

- **fss\_name** must match either:
  - In a JES2 environment, the name in the JES FSS(fss\_name) statement
  - In a JES3 environment, the FSSNAME parameter of the JES FSSDEF statement

  For information about the JES parameters, see [z/OS Infoprint Server Customization](#)

**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 PRTnnnnn 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 a trace option is specified in the FSS definition or the FSA definition in the Printer Inventory.

**Examples:**

1. This example shows how to stop tracing the FSA named PRT001.
   
   ```
   MODIFY FSS1,TRACEOFF,PRT001
   ```

2. This example shows how to stop tracing FSAs managed by FSS1 that are not yet started. Any tracing that is 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 by 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 X'FD1'.

Examples of tracing IP PrintWay basic mode

The examples in this section show how to start and stop internal and external IP PrintWay basic mode tracing.

Starting an internal trace for an FSS and all FSAs at IP PrintWay initialization

Do these steps to start an IP PrintWay internal trace of the FSS and all FSAs in the FSS at IP PrintWay initialization. This example assumes that the FSA names are PRT001 and PRT002, and the FSS name is FSS1.

1. In the IP PrintWay FSS definition for FSS1 in the Printer Inventory, select the Internal option in the Trace mode field.
2. In the IP PrintWay FSA definitions for PRT001 and PRT002, select either None or Internal in the Trace mode field. Because None is the default value, you do not need to create FSA definitions to select this value.
3. Stop all IP PrintWay FSAs in the FSS so that IP PrintWay picks up the changes in the FSS definition.
4. Start the IP PrintWay FSAs, for example FSA PRT001 and FSA PRT002.
5. Return tracing to the default mode of None when you are done. Trace options remain set during your next IP PrintWay session unless you change them.

To stop tracing dynamically:
• Enter the MODIFY operator command for the FSS and for each FSA:

MODIFY FSS1,TRACEOFF
MODIFY FSS1,TRACEOFF,PRT001
MODIFY FSS1,TRACEOFF,PRT002
Starting an internal trace for one FSA dynamically

Do these steps to start an IP PrintWay internal trace for one IP PrintWay FSA dynamically while IP PrintWay is running. This example assumes that the FSA name is PRT001 and the FSS name is FSS1.

1. If an IP PrintWay FSS definition exists in the Printer Inventory, select None for the Trace mode field. This is the default value so you do not need to create an FSS definition to specify the None value.

2. If an IP PrintWay FSA definition exists for the FSA, select None for the Trace mode field. This is the default value so an FSA definition is not required.

3. Start the IP PrintWay FSA.

4. To start the trace, enter this MODIFY command:

```
MODIFY FSS1,TRACEON,PRT001,MODE=INTERNAL
```

Internal tracing of the FSA begins when the FSA is idle or at the next data set boundary.

To stop tracing:

- Enter this MODIFY operator command:

```
MODIFY FSS1,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 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 FSA at IP PrintWay initialization” on page 297.

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 are 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 is started. The first MODIFY command that is 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:

   MODIFY FSS1,TRACEON,PRT001,MODE=FULL

   Tracing begins when the FSA is idle or at the next data set boundary.

   To stop tracing:

   1. Enter this MODIFY operator command to stop tracing FSA PRT001:

      MODIFY FSS1,TRACEOFF,PRT001

   2. Stop GTF by entering: P GTF
Tracing IP PrintWay basic mode ISPF panel logic

When the IP PrintWay ISPF panels do not perform as expected, you might want to trace panel logic.

To trace IP PrintWay ISPF panel logic:
1. On the Infoprint Server: Printer Inventory Manager panel:
   a. Type 7 on the option line to select **7 Configure**.
   b. Press **Enter**.

   ```
   Infoprint Server: Printer Inventory Manager
   Option ===> 7
   Printer Definitions
   1 Add Add a printer definition
   2 List List printer definitions
   3 Select Select printer definitions to list
   Other Functions
   4 Other Definitions Manage FSS, FSA, pool, and job selection definitions
   5 PrintWay Queue View IP PrintWay 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 Configuration panel:
   a. Select (with a slash [/]) or clear 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.

   ```
   Infoprint Server: ISPF Panel Configuration
   Command ==>____________________________________________________________
   / Confirm delete requests
   7 Trace Printer Inventory ISPF internals
   ISPF trace directory . . /var/Printsrv/trace
   Configuration file . . . /etc/Printsrv/aopd.conf
   NLS path . . . . . . . . /usr/lpp/Printsrv/%L/%N
   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 an IP PrintWay basic mode abend occurs. IP PrintWay also sends a message that contains 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 an IP PrintWay abend occurring 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 \texttt{aopnetd}, see [“Tracing Infoprint Server” on page 277](#).

This chapter describes:

- Submitting APARs
- NetSpool trace facility
- NetSpool dumps

## Submitting APARs

Report any difficulties you have 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 you submit an APAR, use one of these component IDs:

- 569504002: Problems in the NetSpool started task.
- 5647A01OP: Problems in the NetSpool daemon \texttt{aopnetd}.

## NetSpool traces

NetSpool provides these types of traces:

- An internal wrap trace
- An external trace that uses 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 \texttt{aopnetd}, see [“Tracing Infoprint Server” on page 277](#).

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 tells 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 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 that is produced by GTF can contain z/OS system-level information and information that concerns 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 is 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 KB above the 16 MB 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, 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 you start a NetSpool external trace. When you start an external trace at NetSpool initialization, start GTF before you start 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, and data set allocation parameters for example. The NetSpool user or system programmer can use this trace information to diagnose problems that are related to the input data stream or to attributes defined in the Printer Inventory for a NetSpool printer LU.
  - FD2 traces cause NetSpool to trace program control flow, and control blocks for example. 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 that run 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 is 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 `aopnetd`. See “Tracing Infoprint Server” on page 277.
Trace parameter on the EXEC statement

Specify the TRACE=ON parameter with the PARM parameter on the EXEC statement. For a description of the other parameters you can specify on the PARM parameter, see z/OS Infoprint Server Customization.

This example shows the syntax of the PARM parameter when TRACE=ON is specified:

```
//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 MB-line storage requirement for NetSpool. Therefore, trace only the printer LUs necessary for diagnosing the problem.

**PAGECOUNT=nnn**

Specifies the number of 4 KB pages of storage to allocate for each internal trace table. NetSpool allocates storage for the trace tables above the 16 MB line. Values 1 - 999 are valid. The default is 12 (48 KB) for tracing NetSpool program control and 12 for each printer LU traced if PAGECOUNT is not specified. This allocation occurs only if NetSpool tracing is active.

Use this syntax to specify the trace options in the trace options data set as specified in the TRACEOPT DD statement:

**Syntax**

```
[TYPE=FULL | INTERNAL]
[,LUNAME=ALL | (lu-name1[,lu-name2...])]
[,PAGECOUNT=nnn]
```

For example, if you want to do full tracing of printer LUs LUPRT101 and LUPRT102, and you want the size of the internal trace storage to be 24 K for each printer LU and the NetSpool program control, specify this in the trace options data set:

```
TYPE=FULL,LUNAME=(LUPRT101,LUPRT102),PAGECOUNT=6
```

When NetSpool tracing is active, you can display the tracing status of the program control and each printer LU by entering this NetSpool command:

**Syntax**

```
F jobname.identifier,DISPLAY TRACE
```

### Starting and stopping a trace dynamically by using NetSpool operator commands

You can enter a NetSpool operator command to start or stop NetSpool tracing after NetSpool is 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 is 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 MB-line storage requirement for NetSpool. Therefore, trace only the printer LUs necessary for diagnosing the problem.

**PAGECOUNT=nnn**
Specifies the number of 4 KB pages of storage to allocate for each internal trace table. NetSpool allocates storage for the trace tables above the 16 MB line. Values 1 - 999 are valid. The default is 12 (48 KB) 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 that 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 that 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 by 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 a NetSpool abend occurs.
- 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 a NetSpool abend occurring 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 you start 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 you start 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 that are produced by IP PrintWay basic mode or NetSpool.

**JOBNAME=**proc_name
Specify this parameter to limit the trace entries to those produced by tasks that run in the IP PrintWay basic mode or NetSpool startup procedure. *proc_name* is the name of the startup procedure.

You must start GTF before you start 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=USR,P,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 IBM Knowledge Center (http://www.ibm.com/support/knowledgecenter/SSLTBW/welcome).

If you experience difficulty with the accessibility of any z/OS information, send a detailed message to the "Contact us" web page for z/OS (http://www.ibm.com/systems/z/os/zos/webqs.html) or use the following mailing address.

IBM Corporation
Attention: MHVRCFS Reader Comments
Department H6MA, Building 707
2455 South Road
Poughkeepsie, NY 12601-5400
United States

Accessibility features

Accessibility features help users who have physical disabilities such as restricted mobility or limited vision use software products successfully. The accessibility features in z/OS can help users do the following tasks:

- Run assistive technology such as screen readers and screen magnifier software.
- Operate specific or equivalent features by using the keyboard.
- Customize display attributes such as color, contrast, and font size.

Consult assistive technologies

Assistive technology products such as screen readers function with the user interfaces found in z/OS. Consult the product information for the specific assistive technology product that is used to access z/OS interfaces.

Keyboard navigation of the user interface

You can access z/OS user interfaces with TSO/E or ISPF. The following information describes how to use TSO/E and ISPF, including the use of keyboard shortcuts and function keys (PF keys). Each guide includes the default settings for the PF keys.

- z/OS TSO/E Primer
- z/OS TSO/E User’s Guide
- z/OS V2R2 ISPF User’s Guide Vol I

Dotted decimal syntax diagrams

Syntax diagrams are provided in dotted decimal format for users who access IBM Knowledge Center with a screen reader. In dotted decimal format, each syntax element is written on a separate line. If two or more syntax elements are always present together (or always absent together), they can appear on the same line because they are considered a single compound syntax element.

Each line starts with a dotted decimal number; for example, 3 or 3.1 or 3.1.1. To hear these numbers correctly, make sure that the screen reader is set to read out
punctuation. All the syntax elements that have the same dotted decimal number (for example, all the syntax elements that have the number 3.1) are mutually exclusive alternatives. If you hear the lines 3.1 USERID and 3.1 SYSTEMID, your syntax can include either USERID or SYSTEMID, but not both.

The dotted decimal numbering level denotes the level of nesting. For example, if a syntax element with dotted decimal number 3 is followed by a series of syntax elements with dotted decimal number 3.1, all the syntax elements numbered 3.1 are subordinate to the syntax element numbered 3.

Certain words and symbols are used next to the dotted decimal numbers to add information about the syntax elements. Occasionally, these words and symbols might occur at the beginning of the element itself. For ease of identification, if the word or symbol is a part of the syntax element, it is preceded by the backslash (\) character. The * symbol is placed next to a dotted decimal number to indicate that the syntax element repeats. For example, syntax element *FILE with dotted decimal number 3 is given the format 3 \* FILE. Format 3* FILE indicates that syntax element FILE repeats. Format 3* \* FILE indicates that syntax element * FILE repeats.

Characters such as commas, which are used to separate a string of syntax elements, are shown in the syntax just before the items they separate. These characters can appear on the same line as each item, or on a separate line with the same dotted decimal number as the relevant items. The line can also show another symbol to provide information about the syntax elements. For example, the lines 5.1*, 5.1 LASTRUN, and 5.1 DELETE mean that if you use more than one of the LASTRUN and DELETE syntax elements, the elements must be separated by a comma. If no separator is given, assume that you use a blank to separate each syntax element.

If a syntax element is preceded by the % symbol, it indicates a reference that is defined elsewhere. The string that follows the % symbol is the name of a syntax fragment rather than a literal. For example, the line 2.1 %OP1 means that you must refer to separate syntax fragment OP1.

The following symbols are used next to the dotted decimal numbers.

**? indicates an optional syntax element**

The question mark (?) symbol indicates an optional syntax element. A dotted decimal number followed by the question mark symbol (?) indicates that all the syntax elements with a corresponding dotted decimal number, and any subordinate syntax elements, are optional. If there is only one syntax element with a dotted decimal number, the ? symbol is displayed on the same line as the syntax element, (for example 5? NOTIFY). If there is more than one syntax element with a dotted decimal number, the ? symbol is displayed on a line by itself, followed by the syntax elements that are optional. For example, if you hear the lines 5 ?, 5 NOTIFY, and 5 UPDATE, you know that the syntax elements NOTIFY and UPDATE are optional. That is, you can choose one or none of them. The ? symbol is equivalent to a bypass line in a railroad diagram.

**! indicates a default syntax element**

The exclamation mark (!) symbol indicates a default syntax element. A dotted decimal number followed by the ! symbol and a syntax element indicate that the syntax element is the default option for all syntax elements that share the same dotted decimal number. Only one of the syntax elements that share the dotted decimal number can specify the ! symbol. For example, if you hear the lines 2? FILE, 2.1! (KEEP), and 2.1 (DELETE), you know that (KEEP) is the
default option for the FILE keyword. In the example, if you include the FILE keyword, but do not specify an option, the default option KEEP is applied. A default option also applies to the next higher dotted decimal number. In this example, if the FILE keyword is omitted, the default FILE(KEEP) is used. However, if you hear the lines 2? FILE, 2.1, 2.1.1! (KEEP), and 2.1.1 (DELETE), the default option KEEP applies only to the next higher dotted decimal number, 2.1 (which does not have an associated keyword), and does not apply to 2? FILE. Nothing is used if the keyword FILE is omitted.

* indicates an optional syntax element that is repeatable

The asterisk or glyph (*) symbol indicates a syntax element that can be repeated zero or more times. A dotted decimal number followed by the * symbol indicates that this syntax element can be used zero or more times; that is, it is optional and can be repeated. For example, if you hear the line 5.1* data area, you know that you can include one data area, more than one data area, or no data area. If you hear the lines 3* , 3 HOST, 3 STATE, you know that you can include HOST, STATE, both together, or nothing.

Notes:
1. If a dotted decimal number has an asterisk (*) next to it and there is only one item with that dotted decimal number, you can repeat that same item more than once.
2. If a dotted decimal number has an asterisk next to it and several items have that dotted decimal number, you can use more than one item from the list, but you cannot use the items more than once each. In the previous example, you can write HOST STATE, but you cannot write HOST HOST.
3. The * symbol is equivalent to a loopback line in a railroad syntax diagram.

+ indicates a syntax element that must be included

The plus (+) symbol indicates a syntax element that must be included at least once. A dotted decimal number followed by the + symbol indicates that the syntax element must be included one or more times. That is, it must be included at least once and can be repeated. For example, if you hear the line 6.1+ data area, you must include at least one data area. If you hear the lines 2+, 2 HOST, and 2 STATE, you know that you must include HOST, STATE, or both. Similar to the * symbol, the + symbol can repeat a particular item if it is the only item with that dotted decimal number. The + symbol, like the * symbol, is equivalent to a loopback line in a railroad syntax diagram.
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