

z/OS



JES3 Diagnosis Reference

z/OS



JES3 Diagnosis Reference

Note

Before using this information and the product it supports, be sure to read the general information under Appendix A, "Notices" on page 193.

Third Edition, September 2002

This is a major revision of GA22-7548-01.

This edition applies to Version 1 Release 4 of z/OS (5694-A01), Version 1 Release 4 of z/OS.e (5694-G52), and to all subsequent releases and modifications until otherwise indicated in new editions.

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About this document

The purpose of this document is to provide a quick reference for system programmers who diagnose JES3 problems. This document is specifically designed for installations running z/OS or z/OS.e.

Who should use this document

This document is intended for system programmers and IBM service representatives or anyone who is responsible for diagnosing and correcting problems in JES3. Users of this document must have a working knowledge of JES3 functions.

Where to find more information

The following table lists documents that contain information related to the information provided in this document.

Most licensed documents were declassified in OS/390 V2R4 and are now included on the z/OS Online Library Collection, SKT2T-6700. The remaining licensed documents appear in unencrypted documentManager softcopy and PDF form on the z/OS Licensed Product Library, LK2T-2499.

Title	Order Number	Description
<i>z/OS Introduction and Release Guide</i>	GA22-7502	Describes the contents and benefits of z/OS as well as the planned packaging and delivery of this new product.
<i>z/OS and z/OS.e Planning for Installation</i>	GA22-7504	Contains information that lets users: <ul style="list-style-type: none">• Understand the content of z/OS• Plan to get z/OS up and running• Install the code• Take the appropriate migration actions• Test the z/OS system
<i>z/OS Information Roadmap</i>	SA22-7500	Describes the information associated with z/OS including z/OS documents and documents for the participating elements.
<i>z/OS Summary of Message Changes</i>	SA22-7505	Describes the changes to messages for individual elements of z/OS. Note: This document is provided in softcopy only on the message bookshelf of the z/OS collection kit.

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Using LookAt to look up message explanations

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

You can access LookAt from the Internet at:

<http://www.ibm.com/eserver/zseries/zos/bkserv/lookat/>

or from anywhere in z/OS where you can access a TSO/E command line (for example, TSO/E prompt, ISPF, z/OS UNIX System Services running OMVS). You can also download code from the *z/OS Collection* (SK3T-4269) and the LookAt Web site that will allow you to access LookAt from a handheld computer (Palm Pilot VIIx suggested).

To use LookAt as a TSO/E command, you must have LookAt installed on your host system. You can obtain the LookAt code for TSO/E from a disk on your *z/OS Collection* (SK3T-4269) or from the **News** section on the LookAt Web site.

Some messages have information in more than one document. For those messages, LookAt displays a list of documents in which the message appears.

Determining if a document is current

As needed, IBM updates its documents with new and changed information. For a given document, updates to the hardcopy and associated BookManager softcopy are usually available at the same time. Sometimes, however, the updates to hardcopy and softcopy are available at different times. Here's how to determine if you are looking at the most current copy of a document:

1. At the end of a document's order number there is a dash followed by two digits, often referred to as the dash level. A document with a higher dash level is more

1. z/OS.e™ customers received a Memo to Licensees, (GI10-0684) that includes this key code.

current than one with a lower dash level. For example, in the document order number GC28-1747-07, the dash level 07 means that the document is more current than previous levels, such as 05 or 04.

2. If a hardcopy document and a softcopy document have the same dash level, it is possible that the softcopy document is more current than the hardcopy document. Check the dates shown in the Summary of Changes. The softcopy document might have a more recently dated Summary of Changes than the hardcopy document.
3. To compare softcopy documents, you can check the last two characters of the document's filename (also called the document name). The higher the number, the more recent the document. Also, next to the document titles in the CD-ROM document and the readme files, there is an asterisk that indicates whether a document is new or changed.

Summary of changes

Summary of changes for GA22-7548-02 z/OS Version 1 Release 4

This document contains information previously presented in *z/OS JES3 Diagnosis Reference*, GA22-7548-01, which supports z/OS Version 1 Release 2.

The following summarizes changes to that information.

New information

- Information has been added to indicate this document supports z/OS.e.
- Await Reason codes 0094 and 0095 added.
- JES Modules added.
- JES Control Blocks added.

Changed information

- Reason codes added to Abend DM762.
- New Failsoft code DM026.
- New Failsoft code explanations for DM0656: X'13' and X'1D'.

Deleted information

- DM048: return codes x'04', x'08', x'0C'

This book includes terminology, maintenance, and editorial changes. Technical changes or additions to the text and illustrations are indicated by a vertical line to the left of the change.

Starting with z/OS V1R2, you may notice changes in the style and structure of some content in this document—for example, headings that use uppercase for the first letter of initial words only, and procedures that have a different look and format. The changes are ongoing improvements to the consistency and retrievability of information in our documents.

Summary of Changes for GA22-7548-01 z/OS Version 1 Release 2

This book contains information previously presented in *z/OS JES3 Diagnosis Reference*, GA22-7548-01, which supports z/OS Version 1 Release 1.

The following summarizes changes to that information.

New and Changed Information

- New Failsoft Codes
 - DM763
 - DM764
- New AWAIT Codes
 - 008F
 - 0090
 - 0091
 - 0092

- 0093
- U0021 is a new JES3 user abend code.
- DM759 and DM760 are updated.
- Completion code, 4FB, has a new reason code.

This book includes terminology, maintenance, and editorial changes. Technical changes or additions to the text and illustrations are indicated by a vertical line to the left of the change.

Chapter 1. JES3 Diagnostic Information and Coding Conventions

The following is general information that you may find useful when diagnosing JES3-related problems.

JES3 Coding Conventions

Certain module conventions are used by JES3 to assist you with debugging JES3 problems.

Module Prolog Descriptions

A prologue exists at the beginning of each module's assembly listing. The prologue includes information in a standard format which is useful for understanding the module and its interaction in the system.

Chapter 3, "JES3 Module Summary" on page 35 contains a chart that summarizes the function of each JES3 module, its location, and its interaction with other JES3 modules.

Entry Point Names

The entry point to executable JES3 modules is identified with a character string that contains the module name (usually the assembly CSECT name), the release level of the module, the date and time the module was assembled, and the address constant (ADCON) that points to the latest APAR number (in EBCDIC) that was applied to the module. The module name is especially helpful to spot module entry points in a printed storage dump.

Data CSECTs may have save areas or other data at the beginning of the module.

For modules with multiple entry points, each entry point is identified with its 8-byte name at the entry point minus eight. Most JES3 entry points are contained in the transfer vector table (TVT) or the subsystem vector table (SSVT).

Register Conventions

You should always check the module prolog of the JES3 module in which you are examining. However, for most JES3 modules the register conventions are:

Register

Contents

- | | |
|----|---|
| 10 | Base address of the module |
| 11 | Address of the FCT for the current DSP |
| 12 | Address of the TVT |
| 13 | Address of the work area or data area associated with the DSP |
| 14 | Entry point address |
| 15 | Return address |

JES3 Storage Usage

Figure 1 shows the data areas in CSA, SQA and JES3 auxiliary storage.

Subpool	Storage	Attributes
MGR Message Routine Table	231	
FSS JSAM DMCs	231	
USAM DMCs Data Mgt. Control Blocks	231	
USAM CSA PBUFs Protected Buffers	231	
Trace Table	231	
IATGRSQ JES3 Storage Queue	231	
MEMDATA Memory Data Block	241	
USAM DSS Data Set Status Block	241	
SETUNITS Setup Units Table	241	
SETNAMES Setup Names Table	241	
DYD DYNAL Data Set Names	241	
MVDAMSTR IATYMVDA Master Control Area	241	
MVDAVERS IATYMVDA Version Control Area	241	
MV DATOKN IATYMVDA Access Token	241	
MPC Main Processor Control Table	241	
SYSUNITS System Units Table	241	
DSQ Destination Routing Queue / Dynamic Destination Queue	241	
FSS BALJ Buffer Allocation JSAM	241	
DDR Dynamic Device Reconfiguration	241	
SSI 54 Info String	241	
Command Text Translate Table	241	
Command Prefix Table	241	
Module Work Area Callpool	241	
Local Command Table	241	
SDA Statistics Data Area	241	
DLOG DLOG Common Data Area	241	
ACQ Access Queue Entry	241	
WEV WLM Event Control Block	241	

CSA Storage

228	CSA	Pageable, user key, explicitly freed, not fetch-protected
229	JES3 Aux.	Fixed, key 0, explicitly freed, not fetch protected
231	CSA	Fixed, user key explicitly assigned and freed, not fetch-protected
241	CSA	Pageable, user key, freed at task termination, fetch-protected
245	SQA	Pageable, user key, explicitly freed, fetch-protected

*Indicates residency is below 16M.

Global Post S3 Routine	228
Writer IOSB/SRB Block	228
PCD Program Call Descriptor	228
USAM Count Histogram	228
UCN USAM Counts Table	228
SSVT Subsystem Vector Table	228

Fixed CSA Storage

IOSB/SRB for NJE, BSC RJP	245
SRB's Service Request Blocks	245
BALP USAM Buffer Allocator Table	245
ISRs IOSB/SRB Blocks	245
IOP I/O Parameter Block	245
RPS Sector Table	245

SQA Storage

ETD Entry Table Descriptor	
USAM AUX PBUFs Protected Buffers	229

JES3 Auxiliary Storage (Optional)

Figure 1. JES3 Use of CSA, SQA, and Auxiliary Storage

Locks Used By JES3

Table 1 describes the use of locks by JES3.

Table 1. Locks Used by JES3

Module	Type of Lock	Purpose
IATABIP	Local/CMS	Serialize I/O activity during purge processing
IATABMN	Local	Free reserved storage if an out-of-storage condition exists
	Local	Release DEBs from chain
	Local	Clear JES3 attention table entry
	Local	Start I/O for any extent on queue for ISR
	Local	Used to CALLRTM under the auxiliary task - ESTAI exit (IATAFAIL)
IATCNDM	Local/CMS	Serialize MEMDATA chain
IATCNSV	Local/CMS	Serialize MEMDATA chain
IATDMBS	Local	Free a protected buffer
IATDMDK	Local	Required for page fix/free/release. Also entered from IATDMEB and IATDMBS with locks already held
IATDMDS	Salloc	General usage routine to GETMAIN or FREEMAIN during branch entry
IATDMEB	Local/CMS	General usage routine to update DSSs (data set status blocks), DSBs (data set blocks), DMCs (data management control blocks), and DATs (data buffer blocks)
IATDMGR	Local	Serialize DSS access
IATDMIT	Local/CMS	Page-free and serialization of DSS, scan FSS BALJ chain
IATDMUB	Local	Branch entry to GETMAIN and FREEMAIN
IATFCLT	Local	Several queues in the FSS address space require serialization before use
IATFCOR	Local	Terminate FSA task using CALLRTM macro
IATFPCC	Local	Branch entry GETMAIN
IATFPDD	Local	Branch entry FREEMAIN
IATFPCP IATFPCW IATFPGD IATFPGF IATFPRA IATFPRD	Local	Several queues in the FSS address space require serialization before use
IATGRFS	Local	Clear FSA DESTQ pointer
IATGRGM	Local	For JES3 GETMAIN/PUTMAIN requests; required to serialize AGETMAIN and APUTMAIN processing and to branch enter the MVS GETMAIN and FREEMAIN services
IATGRGS	Local	For CALLRTM macro to abend a generalized subtask
IATGRG1	Local	Branch entry post of auxiliary task, nucleus task or both FREEMAIN services
IATGRJX	Local	Branch entry post to post nucleus task

Table 1. Locks Used by JES3 (continued)

Module	Type of Lock	Purpose
IATGROP	Local	Used to serialize updates to the TCBDEB chain
IATGRQC	Local	Used to serialize with AGETMAIN/APUTMAIN processing
IATGRSP	Local	Held upon entry to SRB routine
IATINAT	Local	Terminate C/I subtask using CALLRTM macro
IATINC2	Local	Set JES3 entry in IOS attention table; clear TCBTCT field
IATINFC	Local/CMS	Used to search MEMDATA chain
IATINM3	Local/CMS	Add JES3's MEMDATA to MEMDATA chain
IATINSV	Local	Branch entry post for JES3 master ECB and/or IATAUX task ECB
IATLVAT	Local	Terminate locate subtask using CALLRTM macro
IATMDAT	Local	Terminate MDS subtask using CALLRTM macro
IATMFTM	Local	Branch entry post of JMF timer subtask
IATMOCP	Local/CMS	Serialize MEMDATA chain
IATMSR1	Local/CMS	Serialize MEMDATA chain
IATOSDI	Local	Branch entry post for JES3 master ECB and/or IATAUX task ECB
IATOSGR	Local	Terminate SETPRT subtask for a WTR
IATOSPR	Local	Serialize for IATXLPJ3 post of AUX task
IATRJPC	Local	Ensure JES3 does not terminate while parmlist is being processed
IATSIAD	Local/CMS	Branch entry to GETMAIN and FREEMAIN
IATSIAI	Local/CMS	Search MEMDATA chain
IATSICC	Local	Serialize DSS for CLOSE processing
IATSICD	Local/CMS	Serialize MEMDATA chain
IATSIDR	Local/CMS	Search MEMDATA chain
IATSIEM	Local/CMS	Set for the duration of EOM processing for control block cleanup
IATSIJS	Local	Free DSSs and DSBs, and quiesce I/O (job termination and requeue)
	Local/CMS	Search MEMDATA chain (job select)
	Local	Quiesce I/O (EOT)
	Local	Branch entry to GETMAIN or FREEMAIN ACB or DEBs
	Local	Branch entry WAIT for RAB refresh
	Local	Modify the Client Output Work (COW) area chain in the SYSOUT application program interface MEM entry.
IATSIOD	Local	Branch entry GETMAIN/FREEMAIN
	Local	Call IATDMDKR to allocate a spool record
IATSIOR	Local	Allocate a track address for SYSOUT

Table 1. Locks Used by JES3 (continued)

Module	Type of Lock	Purpose
IATSISO	Local	Modify the Client Output Work (COW) area chain in the SYSOUT application program interface MEM entry
IATSITS	Local/CMS	Serialize MEMDATA chain
IATSIWO	Local/CMS	Serialize MEMDATA chain
IATSNDA	Local	Branch entry to GETMAIN
IATSNDE	Local	Branch entry to GETMAIN
IATSNDF	Local	Branch entry to GETMAIN and FREEMAIN
IATSNLM	Local	Branch entry to GETMAIN
IATSNSG	Local	Branch entry to GETMAIN
IATSSCM	Local/CMS	Search MEMDATA chain or create MEMDATA
	Local/CMS	Free MEMDATA
IATSSRE	Local	Call requestor's exit in response to SSISERV TYPE=REPLY request
IATSSJM	Local	Held upon entry to SRB routine
IATSSRN	Local/CMS	Serialize MEMDATA chain

Chapter 2. IPCS JES3 Reference

This chapter contains information that helps you use IPCS to diagnose JES3 problems. It contains:

- A summary of the IPCS subcommands that you may find useful when diagnosing problems using the IPCS JES3 panels
- A procedure for identifying the ASIDs for the address spaces that are in the dump you are examining
- The values you can specify for View Option on the IPCS JES3 panels or on the CBF command
- A chart that identifies the JES3 control blocks that IBM provides diagnostic support for
- A chart that describes the portions of a formatted dump for a JES3 or CI FSS address space
- A chart that describes the information in each JES3 trace entry

Summary of Recommended IPCS Subcommands for JES3

This section presents a summary of the IPCS subcommands you might find useful while diagnosing a JES3 problem. A complete description of the commands is described in *z/OS MVS IPCS Commands*.

To format a control block:

```
▶▶—CBFORMAT—adr—┌—STRUCTURE (name)—┐  
└—MODEL (name)—┘
```

To locate the specified value:

```
▶▶—FIND—adr—
```

To display storage:

```
▶▶—LIST—adr—
```

To add a symbol name on the stack:

```
▶▶—STACK—┌—adr—┐  
└—x—┘
```

To format summary information for JES3 or a CI FSS:

```
▶▶—VERBEXIT—JES3—┌—'ASID=nnnn' —┐ ┌—,OPTION=verb_option—┐  
└—'FSSNAME=name' —┘
```

To identify storage at a specified address:

View Options for JES3

Use the view option to specify the type of fields you want displayed in the formatted control block. IPCS JES3 allows you to use the following view options:

X'0100'

Displays only the reserved fields in the control block

X'0200'

Displays all fields except the reserved fields in the control block

X'0300'

Displays all fields of the control block

X'0400'

Displays the contents of the control block in list or browse format

Refer to *z/OS MVS IPCS Customization* for more information on the acceptable values for view option.

Identifying the Valid ASIDs for IPCS JES3 Control Block Prefixes

Use Table 2 to help you determine the ASIDs you should specify for each control block prefix on the IPCS JES3 - Primary Options panel.

Table 2. Locating ASIDs for JES3-related Problems

Address Space	How to Obtain the ASID
JES3	<p>Locate the ASID for the JES3 address space by:</p> <ol style="list-style-type: none"> 1. Indicating you want a list of valid ASIDs for the dump by specifying Y for List of valid ASIDs. The output provides you with a list of the jobs that are in the dump. 2. Locate the entry for the JES3 ASID by entering 'L JES3' on the option command line. 3. Obtain the ASID for the JES3 address space on the far right of the entry.
CI FSS	<p>If you have a dump of the CI FSS address space and the CI FSS abended, you can obtain the ASID for the CI FSS by either:</p> <ul style="list-style-type: none"> • Locating message IAT3713 in the SYSLOG. Message IAT3713 contains the ASID and fssname of the CI FSS address space that failed. • OR by <ol style="list-style-type: none"> 1. Indicating you want a list of valid ASIDs for the dump by specifying Y for List of valid ASIDs. The output provides you with a list of the jobs that are in the dump. 2. Locating the entry for the CI FSS ASID by entering 'L CIFSS' on the option command line. 3. Obtaining the ASID for the CI FSS address space on the far right of the entry. <p>If you have a dump of the JES3 address space and there was a problem in communications between the JES3 and CI FSS, you can obtain the ASID for the CI FSS by:</p> <ol style="list-style-type: none"> 1. Obtaining the ASID of the JES3 address space as described above. 2. Specifying the JES3 ASID for the IATY prefix on the "IPCS JES3 - Primary Options" panel. 3. Selecting the option Display all Control Block Groups from the "Display or Modify JES3 Control Block Information" panel. 4. Selecting the CIFSS, JES3 or a control block group you have defined that contains the DESTQ. You can examine the queue of staging areas on the destination queue 153 to determine the CI FSS address space JES3 last attempted to communicate with.

Table 2. Locating ASIDs for JES3-related Problems (continued)

Address Space	How to Obtain the ASID
WTR FSS	<p>When diagnosing WTR FSS address spaces, you should have obtained at least one of the following from the SYSLOG:</p> <ul style="list-style-type: none"> • The FSS name of the WTR FSS • The name of the device (jname) • The address of the device <p>If you have a dump of a JES3 address space:</p> <ol style="list-style-type: none"> 1. Obtain the ASID of the JES3 address space as described above. 2. Specify the JES3 ASID for the IATY prefix on the "IPCS JES3 - Primary Options" panel. 3. Select the JES3 Control Block Information option from the "IPCS JES3 - Primary Options" panel. 4. Select the option Display all Control Block Groups from the "Display or Modify JES3 Control Block Information" panel. 5. Select the JES3 group or a control block group you have defined that contains the FSS control block. The FSS control block contains the ASID of the WTR FSS address space in field FSSASID. <p>If you have a dump of only the WTR FSS address space:</p> <ol style="list-style-type: none"> 1. Indicate you want a list of valid ASIDs for the dump by specifying Y for List of valid ASIDs on the "IPCS JES3 - Primary Options" panel. The output provides you with a list of the jobs that are in the dump. 2. Locate the job names that have the procname for a WTR FSS address space. You can identify the valid WTR FSS procnames by examining the JES3 FSSDEF initialization statements from your initialization stream, if available. 3. Record the ASIDs for each WTR FSS address space. 4. Return to the "IPCS JES3 - Primary Options" panel and select the JES3 Control Block Information option. 5. Select the Display all Control Block Groups option from the "Display or Modify JES3 Control Block Information" panel. 6. Select the WTRFSS group or a control block group you have defined that contains the FSCB control block. 7. Select the FSCB from the list of control blocks that are defined to the group. 8. For each ASID you recorded from step 3 <ol style="list-style-type: none"> a. Enter the ASID of a WTR FSS address space on the "WTRFSCB - FSS/FSA Information" panel. b. Obtain the valid FSIDs for the WTR FSS address space c. Return to the "WTRFSCB - FSS/FSA Information" panel and enter a valid FSSID and FSAID for the ASID. If the FSAID is 0, FSCBNAME contains the fssname for the FSS address space. If the FSAID contains a hexadecimal number, FSCBNAME contain the name of the device. FSCBATRA contains the address of the trace area for the FSS or FSA.

JES3 Control Blocks for IPCS JES3

The following chart identifies the control blocks IPCS JES3 Allows you to display. For each control block the chart identifies:

- The control block's common name.
- The valid structure or symbol names of the control block. The control block's prefix indicates the address space where the control block resides. A prefix of:

IATY Indicates the control block resides in common storage or in the JES3 address space

- CI** Indicates the control block resides in a CI FSS address space
 - WTR** Indicates the control block resides in a WTR FSS address space
 - JOB** Indicates the control block resides in an address space for a started task, TSO/E user, or a batch job
- Whether or not you need to supply the control blocks address to IPCS JES3 so that it can be formatted.
 - Where you can obtain the control blocks address if you need to supply it.
 - The model name for the control block. The model name may be useful if you are issuing the IPCS CBF subcommand.
 - The descriptive name of the control block.

Table 3. JES3 Control Blocks for IPCS JES3 and the IPCS CBFORMAT Subcommand

Common Name	Structure (name)	adr	Model (name)	Formats the	Address contained in
ARL	IATYARL	Yes	IATIPARL	Allocation resource list	RQARLADD in IATYRSQ ARLFCHN in IATYARL
BAL	IATYBAL	Yes	IATIPBAL	First buffer allocator block for the JES3 address space	SVTBALJC or SVTBALP in IATYSVT; TVTBALJ in IATYTVT
	CIBAL	No	IATIPBAL	First buffer allocator block for a CI FSS address space	
BFPX	WTRBFPX	Yes	IATIPBFP	FSA buffer prefix control block for a WTR address space	FSBXABUF in IATYFSBX INPXBA in IATYINPX BFPXCHAN in IATYBFPX
CAT	IATYCAT1	Yes	IATIPCA1	Catalog allocate parameter list Catalog unallocate parameter list	LCTALLOC in IATYLCT for IATYCAT1; LCTUNALC in IATYLCT for IATYCAT2
	IATYCAT2	Yes	IATIPCA2		
CFGS	IATYCFGS	Yes	IATIPCFS	Configuration Services Data Area	ITKCFGTK in IATYITK INTCFGTK in IATYITK CFCFGTKN in IATYCFW
CFT	IATYCFT	Yes	IATIPCF1	CI FSS table	FSSEXTPT in IATYFSS IDACFTST in IATYIDA CFTCHAIN in IATYCFT for the next CFT in the chain
CNB	IATYCNB	No	IATIPCNB	Console buffer control block	Address contained in ACONSBCB in IATYTVT
CNC	IATYCNC1	Yes	IATIPCC1	Console service constants	ACONCONS in IATYTVT for IATYCNC1

Table 3. JES3 Control Blocks for IPCS JES3 and the IPCS CBFORMAT Subcommand (continued)

Common Name	Structure (name)	adr	Model (name)	Formats the	Address contained in
CNDB	IATYCNDDB	Yes	IATIPCDB	Console Destination Block	CALLCNDB, LMOPCNDB in IATYNDT; CONCNDDB in IATYCNS; CONSOLE in IATYPRM; DJCLCNDB in IATYDJB; DCON in IATYUTDA; FSACNDB and FSACNDB2 IN IATYFSA; FSSCNDBM, FSSCNDB, and FSSMCNDB IN IATYFSS; IQOSCNS, IQOSCNSL in IATYIQOS; ISDCNDB in IATYISD; JCTCNDB in IATYJCT; JDABCNDB in IATYJDA; JNDTCNDB IN IATYJNR; JSQCNDB in IATYJSQ; MDSCNDB, CNDBMDSM, CNDBMDSN, CNDBMDSS, CNDBMDSD in IATYMDS; MEMHCNDB, MEMECNDB in IATYMEM; MOOSCNSL, MOOSCNS in IATYMOOS; MPCCNDB in IATYMP; NDCNDBW in IATYNCD; NRSCNDB in IATYNRS; PURCNDB in IATYPUR; RDSCCNDB, RDSDCNDB in IATYRDS; RTTCNDB in IATYRLT; QMSCNDB, SRDCNDB in IATYSRD; SUPCNDB, SUPFCNDB, SUPICNDB, SUPRCNDB in IATYSUP; STATCNDB in IATYJMF; S34CNDB in IATYS34; TVTCNJEM, TVTCBDTM in IATYTVTC; VMSGCNDB in IATYVFY; VRYCNDB in IATYVRY; WSBCNDB in IATYWSB; WTRDCNDB in IATYWTD; WTRDCCDB, WTRDDCDB in IATYWTR
CNS	IATYCNS1 IATYCNS4 IATYCNS6	Yes Yes Yes	IATIPCNS1 IATIPCNS4 IATIPCNS6	Console buffer map CONSACTN DSECT Console spool buffer	ACONSBCB in IATYTVT FCTCBPTR in IATYFCT JDABPFDB in IATYJDA
COW	IATYCOW	Yes	IATIPCOW	Client Work Area	SSS2JEST in IAZSSS2
CPB	IATYCPB	Yes	IATICPB	Cell pool control block	CPBNXCPB in IATYCPB for the next IAYTCPB
CSCP	IATYCSCP	Yes	IATIPCSCP	Chained single-record file (SRF) cell pool pointers	TVTCSCP in IATYTVT

Table 3. JES3 Control Blocks for IPCS JES3 and the IPCS CBFORMAT Subcommand (continued)

Common Name	Structure (name)	adr	Model (name)	Formats the	Address contained in
DAT	IATYDAT	Yes	IATIPDAT	Data buffer block for the JES3 address space	BALDATBA and BALXDTBA of IATYBAL; DSB DATBA of IATYDSB; WTRIDATA of IATYWTR
	CIDAT	Yes	IATIPDAT	Data buffer block for a CI FSS address space	BALDATBA and BALXDTBA of CIBAL; WTRIDATA of IATYWTR
DLA	IATYDLA	Yes	IATIPDLA	DLOG address space data area	DLGDLA in IATYDLOG
DLG	IATYDLOG	Yes	IATIPDLG	DLOG common data area	SVTDLOG in IATYSVT
DMC	IATYDMC	Yes	IATIPDMC	Data management control block	BALDMCBA of IATYDSB DSBDMCBA of IATYDSB OSDDMCCP of IATYOSD - points to the first cell pool extent
	CIDMC	Yes	IATYIPDMC	Data management control block for a CI FSS address space	BALDMCBA of IATYDSB DSBDMCBA of IATYDSB OSDDMCCP of IATYOSD - points to the first cell pool extent
DSB	IATYDSB	Yes	IATIPDSB	Data set block	DSSDSB in IATYDSS
DSN	IATYDSN	Yes	IATIPDSN	SETDSN table	VLMSDNPT in SETVOL (IATYVLM)
DSP	IATYDSP	Yes	IATIPDSP	Dynamic support program dictionary for the JES3 address space	FCTDSPDC of IATYFCT
	CIDSP	Yes	IATIPDSP	Dynamic support program dictionary for a CI FSS address space	FCTDSPDC of CIFCT
DSQ	IATYDSQ	Yes	IATIPDSQ	JES3 destination queue	DSQLOC in IATYTVT
DSS	IATYDSS	Yes	IATIPDSS	Data set status block for the JES3 address space	MEMDSS and MEMRRDSS in IATYMEM; DEBIRBAD in IEZDEB; ICTJCDSS, ICTJEDSS, ICTSYSDSS in IATYICT; DFRDSS in IATYDFR; DSB DSS in IATYDSB; SVTPBUFQ in IATYSVT; ICTCHAIN in IATYICT
	CIDSS	Yes	IATIPDSS	Data set status block for a CI FSS address space	MEMDSS and MEMRRDSS in CIMEM; DEBIRBAD in IEZDEB; ICTJCDSS, ICTJEDSS, ICTSYSDSS in CIICT; SVTPBUFQ in IATYSVT
DTR	IATYDTR	Yes	IATIPDTR	DLOG trace table header	DLGTRACE in IATYDLOG DTRCURR in IATYDTR DTRNEXT in IATYDTR
DTRE	IATYDTRE	Yes	IATIPDT2	DLOG trace table entry	
DUL	IATYDUL	Yes	IATIPDUL	Dump list for CSA	SVTDULST in IATYSVT
DVE	IATYDVE	Yes	IATIPDVE	SNARJP device entry table	Contiguous to the WSB

Table 3. JES3 Control Blocks for IPCS JES3 and the IPCS CBFORMAT Subcommand (continued)

Common Name	Structure (name)	adr	Model (name)	Formats the	Address contained in
DYA	IATYDYA1 IATYDYA2	Yes Yes	IATIPDA1 IATIPDA2	Dynamic allocation buffer Request buffer Response buffer	SELDATA in IATYSEL SELDATA in IATYSEL
DYN	IATYDYN	No	IATIPDYN	DYNAL FCT data area	
DYQ	IATYDYQ	No	IATIPDYQ	Dynamic allocation queue entries	
DYR	IATYDYR	Yes	IATIPDYR	Dynamic allocation record control block	AWADYR in IATYAWA
	JOB DYR	Yes	IATIPDYR	Dynamic allocation record control block for a batch job or TSO	AWADYR in IATYAWA
	CIDYR	Yes	IATIPDYR	Dynamic allocation record control block for a CI FSS address space address space	AWADYR in IATYAWA
FCT	IATYFCT	No	IATIPFCT	Function control table chain for the JES3 address space	
	CIFCT	Yes	IATIPFCT	Function control table chain for the CI FSS address space	FCTTOP in CITVT RQFCTAD in IATYRSQ
FDD	IATYFDD	Yes	IATIPFDD	File directory entry for the JES3 address space	AIOFDTOP in IATYTVT
	CIFDD	Yes	IATIPFDD	File directory entry for the CI FSS address space	AIOFDTOP in CITVT
FSA	IATYFSA	Yes	IATIPFSA	Functional subsystem application table	FSSFSAPT in IATYFSS FSACHAIN in IATYFSA
FSCB	WTRFSCB	No	IATIPFSC	Functional subsystem control block a writer FSS address space	
FSL	IATYFSL	Yes		Failsoft logout message (IAT3713) for the JES3 address space	
	CIFSL	Yes		JES3 failsoft logout message (IAT3713) for a CI FSS address space	
FSS	IATYFSS	No	IATIPFSS	Functional subsystem table	

Table 3. JES3 Control Blocks for IPCS JES3 and the IPCS CBFORMAT Subcommand (continued)

Common Name	Structure (name)	adr	Model (name)	Formats the	Address contained in
HWS	IATYHWS1 IATYHWS2 IATYHWS3	No Yes Yes	IATIPHWS IATIPHW1 IATIPHW3	High-watermark setup table Fixed portion Major entry Minor entry	TIHWST in IATYTVT for IATYHWS1; first major entry is contiguous to IATYHWS1; HWSMJCHN in IATYHWS1 for the next major entry; count of minor entries in HWSALTCT in IATYHWS2; minor entries are contiguous to IATYHWS2
	CIHWS1 CIHWS2 CIHWS3	Yes Yes Yes	IATIPHWS IATIPHW1 IATIPHW3	High-watermark setup table for the CI FSS address space Fixed portion Major entry Minor entry	TIHWST in IATYTVT for CIHWS1; first major entry is contiguous to CIHWS1; HWSMJCHN in CIHWS1 for the next major entry; count of minor entries in HWSALTCT in CIHWS2; minor entries are contiguous to CIHWS2
ICT	IATYICT	No	IATIPICT	Interpreter control table for the JES3 address space	
	CIICT	Yes	IATIPICT	Interpreter control table for a CI FSS address space	TVTICTCH in CITVT IDDICT in CIIDD1
IDA	IATYIDA	No	IATIPIIDA	Interpreter Data Area	TVTIDAAD in IATYTVT
IDD	IATYIDD1 IATYIDD2 IATYIDD3 IATYIDD4	Yes Yes Yes Yes	IATIPID1 IATIP1D2 IATIPID3 IATIPID4	Interpreter DSP area for the JES3 address space Common section of the interpreter DSP area CI section of the interpreter DSP area Prescan section of the interpreter DSP area Post scan section of the interpreter DSP area	Register 13 of the CI DSP ICTIDD in IATYICT
	CIIDD1 CIIDD2 CIIDD3 CIIDD4	Yes	IATIPID1 IATIP1D2 IATIPID3 IATIPID4	Interpreter DSP area for a CI FSS address space Common section of the interpreter DSP area CI section of the interpreter DSP area Prescan section of the interpreter DSP area Post scan section of the interpreter DSP area	Register 13 of the CI DSP ICTIDD in CIIDD
IFC	IATYIFC	Yes	IATIPIFC	Interpreter FSS control block for the JES3 address space	TVTIFCAD in IATYTVT
	CIIFC	Yes	IATIPIFC	Interpreter FSS control block for a CI FSS address space	TVTIFCAD in CITVT
INC	IATYINC	Yes	IATIPINC	Intermediate console status table	Initialization spool record table

Table 3. JES3 Control Blocks for IPCS JES3 and the IPCS CBFORMAT Subcommand (continued)

Common Name	Structure (name)	adr	Model (name)	Formats the	Address contained in
INM	IATYINM	Yes	IATIPINM	Intermediate MSGROUTE table	Address contained in INTMSGID in IATYINT
IOP	IATYIOP IATYIOPE	Yes Yes	IATIPIOE IATIIOP	JES3 I/O parameter block JES3 fixed section Extent entry	SVTIOPRM in IATYSVT or TVTIOPRM in IATYTVT for IATYIOP; IPBEXTAB in IATYIOP for IATYIOPE
ISR	IATYISR	Yes	IATIPISR	IOSB/SRB pair	IOPFRISR, IOPLOISR, IOPHIISR in IATYIOP SRBPARM in IHASRB
ITK	IATYITK	Yes	IATIPITK	Initialization task parameters	Local data in IATINTK, TVTITKPM in IATYTVT
JCT	IATYJCT	Yes	IATIPJCT	Job control table	JQEFDB in IATYJQE JVWJCFDB and JVWJCT in IATYJVW
JDAB	IATYJDA1 IATYJDA2	Yes Yes	IATIPJD1 IATIPJD2	Job description accounting block for the JES3 address space Common section SE entries	JCTJDFDB in IATYJCT or RQJDBFDB in IATYRSQ for IATYJDA1; IATYJDA2 is contiguous to IATJDA1
	CIJDA1 CIJDA2	Yes Yes	IATIPJD1 IATIPJD2	Job description accounting block for a CI FSS address space Common section SE entries	JCTJDFDB in CIJCT or RQJDBFDB in CIRSQ for CIJDA1; CIJDA2 is contiguous to CIJDA1
JDE	IATYJDE	Yes	IATIPJDE	JES3 directory element for the JES3 address space	TVTJDEQ in IATYTVT
	CIJDE	Yes	IATIPJDE	JES3 directory element for a CI FSS address space	TVTJDEQ in CITVT
JDO	IATYJDOE	Yes	IATIPJDO	Job Data Set Output Entry	Follows the JDO fixed section
JDO	IATYJDOF	Yes	IATIPJD3	Job Data Set Output Fixed Section	OSDHDJDO in IATYOSA, OSDCHALL in IATYOSA, OSDCHSTP in IATYOSA, OSDCHJOB in IATYOSA
JDS	IATYJDSE	Yes	IATIPJDS	Job Data Set Block Entry	Follows the JDS fixed section
JDS	IATYJDSF	Yes	IATIPJD5	Job Data Set Block Fixed Section	JCTJDSFD in IATYJCT, RQJDSFDB in IATYRSQ
JMQ	IATYJMQ1 IATYJMQ2	Yes Yes	IATIPJM1 IATIPJM2	JESMSG queue control area Header section Entry section	TVTJMQA in IATYTVT IMQFIRST in IATYJMQ1. JMQEJNXT, JMQEJPRV, JMQEMNXT, and JMQEMPRV in IATYJMQ2.
JNM	IATYJNM	Yes	IATIPJNM	Job number table	JOBNRTN in IATYTVT
JNT	IATYJNT	Yes	IATIPJNT	Job-net control block	JNCBTOP in IATYTVT
JPRT	IATYJPRT	Yes	IATIPJPT	JCT data space page release table	JQXPAGRL in IATYJQX
JSQ	IATYJSQ	Yes	IATIPJSQ	Job select queue element	Imbedded in IATYJSA, IATYSTA

Table 3. JES3 Control Blocks for IPCS JES3 and the IPCS CBFORMAT Subcommand (continued)

Common Name	Structure (name)	adr	Model (name)	Formats the	Address contained in
JQE	IATYJQE	Yes	IATIPJQE	Job queue element	JQX4AD in IATYJQX
JQX	IATYJQX	No	IATIPJQX	JCT access method data area	TVTJQX in IATYTVT
JVD	IATYJVD	Yes	IATIPJVD	Job validation/restart data csect	Register 13 if failed DSP is INJOBVAL JVVJVDAD in IATYJVD
JVL	IATYJVL	Yes	IATIPJVL	Job validation/restart error logout data area	Register 13 if the failed FCT is INJOBSNP
JVQ	IATYJVQ	Yes	IATIPJVQ	Job initialization job validation queue	JVDJVQAD in IATYJVD JVLJVQAD in IATYJVL JVVJVQAD in IATYJVW
JVW	IATYJVW	Yes	IATIPJVW	Job validation/restart work area	JVDJVWAD in IATYJVD JVQJVWAD, JVQJVWWQ, JVQJVWJQ, JVVJVWSQ and JVQJVWTQ in IATYJVQ, JVLJVWAD in IATYJVL, JVVNEXT in IATYJVD
LCA	IATYLCA	Yes	IATIPLCA	Locate communication area	LDALRLCA, LDACNLCA, and LDACCLCA in IATYLDA
LCB	IATYLCB	Yes	IATIPLCB	Logical unit control block	WSBLCB in IATYWSB DVELCB in IATYDVE
LCP	IATYLCP1 IATYLCP2 IATYLCP3	No Yes Yes	IATIPLP1 IATIPLP2 IATIPLP3	Locate checkpoint data area Header Main processor entries Job entries	LDALCPFD in IATYLDA for IATYLCP1; first IATYLCP2 entry is contiguous to IATYLCP1; next IATYLCP2 is in LCPMPNXT in IATYLCP2; first job entry is in LCPJB1ST in IATYLCP2 and next job entry is in LCPJBNXT in IATYLCP3
LCR	IATYLCR1 IATYLCR2	No Yes	IATIPLR1 IATIPLR2	Locate restart area Header Job entry	LDALCR in IATYLDA for IATYLCR1; LCRNEXT in IATYLCR1 is next IATYLCR1; IATYLCR2 is contiguous to IATYLCR1
LCT	IATYLCT1 IATYLCT2 IATYLCT3	Yes Yes Yes	IATIPLT1 IATIPLT2 IATIPLT3	Locate control table for the JES3 address space Master task section Locate subtask section Parmlist passed to IATLVAT	LDAMLCT in IATYLDA for IATYLCT1; LDALCT in IATYLDA and LCTNEXT in IATYLCT1 for IATYLCT2; LDAATLCT in IATYLDA for IATYLCT3
	CILCT1 CILCT2 CILCT3	Yes Yes Yes	IATIPLT1 IATIPLT2 IATIPLT3	Locate control table for a CI FSS address space Master task section Locate subtask section Parameter list passed to IATLVAT	LDALCT in CILDA for first CILCT1; LDAMLCT in CILDA for CILCT1; LCTNEXT in CILCT; LDAATLCT in IATYLDA
LDA	IATYLDA	No	IATIPLDA	Locate data area for the JES3 address space	TVTLDAAD in IATYTVT
	CILDA	Yes	IATIPLDA	Locate data area for a CI FSS address space	TVTLDAAD in CITVT

Table 3. JES3 Control Blocks for IPCS JES3 and the IPCS CBFORMAT Subcommand (continued)

Common Name	Structure (name)	adr	Model (name)	Formats the	Address contained in
LSVT	IATYLSV1 IATYLSV2	No Yes	IATIPLDA	Locate subtask vector table for the JES3 address space Header section Table entries	LDALSVT in IATYLDA
	CILSV1 CILSV2	Yes Yes	IATIPLDA	Locate subtask vector table for a CI FSS address space Header section Table entries	LDALSVT in CILDA
MLWO	IATYMLWO	Yes	IATIPMLO	Multi-Line message token	MESSAGE macro parameter list on entry to MESSAGE service routine.
MDS	IATYMDS	No	IATIPMDS	Main device scheduling table	Pointed to by MDSPARM in IATYTVT
MEM	IATYMEMH	No	IATIPMEMH	Memory data block for the JES3 address space	SVTMEMD in IATYSVT MEMCHAIN in IATYMEM MEMHEAD in IATYMEM
MGR	IATYMGR	No	IATIPMGR	Message routing table	SVTMGR in IATYSVT
MLWO	IATYMLWO	Yes	IATIPMLO	Multi-line message token	
MPC	IATYMP	No	IATIPMPC	Main processor control table	MAINDATA in IATYTVT MAINACT in IATYTVT SVTMPEDA in IATYSVT SVTMPACT in IATYSVT MPNEXT in IATYMP
NAM	IATYNAH IATYNAE	Yes Yes	IATIPNAH IATIPNAE	SETNAMES table Header entry Format entry	SETNAMES in IATYTVT and SVTSETNM in IATYSVT for IATIPNAH
	IATYNCB1 IATYNCB2 IATYNCB3	Yes Yes Yes	IATIPNC1 IATIPNC2 IATIPNC3	DJC net control block Prefix portion Fixed portion Variable portion	JNNCBFDB in IATYJNT for IATYNCB1; IATYNCB2 is contiguous to IATYNCB1; IATYNCB3 is contiguous to IATYNCB2
NCF	IATYNCF	Yes	IATIPNCF	New configuration data entry	CFSNCFAD in IATYCFGS NCFNEXT in IATYNCF
NCK	IATYNCK1 IATYNCK2	Yes Yes	IATIPNK1 IATIPNK2	DJC net checkpoint record Prefix portion Entry portion	DJCKCFDB in IATYTVT CKDJCFDB in IATYJCT
	IATYNCT	Yes	IATIPNCT	Networking command entries	ANJECNST in IATYTVT
NDH	IATYNDH	Yes	IATIPNDH	Networking data set header	NTDHNDH in IATYNTDH NRDADSHB in IATYNRD ADSHWRK in IATYNFD NRSTDHSHW in IATYNRS
	IATYNJH	Yes	IATIPNJH	Networking job header	ISNHDFDB in IATYNIS NTHTNJH in IATYNTHT
NJT	IATYNJT	Yes	IATIPNJT	Networking job trailer	NTHTNJT in IATYNTHT
OCF	IATYOCF	Yes	IATIPOCF	Old configuration data entry	CFSDCFAD in IATYCFGS OCFNEXT in IATYOCF

Table 3. JES3 Control Blocks for IPCS JES3 and the IPCS CBFORMAT Subcommand (continued)

Common Name	Structure (name)	adr	Model (name)	Formats the	Address contained in
OSA	IATYOSA	Yes	IATIPOSA	Output service data area	Register 13 contains its address in modules IATOSDR and IATOSDO
OSD	IATYOSD	Yes	IATIPOSD	Output service resident data area	TVTYOSD in IATYTVT
OSE	IATYOSEF IATYOSEV IATYOSED	Yes	IATIPOS3 IATIPOS1 IATIPOS2	Output service element Fixed section of the OSE Variable section of the OSE Data set section of the OSE	RQOSEFDB in IATYRSQ JCTOSEFD in IATYJCT OSDOSECH in IATYOSD JDABOSE and JDABOSES in IATYJDA
OSS	IATYOSSJ IATYOSSM	Yes Yes	IATIPOSS	Output service summary table	Select IATYOSSJ to obtain OSS control blocks for a job. RQOSSTOP in IATYRSQ points to the first OSS for a job. Select IATYOSSM to obtain OSS control blocks for a MOSE. OSEOSS in IATYOSE points to the first OSS on a MOSE chain.
PAB	IATYPAB	Yes	IATIPPAB	PPQ Attributes Block	PPQPAB in IATYPPQ
PAR	IATYPAR	No	IATIPPAR	Interpreter parameter list for the JES3 address space	TIPARMS in IATYTVT
	CIPAR	Yes	IATIPPAR	Interpreter parameter list for a CI FSS address space	TIPARMS in CITVT
PDQ	IATYPDQ	Yes	IATIPPDQ	Pending data set queue	WTRFPDQF in IATYWTR points to the first PDQ on the chain; WTRFPDQL in IATYWTR points to the last PDQ on the chain; WTRFPDQC in IATYWTR points to the PDQ at the channel; WTRFPDQS in IATYWTR points to the "synched to" entry
PPQ	IATYPPQ	Yes	IATIPPPQ	Pending Page Queue entry	WTROPPQF in IATYWTR
PRO	IATYPRO1 IATYPRO2	No Yes	IATIPPR0 IATIPPR1	Procedure library table for the JES3 address space Header section Entry section	TPROCCHN in IATYTVT ICTPRCAD in IATYICT
	CIPRO1 CIPRO2	No	IATIPPR0 IATIPPR1	Procedure library table for a CI FSS address space Header section Entry section	TPROCCHN in CITVT ICTPRCAD in CICT
RAB	IATYRAB	Yes	IATIPRAB	USAM record allocation block	DSSRAB in IATYDSS IDDRAB in IATYIDD RQCIRAB in IATYRSQ

Table 3. JES3 Control Blocks for IPCS JES3 and the IPCS CBFORMAT Subcommand (continued)

Common Name	Structure (name)	adr	Model (name)	Formats the	Address contained in
RLT	IATYRLT	YES	IATIPRLT	RJP line & terminal table	RJPTAB IN IATYTVT SRTPRTRM IN IATYTVT SRTPSRT IN IATYTVT WSBRLTA IN IATYWSB LCBSRPL IN IATYLCB
RSQ	IATYRSQ	Yes	IATIPRQ3 IATIPRQ2 IATIPRQ1 IATIPRQ4 IATIPRQ5 IATIPRQ6	Resident job queue table	
SDE	IATYSDE	Yes	IATIPSDE	SYSOUT application program interface DSP entry	TVTSDEAD, SDEFIRST, SDELAST, SDENEXT, SDEPREV, SDEIDLEQ
SDW	IATYSDW	Yes	IATIPSDW	SYSOUT application program interface DSP work area	SDESDWAD
SEE	IATYSEE	Yes	IATIPSEE	SAPI Exclusion Element	OSTSEEQ in IATYOST, RQSAPSEE in IATYRSQ
SEE	IATYSE1	Yes	IATIPSE1	SAPI Thread Exclusion List	SEETHRED in IATYSEE
SEL	IATYSEL	Yes	IATIPSEL	Service entrance list for SSI requests	Register 1 of the SSISERV invocation AWASEL in IATYAWA
SETUNITS	IATYSET	No	IATIPSET	SETUNIT table entry	
SETVOL	IATYVLM	Yes	IATIPVLM	Resident volume allocation table	MDSVLCHN in IATYMDS SYSVOLAD in IATYSYS VLMCHAIN in IATYVLM DSNVOLAD in IATYDSN
SFW	IATYSFW	Yes	IATIPSF	SYSOUT application program interface FCT work area	SDESFAD
SNFS	IATYSNFS	Yes	IATIPSNF	SNARJP fail DSP work area	Register 2 in an AFB-08 dump and register 2 in DM552 and DM553 dumps
SPB	IATYSPB	Yes	IATIPSPB	Spool partition block	TVTSPLST in IATYTVT EXTSPB in IATYIOP
SRT	IATYSRT	Yes	IATIPSRT	Resident SNA RJP table	SRJPSRT in IATYTVT
SST	IATYSST	Yes	IATIPSS	Security subtask control table	
SSVT	IATYSVT	No	IATIPSVT	Subsystem vector table	
SSWE	IATYSSWE		IATIPSSW	Security subtask work element	NRDSSWRK in IATYNRD Pointers in IATYSST
SSX	IATYSSX	Yes	IATIPSSX	Security installation exit parameter list	Register 1 in IATUX58 and IATUX59

Table 3. JES3 Control Blocks for IPCS JES3 and the IPCS CBFORMAT Subcommand (continued)

Common Name	Structure (name)	adr	Model (name)	Formats the	Address contained in
STA	IATYSTA	Yes	IATIPSTA	Staging area SELSTAG in IATYSEL MPSTAGE and MPSTATL in IATYMPC DSQQHD and DSQQTAIL in IATYDSQ STACHAIN and STAPREV in IATYSTA	
	CISTA	Yes	IATIPSTA	Staging area for a CI FSS SELSTAG in IATYSEL JADSTAR in IATYJAD	
STT	IATYSTT1 IATYSTT2	Yes Yes	IATIPST1 IATIPST2	Single track allocation table	JCTSTT of IATINJQ JBTSTT of IATYJBT
SUPUNITS	IATYSUP1 IATYSUP2 IATYSUP3 IATYSUP4	Yes	IATIPSU1 IATIPSU2 IATIPSU3 IATIPSU4	Support units table Fixed section - applies to all devices Initialization section Remote devices RJP lines	CONSUP in IATYCND; GLADDR in IATYFCT; FSASUPPT in IATYFSA; LCBFISU and LCBFOSUP in IATYLCB; MPSYSADD in IATYMPC; PRTAB, PUNTAP, SUPUNITS, SYSTAB in IATYTVT; WSPASUP in IATYWSP
SYSUNITS	IATYSYS	No	IATIPSYS	System units table	SYSUNITS in IATYTVT; SVTSYSUN in IATYSVT; SYSHNEXT in IATYSYS; SETADD in IATYSET; SUPADD in IATYSUP
SWE	IATYSWE	Yes	IATIPSWE	SYSOUT application program interface wait for work element	TVTSAPWQ; SWEFIRST; SWELAST; SWENEXT; SWEPREV
S34	IATYS34	Yes	IATIPS34	SVC 34 data area	STADATA in IATYSTA
TEL	IATYTEL	Yes	IATIPTEL	Timer element	TVTTELTP in IATYTVT for the first TEL element; TVTTELEN in IATYTVT for the last TEL element; TELNEXT in IATYTVT for the next TEL; TELPREV in IATYTVT for the previous TEL; FCTTELPT in IATYFCT for the TEL elements for an FCT; TELFNEXT in IATYTEL for then next TEL element for an FCT
TVT	IATYTVT	No	IATIPTVT	Transfer vector table for the JES3 address space	
	CITVT	No	IATIPTVT	Transfer vector table for a CI FSS address space	
T35	IATYT35	Yes	IATIPT35	WTO/WTOR text and JES3 prefix	STADATA in IATYSTA
UX57	IATYU57	Yes	IATIPU57	Parameter list for exit IATUX57	

Table 3. JES3 Control Blocks for IPCS JES3 and the IPCS CBFORMAT Subcommand (continued)

Common Name	Structure (name)	adr	Model (name)	Formats the	Address contained in
VIO	IATYVIO	Yes	IATIPVIO	Job validation I/O element	VIONEXT, VIOPREV, VIOIONXT in IATYVIO VIWVIOAD, VIWVIORF, VIWVIORL, VIWVIOWF, VIWVIOWL in IATYVIW
VITR	IATYVITR	Yes	IATIPVIT	Job validation I/O trace entry	VIWTRSTR in IATYVIW VIWTRCUR in IATYVIW
VIW	IATYVIW	Yes	IATIPVIW	Job validation I/O work area	JVWVIWAD in IATYVIW
WSB	IATYWSB	Yes	IATIPWSB	Workstation control block	IATYDVE
WSP	IATYWSP	Yes	IATIPWSP	Output service parameter mapping area	IATOSDR or IATYWTR
WTR	IATYWTR	Yes	IATIPWTI	Writer work/control area (input area)	WTRDIARE in IATYWTR
WTR	IATYWTR	Yes	IATIPWTO	Writer work/control area (output area)	WTDAREA in IATYWTR
WTRX	IATYWTRX	Yes	IATIPWTX	Writer work/control area extension	WTROWTRX in IATYWTR
YOSPC	IATYOSPC	Yes	IATIPOSP	IATOSPC Work area	Register 13 in IATOSPC

JES3 and CI FSS Summary Information

For each option, you can select from the JES3 Summary Information panel or you can specify on the VERBX JES3 command. Table 4 identifies the:

- Sections of the formatted dump that are produced for the option
- A general description of the information found in the formatted section
- Whether the section can be obtained from a JES3 or CI FSS address space

Table 4. Options for VERBX JES3 Subcommand, *START DC, and IPCS JES3 Panels

Option	Segment of JES3 Dump	Description	Address Space
C/I	CIDRVR ECF identifier entries	Displays information that identifies the type of ECF/EVENT, an FCT is awaiting on	JES3
	CIDRVR ECF list control block	Displays information required by the ECF list management routines	JES3
	C/I FSS tables	Contains data to keep track of the status and work being processed by C/I FSS	JES3
	C/I parameter tables	Contains the converter parmlist and region size for a particular PARMID	JES3, CI FSS
	C/I related TVT information	Displays the information related to C/I control blocks	JES3, CI FSS
	Interpreter data area	Contains information related to the CI FSS	JES3
	Interpreter control tables	Contains Converter/Interpreter work area and status information	JES3, CI FSS
	PROCLIB tables	contains a header and an entry for every dataset in concatenation	JES3, CI FSS

Table 4. Options for VERBX JES3 Subcommand, *START DC, and IPCS JES3 Panels (continued)

Option	Segment of JES3 Dump	Description	Address Space
COW	SYSOUT Application Program Interface Client Output Work Area	Displays the contents if there are COWs in the SYSOUT application program interface dataspace.	JES3
CSA	Address Range	Maps the JES3 control blocks and data from CSA, SQA, the JES3 private area, and the JES3 auxiliary address space private area.	JES3, C/I FSS
CSBT	None	Display chained single record file buffer table for a specific job. See RSQ.	JES3
DFC	Device fence control blocks	Contains information used to allocate or deallocate fenced devices for job class groups or DJC networks	JES3
DJC	DJC JOBNET control blocks (JNCB)	Contains information on the total network of jobs in DJC.	JES3, CI FSS
DLY	JQEX delay information for jobs in main service	Delay information for jobs that are waiting to be scheduled for or active in main service	JES3
DYN	DYNAL FCT data area	Information used to control the dynamic allocation requests to the DYNAL DSP.	JES3
	ECF list	Maintains information on the completion of I/O requests that are issued by the DYNAL FCT.	JES3
DSP	DSP dictionary entries	Displays the information regarding each Dynamic Support Program entry	JES3, CI FSS
ENQ	AENQ control data entries	Contains information about exclusive or shared use of JES3 resources.	JES3, CI FSS
	FCT AENQ elements	Contains information to map AENQ resource with the corresponding FCT	JES3, CI FSS
	FCT AENQ element free queue	Contains information about the resources in the FCT AENQ element free queue	JES3
FCT	Auxiliary Task Control Block	Contains status and control information on the execution of the auxiliary task.	JES3
	FCT Ready Queue Summary	Contains the addresses of the FCTs that have completed a JSAM I/O request.	JES3
	Function control table	Contains information on a JES3 DSP.	JES3, CI FSS
FSL	None	Displays information from the failsoft logout message (IAT3713).	JES3, CI FSS
FSS	FSS table entries	Contains definition and status information on functional subsystem address spaces.	JES3

Table 4. Options for VERBX JES3 Subcommand, *START DC, and IPCS JES3 Panels (continued)

Option	Segment of JES3 Dump	Description	Address Space
GMS	CLASS/S	Contains information specified on the CLASS initialization statement.	JES3
	EXPREC/S	Identifies and defines the resources that JES3 can allocate.	JES3
	GRPTBL/S	Defines the characteristics of a job class and group. It also contain information specified on the GROUP initialization statement.	JES3
	JSQ/S	Contains information used to schedule communication with initiators via SSI routines.	JES3
	MPC/S	Describes each main in the complex. The information in the table is obtained from the MAINPROC initialization statement.	JES3, CI FSS
	RESQ/S	Contains information JES3 uses to start a job. It contains an entry for each job that has been sent to, or selected by a main for execution.	JES3
GST	Generalized subtask global data area	Contains information used to manage the generalized subtasks and the work associated with those tasks	JES3, CI FSS
	Non-specific subtask GSDS	Generalized subtask directories for the non-specific subtasks	JES3, CI FSS
	Specific subtask GSDS	Generalized subtask directories for the specific subtasks	JES3, CI FSS
	SQDS in the free pool	Contains information that is used by a generalized subtask to process an IATXCSF request	JES3, CI FSS
HED	Heading page	Contains summary information on the failure.	JES3,CI FSS
INS	Internal reader anchor block	Contains information used to schedule individual internal reader jobs.	JES3
JIO	Data management extent table	Contains information on each spool data set JES3 can access.	JES3, CI FSS
	Data management file directory	Contains information on multi-record and some single-record files.	JES3, CI FSS
	Data management IOSB - SRB pairs	Contains information used by the STARTIO macro to write data to spool.	JES3
	Data management JSAM/USAM data buffers	Contains information about the JSAM and USAM buffer pools.	JES3, CI FSS
	I/O parameter block	Contains information used to control spool I/O and information on spool data sets.	JES3, CI FSS
	RPS sector tables	Information contained in this table is used for scheduling spool I/O.	JES3
	Single track table	Maintains a record of the spool space allocated to the JES3 single track table.	JES3
Spool partition control blocks	Contains information on each spool partition defined to JES3.	JES3	
JQE	JES3 job queue elements	Contains job-related information.	JES3
JST	None	Display job summary table for a specific job. See RSQ for example.	JES3

Table 4. Options for VERBX JES3 Subcommand, *START DC, and IPCS JES3 Panels (continued)

Option	Segment of JES3 Dump	Description	Address Space
JTV	Data management IATYTVT definitions	Contains the entry point addresses for most JES3 data management routines and tables.	JES3, CI FSS
LOC	Locate control tables	Contains information used by each Locate subtask and Locate FCT	JES3, CI FSS
	Locate data area	Contains information used by all locate modules under the Locate FCT	JES3, CI FSS
	Locate entrance tables	Contains information used by a DSP to request the services of the Locate FCT	JES3, CI FSS
	Locate Restart Records	Contains information about jobs active in Locate on a local processor during connect processing	JES3, CI FSS
	Locate subtask vector table	Contains information to map Locate subtask control table with Locate subtask TCB address	JES3, CI FSS
	Master locate control table	Contains information regarding Locate Master task like Master task ECB,LCT for the subtask that is being attached, parameter list, etc	JES3, CI FSS
MDS	Main device scheduler data area	Contains information used by the main device scheduler to schedule jobs.	JES3
	MDS RESQUEUE tables	Lists the jobs that are waiting to be processed by each MDS function.	JES3
MEM	Auxiliary Task Dispatching Element	Used to select an FCT for dispatching under the auxiliary task TCB.	JES3
	JES3 memory usage	Contains the addresses of modules and control blocks in the JES3 address space.	JES3, CI FSS
MOD	JES3 module information from the JDEs	Displays information regarding JES3 directory elements	JES3, CI FSS
MPC	DESTQ	Contains a list of all the unsolicited staging areas received by JES3 according to the function.	JES3
	JESMAIN	Contains information on main processors.	JES3
	MAINSCHD	Identifies the staging areas waiting to be processed by a main.	JES3
	MEMDATA	Contains information on active address spaces for each main and the jobs within an address space.	JES3
MVD	Multi-version data access Master control areas	Contains data that is used by JES3 to control access to data areas that have multiple versions	JES3, CI FSS
NJE	Networking console pointers and queues	Contains information on the buffers containing NMRs	JES3
	NJE active BSC node table	Formats work areas used by the network.	JES3
	NJE resident node table	Contains information on the nodes in the network.	JES3
NUC	JES3 Nucleus	Contains a list of modules and their entry points within the JES3 nucleus.	JES3, CI FSS
OSS	Master OSE table	Summary information of the OSEs that are placed on spool.	JES3

Table 4. Options for VERBX JES3 Subcommand, *START DC, and IPCS JES3 Panels (continued)

Option	Segment of JES3 Dump	Description	Address Space
PRT	PPQ/PDQ writer control blocks	Contains information on JES3 writers.	JES3
	SUPUNITS print/punch resources	Describes the types of print and punch resources defined to JES3.	JES3
RJP	Resident remote and line DCT entries	Contain device control information for lines and terminals.	JES3
	Resident RJP line and terminal table	Contains control information for each line or terminal.	JES3
	Resident SNA RJP Table (SRT)	Contains information specified on the COMMDEFN initialization statement.	JES3
	Resident SNA terminal entries	Contains information on started RJP lines and remote RJP workstations that are signed on.	JES3
RSQ	RESQUEUE table	Contains an entry for each active job.	JES3, CI FSS
	None	Display the RQ for a specific job. Specify: VERBX JES3 'OPTION=RSQ, JOBNAME=xxxxxx' or VERBX JES3 'OPTION=RSQ, JOBNUM=xxxxx'	JES3
SAPI	SYSOUT application program interface related information	Displays SDE, SDW, SFW and SWE control block information	
SCT	SYSOUT Class Table	Contains the device characteristics of SYSOUT class	JES3
STN	SETNAMES table	Contains information specified on the SETNAMES initialization statements.	JES3, CI FSS
STU	SETUNITS table	Contains control information for all devices attached to a main. The table contains information specified on the DEVICE initialization statement.	JES3, CI FSS
SUP	SUPUNITS table	Identifies the devices that are allocated to the global. These devices are used by JES3's support services (i.e. consoles, readers, printers, tape units, RJP lines and networking lines).	JES3
SYS	SYSUNITS table	Contains a unique entry for each device in the complex. Each entry maintains the allocation status of the device.	JES3, CI FSS
SRS	MDSSRS Data Area	Contains information needed by the MDSSRS FCT	JES3
	MDS Control Tables	Contains status information, addresses and work areas used by MDS subtasks, the MDS master task and MDSSRS FCT	JES3
	SMS Available Resource Blocks	Contains information regarding the status of an SMS managed resource	JES3
TRC	JES3 trace tables	Contains diagnostic information pertinent to a JES3 system failure	JES3, CI FSS

Table 4. Options for VERBX JES3 Subcommand, *START DC, and IPCS JES3 Panels (continued)

Option	Segment of JES3 Dump	Description	Address Space
VLM	SETDSN table	Contains information on data sets that are allocated to volumes.	JES3
	SETVOL table	Contains information on all known volume requirements for jobs in the system and maintains the status of all currently mounted volumes.	JES3
WLM	IATYWLM	JES3 work load manager data area	JES3
	IATYSRVC	JES3 data area for WLM service class, including the sampling statics for service class	JES3
	IATYWJS	GMS WLM job sampling device	JES3
WSB	Device Entry	Describes the devices associated with each workstation.	JES3
WSB	LCB Entry	Describes all the active LCBs associated with the workstation.	JES3
	Resident WSB/LUCB entries	Contains information on each active work station.	JES3
	WSB Entry	Describes the contents of the workstation control block (WSB) which contains information for all the active workstations.	JES3

Information for Entries in the JES3 Trace Table

For each trace id, Table 5 provides:

- The module that issues the IATXTRC macro to record the event
- A description of the event
- Information in the entry other than the header for the entry

Table 5. JES3 Trace Events

Trace ID	Module of origin	Description of Trace Origin (function)	Additional data (by word number)
1	IATGRTX	*F E,TRAP=nnnnnn and location nnnnnn has been reached	None
24	IATDMNC	ZEROCORE	1: Return address 2: Address of entry point 3: Address area 4: Count
25	IATDMGB	I/O completion	1: Address of data queue element
26	IATDMGB	USAM track allocation	1: Address of staging area
27	IATDMDT	MOVEDATA	1: Return address 2: TO address 3: FROM address 4: Count
28	IATGRSV	Entry to ASAVE (CALL)	1: Register 13 from calling routine 2: Return address 3: Entry point to called routine 4: Register 0 5: Register 1 6-16: Registers 2-12 from calling routine (register 10 is caller's base)

Table 5. JES3 Trace Events (continued)

Trace ID	Module of origin	Description of Trace Origin (function)	Additional data (by word number)
29	IATGRSV	Exit from ASAVE (RETURN)	1: Address of save area from pool 2: Return address to calling routine (based on return code) 3: Register 15 from called routine 4: Register 0 from called routine 5: Register 1 from called routine 6-16: Registers 2-12 of the calling routine
30	IATGRCT	Ready DSP dispatched by MFM	1: Posted ECF address 2: Posted ECF content
32	IATSIEM	End-of-memory call	1-7: Registers 2-8 8: Address of SSVT 9-35: SEL data, starting at label SELSEC1
37	IATGRCT	IATXELA macro	1: Register 14 - return address 2: Register 15 - entry point of the routine 3: Register 0 - address of ECF 4: Register 1 - ECF mask 5: Register 2 - address of ECF list control block (IATYELB)
38	IATGRCT	IATXELD macro	1: Register 14 - return address 2: Register 15 - entry point of the routine 3: Register 0 - relative position number of ECF entry 4: Register 1 - address of ECF list control block (IATYELB)
39	IATGRCT	IATXELS macro	1: Register 14 - return address 2: Register 15 - entry point of the routine 3: Register 0 - relative position number of ECF entry 4: Register 1 - address of ECF list control block (IATYELB)
40	IATDMNC	IATXIOX macro	1: Register 14 - Return address 2: Register 15 - Entry point address 3: Dump code 4: Reason code 5: Control block identifier 6: FDB address

Table 5. JES3 Trace Events (continued)

Trace ID	Module of origin	Description of Trace Origin (function)	Additional data (by word number)
41	IATMSMS	Determine which initiators to stop	(No additional data defined for IDs 41 through 58)
42	IATMSMS	Staging area purge (SSISERV)	
43	IATMSMS	JOB select for a task which has been started	
44	IATMSMS	End of job step task (EOT)	
45	IATMSJT	End of job (EOJ)	
46	IATMSMS	End of initiator (EOM)	
47	IATMSMS	VS initiator request that job be reenqueued	
49	IATMSMS	Determine number of initiators to start or the number to start for a group	
50	IATMSMS	Checkpoint GMS data in MPCPROC	
51	IATMSMS	RESQUEUE add	
52	IATMSMS	Logical storage update	
53	IATMSMS	ECF posted for error recovery	
54	IATMSMS	Inspect job select queue element	
55	IATMSMC	Job flush (*S,main,FLUSH command or job IPLed off main)	
56	IATMSMS	Cannot start initiator	
57	IATMSMS	Out-of-tracks conditions for GMS	
58	IATMSMS	End of job (EOJ) or end of initiator (EOM) during job select	
60	IATABMN	JES3 ESTAE routine entered	
61	IATABRT	Entry to JESTAE exit routine	1: Address of JESTAE exit routine 2: Address of FSWA
62	IATABRT	Exit from JESTAE exit routine	1: Return code from JESTAE exit routine 2: Address of JESTAE retry routine if return code is 4
63	IATDMGB	I/O error	None

Table 5. JES3 Trace Events (continued)

Trace ID	Module of origin	Description of Trace Origin (function)	Additional data (by word number)
65	IATRJM6	Event on RJP line	1: Identifier of event type (see "RJP Debugging Aids") 2: Action taken 3-4: Line name 5: Register 0 6: Register 1 7: Register 2 8: Register 3 9: Register 4
66	IATDMNC	JES3 file directory FIND routine	1: Return address 2: Entry address 3: TAT FDB address 4: FDB address
67	IATDMNC	JES3 file directory ADD routine	1: Return address 2: Entry address 3: TAT FDB address 4: FDB address
68	IATDMNC	JES3 file directory DELETE routine	1: Return address 2: Address of entry point of function 3: Address of FDB 4: Address of file directory entry
69	IATGRCT	Multifunction Monitor (AWAIT)	1: Address of ECF 2: ECF mask (If this is the list form of AWAIT, the above two words are repeated for each entry in the list)
71	IATDMJA	JDS access routine for user data set allocation	1: Return address 2: Address of staging area
72	Many MDS modules	MDS trace record from the module indicated within the record	Variable number of words, in EBCDIC
75	IATFCxx IATFPxx IATSICD	FSS trace record from the module indicated within the trace record.	See "Functional Subsystem (FSS) Address Space Trace Output" in <i>z/OS JES3 Diagnosis</i> for a description of the FSS trace records. Note: This ID will appear in the JES3 FSS formatted trace.
76	IATOSEN	Indicates an ENF signal was issued	1: Register 2 - ENF exit routine address 2: Register 3 - Work register 3: Register 4 - Address of the caller's parameter list 4: Register 5 - Work area address 5: Register 6 - Work register 6: Register 7 - Work register 7: Register 8 - Return code from the ENFREQ macro 8: Register 9 - Work register
77	IATCNF	Indicates an ENF signal was received by JES3 from MCS.	1: Qualifier code
78	IATMDxx	Indicates the status of an SMS-managed volume has changed	
79	IATCNDxx	DLOG event	Variable, see macro IATYDTR
80	IATGRCT	IATXSTMD (Setmode)	1: Contains following, Byte 0 - the option byte from R0 at entry to setmode. The high order bit of this byte indicates the task mode requested. 1 indicates IATAUX task mode. 0 indicates IATNUC task mode. Byte 1 - FCTMODE field at entry to setmode Byte 2 - TVTATFLG field at entry to setmode Byte 3 - unused 2: Return address
81	IATMOTR	The traced parameters of the *F,E command are: ON OFF EXEL=RESET EXCL=id	1-3: Contains parameters (in hexadecimal) from the *F,E command

Table 5. JES3 Trace Events (continued)

Trace ID	Module of origin	Description of Trace Origin (function)	Additional data (by word number)
82	IATOSPD	Indicates that a PSO staging area has been received by the PSO DSP	1: RESQUEUE address 2: SSOB header address 3: WSP address 4: Staging area address
83	IATOSSD	Indicates that a SYSOUT application program interface staging area has been received by the SYSOUT application program interface DSP	1: Checkpoint job's RESQUEUE address or zero 2: SSOB header address 3: COW address 4: Staging area address

Table 5. JES3 Trace Events (continued)

Trace ID	Module of origin	Description of Trace Origin (function)	Additional data (by word number)
84	IATDJSV	DJ server address space events	<p>1–8 Registers 2–9 9–10: "IATDJSV" 11–12: Event Type:</p> <ul style="list-style-type: none"> • DYNALLOC - Dynamic allocation request has completed. • WAKEUP - DJ address space has been posted to process a request. • OPEN - Open request has completed. • CLOSE - Close request has completed. • EOVS - End of volume (EOV) request has completed. • EXCP - Execute channel program (EXCP) has completed. • RETURN - Server address space has been told to terminate by JES3. • EXIT - Server address space is terminating; this will occur as a result of a RETURN request or when the server address space determines that JES3 is down. • JES3DOWN - The timer exit has determined that JES3 is down. <p>13: DJ server job id 14: ASCB address 15: DJ FCT address</p> <p>WAKEUP Requests</p> <p>16: Function code from the ECB</p> <p>DYNALLOC Requests</p> <p>16: SVC 99 request block address 17: DYNALLOC return code 18: Bytes 1–2: DYNALLOC error reason code. Bytes 3–4: DYNALLOC information reason code</p> <p>OPEN Requests</p> <p>16: DCB address 17: OPEN return code 18: First four bytes of current volser 19: Bytes 1–2: last two bytes of current volser. Bytes 3–4: zero</p> <p>CLOSE Requests</p> <p>16: DCB address 17: CLOSE return code</p> <p>EOV Requests</p> <p>16: DCB address 17: EOVS return code 18: First four bytes of current volser 19: Bytes 1–2: last two bytes of current volser. Bytes 3–4: zero</p>

Table 5. JES3 Trace Events (continued)

Trace ID	Module of origin	Description of Trace Origin (function)	Additional data (by word number)
84 cont.	IATDJSV	DJ server address space events.	<p>EXCP Requests</p> <p>16: IOB address 17: I/O completion ECB contents 18: Byte 1: IOBFLAG1. Byte 2: IOBSENS0. Byte 3: IOBSENS1. Byte 4: zero 19: First four bytes of CSW 20: Bytes 1–3: last three bytes of CSW. Byte 4: zero.</p> <p>JES3DOWN Requests</p> <p>16–17: Set to POST if the server address space was posted for termination. Set to CANCEL if the server address space was cancelled.</p> <p>For RETURN and EXIT requests, there is no additional information</p>
105	IATDMNC	Traced JSAM buffer contents on SRF mismatch for a JESREAD ABEND DM704, RC X'14'.	<p>1: Register 2 - work register 2: Register 3 - return code 3: Register 4 - FDB address 4: Register 5 - JQX address 5: Register 6 - return address 6: Register 7 - SRF identifier 7: Register 8 - buffer address 8: Register 9 - work register 9-488 or 1023: Failing buffer contents</p>
107	IATGRQC	Error exit from IATXGCL	<p>1-8: Registers 2-9 for IATGRQC 9-13: Caller's registers 2-7 14: Caller's register 10 15: Primary CPB address from the caller 16: Return code from IATXGCL 17: Return address</p>
108	IATDMNC	A MRF was read from spool using the ADEBLOCK, APOINT, AOPEND or ABACKR macros. The VALID in the spool buffer did not match the VALID in the file directory entry. JES3 issued an abend code of DM722.	<p>1: Register 2-buffer address 2: Register 3-FD entry address 3: Register 4-FDB address 4: Register 5 5: Register 6 6: Register 7 7: Register 8- 8: Register 9 9-488: Failing buffer contents</p>
109	IATGRQC	Error exit from IATXRCL	<p>1-8: Registers 2-9 for IATGRQC 9-13: Caller's registers 2-7 14: Caller's register 10 15: Primary CPB address from the caller 16: Return code from IATXRCL 17: Return address 18: Cell address to be released</p>

Table 5. JES3 Trace Events (continued)

Trace ID	Module of origin	Description of Trace Origin (function)	Additional data (by word number)
120	IATDMTK	Track allocation	<p>1: X from X.G 2: G from X.G 3: VALID from the TAT 4: Slot address from VALID array 5: The RQ address from FCTRQAD 6: Job number from RQ 7: DSP dict. address 8-12: ASAVE return for the last 5 ACALLS</p> <p>Identifier 120 is present only when the SAT trace has been activated via the *F,E,START=SAT command.</p>
121	IATDMTK	Track allocation	<p>1: X from X.G 2: G from X.G 3: VALID from the TAT 4: Slot address from VALID array 5: The RQ address from FCTRQAD 6: Job number from RQ 7: DSP dictionary address 8-12: ASAVE return for the last 5 ACALLS</p> <p>Identifier 121 is present only when the SAT trace has been activated via the *F,E,START=SAT command.</p>
3000-4005		Available to installations	

Chapter 3. JES3 Module Summary

This section describes each JES3 module as follows:

- Gives the module's functional (descriptive) name
- Summarizes the function of the module
- Names the modules, executable macros, or other system components that directly access the module
- Names the modules that each module calls directly (using a BAL(R) or ACALL)
- Gives the module's assigned addressing mode (AMODE) and residency mode (RMODE), and if the module can be refreshed via the *MODIFY,X,M=modname comand or via dynamic LPA.

Module Name	Function Name	Description	Called By	Calls	Attributes
IATABCOW	COW data space formatting routine	Formats and prints a dump of COW entries in the COW data space.	IATABN0, IATABPR	None	31/Any
IATABCO1	COW address space formatting routine	Formats and prints a dump of COW entries in the application address space when the IPCS command IP VERBX JES3 'OPTION=COW, ASID=app.ASID' is issued.	IATABN0, IATABPR	None	31/Any
IATABCWP	COW prefix dump formatter control block model.	Formats COW prefix using IPCS.	BLSQCFMT	None	31/Any
IATABFS	FSS/FSA table formatting routine	Formats and prints a dump of FSS and FSA table entries.	IATABN0, IATABPR	None	31/Any
IATABIP	JES3 I/O purge driver routine	Cleans up JES3 control blocks and restarts USAM I/O after a JES3 abnormal address space termination or a FSS normal termination. It allows user address space I/O to continue in the absence of JES3 or an FSS.	PURGE SVC	IATDMDK, IEAVPSIB	31/Any
IATABIS	Input service formatting routine	Formats and prints the internal reader anchor control block (IRA) and the internal reader element control block (IRE).	IATABN0, IATABPR	None	31/Any
IATABJDO	JDO entry formatting routine	Formats a JDO entry.	IPCS	BLSQFORI, ADPLESRV	31/Any
IATABJDS	JDS formatting routine	Formats a JDS entry.	IPCS	BLSQFORI, ADPLESRV	31/Any
IATABJM	JMQ Formatter	Formats JMQ entries in a dump	IATABPR, IATABNO	None	31/Any
IATABMN	JES3 ESTAE exit routine and fail soft processor	Contains the ESTAE exit routines for the IATNUC, IATNUCF (FSS), and IATAUX tasks. These exit routines are entered as a result of JES3 program checks, the FAILDSP macro, any abend of a JES3 task, or the *FAIL, *DUMP, or *RETURN command.	MVS recovery termination manager, IATABRT, IATFSLG, IATGRCT, IATINIT, IATUTDC	IATFSLG, IATFSRC, IATGRCT, IEAVG700	31/24

Module Name	Function Name	Description	Called By	Calls	Attributes
IATABMV	MVDA control block formatting routine	Formats and prints the MVDA master and version control tables.	IATABN0, IATABPR	None	31/Any
IATABNA	RJP resident table formatting routine	Formats and prints the BSC and SNA resident RJP tables.	IATABN0, IATABPR	None	31/Any
IATABNB	JES3 trace table formatting routine	Formats and prints the JES3 trace table.	IATABN0, IATABPR	None	31/Any
IATABNC	SUPUNITS table formatting routine	Formats and prints the SUPUNITS table.	IATABN0, IATABPR	None	31/Any
IATABND	SYSUNITS table formatting routine	Formats and prints the SYSUNITS table.	IATABN0, IATABPR	None	31/Any
IATABNE	SUPUNITS extension tables formatting routine	Formats and prints the line SUPUNITS extension table for started RJP lines and the remote SUPUNITS extension table for signed-on terminals or work stations.	IATABN0, IATABPR	None	31/Any
IATABNF	Nucleus CSECT formatting routine	Formats and prints a loading map of the CSECTs within the JES3 nucleus or FSS nucleus.	IATABN0, IATABPR	None	31/Any
IATABNG	SETVOL and SETDSN entry tables formatting routine	Formats and prints the SETVOL and SETDSN entry tables.	IATABN0, IATABPR	None	31/Any
IATABNH	Print/punch output service SUPUNIT format routine	Formats and prints the print and punch devices from the SUPUNITS table.	IATABN0, IATABPR	None	
IATABNI	FCT formatting routine	Formats and prints the active FCT.	IATABN0, IATABPR	None	
IATABNJ	SETUNITS table formatting routine	Formats and prints the SETUNITS table.	IATABN0, IATABPR	None	31/Any
IATABNK	DJC control block formatting routine	Formats and prints the DJC control blocks (JNCB and NCB) and sorts the OS load list and the subpool DOE chains.	IATABN0, IATABPR	None	31/Any
IATABNL	RESQUEUE formatting routine	Formats and prints the RESQUEUEs.	IATABN0, IATABPR	None	31/Any
IATABNM	SDM control blocks formatting routine	Formats and prints the JES3 spool data management (SDM) control blocks IATYIOP, IATYSPB, IATYSTT, and IATYTGB.	IATABN0, IATABPR	IATABN0	31/Any
IATABNN	SDM control blocks formatting routine	Formats and prints the JES3 spool data management (SDM) control blocks IATYBAL, IATYDAT, IATYDMC, and IATYFDD.	IATABN0, IATABPR	IATABN0	31/Any
IATABNO	SDM buffer pool formatting routine	Formats and prints the JES3 memory spool data management (SDM) buffer pool.	IATABN0	None	31/Any
IATABNP	NJE node table formatting routine	Formats and prints the NJE node table.	IATABN0, IATABPR	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATABNQ	JQE formatting routine	Formats and prints the JQE entries.	IATABN0, IATABPR	None	31/Any
IATABNT	WSB/DVEN/ LCB chain formatting routine	Formats and prints the WSB/DVEN/LCB chain associated with any active RDCT.	IATABN0, IATABPR	None	31/Any
IATABNW	DYNAL control block formatting routine	Formats and prints the dynamic allocation (DYNAL) control blocks DYN, DYQ, and ELB.	IATABN0, IATABPR	None	31/Any
IATABNX	GMS tables formatting routines	Formats and prints the GMS control blocks, group tables, EXRESC entries, class tables, RESQUEUEES in "ONMAIN" or "SELECT" status, outstanding job select queue elements (JSQ), and the GMS portion of the MAINPROC tables.	IATABN0, IATABPR	None	31/Any
IATABNY	Main service data areas formatting routine	Formats and prints four main service data areas: the main processor control (MPC) tables, the destination routing queue (DSQ), the memory data control blocks (MEMDATA), and the staging areas (STAR).	IATABN0, IATABPR	None	31/Any
IATABNZ	JES3 or FSS storage SNAP dump routine	Takes a SNAP dump of the JES3 or FSS storage in CSA and in the auxiliary address space.	IATABN0, IATABPR	None	31/Any
IATABN0	Online JES3 or FSS abend formatting routines driver	Controls the sequence of invocations of the JES3 dump-formatting modules when a dump of JES3 or FSS is required by either an abnormal JES3 or FSS termination or the dump core (DC) utility, IATUTDC. It also contains subroutines and a data area that can be used by the called routines during the dump processing and controls the ESTAE retry routine for all the dump-formatting routines that it calls. It can also produce an unformatted dump upon request.	IATABRT, IATUTDC	Abend format routines IATABIS, IATABNA through IATABNZ, IATABN1, IATABN4 through IATABN9	Any/24
IATABN1	Dump header formatting routine	Formats and prints the dump header, abend code, and location and registers at the time of the error.	IATABN0, IATABPR	None	31/Any
IATABN4	MDSDATA, RESQUEUE tables, ARL and IGDSCHRL lists formatting routine	Formats and prints the MDSDATA and RESQUEUE entries in MDS processing and all allocation requirements lists (ARL) and scheduling services required resource lists (IGDSCHRL) control blocks.	IATABN0, IATABPR	None	31/Any
IATABN5	SETNAMES table formatting routine	Formats and prints the SETNAMES table.	IATABN0, IATABPR	None	31/Any
IATABN6	SDM control block formatting routine	Formats and prints the JES3 spool data management (SDM) fields in the IATYTVT control block.	IATABN0, IATABPR	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATABN7	JES3 memory usage table formatting routine	Formats and prints the JES3 and FSS memory usage table.	IATABN0, IATABPR	None	31/Any
IATABN8	ATCB table formatting routine	Formats and prints the auxiliary task control block (ATCB) table and contributes to the formatting of the FCT. It moves the FCT heading contained in this module to the work area. The heading will then be used by IATABN9 to format the FCT and associated auxiliary task dispatching elements (ATDEs).	IATABN0, IATABPR	None	31/Any
IATABN9	FCT and ATDE formatting routine	Formats the FCT ready queue summary, the FCT, and associated auxiliary task dispatching elements (ATDEs).	IATABN0, IATABPR	None	31/Any
IATABOS	Output service MOSE/OSS formatting routine	Formats and prints the MOSE, SNA/NJE MOSE, OSS and SNA/NJE OSS tables.	IATABN0, IATABPR	None	31/Any
IATABOS2	OSE variable section formatting routine	Formats an OSE variable section.	IPCS	BLSQFORI, ADPLESRV	31/Any
IATABPR	JES3 dump formatting interface with IPCS	Provides the interface between IPCS with the JES3 dump-formatting routines.	IPCS	Abend format routines IATABFS, IATABIS, IATABNA through IATABNZ (except IATABNO), and IATABN1, IATABN2, IATABN4 through IATABN9,	31/24
IATABRT	JES3 ESTAE exit retry routines	Performs retry processing after an error occurs in the IATNUC or IATAUX task. It gives control to the JESTAE exit (if an exit is defined) when a DSP is being failed. It also calls failsoft and abend routines to provide logout functions and formatted MVS dump output.	MVS control program	IATABMN, IATABN0, IATFSLG, IATFSRC, IATGRCT, IATOSSC	31/24
IATABSAP	SYSOUT application program interface function format routine	Format data areas related to SYSOUT application program interface.	IATABPR	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATATCB	Auxiliary task control block CSECT	Constitutes the CSECT for the IATYATCB macro, the JES3 auxiliary task (IATAUX task) control block. It is link edited with the other modules that comprise the JES3 nucleus (IATNUC).	Not applicable	IATGRCT	31/Any
IATAUX	Auxiliary task initialization routine	Issues the ESTAE macro to set up the recovery environment for the auxiliary task (IATAUX task). It passes control to the multifunction monitor (IATGRCT) under the auxiliary task.	IATINAX	None	31/Any
IATBDCD	BDT communications interface data area	Contains tables, data areas, and messages used by the MVS/BDT communication interface DSP (IATBDCl).	Not applicable	None	24/24
IATBDCl	BDT communication interface	Functions as the communications interface between JES3 and one or more MVS/BDT subsystems. It builds and sends SNA/NJE transactions to MVS/BDT. It handles MVS/BDT requests (commands or transactions) received from JES3 consoles, MVS/BDT requests (originating from batch jobs and terminals logged on to TSO) received from the subsystem interface routine (IATSIBD), JES3 commands received from either consoles or the subsystem interface routine (IATSIBD), messages to be routed to JES3 consoles.	IATSIBD	BDTCMDV, IATNTSR, IATOSBM, IATOSPC	31/24
IATCFSRV	Configuration services	Serves the IATXCFGS macro to perform functions related to the JES3 configuration.	IATXCFGS macro	None	31/Any
IATCNCM	CONCMD DSP driver	Contains the staging area of the SVC 34 destination driver queue, entering the commands contained in the staging areas for system execution.	Dispatched by MFM	IATCNIN	31/Any
IATCNCN	Data CSECT for console service modules	Constitutes the data CSECT for modules running under the CONCMD, and CONSERV FCT entries. It contains addresses, constants, data, message text, ECFs, and work areas for console service modules.	Not applicable	None	31/Any
IATCNDRM	DLOG resource manager	Contains the task and address space level resource manager for DLOG.	Task or address space termination	None	31/Any
IATCNDRR	DLOG task recovery routine	Receives control when an abend occurs under the DLOG task and when the DLOG address space is terminated.	RTM	IATCNDIT	31/Any
IATCNDS	DLOG services	Contains service routines for the IATXDLOG macro	IATXDLOG macro.	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATCNDTK	DLOG task	First module to get control when the DLOG address space is started.	MVS Dispatcher	IATCNDAL IATCNDIT IATCNDMS	31/Any
IATCNDMS	DLOG message processor	Retrieves messages from the message data space via the MCSOPMSG service, formats them, and writes them to SYSLOG via a WTL.	IATCNDTK	IATCNDFM	31/Any
IATCNDAL	DLOG alert processing	Receives control when the DLOG alert ECB is posted which indicates the message data space is full.	IATCNDTK	None	31/Any
IATCNDB	Console destination block	Service routine for the IATXCNDB macro	IATXCNDB	None	31/Any
IATCNDFM	DLOG formatter	Formats a record for the JES3 DLOG.	IATCNDMS	None	31/Any
IATCNDIT	DLOG task initialization/termination	Initializes the DLOG address when DLOG is started. Performs termination/cleanup processing when DLOG is terminated.	IATCNDTK IATCNDRR	None	31/Any
IATCNDM	Console message spooling routine	JESMSG spooling routine.	Posted by IATGRJA; dispatched by MFM (IATGRCT)	None	31/Any
IATCNDQ	Console buffer dequeue routine	Serves the DEQMSG macro. For input buffers, IATCNDQ dequeues the buffer from the console buffer block and the FCT. For action messages, IATCNDQ issues a delete operator message (DOM) request to delete the message.	DEQMSG macro	IATCNRN	31/Any
IATCNDTR	DLOG trace routine	Creates entries in the DLOG trace table.	Users of the IATXDLTR macro	None	31/Any
IATCNNG	NJECONS services	Contains various services used by the NJECONS DSP.	IATCNNJ	None	31/Any
IATCNNS	NJECONS services	Contains various services used by the NJECONS DSP that must run under a JES3 subtask.	IATCNNG, IATCNNJ	None	31/Any
IATCNIA	Console authority checking routine	Interrogates all console input commands for valid authority.	IATCNIN	IATUX18	31/Any
IATCNIC	Console input command simulator	Serves the INTERCOM macro. It issues the MGCRE macro to enter commands into the system.	INTERCOM macro	IATCNRN	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATCNIN	Console input command processor	Processes and routes console input commands. It analyzes the command verb, initializes the message parameter buffer, and does one of the following: <ul style="list-style-type: none"> • Routes the command to the correct console appendage entry • Gives the command to MVS • Posts the networking console DSP • Processes the command internally. 	IATCNM	IATCNIA, IATCNRN	31/Any
IATCNJS	Console JESTAE exit routine	Services requests of the JESTAE macro issued by console routines running under the CONSERV FCT entries.	IATCNDQ	None	31/Any
IATCNND	NJECONS DSP data area	Contains data areas, tables, etc. It is used by the NJECONS DSP (IATCENNJ).	N/A	None	31/Any
IATCNMF	WTO buffer event listen routine	Validates the incoming ENF signals and sets a bit in the JES3 SSVT to inform JES3 of MCS WTO buffer utilization.	ENFREQ macro	None	31/Any
IATCENNJ	Networking console DSP (NJECONS)	Provides control functions for console records that are received from or are to be sent to another node in the network. Specifically, it maintains the networking console table and processes: <ul style="list-style-type: none"> • Input commands from the network, • Responses to commands from the network, • Messages received from the network, • TSO notify messages, and • Outgoing networking commands and messages. 	The operator at sign-on or the networking console ECF	IATNTCP, IATUX35	31/Any
IATCNRM	Console device-dependent routine for remote consoles	Constitutes console output interface between console service and remote consoles.	IATCNIN, IATRJM1, IATRJM3, IATRJPC, IATSNLD, IATSNLO	IATSNDC, IATSNDO, IATSNFO	31/24
IATCNRN	Console service subroutines	Contains console subroutines whose individual functions are: <ul style="list-style-type: none"> • Obtains/returns a cell from the console cell pool. • Scans/returns the input command buffer. • Converts a routing code to a console destination class. • Converts a binary number to EBCDIC hex representation. 	IATCNDQ, IATCNIC, IATCNIN, IATCNV, IATCNWO	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATCNSV	CONSERV DSP driver	Processes WTO/WTOR requests from the subsystem interface routine (IATSIWO) 1. Handles messages that require a special action to be performed by JES3. 2. Writes messages to the job's JESMSGGLG data set. 3. Calls installation exit IAT_EXIT70.	Dispatched by MFM (IATGRCT)	IAT_EXIT70	31/Any
IATCNTC	TRACE command processor	Serves requests of the *TRACE command, setting the proper flags that indicate whether a trace record is to be written and inform the operator what trace IDs are active.	IATCNIN	None	31/Any
IATCNTR	Attention and asynchronous device- end interrupt handler	Serves all attention and asynchronous device-end interrupts from JES3 units.	Entered from EXCP	None	31/Any
IATCNWO	MESSAGE to WTO convertor	Serves requests of the MESSAGE macro, converting a MESSAGE macro call to a WTO.	Any DSP issuing the MESSAGE macro	IATCNRN	31/Any
IATCS01	Callable service #1	Returns the JES3 authority level for the RJP or MCS console passed as input.	IATXCSIF REQUEST=XAUTH	None	31/Any
IATCS03	Callable service #3	Determine console type.	IATXCSIF REQUEST=CONSTYPE	None	31/Any
IATCS04	Callable service #4	Console initialization phase 2.	IATXCSIF REQUEST=RMTBLD	None	31/Any
IATCS05	Callable service #5	Console initialization phase 1.	IATXCSIF REQUEST=CS05	None	31/Any
IATCS06	Callable service #6	Convert a JES3 destination class to a routing code mask.	IATXCSIF REQUEST=DST2RCM	None	31/Any
IATCS07	Callable service #7	Convert a routing code to a routing code mask.	IATXCSIF REQUEST=RC2RCM	None	31/Any
IATCS08	Callable service #8	Convert a destination class to a routing code.	IATXCSIF REQUEST=DST2RCN	None	31/Any
IATCS09	Callable service #9	Convert a destination class mask to a routing code mask.	IATXCSIF REQUEST=DSM2RCM	None	31/Any
IATCS10	Callable service #10	Convert a routing code mask to a list of routing codes.	IATXCSIF REQUEST=RCM2RC	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATCS11	Callable service #11	Convert a routing code mask to a list of destination classes.	IATXCSIF REQUEST= RCM2DEST	None	31/Any
IATCS12	Callable service #12	Convert a routing code mask to a single destination class.	IATXCSIF REQUEST= SRC2DEST	None	31/Any
IATIPCWP	COW prefix dump formatter control block model	Formats COW prefix using IPCS.	BLSQCFMT	None	31/Any
IATDCDT	Dependent job control update CSECT	Contains the update CSECT used for a work area by IATDCUP and contains the DJC message appendage.	Not applicable	None	31/Any
IATDCNC	NCB synchronous access routine	Maintains synchronous access to net control blocks. It provides searching and updating functions analogous to the JCT job-control routines.	DJC access macro linkage	None	31/Any
IATDCND	DJC job network area CSECT	Contains the data CSECT for input service processing of DJC jobs. One CSECT is loaded per active reader.	Not applicable	None	31/Any
IATDCNO	DJC network status verification routine	Verifies the status of a DJC network for dump job requests to determine whether or not the DJC network can be dumped.	IATDJOT	IATDJDT	31/Any
IATDCPC	Invoke DJC update routine	Invokes DJC updating of a nonstandard JES DJC job via an INTERCOM macro call to the module IATDCUP. (DJCUPDAT).	Scheduled by IATGRJS and dispatched by MFM	None	31/Any
IATDCUP	JNCB/NCB update routine	Updates the job net control block (JNCB) and net control blocks (NCBs) associated with a job net when a job within a net has terminated either normally or abnormally, or when the net is to be modified or canceled by the operator.	INTERCOM macro	None	31/Any
IATDJCR	Release dependent data area mapping CSECT	Contains data area descriptions for the spool control blocks dumped/restored by the dump job facility (DJ). The data area descriptions are for the current JES3 release and are used by the DJ translator to convert job-related control blocks from one JES3 release level to another.	IATDJTR	None	
IATDJDT	DJ DSP data CSECT	Contains the dump job (DJ) data CSECT, mapped by IATYDJB and shared by IATDJOB, IATDJOT and IATDJIN. The data CSECT, in addition to data areas, contains the DJ console message appendage, the tape unload/rewind routine, and several macro expansions used by the DJ processing modules.	IATDCNO,	IATDJOB, IATDJSVS, IATDJMGS	31/24

Module Name	Function Name	Description	Called By	Calls	Attributes
IATDJIN	DJ DSP input processor	Reads files from the dump job (DJ) tape, rebuilds from it the jobs requested by the operator, and reintroduces them into the JES3 queue at the point of processing where they were when dumped.	IATDJOB	IATDJDT, IATDJTR, IATDJSVS	31/Any
IATDJMGS	DJ message module	Writes dump job related messages to the console and log.	IATDJOB	IATDJDT	31/Any
IATDJOB	DJ DSP driver module	Parses console commands from the operator, determines the actions necessary to satisfy the commands, sets flags as reminders of requirements, and then loads and calls either of the DJ processing modules, IATDJIN or IATDJOT, to perform the actual DJ processing.	Scheduled by JSS (IATGRJS) and dispatched by MFM (IATGRCT)	IATDJIN, IATDJOT, IATDJSVS	31/Any
IATDJOT	DJ output module	Copies the control blocks and multirecord data sets of the jobs indicated by the driver to tape and, if specified, also marks the jobs to be purged from the JES3 queue.	IATDJOB	IATDCNO, IATDJDT, IATDJTR, IATDJSVS	31/Any
IATDJSV	DJ server address space task	Responsible for doing the following on behalf of the dump job FCT in the JES3 global address space when dump job is running in server mode: (1) dynamically allocating the tape drive; (2) opening or closing the tape data set; (3) issuing EXCPs to the tape data set; (4) handling end of volume conditions.	Not applicable	None	31/24
IATDJSVS	DJ server mode subroutines	Contains subroutines that are used by the dump job FCT for starting, cancelling, and communicating with the dump job server address space.	IATDJDT, IATDJIN, IATDJOB, IATDJOT	None	31/Any
IATDJTR	DJ translator	Translates job-related control blocks from one JES3 release level to another when restoring or dumping jobs.	IATDJIN, IATDJOT	IATDJCR	
IATDLIN	Deadline scheduling initialization routine	Initializes or reinitializes the deadline scheduling function.	IATDLND	None	31/Any
IATDLND	Deadline scheduling processor	Controls the processing of the DEADLINE DSP and processes all operator commands to DEADLINE DSP.	Scheduled by JSS (IATGRJS) and dispatched by MFM (IATGRCT)	IATDLIN, IATDLTM	31/Any
IATDLTM	Deadline queue entry update routine	Searches the deadline queue for job entries having deadline algorithms that must be processed at that time. If the algorithm requires a change in the job's priority, this module creates a work-to-do (WTD) element to cause the necessary change.	IATDLND	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATDLWK	Deadline work area	Provides a work area for the deadline scheduling function.	Not applicable	None	31/Any
IATDMBS	Block I/O routines	Performs spool I/O for a writer FSS.	IATXBKIO	IATDMDK, IATDMDKG, IATDMDKP	31/Any
IATDMCS	DM chained SRF services	Processes the IATXCSS macro for CREATE, RELEASE, REMOVE, and UPDATE requests.	IATXCSS macro	None	31/Any
IATDMDK	SDM disk I/O routines	Constitutes one of the JES3 common routines and is used by both JSAM and USAM. It processes the starting of I/O to spools and builds CCWs, as part of spool data management (SDM). Contains the routines that allocate and free USAM protected buffers (PBUFFS).	JSAM, USAM, scheduled SRBs, IATABIP, IATDMBS, IATDMEB, IATDMFR, IATDMIT, IATINJB also via IATXSIO macro	IATDMDS, IEAOPT02, IEAVPSIB	31/Any
IATDMDM	Access method request servicing	Services the GET, PUT CHECK, POINT, ENDREQ, and ERASE access method requests routine.	IATSIAD, Branch entered by IATSICC	IATDMEB, IATDMUB, IATSIOR	31/24
IATDMDS	SDM disabled interrupt exit (DIE) and linkup routine	Performs disabled processing for JES3 spool data management (SDM) in support of the STARTIO interface. It provides a branch entry to GETMAIN/FREEMAIN and links the I/O on the device queue for service by the STARTIO macro.	Branch entry from various IOS routines, IATDMDK, IATDMIT	IEAVTRV, IEAVELIT	31/Any
IATDMDT	JSAM MRF routines	Services the following JSAM multirecord file (MRF) macros: ABACKR, ABLOCK, ADEBLOCK, IATXRELC, ALOCATE, MOVEDATA, ANOTE, AOPEND, and APOINT.	Entered via ASAVE macro linkage for JSAM macro calls	IATDMNC	31/Any
IATDMEB	JES3 user access method macro EOB routines	Contains the JSAM end-of-block (EOB) buffer allocation and user memory channel-end routines, and performs the EOB functions for the macros serviced by IATDMDM.	IATDMGR, IATSIAD, IATSICA, IATSICC, IATSIJS, IATSIOR, IATDMGR SRBs scheduled by IATDMDK, IATDMIT, and by IATDMDM, IATDMER, via SVC 111	IATDMDK, IATDMUB, IATSIAD, IATSIOR, IEAOPT02, IEAVPSIB	31/24

Module Name	Function Name	Description	Called By	Calls	Attributes
IATDMER	IOERR DSP driver	Determines if a spool I/O error is recoverable. If so, an I/O retry attempt is scheduled. If the retry is successful, spool records containing invalid addresses are updated.	Dispatched by IATGRCT	IATDMDK, IATDMST, IATDMTK	31/Any
IATDMFR	JES3 functional recovery routine	Contains the JES3 functional recovery routine for those data management routines which hold a lock, are disabled, or are in SRB mode.	Recovery/ termination manager (RTM)	IATDMDK, IATDMIT, IATSIAD	31/Any
IATDMGB	JSAM FCT driver	<ul style="list-style-type: none"> Allocates track groups for USAM. Schedules the error FCT entry for spool I/O errors. Returns buffers to the buffer pool following JSAM I/O completion and schedules any I/O on the file directory (FD). Creates and posts separate FCT entries for tape, unit record, and DASD dynamic device reconfiguration (DDR) requests. Issues action messages when a spool partition is full. 	Dispatched by MFM (IATGRCT)	IATDMER, IATDMNC, IATDMTK	31/Any
IATDMGR	Spool access initialization module	Initializes the control blocks that are necessary for JES3 subtasks to access spool datasets using USAM or the block spooler.	IATXSDM macro and IATSISA	IATDMBS, IATDMEB, IATDMUB, IATSIAD	31/Any
IATDMIT	Spool I/O termination routines	Processes each buffer in the chain separately, performing whatever functions are necessary for the type of I/O completed and posting the proper function. It also contains the abnormal channel end routine, which processes permanent I/O errors.	SRB scheduled by either IOS, IATDMDS, or IATDMFR	IATDMDK, IATDMDS, IATMFDM, IATSIAD, IEAVPSIB, IEAOPT02	31/Any
IATDMJA	JDS access interface routine	Provides job data set (JDS) access interface on the global processor for user data set allocation or deallocation initiated in module IATSIAD on a local processor.	IATMSGC	IATISCD, IATGRJA, IATOSPC	31/Any
IATDMJV	Job spool validation/ restart routine	Validates and reallocates the spool space for jobs being processed by a validation/restart FCT during a warm or hot start. Contains service routines for the XVFDB, XVTAT, XVSrv, and XVSRE macros.	IATJVDR also via IATXVFDB, IATXVTAT, IATXVSRV, IATXVSRE macros	IATDMCS, IATDMTK, IATUX14	31/Any
IATDMLG	Spool data management error logout routine	Generates the spool records summary and detailed spool record diagnostic report during job snap processing for a job that has been marked for deletion.	IATJVLG	IATJVLG	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATDMNC	JSAM macro-handling routines	Contains the JSAM macro-handling routines. These routines perform the directly called or macro-called JES3 data management services and areas as follows: AOPEN, JESREAD, AWRITE, ACLOSE, OUTPUT, INPUT, AGETBUF, APUTBUF, DISK I/O, PURCHAIN, IATXERCV, WRTCHAIN, FD ADD, FD DELETE, FD FIND, IATXIOX, ZEROCORE, and ARELEASE.	Entered via ASAVE macro linkage for JSAM macro calls	IATDMDK, IATDMST, IATDMTK, IEAVPSIB	31/Any
IATDMRN	User Data Management Routines	Data Management Routines running in a user address space	IATXDMRN Macro	None	31/Any
IATDMST	Single track table services	Maintains single track table services and performs five functions: <ul style="list-style-type: none"> • Allocates M.R (spool record) from STT. • Initializes STT segment(s). • Returns M.R to STT. • Scans STT for inquiry/modify requests. • Scans STT for badtrack entries. 	IATDMNC, IATINJQ, IATINST	IATDMTK	31/Any
IATDMTA	FSS/local spool allocation module	Handles all spool allocation requests from a FSS or JES3 local address space.	IATDMNC, IATDMTK	None	31/Any
IATDMTK	Spool space management	<ul style="list-style-type: none"> • Handles spool space allocations from the partition TAT(s) (PTATs) to a job or data set TAT or to a record allocation block (RAB). • Handles unallocation of all spool space from a job or data set TAT. • Completes initialization of the bad track checkpoint record and creates the track group bypass table (TGB) during JES3 initialization. It is also called to dynamically add entries to the bad track checkpoint record and the track group bypass table after an I/O error occurs. • Handles inquiry requests concerning the allocation of spool space. • Handles requests to open or close a RAB. 	IATXRABC, IATXRABD, IATXRABP, IATXJBTS, APURGE, and ATRACK macros IATDMER, IATDMGB, IATDMJV, IATDMTA, IATGRWJ, IATGRWM, IATIICC, IATIHDR, IATINJB, IATINJR, IATINRN, IATINSE, IATINSP, IATIQPG, IATMOSP	IATDMNC	31/Any
IATDMUB	USAM get/free unprotected buffers routine	Gets and frees USAM unprotected buffers.	IATDMDM, IATDMEB, IATDMGR, IATSICC, IATSIJS, IATSIOR	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATDMVIO	Job Validation I/O services	Contains services that are used during initialization job validation to validate and queue up read and write I/O requests in parallel	IATXVIO macro	IATDMDK	31/Any
IATDMVR	JES3 spool data set formatting and format validation routine	Performs device type dependent calculations for a data set and determines if the data set is usable as part of the JES3 spool.	IATINSR	None	31/24
IATDMXM	JES3 spool cross memory access routine	Serves the IATXMOVX macro to do cross memory moves and the IATXPGX macro to do cross memory page fixes, page frees, and page releases.	IATXMOVX and IATXPGX macros	None	31/Any
IATDSI1	DSI processing routine	Handles requests for the dynamic system interchange (DSI) DSP which is invoked by the *X, DSI command. It performs six functions: verifies local DSI procedures, verifies global disable, verifies global device switch, processes the *C, DSI and *S, DSI commands, sets DSI active in the SSVT, and issues abend user code 9 to terminate active JES3.	Dispatched by MFM (IATGRCT)	None	31/Any
IATDYDR	DYNAL FCT driver for fast path	Handles requests for the dynamic allocation (DYNAL) FCT.	Dispatched by MFM (IATGRCT)	Service routines in IATDYSB, IATMDSB via macros	31/Any
IATDYSB	DYNAL fast path subroutines	Serves the IATXADD, IATXCNT, IATXDEL, IATXGET, IATXIOE, IATXLOC, and IATXWRE macros. Also contains JESTAE recovery routines for DYNAL FCT.	Entered via the IATXADD, IATXCNT, IATXDEL, IATXGET, IATXIOE, IATXLOC, and IATXWRE macro calls	None	31/Any
IATFCLT	FSS/FSA listen task	Receives service request lists containing ORDER, and POST FSI requests from the JES3 global address space and passes them to the FSS or FSA for processing.	Attached by IATSICD, Posted by IATSICD, IATSSRE	IATFCOR, IATFCPT, IATFCTR	31/Any
IATFCMS	FSS/FSA message routine	Issues the requested message as a multi-line WTO. The IATXGFM macro requests that the message be issued.	IATXGFM macro	None	31/Any
IATFCOR	JES3 interface to the FSS/FSA ORDER routine	Processes a service request list (SRL) from the JES3 global address space which contains an FSI ORDER request for the FSS or FSA.	IATFCLT, Posted by IATFCSN, IATSICD	IATFCMS, IATFCTR, IATIIFO, IATSSCM	31/Any
IATFCPT	JES3 interface to the FSA POST routine	Processes a service request list (SRL) from the JES3 global address space which contains a POST for the FSA.	IATFCLT	IATFCMS, IATFCTR	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATFCSN	JES3 FSI SEND routine	Performs the FSI SEND function for an FSS or an FSA.	FSS or FSA using FSIREQ macro	IATFCMS, IATFCTR, IATSSCM	31/Any
IATFCTR	JES3 event trace routine in the FSS address space	Services JES3 trace calls (IATXTRC) in the FSS address space.	IATXTRC	None	31/Any
IATFPCC	Writer FSA-specific CONNECT module	Performs the initialization functions required to complete CONNECT processing for a writer FSA.	IATSICD	IATDMBS, IATFCMS, IATFCTR attaches IATFPCW, IATFPRA	31/Any
IATFPCP	JES3 FSI CHKPT routine for writer FSA	Provides the FSI CHKPT service for a writer FSA.	FSA using FSIREQ macro	IATFCMS, IATFCTR	31/Any
IATFPCW	Writer FSA checkpoint writer task	Writes a data set checkpoint record to the JES3 spool in response to a FSI CHKPT request.	ATTACHed by IATFPCC, posted by IATFPCP, IATFPDD, IATSICD	IATDMBS, IATFCMS, IATFCTR	Any/24
IATFPDD	Writer FSA specific DISCONNECT module	Performs the termination and clean-up functions required to initiate DISCONNECT processing for a writer FSA.	IATSICD	IATDMBS, IATFCTR, IATFPRD	31/Any
IATFPGD	JES3 FSI GETDS routine	Provides the FSI GETDS service for a writer FSA.	FSA using FSIREQ macro	IATDMBS, IATFCMS, IATFCTR, IATFPRA, IATFPSB, IATSSCM	31/Any
IATFPGF	JES3 FSI GETREC and FREEREC routines	Performs the FSI GETREC and FREEREC functions for a writer FSA.	FSA using FSIREQ macro, posted by IATFPRA	IATFCMS, IATFCTR, IATFPQC	31/Any
IATFPQC	Writer FSA quickcell service routine	Provides buffer pool management services for a writer FSA.	IATFPGF, IATFPRA, IATFPRD	IATFCMS	31/Any
IATFPRA	Writer FSA read-ahead task	Reads records from a data set that has been allocated to a FSA by the GETDS FSI service.	Posted by IATFPDD, IATFPGD, IATFPGF, IATFPQC, IATFPRD, IATSICD Entered by an ATTACH issued by IATFPCC	IATDMBS, IATFCMS, IATFCTR, IATFPQC	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATFPRD	JES3 FSI RELDS routine	Provides the FSI RELDS service for a writer FSA.	FSA using FSIREQ macro	IATFCMS, IATFCTR, IATFPQC, IATFPSB	31/Any
IATFPSB	SWB processing routine	Updates scheduler work blocks (SWBs) in the FSS address space.	IATFPGD, IATFPRD	IATFCMS, IATFCTR	31/Any
IATFSLG	Failsoft messages module	Issues JES3 failsoft logout messages.	IATABMN, IATABRT	IATABMN	31/Any
IATFSRC	Failsoft termination module	Performs a part of JES3 DSP termination and issues termination messages for DSP.	IATABRT	None	31/Any
IATGRAN	JESNEWS data set update	Creates, maintains, and deletes the JESNEWS data sets based on parameters supplied by operator commands or by a //*PROCESS statement.	Operator command or JECL process statement	None	31/Any
IATGRAS	Invoke ARM Services	Contains invocations of ARM-related services.	IATSIJS IATSIEM IATMSJV IATMSJT	None	31/Any
IATGRCD	*CALL DSP command processing	Processes the *CALL DSP command and builds the job structures of JDAB, JCT, and JMR for called DSPs.	IATGRWD	IATUX27	31/Any
IATGRCK	Checkpoint access method	Provides I/O for the checkpoint data sets.	IATINTK during JES3 initialization; IATINGL (BALR) when a local processor needs reinitialization; IATINFA (BALR) in a FSS address space; IATXCKPT macro	None	31/24
IATGRCP	JES3 checkpoint services	Writes the JESCKPNT record to the checkpoint data set, updates the spool data set or spool partition checkpoint records, and validates/invalidates the partition TAT checkpoint record in the checkpoint data set.	JESCKPNT, IATXPTCK, and IATXSPCK macros	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATGRCT	JES3 multifunction monitor (MFM) and macro servicing routines	Dispatches FCT entries under either the primary task (IATNUC) or the auxiliary task (IATAUX). It services the following executable macros: AWAIT, ATIME, IATXTOD, VIOLATE, IATXELA, IATXELD, IATXELS, and IATXSTMD. It also contains the path validation routine, which validates physical paths to JES3 support unit devices.	Issuance of any entry point macro call, IATABMN, IATGRSR, MVS timer services, IATABRT, IATATCB	IATABMN, IECVIOPM	31/Any
IATGRED	Trace information to console routine	Displays trace entries on the console.	IATMOTR	None	31/Any
IATGRES	SSI driver for extended status processing	Processes staging areas originating from applications that use the SSI 80 function code for various types of JES3 status requests.	Dispatched by MFM (IATGRCT)	None	31/Any
IATGRFC	FSS address space controller driver routine	Controls the initialization and termination of FSS address spaces on behalf of FSA DSPs (writers).	IATGRJR	IATGRFD	31/Any
IATGRFD	FSS address space controller data CSECT	Contains the data area for the FSS controller DSP.	IATGRFC	None	31/Any
IATGRFS	JES3 global FSS/FSA services	Provides the facilities for: <ul style="list-style-type: none"> Starting an FSS controller DSP. Starting a FSS address space. Checkpointing FSS/FSA control blocks. Abnormally terminating a FSS address space. Cleaning up FSS/FSA control blocks. Assigning a device address for a FSS-supported device. 	IATXFSS macro	None	31/Any
IATGRGM	AGETMAIN and APUTMAIN service routines	Provides support for JES3 storage allocation (AGETMAIN) or deallocation (APUTMAIN).	AGETMAIN and APUTMAIN macros	None	31/Any
IATGRGS	Call subtask function service routine	Services the call subtask function macro, IATXCSF.	IATXCSF macro	None	31/Any
IATGRGU	GETUNIT, PUTUNIT service, IATXAMDV, and IATXSRS macro routines	Services the GETUNIT and PUTUNIT macros, upon request from other JES3 routines for JES3 global device allocation and deallocation.	GETUNIT, PUTUNIT, IATXAMDV, and IATXSRS macros	None	31/Any
IATGRG1	Generalized system subroutines	Provides support for the executable macros: IATXPRT, DEVSCAN, IATXGFC, IATXATF, IATXATDE, IATXLPJ3, and IATXJLOK.	Generalized system macros	IATGRPR (IATXPRT)	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATGRJA	JDS access routines	Contains common service routines JDGET, JDSADD, JDSHOLD, JDSREG, JDSPUT for addressing and updating JDS records for a job. Also does asynchronous JESMSG processing.	IATIICX, JDS access macros IATXJDN, IATXJDS	None	31/Any
IATGRJM	JESMSG processor	JESMSG service routines in the JES3 address space	JESMSG Macro	None	31/Any
IATGRJN	Job number routine	Maintains the pool of JES3 job numbers and performs three functions: it obtains a job number from the pool of available numbers, determines if a specific job number is in use, and returns a job number to the pool of available numbers.	AJOBNUM macro	None	31/Any
IATGRJR	Initial entry and terminal point routines	Serves as the initial entry point for a starting DSP. It loads the driver module and data CSECT and branches to the driver. It also serves as the terminal point of ending DSPs, freeing resources and deleting the driver module and data CSECT. In the case of specialized rescheduling, it will wait for available units, re-attempt the GETUNIT, and reload the CSECTs.	Dispatched by MFM (IATGRCT)	All DSP drivers	31/Any
IATGRJS	Job segment scheduler (JSS)	Examines each job that is ready for ending function and/or scheduler element work, processes any ending function RESQUEUE entry, and then determines if the next scheduler element is eligible for execution. If so, it attaches an FCT entry to the chain of active FCT entries.	Branched to by IATINIT, IATISEN, Issuers of IATXJSS, Dispatched by MFM (IATGRCT)	IATIICS, IATIIPC, IATIIPS	31/Any
IATGRJX	JQE/JCT access method routines	Services JQE and JCT access requests.	IATXJQE and IATXJCT macros	None	31/Any
IATGRLD	ALOAD and ADELETE routines	Loads and deletes JES3 modules, as necessary, upon request from other JES3 routines via the ALOAD and ADELETE macros.	ALOAD and ADELETE macros	None	31/Any
IATGRLG	LOGIN and LOGOUT routines	Services the LOGIN and LOGOUT macros.	LOGIN and LOGOUT macros	None	31/Any
IATGRMVD	Multi-version data access services	Performs services to manipulate and serialize access to CSA tables.	IATXMVDA macro	None	31/Any
IATGROP	JESOPEN, JESEXCP, and JESCLOSE routines	Processes OPEN, CLOSE, and EXCP requests for unit record and tape devices. It also contains a channel end appendage for JESEXCP processing.	JESCLOSE, JESEXCP, and JESOPEN macros EXCP	IATRJM2 (when processing for an RJP device)	31/24

Module Name	Function Name	Description	Called By	Calls	Attributes
IATGRPJ	Persistent JCL Support	Processes requests from MVS Automatic Restart Management (ARM) routed to the global by IATSIPJ.	Dispatched by MFM (IATGRCT)	None	31/Any
IATGRPR	Generalized print routine	Formats JES3 storage locations into hexadecimal and EBCDIC print lines and writes these lines to a multi-record file. It is commonly used by the CBPRNT and INTERPRETER DSPs to print CBPRNT and DEBUG output respectively.	IATGRG1, IATXPRT macro	None	31/Any
IATGRPT	Function control table (FCT) and DSP dictionary	Contains the resident FCT entries, DSP dictionary entries, DSP device requirements lists, and installation exit address list.	Not applicable	None	31/Any
IATGRPTF	FSS function control table (FCT) and DSP dictionary	Contains the resident FCTs, DSP dictionary entries, and installation exit address list in an FSS address space.	None	None	31/Any
IATGRQC	Cell pool service routines	Serves the cell pool macros: IATXBPL, IATXGCL, IATXRCL, and IATXDPL.	Cell pool macros	None	31/Any
IATGRRL	Security checking parameter lists	Contains the list forms of the RACROUTE macro needed for security checking.	N/A	None	31/Any
IATGRRQ	RESQUEUE table access routines	Serves RESQUEUE table access requests as well as resource management.	IATXFRQ, IATXGRQ, RQTAAD, RQTADEL, RQTAPUT, AENQ, ADEQ, and ATEST macros	None	31/Any
IATGRSC	Common security processing	Invokes the security authorization facility (SAF) to make security related decisions.	IATXSEC	IATUX58, IATUX59, ICHSER00, IEAVM703	31/Any
IATGRSP	Spin Off Processor	Routines to perform job log spin off processing	IATDMEB, IATGRSP (IRB routine)	None	31/Any
IATGRSQ	JES3 storage queue manager	Provides a logging function for JES3 use of storage subpools.	IATINSV, IATXSQE macro	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATGRSR	General service DSP	Performs five general service functions in support of writer output multitasking: <ul style="list-style-type: none"> • The pending FAILDSP routine processes FAILDSPs that are targeted for DSPs running under the IATAUX task. • The attach ATDE routine moves ATDE control blocks that are on the attach-request queue to the dispatch queue. • The detach ATDE routine removes ATDE control blocks that are ready to be detached from the dispatching queue and returns them to the free pool. • The AGETMAIN posting routine posts FCT entries when an APUTMAIN occurs after an unsuccessful AGETMAIN. • The stop IATAUX task routine places the IATAUX task in an OS wait while the *MODIFY, MT command is being processed. 	Dispatched by MFM (IATGRCT)	IATGRCT	31/Any
IATGRSS	Asynchronous security subtask	Interfaces with SRF for callers which can not wait for the request to finish.	Attached by IATINIT. Posted by IATSNLB, IATSNLS	None	31/Any
IATGRSV	Save area (ASAVE) service routine	Handles ASAVE linkage from JES3 modules to other modules and routines. It saves registers 2 through 10 and 13 on ACALL and restores them on ARETURN.	ACALL, ARETURN and ASAVE macros	None	31/Any
IATGRSYS	SYSUNITs services	Contains services that are used to perform functions against the SYSUNITs table	IATXSYSU macro	None	31/Any
IATGRTM	JES3 timer services	Contains JES3 timer services.	Not applicable	None	31/Any
IATGRTX	Event trace facility	Comprises the trace routine and trace table.	IATINSV, IATXTRC macro	None	31/Any
IATGRUX	Installation exit loader	Loads the required user exits based on the type of address space.	IATINFC, IATINIC	None	31/Any
IATGRVT	Transfer vector table (TVT)	Constitutes an assembled form of macro IATYTVT (the JES3 TVT) and is the JES3 equivalent of the OS CVT. It is link- edited together with the other modules that compose IATNUC, the resident JES3 nucleus. The IATYTVT CSECT is followed by a translate table and a CSECT map of load module IATNUC.	Not applicable	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATGRVTC	Transfer vector table (TVT) checkpointed extension	Contains an extension of macro IATYTVT, the JES3 transfer vector table (TVT).	Dispatched by MFM (IATGRCT)	IATGRCD, IATGRWJ, IATGRWM	31/Any
IATGRVTF	Transfer vector table (TVT)	Contains the assembled form of macro IATYTVT, the JES3 transfer vector table (TVT) for an FSS address space.	Not applicable	None	31/Any
IATGRVTX	Transfer vector table (TVT) fixed extension	Contains an extension of macro IATYTVT, the JES3 transfer vector table (TVT).	Dispatched by MFM (IATGRCT)	IATGRCD, IATGRWJ, IATGRWM	31/Any
IATGRWD	WTD driver module	Processes inquiry and modify requests from the work-to-do (WTD) queue and from staging areas and DSP calls passed from console service.	Dispatched by MFM (IATGRCT)	IATGRCD, IATGRWJ, IATGRWM	31/Any
IATGRWJ	WTD JCT inquiry processor	Accesses the JQE/JCT control blocks to service the inquiry requests enqueued in the work-to-do (WTD) elements.	IATGRWD	None	31/Any
IATGRWM	WTD JCT modify processor	Processes modify requests that require access to the JCT.	IATGRWD	IATMOCP	31/Any
IATGRWP	Process SYSOUT (PSO) driver	Services output requests from TSO terminal users, external writers, and MVS/ BDT. The requests are routed to the JES3 address space from the SSI module IATSIOP via SSISERV macro calls.	Dispatched by MFM (IATGRCT)	IATNTSR, IATOSPC, IATUX30	31/Any
IATGRWQ	TSO driver for CANCEL/ STATUS/ VALIDATE processing	Services status, cancel, and validate requests from MVS TSO terminal users.	Dispatched by MFM (IATGRCT)	IATUX30	31/Any
IATGSC1	Generalized subtask control module	Provides isolation of execution for code that has implicit OS waits from the JES3 main TCB.	Attached by IATGRGS, Dispatched by MVS	Executes user request-defined appends	31/Any
IATIICA	C/I in-storage access method module	Contains the in-storage access method used by the C/I DSP to access internal text records for the MVS converter interpreter.	IATIICC, IATIIST MVS converter MVS interpreter	None	Any/24
IATIICC	JES3 C/I subtask control module	Acts as the interface between JES3 and the converter interpreter (C/I) subtask.	IATIIDR	IATIICA, IATIIST, IATINAT	31/Any
IATIICD	CIDRVR DSP "driver" module	Gives control to the proper routine when the CIDRVR is posted. Contains the CIDRVR console appendage, JESTAE exit, and JESTAE retry routine.	Dispatched by MFM	IATIICJ, IATIIFR, IATIIFS	31/Any
IATIICJ	CIDRVR JESTAE retry module	Performs cleanup and recovery processing for the JESTAE retry routine in module IATIICD.	IATIICD	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATIICM	C/I compatibility module	Provides the following services: <ul style="list-style-type: none"> Scans the SWA control blocks and creates the job, step, and DD level records in the IDD. Initiates the process of spooling the VATs and SWA control blocks to the job's JCBLOCK dataset. Retrieves DD related information from the SIOT SWBs using SJF services. 	IATIIPR, IATIIST	IATIIOS, IATIIST, IATINAT, IEFJSJCNL	31/Any
IATIICS	C/I scheduling module	Schedules a job for C/I service, or checks whether C/I DSPs are available for C/I service.	IATGRJS, IATXSCH macro	None	31/Any
IATIICT	Interpreter control table	Data CSECT for converter interpreter (C/I) subtask, and contains the ETXR routine.	ETXR is dispatched by MVS	IATIISB	31/Any
IATIICTX	Interpreter control table extension	Contains data for C/I subtask which must remain below the 16Mb line.	Not applicable	None	31/24
IATIICX	MVS C/I exits module	Contains three exits which the MVS converter or interpreter takes: the accounting exit, the queue manager exit for move mode processing, and the queue manager exit for locate mode processing.	Branch entry from MVS converter interpreter	IATGRJA, IATUX03, IEFQB550, IEFQB556	Any/24
IATIIDA	Interpreter data area	Contains routine addresses, data, and status information used by CIDRVR.	Not applicable	None	31/Any
IATIIDR	C/I, POSTSCAN, and CICLENUP DSP driver module	Provides for the logical flow of jobs through conversion and interpretation, global locate processing, and job summary table creation for MDS.	Scheduled by JSS, dispatched by MFM (IATGRCT)	IATIICC, IATIIPN, IATIIPRE, IATIIST, IATINAT, IATUX09	31/Any
IATIIDS	PROCLIB DISABLE DSP	Disables the procedure libraries that the job will be updating.	Scheduled by JSS, dispatched by MFM (IATGRCT)	IATIION	31/Any
IATIIDY	Dynamic allocation JST create module	Creates JST/JVT records as a result of dynamic allocation requests. If the dynamic allocation request is for an SMS resource, does not construct the JVT entries.	IATMDDR	None	31/Any
IATIIEEN	PROCLIB ENABLE DSP	Enables the procedure libraries (PROCLIB) that were disabled for updating.	Scheduled by IATGRJS and dispatched by MFM.	None	31/24
IATIIFC	Converter interpreter FSS driver	Controls C/I processing in the C/I FSS address space.	Dispatched by MFM (IATGRCT)	IATINAT, IATINRB	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATIIFO	C/I FSS ORDER processor	Accepts orders destined for the C/I FSS from the functional subsystem interface (FSI).	IATFCOR	None	31/Any
IATIIFR	C/I driver "FSS Receive" module	Processes the C/I driver's FSS communication post - staging area handling.	IATIIICD	IATIIIFS, IATIIOR	31/Any
IATIIIFS	C/I driver DSP "FSS subroutine" module	Contains subroutines used by the C/I driver for processing work and controlling the C/I FSSs.	IATIIICD, IATIIIFR	IATGRFS, IATIIOR	31/Any
IATIIII	Interpreter/initiator compatibility module	Intercepts the normal initiator interpreter processing, by bringing into storage the scheduler control blocks written out by IATIICM during the prescan phase.	IEFIB600	IATUX26, IEFQB550, IEFQB555, IEFSJCNL	Any/24
IATIIJT	C/I JSTTEST	Performs JSTTEST processing. Produces a formatted version of the JST in the JESMSG data set.	IATIIPN	None	31/Any
IATIIJV	C/I validation/restart processing routine	Performs restart and analysis processing for jobs that are active in C/I or jobs that update proclib data sets.	IATJVDR	IATUX14	31/Any
IATIIIMS	Converter interpreter message module	Issues messages to the operator and/or the JESMSG data set, or closes the JESMSG data set.	IATXIWT macro	IATUX10	31/Any
IATIIOR	C/I issue order module	Sends ORDERS to a C/I FSS address space.	IATXCIO macro	None	31/Any
IATIIOS	Output SWB processing routine	Spools output SWBs and stores information from the output statement in a JDS entry.	IATIICM	IATIIISB, IATIIIST, IEFSJCNL	31/Any
IATIIIPC	Procedure library update module	Schedules jobs for the disable DSP and performs procedure library (PROCLIB) restart during initialization.	IATGRJS, IATINJS via IATXSCH macro	IATIIUN	31/Any
IATIIPL	Postscan pre-locate catalog orientation module	Invokes SMS pre-locate catalog orientation to ensure that the SMS managed catalogs required by the job are available.	IATGSC1, IATIIP0	None	31/Any
IATIIPN	Converter interpreter postscan module	Handles the postscan phase of C/I service in the JES3 global address space and C/I FSS address spaces.	IATIIDR	IATIIJT, IATIIP0, IATIIP1, IATIIP2, IATIIP3, IATUX08	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATIIPR	Driver module for the prescan phase of C/I	Performs the following functions: 1. Calls IATIICM to scan the SWA control blocks for job, step, and DD level information. 2. Creates the following intermediate tables: intermediate job summary table (IJS) job volume table (JVT) locate request table (LVS) 3. Calls IATIICM to write the SWA control blocks to spool.	IATIIDR	IATIICM, IATIIST, IATUX04, IATUX05, IATUX06	31/Any
IATIIPS	Postscan scheduler module	Schedules a job for postscan processing.	IATGRJS, IATIIFS via IATXSCH macro	None	31/Any
IATIIPRE	Prescan scheduler module	Performs the following functions: 1. Calls IATIICM to scan the SWA control blocks for job, step, and DD level information. 2. Creates the following intermediate tables: intermediate job summary table (IJS) job volume table (JVT) locate request table (LVS) 3. Calls IATIICM to write the SWA control blocks to spool.	IATIIDR	IATIICM, IATIIST, IATUX04, IATUX05, IATUX06	31/Any
IATIIP0	Postscan catalog resolution module	Performs locate processing for a job. Calls IATIIP0X to build IJS and JVT entries from locate responses for subsequent use by module IATIIP1.	IATIIPN	IATGSC1, IATIIP1, IATIIP0X, IATIIP1, IATMDSB, IATUX07, IATUX11	31/Any
IATIIP0X	Postscan locate response mapping module	Maps the locate responses into IJS and JVT control blocks for subsequent use by module IATIIP1.	IATIIP0	None	31/Any
IATIIP1	Postscan JST create	Builds the job summary table (JST) from the intermediate job summary (IJS) and job volume table (JVT).	IATIIPN, IATIIP0	None	31/Any
IATIIP2	Postscan user setup fetch override processing	Processes fetch/setup user override statements and modifies the job summary table (JST) of the specified DD names accordingly.	IATIIPN	None	31/Any
IATIIP3	Postscan high-watermark setup processing	Performs high-watermark setup. It determines the minimum number of devices required for the job.	IATIIPN	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATIISB	Interpreter subtask	Attaches the converter interpreter (C/I)subtask (IATIIST), which interfaces with the MVS converter interpreter.	IATIICC, IATIICM, IATIICT, IATIIST, IATINAT, recovery termination manager (RTM) IATDMUB, IATIIST, IATSIAD, IEFNB903	None	31/Any
IATIISP	SWA block spooling routine	Spools the SWA control blocks to the JCBLOCK data set at the end of prescan processing.	IATIIST	None	31/Any
IATIIST	C/I subtask module	Performs the following functions: <ul style="list-style-type: none"> • Calls the MVS converter to convert JCL into internal text. • Calls the MVS interpreter to create scheduler control blocks from the internal text. • Calls IATIIOS for output SWB processing. • Calls IATIISP to write the SWA blocks to spool. • Calls the SWA manager to free storage used for the scheduler control blocks. • Calls SJF for SJF termination processing. • Calls IATIICM for SWA processing. • Closes the proclib that is currently open. 	IATIICC, IATIICM, IATIIDR, IATIIOS, IATIISB, IATIUN, IATINAT, recovery termination module (RTM)	IATIICA, IATIICM, IATIIOS, IATIISB, IATIISP, IATUX41, IEFNB903, IEFQB550, IEFQB556, IEFSJCNL, IEFVH1, IEFGB4UV	31/Any
IATIIUN	Procedure library unallocation module	Disables procedure libraries in the JES3 address space.	IATIIDS, IATIIPC	IATIIST	31/Any
IATINACC	ACCOUNT initialization statement processor	Process the ACCOUNT initialization statement.	IATINCD	None	31/Any
IATINAL	Restart analysis module	Examines the VUT and DLF spool control blocks.	IATINIT	None	31/Any
IATINAT	C/I subtask attach module	Performs C/I subtask initialization and termination processing.	IATIICC, IATIICM, IATIIDR, IATIIFC, IATIIOS, IATINI1	IATIISB	31/Any
IATINAX	Auxiliary task initialization module	Handles the initialization and attaching of the auxiliary task.	IATINGN	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATINCD	General initialization statement processor	This is the next statement-reading initialization module loaded by IATINIT after IATINIC. It processes all of the initialization statements after ENDJSAM by loading another initialization module and passing control to it.	IATINIT	IATINACC, IATINDST, IATINCF, IATINCH, IATINCT, IATINC1, IATINDED, IATINDVS, IATINDYD, IATINFS, IATINII, IATINM1, IATINN1, IATINN3, IATINOS, IATINPK, IATINRB, IATINSAL, IATINSPR, IATINSRS, IATINSTN, IATINWS	31/24
IATINCF	ACCOUNT DEADLINE, and DEVICE initialization statements processor	Processes the ACCOUNT, DEADLINE, and DEVICE initialization statements. Process Device statements during *MODIFY,CONFIG command processing.	IATINCD, IATMOCF	IATOSSC	31/Any
IATINCH	COMMDEFN, OUTSERV, STANDARDS, and SYSOUT initialization statements processor	Processes the COMMDEFN, OUTSERV, STANDARDS, and SYSOUT initialization statements.	IATINCD	None	31/Any
IATINCL	CLASS statement processor	Processes the CLASS initialization statement.	IATINM1	None	31/Any
IATINCT	COMPACT statement processor	Performs syntax checking for the COMPACT statements in phase 1 initialization. During phase 2 initialization, IATINCT builds the compaction tables.	IATINCD, IATINSNA	None	31/Any
IATINC1	CONSOLE and MSGROUTE initialization statements processor	Performs the first-pass initialization for the console and processes the CONSOLE and MSGROUTE initialization statements. Processes console statements during *MODIFY,CONFIG command.	IATINCD, IATMOCF	None	31/Any
IATINC2	Console tables initialization module	Performs the second pass for console initialization. Builds console tables and control blocks and physically initializes JES3 consoles. Processes console statements during *MODIFY,CONFIG command.	IATINGN, IATMOCF	IATINN2	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATINDED	DEADLINE initialization statement processor	Processes the DEADLINE initialization statement.	IATINCD	None	31/Any
IATINDEV	Device initialization	Initializes the SYSUNITs and SUPUNITs tables during JES3 initialization and *MODIFY,CONFIG command processing.	IATINGN, IATMOCF	None	31/Any
IATINDF	Device fence initialization	Performs device fence related initialization during JES3 initialization.	IATINMD	None	31/Any
IATINDS	Initialization dataset cleanup	Closes and deallocates JES3OUT and JES3IN.	IATINIT	IATINRN	31/24
IATINDST	Initialization statement processor	Processes the DESTDEF initialization statement during phase 1 initialization. Builds the DDF table during phase 2 initialization. Processes the *MODIFY CONFIG command to allow initialization statements to be read without a JES3 restart.	IATINCD, IATINGN, IATINCF	None	31/Any
IATINDT	Initialization data CSECT	Constitutes the assembled form of the IATYINT macro, which is the initialization data control section.	Not applicable	None	31/24
IATINDVS	Initialization Device Services	Performs services to add or manipulate device definitions during initialization.	IATXIDVS macro	None	31/Any
IATINDY	DYNAL initialization module	Builds the DYN, ECF, and DYQ data areas required by dynamic allocation (DYNAL), updates the TVT and DYNAL FCT, and checkpoints DYNAL DSP data for hot-start usage.	IATINMD	None	31/Any
IATINDYD	DYNALDSN initialization statement processor	Processes the DYNALDSN initialization statement.	IATINCD	None	31/Any
IATINFA	JES3 FSS data set allocation	Performs early initialization of a JES3 functional subsystem address space.	IATINTK	IATINSV	31/24
IATINFC	C/I FSS initialization module	Handles C/I specific initialization in a converter interpreter (C/I) FSS address space.	IATINIT	IATGRUX, IATINIF, IATINLC	31/Any
IATINFS	FSSDEF statement processing and FSS table building and verification	Checks the syntax of the FSSDEF statement and creates FSS-related intermediate text. Builds FSS and FSA tables. Processes FSS/FSA tables' checkpoint.	IATINCD, IATINGN, IATMOCF	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATINGL	JES3 initialization mode determination	Determines the type of JES3 restart to perform by reading all JES3 checkpoint records from the checkpoint data sets(s) which restrict the start type. The status of each processor in the complex is displayed and the module IATINGS is invoked to communicate with the system operator and to read the DYNALLOC statement from the JES3 initialization stream.	IATINTK	IATINGS	31/24
IATINGN	Initialization table processor	Builds tables from intermediate-spoiled data, allocates space for and initializes tables based on available in-storage data, and calls the necessary table-building routines.	IATINIT	IATINAX, IATINC2, IATINDEV, IATINDST, IATINFS, IATINI1, IATINLC, IATINMD, IATINM2, IATINN4, IATINPK, IATINRB, IATINR2, IATINSNA, IATINVR, IATOSSC	31/24
IATINGP	GROUP statement processor	Processes the GROUP initialization statement.	IATINM1	None	31/Any
IATINGS	JES3 initialization start type determination operator dialogue	Prompts the system operator to reply with the type of JES3 restart to perform. The reply is validated against the start type restrictions established by IATINGL.	IATINGL	IATUX15	31/24
IATINIC	JES3 I/O statements processor	Opens specific data sets and reads the spool I/O section of the initialization stream. This is the first mainline initialization module loaded by IATINIT.	IATINIT	IATINRN	31/24
IATINIF	C/I table building module	Builds the CIPARM, RESDSN, and HWS tables.	IATIIFC, IATINI1	None	31/Any
IATINII	C/I initialization statement module	Processes the CIPARM, RESDSN, PROC, and HWSNAME initialization statements.	IATINCD	None	31/Any
IATINIO	Spool initialization routine	Builds the tables and data areas needed for spool data management (SDM) functions.	IATINIT	IATDMDK	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATINIT	Initialization driver	This is the resident driver module of JES3 at initialization and the entry point of the JES3 and FSS nucleus. It loads, calls, and deletes the initialization modules.	IATNUC, IATNUCF attached by IATINTK	IATABMN, IATGRJS, IATIIFC, IATINAL, IATINCD, IATINFC, IATINGN, IATINIC, IATINIO, IATINJB, IATINJQ, IATINJR, IATINJS, IATINRN, IATINSD, IATINSE, IATINSP, IATINSR, IATINST	31/Any
IATINI1	C/I initialization driver module	Calls other CI init modules, restores/checkpoints CI related counts, initializes the CIDRVR DSP, and creates the C/I FSS tables.	IATINGN	IATINAT, IATINIF	31/Any
IATINJB	Creates/writes initialization-related checkpoint records Issues IAT3102 if any errors are detected during initialization	Issues the JES3 START and other messages and closes JES3IN.	IATINIT	IATDMTK	31/24
IATINJQ	JES3 JCT access method initialization	Builds the control blocks for the JCT access method and the JCT data set record allocation routine. For warm or hot starts, reads the JCT data set and does a high level validation of the JES3 job queue.	IATINIT	IATDMDK, IATDMST, IATINRB	31/Any
IATINJR	JES3 initialization job validation/restart driver module	Establishes the environment for job validation/restart and controls the queueing of jobs to the job validation FCTs. Receives control when the validation process for a job completes to either retain the job in the system, delete or queue the job for diagnostic output depending on the outcome of validation.	IATINIT	IATDMCS, IATINJV, IATINLG	31/Any
IATINJS	Initialization job segment scheduler restart module	Performs job segment scheduler (JSS) restart processing. It performs the final phase of job restart before initialization completes.	IATINIT	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATINJV	Initialization job validation DSP driver	Responsible for asynchronous (FCT mode) validation of spool resident data areas related to jobs. Interfaces with the appropriate JES3 job validation routines for physical and logical validation of the spool resident data areas for a job.	IATINJR via IATXATF macro	IATJVDR, IATUX14	31/Any
IATINLC	Locate initialization	Performs locate initialization during the table build phase (Phase 4) of JES3 and C/I FSS initialization.	IATINGN, IATINFC	IATLVAT	31/Any
IATINLG	Initialization job SNAP FCT driver	Responsible for producing a hardcopy of diagnostic information and a SNAP of all spool records for jobs in which errors were detected during the job validation phase of JES3 initialization.	IATINJR via IATXATF macro	IATJVLG	31/24
IATINMD	MDS initialization driver module	Performs MDS initialization processing for the MDS function, generates MDS tables, loads the resident MDS modules, setup ENF listen routine, and if SMS is active, loads the modules required for the MDSSRS FCT. Calls IATMDAT to attach the MDS master task and subtasks.	IATINGN	IATINDT, IATINDY, IATMDAT, IATMDSB, IATINDF	31/Any
IATINMP	Main procedure (MAINPROC) statement processor	Processes the MAINPROC initialization statement.	IATINM1	None	31/Any
IATINMPC	Main procedure (MAINPROC) initialization service routines	Contains services performed for various MAINPROC initialization functions	IATXIMPC	IATXMSTA	31/Any
IATINM1	Main service initialization driver	Invokes the appropriate module to process GMS and main service initialization statements.	IATINCD	IATINCL, IATINGP, IATINMP, IATINSL	31/Any
IATINM2	Main service initialization routine 2	Reads spool records created by IATINCL, IATINGP, IATINMP, and IATINSL and creates the CLASS, MAINPROC, and SELECT tables for GMS and main service. It also creates the GMS checkpoint data set.	IATINGN	IATINM3, IATINM4, IATMOGM, IATMSCK	31/Any
IATINM3	Local, global CTC initialization routine	Initializes the CTC section of the main processor table and SRB/IOBs, initializes some JES3 I/O, determines the MAINPROC table, and ALOADS the VERIFY module and initializes the VERIFY FCT entries.	IATINM2	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATINM4	Main service initialization subroutine	Performs six functions: 1. Finds the console class for processor MDEST specification 2. Builds the send and receive message ID fields in the MAINPROC control table 3. Changes group table priorities for sorting group tables by priority 4. Loads the main service modules for each processor and creates the FCT entries for each processor 5. Checks the validity of the main service control blocks in CSA upon a JES3 hot start, and forces an IPL if an invalid control block is found. 6. Gets storage for MPCs and dedicated storage areas	IATINM2	None	31/Any
IATINN1	NJECONS initialization card processing routine	Scans the NJECONS initialization statement and writes an intermediate spool record.	IATINCD	None	31/Any
IATINN2	NJECONS intermediate spool record processing routine	Reads the NJECONS intermediate spool record, processes the networking MSGCLASS, and constructs an NJECONS spool record.	IATINC2	None	31/Any
IATINN3	Networking NJERMT initialization statement processing routine	Scans the NJERMT statement, creates unique names for SUPUNITS entries, and creates the networking logical printer, punch, and sender SUPUNITS entries.	IATINCD	IATINHDV	31/Any
IATINN4	Networking NJERMT spool record processing routine	Builds the networking node table.	IATINGN	None	31/Any
IATINOS	OUTSERV initialization statement processor	Processes the OUTSERV initialization statement. The information on the OUTSERV statement is saved in the OSD output service data area. The OSD resides in the output service module IATOSDA in the JES3 nucleus.	IATINCD	None	31/Any
IATINPK	CONSTD initialization statement processor	Processes the CONSTD initialization statement.	IATINCD, IATINGN	None	31/Any
IATINRB	Resident control block initialization module	Processes the RESCTLBK initialization statement (warm and cold starts). Builds resident control blocks and control block pools: <ul style="list-style-type: none"> • RQ control area (IATYRQC) • RQ cell pool(s) • Preallocated FCT entries 	IATIIFC, IATINCD, IATINGN, IATINJQ	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATINRN	Initialization subroutines	Services commonly used and required JES3 initialization macros: ICARDRD, ICARDRD2, ICONVBIN, ICONVHEX, IVALFDB, INITMWLE, ISCAN1, ISCAN2, ISORT, ITREAD, ITWRITE, IWASPOUT, INEOF2, INOMAIN, and IPURGE.	Initialization macros IATMOCF, IATINJB, IATINIC, IATINDEV, IATINDS, IATINCD	IATDMTK, IATUX15	31/24
IATINR1	RJP BSC initialization routine	Processes the RJPTERM and RJPLINE initialization statements. It builds and writes to intermediate spool records used by IATINR2.	IATINCD	None	31/Any
IATINR2	RJP BSC initialization routine	Completes the processing of the RJPLINE and RJPTERM initialization statements, reads the intermediate spool records, and creates the resident RJP table and preformatted BSC RJP line and terminal SUPUNITS tables on spool.	IATINGN	IATOSSC	31/Any
IATINSAC	SETACC initialization statement	Processes the SETACC initialization statement.	IATINCD	None	31/Any
IATINSD	JES3 spool data set OPEN processing	Determines the current status of each spool data set. Verifies spool configuration changes using a WTOR. Creates the control block structure necessary to support I/O to the spool.	IATINIT	None	31/24
IATINSE	JES3 spool initialization cleanup routine	Writes the spool related checkpoint records to the checkpoint data sets and releases the associated storage.	IATINIT	IATDMTK	31/Any
IATINSL	SELECT statement processor	Processes the SELECT initialization statement.	IATINM1	None	31/Any
IATINSNA	SNA/RJP initialization	Initializes SNA/RJP related control blocks during JES3 initialization and *MODIFY,CONFIG command processing.	IATINGN, IATMOCF	IATINCT, IATINWS	31/Any
IATINSP	JES3 spool partition initialization	Performs initialization of the spool space allocation routine. Constructs the spool checkpoint record (cold start) or is modified to describe the spool partition configuration specified in the initialization stream. Creates the control block structure to support allocation and purge of units of spool space.	IATINIT	IATMOSP	31/Any
IATINSPR	SETPARAM initialization statement processor	Processes the SETPARAM initialization statement.	IATINCD	None	31/Any
IATINSR	JES3 spool data set initialization	Completes the initialization of the JES3 spool data sets begun by module IATINSD.	IATINIT	IATDMVR, IECOSCR1	31/24

Module Name	Function Name	Description	Called By	Calls	Attributes
IATINSRS	SETRES initialization statement processor	Process the SETRES initialization statement.	IATINCD	None	31/Any
IATINST	JES3 single track table (STT) initialization	Builds the control block structure for allocation and purge of records from the single track table space on the JES3 spool.	IATINIT	IATDMST	31/Any
IATINSTN	SETNAME initialization statement	Processes the SETNAME initialization statement.	IATINCD	None	31/Any
IATINSV	SSVT initialization routine	Initializes or verifies the SSVT, JES3 storage management, the SSI destination queue, and the JES3 trace routine and table. It also contains and initializes the JES3 global post routine which can be called from any address space to post either the IATNUC task or the IATAUX task or both. It establishes the JES3 WTO buffer utilization listen routine (IATCNNF).	IATINFA, IATINGL	None	31/Any
IATINTK	JES3 initialization task module	Handles the highest level JES3 task control block (TCB) and attaches the JES3 nucleus, IATNUC or the FSS nucleus, IATNUCF.	Attached by initiator subroutine	IATINFA, IATINGL	31/24
IATINVR	Initialization of JES3 VARY status	Performs several functions pertaining to the initialization of the VARY (online/offline) status of execution devices.	IATINGN	IEE3603D, IEFAUINT, IEFAUSRV	31/24
IATINWS	RJPWS initialization processor	Performs syntax checking for the RJPWS statement in phase 1 initialization. During phase 2 initialization, IATINWS builds the work station's control blocks. Called to process RJPWS statements during *MODIFY,CONFIG command processing.	IATINCD, IATINGN, IATMOCF	None	31/Any
IATINXM	JES3 auxiliary address space initialization routine	Creates the cross memory environment and the JES3 control blocks and data areas for JES3 auxiliary address space.	IEEPRW12	None	31/Any
IATIPCFS	CFGS dump formatter control block model	Formats CFGS using IPCS.	BLSQCFMT	None	31/Any
IATIPDAT	DAT dump formatter control block model	Formats DAT using IPCS.	BLSQCFMT	None	31/Any
IATIPCDB	CNDB dump formatter control block model	Formats the JES3 console destination block.	None	None	31/Any
IATIPDG2	IPCS model for a portion of IATYDLOG	Formats the DLGFLAGS portion of IATYDLOG.	BLSQCFMT	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATIPDLA	DLA dump formatter control block model	Formats the DLA using IPCS	BLSQCFMT	None	31/Any
IATIPDLG	DLG dump formatter control block model	Formats the DLG using IPCS.	BLSQCFMT	None	31/Any
IATIPDTR	DTR dump formatter control block model	Formats the DTRHEADR DSECT of the DTR using IPCS.	BLSQCFMT	None	31/Any
IATIPDT2	DTR dump formatter control block model	Formats the DTRENTYR DSECT of the DTR using IPCS.	BLSQCFMT	None	31/Any
IATIPDT3	DTR dump formatter control block model	Formats the DTREVDAT DSECT of the DTR using IPCS.	BLSQCFMT	None	31/Any
IATIPDMC	DMC dump formatter control block model	Formats DMC using IPCS.	BLSQCFMT	None	31/Any
IATIPDSB	DSB dump formatter control block model	Formats DSB using IPCS.	BLSQCFMT	None	31/24
IATIPDSQ	DSQ dump formatter control block model	Formats DSQ using IPCS.	BLSQCFMT	None	31/24
IATIPDSS	DSS dump formatter control block model	Formats DSS using IPCS.	BLSQCFMT	None	31/Any
IATIPFCT	FCT dump formatter control block model	Formats FCT using IPCS.	BLSQCFMT	None	31/Any
IATIPFSC	Dump formatter control block model	Formats the IATYFSCB mapping macro.	Issuers of the IPCS CBFORMAT subcommand.	None	31/Any
IATIPITK	ITK dump formatter control block model	Formats ITK using IPCS.	BLSQCFMT	None	31/Any
IATIPJDO	JDO entry dump formatter control block model	Formats a JDO entry using IPCS.	BLSQCFMT	None	31/Any
IATIPJDS	JDS entry dump formatter control block model	Formats a JDS entry using IPCS.	BLSQCFMT	None	31/Any
IATIPJD3	JDO fixed section dump formatter control block model	Formats a JDO fixed section using IPCS.	BLSQCFMT	None	31/Any
IATIPJD4	IATYJDSO dump formatter control block model	Formats a JDS fixed section using IPCS.	BLSQCFMT	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATIPJD5	JDS fixed section dump formatter control block model	Formats a JDS fixed section using IPCS.	BLSQCFMT	None	31/Any
IATIPJSQ	JSQ dump formatter control block model	Formats the JSQ using IPCS.	BLSQCFMT	None	31/Any
IATIPJT1	JET header formatter	Formats the JET header in IPCS	BLSQCFMT	None	31/Any
IATIPJT2	JET entry formatter	Formats the JET entry in IPCS	BLSQCFMT	None	31/Any
IATIPML0	MLWO dump formatter control block model	Formats MLWO using IPCS.	BLSQCFMT	None	31/Any
IATIP10P	IOP dump formatter control block model	Formats IOP using IPCS.	BLSQCFMT	None	31/Any
IATIPJVD	JVD dump formatter control block model	Formats JVD using IPCS.	BLSQCFMT	None	31/24
IATIPJVL	JVL dump formatter control block model	Formats JVL using IPCS.	BLSQCFMT	None	31/Any
IATIPJCT	JCT dump formatter control block model	Formats JCT using IPCS.	BLSQCFMT	None	31/Any
IATIPJQX	JQX dump formatter control block model	Formats JQX using IPCS.	BLSQCFMT	None	31/Any
IATIPJVQ	JVQ dump formatter control block model	Formats JVQ using IPCS.	BLSQCFMT	None	31/24
IATIPJVW	JVW dump formatter control block model	Formats JVW using IPCS.	BLSQCFMT	None	31/24
IATIPMDS	MDS dump formatter control block model	Formats MDS using IPCS.	BLSQCFMT	None	31/Any
IATIPMEE	MEM data entry dump formatter control block model	Formats MEM data entry using IPCS.	BLSQCFMT	None	31/Any
IATIPMEH	MEM header dump formatter control block model	Formats MEM header using IPCS.	BLSQCFMT	None	31/Any
IATIPMGR	MGR dump formatter control block model	Formats MGR using IPCS.	BLSQCFMT	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATIPMPC	MPC dump formatter control block model	Formats MPC using IPCS.	BLSQCFMT	None	31/Any
IATIPNCF	NCF dump formatter control block model	Formats NCF using IPCS	BLSQCFMT	None	31/Any
IATIPNDH	NDH dump formatter control block model	Formats NDH using IPCS.	BLSQCFMT	None	31/Any
IATIPNJH	NJH dump formatter control block model	Formats NJH using IPCS.	BLSQCFMT	None	31/Any
IATIPNJT	NJT dump formatter control block model	Formats NJT using IPCS.	BLSQCFMT	None	31/Any
IATIPOCF	OCF dump formatter control block model	Formats OCF using IPCS.	BLSQCFMT	None	31/Any
IATIPOSD	OSD dump formatter control block model	Formats OSD using IPCS.	BLSQCFMT	None	31/Any
IATIPOSP	IATYOSPC Formatter	Formats the IATYOSPC in IPCS	BLSQCFMT	None	31/Any
IATIPOSS	OSS dump formatter control block model	Formats OSS using IPCS.	BLSQCFMT	None	31/24
IATIPOS1	OSE fixed section dump formatter control block model	Formats OSE fix using IPCS.	BLSQCFMT	None	31/Any
IATIPOS2	OSE variable section dump formatter control block model	Formats OSE variable using IPCS.	BLSQCFMT	None	31/Any
IATIPOS3	OSE data section dump formatter control block model	Formats OSE data using IPCS.	BLSQCFMT	None	31/Any
IATIPOTH	OST header formatter	Formats the OST header in IPCS	BLSQCFMT	None	31/Any
IATIPOT1	OST OSE entry formatter	Formats the OST OSE entry in IPCS	BLSQCFMT	None	31/Any
IATIPOT2	OST data set entry formatter	Formats the OST data set entry in IPCS	BLSQCFMT	None	31/Any
IATIPPDA	IATYPDA formatter	Formats the IATYPDA in IPCS	BLSQCFMT	None	31/Any
IATIPPDQ	PDQ dump formatter control block model	Formats PDQ using IPCS.	BLSQCFMT	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATIPPPQ	PPQ dump formatter control block model	Formats a PPQ entry using IPCS.	BLSQCFMT	None	31/Any
IATIPRAB	RAB dump formatter control block model	Formats RAB using IPCS.	BLSQCFMT	None	31/Any
IATIPRLT	RLT dump formatter control block model	Formats the RTTSTART DSECT of the RLT using IPCS.	BLSQCFMT	None	31/Any
IATIPRQ1	RQ fixed section dump formatter control block model	Formats the fixed section of the RQ using IPCS.	BLSQCFMT	None	31/Any
IATIPRQ2	RQ common section dump formatter control block model	Formats the common section of the RQ using IPCS.	BLSQCFMT	None	31/Any
IATIPRQ3	RQ C/I section dump formatter control block model	Formats the C/I section of the RQ using IPCS.	BLSQCFMT	None	31/Any
IATIPRQ4	RQ GMS section dump formatter control block model	Formats the GMS section of the RQ using IPCS.	BLSQCFMT	None	31/Any
IATIPRQ5	RQ MDS section dump formatter control block model	Formats the MDS section of the RQ using IPCS.	BLSQCFMT	None	31/Any
IATIPRQ6	RQ output service section dump formatter control block model	Formats the output service section of the RQ using IPCS.	BLSQCFMT	None	31/Any
IATIPSEE	SEE dump formatter control block model	Formats a SEE using IPCS.	BLSQCFMT	None	31/Any
IATIPSEL	SEL dump formatter control block model	Formats SEL using IPCS.	BLSQCFMT	None	31/Any
IATIPSE1	SAPI thread exclusion list dump formatter control block model	Formats a SAPI thread exclusion using IPCS.	BLSQCFMT	None	31/Any
IATIPSPB	SPB dump formatter control block model	Formats SPB using IPCS.	BLSQCFMT	None	31/Any
IATIPSTA	STAR dump formatter control block model	Formats STAR using IPCS.	BLSQCFMT	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATIPSVT	SVT dump formatter control block model	Formats SVT using IPCS.	BLSQCFMT	None	31/Any
IATIPTVC	TVC dump formatter control block model	Formatter for IATXTVTC. It is the IPCS model.	None	None	31/Any
IATIPTVT	TVT dump formatter control block model	Formats TVT using IPCS.	BLSQCFMT	None	31/Any
IATIPVIO	VIO dump formatter control block model	Formats VIO using IPCS.	BLSQCFMT	None	31/Any
IATIPVIT	VITR dump formatter control block model	Formats VITR using IPCS.	BLSQCFMT	None	31/Any
IATIPVIW	VIW dump formatter control block model	Formats VIW using IPCS.	BLSQCFMT	None	31/Any
IATIPVI2	VIO flags dump formatter control block model	Formats the VIO flags using IPCS.	BLSQCFMT	None	31/Any
IATIPWSP	WSP dump formatter control block model	Formats a WSP using IPCS.	BLSQCFMT	None	31/Any
IATIPWTI	WTR input area dump formatter control block model	Formats a WTR input area using IPCS.	BLSQCFMT	None	31/Any
IATIPWTO	WTR output area dump formatter control block model	Formats a WTR output area using IPCS.	BLSQCFMT	None	31/Any
IATIPWTX	WTR extension area dump formatter control block model	Formats a WTR extension using IPCS.	BLSQCFMT	None	31/Any
IATIQAC	Inquiry on active jobs	Processes the *I,A inquiry command.	IATIQDV	None	31/Any
IATIQBK	Inquiry backlog command processor	Processes the inquiry backlog command (*I,B).	IATIQDV	None	31/Any
IATIQCN	Console status processor	Processes and responds to console status inquiry requests.	IATIQDV	None	31/Any
IATIQCR	Inquiry direct access buffer pool	Processes the *I C command to display the status of the JES3 direct access buffer pool.	IATIQDV	None	31/Any
IATIQDC	DJC inquiry routine	Performs DJC inquiry functions.	IATIQDV	None	31/Any
IATIQDL	Deadline inquiry command processor	Processes the inquiry command for deadline scheduling.	IATIQDV	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATIQDS	Device status display module	Displays the status of selected devices.	IATIQDV	IATOSSC	31/Any
IATIQDST	DESTDEF inquiry processor	Processes the *I,DEST command.	IATIQDV	None	31/Any
IATIQDV	Inquiry command driver	Separates the specified parameters of the inquiry command (*I), checks the syntax of the request, and loads, calls, and deletes the appropriate inquiry module.	Dispatched by MFM (IATGRCT)	IATIQAC, IATIQBK, IATIQCN, IATIQDC, IATIQDL, IATIQDS, IATIQDST, IATIQDX, IATIQFS, IATIQGM, IATIQMR, IATIQMT, IATIQNJ, IATIQOS, IATIQPR, IATIQQU, IATIQRJ, IATIQSP	31/Any
IATIQDX	DSP or ALOAD inquiry command processor	Processes the *I,X inquiry command.	IATIQDV	None	31/Any
IATIQFS	FSS inquiry command	Processes the *I, F command.	IATIQDV	None	31/Any
IATIQGM	GMS-related field display routine	Displays GMS-related fields on the operator console in response to an operator command.	IATIQDV	None	31/Any
IATIQMPC	MAINPROC inquiry routine	Processes the *I,MAIN= command and displays information about a main processor	IATIQDV	None	31/Any
IATIQMR	Message routing table inquiry routine	Performs message routing inquiry for MCS and JES3 consoles.	IATIQDV	None	31/Any
IATIQMT	JES3 multitask inquiry routine	Processes the multitask inquiry request (the *I, MT command).	IATIQDV	None	31/Any
IATIQNJ	Networking inquiry routine	Provides the status of started networking lines.	IATIQDV	None	31/Any
IATIQOI	Output service inquiry implementation routine	Processes the *I,U,Q= command and displays output information.	IATGRJR	IATIQOM	31/Any
IATIQOM	Output service inquiry messages	Creates and issues messages.	IATIQOI	IATIQOI	31/Any
IATIQOS	Output service inquiry command parser routine	Validates the *I,U,Q= command.	IATIQDV	None	31/Any
IATIQPG	Partition inquiry on track groups	Provides a message listing the users of the largest amount of spool space.	IATIQSP	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATIQPR	Proclib inquiry module	Processes the *I, proclib command.	IATIQDV	None	31/Any
IATIQQU	Job and queue inquiry request processor	Processes job and queue inquiry requests.	IATIQDV	None	31/Any
IATIQRJ	BSC/SNA RJP WS and line status inquiry processor	Handles inquiry commands to RJP. It processes the *I, T command for BSC lines, BSC terminals, and/or SNA work stations (WSs).	IATIQDV	None	31/Any
IATIQSP	Spool inquiry module	Processes the following inquiry commands: *I, Q, S *I, Q, SP = spart-name *I, Q, SP = spart-name, DD *I, Q, SP = spart-name, O *I, Q, SP = spart-name, U, N=Limit *I, Q, DD = name *I, Q, BT	IATIQDV	IATIQPG	31/Any
IATISCB	Disk reader DCB	Initializes the DRDCB field in the TVT to point to the disk reader DCB.	IATINIT	None	31/24
IATISCD	Internal reader job scheduler	Processes internal reader data sets submitted over the SSI from IATDMEB or from IATSICC.	IATDMJA	IATUX27	31/Any
IATISCR	Card Reader DSP driver and I/O module	Performs the entry and exit routines for the card reader DSP. It also performs I/O to the card reader.	IATGRJR, IATISRI, IATISRL	IATISRL	31/Any
IATISDL	Deadline schedule jobs service routine	Processes the deadline parameter on the /*MAIN statement, calculates the deadline time interval, and creates applicable control blocks for a job.	IATISMN	None	31/Any
IATISDR	Disk reader DSP driver and I/O module	Provides the entry and exit routines for the disk reader DSP. It also performs I/O to the disk reader.	IATGRJR, IATISRI, IATISRL	IATISRL	31/24
IATISDS	/*DATASET and /*ENDDATA- SET JES3 control statements processor	Processes the /*DATASET and /*ENDDATASET JES3 control statements.	IATISLG	None	31/Any
IATISDT	Data CSECT for input service	Stores data for the duration of the input service function and serves as the build area for the input job JCT. It also contains the console message appendage for the input service function.	IATISEN, IATISIR, IATISPR	None	31/Any
IATISDV	ISDRVR driver module	Reads and passes to IATISLG the job entries for the multirecord files input to the ISDRVR job; ALOADs IATISLG and IATISJL at the start of processing and ADELETes them at the end; gets the buffers for each input job and initializes the JDS and JDAB.	IATISIR	IATISLG, IATOSPC	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATISEN	End of input service processing module	Finishes input service processing of a job and adds each job to the JES3 job queue, builds the OSE, closes the data sets, completes the main task, specifies the main requirements issues the logon message, and writes the control blocks to spool for each job.	IATISLG	IATISDL, IATISDT, IATUX29	31/Any
IATISFR	/*FORMAT control statement processor	Processes the /*FORMAT JES3 control statement. It scans the parameters of the /*FORMAT statement, checks the syntax of the statement, and stores the parameter data in the format parameter buffer (FRP) for later use by input service.	IATISLG	None	31/Any
IATISIR	Internal reader input processor	Obtains input from the internal reader job JDS entry built by IATISCD to process internal reader jobs.	IATGRJR	IATISDT, IATISDV	31/Any
IATISJB	Job statement processor	Processes the //jobname JOB statement and constructs the standard scheduler elements for the job.	IATISLG	IATUX17, IATUX28	31/Any
IATISJL	JCL statements processor	Processes input JCL, recognizes DD* and DD DATA-type data sets and creates appropriate JDS entries. Other JCL is placed into the JCLIN data set to be passed to the converter interpreter (C/I).	IATISLG	None	31/Any
IATISJN	Networking input statement parsing module	Scans and validates the /*NETACCT, /*ROUTE XEQ, and // XMIT statements.	IATISLG	None	
IATISJV	Input service job validation and restart routine	Performs validation and restart processing for jobs that have input service related scheduler elements (CR, DR, TR, ISDRVR, or INTRDR).	IATABRT, IATJVDR	None	31/Any
IATISLG	Input statement scanner module	Reads the multirecord file from IATISDV, i.e., it reads the statements in an input job, determines if they are JES3 control statements or JCL statements, and interfaces with the proper routine to process and place each statement in the appropriate data set.	IATISDV	IATISDS, IATISEN, IATISFR, IATISJB, IATISJL, IATISMN, IATISNJ, IATISNT, IATISPR, IATUX33, IATUX34, IATUX44	31/Any
IATISMN	/*MAIN JES3 control statement processor	Processes the /*MAIN JES3 control statement.	IATISLG	IATISDL	31/Any
IATISNJ	/*ROUTE XEQ and // XMIT statement processor	Processes the /*ROUTE XEQ and // XMIT statements.	IATISLG	IATNTCP, IATNTSR, IATUX40	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATISNT	/**NET control statement processor	Processes the /**NET control statement.	IATISLG	IATUX24	31/Any
IATISPR	/**PROCESS and /**ENDPROCESS JES3 control statement processor	Processes the /**PROCESS and /**ENDPROCESS JES3 control statements.	IATISLG	IATISDT	31/Any
IATISRD	Data CSECT and message appendage for JES3 reader DSPs	Provides data areas, work areas, an input buffer, and a message appendage routine for the JES3 reader DSPs: the card reader (CR), tape reader (TR), and disk reader (DR).	IATCNIN (consoles)	None	31/24
IATISRI	Common reader-initialization routine for JES3 reader DSPs	Initializes the data CSECT (IATISRD), gets the reader device, and reads the first job statement.	IATISRL	IATISCR, IATISDR, IATISRL, IATISRP, IATISTR	31/Any
IATISRL	Common logic module for JES3 reader DSPs	Reads statements until EOF is reached. It places the jobs in batches and creates a JES3 input service job to process the batch.	IATISCR, IATISDR, IATISRI, IATISTR	IATISRP, IATISTR	31/Any
IATISRP	Parameter scan routine for JES3 reader DSPs	Scans the operator parameters from an *CALL, *START, or *CANCEL command for validity. The parameters are then used to set flags, or they are saved in IATISRD.	IATISRI, IATISRL	None	31/Any
IATISSR	SNA reader module	Gets logical records from an SNA device.	IATISRI, IATISRL	IATSNFI	31/Any
IATISTR	Tape reader driver and I/O module	Provides the entry and exit routines for the tape reader DSP. It also performs I/O to the tape reader.	IATISRL	IATISRL	31/Any
IATJVDR	JES3 job validation/ restart driver routine	Validates the minimum set of spool data for a passed job and interfaces to other validation routines for processing of all other job related spool records.	IATINJV	IATDMJV, IATIJV, IATISJV, IATMSJV, IATOSJV, IATUX14	31/Any
IATJVLG	JES3 job validation error logout routine	Produces a hardcopy SNAP of jobs that fail job validation. Produces a formatted and unformatted SNAP of the JVW and writes any messages chained off of the fixed portion of the JVW. Also writes all diagnostic information to the JES3SNAP data set.	IATINLG	IATDMLG	31/24
IATLVAT	Locate subtask maintenance module	Provides the following services: <ul style="list-style-type: none"> • Initializes one or more subtasks. • Cleans up and reinstates a locate subtask. • Abnormally terminates a locate subtask. • Normally terminates a locate subtask. 	IATINLC, IATLVIN	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATLVDA	Locate data CSECT	Defines the data areas used by the locate modules under the locate FCT.	Not applicable	None	31/Any
IATLVIN	Locate driver module	Receives requests for locate services to obtain information from the catalog about one or more datasets. Performs processing on the JES3 global, JES3 local, or in a C/I FSS address space.	Dispatched by MFM (IATGRCT)	IATLVAT	31/Any
IATLVLC	Locate subtask module	Interfaces with MVS catalog management (via the LOCATE macro) to resolve requests for JES3 locate services.	Attached by IATLVMT	IATLVAT, IATLVIN, IATLVMT, IATDMGR, IEFAB4F4, IEFGB4F5, IEFGB4UV	31/Any
IATLVMT	Locate master task	Attaches locate subtasks.	Attached by IATLVAT	None	31/Any
IATLVVR	Volume mounting verification routine	Verifies that the mounting of volumes on JES3 setup devices has been performed correctly. For each volume mounted, a response is built and sent to MDS indicating correct or incorrect mounting; if incorrect, an appropriate error code is returned to MDS from which an error message to the operator may be constructed. Also invokes MVS vary.	Dispatched by MFM (IATGRCT)	IATUX25, IEE3603D, IEFAB49C, IEFAUINT, IEFAUSRV	31/24
IATMDAL	Resource allocation processor	Performs processor device testing to see if the processor meets the job's requirements, or attempts the allocation of volumes, devices, and data sets for the calling function operating off the MDS FCT. Does not perform allocation for devices with SMS-managed volumes.	IATMDFE, IATMDMO, IATMDSL, IATMDRS	IATMDSB	31/Any
IATMDAR	MDS ARL management module	Contains subroutines that perform services in support of the allocation requirements list (ARL) control block. These services are: 1. Create or refresh a job's ARL. 2. Scan the ARL to determine if the job should be given an allocation attempt. 3. Delete an ARL.	Users of IATXARL macro	None	31/Any
IATMDAT	MDS subtask maintenance module	Provides the following services: 1. Initializes one or more MDS subtasks. 2. Cleans up and reinstates an MDS subtask. 3. Abnormally terminates an MDS subtask. 4. Normally terminates an MDS subtask.	IATINMD, IATMDSR	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATMDBK	MDS breakdown	Provides MDS resource deallocation of volumes, data sets, and devices for dynamic deallocation, step termination, and job termination.	IATMDDR	IATGRGU, IATMDSB	31/Any
IATMDCL	MDS cleanup for restart through C/I	Reinitializes the control blocks so that a job can be restarted through C/I.	Dispatched by MFM (IATGRCT)	None	31/Any
IATMDCR	Configuration change exit	Changes JES3 device related tables when a device defined to JES3 is deleted or changed.	Called as an exit from MVS configuration change	None	31/Any
IATMDDA	MDS Data CSECT	Contains commonly used data areas and flags referenced by all MDS modules.	Not applicable	None	31/Any
IATMDDD	MDS DASD DDR DSP driver	Sets up the DASD dynamic device reconfiguration (DDR) environment for DDR routines in module IATMDSB. It calls those DDR routines for every staging area on the DASD DDR destination queue.	Dispatched by MFM (IATGRCT)	IATMDSB	31/Any
IATMDDR	MDS driver	Passes control to lower level MDS modules, accepts MDS operator commands, and processes verify responses and MDS-related SSI functions.	Dispatched by MFM (IATGRCT)	IATMDBK, IATMDFE, IATMDOP, IATMDRS, IATMDSB, IATMDSL, IATMDVE, IATMDWLE	31/Any
IATMDDT	MDS tape and unit record DDR DSP driver	Sets up the tape and unit record dynamic device reconfiguration (DDR) environment for DDR routines in module IATMDSB. It calls those DDR routines for every staging area on the tape and unit record DDR destination queue.	Dispatched by MFM (IATGRCT)	IATMDSB	31/Any
IATMDEN	MDSSRS ENF listen routine	Listens for notification of a change in the availability of an SMS managed resource and saves the information for the MDSSRS DSP.	IEFENFNM	None	31/Any
IATMDFE	MDS fetch routine	Performs MDS main limit allocation. Also performs volume fetch for jobs or dynamic allocation requests.	IATMDDR	IATMDAL, IATMDSB, IATMDML	31/Any
IATMDIQ	MDS inquiry routine	Provides the inquiry facility for the MDS function.	IATMDOP	IATMDISM, IATMDSB	31/Any
IATMDISM	MDS *I,S,A,SUMM command processor	Processes the *I,S,A,SUMM command to display a summary of the jobs in the MDS allocation.	IATMDIQ	None	31/Any
IATMDJV	MDS validation/restart processing routine	Validates the MDS job related spool control blocks for each job that has a main service scheduler element (SE) and requires setup.	IATMSJV	IATUX14	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATMDML	MDS main limiting	Determines whether each main has access to the correct device types and the correct number of devices.	IATMDFE, IATMDRS	IATMDSB	31/Any
IATDMO	MDS modify routine	Provides the modify facility for the MDS function.	IATMDOP	IATMDAL, IATMDSB	31/Any
IATMDMT	MDS master task	Attaches the MDS subtasks (IATMDST).	Attached by IATMDAT	None	31/Any
IATMDOP	MDS operator message routine	Validates operator messages that are received by IATMDDR. It calls IATMDIQ to process setup inquiry commands and IATDMO to process modify setup commands. It also processes start, cancel, and restart setup commands.	IATMDDR	IATMDIQ, IATDMO, IATMDSB	31/Any
IATMDRL	MDSSRS SMS resource management routine	Determines whether a job's SMS-managed resources are now available.	IATMDSR	None	31/Any
IATMDRS	MDS restart routine	Provides MDS resource reallocation for setup jobs during a hot start, warm start, dynamic system interchange (DSI), and for jobs that require locate restart after JES3 initialization is completed.	IATMDDR	IATMDAL, IATMDMS, IATMDSB, IATMDML	31/Any
IATMDSB	MDS subroutines	Contains commonly used subroutines for use by modules requiring MDS services.	IATDYDR, IATIIP0, IATIIP1, MDS modules	IATUX61	31/Any
IATMDSL	MDS job selection routine	Performs MDS job setup selection, final resource allocation, and issues operator messages to perform the initial volume mounting required for job execution.	IATMDDR	IATGRGU, IATMDAL, IATMDAR, IATMDSB	31/Any
IATMDSR	MDSSRS DSP driver module	Provides for the logical flow of jobs through MDS system select and MDS system verify.	Dispatched by MFM (IATGRCT)	IATMDAT, IATMDRL, IATMDSB	31/Any
IATMDSRD	MDSSRS data csect	Contains pointers, queues, and flags associated with the MDSSRS FCT. It is the assembled form of IATYSRS.	Not applicable	None	31/Any
IATMDST	MDS subtask routine	Calls SMS using the subsystem interface (SSI) on behalf of jobs in MDSSRS processing.	Attached by IATMDMT	IATDMBS, IATDMGR	31/Any
IATMDVE	MDS volume verification routine	Performs verification for jobs and dynamic allocation requests referencing MDS managed devices.	IATMDDR	IATMDSB, IATUX62	31/Any
IATMDWLE	MDS Workload Management (WLM) event processing	Processes WLM-related events for MDS.	IATMDDR	None	31/Any
IATMFCT	JMF FCT sampling routine	Collects information for the FCT analysis report.	IATMFDR, IATMFTM	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATMFDM	JMF SDM sampling routine	Collects information for the spool data management report.	IATMFDR, IATMFTM	IATMFRN	31/24
IATMFDQ	JMF SSI destination queue sampling routine	Collects information for the JES3 subsystem interface (SSI) destination queue analysis report.	IATMFDR, IATMFTM	None	31/Any
IATMFDR	JMF driver routine	Performs the following functions: <ul style="list-style-type: none"> • Parses the JMF program options. • Attaches the timer subtask routine (IATMFTM). • Initializes selected timer exit routines and waits until the JMF interval expires. • Calls the SMF record generator routine (IATMFSM) to generate the SMF records. • If the WTR option was selected, calls the JMF report writer routine (IATMFWR) to generate the JMF hardcopy report. 	IATGRJS, IATMFTM	IATMFCT, IATMFDM, IATMFDQ, IATMFDT, IATMFIR, IATMFJB, IATMFRN, IATMFSI, IATMFSM, IATMFSP, IATMFTM, IATMFWR	31/Any
IATMFDT	JMF DSP data control section routine	Contains the JMF data CSECT mapped by IATYJMF.	Not applicable	None	31/Any
IATMFIR	JMF INTRDR sampling routine	Collects information for the internal reader DSP report.	IATMFDR, IATMFTM	None	31/Any
IATMFJB	JMF job sampling routine	Collects information for the job analysis report.	IATMFDR, IATMFTM	None	31/Any
IATMFRN	JMF common processing routine	Contains common processing routines that are used by the JMF modules.	IATCNIN, IATMFDM, IATMFDR, IATMFR1, IATMFR2, IATMFR3, IATMFR4, IATMFR5, IATMFR6, IATMFR7, IATMFR8, IATMFR9, IATMFS1, IATMFS2, IATMFS3, IATMFS4, IATMFS5, IATMFS6, IATMFS7, IATMFS8, IATMFS9, IATMFWR	None	31/Any
IATMFR1	JMF FCT report writer	Generates the FCT analysis report.	IATMFWR	IATMFRN	31/Any
IATMFR2	JMF FCT summary report writer	Generates the FCT summary, the FCT and AWAIT highlight, and the WAIT analysis reports.	IATMFWR	IATMFRN	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATMFR3	JMF SDM report writer	Generates the spool data management report.	IATMFWR	IATMFRN	31/Any
IATMFR4	JMF control block and RSQ report writer	Generates the RESQUEUE cell pool statistics, JCT access method analysis, and JES3 control block utilization report.	IATMFWR	IATMFRN	31/Any
IATMFR5	JMF job analysis report writer	Generates the job analysis report.	IATMFWR	IATMFRN	31/Any
IATMFR6	JMF hot spot report writer	Generates the hot spot analysis report.	IATMFWR	IATMFRN	31/Any
IATMFR7	JMF INTRDR report writer	Generates the internal reader DSPs analysis report.	IATMFWR	IATMFRN	31/Any
IATMFR8	JMF SSI response report writer	Generates the subsystem interface (SSI) response analysis report.	IATMFWR	IATMFRN	31/Any
IATMFR9	JMF SSI destination queue report writer	Generates the destination queue report.	IATMFWR	IATMFRN	31/Any
IATMFSI	JMF SSI sampling routine	Collects information for the subsystem interface (SSI) response report.	IATMFDR, IATSSCM via IATXRMEP macro	None	31/Any
IATMFSM	SMF record 84 driver routine	Formats the SMF data and writes it to the SMF report data set. Calls the JMF SMF record generating routines (IATMFS1 through IATMFS9) to create the sub-type 1 through 9 records.	IATMFDR	IATMFS1, IATMFS2, IATMFS3, IATMFS4, IATMFS5, IATMFS6, IATMFS7, IATMFS8, IATMFS9	31/Any
IATMFSP	JMF hot spot sampling routine	Collects information for the hot spot analysis report.	IATMFDR, IATMFTM	None	31/Any
IATMFS1	JMF SMF type 84 subtype 1 record writer	Generates a SMF type 84 record (subtype 1) containing information about task activity, real storage usage, MFM and IRB activity, FCT activity, and AWAIT activity.	IATMFSM	IATMFRN	31/Any
IATMFS2	JMF FCT summary SMF record writer	Generates the FCT summary SMF type 84 subtype 2 record.	IATMFSM	IATMFRN	31/Any
IATMFS3	JMF SDM SMF record writer	Generates the spool data management SMF type 84 subtype 3 record.	IATMFSM	IATMFRN	31/Any
IATMFS4	JMF RSQ cell pool and JES3 control block utilization SMF record writer	Generates the resqueue cell pool, the JCT access method, and JES3 control block utilization SMF type 84 subtype 4 record.	IATMFSM	IATMFRN	31/Any
IATMFS5	JMF job analysis SMF record writer	Generates the job analysis SMF type 84 subtype 5 record.	IATMFSM	IATMFRN	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATMFS6	JMF hot spot analysis SMF record writer	Generates the hot spot analysis SMF type 84 subtype 6 record.	IATMFSM	IATMFRN	31/Any
IATMFS7	JMF INTRDR DSPs analysis SMF record writer	Generates the internal reader DSPs analysis SMF type 84 subtype 7 record.	IATMFSM	IATMFRN	31/Any
IATMFS8	JMF SSI response analysis SMF record writer	Generates the subsystem interface (SSI) response analysis SMF type 84 subtype 8 record.	IATMFSM	IATMFRN	31/Any
IATMFS9	JMF SSI destination queue SMF record writer	Generates the destination queue SMF type 84 subtype 9 record.	IATMFSM	IATMFRN	31/Any
IATMFTM	JMF timer subtask exit routine	Calls the JMF sampling routines, sets a timer for these routines, and waits for them to complete.	Attached by IATMFDR, MVS	IATMFCT, IATMFDM, IATMFDQ, IATMFIR, IATMFJB, IATMFSP	31/Any
IATMFWR	JMF report driver routine	Formats the JMF information and writes it to the JMF report data set. Calls the JMF report generating routines (IATMFR1 through IATMFR9).	IATMFDR	IATMFR1, IATMFR2, IATMFR3, IATMFR4, IATMFR5, IATMFR6, IATMFR7, IATMFR8, IATMFR9	31/Any
IATMOCF	*MODIFY,CONFIG COMMAND Processor	Process the *MODIFY,CONFIG command which is used to add RJPWS, FSS's etc. dynamically.	IATMODV	IATINCF, IATINC1, IATINC2, IATINDEV, IATINFS, INTINRN, IATINSNA, IATINWS	31/Any
IATMOCN	RJP console modify request processor	Processes and responds to RJP console modify requests.	IATMODV	None	31/Any
IATMOCP	Modify priority and job cancel processor	Processes the job cancel and priority change requests of the modify command.	IATGRWM, IATMODV	None	31/Any
IATMOCW	*MODIFY,CONFIG Command Data CSECT	Contains the assembled form of IATYCFW which is the data CSECT for the *MODIFY,CONFIG command.	None	None	31/Any
IATMODC	DJC modify processor	Processes DJC modify commands.	IATMODV	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATMODL	Modify deadline command processor	Verifies parameters and, if errors are found, gives an error message and returns. It locates the deadline entry to be changed and, if it is not found, issues an error message and returns. It updates the entry and issues a message indicating the new status of the deadline entry.	IATMODV	None	31/Any
IATMODST	DESTDEF modify processor	Processes the *MODIFY,DEST command.	IATMODV	None	31/Any
IATMODV	Driver routine for modify commands	Acts as the driver for the modify function (*F or *MODIFY). It separates the specified parameters, checks the syntax of the request, and loads, calls, and deletes the appropriate modify module.	Dispatched by MFM (IATGRCT)	IATMOCN, IATMOCP, IATMODC, IATMODL, IATMODST, IATMODW, IATMOCF, IATMODX, IATMOFS, IATMOGM, IATMOHR, IATMOMR, IATMOMT, IATMONJ, IATMOOS, IATMORJ, IATMOSP, IATMOTR, IATMOVR	31/Any
IATMODW	Writer related SUPUNIT modify command routine	Processes the *MODIFY,W command.	IATMODV	None	31/Any
IATMODX	DSP or ALOAD modify command processor	Processes the *MODIFY,X command.	IATMODV	None	31/Any
IATMOFS	FSS-related modify command	Processes the *MODIFY,F command.	IATMODV	IATGRFS	31/Any
IATMOGM	GMS modify command processor	Handles the generalized main scheduler (GMS) modify commands.	IATINM2, IATMODV	IATMSCK	31/Any
IATMOHR	Modify command processor	Processes the modify command to hold or release the queue, a priority level of the queue, or a specific job.	IATMODV	None	31/Any
IATMOMR	Modify MCS message- routing table processor	Modifies the message-routing table for multiple console support (MCS) according to the modify request.	IATMODV	None	31/Any
IATMOMT	Multitask modify command processor	Processes the multitask modify command (*MODIFY, MT=) to enable or disable writer output multitasking.	IATMODV	None	31/Any
IATMONJ	Modify networking processor	Modifies the JES3 networking capabilities.	IATMODV	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATMOOI	Output service modify implementation routine	Processes the *F,U,Q= command; that is, modifies data in the output service queue as specified in the command.	IATGRJR	IATOSSC, IATUX48	
IATMOOS	Output service modify parser routine	Validates the *F,U,Q= command.	IATMODV	None	31/Any
IATMORJ	Modify RJP terminal or line characteristics command processor	Processes the *MODIFY, T command to change line or terminal characteristics or options originally set during initialization.	IATMODV	None	31/Any
IATMOSP	Modify spool partitions module	Processes the following commands: *F, Q, SP = spart-name, O=ovrfl-spart *F, Q, DD=ddname, SP = spart-name *F, Q, DD=ddname, DRAIN *F, Q, DD=ddname, USE *F, Q, DD=ddname, HOLD *F, Q, DD=ddname, RELEASE *F, Q, DD=ddname, STOP *F, Q, DD=ddname, CANCEL	IATINSP, IATMODV	TATSTAT in IATDMTK, Disk IO in IATDMNC	31/Any
IATMOTR	Modify trace activity and processor	Process modify trace commands.	IATMODV	IATGRED	31/Any
IATMOVL	VARY local processor	Performs VARYL processing for on a local for a specified assignable device.	Dispatched by MFM (IATGRCT)	None	31/Any
IATMOVR	Modify device status command processor	Processes the *MODIFY, V command. This command is used to vary devices online and offline to JES3.	IATMODV	None	31/Any
IATMSCD	Main processor control table data csect	Contains pointers, queues, and flags associated with one processor. It is the assembled form of IATYMPC.	Not applicable	None	31/Any
IATMSCK	GMS checkpoint routine	Checkpoints all generalized main scheduler (GMS) control blocks.	IATINM2, IATMOGM	None	31/Any
IATMSDR	Main service DSP driver	Runs a resident FCT for JES3 main I/O. It performs processing to meet the following conditions: • Operator message or INTERCOM macro for START, RESTART, or CANCEL (posted by IATMSCD) • Connect post (posted by IATGRJS, IATMDRS, IATMOVR, IATINM3 and IATMSDR)	Dispatched by MFM (IATGRCT)	IATSSCM	31/Any
IATMSEWL	Workload Management (WLM) event processing listen routine	Listens for WLM-related events such as changes in the availability of a scheduling environment or WLM policy changes and notifies the JES3 global when an event occurs.	IEFENFNM	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATMSGC	General staging area processor	Contains subroutines for processing staging areas. Also has an entry point to update generalized main scheduler (GMS) counters.	Dispatched by MFM (IATGRCT) IATMSMC	IATDMJA None	31/Any 31/Any
IATMSJT	GMS job termination processing	Processes job termination requests.	IATMSMS	None	31/Any
IATMSJV	Main scheduling validation/ restart processing routine	Determines restart requirements for the job, obtains and initializes a RESQUEUE if the job was active in the main scheduler element. Calls IATMDJV to validate MDS job specific spool control blocks if analysis and setup were requested.	IATJVDR	IATMDJV	31/Any
IATMSMC	Main service connect processor	Processes the connect record over a JES3 start; determines the action to be taken for active jobs over a warm start or hot start; processes the flush of jobs active on a processor; and updates generalized main scheduler (GMS) counters on job selection and termination.	IATMSMS	IATMSGC	31/Any
IATMSMS	JES3 GMS module	Performs job selection, job termination, execution resource allocation, and execution resource deallocation for JES3 and main connect processing.	Dispatched by MFM (IATGRCT)	IATMSCK, IATMSMC, IATMSWLE, IATMSJT	31/Any
IATMSR1	JES3 restart and connect routine number 1	Runs in a local processor to provide communication between the local and global processor and to set connect flags.	IATMSGC	IATSSRN	31/Any
IATMSR2	JES3 restart and connect routine number 2	Executes on the global JES3 processor only. It processes the last complete set of records from the local processor and uses them to update the global processor's control blocks. It then informs the local processor whether the connection completed successfully or unsuccessfully.	IATMSGC	IATSSRN	31/Any
IATMSR3	JES3 restart and connect routine number 3	Issues a connect complete message to the operator on the global JES3 system.	IATMSGC	IATSSRN	31/Any
IATMSSTA	Main Service Status	Contains routines to determine whether a processor is down, or to require it to be brought down	IATXMSTA	None	31/Any
IATMSWLE	GMS Work-Load Manager (WLM) event processing	Processes WLM-related events for GMS.	IATMSMS	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATNTCP	Networking data compression routine	Compresses the networking transmission records.	IATCNNJ, IATNTRS, IATNTSF, IATOSNJ, IATOSNT	None	31/Any
IATNTDH	Networking dataset header builder	Creates a dataset header for a network job.	IATOSBP, IATOSNJ	IATUX39	
IATNTDN	NJE reader data CSECT	Contains the NJE reader data csect mapped by IATYNDN. Contains the console appendage, data areas, and ECF for the NJE reader.	IATCNIN	None	
IATNTDP	Networking data manager	Decompresses the networking transmission record.	IATNTDR, IATNTJS, IATNTRS	None	31/Any
IATNTDR	Networking BSC line manager	<ul style="list-style-type: none"> Performs NJE DSP initialization and termination functions. Scans the parameters from the call command and performs line signon. Handles normal line manager dispatching. Determines the next record to be transmitted. Performs I/O operations. Processes line start and cancel commands. Purges any outstanding I/O and cleans up control blocks. 	Operator call	IATNTDP, IATNTJS, IATNTLG	31/Any
IATNTDT	Networking line manager data CSECT	<ul style="list-style-type: none"> Contains the networking line manager data CSECT including the console and timer appendages. Contains STARTIO exits. 	Console services, timer services, STARTIO	None	31/24
IATNTFD	JES3 networking store-and-forward data CSECT	This data CSECT maps macros used by the networking store-and-forward module (IATNTSF). It contains the CSECT expansion of the IATYNFD macro.	Not applicable	None	31/Any
IATNTHT	Networking job header/trailer builder	Creates a network job header and trailer for a job. However, if a network job header and trailer already exist, then IATNTHT reads them in.	IATOSBP, IATOSNT	IATUX40, IATUX43	
IATNTJS	Networking job and SYSOUT receive module	Processes job and SYSOUT records received from a remote node by IATNTDR or IATNTNR. It builds a utility job which will either process the job/SYSOUT records or send them to the next node in the path to the destination.	IATNTDR, IATNTNR	IATNTDP, IATUX36, IATUX37	

Module Name	Function Name	Description	Called By	Calls	Attributes
IATNTLG	Networking line trace routine	After line logging is started, this module records trace information for each I/O operation on the line. When line logging is stopped, this module spins off a SYSOUT data set to print the recorded information.	IATNTDR	None	31/Any
IATNTNR	NJE reader DSP driver	Acts as the front end to the receiver module IATNTJS for SNA/NJE processing. MVS/BDT receives job/SYSOUT streams from a remote SNA node and writes the data to JES3 spool. MVS/BDT unallocates the data set which causes JES3 to spin off the data to output service for an NJE reader named NJERDR.	IATGRJR	IATNTJS, IATOSPC	
IATNTRD	Networking reroute DSP data csect	Contains the console appendage, data areas, and messages for the NJEROUT DSP.	IATCNIN	None	
IATNTRS	Networking reroute DSP driver	Reroutes queued network job and SYSOUT streams to a network destination or to the home node. Also functions as a migration vehicle to migrate from BSC/NJE to SNA/NJE.	IATGRJR	IATNTCP, IATNTDP	
IATNTSD	Networking sender routine (NJESND)	Obtains records for transmission from spool and passes them to the networking line manager, IATNTDR, for transmission.	Scheduled by JSS (IATGRJS) Dispatched by MFM (IATGRCT)	None	31/Any
IATNTSF	JES3 networking store-and-forward routine	Performs store-and-forward functions for JES3 networking. This is done for all jobs and SYSOUT data which are received from one node in the network but are destined for some other node. It also processes SYSOUT data destined for this node.	Scheduled via JSS (by IATNTJS)	IATNTCP, IATOSNT, IATUX38, IATUX42	31/Any
IATNTSR	Networking node table search routine	Searches the networking node table for a specified entry.	IATXNTS macro	None	31/Any
IATODDR	Outserv FCT driver data area	Contains a data area that is used by outserv FCT.	Not applicable	None	
IATODFD	FSS writer driver CSECT	Contains a data area that is used by writer driver module IATOSFD.	Not applicable	None	31/Any
IATODNJ	Networking data CSECT	Constitutes the data CSECT work area for networking writers.	Not applicable	None	31/Any
IATODPN	Punch writer data CSECT	Constitutes the data CSECT work area for output service punch writers.	Not applicable	None	31/Any
IATODPR	Print writer data CSECT	Constitutes the data CSECT work area for output service print writers.	Not applicable	None	31/Any
IATODPX	Output writer print/punch data CSECT	Used by output service (non-FSS mode printers and punches) for data areas that must reside below the 16M line.	Not applicable	None	31/24

Module Name	Function Name	Description	Called By	Calls	Attributes
IATODSI	Spool input data CSECT	Constitutes the data CSECT work area for the output service writer spool input routine, IATOSI.	Not applicable	None	31/Any
IATODSN	SNA WTR data CSECT	Constitutes the data CSECT for the output service SNA device processor, IATOSSN.	Not applicable	None	31/Any
IATODWD	Output service writer driver data CSECT	Contains a data area that is used by writer driver module IATOSWD.	Not applicable	None	31/Any
IATOFIN	Initialization offset table	Provides offsets for initialization data used in non-source maintained modules.	None	None	31/Any
IATOSBM	Output service BDT manager	Handles the following requests: 1. Inquiry - Obtains the destination of the SNA/NJE work. 2. GET - Gets the SNA/NJE work to process. 3. PUT - Updates the status of the SNA/NJE work. 4. Recovery - Performs SNA/NJE recovery processing when JES3 or BDT terminate. 5. Assign - Assign valid BDT group-ids.	IATGRJR, IATOSDR, IATXOSBM macro	None	
IATOSBP	Output service BDT OSE processor	Coordinates the building of BDT OSEs for SNA/NJE network job or SYSOUT streams.	IATOSDR	IATNTDH, IATNTHI, IATOSDO	
IATOSDA	Common output service data area	Defines storage for the common output service data area. IATOSDA is not an executable module. It is a CSECT data area.	Not applicable	None	
IATOSDAF	Common output services data area - FSS	Defines storage for the common output service data area for a functional subsystem. IATOSDAF is not an executable module. It is a CSECT data area.	Not applicable	None	31/Any
IATOSDI	Disable interrupt exit (DIE) for output service and channel end appendage	Drives local printers continuously by freeing completed CCW areas and posting on PCI interrupts. It also contains a channel end appendage which posts JES3 to schedule a writer FCT entry that is waiting for local printer I/O completion.	IOS, scheduled SRB	None	31/24
IATOSDO	Output service driver OSE management routine	Performs output scheduling element (OSE) building and queuing.	IATOSBP, IATOSDR, IATOSSC	IATODDR, IATOSDA, IATUX19	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATOSDR	Output service driver	Coordinates the building, queuing, and spooling of control blocks for a SYSOUT data set. The module also contains routines to process certain JES3 executable macros. They are: IATXSPRE (IATXSPR macro), IATSMFW (IATXSMF), IATPOSE (IATXPOSE), and IATGOSE (IATXGOSE).	Dispatched by MFM (IATGRCT)	IATODDR, IATOSBP, IATOSDA, IATOSDO, IATOSSC, IATUX19, IEFUJP	31/Any
IATOSFD	Output service FSS writer driver module	Contains functions needed to support an output writer FSS address space.	IATOSFG, IATOSFM, IATOSMP, IATOSMV, IATOSWC	IATGRFS, IATOSFG, IATOSFI, IATOSFP, IATOSFR, IATOSFS, IATOSFT, IATOSMP, IATOSWC, IATOSWS	31/Any
IATOSFG	Output service FSS writer GETDS request processor	Handles GETDS requests for the FSS writer driver module, IATOSFP.	IATOSFD	IATOSFD, IATOSFP, IATOSFS, IATOSWC, IATOSWS	31/Any
IATOSFI	Output service FSS writer initialization module	Initializes a functional subsystem address space so that it can support a functional subsystem writer DSP.	IATOSFD	IATGRFS, IATOSMP	
IATOSFM	FSS writer command processor	Provides two major functions: 1. Builds a service request list (SRL) to SYNCH and/or SET the FSS supported device. 2. Implements all the valid input command parameters for FSS-supported output service writers.	IATOSMP	IATGRFS, IATOSFD, IATOSFP, IATOSWC	31/Any
IATOSFP	Output service FSS writer pipeline manager	Creates and maintains the pending data set queue (PDQ).	IATXPDQ macro	IATOSWS	31/Any
IATOSFR	Output service FSS writer RELDS request processor	Handles RELDS requests for the FSS writer driver module, IATOSFD.	IATOSFD	IATOSFP	31/Any
IATOSFS	Output service FSS printer setup processor	Insures that the FSS supported devices have the correct setup requirements to process the current data set(s).	IATOSFD, IATOSFG	None	31/Any
IATOSFT	Output service FSS writer termination module	Terminates a FSS writer, the FSA and the device it drives, and the address space that supports the FSS.	IATOSFD	IATGRFS	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATOSGR	Output service general routines	Contains the service routines required by various output service modules that do not process the OSE.	IATINFC, IATINGN, IATINR2, IATINWS, IATIQDS, IATMDBK, IATMFRN, IATMOOI, IATNTSD, IATOSGP, IATOSGR, IATOSMP, IATOSPC, IATOSPR, IATOSPS, IATOSSC, IATOSSN, IATOSWC, IATOSWD, IATOSWS, IATOSWP, IATPURG, IATRJM1, IATRJM3, IATRJM4, IATSNLC	None	31/Any
IATOSJV	Output service validation/ restart processing routine	Performs validation and restart processing for jobs that have an OUTSERV scheduler element.	IATJVDR	IATUX14	31/Any
IATOSMI	Implementation writer command	Implements all valid input commands for non-FSS writer FCTs.	IATOSMP	IATOSMP OSMPRFOR	31/Any
IATOSMP	Output service message control module	Parses and validates all input commands for all writer FCTs.	IATOSFD, IATOSFI, IATOSMV, IATOSWD	IATOSFD, IATOSFM, IATOSFP, IATOSMI, IATOSMV, IATOSSC, IATOSWC, IATOSWP	31/Any
IATOSMV	Writer command validation routine	Verifies if parameters and keywords specified in writer commands for FSS and non-FSS writers are allowed for the current state of the writers and devices.	IATOSMP	IATGRFS, IATOSFD, IATOSFP, IATOSMP, IATOSWC	31/Any
IATOSNJ	JES3 networking BSC writer	This module is a logical BSC writer which appears to JES3 as a physical device. It handles output destined for BSC/NJE nodes.	IATOSWD	IATNTCP, IATNTDH	
IATOSNT	JES3 BSC networking output packager	Packages all BSC networking output destined for a single BSC/NJE destination. It creates a new job that assumes ownership of the SYSOUT data set's spool files.	IATNTSF, IATOSWD	IATNTCP, IATNTHT	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATOSOR	Output service general routines	Contains the service routines required by various output service modules that process the OSE.	IATMOOI, IATOSPC, IATOSSO, IATOSWS	None	31/Any
IATOSPC	Output service work scheduler for process SYSOUT requests	Handles process SYSOUT requests.	IATBDCI, IATDMJA, IATGRWP, IATISDV, IATNTNR	IATOSSC	
IATOSPD	Output service process SYSOUT (PSO) DSP	Processes requests for the process SYSOUT destination queue (DSTOUTPT) on behalf of external writers, TSO users, and BDT.	Dispatched by MFM (IATGRCT)	IATGRWP	31/Any
IATOSPN	Output service punch routine	Processes all output service I/O requests for a punch-type device and supplies three services (or routines): OPEN, CLOSE, and EXCP.	IATOSWD, IATUX20, IATUX21, IATUX23	IATOSPS	31/Any
IATOSPR	Output service print request processor	Processes all output service I/O requests for a print-type device and supplies three services: OPEN, CLOSE, and EXCP. It also contains a termination routine.	IATOSPS, IATOSWD, IATUX20, IATUX21, IATUX23	IATOSPS	31/Any
IATOSPS	Output service print/ punch setup processor	Contains the output service SUPUNITS table maintenance routines. It ensures that the device in use has the correct setup requirements to process the current data set(s).	IATOSMI, IATOSPN, IATOSPR, IATOSSN, IATOSWD	IATOSPN, IATOSPR, IATOSWP, IATUX22	31/Any
IATOSRS	Output service restart GET/FREE processor	Handles building of output service restart records (OSR) and freeing them when no longer needed.	IATOSDR, IATOSFP	None	31/Any
IATOSSC	Output service work scheduler for subsystem requests	Processes subsystem requests to cancel jobs from the output queue or to schedule output writers. Also contains process mode table routines.	IATABRT, IATINCF, IATINGN, IATINR2, IATINWS, IATIQDS, IATIQOI, IATMOCP, IATMOOI, IATOSDR, IATOSMP, IATOSPC, IATOSWS, IATXOSSC, IATXPRMD macros	IATOSDO	31/Any
IATOSSD	Output service process for SYSOUT application program interface	Processes requests for the destination queue (DSTSAPI) on behalf of SYSOUT application program interface applications.	Dispatched by MFM (IATGRCT)	IATOSSO	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATOSSI	Output service spool input processor	Processes all output service I/O requests for all devices, and supplies the following services for spool I/O: 1. Open processing 2. Re-open processing 3. Note processing 4. Get processing 5. Close processing 6. Error processing	IATOSWD, IATXOSCI, IATXOSOI, IATXOSG macros	None	31/Any
IATOSSN	Output service SNA device processor	Processes all output service requests for SNA printers and punches. It also handles error returns from the SNA macros.	IATOSMP, IATOSPS, IATOSSN, IATOSWD, IATUX20, IATUX21, IATUX23	IATODSN, IATODWD, IATOSPS	31/Any
IATOSSO	Output service work scheduler for SYSOUT application program interface requests	Handles process SYSOUT application program interface requests.	IATOSSD	IATOSOR	31/Any
IATOSSR	SYSOUT application program interface driver	Services output requests from SYSOUT application program interface applications. The requests are routed to the JES3 address space from the SSI module IATSISO via SSISERV macro calls.	Dispatched by MFM (IATGRCT)	IATNTSR	31/Any
IATOSSWB	Output service SWB services	Contains SWB-related services used by various NJE and output service modules.	IATXSWBU macro	None	31/Any
IATOSWC	Output service writer control module	Starts either a hot or dynamic writer and loads and calls the appropriate module and data CSECT to drive the writer.	IATGRJR, IATOSFD, IATOSFM, IATOSFP, IATOSFT, IATOSMP, IATOSMV, IATOSWD	IATGRGU, IATOSFD, IATOSWD	31/Any
IATOSWD	Output service non-FSS writer driver	Performs output service non-FSS writer driver functions. Writers driven by this module run completely in the JES3 global address space. Controls the reading and writing of data sets from spool to a printer or punch (local or RJP), or a networking line.	IATOSWC	IATOSMP, IATOSNJ, IATOSNT, IATOSPN, IATOSPR, IATOSPS, IATOSSI, IATOSSN, IATOSWC, IATOSWP, IATOSWS	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATOSWP	Output service writer PPQ pipeline manager	Provides interface routines to synchronize the activity occurring at the channel with that occurring at the device when an output service writer is using a 3800 device in non-FSS mode. The module is divided into the writer and pending page queue manager functions.	IATIQDS, IATMOOS, IATOSMI, IATOSMP, IATOSPR, IATOSPS, IATOSWD, IATOSWP	IATODWD, IATOSPR, IATOSWD, IATOSWS	31/Any
IATOSWS	Output service work scheduler	Processes output service requests for work from the output queue, the JESTAE routines for modules IATOSWS, IATOSSC, and IATOSPC, and chained single-record file error recovery requests.	IATABRT, IATOSBM, IATOSDR, IATOSFD, IATOSFG, IATOSFP, IATOSMI, IATOSSC, IATOSWD, IATOSWP	IATOSSC	31/Any
IATPURG	Job purge routine	Returns spool tracks used by the job and removes the job from the system.	Scheduled by JSS Dispatched by MFM	None	31/Any
IATRJDV	BSC RJP driver	Contains the RJP DSP driver, RJP line manager's JESTAE exit and JESTAE retry routines. When the operator calls RJP DSP, this module gets control.	Scheduled by JSS Dispatched by MFM	IATRJM1	31/Any
IATRJGR	RJPCONS services	Contains services used by the RJPCONS FCT.	IATRJPC	None	31/Any
IATRJPC	Remote Job Processing (RJP) Message Handler	Processes messages destined for RJP work stations.	Dispatched by MFM (IATGRCT)	None	31/Any
IATRJM1	BSC RJP line manager	Contains the central routines of the RJP DSP.	IATRJDV	IATCNRM, IATRJM2, IATRJM3, IATRJM4, IATRJSN	31/Any
IATRJM2	RTAM access routines	Contains the remote terminal access method (RTAM); functions as the RJP, OPEN, GET, PUT, and CLOSE processor.	IATGROP, IATRJM1	IATRJM3, IATRJM4	31/Any
IATRJM3	RJP RTAM subroutines	Contains the line manager and RTAM subroutines.	IATRJM1, IATRJM2	IATRJM4	31/Any
IATRJM4	RJP line manager subroutine module	Contains the line manager subroutines.	IATRJM1, IATRJM2, IATRJM3	None	31/Any
IATRJM5	BSC RJP data CSECT	Contains the RJP data CSECT and STARTIO exits.	STARTIO	None	31/Any
IATRJM6	BSC RJP subroutine	Contains a group of subroutines used by BSC RJP.	IATRJM1, IATRJM2, IATRJM3, IATRJM4, IATRJM6, IATRJDV	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATRJSN	BSC RJP channel end buffer snap DSP	Supports the RJP channel-end buffer snap facility.	IATRJM1	None	31/Any
IATSIAD	JES3 SSI allocation/deallocation routines	Performs allocation and deallocation for all SYSIN and SYSOUT data sets. It also contains an entry point to GETMAIN or FREEMAIN the DSB and DSS control blocks.	IATDMEB, IATDMFR, IATDMGR, IATDMIT, IATSIEM	IATDMDM, IATDMEB,	31/Any
IATSAI	Subsystem interface routine	Performs allocation related to SSI initialization for common allocation, common/dynamic unallocation, change ddname, change ENQ using attribute and early volume release SSI modules.	IATSICA, IATSIDD, IATSINQ, IATSIVR	None	31/Any
IATSIBD	MVS/BDT subsystem interface routine	Locates, validates, and completes the subsystem interface data area (BSID) that is created to represent a request for MVS/BDT services (a transaction or command). It then passes the BSID to the global JES3 processor.	BDTSSBDT	IATBDCI	31/Any
IATSIBS	Step initiation subsystem interface module	Serves the SSI request for step initiation. The step name, procedure step name (procstepname) and step number are saved in the MEMENTRY and sent to the global processor.	IEFSSREQ macro	None	31/Any
IATSICA	Subsystem interface routines	Consists of three MVS-JES3 subsystem interface routines that support common allocation, dynamic allocation, and common/dynamic unallocation.	IEFSSREQ macro	IATDMEB, IATUX32, IEFAB49C, IEFGB4UV, IATSAI	31/Any
IATSICC	JES3 close/checkpoint SSI routines	Provides close and checkpoint service for all SYSIN and SYSOUT data sets.	IEFSSREQ macro	IATDMEB, IATDMUB	31/24
IATSICD	FSS/FSA connect/disconnect subsystem	Provides the FSS and FSA connect and disconnect functions.	IEFSSREQ macro	IATFCTR, IATFPCC, IATIIFC, IATSSCM, IATFPDD attaches IATFCLT	31/Any
IATSICF	Task failure subsystem interface module	Serves the started task failure subsystem interface by passing failing task information to the generalized main scheduler (GMS).	IEFSSREQ macro	IATSSCM	31/Any
IATSICN	TSO cancel command processor	Interfaces with the global JES3 memory via subsystem services to process TSO user cancel command requests.	IEFJSREQ macro	IATSSCM	31/Any
IATSIDD	Subsystem interface routine	Serves the change ddname request.	IEFDB4FB macro	IATSAI	31/Any
IATSIDR	JES3 DDR function support module	Consists of three MVS-JES3 subsystem routines that support the dynamic device reconfiguration (DDR) functions of candidate selection, candidate verification, and swap completion.	IEFSSREQ macro	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATSIEM	Subsystem interface routine for job end of memory	Cleans up common storage JES3 control blocks at JES3 memory termination and handles all end-of-memory calls.	IEFSSREQ macro	IATSIAD, IATSIJS, IATSSCM, IEAVG700	31/Any
IATSIES	Enhanced status subsystem interface	Processes TSO generic resource requests.	IEFSSREQ macro	None	31/Any
IATSIJS	Job processing subsystem interface module	Services SSI requests for job select, job termination, job requeue, end-of-task, request job ID, and return job ID.	IEFJSREQ macro IATSIEM	IATSSCM, IEFIB600	31/Any
IATSINU	Notify the user of a SSI routine	Provides the user with a message from the SSI routine.	SSI	None	31/Any
IATSINQ	Subsystem interface routine	Services the change ENQ use attribute request.	IEFGB4DC macro	IATSIAI	31/Any
IATSIOD	Output SWB processing routines	Provides SSI SYSOUT routines access to the output descriptors associated with a given SYSOUT data set.	IATSIAD, IATSIJS, IATSIOD, IAISIOR	None	31/Any
IATSIOP	TSO subsystem interface output processor	Processes TSO user output command requests and external writer SYSOUT data set selection requests.	IEFSSREQ macro	None	31/Any
IATSIOR	JES3 open and restart SSI routines	This module provides open, internal reader reopen, and restart service for all SYSIN and SYSOUT data sets.	IATDMDM, IATDMEB	IATDMDS, IATDMEB	31/Any
IATSIPJ	ARM SSI Support	Processes requests from Automatic Restart Management (ARM) component of MVS.	ARM via the SSI	None	31/Any
IATSISA	JES3 spool access facility	Allows a system component to access information on the JES3 spool. Provides the following functions: <ul style="list-style-type: none"> • Read information from spool (READ). • Write information to a new or existing dataset on spool (WRITE). • Release buffers containing data read from spool (RELEASE). 	IEFJSREQ macro, SMS routines	IATDMDM, IATDMGR	31/Any
IATSISO	SYSOUT application program interface subsystem interface	Processes SYSOUT application program interface data set.	IEFSSREQ macro	None	31/Any
IATSIVI	Subsystem version information	IATSIVI processes SSI Function Code 54, the Subsystem version information SSI call. It provides callers both installation defined and JES3 defined information (such as NODE name or JES3 release level) that seldom changes (for instance, this information changes during a warm start).	IEFJSREQ macro	None.	31/Any
IATSIST	SSI module for TSO status	Services job status requests from TSO users.	IEFJSREQ macro	IATSSCM	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATSIVL	SSI SYSOUT device name validation module	Interfaces with the global JES3 memory to validate the SYSOUT device name passed the caller in the SSOB (SSUSUSER).	IEFJSREQ macro	None	31/Any
IATSIVR	Subsystem interface routine	Serves the Early Volume Release Request.	IFG0194J	IATSIAM	31/Any
IATSIWO	WTO/WTOR (SVC 35) and WTL (SVC 36) interface	Processes WTO/WTOR and WTL for the subsystem interface.	IEFSSREQ macro	IATUX57	31/Any
IATSI34	SVC 34 subsystem interface	Examines input commands issued via SVC34 to determine JES3 and/or MCS processing.	IEFSSREQ macro	None	31/Any
IATSNDA	VTAM return and feedback analysis routine	Analyzes VTAM return and feedback codes. Formats and issues appropriate messages and, if the error is severe enough, initiates the termination of a session.	IATXERCK macro	IATSNDE	31/24
IATSNDC	Work station close routine	Processes requests to close a remote reader, writer, or console.	IATXWSCL macro, IATCNRM, IATGRGU, IATISRL	IATSNDE, IATSNDM	31/Any
IATSNDD	DFASY exit routine	Schedules this exit via VTAM whenever a signal or request shutdown is sent in from a work station.	VTAM	IATSNDE	31/Any
IATSNDE	Session activity termination routines	Terminates or clears a session between JES3 and a secondary LU at a work station and resets the work station	IATXTRMT macro, IATSNDA, IATSNDC, IATSNDD, IATSNDF, IATSNDM, IATSNDO, IATSNDR, IATSNV, IATSNLC, IATSNLD, IATSNLS	IATSNDT	31/Any
IATSNDF	FRR routine	Handles abends under SNA RJP SRBs.	Invoked by MVS recovery termination	IATSNDE, IATSNDM	31/Any
IATSNDG	RU GET service routine	Returns a received RU to the deblock routine.	IATSNFI, IATXRUGT macro	IATSNDT	31/Any
IATSNDM	State manager	Updates session states due to protocols or session interruptions.	IATSNDC, IATSNDF, IATSNDG, IATSNND, IATSNDO, IATSNDR, IATXSMGR macro	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATSNDN	Negative response routine	Sends a negative response (-R).	IATSNFI	IATSNDM, IATSNDT, IATSNLO	31/Any
IATSND0	Work station open routine	Processes requests to open a remote reader, writer, or console.	IATXWOPN macro, IATCNRM, IATISRI, IATOSSN	IATSNDM	31/Any
IATSNDP	RU PUT service routine	Allocates an RU for the block routine and initiates sending RUs to a work station.	IATSNFO	IATSNDM, IATSNDT	31/Any
IATSNDR	Response exit routine	Handles all positive and negative responses (+R, -R) from the work station.	Scheduled by VTAM	IATSNDM	31/Any
IATSNDS	Send exit routine	Checks the RUs sent by IATSNDU for errors and determines if the writer DSP should be posted.	Scheduled by VTAM	IATSNDU	31/Any
IATSNDT	Session restart routine	Restarts SNA RJP session I/O activity when no VTAM SEND/RECEIVE request is outstanding. It also restarts and alerts session users at end-of-chain and between-bracket states.	IATXRST macro, IATSNDDE, IATSNDG, IATSNDM, IATSNDN, IATSNDP, IATSNDV, IATSNLD	IATSNDNA, IATSNDU, IATSNSG	31/Any
IATSNDU	SNA RJP output routine	Issues VTAM sends for data.	IATSNDT, IATSNDS	None	31/Any
IATSNDV	Receive VTAM input routine	Receives data from VTAM.	Scheduled by VTAM	IATSNDM	31/Any
IATSNFI	Function management (inbound) routine	Deblocks RUs transmitted from SNA RJP work station LUs into console commands or card records.	IATXLRGT macro, IATSNDLO	IATSNDG, IATSNDN, IATSNDPI	31/Any
IATSNDFO	Function management (outbound) routine	Blocks console messages or print/punch records into RUs for transmission to SNA RJP work station LUs.	IATXLRPT macro, IATCNRM, IATOSSN	IATSNDP, IATSNDPO	31/Any
IATSNL	SNA RJP data CSECT module	Constitutes the data CSECT for the SNARJP DSP.	Not applicable	None	31/24
IATSNLB	Build control block routine	Builds work station control blocks and session control blocks as a result of a LOGON request from the work station or as a result of an automatic LOGON request at SNARJP DSP initialization time.	IATSNLD	IATSNLD, IATSNLM	31/Any
IATSNLC	Cancel processing routine	Performs work station or DSP cancel functions including control block FREEMAIN.	IATSNLD, IATSNDLO	IATSNDDE, IATSNLD, IATSNDLO	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATSNLD	SNA RJP main driver module	Receives control initially as a result of an *CALL SNARJP command. It is the main SNA RJP driver module responsible for SNARJP DSP initialization and for dispatching routines in the SNA RJP component to perform various functions (such as building control blocks, returning to JSS, processing operator commands, and removing control blocks).	*CALL SNARJP command, IATSNLB, IATSNLC	IATSNLB, IATSNLC, IATSNLO, IATSNLS	31/Any
IATSNLM	SNA message routine	Sends messages for SRBs, IRBs, and DSPs.	IATXSNM macro, IATSNDD, IATSNDF, IATSNDR, IATSNDV, IATSNLB, IATSNLC, IATSNLD, IATSNLO, IATSNLS	None	31/Any
IATSNLO	SNA DSP console queue and work queue processor	Handles operator commands and processes requests from SRBs and IRBs to perform specific functions.	IATSNND, IATSNLC, IATSNLD, JES3 console services	IATCNRM, IATSNDC, IATSNDO, IATSNFL	31/Any
IATSNLS	SNA RJP subtask	Opens/closes the access method control block (ACB) and contains many of the VTAM exit routines.	Scheduled by VTAM or MVS	IATSNDE, IATSNDT	31/24
IATSNPI	Presentation services (inbound) routines	Performs decompression, or ASCII to EBCDIC translation, of input data from an SNA RJP work station LU.	IATSNFI	None	31/Any
IATSNPO	Presentation services (outbound) routines	Performs compression/compaction, or EBCDIC to ASCII translation, of output data to an SNA RJP work station LU.	IATSNFO	None	31/Any
IATSNSG	Storage GET routine	Gets a save area.	IATXGSV macro, IATSNDA, IATSNDC, IATSNDD, IATSNDE, IATSNDF, IATSNDM, IATSNND, IATSNDO, IATSNDR, IATSNDS, IATSNDT, IATSNDU, IATSNDV, IATSNLM, IATSNLO	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATSSCK	Subsystem communications staging area checkpoint module	Checkpoints all destination queue staging areas during JES3 termination.	IATABMN	None	31/Any
IATSSCM	Subsystem communication services	Processes JES3-to-JES3 and JES3-to-user communication.	SSISERV macro, IATSSJS	IATMFSI	31/Any
IATSSDQ	SSICS destination routing queue	Contains the destination routing table.	Not applicable	None	31/Any
IATSSDS	Subsystem communications destination queue services	Contains the service routines for the DLOCON, DLOCOFF and DSQLOC macros. These routines interface with JESXCF services to manage JESXCF mailboxes and retrieve messages for JES3 functions.	DLOCON, DLOCOFF AND DSQLOC macros; IATSSRN	None	31/Any
IATSSJM	JESMSG Offload Services	Message handling routines in a user address space	IATSIWO	None	31/Any
IATSSJS	JSERV to SSISERV conversion module	Converts parameters from a JSERV macro to those required by the SSISERV macro and then issues the SSISERV macro.	JSERV macro	IATSSCM	31/Any
IATSSRE	JES3 subsystem communications read-read end module	Passes the communication request to the receiver within the target address space. The receiver could be JES3 or any user address space.	IATSSCM,	None	31/Any
IATSSRN	Subsystem communications subroutines	Assists initialization and connect routines in their common processing.	IATINM3, IATMSR1	None	31/Any
IATSSVT	Subsystem vector table for JES3	Contains the JES3 subsystem vector table (SSVT), which resides in CSA and contains subsystem interface routine addresses and data.	Not applicable	None	31/24
IATUTCB	CBPRNT module	Produces a formatted listing of specified JES3 and MVS control blocks.	Scheduled by JSS; IATUTDC	IATUTC2	31/Any
IATUTC2	MVS control block formatting routine	Formats and prints the MVS control blocks.	IATUTCB	None	31/Any
IATUTDA	Dump core (DC) data CSECT	Constitutes the data CSECT for modules running under the dump core (DC) FCT. It contains data and work areas for dump core modules.	Not applicable	None	31/Any
IATUTDC	Dump core (DC) debugging utility	Initializes the dump core (DC) DSP and parses the *CALL,DC command.	Scheduled by JSS and dispatched by MFM, IATUTD0, IATUTD1, IATUTD2	IATUTD0	31/Any
IATUTD0	Dump core (DC) debugging utility command processor	Processes the *START, *RESTART, and *CANCEL commands. Also contains the dump core (DC) trap routine.	IATGRVT, IATUTDC	IATABN0, IATUTDC, IATUTD1, IATUTD2	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATUTD1	Dump core (DC) debugging utility control block formatting routine	Interfaces with the JES3 ABEND formatting routine and the CBPRNT DSP.	ABEND formatters, IATUTD0	IATABN0, IATUTCB, IATUTDC	31/Any
IATUTD2	Dump core (DC) debugging utility debug functions	Performs debugging functions such as displaying or altering storage, setting traps, and finding JES3 module entry points.	IATUTD0	IATUTDC	31/Any
IATUTDD	Dependent job net status report DSP (DISPDJC)	Contains the display-dependent job control program, which is designed to give a report on the status of a dependent job net on a printer.	Scheduled by JSS and dispatched by MFM (IATGRCT)	None	31/Any
IATUTDS	Display DSP	Displays information pertaining to one or all of the jobs in the system on the calling console or places it in a print data set.	Scheduled by JSS and dispatched by MFM (IATGRCT)	None	31/Any
IATUTIC	Iteration counter DSP	Counts the number of times an entry is made to those JES3 routines whose entry addresses are located in the TVT between TVTEPS and TVTEPE. The counters may be displayed.	*X IC command	None	31/Any
IATUTICP	*S,DC,OPTION= ICP command processor	Formats the initialization Checkpoint Record created during initialization	IATUTD0	IATUTD1 (format and print routine)	31/Any
IATUTIS	JES3 initialization stream checker	Performs a syntax check of an initialization stream under a running system (BATCH or TSO).	Not applicable	JES3 nucleus (IATNUC), all JES3 initialization routines (IATINxx) except for spool I/O initialization routines	31/24
IATUTITX	*S,DC,OPTION= ITX command processor	Formats the intermediate text created during initialization.	IATUTD0	IATUTD1 (format and print routine)	31/Any
IATUTJCC	Copy checkpoint data set	Update checkpoint information and write it to the new checkpoint data set.	IATUTJCT	IATUTJSD, IATUTJUC, IATXCKPT macro	31/24
IATUTJCI	IATUTJCT JCT CCW initialization	Initializes CCWs for old and new JCT data sets.	IATUTJEE	None	31/24
IATUTJCJ	IATUTJCT copy JCT driver	Drives the copying and migration (if specified) of JCT entries from the old JCT data set to the new JCT data set.	IATUTJCT	IATUTJGT, IATUTJPT	31/24

Module Name	Function Name	Description	Called By	Calls	Attributes
IATUTJDD	IATUTJCT DD handling module	Processes DD statements for the IATUTJCT utility.	IATUTJEE	IATUTJEX	31/24
IATUTJEE	IATUTJCT establish environment	Establishes and validates the operating environment of IATUTJCT.	IATUTJCT	IATUTJDD, IATUTJCI, IATXCKPT macro	31/24
IATUTJEX	IATUTJCT EXCP module	Issues the EXCP to read from or write to a JCT data set.	IATUTJDD, IATUTJGT, IATUTJPT	None	31/24
IATUTJGT	IATUTJCT JCT get routine	Gets a JCT entry from the old JCT data set.	IATUTJCT	IATUTJEX	31/24
IATUTJPT	IATUTJCT JCT put routine	Puts a JCT entry into the new JCT data set.	IATUTJCT	IATUTJEX	31/24
IATUTJRC	IATUTJCT recovery module	Provides ABEND recovery for the IATUTJCT utility.	MVS recovery termination manager	None	31/24
IATUTJSD	IATUTJCT switch DD routine	Switches checkpoint data set DD definitions for the checkpoint access method.	IATUTJCC	None	31/24
IATUTJUC	IATUTJCT update checkpoint routine	Updates the JES3 checkpoint records to reflect information in the new JCT data set.	IATUTJCC	None	31/24
IATUTSDA	*S,DC,OPTION= SDA command processor	Formats the Statistics Data Area.	IATUTD0	IATUTD1 (format and print routine)	31/Any
IATUTSTT	*S,DC,OPTION= STT command processor	Reports information on the spool records that reside in the single track table (STT).	IATUTD0	None	31/Any
IATUX03	C/I internal text installation exit	Provides the user with the internal text created from the JCL input.	IATIICX	None	31/Any
IATUX04	Prescan job information installation exit	Provides the user with job information passed to the prescan phase by the compatibility modules; on completion, the user may continue the job normally or have it fail.	IATIIPR	None	31/Any
IATUX05	Prescan step installation exit	Provides the user with step information passed to the prescan phase by the compatibility modules; on completion, the user may continue the job normally or have it fail.	IATIIPR	None	31/Any
IATUX06	Prescan DD installation exit	Provides the user with DD information passed to the prescan phase by the compatibility modules; on completion, the user may continue the job normally or have it fail.	IATIIPR	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATUX07	C/I locate installation exit	Allows the user to supply unit and volume serial information to C/I service in the event that a locate attempt fails because the data set name is not found.	IATIIP0X	None	31/Any
IATUX08	C/I setup installation exit 1	Taken whenever job setup has been either specified or defaulted. The user is provided with the number of units required for job setup and has the option of: <ul style="list-style-type: none"> • Allowing the job to continue under job setup. • Cancelling the job. • Requesting that the job be processed for high-watermark setup in order to reduce the number of units required for job execution. 	IATIIPN	None	31/Any
IATUX09	C/I setup installation exit 2	Allows the user the opportunity to examine the setup results of interpreter service and either allow the job to continue or fail it before interpreter service returns to JSS.	IATIIDR	None	31/Any
IATUX10	C/I JESMSG installation exit	Allows the user to generate a message to the JESMSG data set pertaining to the status of another installation exit within the interpreter DSP.	IATIIMS	None	31/Any
IATUX11	C/I locate response installation exit	Enables the user to determine whether or not to write a locate request or its associated response (or both or neither) to the JESMSG data set.	IATIIP0X	None	31/Any
IATUX14	Job validation/restart installation exit	Enables the user to validate fields in IBM spool control blocks.	IATDMJV, IATIJV, IATINJV, IATJVDR, IATMDJV, IATOSJV	None	31/Any
IATUX15	Initialization statement scan installation exit	Allows the user to assume control immediately after each initialization statement is read. Return codes then determine further processing or the disposition of the statements.	IATINGS, IATINRN	None	31/Any
IATUX17	DSP names installation exit	Permits the definition of a string of 8-character DSP names to be used in creating the initial set of scheduler elements for each job.	IATISJB	None	31/Any
IATUX18	Input command modification and validation installation exit	Allows the user to modify an input command and to validate the authority of the command.	IATCNIA	None	31/Any
IATUX19	OSE modification installation exit	Allows the user to modify the OSE.	IATOSDO, IATOSDR	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATUX20	Job header page generation installation exit	Generates the header page and specifies the job name, job number, device name, and device type.	IATOSPN, IATOSPR	None	31/Any
IATUX21	Data set header record generation installation exit	Writes cards and data set header pages containing fully qualified data set names, SYSOUT classes, and priorities.	IATOSPN, IATOSPR	None	31/Any
IATUX22	Forms alignment installation exit	Permits the user to verify forms alignment on the 3211 printer.	IATOSPS	None	31/Any
IATUX23	Job trailer record generation installation exit	Generates the trailer page containing job number, and job end.	IATOSPN, IATOSPR	None	31/Any
IATUX24	NET ID examination installation exit	Provides installation exit module input service processing at the time a DJC net device request is found on a <code>/**NET</code> control statement. It gives the user an opportunity to examine the NET ID and the devices requested.	IATISNT	None	31/Any
IATUX25	Nonstandard label installation exit	Provides the user with an opportunity to verify nonstandard label tape volumes.	IATLVVR	None	31/Any
IATUX26	SWA installation exit	Permits the user to scan all MVS scheduler control blocks before they are written to the scheduler work area (SWA) for the initiator. The user has the opportunity of examining data before processing continues. On completion, the user has the option of continuing normally or having the job fail.	IATIIII	None	31/24
IATUX27	*CALL DSP installation exit	Allows processing or altering of the JDAB, JCT, or JMR (particularly job accounting information) when a DSP is called.	IATGRCD, IATISCD	None	31/Any
IATUX28	Input service installation exit	Allows the user access to the JOB statement prior to the processing of a job by input service.	IATISJB	None	31/Any
IATUX29	Input service job control block installation exit	Allows the user access to the completed job control table (JCT), job description accounting block (JDAB), and job management record (JMR). It permits the user to decide whether to accept or flush the job.	IATISEN	None	31/Any
IATUX30	MVS/TSO authorization installation exit	Performs the MVS/TSO STATUS, CANCEL, and OUTPUT authorization checking.	IATGRWP, IATGRWQ	None	31/Any
IATUX32	DYNALDSN override installation exit	Allows the user to override the DYNALDSN statement for any dynamic allocation.	IATSICA	None	31/Any
IATUX33	JES3 control statement installation exit	Allows verification, modification, and addition of JES3 control statement parameters.	IATISLG	None	31/Any
IATUX34	JCL control statement installation exit	Allows verification, modification, and addition of JCL control statement parameters.	IATISLG	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATUX35	Console network command validation installation exit	Allows the local installation to perform its own validity checks on incoming network commands. The exit is entered at the receiving node.	IATCENNJ	None	31/Any
IATUX36	Network JMR accounting information installation exit	Allows the user to fill in the job management record (JMR) fields reserved for local accounting information from the fields in the first segment of the job header. The exit is entered at the receiving node.	IATNTJS	None	31/Any
IATUX37	Network local data set headers installation exit	Allows the user to modify data set headers for data sets that are processed locally. The exit is entered at the receiving node.	IATNTJS	None	31/Any
IATUX38	Network local SYSOUT class installation exit	Allows the user to process SYSOUT classes for SYSOUT data sets that are processed locally. The exit is entered at the receiving node.	IATNTSF	None	31/Any
IATUX39	Output service network data set header installation exit	Allows the user to modify the data set header of a SYSOUT data set before JES3 or MVS/BDT transmits the data set. The exit is entered at the transmitting node.	IATNTDH	None	31/Any
IATUX40	Network job stream job header modification	Allows the user to modify the job header fields that accompany a network job to the execution node. The exit is entered at the transmitting node from IATISNJ or at the middle node for a store-and-forward network job from IATNTHT if the next node is SNA/NJE.	IATISNJ, IATNTHT	None	31/Any
IATUX41	Converter interpreter job JCL statements installation exit	Allows the user to cancel a job or ignore the job limit for a job. This exit is entered at the end of conversion processing whenever the job JCL statement count is greater than the job limit.	IATIIST	None	31/Any
IATUX42	Incoming NETDATA files validation installation exit	Allows the user to validate incoming NETDATA files and to specify the JES3 system to which target user notification is sent. The exit is entered at the receiving node.	IATNTSF	None	31/Any
IATUX43	Network SYSOUT stream job header modification	Allows the user to modify the job header before the job is spooled. The exit is entered at the transmitting node or at the middle node for a store-and-forward network job if the next node is SNA/NJE.	IATNTHT	None	31/Any
IATUX44	Scheduler output JCL facility/other JCL statements installation exit	Allows the user to modify (add, change, delete) JES3 control statement information.	IATISLG	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATUX45	FSS writer GETDS service request list modification installation exit	Gives the user access to the complete service request list, the job header, trailer information, and data set header information in the JSPA, the JMR, and data set characteristics, and returns the completed GETDS service request list to the FSS writer DSP to return to the FSS for the FSA making the GETDS request.	IATOSFG	None	31/Any
IATUX46	C/I scheduling eligibility installation exit	Allows the user to select the main processor for C/I scheduling. It also allows the user to indicate whether the job can be scheduled for C/I in the JES3 global address space.	IATIICS	None	31/Any
IATUX48	Output service modify installation exit	Allows the user to accept, reject, or alter the modification of an OSE while it is being processed.	IATMOOI	None	31/Any
IATUX49	C/I scheduling address space selection installation exit	Allows the user to accept or reject an address space (either JES3 global or a C/I FSS) when it has been selected for C/I processing.	IATIICS	None	31/Any
IATUX50	Process user defined BSID code	Allows the user to process user defined BSIDMOD codes.	IATBDCI	None	31/Any
IATUX57	WTO with multiple routing codes installation exit	Allows the installation to select a single routing code for processing by IATSIWO when a WTO with multiple routing codes is encountered.	IATSIWO	None	31/Any
IATUX61	MDS error queue installation exit	Determines if a job should go to the MDS error queue or be cancelled.	IATMDSB	None	31/Any
IATUX62	MDS verify installation exit	Gives the user the choice of accepting JES3's decision or using the installation's criteria to determine if a tape or DASD mount is valid.	IATMDVE	None	31/Any
IATUX63	SSI 54 (Subsystem version) installation string	Provides the ability for an installation to define an information string to pass back to the callers of SSI 54.	IATINIT	None	31/Any
IATUX69	WTO SSI Message Exit	Allows a message to be examined and sent to the global JES3 address space for additional processing.	IATSIWO	None	31/Any
IATUX70	JES3 global address space message exit	Receives message sent by installation exit 69.	IATCNSV	None	31/Any

Module Name	Function Name	Description	Called By	Calls	Attributes
IATUX71	Setup message modification exit	This exit allows the user to modify one of the following JES3 setup messages: IAT5110, IAT5210, IAT5410, or IAT5420. This exit may supply either a 1-6 character string to replace the VOLSER in the message, or a 1-13 character string to be appended to the message. In addition, this exit can be used to return a 1-6 character string to be passed to the MSGDISP service in place of the VOLSER.	IATMDSB	None	31/Any
IATUX72	OSE modification exit	Allows the installation to modify an OSE when it is built or when SYSOUT is moved from the hold queue to the writer queue.	IATMOO1, IATOSDO, IATOSPC, IATOSSO	None	31/Any
IATWAN	AN train translate table	Contains the AN image translate table.	Not applicable	None	31/Any
IATWGN	GN train translate table	Contains the GN UCS trace translate table.	Not applicable	None	31/Any
IATWHN	HN train translate table	Contains the HN UCS image translate table.	Not applicable	None	31/Any
IATWPCAN	PCAN train translate table	Contains the PCAN UCS image translate table.	Not applicable	None	31/Any
IATWPCHN	Image translate table	Contains the PCHN UCS image translate table.	Not applicable	None	31/Any
IATWPN	PN train translate table	Contains the PN UCS image translate table.	Not applicable	None	31/Any
IATWQN	Image translate table	Contains the QN UCS image translate table.	Not applicable	None	31/Any
IATWQNC	QNC train translate table	Contains the QNC UCS image translate table.	Not applicable	None	31/Any
IATWRN	RN train translate table	Contains the RN UCS image translate table.	Not applicable	None	31/Any
IATWSN	SN train translate table	Contains the SN UCS image translate table.	Not applicable	None	31/Any
IATWTN	TN train translate table	Contains the TN UCS image translate table.	Not applicable	None	31/Any
IATWXN	XN train translate table	Contains the XN UCS image translate table.	Not applicable	None	31/Any
IATWYN	YN train translate table	Contains the YN UCS image translate table.	Not applicable	None	31/Any

Chapter 4. JES3 Data Area Summary

This section contains a diagram which illustrates the chaining of JES3 data areas for a particular functional area. It also describes each JES3 data area as follows:

- Identifies the macro's location as being in virtual storage below 16 megabytes, when it is
- Gives the macro's common name describes the control block macro type as follows:
 - blank** resident block
 - SPOOL** spool record
 - ISR** intermediate spool record
 - CKPT** checkpoint record
 - STA** staging area data
- Summarizes the function of the macro

Control Block Chaining

This section illustrates the logical relationships of the major JES3 data areas.

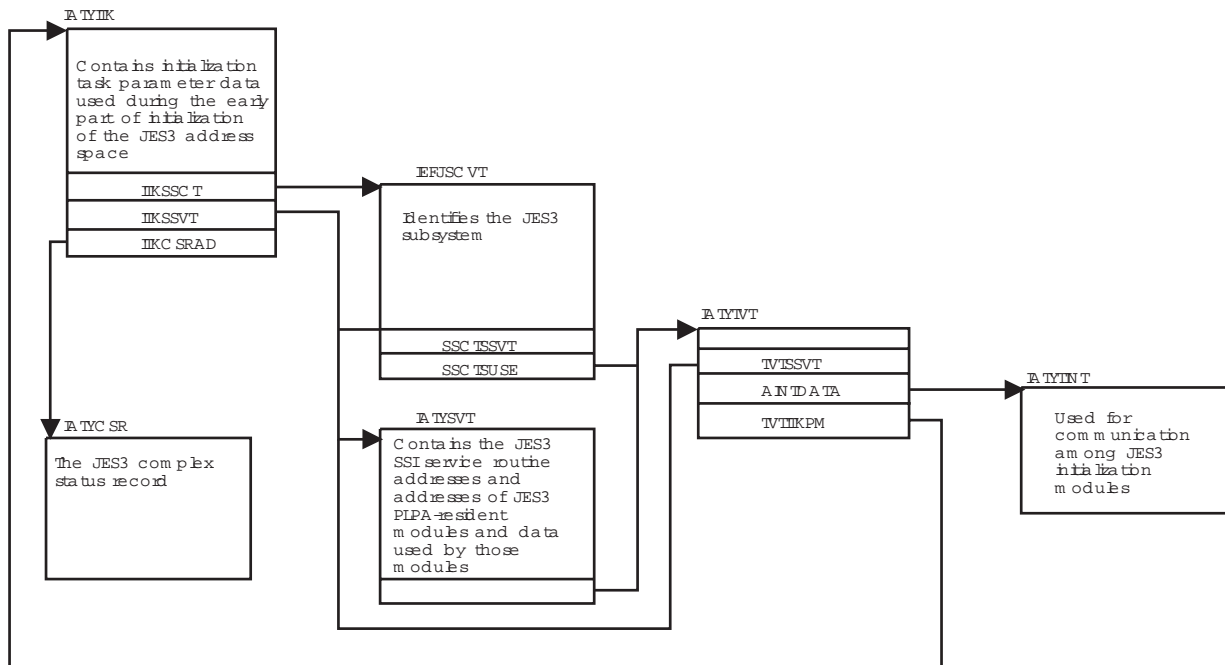
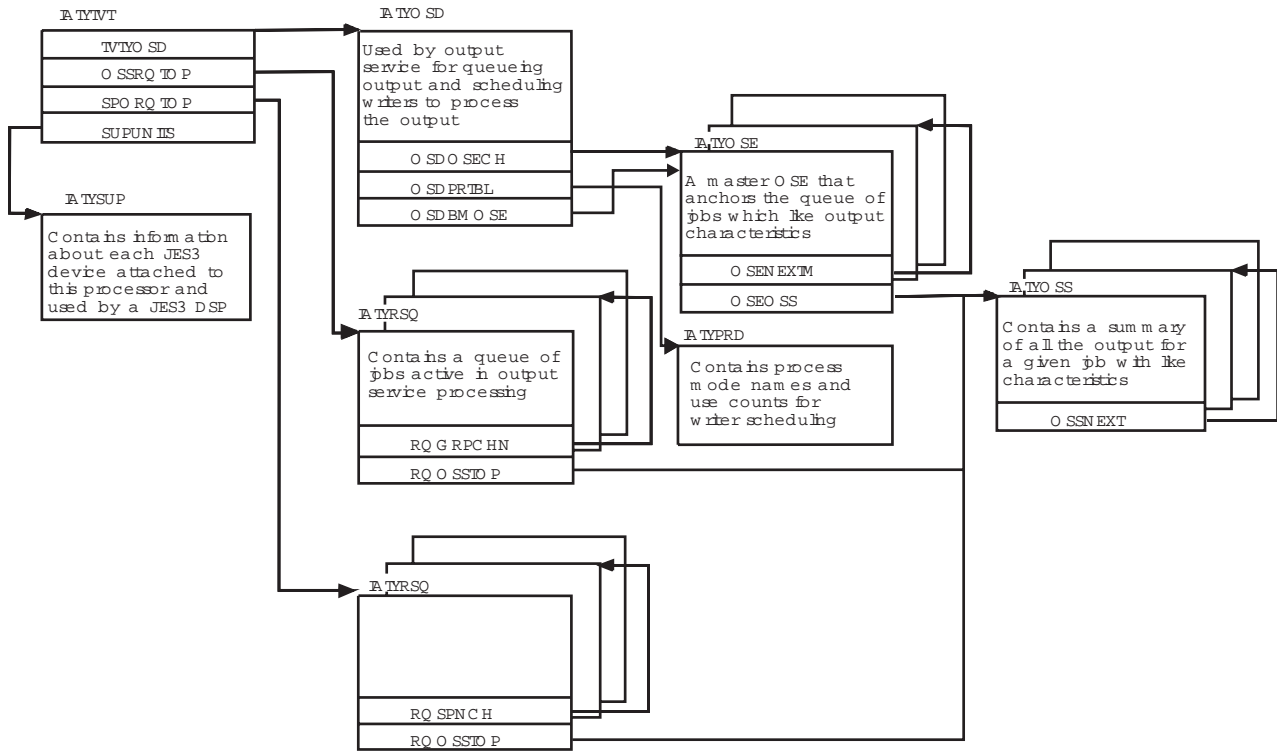


Figure 2. Initialization Control Block Chaining



Note: OSDBMOSE is used for BDT work; OSD O SECH is used for all other output service work.

Figure 3. Output Service Control Block Chaining

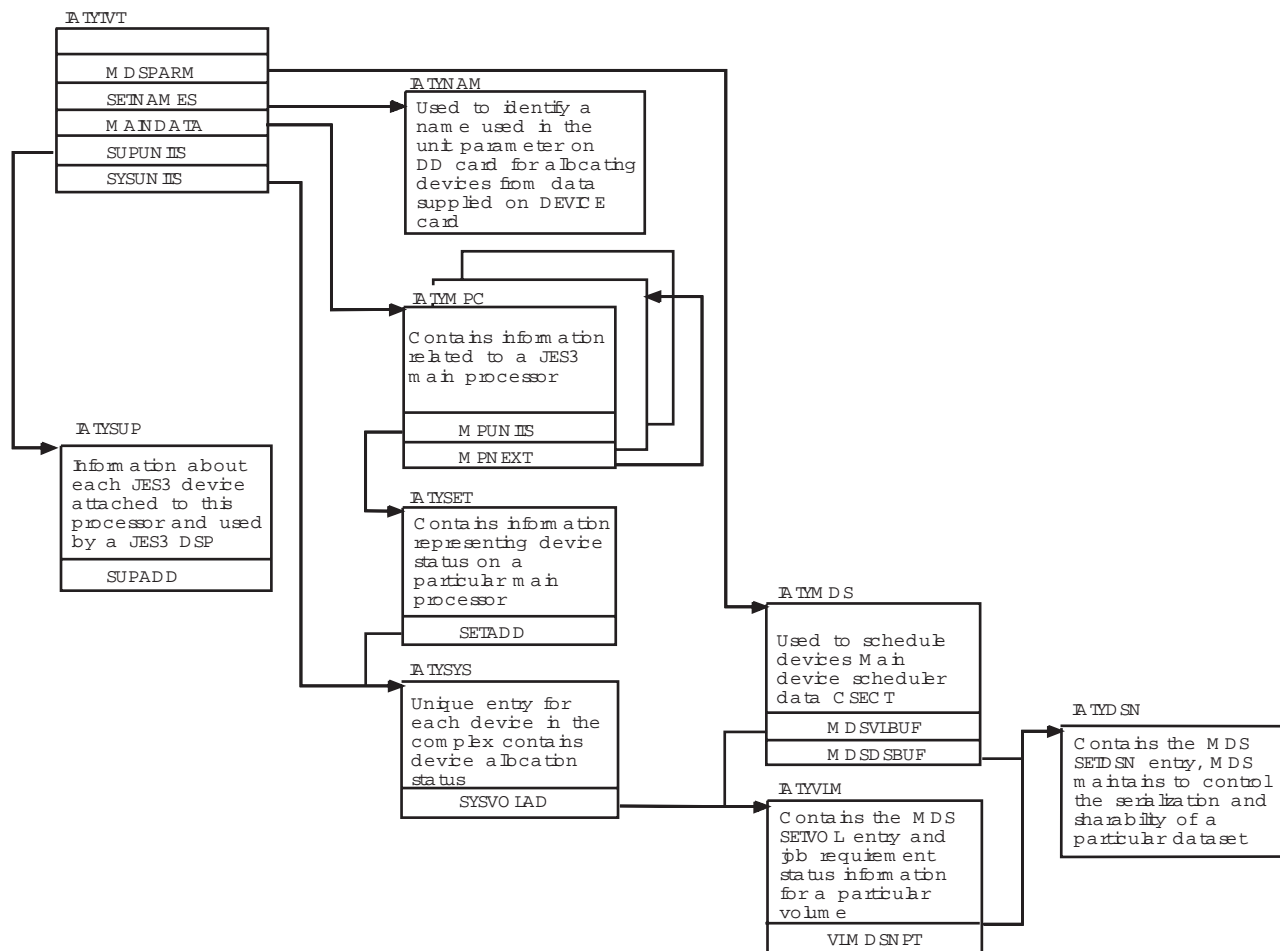


Figure 4. Setup Control Block Chaining

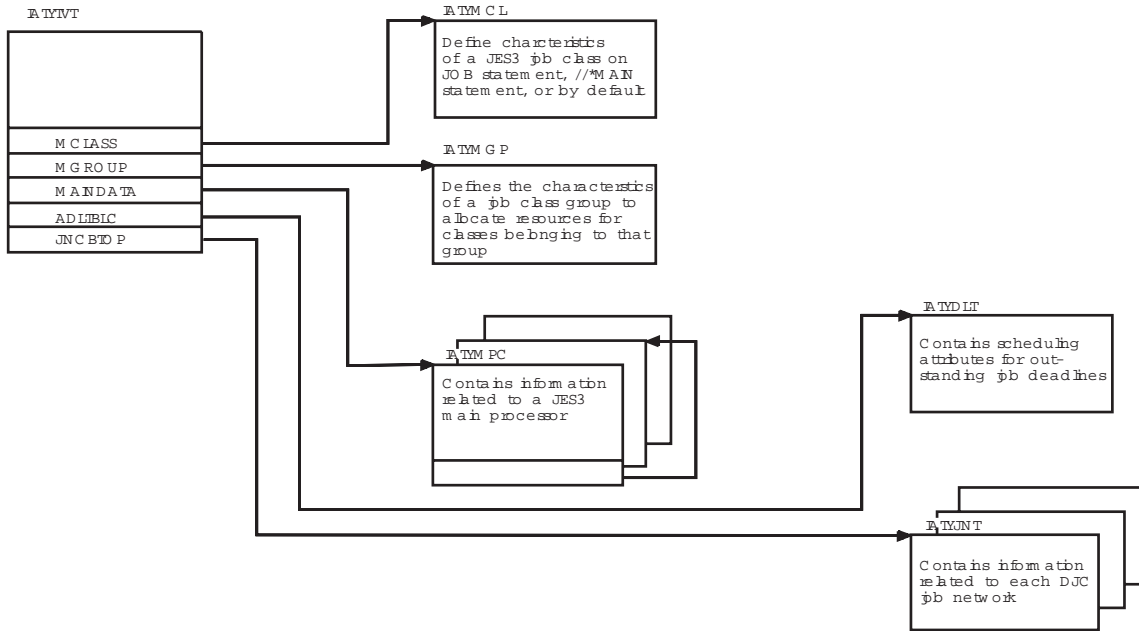


Figure 5. Job Scheduling Control Block Chaining

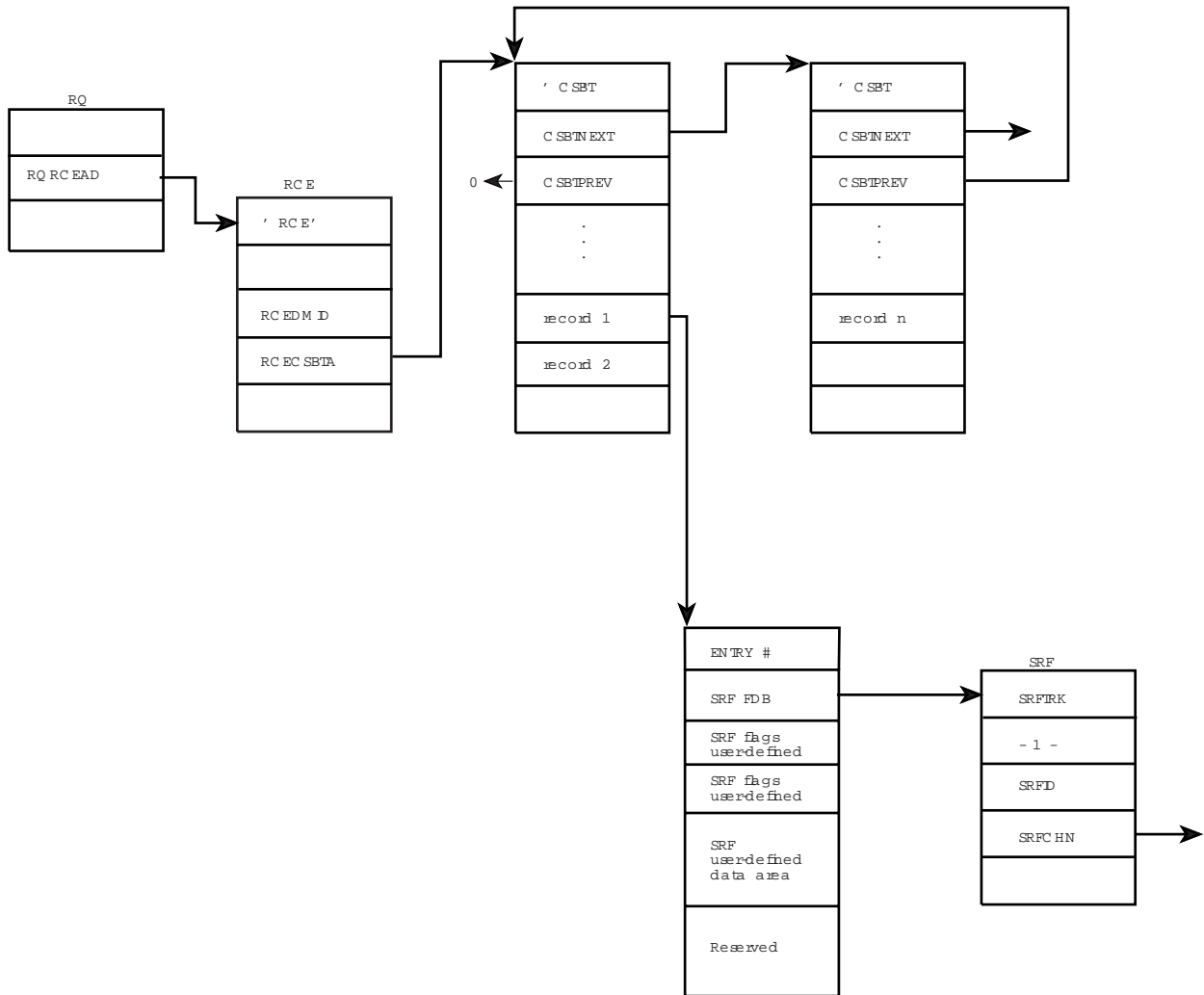


Figure 6. Chained Single Record File Control Block Chaining

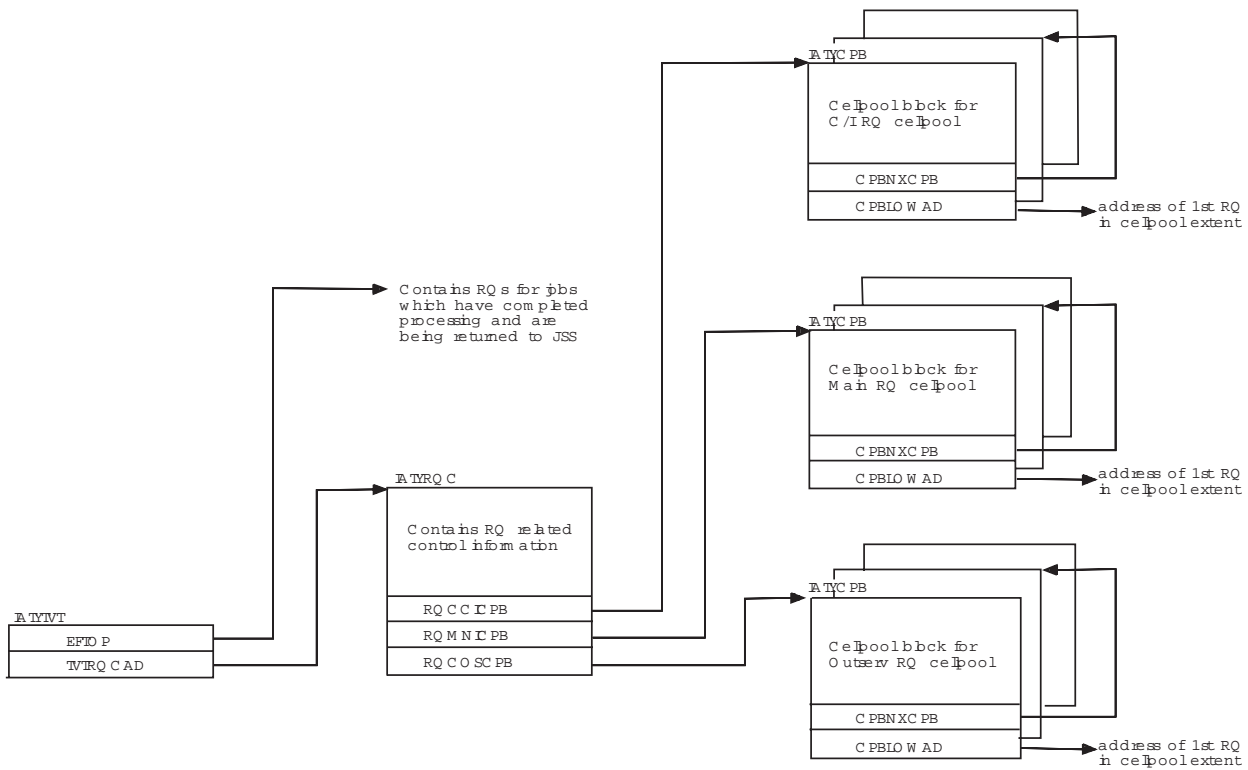


Figure 7. RESQUEUE Related Control Block Chaining (Part 1 of 2)

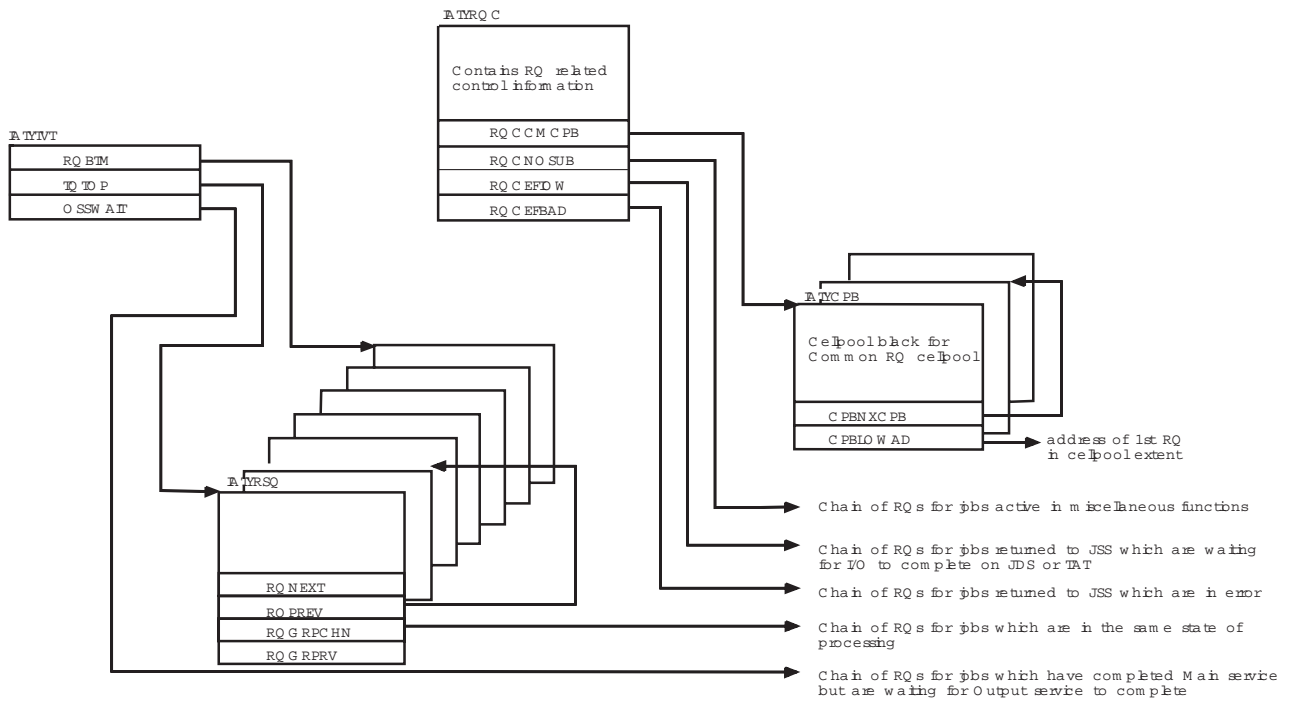


Figure 7. RESQUEUE Related Control Block Chaining (Part 2 of 2)

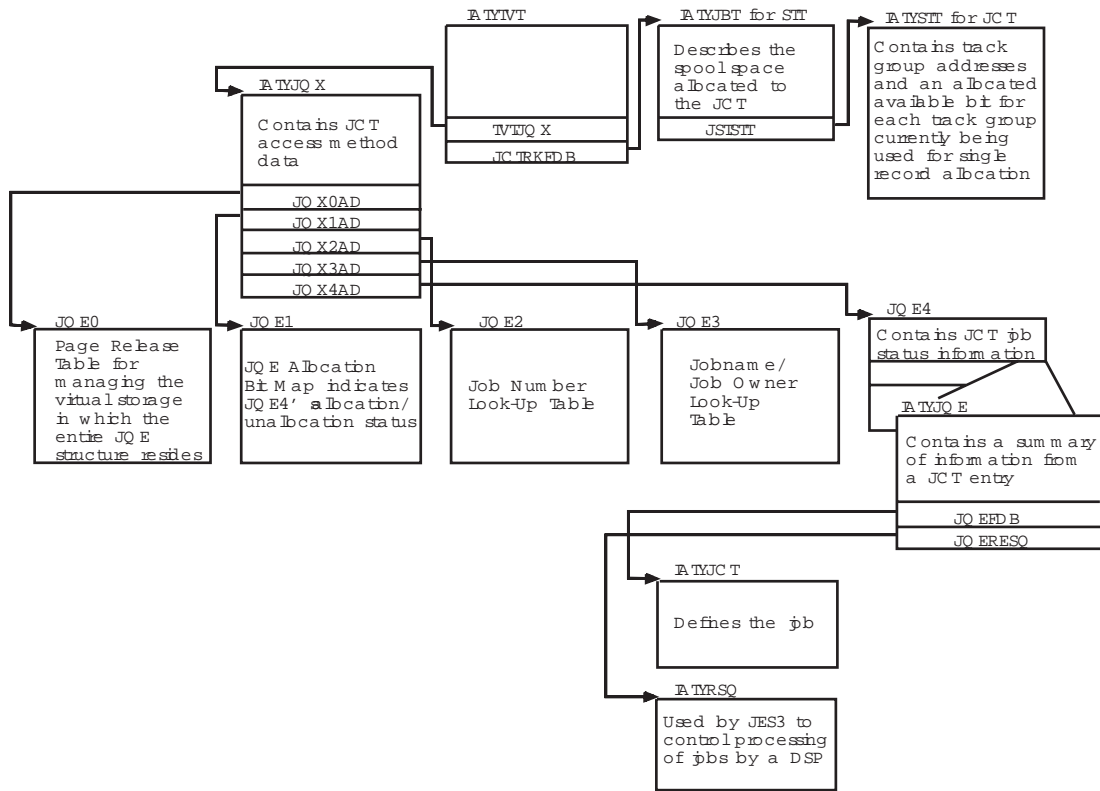


Figure 8. JES3 Scheduling Control Block Chaining

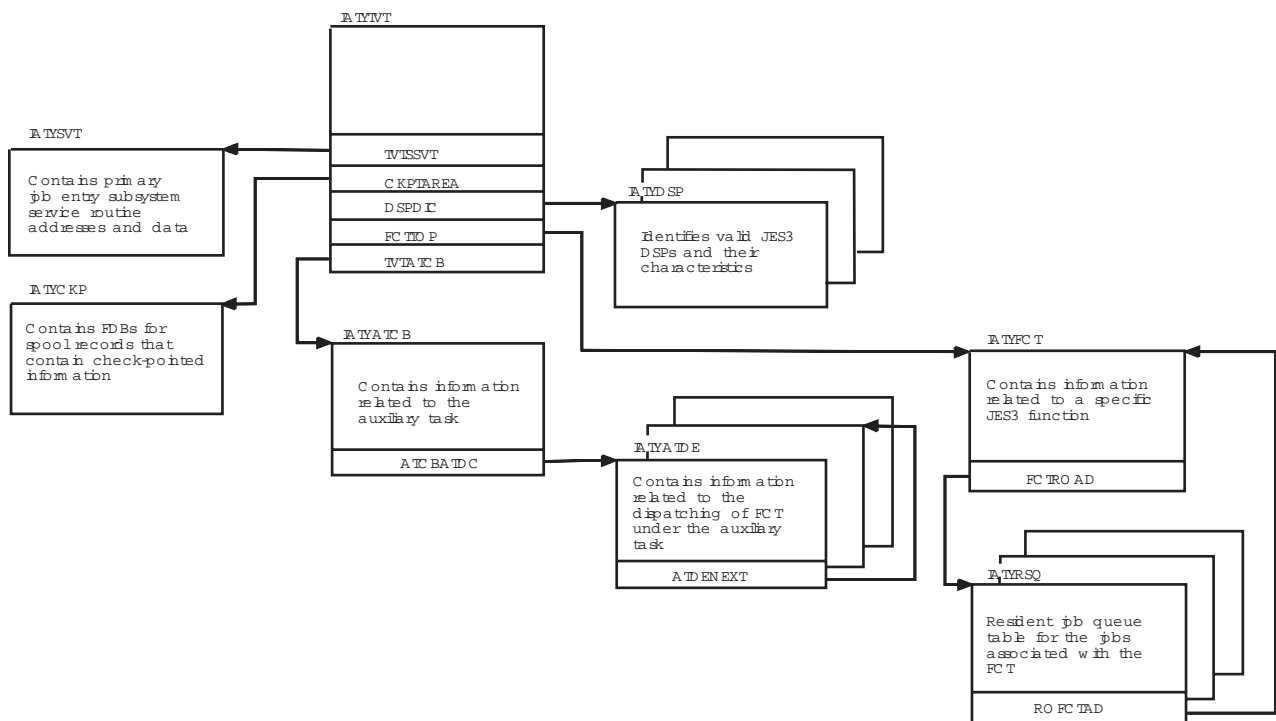
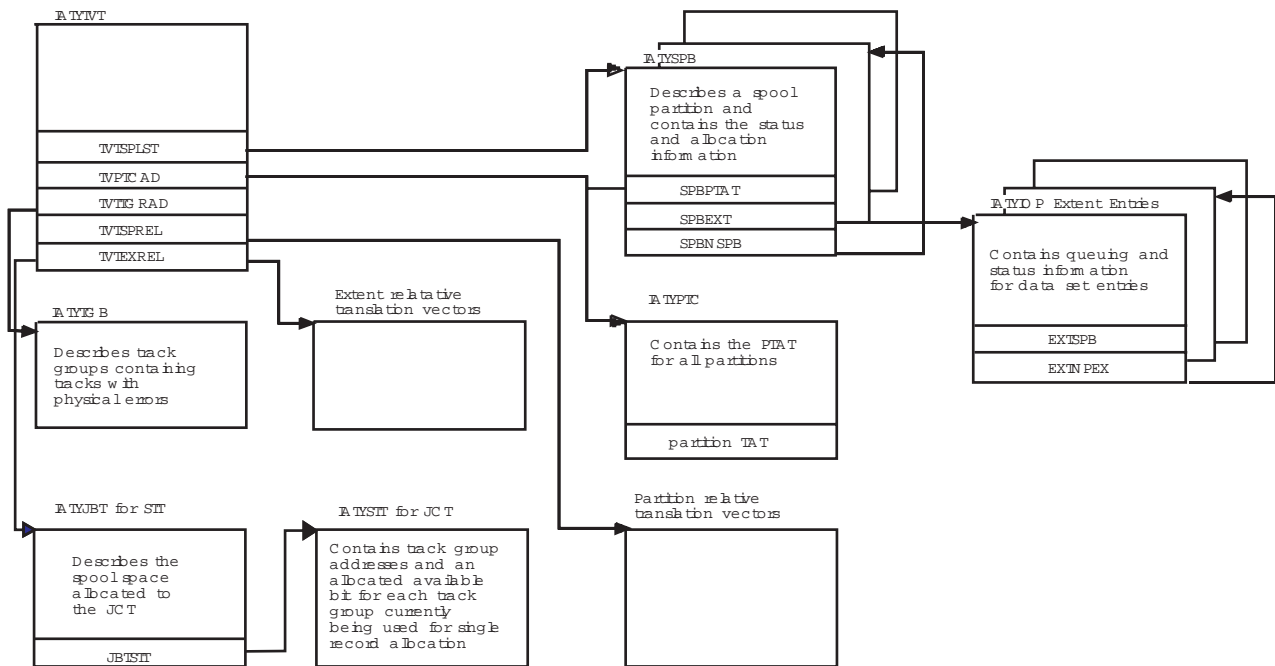


Figure 9. General Services Control Block Chaining



Spool Space Allocation

Figure 10. Spool Data Management Control Block Chaining (Part 1 of 2)

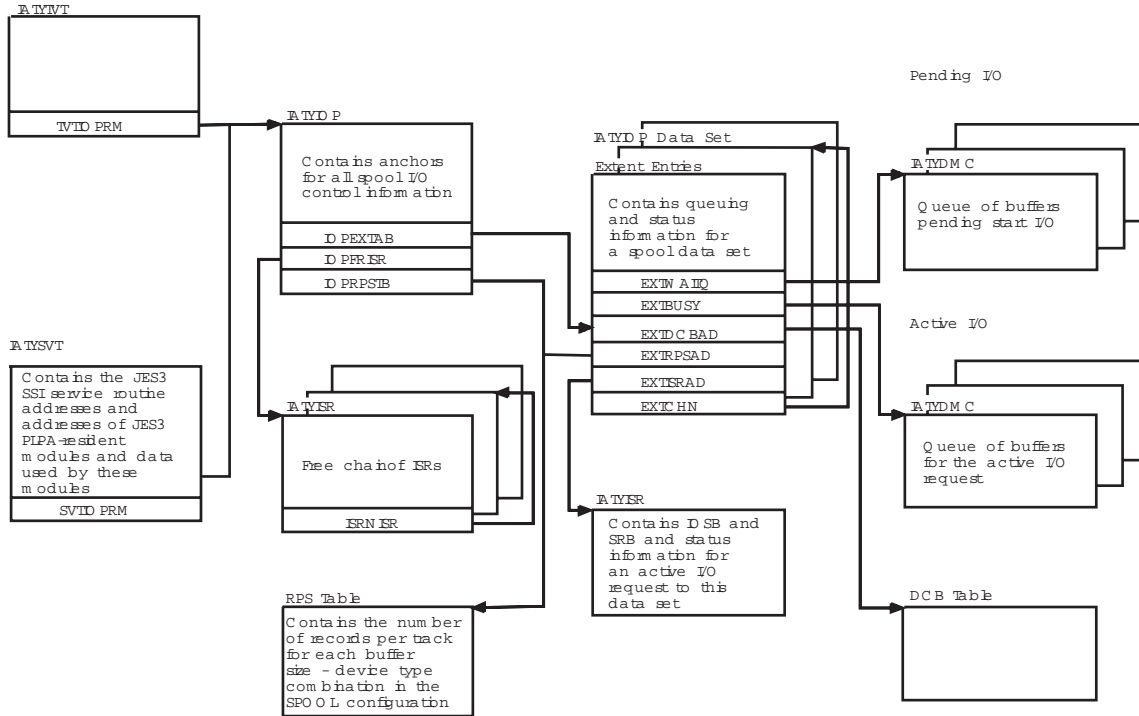
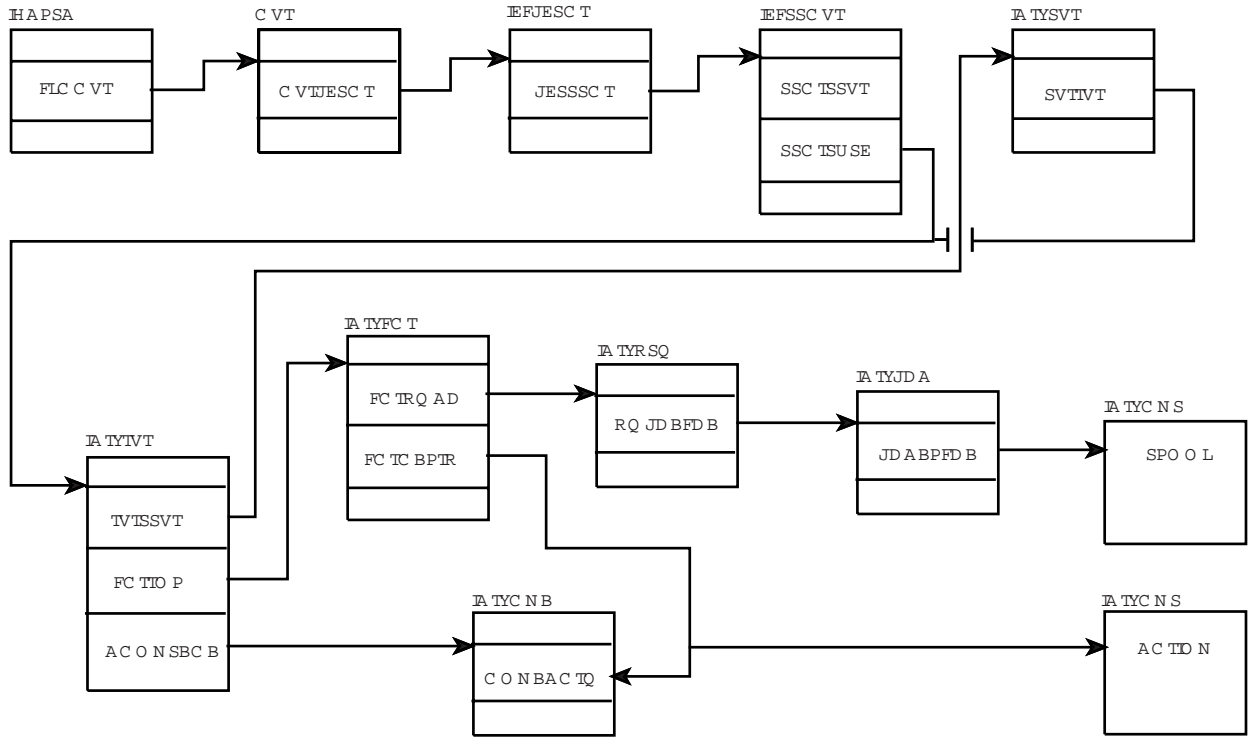


Figure 10. Spool Data Management Control Block Chaining (Part 2 of 2)



Console Buffer Management

Figure 11. Consoles Control Block Chaining (Part 1 of 2)

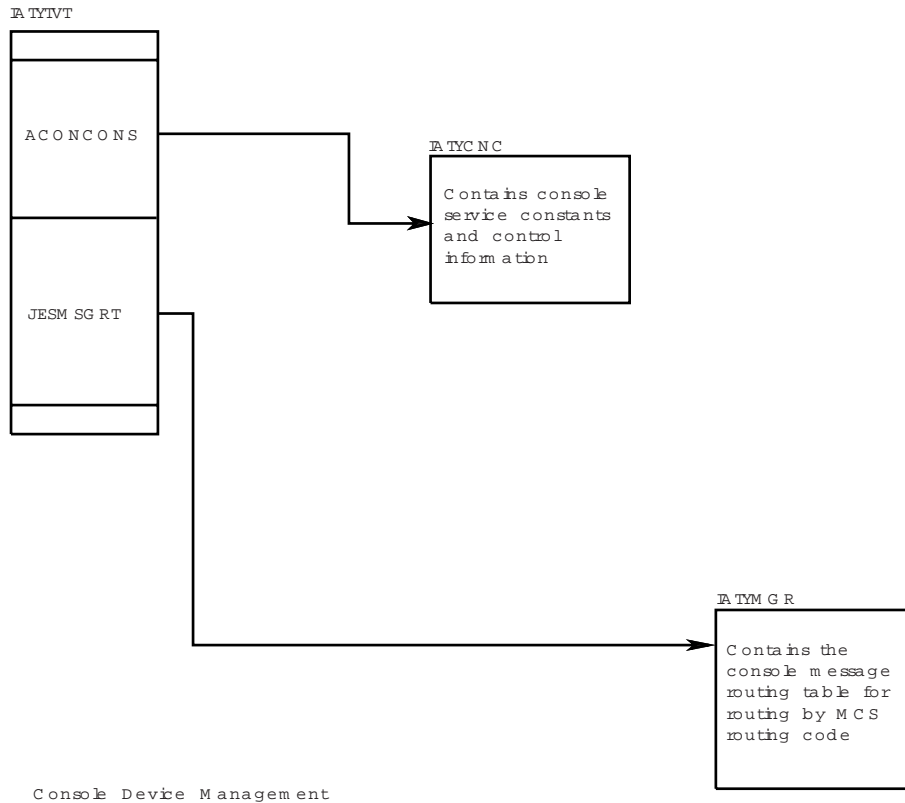


Figure 11. Consoles Control Block Chaining (Part 2 of 2)

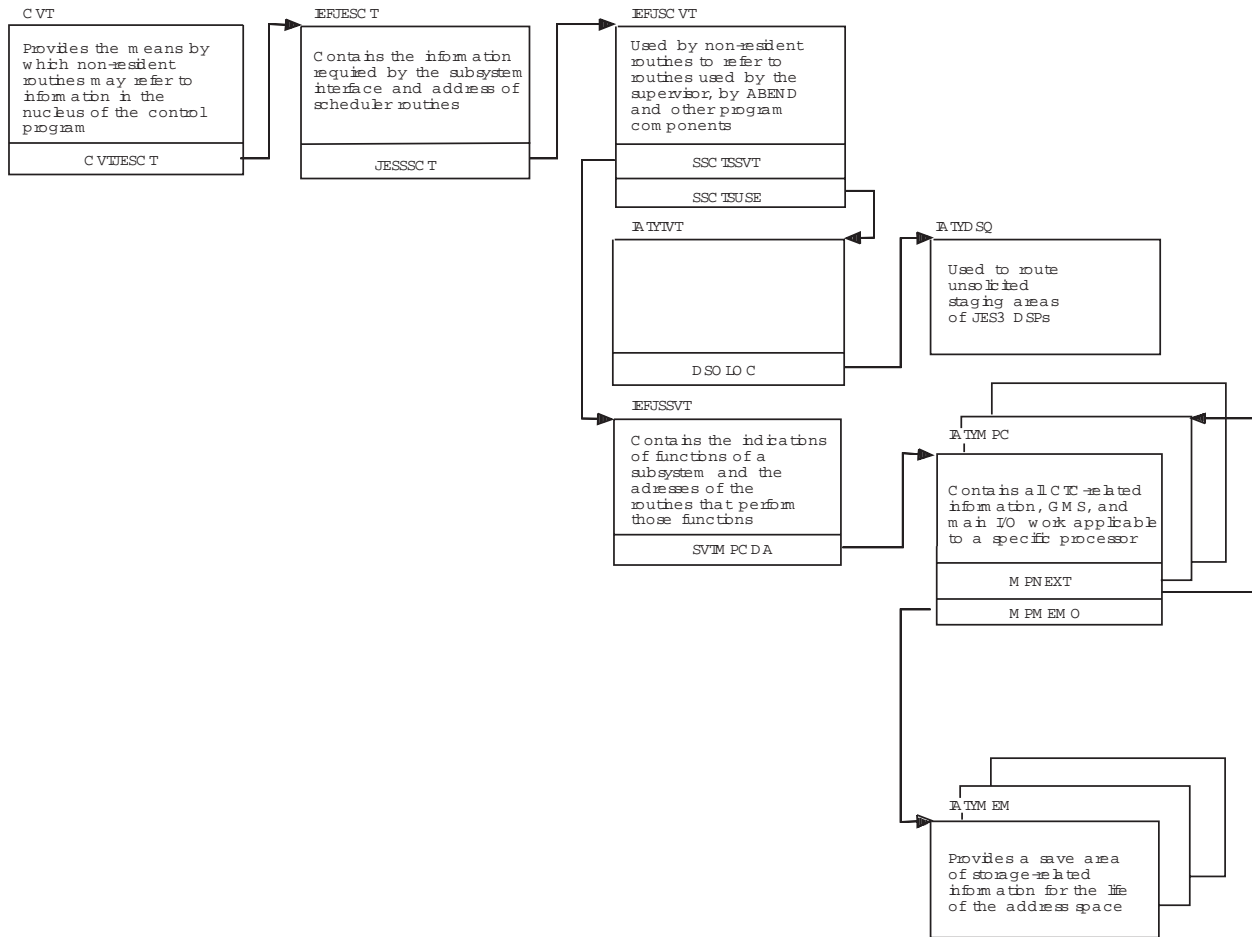


Figure 12. JES3 Communications Control Block Chaining

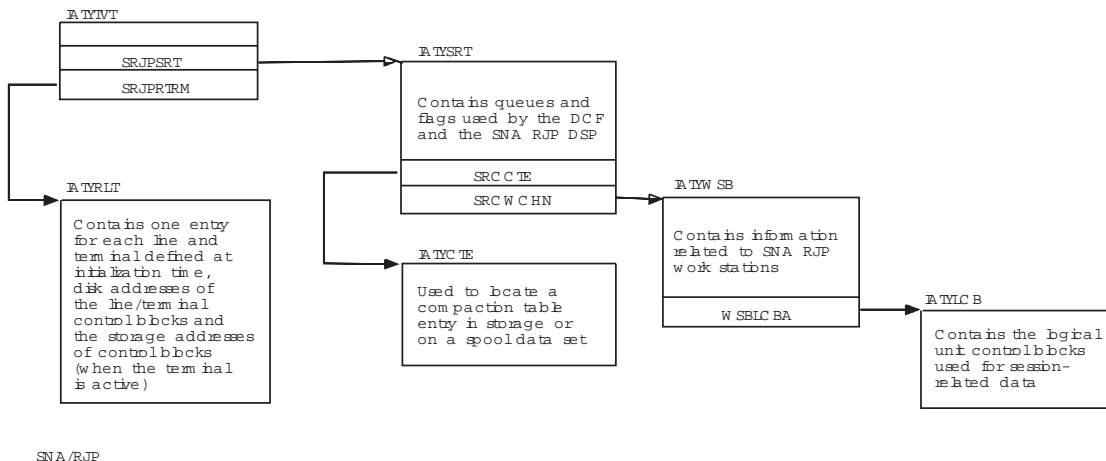


Figure 13. Remote Processing Control Block Chaining (Part 1 of 2)

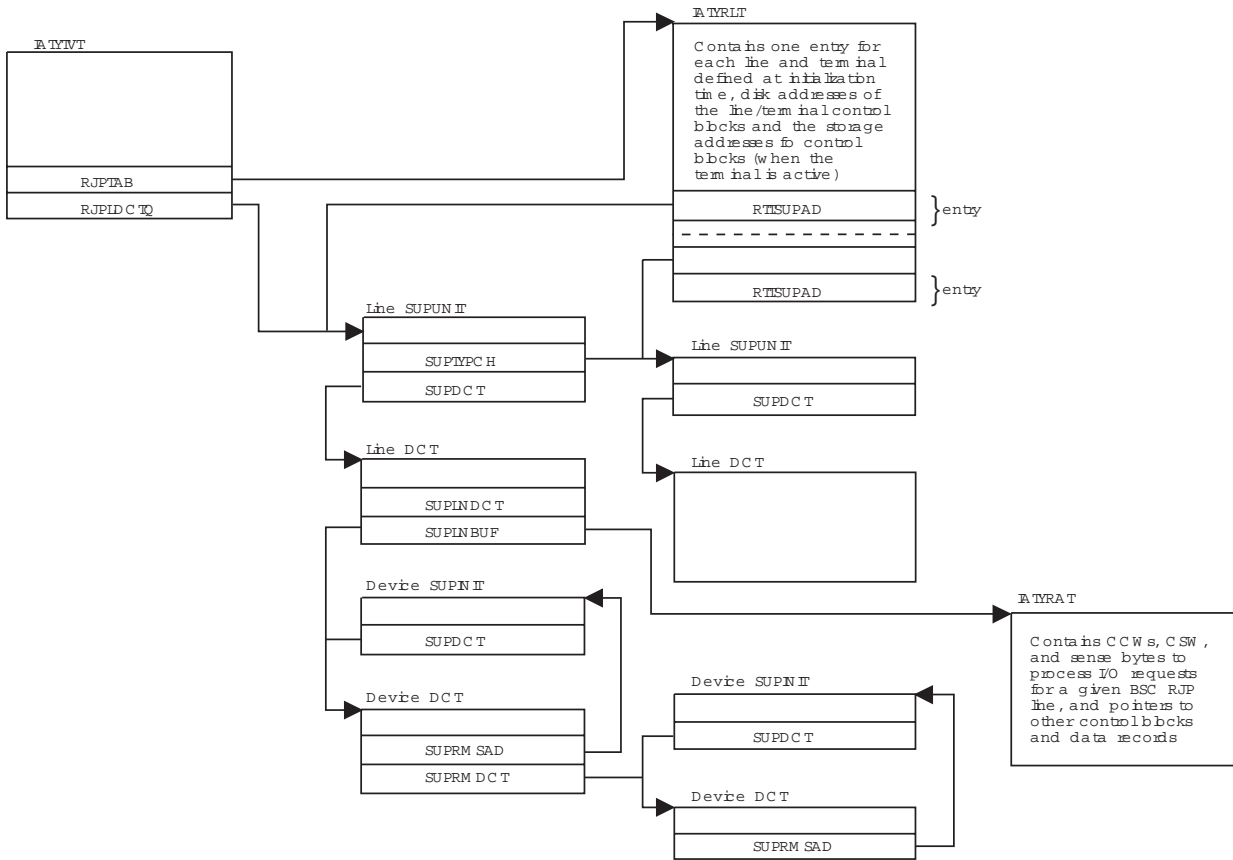


Figure 13. Remote Processing Control Block Chaining (Part 2 of 2)

Chapter 5. AWAIT Reason Codes

This chapter contains a complete list of AWAIT reason codes as found in macro IATYAWR. The table that follows shows:

- The AWAIT Reason code in Hex.
- The AWAIT Reason Code name as found in the IATYAWR macro.
- A description showing the reason for the AWAIT.

AWAIT Reason Code (Hex)	AWAIT Reason Code Name (in IATYAWR)	Description
0000	AWRNORSN	NO AWAIT REASON CODE IS ASSOCIATED WITH THIS ENTRY
0001	AWRWT4WK	WAIT FOR WORK OR STANDARD FCT AWAIT
0002	AWRGNSUB	WAITING FOR A GENERALIZED SUBTASK TO BECOME AVAILABLE OR TO FINISH PROCESSING A REQUEST
0003	AWRAENQS	WAITING FOR SHARED USE OF AN AENQ RESOURCE
0004	AWRAENQE	WAITING FOR EXCLUSIVE USE OF AN AENQ RESOURCE
0005	AWRJSACT	WAITING FOR JSS TO BE ACTIVE (JSSACTIV TO BE SET)
0006	AWRJSSTR	WAITING FOR JSS TO BE STARTED (*S,JSS COMMAND, I.E. JSSSTART TO BE SET)
0007	AWRSTORG	WAITING FOR STORAGE TO BECOME AVAILABLE FOR AN AGETMAIN REQUEST
0008	AWRSTCPL	WAITING FOR STORAGE TO BECOME AVAILABLE FOR A CELLPOOL REQUEST
0009	AWRCNVIN	WAITING FOR A C/I SUBTASK TO COMPLETE CONVERTER/INTERPRETER PROCESSING
000A	AWRLOCAT	WAITING FOR A CATALOG LOCATE REQUEST TO COMPLETE
000B	AWRJCLLM	C/I WAITING BECAUSE THE JCL LIMIT HAS BEEN EXCEEDED
000C	AWRSPECR	FCT IS IN SPECIALIZED RESCHEDULE AND IS WAITING FOR DEVICES TO BECOME AVAILABLE OR TO BE CANCELLED
000D	AWRATIME	WAITING FOR AN ATIME INTERVAL TO EXPIRE
000E	AWRJSRBA	WAITING FOR JCT READ SRB TO BECOME AVAILABLE TO ACCESS A JCT DATA SPACE PAGE FOR IATXJCT REQUEST
000F	AWRJSRBC	WAITING FOR THE JCT READ SRB TO COMPLETE FOR AN IATXJCT REQUEST (JQXSRBLK)
0010	AWRJQEAV	WAITING FOR A JQE TO BECOME AVAILABLE FOR AN IATXJCT TYPE=ADD REQUEST (TVTGRJQE)
0011	AWRJOBNM	WAITING FOR JOB NUMBERS TO BECOME AVAILABLE FOR AN AJOBNUM REQUEST (TVTJNMSK)
0012	AWRJDSAV	WAITING FOR A JDS TO BECOME AVAILABLE FOR A JDS RELATED MACRO REQUEST (RQJDSFCT)
0013	AWRSDTCH	WAITING FOR A SUBTASK TO COMPLETE DETACH/TERMINATION PROCESSING
0014	AWRPERMN	PERMANENT AWAIT - WAIT FOREVER
0015	AWREXCPC	WAITING FOR AN EXCP TO COMPLETE (FOR EXAMPLE, JESEXCP)
0016	AWRMDSRS	WAITING FOR MDS RESTART TO COMPLETE

AWAIT Reason Code (Hex)	AWAIT Reason Code Name (in IATYAWR)	Description
0017	AWRDFCBA	WAITING FOR DEVICE FENCE CONTROL BLOCK (DFCB) TO BECOME AVAILABLE (DFCINUSE)
0018	AWROSEUP	WAITING FOR AN OSE TO BE RELEASED (RQOSESUP)
0019	AWRDUMMY	DUMMY AWAIT THAT IS USED TO ALLOW OTHER FCTS TO GET CONTROL
001A	AWRPGFIX	WAITING FOR A PAGE FIX TO COMPLETE
001B	AWRCPOOL	WAITING FOR A CELL WITHIN A CELLPOOL TO BECOME AVAILABLE
001C	AWRFILDR	WAITING FOR FILE DIRECTORY ENTRIES TO BECOME AVAILABLE
001D	AWRJSAMB	WAITING FOR JSAM BUFFERS TO BECOME AVAILABLE
001E	AWRSPLSP	WAITING FOR SPOOL SPACE TO BECOME AVAILABLE
001F	AWRALODR	WAITING FOR AN ALOADED MODULE TO BE REFRESHED (JDEREQNU)
0020	AWRJDELK	WAITING FOR A JDE TO BE UNLOCKED (JDELOCK)
0021	AWRSATCH	WAITING FOR SUBTASK ATTACH AND INITIALIZATION TO COMPLETE
0022	AWRMATCH	WAITING FOR MASTER TASK ATTACH AND INITIALIZATION TO COMPLETE
0023	AWRCNLOC	WAITING FOR LOCATE TO COMPLETE LOCATE RESTART PROCESSING DURING CONNECT
0024	AWRCNWTD	WAITING FOR WTDDRVR TO COMPLETE DEMAND SELECT CANCEL PROCESSING DURING CONNECT
0025	AWRCNGMS	WAITING FOR GMS TO COMPLETE GMS RESTART PROCESSING DURING CONNECT
0026	AWRCNVER	WAITING FOR VERIFY/MDS TO COMPLETE INITIAL VERIFY PROCESSING DURING CONNECT
0027	AWRSQDAV	WAITING FOR A SUBTASK QUEUE DESCRIPTOR (SQD) TO BECOME AVAILABLE
0028	AWRSRFIN	WAITING FOR SINGLE RECORD FILE (SRF) INPUT I/O TO COMPLETE
0029	AWRSRFOT	WAITING FOR SINGLE RECORD FILE (SRF) OUTPUT I/O TO COMPLETE
002A	AWRMRFIN	WAITING FOR MULTI-RECORD FILE (MRF) INPUT I/O TO COMPLETE
002B	AWRMRFOT	WAITING FOR MULTI-RECORD FILE (MRF) OUTPUT I/O TO COMPLETE
002C	AWRCNQTD	WAITING DUE TO A CONSOLE QUEUED-TO-DEPTH (IATCNWO)
002D	AWRINTRQ	WAITING FOR A RESQUEUE FOR THE INTRDR JOB TO BE CREATED (IATDMJA)
002E	AWRASPIN	WAITING FOR AN ADDRESS SPACE TO COMPLETE INITIALIZATION
002F	AWRASPTM	WAITING FOR AN ADDRESS SPACE TO TERMINATE
0030	AWRJNCBU	WAITING FOR THE JNCB USE COUNT TO BE ZERO
0031	AWRNCKLK	WAITING FOR THE NCK LOCK TO BECOME AVAILABLE
0032	AWRJQEPR	WAITING FOR A JQE PRIORITY TO BECOME AVAILABLE
0033	AWRJCTRW	WAITING FOR READ/WRITE ACCESS TO THE JCT (JQERWENQ)
0034	AWRJCMRO	WAITING FOR THE MAXIMUM NUMBER OF JCT READ-ONLY USERS TO BE DECREASED (JQEUCT)

AWAIT Reason Code (Hex)	AWAIT Reason Code Name (in IATYAWR)	Description
0035	AWRJCRON	WAITING FOR THE NUMBER OF JCT READ-ONLY USERS TO BECOME ZERO (JQEUCT)
0036	AWRJCRIO	WAITING FOR JCT READ I/O TO COMPLETE (FDBCLOSE)
0037	AWRPVCON	WAITING FOR A PREVIOUS MAIN PROCESSOR CONNECT TO COMPLETE
0038	AWRJDSEN	WAITING FOR ANOTHER FCT TO RELEASE CONTROL OF A JDS ENTRY (JDSDSPH)
0039	AWRPTATM	WAITING FOR PTAT MANIPULATION TO COMPLETE (TVTSPCHG)
003A	AWRJBTCL	WAITING FOR THE JOBTAT FDB TO BE CLOSED (FDBCLOSE)
003B	AWRJBTRD	WAITING FOR A JOBTAT READ TO COMPLETE (FDBCLOSE)
003C	AWRJBTWT	WAITING FOR A JOBTAT WRITE TO COMPLETE (FDBCLOSE)
003D	AWRCAMRD	WAITING FOR THE IATXCKPT ACCESS METHOD TO BECOME AVAILABLE FOR A READ REQUEST
003E	AWRCAMWT	WAITING FOR THE IATXCKPT ACCESS METHOD TO BECOME AVAILABLE FOR A WRITE REQUEST
003F	AWRCAMPR	WAITING FOR THE IATXCKPT ACCESS METHOD TO BECOME AVAILABLE FOR A PURGE REQUEST
0040	AWRIOERR	WAITING FOR I/O ERROR RECOVERY TO COMPLETE
0041	AWRMINTK	WAITING FOR A MINIMAL TRACK CONDITION TO CLEAR UP (TATMINQ)
0042	AWRIORLC	WAITING FOR I/O TO COMPLETE BEFORE PROCESSING AN IATXRELC REQUEST (FDBCLOSE)
0043	AWRRCPST	WAITING FOR A RESTART OR A CONNECT COMPLETE POST FROM IATMSR2
0044	AWRGMSUP	WAITING FOR A GMS UPDATE TO COMPLETE (TVTGMSP)
0045	AWRJSTOS	WAITING FOR A JOB'S JST FDB TO CONTAIN A SPOOL ADDRESS (FDBONSP)
0046	AWRJSRAV	WAITING FOR FILE TO BE CLOSED FOR A JESREAD REQUEST (FDBCLOSE)
0047	AWRJSRSA	WAITING FOR THE FDB TO CONTAIN A SPOOL ADDRESS FOR A JESREAD REQUEST (FDBONSP)
0048	AWRJSRIO	WAITING FOR JESREAD I/O COMPLETION
0049	AWRAWTIO	WAITING FOR AWRITE I/O COMPLETION
004A	AWRWCHIO	WAITING FOR WRTCHAIN I/O COMPLETION
004B	AWRPGPEN	WAITING FOR IATIQPG TO FINISH SCANNING TATS OWNED BY THIS FCT
004C	AWRINITG	WAITING FOR INITIALIZATION ON JES3 GLOBAL TO COMPLETE (TVTGLOBL)
004D	AWROSRSC	WAITING FOR OUTPUT SERVICE RESTART TO COMPLETE (OSDRDONE)
004E	AWRJDAOS	WAITING FOR A JOB'S JDAB FDB TO CONTAIN A SPOOL ADDRESS (FDBONSP)
004F	AWRSTATP	WAITING FOR A STATUS POST
0050	AWRCLUP	WAITING FOR CLEANUP TO COMPLETE
0051	AWRSDECL	WAITING FOR SDE CHAIN LOCK FLAG

AWAIT Reason Code (Hex)	AWAIT Reason Code Name (in IATYAWR)	Description
0052	AWRSDEPL	WAITING FOR SDE PENDING SA LOCK FLAG
0053	AWRSDEP	WAITING FOR SDE (IDLE DSP) POST
0054	AWRSWECL	WAITING FOR SWE CHAIN LOCK FLAG
0055	AWRDSPCG	WAITING FOR DSP AVAILABILITY
0056	AWROSBSY	WAITING FOR OUTPUT SERVICE TO RELEASE AN RQ (RQOSBUSY)
0057	AWRJVRIO	WAITING FOR JOB VALIDATION READ I/O TO COMPLETE
0058	AWRJVWIO	WAITING FOR JOB VALIDATION WRITE I/O TO COMPLETE
0059	AWRJQJCT	IATINJQ WAITING FOR A JCT FULL TRACK READ TO COMPLETE (DMCCOMPL)
005A	AWRVJTRM	IATINJR WAITING FOR JWV TO BE ADDED TO THE TERMINATION QUEUE
005B	AWRJRJCT	IATINJR WAITING FOR A JCT FULL TRACK READ TO COMPLETE (DMCCOMPL)
005C	AWRMDOPR	MDS WAITING FOR AN OPERATOR COMMAND OR MDS RESTART POST
005D	AWRWCHLK	WAITING FOR THE WRTCHAIN FDB LOCK TO BECOME AVAILABLE (FDBWCHLK)
005E	AWRSDSLK	WAITING FOR THE SETDSN LOCK TO BECOME AVAILABLE
005F	AWRSVLLK	WAITING FOR THE SETVOL LOCK TO BECOME AVAILABLE
0060	AWRJSDYN	MDS IS WAITING FOR DYNAL TO FINISH USING THE JST (RQJSTDYN)
0061	AWRMDDJS	MDS WAITING FOR THE DJST TO BECOME AVAILABLE
0062	AWRWCHAV	WAITING FOR A FILE TO BE CLOSED FOR A WRTCHAIN REQUEST (FDBCLOSE)
0063	AWRSCWIC	WAITING FOR SAPI DATASPACE COW SERVICES TO INITIALIZE
0064	AWRRJPIO	WAITING FOR RJP I/O TO COMPLETE
0065	AWRCATSU	WAITING FOR CATALOG SETUP TO COMPLETE
0066	AWRCATBK	WAITING FOR CATALOG BREAKDOWN TO COMPLETE
0067	AWRAWTAV	WAITING FOR FILE TO BE CLOSED FOR AN AWRITE REQUEST (FDBCLOSE)
0068	AWRARLAV	WAITING FOR FILE TO BE CLOSED FOR AN ARELEASE REQUEST (FDBCLOSE)
0069	AWRPSOPR	WAITING FOR PSO TO FINISH PROCESSING A REQUEST BEFORE IT CAN BE PURGED
006A	AWRSWASP	WAITING FOR SWA SPOOLING TO COMPLETE
006B	AWRSWAPR	WAITING FOR SWA PROCESSING TO COMPLETE
006C	AWRSWAFR	WAITING FOR SWA SUBPOOL FREE PROCESSING TO COMPLETE
006D	AWRSJFTM	WAITING FOR SJF TERMINATION PROCESSING TO COMPLETE
006E	AWRAUXTD	WAITING TO BE DISPATCHED TO EXECUTE UNDER THE AUX TASK
006F	AWRNUCTD	WAITING TO BE DISPATCHED TO EXECUTE UNDER THE NUC TASK
0070	AWRATDEA	WAITING FOR ATDE TO BE CHAINED TO AUXTASK DISPATCHING QUEUE
0071	AWRJ3LOK	WAITING FOR A JES3 LOCK TO BECOME AVAILABLE

AWAIT Reason Code (Hex)	AWAIT Reason Code Name (in IATYAWR)	Description
0072	AWRMREAD	WAITING FOR AN IATXSIO MULTI-READ REQUEST TO COMPLETE
0073	AWRDJISA	WAITING FOR ALL INPUT SERVICE FCT'S TO FINISH WITH THIS DJC NET (JNISACNT)
0074	AWRJNCHL	WAITING FOR ANOTHER FCT TO FINISH USING THE JNCB FOR A JNCBHLD REQUEST
0075	AWROPERC	WAITING FOR AN OPERATOR TO ISSUE A COMMAND
0076	AWRWSPFR	WAITING FOR THE WSP TO BE FREED
0077	AWRVARYC	WAITING FOR A VARY COMMAND TO COMPLETE
0078	AWRMPCON	WAITING FOR A MAIN PROCESSOR TO CONNECT
0079	AWROUTSP	WAITING FOR OUTPUT STATEMENT PROCESSING TO COMPLETE
007A	AWRFSSIN	WAITING FOR THE FSS INHIBIT INDICATOR TO BE RESET
007B	AWRJDSIO	WAITING FOR JDS I/O TO COMPLETE
007C	AWRSUSPW	WAITING FOR THE NEXT MFM CYCLE
007D	AWRFSSSU	WAITING FOR FSS STARTUP TO COMPLETE
007E	AWRASPRQ	WAITING FOR AN ADDRESS SPACE TO COMPLETE A REQUEST
007F	AWRMRFCL	WAITING FOR A MULTI-RECORD FILE TO BE CLOSED
0080	AWRRJPUR	WAITING FOR RJP SPOOL FILE PURGE TO COMPLETE
0081	AWRRJCNS	WAITING FOR RJPCONS TO FINISH USING RJP SPOOL FILE
0082	AWRCAMRS	WAITING FOR THE IATXCKPT ACCESS METHOD TO BECOME AVAILABLE FOR A RESERVE REQUEST
0083	AWRSTRTI	WAITING FOR A STARTIO REQUEST TO COMPLETE
0084	AWRNJGNR	WAITING FOR A GENERAL NJE SENDER TO RESCHEDULE
0085	AWRNJBR	WAITING FOR A JOB NJE SENDER TO RESCHEDULE
0086	AWRNJSYR	WAITING FOR A SYSOUT NJE SENDER TO RESCHEDULE
0087	AWRSSCMP	WAITING FOR SECURITY SUBTASK REQUEST TO COMPLETE
0088	AWRSSPUR	WAITING FOR SECURITY SUBTASK PURGE REQUEST TO COMPLETE
0089	AWROSSFR	WAITING FOR AN OSS TO BE FREED
008A	AWRDVRDY	WAITING FOR A DEVICE TO BECOME READY
008B	AWRPRDFS	WAITING FOR C/I FSS'S TO DISABLE PROCLIBS
008C	AWRPREFS	WAITING FOR C/I FSS'S TO ENABLE PROCLIBS
008D	AWRPROCN	WAITING FOR A PROCLIB TO NO LONGER BE IN USE
008E	AWRPRCCL	WAITING FOR A C/I SUBTASK TO CLOSE A PROCLIB
008F	AWRWLRCL	WAITING FOR WLM RECLASSIFICATION PROCESSING TO COMPLETE
0090	AWRSMLPK	WAITING FOR WLM SAMPLING LOCK TO BECOME AVAILABLE
0091	AWRDTRAP	WAITING AS A RESULT OF A DUMP CORE TRAP
0092	AWROSCKP	WAITING FOR OUTSERV CHECKPOINT TO BECOME AVAILABLE
0093	AWROSJDA	WAITING FOR OUTSERV JDAB TO BECOME AVAILABLE
0094	AWROS4WK	WAITING FOR OUTSERV RESTART OR NEW WORK
0095	AWRGDISB	DSI WAITING FOR GLOBAL TO BE DISABLED

Chapter 6. JES3 Failsoft Codes

JES3 issues a failsoft code when JES3 is about to end or has attempted unsuccessfully to recover from an error. JES3 issues two types of failsoft codes:

- User codes
- DM codes

JES3 User Abend Codes

User Abend Codes

When JES3 encounters an error during its initialization and the error is severe, JES3 will end with a user abend code. When a severe error is encountered, JES3 issues a abend macro and ends the JES3 address space.

The abend macro provides the user with failure codes that identify the error. The heading of the resultant dump may contain a system completion code, user completion code, and/or a JES3 user abend code. All user abend codes are described below. The JES3 system completion codes appear in *z/OS MVS System Codes*. See "Problem Determination" for the tables referred to by the DM completion codes.

Note: Whenever a U code lists register 0, register 1, register 14 and register 15 as containing information, these registers can be found in the trace table, not in DM081.

U0000

Explanation: An abend occurred during JES3 initialization because either the JES3IN or JES3OUT data set is not open.

System Action: JES3 issues message IAT3014 identifying the data set. JES3 initialization ends.

Programmer Response: Correct the condition(s) that caused the failure. This may involve changing the JES3 procedure, or making a device available, or defining the applicable data set.

Module: IATINIC

U0001

Explanation: An abend occurred during JES3 initialization because there are one or more errors in the initialization stream.

System Action: JES3 writes message IAT3160, IAT3161, IAT3162, or IAT3403 to JES3OUT identifying the cause of failure. JES3 initialization ends.

Programmer Response: Correct the statements in error.

Module: IATINIC, IATINCD

U0002

Explanation: An abend occurred during JES3 initialization because not enough storage was available. The most likely cause of this failure is that an inadequate common storage area (CSA) size was specified during the system installation or initialization.

System Action: JES3 issues message IAT3091 to the operator. JES3 initialization ends.

Programmer Response: Check initialization statements such as BUFFER, that affect storage size and consult *z/OS JES3 Initialization and Tuning Reference*.

Module: IATINRN

U0003

Explanation: This code accompanies message IAT3220. The TVTABLE field TVTINITID, which is filled in from data from the CHPNT data set on a local or hot start, does not match the time stamp that was written to the queue. Register 2 points to the starting time stamp that was recorded on the JES3 spool data set(s). The TVTABLE field TVINITID contains the time stamp that was recorded on the CHPNT data set.

Programmer Response: See message IAT3220. Perform a warm or cold start of the system.

Module: IATINGN

U0004

Explanation: An error occurred while building tables based on JES3 initialization statements or in the table build phase of initialization.

System Action: JES3 ends. Dumps are written to the JESABEND and SYSABEND data sets.

Programmer Response: The nature of the error(s) appears in message text printed on the JES3OUT data set. If it cannot be ascertained from message text, analyze the main storage dump for the cause.

Module: IATINJB

U0005

Explanation: The JES3 initialization debugging monitor has detected a specific message scheduled to be issued to JES3OUT. The message matches the "message-text" on an INTDEBUG statement in the initialization stream.

System Action: JES3 ends.

Programmer Response: None.

Module: IATINRN

U0007

Explanation: An error code was returned when JES3 issued the ESTAE macro. This is probably a system error. Register 15 contains the return code from the attempted execution of the ESTAE macro.

System Action: JES3 ends with a dump.

Programmer Response: Determine the cause of the error and correct it.

Module: IATINIT

U0008

Explanation: An operator entered the *DUMP command to end JES3.

System Action: JES3 ends with a dump, depending on what options were specified on the OPTIONS initialization statement.

Programmer Response: None.

Module: IATABMN, IATABRT, IATCNIN, IATIIFC

U0009

Explanation: An operator entered the *RETURN command to end JES3.

System Action: JES3 ends normally (without a dump).

Programmer Response: None.

Module: IATABMN, IATCNIN, IATIIFC

U0010

Explanation: This code indicates that JES3 should end with a completion code of 2FB, but that a storage dump is not to be taken. This code may be set as the result of an operator's choice not to dump, or when the reason JES3 should end is indicated by a message to the operator.

System Action: JES3 ends without the full set of dumps normally produced.

Programmer Response: None.

Module: IATABMN, IATINIC, IATINIT, IATINJB

U0015

Explanation: During a JES3 restart, an existing JES3 control block was found to contain an incorrect control block ID. Prior to the abend, JES3 issues message IAT4002 indicating the control block name.

System Action: JES3 ends with a dump.

Programmer Response: Restart JES3 with a MVS IPL, and if the problem reoccurs, follow the steps listed under Problem Determination.

Module: IATINSND

U0019

Explanation: JES3 detected that the initialization stream used to initialize the local does not match the one used during the last JES3 cold- or warmstart.

For a cold- or warmstart, JES3 requires that the global complete initialization before locals can be started. JES3 also requires that you IPL all locals before starting JES3.

System Action: JES3 issues message IAT3178, listing the system on which the error was detected. JES3 initialization ends.

Programmer Response: IPL the system in error.

Module: IATINIC

U0020

Explanation: An internal error resulted from the IATXIDVS service. The following reason codes further describe the error:

Code	Explanation
------	-------------

X'04'	The DSPSERV service to create the initialization data space failed.
-------	---

X'08'	The ALESERV service for the initialization data space failed.
-------	---

- X'12'** An IATXIDVS service requires the IDVS data area, but the pointer to this area within IATINDT is zero.
- X'16'** AN IATXIDVS service requires the IDVS data area, but the pointer to this area within IATINDT is incorrect.
- X'20'** A DEVICE,DTYPE=SYSMAIN statement is replacing a default SYSMAIN definition, but the corresponding default SYSMAIN definition was not found.

System Action: Initialization or *MODIFY,CONFIG ends.

Programmer Response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Problem Determination: See Table I, items 1 and 5.

Module: IATINDVS

U0021

Explanation: JES3 Spool Data management encountered an error when attempting to build a cellpool for the File Directory. R3 contains the return code from the IATXBPL service.

System Action: JES3 initialization ends.

Programmer Response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Module: IATINIO

U0032

Explanation: The creation of the ESTAEs for the auxiliary task failed.

System Action: The auxiliary task abends with a DM032 user completion code. As a result, the ESTAI exit (in IATABMN) that was established when the task

was created is invoked. The ESTAI routine requests that a dump be taken based on the options selected at initialization and then performs a CALLRTM to end the JES3 IATNUC task with a CFB system completion code. This causes JES3 to end abnormally.

Programmer Response: Analyze the dump to determine why the auxiliary task ESTAEs could not be created.

Module: IATAUX

U0060

Explanation: An IATXCKPT macro was incorrectly issued by a DSP or task executing on a JES3 local main or in an FSS address space. Requests of this type are allowed only in the JES3 global address space. The request was for one of the following:

- to write a new checkpoint record
- to change the size of an existing checkpoint record
- to purge a record.

System Action: JES3 ends the DSP or task issuing the request.

Programmer Response: Correct the usage of the IATXCKPT macro in the failing program.

Module: IATGRCK

U0140

Explanation: A MVS GETMAIN macro was issued to obtain space for a new save area, but a non-zero return code was received from the GETMAIN macro.

System Action: JES3 failsoft processing ends with an SDUMP. If the SDUMP fails, JES3 issues message IAT3802.

Programmer Response: Analyze the dump and determine why the GETMAIN macro was failed.

Module: IATGRSV

JES3 DM Codes

DM Codes

The dynamic support program (DSP) failsoft feature of JES3 allows a DSP to abend without ending JES3. When a DSP encounters an error, it issues a FAILDSP macro. The FAILDSP macro ends the JES3 function but allows other functions to continue processing jobs.

The FAILDSP macro provides the user with failure codes that identify the error. The heading of the resultant dump may contain a system completion code, user completion code, and/or a JES3 failsoft DM code. All JES3 failsoft DM codes are described below. A DMxxx code appears as a Uxxx code to the base control program (BCP).

The JES3 system completion codes appear in *z/OS MVS System Codes*. See "Problem Determination" for the tables referred to by the DM completion codes.

Note: Whenever a U code lists register 0, register 1, register 14 and register 15 as containing information, these registers can be found in the trace table, not in DM081.

DM006

Explanation: An error that cannot be corrected was detected during processing of the system JOBTAT, making a restart impossible. The STT JOBTAT damage was one of the following:

- The FDB was incorrect.
- The STT JOBTAT could not be read from the job queue.
- The buffer track address did not match the FDB track address.

System Action: JES3 issues message IAT4100 or IAT4101 to JES3OUT and initialization ends.

Programmer Response: Attempt another restart. If the problem persists, a cold start is necessary; all jobs in the JES3 job queue will be lost.

Module: IATINST

DM011

Explanation: One or more errors have been detected during validation of JES3 spool and cannot be corrected. The system operator is given the choice of ending JES3 or allowing JES3 to continue without the spool data set for which the error is detected. The operator has replied CANCEL.

System Action: JES3 ends.

Programmer Response: Correct the errors listed on JES3OUT.

Module: IATINJR, IATINSD, IATINSP, IATINSR, IATINST

DM012

Explanation: One or more errors that cannot be corrected were detected during the validation of spool.

System Action: JES3 ends with a dump.

System Programmer Response: Correct the errors listed on JES3OUT.

Problem Determination: See Table I, items 2, 16, and 29.

Module: IATINJQ, IATINJR, IATINSD, IATINSP, IATINSR

DM013

Explanation: An error occurred during a cold or warm start and the CPU is not IPL'd, or incorrect information was found in the CSA such as:

- no SSVT
- no destination queue
- no MPC table
- number of staging area extents exceeded (if no auxiliary address space)
- staging area access failed (if auxiliary address space)
- incorrect staging area

System Action: JES3 ends and a message is written to JES3OUT.

Programmer Response: Re-IPL. If the problem persists, take a dump of the JES3 address space, all of CSA and the auxiliary address space if there is one.

Module: IATINM4

DM014

Explanation: One of the following errors was detected during processing of a JSERV macro:

- The JSERV parameter SA= or MPC= specifies an address that is negative or zero.
- The staging area pointed to by the SA= parameter does not have an eye catcher of 'STAR' or the main processor control table pointed to by the MPC= parameter does not have an eye catcher of 'MPC'.
- A JSERV TYPE=RESP was issued with a data length too large to fit in the response staging area.
- A JSERV TYPE=RESP or PURGE was issued and the staging area was not on the destination queue associated with the staging area's function code.
- Module IATSSCM either ended abnormally or encountered an error. Field SDWASR15 in the SDWA contains a return code, which corresponds to the contents of register 15 in the X'6FB' abend. See *z/OS MVS System Codes* for more information concerning the X'6FB' abend code.

For the first four cases, JES3 produces a dump of the DM014 abend. For the fifth case, no dump is produced for the DM014, but a dump is produced by module IATSSCM for the X'6FB' abend.

Programmer Response: Correct the address specified on the SA= or MPC= parameter to point to a staging area or main processor control table that has a valid eye catcher. Correct the data length of the response JSERV, if applicable. Check for possible multiple JSERVs for the same staging area. For an IATSSCM error, analyze the dump produced by IATSSCM to determine the cause of the error.

Module: IATSSJS

DM016

Explanation: An error was detected during initialization of the JES3 auxiliary address space.

System Action: JES3 writes message IAT3441 to JES3OUT. Depending upon the severity of the error, JES3 may end. Message IAT3441 identifies what happened, and whether or not JES3 will end.

Programmer Response: Examine the message text and correct the condition.

Module: IATINM3

DM017

Explanation: A spool data set containing initialization data has been removed prior to or during a JES3 hot start.

System Action: JES3 ends with a dump.

Programmer Response: Return the spool data set and either warm start or hot start JES3. If the spool

data set cannot be returned a warm start is required. If the spool cannot be returned and it contains data needed for restart which cannot be reconstructed during a warm start, a cold start may be necessary.

Module: IATINST

DM018

Explanation: An error that cannot be corrected has been detected while reading a WSB from spool during phase 2 of initialization processing. Possible causes are:

1. EOD was reached while reading the WSB file without finding a match for an RLT entry.
2. The size of the WSB exceeded the buffer size.

System Action: JES3 ends with a dump.

Programmer Response: Analyze the dump to find the cause of the failure and correct it.

Module: IATINWS

DM022

Explanation: A catastrophic error was encountered during formatting of a new or replaced spool data set:

- An I/O completion code other than X'7F' or X'41' was received.
- The track address on which the error was encountered differs from the track address being formatted.

The active format/verify parameter list, IATYFVP indicates the specific error that was encountered.

System Action: JES3 initialization ends with a dump.

Programmer Response: The spool data set being processed at the time of the failure cannot be used. Replace the spool data set and restart JES3. If the problem persists, reformat the data set prior to restarting JES3, or restart JES3 without the data set.

Module: IATDMVR

DM023

Explanation: A IATXCKPT macro was issued with the RESERVE option and failed.

System Action: JES3 initialization fails.

Programmer Response: Register 15 contains reason codes for the failure.

Note: These values appear in the JES3 trace table only (not in the failsoft logout). Determine the cause of the reserve failure and restart JES3.

Module: IATINJB

DM024

Explanation: An error or out-of-storage condition occurred when IATINC2 attempted to build the console cell pools. This ABEND is accompanied by a message that contains the name of the pool for which the IATXBPL macro was issued and the decimal value of the error return code.

System Action: Probable system error; JES3 ends.

Programmer Response: None.

Module: IATINC2

DM025

Explanation: During a restart of JES3, JES3 rebuilds the JES3 job queue to identify the jobs that require processing. While attempting to rebuild the job queue, JES3 determined one or more of the remaining jobs could not be processed due to one of the following reasons:

- The JOBNO parameter on the OPTIONS statement was altered over the restart. Some jobs waiting to be processed are not included in the new job number range and JES3 cannot process these jobs because their present job numbers are not valid.
- JES3 encountered an error while reading a job control table (JCT) from the JCT data set.

JES3 issues either message IAT4079 or IAT4080 to ask the installation if JES3 should continue initialization or end. Your installation requested JES3 to end.

System Action: JES3 ends.

System Programmer Response: To help identify the error, you should:

1. Examine the hardcopy log to determine why JES3 ended.
2. If the hardcopy log contains message IAT4080, an error was encountered accessing the JCT data set. Use the return code from the IATXJCT macro to determine the error.
3. If the hardcopy log contains message IAT4079, you must either:
 - Cancel the jobs that remain in the system whose job numbers exceed the job number range.
 - Change the JOBNO parameter on the OPTIONS statement so that all jobs that remain in the system are included in the job number range. IPL the system and perform a JES3 warm start.

Module: IATINJQ

DM026

Explanation: During a hot start with refresh, one or more MAINPROC statements were added, deleted, or changed, but the change failed validation.

The ABEND reason code identifies the specific error:

1. A processor shifted by the addition or deletion of a MAINPROC statement that was not made at the end.
2. An attempt was made to delete the current global processor.
3. An error occurred while validating the state of a deleted processor.
4. The operator was requested to reset a deleted processor, but replied CANCEL.
5. An error occurred while validating the state of down level processors.
6. The operator was requested to reset all down level processors, but replied CANCEL.
7. An error occurred while validating the state of a processor on which the PRTPAGE or FIXPAGE parameter was changed.
8. The operator was requested to reset a processor on which the PRTPAGE or FIXPAGE parameter was changed, but replied CANCEL.
9. The PRTPAGE or FIXPAGE parameter was changed on the global, but the global was not IPLed.

System Action: JES3 initialization ends.

System Programmer Response: Determine if messages IAT2063, IAT3069, IAT3423, IAT3424, IAT3425, and/or IAT3426 were issued to further explain the condition leading to the error. Take the following action depending on the reason code.

- For reason code 1, correct the order of the MAINPROC statements.
- For reason code 2, if the deletion is inadvertent, put the MAINPROC statement back in. If the deletion is needed, it must be done on another processor. Either perform a warm start on another processor, or perform a DSI followed by a hot start with refresh. The deleted system (the current global) must be brought down.
- For reason code 3, 5, or 7, refer to message IAT2063 in *z/OS JES3 Messages*.
- For reason code 4, 6, or 8, if the change is inadvertent, correct the MAINPROC statement in question. If the change is needed, retry the hot start with refresh and ensure that the operator complies with the messages indicating which processors must be reset.
- For reason code 9, if the change is inadvertent, correct the global's MAINPROC statement. If the change is needed, re-IPL the global and retry the hot start with refresh.

Module: IATINMPC

DM028

Explanation: Input service was unable to rebuild the FRP chain after a recoverable JSAM I/O error on an AWRITE.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: Analyze the dump to find the cause of the broken FRP chain.

Module: IATISFR

DM030

Explanation: During creation of a data set that has been input via a //SYSIN DD * or //SYSIN DD DATA or /*DATASET statement, one of the following occurred:

- An attempt was made to initialize the current JDS pointer when it has already been initialized.
- An attempt was made to read a JDS entry before the current pointer has been initialized.
- An attempt was made to create a new JDS entry before the buffer chain pointers have been updated.

System Action: JES3 sends message IAT3756 to the calling console. The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: Correct the usage of input service JDS access routines and resubmit job stream.

Module: IATISDV

DM031

Explanation: The resource name given in an AENQ, ADEQ, or ATEST macro is incorrect or not available because the resource is already enqueued to the FCT issuing the AENQ macro.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: Check and correct the parameters of the macro.

Module: IATGRRQ

DM033

Explanation: JES3 failsoft retry processing is to be attempted under the control of the IATNUC task for a DSP that failed under the auxiliary (IATAUX) task. When a DSP fails under the auxiliary task, JES3 recovery processing logs out the error and takes a dump if requested. It then sets the DSP's FCT to fail under the IATNUC task with a DM033 completion code. JES3 recovery for the IATNUC task bypasses logout and dump processing and performs only JESTAE exit

processing for the failing FCT.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exit exists, or none of the JESTAE exits request retry, the DSP is ended.

Programmer Response: None.

Module: IATABRT

DM034

Explanation: While JES3 was validating a job, JES3 encountered an error in the job validation/restart DSP that caused JES3 to abend. JES3 attempted and failed to recover from the error. The error is caused because either:

- An error occurred that caused the system to end.
- JES3 could not recover from a macro that was incorrectly issued during job validation/restart processing.

System Action: JES3 issues message IAT3797 to indicate JES3 encountered an unrecoverable error and ends.

System Programmer Response:

To isolate the problem and determine the error:

1. Examine the hardcopy log to determine if the abend was caused from a previous error or from an error that occurred while JES3 was validating the job.
2. If the hardcopy log contains a failsoft banner (message IAT3713) that contains a DM035 or DM036 failsoft code, JES3 ended due to an incorrectly coded parameter on a job validation/restart macro. Refer to the system programmer responses in DM035 or DM036 to help you diagnose the error.
3. If the hardcopy log contains a failsoft banner that indicates the system encountered an error that caused a system completion code to be issued, use the appropriate system programmer response in *z/OS MVS System Codes* to correct the problem.

Module: IATINJV, IATINLG

DM035

Explanation: During job validation/restart processing, a IATXVMSG or IATXVSRE macro was issued to send a message to the JES3OUT data set and the system console. JES3 could not process the message because either:

- The parameter list was passed incorrectly
- The message text was greater than 122 bytes

System Action: The JESTAE in the job validation/restart routines attempts to recover from the error. The JESTAE issues message IAT4163 to indicate the job that failed during initialization. If the JESTAE cannot recover from the error DM034 is issued.

System Programmer Response: To isolate and

identify the problem, perform the following:

1. Locate the entry in the JES3 event trace table for the IATXVSRE or IATXVMSG macro.
2. Obtain the job number of the job from register 3.
3. Use the address in register 4 to locate the message text for the job.
4. Examine the contents of register 4. Register 4 should contain the address of the message in WTO list form. If the address is incorrect, correct the address specified on the macro and perform step 6.
5. Determine if the message text contains more than 122 characters. Messages that are longer than 122 characters should either be:
 - Issued in two parts
 - Shortened so that the message text is 122 characters or less
6. Correct the macro, if necessary. Assemble and relink edit the module.

Module: IATDMJV, IATINJV

DM036

Explanation: An error occurred because the ROOT= parameter on the IATXVSRV macro:

- Was improperly specified
- Contained an incorrect address

To validate a control block, job validation/restart processing issues an IATXVFDB macro and then an IATXVSRV macro. The IATXVFDB macro obtains the FDB that describes the control block and the IATXVSRV macro validates it. If the validated control block contains the addresses of other control blocks, the ROOT= parameter was specified on the IATXVFDB or IATXVSRV macro to identify the control block that contains the other addresses (the root or master control block).

System Action: The JESTAE in the job validation/restart routines attempt to recover from the error. The JESTAE issues message IAT3899 to indicate the control block will not appear in the SNAP output since the IATXVSRV macro encountered an incorrect parameter list address. If the JESTAE cannot recover from the error DM034 is issued.

System Programmer Response: To isolate and identify the problem, perform the following:

1. Locate the entry in the JES3 event trace table for the IATXVSRV or a previous occurrence of the IATXVFDB macro.
2. Use register 3 to identify the job number of the job.
3. Use the address in register 4 to locate the parameter list for the IATXVSRV macro.
4. Correct the address of the parameter list on the IATXVSRV macro, if necessary assemble and relink-edit the module.

Module: IATDMJV

DM037

Explanation: During the job validation phase of JES3 initialization, an error occurred during Job Validation I/O Services (IATXVIO).

The ABEND reason code identifies the specific error:

Code	Explanation
X'01'	An incorrect function code was passed to the IATXVIO service routine. Registers at time of error: Register 2 - incorrect function code.
X'02'	An IATXBPL error occurred while attempting to create the Job. Validation I/O Element (VIO) cellpool during IATXVIO JOBVAL_INIT processing. Registers at time of error: Register 2 - IATXBPL return code.
X'03'	An IATXGCL error occurred while attempting to get a Job Validation I/O Element (VIO) cell from the cellpool during IATXVIO ADD_READ processing. Registers at time of error: Register 2 - IATXGCL return code. Register 7 - Job Validation I/O Work Area (VIW) address Register 13 - Job Validation Data Area (JVD) address
X'04'	The Job Validation I/O Element (VIO) for the requested spool record could not be found for an IATXVIO ADD_WRITE request. Registers at time of error: Register 7 - Job Validation I/O Work Area (VIW) address Register 13 - Job Validation Data Area (JVD) address
X'05'	The Job Validation I/O Element (VIO) for the requested spool record could not be found for an IATXVIO GET request. Registers at time of error: Register 7 - Job Validation I/O Work Area (VIW) address Register 13 - Job Validation Data Area (JVD) address
X'06'	The Job Validation I/O Element (VIO) for the requested spool record could not be found for an IATXVIO DELETE request.

	Registers at time of error: Register 7 - Job Validation I/O Work Area (VIW) address Register 13 - Job Validation Data Area (JVD) address	X'0B'	An IATXVIO ADD_WRITE request was issued and the control block id does not match the one provided when the spool record was read.
X'07'	The Job Validation I/O Element (VIO) for the requested spool record could not be found for an IATXVIO WRITE_CHECK request. Registers at time of error: Register 7 - Job Validation I/O Work Area (VIW) address Register 13 - Job Validation Data Area (JVD) address		Registers at time of error: Register 2 - bad control block id Register 6 - Job Validation I/O Element (VIO) address Register 7 - Job Validation I/O Work Area (VIW) address Register 13 - Job Validation Data Area (JVD) address
X'08'	The Job Validation I/O Element (VIO) for the requested spool record could not be found for an IATXVIO EXTRACT request. Registers at time of error: Register 7 - Job Validation I/O Work Area (VIW) address Register 13 - Job Validation Data Area (JVD) address	X'0C'	An IATXIOX service returned indicating that the write I/O has not completed for an IATXVIO WRITE_CHECK request (even though we think it has completed). Registers at time of error: Register 6 - Job Validation I/O Element (VIO) address Register 7 - Job Validation I/O Work Area (VIW) address Register 13 - Job Validation Data Area (JVD) address
X'09'	An IATXVIO ADD_WRITE request was issued but the caller did not successfully complete a read request for this spool record (i.e. an IATXVIO ADD_READ was not done or the read I/O did not complete successfully). Registers at time of error: Register 2: Byte 1 - 0 Byte 2 - 0 Byte 3 - VIO read status flag 1 (VIORFLG1 in IATYVIO) Byte 4 - VIO read status flag 2 (VIORFLG2 in IATYVIO) Register 6 - Job Validation I/O Element (VIO) address Register 7 - Job Validation I/O Work Area (VIW) address Register 13 - Job Validation Data Area (JVD) address	X'0D'	An IATXRCL error occurred while attempting to free a Job Validation I/O Element (VIO) cell during IATXVIO DELETE processing. Registers at time of error: Register 2 - IATXRCL return code. Register 6 - Job Validation I/O Element (VIO) address Register 7 - Job Validation I/O Work Area (VIW) address Register 13 - Job Validation Data Area (JVD) address
		X'0E'	An IATXVIO WRITE_CHECK request was issued and it was determined that the read I/O did not complete successfully. Registers at time of error: Register 2: Byte 1 - Read status flag 1 (VIORFLG1 in IATYVIO) Byte 2 - Read status flag 1 (VIORFLG2 in IATYVIO) Byte 3 - Write status flag 1 (VIOWFLG1 in IATYVIO) Byte 4 - Write status flag 1 (VIOWFLG2 in IATYVIO) Register 6 - Job Validation I/O Element (VIO) address Register 7 - Job Validation I/O Work Area (VIW) address Register 13 - Job Validation Data Area (JVD) address
X'0A'	An IATXVIO ADD_WRITE request was issued but there is another write request pending for this spool record. Registers at time of error: Register 2: Byte 1 - 0 Byte 2 - 0 Byte 3 - VIO write status flag 1 (VIOWFLG1 in IATYVIO) Byte 4 - VIO write status flag 2 (VIOWFLG2 in IATYVIO) Register 6 - Job Validation I/O Element (VIO) address Register 7 - Job Validation I/O Work Area (VIW) address Register 13 - Job Validation Data Area (JVD) address	X'0F'	An IATXVIO WRITE_CHECK request was issued and it was determined that

	an IATXVIO ADD_WRITE request was not issued for this spool record.	X'13'	During IATXVIO INITIATE processing, an AWRITE request returned indicating that it was unable to initiate the I/O (i.e. the AWRITE BUSY exit was taken).
	Registers at time of error: Register 2: Byte 1 - Read status flag 1 (VIORFLG1 in IATYVIO) Byte 2 - Read status flag 1 (VIORFLG2 in IATYVIO) Byte 3 - Write status flag 1 (VIOWFLG1 in IATYVIO) Byte 4 - Write status flag 1 (VIOWFLG2 in IATYVIO) Register 6 - Job Validation I/O Element (VIO) address Register 7 - Job Validation I/O Work Area (VIW) address Register 13 - Job Validation Data Area (JVD) address		Registers at time of error: Register 6 - Job Validation I/O Element (VIO) address Register 7 - Job Validation I/O Work Area (VIW) address Register 13 - Job Validation Data Area (JVD) address
X'10'	During IATXVIO INITIATE processing, an IATXSIO single read request returned indicating that an error occurred.	X'14'	During IATXVIO ADD_READ processing, a Job Validation I/O Element (VIO) was found on the chain having the same spool address of the spool record being added.
	Registers at time of error: Register 3 - Data Management Control Block (DMC) address Register 6 - Job Validation I/O Element (VIO) address Register 7 - Job Validation I/O Work Area (VIW) address Register 13 - Job Validation Data Area (JVD) address		Registers at time of error: Register 2 - First four bytes of spool address Register 3: Byte 1 - fifth byte of spool address Byte 2 - sixth byte of spool address Byte 3 - zero Byte 4 - zero Register 6 - Job Validation I/O Element (VIO) address Register 7 - Job Validation I/O Work Area (VIW) address Register 13 - Job Validation Data Area (JVD) address
X'11'	During IATXVIO INITIATE processing, an IATXSIO multi-read request returned indicating that an error occurred.	X'15'	During IATXVIO WRITE_CHECK processing, it was determined that the AWRITE request used to initiate the write I/O was unsuccessful. This reason code is used to cause the calling FCT's recovery routine to be entered.
	Registers at time of error: Register 3 - Address of the first Data Management Control Block (DMC) in the multi-read request Register 6 - Job Validation I/O Element (VIO) address Register 7 - Job Validation I/O Work Area (VIW) address Register 13 - Job Validation Data Area (JVD) address		The registers at the time of error are not interesting. This reason code is used to cause the calling FCT's recovery routine to be entered. Diagnostic information has already been provided by the INITIATE service when the AWRITE error was detected.
X'12'	During IATXVIO INITIATE processing, an AWRITE request returned indicating that an error occurred.	X'16'	A Job Validation I/O Work Area (VIW) already existed when an IATXVIO FCT_INIT request was issued (probably caused by more than one IATXVIO FCT_INIT request).
	Registers at time of error: Register 2 - dump code returned from AWRITE Register 3 - reason code returned from AWRITE Register 6 - Job Validation I/O Element (VIO) address Register 7 - Job Validation I/O Work Area (VIW) address Register 13 - Job Validation Data Area (JVD) address		Registers at time of error: Register 7 - Job Validation I/O Work Area (VIW) address
		System Action:	The JESTAE in the job validation/restart routines attempts to recover from the error. The JESTAE issues message IAT4163 to indicate the job that failed during initialization. If the JESTAE

cannot recover from the error DM034 is issued.

System Programmer Response: Contact IBM support and provide the following documentation:

- The DM037 reason code
- The registers at the time of error
- A dump taken as a result of the DM037 abend
- The SYSLOG at the time of error
- Any job validation SNAP output that was produced during initialization
- Compiler/assembler listings for the following modules:
 - IATDMVIO - all reason codes
 - IATDMJV - all reason codes except X'02', X'16'
 - IATJVDR - all reason codes except X'02', X'16'
 - IATINJR - for reason code X'02'
 - IATINJV - for reason code X'16'

Module: IATDMVIO

DM040

Explanation: The generalized print routine (IATGRPR) was entered with a size parameter that was negative or too large for the function requested with the IATXPRT macro.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exit exists, or none of the JESTAE exits request retry, the DSP is ended.

Programmer Response: Correct the IATXPRT macro or the cause of the incorrect size parameter.

Module: IATGRPR

DM045

Explanation: The RESQUEUE management routines have been entered with a RESQUEUE entry which does not contain a valid index value or, an entry which is to be put (via RQTAPUT) or deleted (via RQTADEL) is not on the chain of active entries.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exit exists, or none of the JESTAE exits request retry, the DSP is ended.

Programmer Response: Correct the calculation of the index value or eliminate possible RQTADEL, RQTAPUT or RQTADEL sequence. If the job is under MDS's control, check the error queue and restart queue for a job that could be causing the DSP to end. One way of finding the job is to systematically cancel jobs on the queues until the DSP in question runs normally. Use *I,S,E to display jobs on the error queue and *I,S,R to display jobs on the restart queue. Then use *F,J=jobno,C to cancel jobs.

Module: IATGRRQ

DM046

Explanation: The buffer pointed to by the chained single record file buffer table (CSBT) encountered an error. Register 6 contains a return code which indicates the type of error:

Code	Explanation
------	-------------

X'01'	The buffer failed the acronym check.
-------	--------------------------------------

X'02'	The buffer was not owned by the CSBT. The JDSPREV field does not point back to the file description block (FDB) in the CSBT entry.
-------	--

Register	Contents
----------	----------

4	Contains the address of the RESQUEUE for the current job.
---	---

5	Contains the address of the JDS buffer. This is loaded from the CSBTFDB field.
---	--

6	Contains the DM046 reason code.
---	---------------------------------

8	Contains the address of the CSBT entry for the buffer.
---	--

System Action: The calling FCT has ended with code DM046. The JSAM buffers involved are not being returned to JES3 and may not be recovered until the next JES3 restart.

System Programmer Response: Determine the cause of the buffer overlay.

Module: IATGRJA

DM047

Explanation: An error was encountered while JES3 was releasing a job data set control block (JDS). JES3 was attempting to write the JDS to spool using the WRTCHAIN macro when JES3 determined the job number was not in the job's resqueue.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exit exist, or no JESTAE exits request retry, the DSP is ended.

System Programmer Response: Examine the resqueue to determine the error.

Module: IATGRJA

DM048

Explanation: An error occurred during processing of a JESMSG macro. Register 2 contains a return code which indicates the type of error.

Code	Explanation
------	-------------

X'10'	A JSAM error occurred during processing of an AOPEN, ALOCATE, ABLOCK, or ACLOSE macro. Register 3 contains the appropriate
-------	--

dump code. See *z/OS JES3 Customization* for descriptions of the macros and dump codes.

X'14' An error occurred during processing of the IATXJCT macro while updating the JCT after a recoverable write error. Register 0 and Register 15 from the JCT failure are saved in registers 4 and 5 before issuing the FAILDSP.

X'18' The root FDB to be updated after a recoverable write error is not in the JDS or JCT.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exit exists, or none of the JESTAE exits request retry, the DSP is ended.

Programmer Response: Determine and correct the conditions causing the DSP to end.

Module: IATGRJA, IATIIMS

DM049

Explanation: A DSP issued the IATXPRT macro (to write into or close the file) without issuing IATXPRT TYPE=OPEN (to open the file).

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exit exists, or none of the JESTAE exits request retry, the DSP is ended.

Programmer Response: None.

Module: IATGRG1

DM050

Explanation: A JES3 ATIME macro was issued without an ATIME appendage address specified.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exit exists, or none of the JESTAE exits request retry, the DSP is ended.

Programmer Response: Correct the ATIME macro to include an appendage address.

Module: IATGRCT

DM050

Explanation: JES3 discovered an error while processing an ATIME request from a JES3 DSP. A JES3 DSP issues an ATIME macro to

- establish an ATIME request.
- update an ATIME request.
- cancel an ATIME request.

System Action: The JESTAE exit, if one exists, for the JES3 DSP that issued the ATIME request is invoked. If a JESTAE exit does not exist, or none of the JESTAE exits request retry, the JES3 DSP ends.

System Programmer Response:

1. Examine the hardcopy log for the failsoft banner (message IAT3713)
2. Obtain the reason code from the **FAILURE REASON CODE= rsn code** line in the failsoft banner. The rsn code indicates the type of error the ATIME service routine encountered.
3. If the reason code is a X'04', X'08',X'0C', or X'10', the abend occurred because the parameter list for the ATIME macro was not built correctly. The problem is within the code that invokes the ATIME service routine using the ATIME macro. For a reason code of:

Code	Explanation
------	-------------

X'04'	The parameter list passed to the ATIME macro was incorrect. Correct the error by ensuring the parameters on the ATIME macro are properly specified.
--------------	---

X'08'	It indicates that a JES3 DSP invoked the ATIME service routine with the ENTER= parameter, but did not supply a timer appendage address. Verify that valid parameters are passed to the ATIME macro.
--------------	---

X'0C'	It indicates that a JES3 DSP invoked the ATIME service routine with the ECFADD= and the ECFMASK= parameters, but did not supply an ECF address. Verify that valid parameters are passed to the ATIME macro.
--------------	---

X'10'	It indicates that a JES3 DSP invoked the ATIME service routine with the ECFADD= and the ECFMASK= parameters, but did not supply an ECF mask. Verify that valid parameters are passed to the ATIME macro.
--------------	--

Correct the problem, if the problem exists in an installation-written DSP or installation exit. Otherwise, notify your IBM representative of the problem and provide the information you have obtained.

4. If the reason code is a X'10000nnn' or a X'10000nnn' where nnn is a number, notify your IBM representative of the problem and provide the information you have obtained.

Module: JES3 general routines

DM051

Explanation: A DSP has returned to IATGRJR (JSS driver) with save areas still on the FCT save chain. This normally would result when a module called via an ACALL macro returns to JSS rather than to its caller via the ARETURN macro.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exit exists, or none of the

JESTAE exits request retry, the DSP is ended.

Programmer Response: Correct and re-link-edit the DSP.

Module: IATGRJR

DM052

Explanation: User exit IATUX30 returned an incorrect return code.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exit exists, or none of the JESTAE exits request retry, the DSP is ended.

Programmer Response: Correct and re-link-edit the user exit.

Module: IATGRWP, IATGRWQ

DM053

Explanation: The retry routine for the TIMER FCT was entered after an error was encountered while processing an expired ATIME request. The TIMER FCT fails the DSP that issued the ATIME request.

System Action: The JESTAE exit, if one exists, for the JES3 DSP that issued the ATIME request is invoked. If a JESTAE exit does not exist, or none of the JESTAE exits request retry, the JES3 DSP ends.

System Programmer Response:

1. Examine the hardcopy log for the failsoft banner (message IAT3713)
2. Obtain the reason code from the **FAILURE REASON CODE= rsn code** line in the failsoft banner. The rsn code indicates the type of error the TIMER FCT encountered.
3. Notify your IBM representative of the problem and provide the information you have obtained.

Module: JES3 general routines

DM054

Explanation: A lock error was detected by the IATXJLOK service routine. A DSP attempted to obtain a second JES3 lock while already holding one lock. At the time of the failure register 2 contains the caller's return address.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exit exists, or none of the JESTAE exits request retry, the DSP is ended.

Programmer Response: Analyze the dump (if one was taken) to determine the cause of the error.

Module: IATGRG1

DM055

Explanation: An error occurred during the processing of an IATXSYSU CREATE_ENTRY request by IATINDEV as a result of a *MODIFY,CONFIG command.

The possible causes of the error are:

- The SYSUNITs index assigned to the device is bad.
- The SYSUNITs entry to be assigned to the device is already in use.

System Action: The DSPs JESTAE exits are invoked.

System Programmer Response: Gather the following information and contact IBM support:

- Compiler for modules IATGRSYS, IATINDEV, and IATINCF.
- The dump that was taken as a result of the DM055 abend.
- The *MODIFY,CONFIG log that was generated (if any).

Module: IATINDEV

DM080

Explanation: An error occurred when an ALOAD macro was issued to load a module into storage. The ALOAD macro is used to load either a JES3 or non-JES3 module into storage. To load a module, ALOAD uses the services of the MVS LOAD macro. The ALOAD macro requires the address of a JES3 directory element (JDE). A JDE contains the status information of all the status data for the module.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If not JESTAE exits exist, or none of the JESTAE exits require retry, the DSP is ended.

System Programmer Response: Determine the error by performing the following:

1. Locate information from the LOAD macro. Information from the LOAD macro can be obtained from either:
 - Message IAT6308 in the LOG. Refer to *z/OS JES3 Messages* for the information this message supplies.
 - The RETURN entry in the trace table for the ALOAD macro. The registers in the trace entry contains the following information:

Register	Contents
0	Contains the MVS abend code from the LOAD macro
1	Contains the reason code from the LOAD macro
2 and 3	Contains the requested module name

2. Refer to *z/OS MVS System Codes* for an explanation of the error code and the specific action to be taken.

Module: IATGRLD

DM081

Explanation: An error occurred while attempting to determine a module's size requirements. JES3 issued an ALOAD macro to load a module into storage. The ALOAD macro invokes the services of the MVS LOAD macro. Before a module can be loaded into storage the modules size requirements are determined by issuing a BLDL macro. The BLDL macro could not locate or determine the module's size requirements.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If not JESTAE exits exist, or none of the JESTAE exits require retry, the DSP is ended.

System Programmer Response: Determine the error by performing the following:

1. Locate information from the LOAD macro. Information from the LOAD macro can be obtained from either:
 - Message IAT6308 in the LOG. Refer to *z/OS JES3 Messages* for the information this message supplies.
 - The RETURN entry in the trace table for the ALOAD macro. The registers in the trace entry contains the following information:

Register	Contents
0	Contains the MVS abend code from the BLDL macro
1	Contains the reason code from the BLDL macro
2 and 3	Contains the requested module name

2. Refer to *z/OS MVS System Codes* for an explanation of the error code and the specific action to be taken.

Module: IATGRLD

DM082

Explanation: An error occurred during ADELETE processing. The JES3 directory element (JDE) could not be found in a search of the JDE queue of elements. Register 4 contains the JDE not found indicator (X'04') and register 1 contains the JES3 dump code.

Note: These values appear in the JES3 trace table only (not in the failsoft logout).

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exist, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: None.

Module: IATGRLD

DM083

Explanation: An error occurred during ALOAD processing. The JES3 AGETMAIN for a storage buffer failed. Register 4 contains the AGETMAIN busy indication (X'04'). Register 1 contains the JES3 dump code.

Note: These values appear in the JES3 trace table only (not in the failsoft logout).

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exist, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: None.

Module: IATGRLD

DM084

Explanation: An error occurred during ADELETE processing. A request was made against a module that does not have any current users and a delete synchronization error condition exists. Register 4 contains the delete synchronization error indicator (X'0C') and register 0 contains the address of the JDE for the module being deleted. Register 1 contains the JES3 dump code.

Note: These values appear in the JES3 trace table only (not in the failsoft logout).

Registers 2 and 3 contain the name of the module being deleted (in hexadecimal).

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exist, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: None.

Module: IATGRLD

DM086

Explanation: An ADELETE request was made for a data CSECT module that the requestor did not own (FCT check failed); or the requestor provided a JDE address for a module and the module names did not match. Register 0 contains the address of the JDE for the module being deleted.

Note: These values appear in the JES3 trace table only (not in the failsoft logout). Register 4 contains the incorrect delete request indicator.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exist, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: None.

Module: IATGRLD

DM090

Explanation: A DSP has issued a LOGOUT macro; the LOGOUT macro failed because the JDAB SE could not be found for the DSP.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exit exist, or none of the JESTAE exits request retry, the DSP is ended.

Programmer Response: Correct and re-link-edit the DSP.

Module: IATGRLG

DM091

Explanation: A LOGOUT macro has been issued by a DSP for which no corresponding LOGIN has been issued.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: Provide a LOGIN macro or eliminate the LOGOUT macro in the failing DSP.

Module: IATGRLG

DM092

Explanation: The LOGOUT macro has been issued with a zero RESQUEUE address in the FCT (FCTRQAD).

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: Correct and re-link-edit the DSP.

Module: IATGRLG

DM100

Explanation: JES3 encountered an error. The reason code in register 15 indicates the type of error that occurred.

Code	Type of Error
------	---------------

X'04'	JES3 could not locate the job segment scheduler (JSS) FCT on the FCT chain
X'08'	JES3 could not locate the FSSDRVR FCT on the FCT chain
X'0C'	JES3 attempted and failed to load a module into storage
X'10'	JES3 could not locate the MDSSRS FCT on the FCT chain

X'14' JES3 could not find the LOCATE FCT on the FCT chain

System Action: If the abend occurred during JES3 initialization, JES3 initialization is ended. Otherwise, The DSP's JESTAE exits, if any exist, are invoked. If there isn't a JESTAE associated with the DSP, or none of the JESTAEs exits requires retry the DSP is ended.

System Programmer Response: Perform the following to determine the cause of the error:

1. Locate the failsoft banner (message IAT3713) in the hardcopy log
2. Locate the contents of register 15. If register 15 contains:

Code	Type of Error
------	---------------

X'04'	JES3 could not locate the job segment scheduler (JSS) FCT on the FCT chain.
X'08'	JES3 could not locate the FSSDRVR FCT on the FCT chain
X'0C'	JES3 attempted and failed to load a module into storage
X'10'	JES3 could not locate the MDSSRS FCT on the FCT chain
X'14'	JES3 could not find the LOCATE FCT on the FCT chain

Module: IATINIT, IATINLC, IATINMD

DM101

Explanation: Either an error has occurred during IATXBPL (build cellpool) processing, or there is not enough storage to build the cellpool. The error occurred in a C/I FSS address space, the FSS terminates. Register 2 contains the return code from IATXBPL.

Code	Explanation
------	-------------

X'04'	The value specified for the CPADDR parameter is nonzero and does not point to a primary cell pool control block (CPB).
X'08'	The primary cell pool extent or secondary extents contain unallocated cells.
X'0C'	Storage is not available.
X'10'	The cell size is not a multiple of 4.
X'14'	The MAXEXTNT value is greater than 255.
X'18'	THE CELL SIZE (in the parameter list or the primary CPB) is not within the range of 4 to 4096.
X'1C'	The LIST parameter was not specified. This parameter is required when creating a cell pool.
X'20'	The PGRLE and SPAN parameters were specified when creating a new cell pool; this is not valid.

- X'24'** The number of cells for the secondary extent was not specified.
- X'28'** The extent size is greater than X'7FFFFFFF' bytes.
- X'2C'** SPAN=YES and PGFIX=YES were both specified; this is not valid.
- X'30'** The requested number of reserved cells exceeds the limit of the primary cell pool extent.

System Action: The CI/FSS address space is ended.

Programmer Response: None.

Module: IATINRB

DM102

Explanation: An error has occurred during IATXGCL (get cell) processing.

The error is detected by the GET RESQUEUE routine in module IATGRRQ. Register 2 contains the return code from IATXGCL.

Code	Explanation
-------------	--------------------

- | | |
|--------------|--|
| X'04' | The address specified in the CPADDR parameter does not point to a primary CPB. |
| X'08' | The cell pool cannot be expanded without exceeding the maximum extents defined for the cell pool. |
| X'0C' | The cell pool cannot be expanded because storage is not available in the user-specified subpool. |
| X'10' | No cells are available but the total counter indicates that cells are available. |
| X'14' | The bit may indicate that all cells are in use but the counter indicates that cells are available. |

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exist, or none of the JESTAE exits request retry, the DSP ends.

Programmer Response: None.

Module: IATGRRQ

DM103

Explanation: An error has occurred during IATXRCL (free cell) processing.

The error is detected by the FREE RESQUEUE routine in module IATGRRQ. Register 2 contains the return code from IATXRCL.

Code	Explanation
-------------	--------------------

- | | |
|--------------|---|
| X'04' | The CPADDR parameter does not specify the address of a primary CPB. |
|--------------|---|

- X'08'** The address specified in the CELL parameter is not valid.

- X'20'** SPAN and PGRLSE were specified when the cell pool was created.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exist, or none of the JESTAE exits request retry, the DSP ends.

Programmer Response: None.

Module: IATGRRQ

DM105

Explanation: An error condition occurred (during IATXCNS macro processing) while attempting to read the JDAB, the parameter record, or while attempting to reconstruct the input parameter buffer.

System Action: The DSP is ended.

Module: IATCNRN

DM106

Explanation: An error return from the IATXPRMD service routine was detected. Register 2 contains one of the following reason codes from IATYPRD:

Code	Explanation
-------------	--------------------

- | | |
|--------------|---|
| X'01' | (PRDERSUP) An initialization module detected too many additions to a single SUPUNIT. |
| X'02' | (PRDERADD) An initialization module attempted to add a duplicate process mode or alternate process mode name. |
| X'03' | (PRDERCOM) More than 255 process modes were defined in the initialization stream for this complex. |

System Action: JES3 initialization fails.

Module: IATFSLG

DM107

Explanation: An error occurred while macro IATXJMR was processing. The failsoft logout banner displayed in message IAT3713, contains the reason code for the error.

Code	Explanation
-------------	--------------------

- | | |
|--------------|---|
| X'04' | A TYPE=GET request was issued and the job management record (JMR) was not found in the data sets output information (DOI). |
| X'08' | ATYPE=GET request was issued and an error occurred while attempting to read the data sets output information (DOI). |
| X'0C' | A TYPE=GET request was issued and there was no data set output information (DOI) for the data set's output service element (OSE). |

X'C0' ATYPE=PUT request was issued and an error occurred while macro IATXSIO was processing.

System Action: The dynamic support program (DSP) invokes a JESTAE exit. If none exist, the DSP is halted.

Module: JES3

System Programmer Response: Determine and correct the conditions causing the halt.

DM111

Explanation: An error occurred during LOCATE processing by module IATLVIN or the locate subtask (LVLC) ended abnormally.

System Action: Depending on the severity of the error, either the locate FCT will recover or the locate function may be lost.

Programmer Response: Use the tracking bytes in the IATLVIN data area to determine the failing routine. To regain locate functions, perform a hot start.

Module: IATLVIN

DM131

Explanation: A DSP's message appendage has abnormally ended.

System Action: Console service remains active. If DSP failsoft processing cannot circumvent the problem, the message appendage in the failing DSP is routed to JES3 failsoft processing.

Programmer Response: Analyze and correct the error in the failing DSP.

Module: IATCNIN

DM132

Explanation: JES3 or a user exit issued a MESSAGE macro to send a message to the operator. JES3 converts MESSAGE macros into a WTO macro. JES3 could not convert the MESSAGE macro to a WTO due to an improperly coded parameter. JES3 issues message IAT3893 to indicate an error occurred while processing a MESSAGE macro.

System Action: The DSP's JESTAE, if any exist, are invoked for recovery processing. If the DSP does not have an JESTAE, the DSP ends.

Programmer Response: To determine the error, perform the following:

1. Locate the ACALL and RETURN trace entry for the MESSAGE macro
2. Register 1 of the ACALL trace entry contains the address of the parameter list used by the MESSAGE macro. The parameter list is mapped by a DSECT in module IATCNWO.

3. Register 2 in the failsoft logout (message IAT3713) contains one of the following reason codes to indicate why the MESSAGE parameter list was incorrect.

Code	Explanation
------	-------------

X'04'	There was not any message text specified, the length of the text was 0.
--------------	---

X'08'	The specified destination class was incorrect
--------------	---

X'0C'	A non-zero return code was received from the IATXCNDDB TRANSFER service.
--------------	--

X'10'	A non-zero return code was received from the IATXCNDDB VERIFY service.
--------------	--

X'14'	The multi-line message list (IATYMLWO) supplied by the caller does not contain the proper identifier
--------------	--

X'18'	The message length of a message pointed to by an MLWO entry is zero.
--------------	--

4. Use the trace table to locate the module that issued the MESSAGE macro. Register 14 of the ACALL entry in the trace table contains the return address and register 10 contains the base register.

5. Correct the parameter list in the module that issued the MESSAGE macro.

6. Re-link edit the DSP.

Module: IATCNWO

DM133

Explanation: The operator issued a *FAIL command to end the DSP.

System Action: The DSP may or may not end.

Programmer Response: If the DSP had been rejecting other attempts to cancel it, analyze the dump to determine why the DSP could not be canceled.

Module: IATCNIN

DM135

Explanation: JES3 common quick cell services were processing a console service cell pool when an error was detected.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: In the dump, look at field ACONSBCB in IATYTVT to determine which return code was returned from IATGRQC. The return codes for each of the JES3 common quickcell services macros (for example, IATXBPL, IATXDPL, IATXGCL, and IATXRCL) are explained in *z/OS JES3 Customization*.

Module: IATCNRN

DM141

Explanation: An AGETMAIN macro has been issued requesting zero bytes of storage.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exit exists, or none of the JESTAE exits request retry, the DSP is ended.

Programmer Response: Determine and correct the criteria for calculating the desired length.

Module: IATGRGM, IATUTIS

DM142

Explanation: An APUTMAIN macro has been issued for an area which is not on a double-word boundary.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exit exists, or none of the JESTAE exits request retry, the DSP is ended.

Programmer Response: Find and correct the calculations for obtaining the area address.

Module: IATGRGM, IATUTIS

DM143

Explanation: The APUTMAIN routine has issued a conditional FREEMAIN macro which has returned a nonzero return code. The return code is placed in register 3 for display in the resulting failure.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exit exists, or none of the JESTAE exits request retry, the DSP is ended.

Programmer Response: Find and correct the cause of the failure (incorrect address or subpool, etc.).

Module: IATGRGM, IATUTIS

DM144

Explanation: A nonzero return code has been returned from ATTACH macro processing. The return code is placed into register 8.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exit exists, or none of the JESTAE exits request retry, the DSP is ended.

Programmer Response: Find and correct the conditions causing the failure.

Module: IATGRGS

DM145

Explanation: An APUTMAIN macro has been issued requesting zero bytes of storage.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exit exists, or none of the JESTAE exits request retry, the DSP is ended.

Programmer Response: Determine and correct the criteria for calculating the desired length.

Module: IATGRGM

DM146

Explanation: The appendage attached as a subtask has abnormally ended.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exist, or none of the JESTAE exits request retry, the DSP is ended.

Programmer Response: Find and correct the conditions causing theabend. The PSW and registers at the time of the subtask abend are in the GSD. There is one fullword in the ESTAE entry in the JES3 trace table that points to the GSD.

Module: IATGRGS

DM147

Explanation: A failure occurred while processing an IATXCSF request.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exist, or none of the JESTAE exits request retry, the DSP is ended.

Programmer Response: Find and correct the conditions causing the abend.

Module: IATGRGS

DM200

Explanation: There was an error return from the JDSGET macro or IATXRABC (RAB create) macro.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exit exists, or none of the JESTAE exits request retry, the DSP is ended.

Programmer Response: Use the trace entries in the dump to determine which routine caused the problem, then analyze the dump to locate the cause of the failure.

Module: IATIICC, IATIIDR

DM201

Explanation: The DSP invoked the C/I, LOCATE, or MDS subtask passed incorrect parameters to the subtask maintenance module.

System Action: The DSP's exists, if any exist, are invoked. If no JESTAE exists, or none of the JESTAE exits requires retry, the DSP is ended.

System Programmer Response: Examine the dump to determine the reason the reason why the subtask passed the invalid parameters.

Module: IATINAT, IATLVAT, IATMDAT

DM202

Explanation: The CIDRVR FCT has detected an error. Register 2 contains a return code which indicates the type of error (defined by macro IATYIDA.)

Code Explanation

- X'04'** The ERROR exit from macro IATXFSS was taken and was found to be a severe error. This may indicate an incorrect FSS table (IATYFSS) control block. Note that other error returns from IATXFSS, such as checkpoint disabled, are ignored.
- X'08'** The ERROR or NAVAIL exit was taken after issuing the IATXELA, IATXELS, or IATXELD macro. This may indicate an incorrect ECF list control block (IATYELB). The ELB is pointed to by the interpreter data area at field IDAELBST.
- X'0C'** An incorrect staging area has been detected. (The staging area can be found by searching the CIDRVR's destination queue entry.)
- X'10'** An incorrect FSS table (IATYFSS) has been detected.
- X'14'** An incorrect RESQUEUE (IATYRSQ) has been detected. The address of the RESQUEUE being processed at the time of error is pointed to by the interpreter data area (field IDAEIEST).
- X'18'** An incorrect or missing ECF identifier entry (EIE) has been detected. The EIE's are pointed to by the interpreter data area (IATYIDA) at field IDAEIEST.

System Action: The CIDRVR's JESTAE exit is entered. If the JESTAE exit detects an unrecoverable error (such as an incorrect interpreter data area or ECF list control block), the CIDRVR FCT ends. Otherwise, the JESTAE exit tries to request retry. The type of processing performed depends on the reason code:

Code Explanation

- X'04'** The CIDRVR validates the C/I FSS tables (IATYCFT) and their corresponding FSS tables (IATYFSS). If any of them are invalid, message IAT4450 is issued and the CIDRVR enters a permanent AWAIT.
- X'08'** The CIDRVR attempts to rebuild the ECF list control block and ECF identifier entries. All duplicate and invalid entries are deleted.
- X'0C'** The CIDRVR searches the destination queue to find the staging area being processed at the time of the error. If any of the staging areas on the queue are invalid, message IAT4450 is issued, and the CIDRVR enters a permanent AWAIT.

Otherwise, the FSS that sent the staging area is determined. If this is a recursive error for the

same staging area, the FSS is ended. The FSS is also ended if the C/I communication block within the staging area is incorrect.

- X'10'** The CIDRVR validates the C/I FSS tables (IATYCFT) and their corresponding FSS tables (IATYFSS). If any of them are incorrect, message IAT4450 is issued and the CIDRVR enters a permanent AWAIT.
- X'14'** The CIDRVR validates the RQ. If the RQ is incorrect and is on one of the RQ chains processed by the CIDRVR, message IAT4450 is issued and the CIDRVR enters a permanent AWAIT. If the RQ is incorrect and not on a CIDRVR chain, processing of the RQ is bypassed. If the RQ is valid, the CIDRVR cleans up and cancels the job.
- X'18'** The CIDRVR attempts to rebuild the ECF list control block and ECF identifier entries. All duplicate and incorrect entries are deleted.

Programmer Response: If the CIDRVR ends or enters a permanent AWAIT, JES3 must be restarted to regain the CIDRVR functions. JES3 should also be restarted if any of the tables in the JES3 address space are incorrect.

Module: IATIICD, IATIIFR, IATIIFS

DM203

Explanation: The parameters passed to the C/I issue ORDER routines are missing or incorrect. Register contents depends on how far the routine got before detecting the error and are as follows:

Register	Contents
2	The reason code for the abend: X'04' Incorrect or missing FSS table address. X'08' Incorrect or missing RESQUEUE address. X'0C' Incorrect or missing JCT address. X'20' Incorrect or missing procedure library table address.
5	The address of the FSS table (IATYFSS).
6	The address of the C/I FSS table (IATYCFT). Field CFTFSSPT of the CFT points to the FSS table (IATYFSS).
7	The address of the service request list (IATYSRL) being built.

- 8 The address of the current C/I communication block entry (IATYCCB) being built.
- 13 The address of the ORDER work area (for variable size orders).

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exist, or none of the JESTAE exits request retry, the DSP is ended.

Programmer Response: Find and correct the conditions causing the error.

Module: IATIIOR

DM204

Explanation: All C/I subtasks have abended during C/I subtask initialization in a C/I FSS address space. Message IAT3515 appears before the FAILDSP is issued.

System Action: The C/I FSS address space ends.

Programmer Response: Print and examine the dump taken by each of the C/I subtask's ESTAE exit to determine the cause of the error.

Module: IATINAT

DM205

Explanation: An error has occurred while IATIIFP was processing PROCLIB ORDERS in the C/I FSS address space. Register 13 contains the address of the PROCLIB work area. Register 2 contains the error flag as follows:

Code	Explanation
------	-------------

- | | |
|-------|--|
| X'80' | An incorrect C/I communication block (CCB) has been detected. |
| X'40' | A dynamic concatenation error has occurred. Messages IAT4883 and IAT4886 are also issued. The abend is issued after processing of the other proclib completes. |
| X'20' | A dynamic allocation error has occurred. Messages IAT4883 and IAT4886 are also issued. The abend is issued after processing of the other proclib completes. |
| X'10' | A proclib OPEN error has occurred. Message IAT4880 is also issued. The abend is issued after processing of the other proclib completes. |
| X'08' | A proclib's block size is not a multiple of 80. Message IAT4881 is also issued. The abend is issued after processing of the other proclib completes. |
| X'04' | A dynamic unallocation error has occurred. Messages IAT4883 and IAT4886 are also issued. The abend is issued after processing of the other proclib completes. |

System Action: The CI FSSDRVR's JESTAE exit gets control. If the error occurred during proclib initialization, the CI FSS address space ends. Otherwise, the CCB that was being processed at the time of the error is deleted.

Programmer Response: Find and correct the conditions causing the error.

Module: IATIIFP

DM206

Explanation: An inconsistency was found between the disk output scheduler element (OSE) chain and the in-storage output service summary entry (OSS) chain for a job. A JES3 writer, FSS writer, or external writer selected a job for processing based on the presence of an OSS, but there is no corresponding output on spool.

System Action: The DSP is placed in failsoft processing. The OSS chain for the job is purged and rebuilt from spool. A separate dump containing the output service elements (OSE) for the job is taken.

System Programmer Response: Analyze the DM206 dump and the OSE dump to determine the cause of the error. The registers contain the following information:

Register	Contents
3	OSS address (if contents are not zero)
6	RQ address

Module: IATOSWS, IATOSPC

DM207

Explanation: The C/I FSS driver initialization module (IATINFC) or the C/I FSS driver module (IATIIFC) has detected an error. Register 2 contains a reason code for the abend:

Code	Explanation
------	-------------

- | | |
|-------|--|
| X'04' | Module IATINFC could not locate the correct MEMDATA entry on the MEMDATA chain. |
| X'08' | Module IATINFC failed to load the C/I FSS ORDER module (IATIIFO). |
| X'0C' | Module IATINFC failed to load the C/I table building module (IATINIF). |
| X'10' | Module IATINFC failed to load the C/I message module (IATIIMS). |
| X'14' | Module IATINFC detected a zero MPC address in the TVT. |
| X'18' | Module IATIIFC detected a connect failure. |
| X'1C' | Module IATIIFC is unable to find the PROCLIB entry that was specified in the CCB for the job entering C/I service. |

X'20' Module IATIIFC determined that the CCB is incorrect.

System Action: Error codes 04, 08, 0C, 10, 14, and 18 are severe errors; initialization of the FSS is ended.

Error code 1C is not severe. The CCB with the bad procedure library identifier is deleted. The job whose CCB is deleted waits in C/I service on the FSS in which it failed. IATIIFC continues processing other jobs.

Error code 20 is not severe. The CCB is deleted. The job whose CCB is deleted waits in C/I services on the FSS in which it failed. IATIIFC continues processing other jobs.

Programmer Response: If the FSS ends, correct the cause of the failure and restart the FSS. If the FSS continues and there are no jobs hung in C/I, no further action is required. If jobs are hung in C/I because of the deleted CCBs, cancel or fail the FSS to clear them.

Module: IATINFC, IATIIFC

DM209

Explanation: C/I processing has encountered an error condition during scheduler JCL facility (SJF) processing. The contents of the registers are:

Register	Contents
2	The error code from output scheduler work block (SWB) processing. The reason codes are mapped by flag IDD209ER.
3	The SJF return code returned by SJF in register 15.
4	The SJF reason code from the SJF parameter list. The reason codes are defined by macro IEFSJRC.
13	The address of the IDD (macro IATYIDD). The IDD points to the SJF GET parameter list. SJF RETRIEVE Points to IEFSJREP SJF GET Points to IEFSJGEP SJF FIND Points to IEFSJFNP SJF UPDATE Points to IEFSJRUP

System Action: The C/I DSP's JESTAE exit is invoked to cleanup. The job being processed at the time of error is cancelled with print.

Programmer Response: Find and correct the conditions causing the error.

Module: IATIICM, IATIIOS, IATIISP

DM300

Explanation: An error return occurred after module IATDYDR, IATIIDS, or IATIIEN issued an IATXELA or an IATXELD macro.

System Action: Dynamic allocation first level error recovery attempts to rebuild the incorrect control block. If successful, processing will continue. Proclib enable/disable processing continues if the macro was issued by IATIIDS or IATIIEN.

Programmer Response: Analyze the dump to find the cause of the control block failure.

Module: IATDYDR, IATIIDS, IATIIEN

DM301

Explanation: An NAVAIL return occurred after module IATDYDR issued an IATXIOX macro.

System Action: Dynamic allocation error recovery cancels or finishes the request in progress.

Programmer Response: Analyze the dump to find the cause of the lost ECF.

Module: IATDYDR

DM302

Explanation: An error return occurred after module IATDYSB issued an IATXJCT macro. This error occurs during dynamic allocation first level error recovery.

System Action: The DYNAL DSP ends.

Programmer Response: Analyze the dump to find the cause of the JCT failure.

Module: IATDYSB

DM303

Explanation: An error return occurred after module IATDYDR issued an IATXADD or an IATXLOC macro, or, if the failure occurred in IATDYSB, the DJST was not validated during negative use count processing by the internal recovery routine.

System Action: Dynamic allocation error recovery cancels or finishes the offending request.

Programmer Response: Analyze the dump to find the cause of the failure.

Module: IATDYDR, IATDYSB

DM304

Explanation: An error return code occurred after module IATDYDR issued a JESMSG macro.

System Action: Dynamic allocation error recovery finishes the request in progress. Processing then continues.

Programmer Response: Analyze the dump to find the cause of the failure.

Module: IATDYDR

DM306

Explanation: Parameters passed to the internal recovery routine for negative use counts are incorrect.

System Action: Dynamic allocation error recovery cancels or finishes the offending request.

Programmer Response: Analyze the dump to find the cause of the failure.

Module: IATDYSB

DM307

Explanation: Module IATDYSB detected a use or allocation count error. Register 2 (and DYNERRCD) contains a reason code for the abend:

Code	Explanation
------	-------------

X'04'	Indicates an attempt to decrement the SYSUNITS use count that is already zero.
X'08'	Indicates an attempt to decrement the SETDSN use count that is already zero.
X'10'	Indicates an attempt to decrement the SETVOL allocation count that is already zero.
X'14'	Indicates an attempt to decrement the SETVOL fetch count that is already zero.
X'18'	Indicates a duplicate SETUNITS entry was found on the volume verify chain.
X'24'	Indicates an attempt to decrement the SYSUNITS count when the RQ control count is zero.
X'30'	Indicates an attempt to decrement the SETDSN use count when the RQ control count is zero.
X'3C'	Indicates an attempt to decrement the SETVOL fetch count when the RQ control count is zero.
X'48'	Indicates an attempt to decrement the SETVOL allocation count when the RQ control count is zero.

System Action: JES3 processing continues.

Programmer Response: Analyze the dump to find the cause of the use or allocation count error.

Module: IATDYSB

DM400

Explanation: The main device scheduler (MDS) received an invalid return code from the JESMSG macro.

System Action: A dump is written to JESABEND. When the dump completes, the job which was active is placed on the MDS error queue and MDS is reinstated.

Programmer Response: Analyze the dump to determine the validity of the JDS control block and/or the JESMSG JDS entry.

Module: IATMDFE, IATMDOP, IATMDSB, IATMDSL, IATMDVE

DM420

Explanation: An error occurred under the processing of the MDSSRS FCT. Use register 2 to determine the error.

Code	Explanation
------	-------------

1	The MDS master task did not successfully attach or the task abended before it completed initialization
2	Module IATMDSR was unable to find the originating main for a RESQUEUE
3	The MDS master task experienced recursive failures while trying to attach an MDS subtask
5	The SMS available resource block contains an incorrect pointer
6	The Scheduling service required resource list contains an incorrect pointer. The incorrect address could be for the SCHPL, SCHRL, or the SCHRE.
7	The MDSSRS FCT could not access the RESQUEUE
8	The scheduling service required resource list contains an invalid SCHRE control block; JES3 has detected the end of the chain of SCHREs but no SCHRE is marked as being last in the group.

If the attach of the MDS master task did not successfully complete, the non-zero return code from the ATTACH macro is in register 3.

System Action: JES3's failsoft processing passes control to the DSP's JESTAE exit. If there are no JESTAE exits, the DSP is ended.

System Programmer Response: Use the dump to determine the reason for the error. :module IATMDAT, IATMDSR, IATMDRL

DM450

Explanation: The main device scheduler (MDS) encountered an error situation, such as a count field being decremented to a value less than zero. An error code is stored in each JST DD entry for which an error occurred. Error codes are:

Code	Explanation
X'04'	Indicates an attempt to decrement the SYSUNITS use count that is already zero.
X'08'	Indicates an attempt to decrement the SETDSN use count that is already zero.
X'0C'	Indicates no SETVOL entry was found.
X'10'	Indicates an attempt to decrement the SETVOL allocation count that is already zero.
X'14'	Indicates an attempt to decrement the SETVOL fetch count that is already zero.
X'18'	Indicates a duplicate SETUNITS entry was found on the volume verify chain.
X'1C'	Indicates an attempt to increment the SYSUNITS use count that has already been incremented.
X'20'	Indicates an attempt to decrement the SYSUNITS use count when the JST indicates that the count has not been incremented or has already been incremented.
X'24'	Indicates an attempt to decrement the SYSUNITS count when the RQ control count is zero.
X'28'	Indicates an attempt to increment a SETDSN use count that has already been incremented.
X'2C'	Indicates an attempt to decrement the SETDSN use count when the JST indicates that the count has not been incremented or has already been decremented.
X'30'	Indicates an attempt to decrement the SETDSN use count when the RQ control count is zero.
X'34'	Indicates an attempt to increment the SETVOL fetch control count in the JST to a value greater than the maximum.
X'38'	Indicates an attempt to decrement the SETVOL fetch count when the JST fetch count is zero.
X'3C'	Indicates an attempt to decrement the SETVOL fetch count when the RQ control count is zero.
X'40'	Indicates an attempt to increment the SETVOL allocation count in the JST to a value greater than the maximum.
X'44'	Indicates an attempt to decrement the SETVOL allocation count when the JST allocation count is already zero.
X'48'	Indicates an attempt to decrement the SETVOL allocation count when the RQ control count is already zero.

System Action: A dump is written to JESABEND. When the dump completes, the MDSERRQ macro is invoked to determine where the job that was active is placed.

Programmer Response: Analyze the dump to determine the cause of the failure.

Module: IATMDAL, IATMDBK, IATMDDR, IATMDMS, IATMDSB, IATMDAR, IATMDVE

DM451

Explanation: The main device scheduler (MDS) encountered an error during allocation processing by subroutine MDSRSCAL. An error code is stored in each JST DD entry for which an error occurred. Error codes are:

JST DD Field**JSTERRCD**

Code	Explanation
X'4'	Type does not exist.
X'8'	Not enough devices.
X'12'	Demand allocation with no main specified.
X'16'	Multi-volume request for permanently resident volume.

JSTMSERR

Code	Explanation
X'4'	SETVOL pointer is 0.
X'5'	SETVOL extension pointer is 0.
X'6'	SVXHUSCT negative.
X'7'	SVXUSCT negative.
X'8'	MSUVUALC negative.
X'9'	PATVUALC negative.
X'10'	SDGVUALC negative.
X'11'	SVXUSCT negative on switch to host exclusive.

System Action: JES3 failsoft processing receives control of the SETUP DSP and a dump is taken, if requested. The SETUP DSP is then reinstated. The active job proceeds normally to the next processing step; it is unaffected by the failure.

Programmer Response: None.

Problem Determination: See Table I, items 1 and 4.

Module: IATMDSL, IATMDRS

DM452

Explanation: An error occurred while the main device scheduler was processing an allocation requirements list (ARL). An ARL is used by the main device scheduler to specify the resources a job was unable to obtain in a previous allocation attempt. The main device scheduler may have been either:

- Attempting to create or add new entries to the ARL for a specific job.
- Delete the ARLs for a job.

System Action: JES3 failsoft processing receives control of the SETUP DSP and a dump is taken, if requested. The SETUP DSP is reinstated. The job proceeds normally to the next processing step.

System Programmer Response: To determine the error locate the failsoft logout banner (message IAT3713). The high order byte in register 2 indicates the processing that caused the error. If the high order byte contains a:

- X'01'** This indicates the main device scheduler issued a IATXGCL macro in an attempt to build or add entries to the ARL. The low order byte of register 2 contains the return code from the IATXGCL macro.
- X'02'** This indicates the main device scheduler issued a IATXRCL macro in an attempt to delete an ARL allocated to a specific job. The low order byte of register 2 contains the return code from the IATXRCL macro.

For information on the return codes, refer to *z/OS JES3 Customization*.

Problem Determination: See Table I, items 1 or 2, and 4.

Module: IATMDAR

DM455

Explanation: The main device scheduler (MDS) detected an error during early volume release processing. Register 2 contains an error code indicating the type of error. Error codes are:

Code	Explanation
------	-------------

- | | |
|--------------|-----------------------------------|
| X'01' | Passed device is not tape. |
| X'02' | JST entry not found. |
| X'03' | JVT entry not found. |
| X'04' | SETVOL entry not found. |
| X'05' | SETDSN entry not found. |
| X'06' | SETUNITS entry not found. |
| X'07' | Data set allocation count error. |
| X'08' | SETVOL for next volume not found. |
| X'09' | Volume allocation count error. |

System Action: JES3 failsoft processing receives control of the SETUP DSP and a dump is taken, if requested. The SETUP DSP is then reinstated. The job proceeds normally to the next processing step; it is unaffected by the failure.

Programmer Response: None.

Problem Determination: See Table I, items 1 and 4.

Module: IATMDBK

DM460

Explanation: The main device scheduler (MDS) encountered an error while processing an MSVC volume selection request. MDS placed an error code into register 1 prior to requesting FAILDSP. You can locate the error code in a JES3 formatted dump by examining the highest-level active save area for the SETUP DSP FCT entry. Error codes are:

Code	Explanation
------	-------------

- | | |
|--------------|--|
| X'01' | The RSQ entry for the requesting job is not in the 'on main' queue for the main from which the request originated. |
| X'02' | There was an unexpected end-of-data return from a search of the job's JST. |
| X'03' | Reserved error code. |
| X'04' | There is an incompatible scratch allocation for this job step and this volume. |
| X'05' | There was an error during an attempt to locate the requested virtual unit in the VUA table of the main where the request originated. |
| X'06' | There was an error during removal of a previously established scratch allocation pending status. |

Note: These values also appear in the JES3 trace table (they do not appear in the failsoft logout).

System Action: JES3 failsoft processing receives control of the SETUP DSP and a dump is taken if requested. The SETUP DSP is reinstated. The active job is failed.

Programmer Response: Resubmit the failing job.

Problem Determination: Table I, items 1 and 4.

Module: IATMDMS

DM480

Explanation: The main device scheduler (MDS) encountered an error while attempting to delete an entry from the DSNAME table chain.

System Action: A dump is written to JESABEND. When the dump completes, the job which was active is placed on the MDS error queue and MDS is reinstated.

Programmer Response: Analyze the dump to find the cause of the failure.

Module: IATMDSB

DM481

Explanation: The main device scheduler (MDS) encountered an error while attempting to build or to delete an entry from the volume table (VLMENTRY) chain or to build or delete a SETVOL extension.

System Action: A dump is written to JESABEND. When the dump completes, the job which was active is placed on the MDS error queue and MDS is reinstated.

Programmer Response: Analyze the dump to find the cause of the failure.

Module: IATMDSB

DM500

Explanation: Two requests were made for I/O on a BSC RJP line without an intervening channel end. For programmable workstations, the second I/O request should have been queued and an attempt should have been made to transmit after the first I/O request was completed.

System Action: The BSC line is canceled and restarted. Sign-on will be required again for the workstation on the line.

Programmer Response: Analyze the dump to find the cause of the second I/O request.

Module: IATRJM3

DM530

Explanation: The SNA/NJE spinoff data set created by the local MVS/BDT facility for the JES3 NJE reader DSP found a problem while processing the network stream.

System Action: The NJE reader is placed in control of JES3 failsoft processing and JES3 prompts the operator to take a dump. JES3 deletes the network stream and the DSP ends.

Operator Response: Select the JES3 default dump.

Programmer Response: Locate the incorrect record in the JES3 dump or the security error. You can use the following procedure to locate the error in the network stream. For security errors, contact your RACF administrator.

1. Locate the module name (IATNTDN) in the JES3 MEMORY USAGE TABLE of the dump. Note the starting address of the module. Module IATNTDN contains the IATYNDN data csect. Use Register 13 from the failsoft logout.
2. Locate the address of the beginning of the SNA buffer area by:
 - a. Locate the address contained in field NDNSBFAD. This field contains the starting address of the SNA buffer area.
 - b. Locate the networking mapping macro IATYNRD using field NDTNRDPT.
 - c. Locate the address of the first record in the SNA buffer area in field NRDRECPT.
 - d. Locate the address of the next record to be processed in the SNA buffer area in field NRDRECNX.

3. Locate the incorrect record in the SNA buffer area. The records contained in the SNA buffer area have the following format:

RCB	SRCB	RLEN	Record
-----	------	------	--------

The RCB, SRCB, and RLEN compose the record identifier (RID) and has a length of 3. The RLEN contains the length of the record minus 1.

To locate each record in the data set, you should calculate the address of the next record in the SNA buffer area by:

address found in NRDRECPT+RLEN+4

4. To isolate the failing component, attempt to recreate the failure by using either a BUF, RNIO, or LINE VTAM trace. IBM prefers you use a BUF VTAM trace because it will not truncate the record of the link between the sending and receiving nodes. The VTAM trace records the incorrect record or the record that became incorrect in a compressed format.
5. Contact your IBM representative, report the type of failure, and the data you have collected.

Module: IATNTNR

DM531

Explanation: The reroute DSP (NJEROUT) encountered an error in a stream being rerouted. Register 8 contains the error code. Macro IATYNRS contains error code explanations.

Code Explanation

- | | |
|--------------|---|
| X'50' | Decompressed record too long |
| X'51' | Decompressed data record too long |
| X'52' | Premature end of data (EOD) for spanned data |
| X'53' | Spanned data segment error |
| X'54' | Invalid SRCB carriage control |
| X'55' | Decompressed DSH record too long |
| X'56' | Premature end of data (EOD) for spanned DSH |
| X'57' | Error accessing job description and accounting block (JDAB) parameters |
| X'58' | No JDAB scheduler element for reroute DSP |
| X'59' | IATOSPC returned an OSE buffer number (WSPBUFNB) and OSE offset (WSPOFFST) for which no OSE buffer could be found when a CSBT was present |
| X'60' | Error on JESREAD trying to get OSE buffer of origin job for JMR transaction program processing |

X'61' Error on ARELEASE trying to release the BDT OSE buffer during JMR transaction program processing

X'62' IATXJMR TYPE=GET returned an error during JMR transaction program processing

X'63' IATXJMR TYPE+REL returned an error during JMR transaction program processing

Operator Response: Take a dump

System Action: Reroute ends the processing of the job.

Programmer Response: Determine the problem or reissue the command.

Module: IATNTRS

DM532

Explanation: While transmitting a network stream JES3 encountered a system error while processing the records in a network stream. JES3 encountered while decompressing the data contained in the record from the decompression work area.

System Action: The NJESND DSP ends. All other JES3 functions remain active. JES3 places the network job into operator hold.

Operator Response: Request a dump from JES3 and notify the systems programmer.

Programmer Response: Perform the following to determine why JES3 could not decompress the data in the record:

1. Use the address in register 13 to locate the address of the data csect for module IATNTSD.
2. Locate the decompression work area. Field NSNDCWRK at offset X'20C' contains the address of the decompression work area.
3. Locate the decompression parameter list. Field DPRSSPRM at offset X'154' contains the address of record that caused JES3 to end the NJESND DSP.
4. Determine why JES3 could not decompress the record into the work area. A possible reason for the failure is the storage was overlaid. Contact your IBM representative with the type of failure and the data you have collected.

Problem Determination: See Table I, items 2, 4, and 7.

Module: IATNTSD

DM534

Explanation: The NJERDR DSP was unable to find its WSP on the hot writer wait queue after either a command was issued against it, or it was posted for work by output service.

System Action: The NJERDR DSP ends processing.

Module: IATNTNR

DM550

Explanation: An operator has entered the *FAIL,SNARJP command, causing SNARJP to fail.

System Action: The SNARJP termination routine will fail any reader or writer DSPs servicing SNA devices.

Programmer Response: Analyze the dump to determine why the NJERDR WSP was taken off the hot writer queue.

Module: IATSNDL

DM551

Explanation: While execution was taking place under control of the SNARJP DSP, an attempt was made to reuse an RPL which was still active.

System Action: The session associated with the RPL is cancelled. All other sessions, including those associated with the same workstation, are unaffected.

Programmer Response: Analyze the dump to determine which RPL was about to be overlaid and what data was about to be sent or received.

Module: IATSNDA, IATSND C, IATSND E, IATSND M, IATSND O, IATSND T, IATSND V, IATSNLB, IATSNLO, IATSN DN

DM552

Explanation: An IATXSNLK macro was issued to update the use count of a logical unit control block (LCB). An abnormal end occurred because JES3 could not update the use count in the LCB.

An LCB can be used by more than one user. The use count of the LCB must be incremented before an FCT, SRB or IRB references the LCB. After the FCT, SRB or IRB finishes using the LCB, the use count must be decremented. Each user must update the use count of the LCB so that another user will not return the LCB to storage. The LCB will be returned to storage when the use count reaches zero and an indicator in the LCB is on.

System Action: The FCT that issued the IATXSNLK macro abnormally ends. All other functions within JES3 will end.

System Programmer Response: To determine the error, perform the following:

1. Locate the failsoft banner in the log. Register 2 contains the address of the RJP work area. Register 15 contains a reason code.
2. Use the reason code in register 15 to determine why JES3 could not alter the status of the SNA RJP line.
3. If register 15 contained a 0 or 8, the LCB was incorrect.

- a. Use register 2 to locate the address of the LCB. Register 2 contains the address of the RJP work area and the work area contains:

Offset	Meaning
X'00'	work area identifier 'YSNFS'
X'0C'	abnormal end code identifier, DM552
X'10'	address of the FCT that the abnormal end will occur under
X'50'	18 word save area which contains the contents of the caller's registers
X'9C'	address of the data area for DM552

Using the address at offset X'9C', locate the data area for DM552 in storage. The data area for a DM552 abend contains:

Offset	Meaning
X'04'	contains the address of the LCB passed by the caller
X'08'	contains the address of the return code from the validation routine

- b. Using the address at offset '04' in the data area, locate the LCB in storage. If the control block does not contain the identifier 'LCB', there may be a storage overlay problem.
4. If register 15 contained a **8**, the address of the LCB specified by the caller was invalid.

Module: IATSNLK

DM553

Explanation: An IATXSNST macro was issued to alter a status indicator of a SNA RJP session. To alter the status of an SNA RJP session, the address of the logical control unit block (LCB) that represents the SNA RJP session is required on the IATXSNST macro. JES3 encountered an error while altering the status of the SNARJP session.

System Action: The FCT that issued the IATXSNST macro will abnormally end. All other functions running in JES3 will remain active.

System Programmer Response: To determine the error, perform the following:

1. Locate the failsoft banner in the log. Register 2 contains the address of the RJP work area. Register 15 contains a reason code.
2. Use the reason code in register 15 to determine why JES3 could not alter the status of the SNA RJP line.
3. If register 15 contained a **0** or **8**:
 - a. the LCB didn't contain a valid identifier. Use register 2 to locate the address of the LCB. Register 2 contains the address of the RJP work area and the work area contains:

Offset	Meaning
X'00'	work area identifier 'YSNFS'
X'0C'	abnormally end code identifier, DM553
X'10'	address of the FCT that the abnormal end will occur under
X'50'	18 word save area which contains the contents of the caller's registers
X'9C'	address of the data area for a DM553 abnormal end

Using the address at offset X'98', locate the data area for DM553 in storage. The data area for a DM553 abnormal end contains:

Offset	Meaning
X'04'	address of the LCB when JES3 encountered the error
X'08'	return code that indicates why JES3 was unable to alter the status of the SNA RJP line.

- b. Using the address at offset X'04' in the DM553 data area, locate the LCB in storage. Possible causes for an incorrect LCB are:
 - An invalid LCB address was specified.
 - The control block did not contain the identifier 'LCB'. There may be a storage overlay problem.

4. If register 15 contained a **4**, the address of the LCB specified by the caller was incorrect.

Module: IATSNLK

DM555

Explanation: JES3 or the operator entered a *CANCEL SNARJP IMMEDIATE command. JES3 issues DM555, cancelling the workstation and the associated devices.

System Action: JES3 fails each device associated with the workstation that was cancelled by DM555.

Programmer Response: You can restart the SNARJP workstation after all the associated devices have been cancelled.

Module: IATSNLC

DM556

Explanation: While rebuilding the job header or job trailer, the system obtained header or trailer data from the spool whose total length exceeded the maximum length allowed. Network streams may be lost. The contents of the registers are:

Register	Contents
----------	----------

2	Segment length returned by ADEBLOCK macro
3	Segment address returned by ADEBLOCK macro
4	JDS entry address
5	Total accumulated job header/trailer length
6	RQ address
7	Indicates whether information is for a job header or job trailer. If register 7 contains a 0, the information is for a job header. If register 7 contains a 4, the information is for a job trailer.
8	Binary job number of failing job.

System Action: The DSP is placed in control of failsoft processing.

Programmer Response: Analyze the dump to determine the cause of the failure.

Module: IATNTHT

DM600

Explanation: Module IATMSMS found an error during generalized main scheduling.

System Action: Module IATMSMS issues message IAT2004, which describes the error and indicates whether the error was recoverable or not recoverable.

Programmer Response: Analyze the dump to determine the cause of the failure.

Module: IATMSMS

DM610

Explanation: An unexpected mismatch of processor names that were previously verified in module IATUTIS occurred.

System Action: The DSPs JESTAE exits, if any exist, are invoked. If no JESTAE exit exists, or none of the JESTAE exits require retry, the DSP is terminated.

Operator Response: Issue a dump and notify the system programmer.

Programmer Response: Analyze the dump to determine the status of the processors.

Module: IATUTIS

DM655

Explanation: A routine in IATOSFP has detected an error. Register 9 contains an error code describing the reason:

Code	Explanation
------	-------------

X'01'	Error building a cell pool for PDQs.
X'02'	Error deleting a cell pool for PDQs.
X'03'	GETCELL error.
X'04'	RELEASE cell error.
X'05'	Error during data set disposition processing.
X'06'	Error during job disposition processing.
X'07'	Specified PDQ not found.
X'08'	Completion processing requested for a PDQ already completed.
X'09'	Error during PDQCLEAR processing.
X'0A'	Error during PDQDEL processing.
X'0B'	Error during WOSE write processing.
X'0C'	Error during stand alone job trailer/JESNEWS processing.

System Action: A dump of the JES3 address space is taken if requested, and the routine returns to the caller via the error return.

Programmer Response: Analyze the dump, if taken and report the problem.

Module: IATOSFP

DM656

Explanation: The functional subsystem (FSS) writer driver DSP has detected an error. Register 2 contains a reason code that describes the error:

Code	Explanation
------	-------------

X'01'	There are two possibilities: During FSS start-up processing, the FSS was found to be active under the control of a different FSS writer driver FCT. During FCT restart processing following a JES3 hot start, the FSS was found to be active but in control of a different device and FSA.
X'02'	An error was detected (during FCT restart processing following a JES3 hot start) while attempting to recreate the pending data set queue.
X'03'	An error return code was received (during FSS start-up processing) from the IATXFSS TYPE=START service. Not all non-zero return codes cause an abnormal end. Register 3 contains the return code.
X'04'	An incorrect staging area was received from the FSS. Register 8 contains the staging area address.
X'05'	An incorrect staging area was received from the FSA. Register 8 contains the staging area address.

- X'06'** The response to a STOP FSS order contained a non-zero return code.
- X'07'** The response to a START FSA order contained a non-zero return code.
- X'08'** The response to a STOP FSA order contained a non-zero return code.
- X'09'** The response to a START DEVICE order contained a non-zero return code.
- X'0A'** The response to a STOP DEVICE order contained a non-zero return code.
- X'0B'** The JES3 support in the FSS address space requested a dump of the JES3 global address space.
- X'0C'** The response to an FSI SYNCH ORDER contained a non-zero return code.
- X'0D'** The response to an FSI SET ORDER contained a non-zero return code.
- X'0E'** An unrecoverable error was detected during processing of a GETDS request.
- X'0F'** An incorrect writer state for FSA-initiated ending.
- X'10'** The response to an ORDER intervention contained a non-zero return code.
- X'11'** The response to a QUERY order contained a non-zero return code.
- X'12'** An unexpected return code was received (during GETDS processing) from the IATOSFS service. Register 3 contains the return code.
- X'13'** Number of possible function dependent sections (FSIEXNUM) is zero.
- X'14'** The dynamic destination queue was not accessible during a DSQLOC after the FSS writer received a staging area from the FSA.
- X'15'** The FSS dynamic destination queue was not accessible during a DSQLOC while attempting to make queued RELDS requests available after a command completed processing.
- X'16'** The FSS dynamic destination queue was not accessible during DLOCON while attempting to have the WRITER logon after a JES3 hot start.
- X'17'** The FSS dynamic destination queue was not accessible during DLOCON while attempting to have the WRITER login during WRITER start-up.
- X'18'** The FSS dynamic destination queue was not accessible during DLOCON while attempting to have the FSS controller logon during FSS start-up.
- X'19'** The FSS dynamic destination queue was not

accessible during DLOCON after the FSS controller received a staging area from the FSS.

- X'1A'** A zero FDB was detected while attempting to read in a WOSE.
- X'1B'** The JESNEWS use count value was non-zero when an FSS writer entered it's idle state with no data sets left in it's pipeline.
- X'1C'** An ORDER intervention response call was made to IATOSFS, during device setup processing, without a staging area address in WTRFSTAR.
- X'1D'** FSI extension end address points beyond the end of SRL.

System Action: A dump of the JES3 global address space is taken if the operator requests it and the writer driver FCT is reinstated. For all reasons codes except X'0B' all data sets pending the writer are released, the FSS address space is cancelled, and the writer FCT is ended.

For reason code X'0B', normal writer processing is resumed when the dump has completed.

Programmer Response: Restart the FSS writer unless this is a recurring error.

Module: IATOSFD, IATOSFI, IATOSFT, IATOSMP, IATOSFP

DM657

Explanation: During output service restart processing, an attempt was made to delete a cell and no cell exists to be deleted.

System Action: JES3 failsoft processing receives control of the DSP. The failing DSP is ended and all data sets are rescheduled.

Programmer Response: None.

Problem Determination: See Table I, items 1, 2, or 3 and 4.

Module: IATOSRS

DM660

Explanation: The FSS DSP encountered an error while starting the FSS address space or processing a request from the FSA. Register 2 contains a reason code which indicates the error the FSS encountered.

Code Reason

- X'00'** indicates an error was encountered that caused the FSS controller to ABEND. The JESTAE is attempting to recover from the error and deallocate any resources allocated to the FSS.

- X'01'** indicates the FSS address space was already started.
- X'02'** indicates either:
 - an incorrect FSS entry was passed to the FSS DSP.
 - an error was encountered while the FSS address space was initializing. A return code was returned from the IATXFSS TYPE=START macro.
- X'03'** JES3 received an incorrect staging area from the FSS address space.
- X'04'** an error was encountered while processing a STOP FSS order.
- X'05'** JES3 support for the FSS address space requested a dump of the JES3 global.
- X'06'** JES3 attempted to start an FSS that is not defined as a writer FSS.
- X'07'** the main processor defined for the device is not defined to JES3.
- X'08'** The dynamic destination queue was not accessible during a DSQLOC while attempting to have the FSS controller logon during an FSS start-up.
- X'09'** The FSS dynamic destination queue was not accessible during a DSQLOC after the FSS controller received a staging area from the FSS.

System Action: JES3 issues message IATxxxx to allow the operator to take a dump of the JES3 address space. JES3 attempts to unallocate the resources by:

- Posting the writer FCTs to perform end processing
- Cancelling the FSS address space
- Ending the FSS FCT

Programmer Response: If this is not a recurring error, restart the writers.

If the error is recurring, use the value provided in register 2 to:

- Identify the address space where the error occurred
- Determine how to correct the error
- If you are not able to correct the problem, contact IBM with the information you have collected.

If register 2 contains a:

- X'01'** the error occurred in the JES3 address space. Identify the problem by performing steps 1, 2, 3, and 10.
- X'02'** the error occurred in the JES3 address space. Identify the problem by performing steps 1, 2, 3, 4.
- X'03'** the error occurred in the FSS address space. Identify the problem by performing steps 1, 2, 3, 5, 7, and 10.

- X'04'** the error occurred in the FSS address space. Identify the problem by performing steps 1, 5, 8, and 10
- X'05'** the error occurred in the FSS address space. Identify the problem by performing steps 1, 5, and 8.
- X'06'** the error occurred in the JES3 address space. Identify the problem by performing steps 1, 2, 2, 5, and 11.
- X'07'** the error occurred in the JES3 address space. Identify the problem by performing steps 1, 2, 3, 5, 6, 9, and 10.
- X'08'** the error occurred in the JES3 address space. Identify the problem by performing steps 2, 3, 4, 8, and 11.
- X'09'** the error occurred in the JES3 address space. Identify the problem by performing steps 2, 3, 2, 8, and 11.
 1. Examine the hardcopy log for any messages that are related to the FSS or the devices managed by the FSS.
 2. Use the address in register 13 to obtain the data area, IATGRFD (which is mapped by IATYGRC), for the FSS controller.
 3. Locate field GFCFSSAD in the FSS Controller. This address is the FSS table entry for the FSS. If the address is incorrect, 11.
 4. Locate the entry in the JES3 event trace table that identifies the invoker of the FSS services. Register 1 of the ACALL entry contains the address of the FSS and register 14 identifies the invoker of the FSS.
 5. Issue the *I,F,FSSNAME=fssname to obtain information for the FSS address space.
 6. Examine the list of valid mains in the MAINPROC table segment of the JES3 formatted dump to determine if the main is defined to your installation.
 7. Collect any information that pertains to the FSS address space.
 8. Examine the DESTQ, SAPQ, and SAWQ segments of the JES3 formatted dump. Ensure JES3 is processing the staging areas and JES3 is queuing the staging areas to the correct destination queue.
 9. Issue the *F,F,FSSNAME=fssname,SYS=main to identify the FSS address spaces that are defined to run to the specified main.
 10. Restart the devices and the FSS address space
 11. Contact IBM with the information you have gathered.

Module: IATGRFC

DM670

Explanation: During exit initialization processing for user exit IATUX20 or IATUX21, or during Modify Output Service processing, JES3 encountered an error validating the SWB file associated with an output data set.

System Action: JES3 failsoft processing receives control of the DSP. JES3 produces a dump and processing continues without the data from the SWB file.

Programmer Response: None.

Problem Determination: See Table I, items 3 and 4.

Module: IATOSGR

DM671

Explanation: An error occurred during SWB update (IATXSWBU) processing.

System Action: A dump is taken. Field FCTRESON contains a reason. The possible reasons are:

Code Reason

X'0001' There are no fields to be modified in the IATXSWBU parameter list.

Debugging Information: None

X'0002' The number of fields to be modified in the IATXSWBU parameter list is greater than the maximum number of fields.

Debugging Information:

R2 = Number of fields to be modified
R3 = Maximum number of fields

X'0003' The data length associated with one of the fields to be modified is not equal to the maximum data length.

Debugging Information:

R2 = Current data length
R3 = Maximum data length
R4 = Address of IATXSWBU variable entry in error.

X'0004' The data address associated with one of the fields to be modified is non-zero but the data length is zero.

Debugging Information:

R4 = Address of IATXSWBU variable entry in error.

X'0005' The SWB TU prefix in the output SWB TU file read from spool does not contain the correct eye catcher.

Debugging Information:

R2 = SWB TU prefix address

X'0006' The size of the SWB TU record does not match the total size of the record returned by ADEBLOCK.

Debugging Information:

R2 = SWB TU prefix address
R3 = Size of record returned by ADEBLOCK

Programmer Response: None

Problem Determination: Contact your IBM Support Center

Module: IATOSSWB

DM672

Explanation: The OUTDIRCT routine in module IATOSDO found an error. A Sysout DD contained a reference to an OUTPUT statement (or a dynamically created output descriptor) that couldn't be resolved.

System Action: A dump of the JES3 address space is taken if requested. If this Sysout was processed as a Spinoff entry, the output from the DD is lost. If the error was found when the job was being processed by Output Service, the job is made unavailable for output writer processing and message IAT7042 is issued.

Programmer Response: Analyze the dump. Use DC Snap to snap the job's spool control blocks and report the problem.

Module: IATOSDO

DM700

Explanation: An AOPEN macro was issued but the FDB address for the file already exists in the file directory, or the FDBDATA field is zero.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: Make sure you have not issued more than one AOPEN on the same file or that no other DSP uses the same FDB at the same time on a JESREAD or AWRITE.

Module: IATDMNC

DM701

Explanation: An I/O request was issued for multi-record file but the FDB address for the file does not exist in the file directory.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is ended. For an NJE device, processing of the current data set is discontinued.

Programmer Response: Make sure an AOPEN macro

has been issued. If an AOPEN has been issued, check that the register supplying the FDB address contains the same FDB address as when the AOPEN macro was issued.

Module: IATDMDT, IATDMNC, IATOSSI

DM702

Explanation: Reading of the file via an ADEBs or ADEBLOCK macro was ended by a zero next track address rather than an end of data (EOD).

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: Correct and re-link-edit the DSP.

Module: IATDMDT, IATDMNC, IATOSSI

DM703

Explanation: An AWRITE or WRTCHAIN macro was issued to write a single-record file (SRF) or a chain of SRFs to spool. The AWRITE and WRTCHAIN macros require the address of a file descriptor block (FDB). The FDB contains the address of the buffer that contains the SRF or the first SRF in the chain. If there is a track address in the buffer address field of the FDB (FDBDATA), the SRF has already been written to spool and the error occurred while trying to update a previously written SRF or an SRF that was previously released.

JES3 could not write the SRF to spool due to an error in the file description block (FDB). One of the following return codes is used to indicate the type of FDB error:

Code	Explanation
X'08'	The FDB contains a spool record address.
X'1C'	The first word of the FDB contained zeros.
X'20'	The ID specified on the AWRITE or WRTCHAIN macro did not match the ID in SRF.
X'34'	The FDB indicated the buffer contained a multi-record file (MRF).

System Action: If the caller supplied an error exit on the AWRITE or WRTCHAIN macro, control returns to the caller's error routine. Otherwise, module IATDMNC ends the DSP.

System Programmer Response: Determine the cause of the error by performing the following:

1. determine the module that issued the FAILDSP
2. locate the trace table entry for the module that issued the WRTCHAIN or AWRITE macro

3. determine why the SRF could not be written to spool. If IATDMNC is the module issued the FAILDSP, the return code is in register 3. Otherwise, the module that issued the AWRITE or WRTCHAIN macro, issued the FAILDSP and the return code is in register 15.
4. locate the FDB in storage by using the address contained in register 1. (use the entry for the failing module in the trace table). Verify the error in the FDB.
5. correct and relink–edit the DSP.

The following are probable causes for the error:

Code	Explanation
X'08'	The error probably occurred because a JESREAD was not issued before the AWRITE or WRTCHAIN macro.
X'1C'	The error probably occurred because an AGETBUF was not issued to initialize the FDB.
X'20'	Determine if the buffer address in the FDB is valid. Use the Data Management JSAM Data Buffers section of the JES3 formatted dump to determine if a buffer exists (add X'C' to the DMCDAT to obtain the buffer address). Use the SRfid in the same section to determine if the ID is valid.
X'34'	The error probably occurred because a single-record file service was being performed on a multi-record file.

Module: IATDMNC, IATMDSB, IATOSFP, IATOSWP

DM704

Explanation: One of the following may be true:

- JES3 detected a single-record file buffer that did not have a valid validation identifier.
- A JESREAD macro was issued for a single-record file, but the first word of the FDB contains zeros.
- A JESREAD macro was issued for a single-record file, but the validation identifier did not match the buffer contents.

The FDB address may not point at a valid FDB, the FDB address may not point at the FDB associated with the ID, or the FDB may not have been initialized by an AWRITE. Register 3 contains the return code if the FAILDSP was issued by IATDMNC.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is terminated.

Programmer Response: Correct and re-link edit the DSP.

Module: IATDMNC, IATOSFP, IATOSSC, IATOSWP, IATOSWS, IATMDSB

DM704

Explanation: One of the following may be true:

- JES3 detected a single-record file buffer that did not have a valid validation identifier.
- A JESREAD macro was issued for a single-record file, but the first word of the FDB contains zeros.
- A JESREAD macro was issued for a single-record file, but the validation identifier did not match the buffer contents.

The FDB address may not point at a valid FDB, the FDB address may not point at the FDB associated with the ID, or the FDB may not have been initialized by an AWRITE. Register 3 contains the return code if the FAILDSP was issued by IATDMNC.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is terminated.

Programmer Response: Correct and re-link edit the DSP.

Module: IATDMNC, IATOSFP, IATOSSC, IATOSWP, IATOSWS, IATMDSB

DM705

Explanation: A buffer address to be returned to the buffer pool via an APUTBUF macro is invalid.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is terminated.

Programmer Response: If an APUTBUF macro is issued by a DSP, check the code that loads the buffer address. Also check if the same address is coming back more than once. Correct and re-link-edit the DSP.

Module: IATDMNC

DM706

Explanation: An ACLOSE macro was issued but no entry exists in the file directory for the FDB address supplied.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: Ensure that the file was opened via AOPEN or AOPENEND or that an ACLOSE was not issued twice. Correct and re-link-edit the DSP.

Module: IATDMNC

DM708

Explanation: No job TAT was provided by an AOPEN macro for an output multi-record file, or by an AWRITE macro for a new single-record file. Register 3 contains the return code if the FAILDSP was issued by IATDMNC.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: Check the RESQUEUE entry for the FCT if the macro does not supply the job TAT; if it is zero, a job TAT will have to be supplied on the macro. In the case of AWRITE MNTRKFDB from the TVT may be used to obtain a record address from single track table (STT).

Module: IATDMNC

DM709

Explanation: A request for a RAB refresh resulted in an incorrect RAB refresh element (RRE) being provided to the allocation routine (IATDMGB).

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is terminated.

Programmer Response: Determine where the RRE was damaged or incorrectly initialized and correct the error.

Module: IATDMGB

DM710

Explanation: A track group being returned to the TAT already exists in the TAT, or the job TAT does not contain the TAT identifier, or a purge of a single-record file back into the single track table (STT) has been attempted and the track address already exists in the STT.

System Action: DSP is placed in control of JES3 failsoft processing.

Programmer Response: Correct and re-link-edit the DSP.

Module: IATDMTK, IATDMST

DM711

Explanation: An I/O request to a multi-record file is issued for a file that is not open.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: Make sure an AOPEN or AOPENEND macro is issued before using any other multi-record file macro. If an AOPEN has been issued,

ensure that the register supplying the FDB address contains the same FDB location as when the AOPEN was issued. Correct and re-link-edit the DSP.

Module: IATDMDT

DM712

Explanation: A count specified in either an ALOCATE or ABLOCK macro is too large. The largest count on an ALOCATE or ABLOCK macro is defined by CTCBUFSZ in the TVT.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: Correct and re-link-edit the DSP.

Module: IATDMDT

DM713

Explanation: An FDB passed to the purge routine or track routine via the APURGE/ATRACK macro is not valid.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: Correct and re-link-edit the DSP.

Module: IATDMTA, IATDMTK

DM714

Explanation: A single-record file FDB passed to the purge routine via the APURGE macro contains a track address which does not exist in the single track table (STT).

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: Correct and re-link-edit the DSP.

Module: IATDMST

DM715

Explanation: An AOPEND macro was issued for a multi-record file that is already open.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: Correct and re-link-edit the DSP.

Module: IATDMDT

DM716

Explanation: An AOPEND macro was issued for a multi-record file but the last data buffer does not contain an end-of-data indicator.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: Verify that the FDB referenced by the AOPEND macro is valid or that the last data buffer read is valid data. Correct and re-link-edit the DSP.

Module: IATDMDT

DM717

Explanation: An ALOCATE macro was issued for an output multi-record file but the previous call for the file was also an ALOCATE. After each ALOCATE macro, an ABLOCK macro must be issued.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: Correct and re-link-edit the DSP.

Module: IATDMDT

DM718

Explanation: Two successive ABLOCK macros were issued for an output multi-record file without an ALOCATE macro, or an ABLOCK macro was issued without a prior ALOCATE macro.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: Check the code for the proper sequence of ALOCATE and ABLOCK macros.

Module: IATDMDT

DM719

Explanation: An IATXOSP macro caused a record to be read from spool which does not belong to the current data set.

System Action: For an NJE device, processing of the current data set is discontinued. For all other devices, the record is skipped and the next valid record is read.

Programmer Response: None.

Module: IATOSSI

DM720

Explanation: An ABACKR macro was issued against an output file.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: Correct and re-link-edit the DSP.

Module: IATDMDT

DM721

Explanation: An I/O request has been issued and the track address or other data passed to the disk I/O routine is not valid. Register 3 contains the return code if the FAILDSP was issued by IATDMNC.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: Check the FDB supplied to the I/O routines, it may have been overlaid by data or changed in some way by user code. Correct and re-link-edit the DSP.

Module: IATDMDT, IATDMGB, IATDMNC, IATDMTK, IATOSS

DM722

Explanation: The validation field (VALID) in the data buffer read from a multi-record file does not match the VALID in the file directory.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: If a warm or hot start was just performed, this code indicates the normal end of a SYSOUT data set which was active when JES3 was previously ended; otherwise, correct and re-link-edit the DSP.

If the DM722 was issued by output service (IATOSWD), analyze the dump in the following manner:

1. Register 13 points to the writer driver data CSECT (IATODWD).
Field WTRDIARE in IATODWD points to the spool input data CSECT (IATODSI). (You can also look for IATODSI within IATODWD and back up 4 bytes to get the address.)
2. The following fields point to DMCs for the multi-record file (they all may be the same DMC):
WTRIFDMC - address of the first DMC of file
WTRICDMC - address of the current DMC
WTRILDMC - address of the last DMC

Field DMCDAT points to a data buffer block (DAT).

Field WTRIVLID contains the validation field.

3. Look at the DMC and compare field DMCFCCT (FCT address) with the failing FCT to verify that this FCT failed.
4. Obtain the following fields DATTHIS, DATFIRST, DATPREV, DATNEXT, and DATVALID from the DAT.
5. Look at the DAT to try to identify the data as being a job's JCL, SYSOUT, or a control block, etc.
6. Forward this information to IBM.

Module: IATDMNC, IATOSI, IATOSWD

DM723

Explanation: An ARELEASE macro was issued on a JES3SDM single record file and the first word of the FDB contains zeros, or does not contain a buffer address. Or an IATXRELC macro was issued with an ID parameter, but the ID does not match the validation field (VALID) in the data buffer.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: The FDB may not point at a valid FDB or the FDB may not have been initialized by an AWRITE. Correct and re-link-edit the DSP.

Module: IATDMNC, IATDMDT

DM724

Explanation: A recovered I/O error on an output file required the replacement of the original track address. Register 3 contains the return code if the FAILDSP was issued by IATDMNC.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is terminated.

Programmer Response: Provide an error exit for the macro and checkpoint the changed FDB. Correct and re-link-edit the DSP.

Module: IATDMDT, IATDMNC, IATINRN, IATOSI

DM725

Explanation: An unrecoverable I/O error was encountered. Register 3 contains the return code if the FAILDSP was issued by IATDMNC.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: None.

Problem Determination: Analyze the data management IOSB-SRB pair section in the formatted dump. Check the IOSCSW and IOSCOD (I/O completion code) fields in the IOSB.

Module: IATDMDT, IATDMNC, IATOSSI

DM726

Explanation: During initialization, the FDB used does not have its close bit on or does not contain a track address. The DSP cannot wait as it normally would, since there is only one function active. Register 3 contains the return code if the FAILDSP was issued by IATDMNC.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: Correct and re-link-edit the DSP.

Module: IATDCNC, IATDMNC

DM727

Explanation: The STT being used to satisfy a spool allocation request is in error. The abend reason code identifies what caused the abend:

Code	Explanation
------	-------------

X'04'	The STT has an incorrect identifier
X'08'	No segments are specified in the primary STT or in an STT expansion entry.
X'0C'	The count of available records has been corrupted.

System Action: JES3 places the caller's routine under the control of failsoft processing and attempts a retry. The job or DSP might be failed and any further requests for STT allocation may also fail. If the count of available records has been corrupted, the STT extent is placed in drained status to prevent any further allocations until you hotstart JES3.

Programmer Response: Determine the cause of the incorrect STT and link-edit the change into the system.

Module: IATDMST

DM728

Explanation: No track groups were available for allocation during initialization.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: Analyze the spool space allocation specifications in the initialization stream. (See *z/OS JES3 Initialization and Tuning Reference*.)

Module: IATDMNC

DM729

Explanation: Spool space cannot be allocated to a new single or multi-record file due to a job TAT or data set TAT error. Register 3 contains the return code if the FAILDSP was issued by IATDMNC.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: Correct and re-link-edit the DSP.

Module: IATDMDT, IATDMNC

DM731

Explanation: An attempt has been made to access a record in a multi-record file via an IATXOSOI macro instruction or an IATXOSG macro instruction and one of the following conditions was found:

- The record did not exist at the offset into the spool buffer supplied by the IATXOSOI macro.
- The record contained an incorrect length field.
- Inadequate buffers are defined to a line mode printer processing stream mode data. Further input processing of the current split record is impossible on this device.

System Action: The DSP is placed in the control of JES3 failsoft processing. If the incorrect length condition is a result of an incorrect split record condition, an operator action message is issued and the DSP waits for operator to respond before continuing.

Programmer Response: An invalid split record condition can occur when stream mode data is sent to a line mode printer (for example, a 1403). If the printer does not have adequate I/O buffers defined and a large split stream mode data record is encountered, input processing cannot continue. The failing job should be rescheduled to a printer that has sufficient buffers (for example, a 3800). An incorrect length condition can also occur due to an incorrect split record condition. If a record is split between two spool buffers, the sum of the length of the two halves must equal the total length described in the length field of the first portion of the record.

The incorrect split record condition can be caused by improper serialization at the time the data set is created if multiple asynchronous routines are creating data in the same data set. (For example, when a job is cancelled with a dump and it is in the process of dumping.)

Rerun the failing job.

Analyze the dump in the following manner:

1. Register 13 points to the writer driver data csect (IATODWD).

Field WTRDIARE in IATODWD points to the spool input data csect (IATODSI). (You can also look for "IATODSI" eyecatcher within IATODWD and back up 4 bytes to get the address.)

- WTRIRTN - return address for IATXOSG
- WTRDM731 - IATOSI DM731 footprint. This value points to the section of code within IATOSI where the error was detected. Values are defined as data constants within IATOSI routine IATXOSG. The form of the field names is G7310nn, where nn is the unique numeric identifier stored in WTRDM731.

2. The following fields point to DMCs for the multi-record file (they all may be the same DMC):
 - WTRIFDMC - address of the first DMC of file.
 - WTRICDMC - address of the current DMC.
 - WTRILDMC - address of the last DMC.
 - WTRIDATA - address of the current data area.
 - WTRICREC - address of the current record.

Field DMCDAT points to a data buffer block (DAT).

3. The first four bytes of the record pointed to by WTRICREC contain the DATCC and the record length fields.
4. Forward this information to the change team as documentation.

Module: IATOSI

DM732

Explanation: An error that could not be corrected was detected by the writer pending page queue (PPQ) manager. The two low-order bytes of register 9 identify the error. The first byte contains one of the error codes shown below. The second byte contains zeros or, for macro errors, the macro error return code.

Code Explanation

- | | |
|--------------|--|
| X'01' | A permanent read error occurred for a writer output scheduling element (WOSE). |
| X'02' | A write error that cannot be corrected occurred for a WOSE. |
| X'03' | Macro IATXOSPM specified an invalid request for a PPQ entry that represents end of job, end of output scheduling element (OSE) or end of data set. |
| X'04' | An error return for macro IATXBPL resulted from an attempt to allocate or extend the PPQ cell pool. |
| X'05' | An error return for macro IATXGCL resulted from an attempt to allocate a PPQ entry from an existing PPQ pool. |
| X'06' | An error return for macro IATXDCL resulted from an attempt to unallocate the PPQ primary cell pool. |
| X'07' | An IATXOSPM TYPE=DEQUEUE request was |

issued and no PPQ entries exist or none can be found to satisfy the request. This abend may have been caused by an IMPL of the D/T3800 when the writer had not been properly quiesced.

- | | |
|--------------|--|
| X'08' | An error return code for macro IATXRCL resulted from an attempt to unallocate a PPQ entry. |
| X'09' | An IATXOSPM TYPE=INQUIRY request was issued and the SUPUNIT passed with the request does not point to a valid write area (IATOSWD). |
| X'0A' | An IATXOSPM TYPE=JSTART request was issued and no PPQ entries exist or none can be found that represents data at or beyond the transfer station. |
| X'0B' | An IATXOSPM TYPE=SYNC request was issued for a data set and no PPQ entries exist. |
| X'0C' | An IATXOSPM TYPE=SYNC request was issued for an OSE and no PPQ entries exist. |

System Action: The DSP is placed under the control of JES3 failsoft processing. If the failing DSP is an output service writer, it is ended and all data sets not completely processed are rescheduled. Message IAT3705 is issued.

Programmer Response: None.

Problem Determination: See Table I, item 1, or items 2 and 4.

Module: IATOSWP

DM733

Explanation: An IATXPGXM macro was issued, but an error existed. (Module IATDMXM, invoked when the macro is encountered, returns with a nonzero value in register 15 to indicate abnormal completion.)

Note: These values appear in the JES3 trace table only (not in the failsoft logout).

System Action: The error is recorded in the logrec data set.

Programmer Response: None.

Module: IATDMIT, IATABIP

DM734

Explanation: Output service module IATOSDR issued an IATXBPL macro and the error return was taken.

System Action: JES3 failsoft processing ends the OUTSERV DSP.

Programmer Response: Determine the cause of the error and restart JES3.

Problem Determination: See Table I, item 1 or items 2, 4, and 7.

Module: IATOSDR

DM735

Explanation: An error occurred while a JES3 writer DSP was using the JES3 quickcell services.

System Action: JES3 failsoft processing ends the writer DSP and reschedules all data sets not completely processed.

Programmer Response: If the failing writer was a hot writer, call the writer again.

Problem Determination: See Table I, item 1 or items 2, 4, and 7.

Module: IATOSSI

DM736

Explanation: JES3 encountered an error while processing a chained single record file (SRF) buffer table (CSBT) or RESQUEUE chained SRF table extension (RCE). Register 3 contains a reason code that describes the error.

Code Explanation

- X'08'** Indicates that, even though the CSBT was used in the previous JST read, the CSBT header specified could not be located.
- X'14'** Indicates that the SRF in the CSBT and the ID= keyword on the IATXRELC macro with the CSBT= keyword specified do not match.
- X'18'** Indicates that the ARELEASE macro was issued when the IATXRELC macro with the CSBT= keyword should have been used instead.
- X'1C'** The CSBT ID on the IATXRELC macro was incorrectly specified.
- X'20'** Indicates that the CSBT= keyword was issued with the IATXRELC macro but not used on the previous JESREAD macro.
- X'24'** Indicates that an IATXRELC macro did not specify the CSBT= keyword, but the CSBT keyword was specified on the previous JESREAD macro.
- X'28'** Indicates that the SRF in the CSBT and the ID= keyword on the JESREAD macro with the CSBT keyword specified do not match.
- X'2C'** The CSBT ID on the JESREAD macro was incorrectly specified.
- X'30'** Indicates that the control block identifiers of the SRF in the CSBT and the ID= keyword did not match when using the WRTCHAIN macro with the CSBT= keyword specified.

X'34' The CSBT ID on the WRTCHAIN macro was incorrectly specified.

X'38' Indicates that the CSBT= keyword was issued with the WRTCHAIN macro but not used on the previous JESREAD.

X'3C' Indicates that the CSBT= keyword was not issued with the WRTCHAIN macro but was used on the previous JESREAD.

X'40' Indicates that the WRTCHAIN macro with the CSBT= keyword was issued and an error occurred while trying to read the previous buffer.

X'44' Indicates that the AWRITE macro was issued when the WRTCHAIN macro with the CSBT= keyword should have been used instead.

X'48' Indicates that the JESREAD macro with the CSBT= keyword was issued but the corresponding RCE entry could not be found.

System Action: JES3 issues message IAT3913.

Programmer Response: Contact your IBM Support Center.

Module: IATDMDT, IATDMNC, IATMDSB, IATMDSL, IATMDSR

DM737

Explanation: An attempt was made to use the single track table (STT) outside the global address space.

System Action: JES3 begins failsoft processing for the CI FSS address space issuing the request.

Programmer Response: None

Module: IATDMNC

DM738

Explanation: An ATRACK macro was issued in a CI FSS or local JES3 address space. The IATXGCL service took the ERROR or NAVAIL return while attempting to obtain virtual storage for a RAB refresh element (RRE).

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: For the ERROR return, check the cell pool control block (CPP) to ensure that it has not changed. For the NAVAIL return, not enough virtual storage was available for the RRE.

Module: IATDMTA

DM739

Explanation: One of the following occurred:

- An error occurred while attempting to build a quick-cell pool during initialization (in a CI FSS address space).
- An error occurred while attempting to return a cell to the quick-cell pool (in a CI FSS address space). Register 15 contains a return code indicating the cause of the error.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: Check the cell pool control block (CPP). Correct and link edit the DSP. For the first case, return codes are from IATXBPL. For the second case return codes are from IATXRCL.

Note: These values appear in the JES3 trace table only.

See *z/OS JES3 Customization* for ERROR or NAVAIL causes for these macros.

Module: IATDMTA

DM740

Explanation: The TRAKALOC FCT in the CI FSS address space detected an incorrect RRE control block on the spool allocation reply chain in IATDMTA.

Programmer Response: Check the cell pool control block (CPP); or verify that the RRE was correctly processed by the SDM RRE processing routine in IATDMGB. Correct and link edit the DSP.

Module: IATDMTA

DM741

Explanation: The IATXCSS macro with the CSS= keyword was issued but the CSS= keyword was not set up properly.

System Action: JES3 failsoft processing passes control to the JESTAE exit for module IATDMCS and does clean-up processing. If a dump is requested, the dynamic support program (DSP) that issued the IATXCSS macro is reinstated and JES3 issues message IAT3905. Register 2 contains the reason code. The possible reasons are:

Code Explanation

X'04' An incorrect control block identifier for CSS was specified.

X'08' The CSS was not properly initialized.

Programmer Response: Contact your IBM Support Center.

Module: IATDMCS

DM742

Explanation: A job or data set TAT to be used to satisfy an allocation request contains incorrect identification, or an incorrect spool index field or has no spool record entries.

System Action: The allocation routine returns control to the requestor's error exit with a dump failure code. JES3 may fail the job in error; however, allocation requests will continue to be processed.

Programmer Response: Find the DSP that caused the job TAT to be in error and correct it.

Module: IATDMTA, IATDMTK

DM743

Explanation: A job or data set TAT to be used to satisfy an allocation request was found to contain a spool address (X.G) that is not within the range of extents of the requested spool partition.

System Action: The allocation routine returns control to the requestor's error exit with a dump failure code. The job in error may be failed, however, allocation requests will continue to be processed.

Programmer Response: Further allocation from the job or data set TAT should not be allowed.

Module: IATDMTK

DM744

Explanation: The spool partition requested to satisfy a track allocation request in IATDMTK was found to be invalid and cannot be used.

System Action: The allocation routine returns control to the requestor's error exit with a dump failure code. The DSP is placed in control of failsoft processing.

Programmer Response: All allocation and purge activity related to the damaged partition should be halted by issuing the proper spool MODIFY commands.

Module: IATDMTK, IATMOSP

DM745

Explanation: A CCHH contained in a spool badtrack entry is converted to a partition TAT (PTAT) relative address, but cannot be found in the applicable PTAT.

System Action: The DSP is placed in control of failsoft processing.

Programmer Response: The badtrack entry should be removed from the initialization input stream or omitted from those dynamic entries added at the next warm or cold start.

Module: IATDMTK

DM746

Explanation: An incorrect control block (for example, JOBTAT, RRE, or RESQUEUE) was detected during an attempt to process a track allocation request.

System Action: A dump of the JES3 global address space is produced if requested by the installation. A 4FB abend may be produced in the requesting user's address space when the staging area containing the RRE is returned.

Programmer Response: Use the dump to determine the control block that caused the failure.

Module: IATDMGB

DM747

Explanation: An error was encountered while processing a JDS interface block (JIB).

System Action: A dump of the JES3 global address space is produced if requested by the installation. The job number in register 3 may be abended with a 1FB when the JIB is returned to the requesting user's address space.

Programmer Response: Use the dump to determine the cause of the error. Use JIBFLAG2 in the JIB and the return address in register 9 to determine the origin of the error.

Module: IATDMJA

DM748

Explanation: An error was detected by the ABACKR routine.

System Action: JES3 failsoft processing receives control of the DSP that issued the ABACKR macro.

Programmer Response:

Module: IATDMDT

DM749

Explanation: JES3 encountered an error while trying to obtain or free a cell. Register 2 contains the following information:

Byte 00

contains a reason code that:

Code	Explanation
-------------	--------------------

X'01'	indicates that IATXGCL received an error while attempting to get a cell.
--------------	--

X'02'	indicates that IATXRCL received an error while attempting to return a cell.
--------------	---

Byte 01

Contains a reason code that shows the type of cell when the error occurred:

Code	Explanation
-------------	--------------------

X'01'	RESQUEUE chained SRF table extension (RCE)
--------------	--

X'02'	chained SRF buffer table (CSBT) - job data set control block (JDS)
--------------	--

X'03'	CSBT - job summary table (JST)
--------------	--------------------------------

X'04'	CSBT - output scheduler element (OSE)
--------------	---------------------------------------

X'05'	CSBT - dynamic job summary table (DJST)
--------------	---

Bytes 02 and 03

Contains a return code from either the get cell or free cell service routines.

System Action: JES3 issues message IAT3713. The failsoft processing passes control to the JESTAE exit for IATDMCS which does clean-up processing. The job remains in the system, the job's chained SRFs will be read serially.

Programmer Response: Check the dump and the contents of Register 2. For more information on the return codes from macros IATXGCL and IATXRCL, refer to *z/OS JES3 Customization*.

Module: IATDMCS

DM750

Explanation: The error recovery processing for a spool I/O error could not be completed.

System Action: JES3 failsoft processing ends the IOERR DSP. After the dump processing, the IOERR DSP will be reinstated and one or more spool I/O errors will be posted as permanent errors. The low-order byte of register 2 contains the error code:

Code	Explanation
-------------	--------------------

X'08'	An error occurred while the module number was being calculated for the spool record (M.R).
--------------	--

X'0C'	The file description block (FDB) was not found in the file directory.
--------------	---

X'10'	An error occurred because the write-inhibit switch is in the read-only position on the device.
--------------	--

X'14'	An error occurred while the active I/O count was being calculated.
--------------	--

X'18'	The I/O error count was zero after the post for the I/O error retry (I/O completed with errors).
--------------	--

X'1C'	The I/O error count was zero after the post for the I/O error retry (I/O completed without errors).
--------------	---

- X'20'** There was an error return from module IATDMDK (I/O retry).
- X'24'** An error exists in the spool I/O error block (IEB) chain.
- X'28'** There was an incorrect entry to the continue routine.
- X'2C'** The wait for a post exceeded 20 seconds.
- X'30'** Spool space could not be allocated to a new single record file due to a job or data set TAT error.
- X'34'** The IOSABNC field of the I/O supervisor block (IOSB) showed that the I/O request was abnormally ended.

Programmer Response: Not applicable.

Problem Determination: See Table I, items 4, 5, 7, and 22.

Module: IATDMER

DM751

Explanation: An incorrect output service summary entry (OSS) address was detected while processing an IATXPOSE macro call. Register 5 contains the job number (in decimal) of the failing job.

System Action: The DSP is placed in control of failsoft processing.

Programmer Response: Use the dumpcore utility to dump the job data set (JDS) and output service element (OSE) control blocks of the failing job. Use the dumpcore output and the dump to determine why the OSS address is incorrect. Correct and relink-edit the DSP.

Module: IATOSDR

DM752

Explanation: The OUTPUT routine in module IATDMNC was called to write a buffer to spool. The end of the buffer chain was encountered before the requested buffer was located.

System Action: The OUTPUT routine returns control to the caller's error exit with a dump and a return code.

Programmer Response: If a dump was produced for the error, analyze the dump to determine the cause of the error.

Module: IATDMNC

DM753

Explanation: An error occurred during RAB destroy processing. Register 4 contains a reason code. The same reason code will also be used as a return code to the caller of the IATRABD macro. See the description of

the IATRABD macro in *z/OS JES3 Customization* for the reason codes and their meanings.

System Action: A dump of the JES3 global address space is produced if requested by the installation.

Programmer Response: Use the dump to determine the cause of the error.

Module: IATDMTK

DM754

Explanation: Output service issued an RQTAPUT macro call to remove a job from the output service writer chain. During processing of the RQTAPUT macro call, an active output service summary (OSS) entry was found. No OSS entries should exist while output service is removing the job from the writer chain. The contents of the registers are:

Register	Contents
5	The job number (in decimal) of the failing job.
6	The address of the incorrect OSS.

System Action: The DSP is placed in control of failsoft processing. A separate dump containing the output service elements (OSE) for the job is taken.

Programmer Response: If register 5 contains zeroes, the job in error is job 0. Use the DM754 dump and the OSE dump to determine why the OSS address exists.

Module: IATGRRQ

DM755

Explanation: Module IATDMGB detected an attempt to decrement the file description block (FDB) I/O count of a JSAM multi-record file when the count was already zero.

Register 2 contains the address of the FDB.

System Action: A dump of the JES3 global address space is produced if required by the installation. After the dump has been generated, the FDB I/O count will remain zero.

Programmer Response: Analyze the dump to determine the cause of the error.

Module: IATDMGB

DM756

Explanation: Output service issued an IATXPOSE macro call to update the status in the output service summary element (OSS) or the OSS and the master output scheduling element (MOSE) for the supplied input RESQUEUE. The decrement of the OSS count caused either the OSSAVAIL or the OSSSCHD count to become negative. Neither of these counts should

ever be a negative value. The contents of the registers are:

Register	Contents
7	The address of the OSE.
8	The address of the OSS.
9	The address of the RESQUEUE.

System Action: The DSP is placed in control of failsoft processing.

Programmer Response: Analyze the dump to determine the cause of the negative value.

Module: IATOSGP

DM757

Explanation: JES3 RJP processing encountered an error while trying to obtain or free a cell.

For an IATXGCL request, register 2 contains the return code from the get cell service.

For an IATXRCL request, register 2 contains the return code from the return cell service, and register 3 contains the address of the cell being returned.

Register 2 contains the following information:

Byte 00

contains a reason code that:

Code	Explanation
------	-------------

- | | |
|-------|---|
| X'01' | indicates that IATXGCL received an error while attempting to get a cell. |
| X'02' | indicates that IATXRCL received an error while attempting to return a cell. |

Byte 01

Unused

Bytes 02 and 03

Contains a return code from either the get cell or free cell service routines.

System Action: JES3 issues message IAT3713. The failsoft processing passes control to the JESTAE exit for IATRJPC (get cell) or IATCNRM (return cell) which does clean-up processing.

Programmer Response: Check the dump and the contents of Register 2. For more information on the return codes from macros IATXGCL and IATXRCL, refer to *z/OS JES3 Customization*.

Module: IATRJPC, IATCNRM

DM758

Explanation: Module IATDMGB detected an incorrect file directory (FD) entry I/O pending count during I/O completion processing of a chained single-record file. The contents of the registers are:

Register	Contents
4	The address of the FD entry that contains the incorrect I/O pending count.
5	The address of the function control table (FCT) of the dynamic support program (DSP) which initiated the I/O operation.

System Action: The system issues messages IAT3929 and IAT3713. JES3 continues processing.

System Programmer Response: Analyze the dump to determine the cause of the error.

If you continue to experience problems with your system, it may be an indication that the FCT was not posted for I/O completion. To recover the FCT, a *FAIL command or JES3 hot start may be required.

Note: Even though the failure occurs under the JSAM FCT, do not fail JSAM. Fail the FCT that initiated the I/O request.

Module: IATDMGB

DM759

Explanation: During JES3 Subsystem Communication Services processing, an error was detected. Register 2 contains an error reason code:

Code	Explanation
------	-------------

- | | |
|-------|--|
| X'01' | Module IATINM3 received a bad return code from the JESXCF Attach service (IXZXIXAT) while attempting to attach to JESXCF. This return code occurs if the current release of JES3 is not supported on the current release of z/OS. <ul style="list-style-type: none"> Register 3 - Return code from IXZXIXAT Register 4 - Reason code from IXZXIXAT |
| X'02' | Module IATINM3 received a bad return code from the JESXCF Create Mailbox service (IXZXIXMB) while attempting to connect to the default mailbox. <ul style="list-style-type: none"> Register 3 - Return code from IXZXIXMB Register 4 - Reason code from IXZXIXMB |
| X'03' | Module IATINM3 received a bad return code from the JESXCF Delete Mailbox service (IXZXIXMD) while attempting to delete the default mailbox. <ul style="list-style-type: none"> Register 3 - Return code from IXZXIXMD Register 4 - Reason code from IXZXIXMD |
| X'04' | After a DSI, JES3 on the old global was reinitializing as a local. Module IATINM3 called the XCF Query service (IXCQUERY) to |

- determine if all active mains had reconnected. IATINM3 received a bad return code from this IXCQUERY call.
- Register 3 - Return code from IXCQUERY
 - Register 4 - Reason code from IXCQUERY
- X'05'** Module IATINM3 received a bad return code from the JESXCF Update Status service (IXZXIXUS) while attempting to update the user state for the JES3 global. The JESXCF Update Service (IXZXIXUS) is used to indicate that the JES3 main is automatic restart manager capable.
- Register 3 - Return code from IXZXIXUS
 - Register 4 - Reason code from IXZXIXUS
- X'09'** Routine SSDSDLOC in module IATSSDS, while processing a DSQLOC call, determined that a JESXCF mailbox did not exist for the destination queue that it was to process.
- X'0A'** Routine SSDSDLOC in module IATSSDS, while processing a DSQLOC call, received a bad return code from the JESXCF Receive Message service (IXZXIXRM) while attempting to receive a staging area from a JESXCF mailbox.
- Register 3 - Return code from IXZXIXRM
 - Register 4 - Reason code from IXZXIXRM
- X'0B'** Routine SSDSDLOC in module IATSSDS, while processing a DSQLOC call, could not locate the Main Processor Control Table (IATYMPC) representing the system that sent the staging area that SSDSDLOC was currently processing.
- X'0C'** Routine SSDSDLOC in module IATSSDS, while processing a DSQLOC call, detected that the eyecatcher in the JESXCF Message Envelope (IXZYIXEN) for the current staging area was not correct.
- X'0D'** Routine SSDSDLOC in module IATSSDS, while processing a DSQLOC call, detected that the JESXCF mailbox to which the current staging area was to be sent does not match the JESXCF mailbox from which it was received.
- X'0E'** Routine SSDSDLOC in module IATSSDS, while processing a DSQLOC call, detected that the eyecatcher in the staging area was not correct.
- X'11'** Routine SSDSDLON in module IATSSDS, while processing a DLOCON call, received a bad return code from the JESXCF Create Mailbox service (IXZXIXMB) while attempting to create a JESXCF mailbox for the input destination queue.
- Register 3 - Return code from IXZXIXMB
 - Register 4 - Reason code from IXZXIXMB
- X'19'** Routine SSDSDLOF in module IATSSDS, while processing a DLOCOFF call, received a bad return code from the JESXCF Acknowledge Message service (IXZXIXAC) while acknowledging all staging areas for the JESXCF mailbox that was about to be deleted.
- Register 3 - Return code from IXZXIXAC
 - Register 4 - Reason code from IXZXIXAC
- X'1A'** Routine SSDSDLOF in module IATSSDS, while processing a DLOCOFF call, received a bad return code from the JESXCF Delete Mailbox service (IXZXIXMD) while attempting to delete the JESXCF mailbox for the input destination queue.
- Register 3 - Return code from IXZXIXMD
 - Register 4 - Reason code from IXZXIXMD
- X'21'** Module IATSSRN was called with an incorrect routine index.
- X'22'** Routine SSRNMBDL in module IATSSRN received a bad return code from the JESXCF Delete Mailbox service (IXZXIXMD) while attempting to delete the JESXCF mailbox for the input destination queue.
- Register 3 - Return code from IXZXIXMD
 - Register 4 - Reason code from IXZXIXMD
- X'29'** Routine MSDRINIT in module IATMSDR received a bad return code from the JESXCF Create Mailbox service (IXZXIXMB) while attempting to create a JESXCF mailbox for the active FCT.
- Register 3 - Return code from IXZXIXMB
 - Register 4 - Reason code from IXZXIXMB
- X'2A'** Routine MSDRINIT in module IATMSDR received a bad return code from the JESXCF Clear Mailbox service (IXZXIXMC) while attempting to clear the JESXCF mailbox for the active FCT.
- Register 3 - Return code from IXZXIXMC
 - Register 4 - Reason code from IXZXIXMC
- X'2B'** Routine MSDROBIF in module IATMSDR received a bad return code from the JESXCF Obtain Member Information service (IXZXIXIF) while attempting to obtain information about a JES3 main.
- Register 3 - Return code from IXZXIXIF
 - Register 4 - Reason code from IXZXIXIF
- X'2C'** Routine MSDRJMSG in module IATMSDR received a bad return code from the JESXCF Receive Message service (IXZXIXRM) while attempting to process messages in a Main Service mailbox.
- Register 3 - Return code from IXZXIXRM
 - Register 4 - Reason code from IXZXIXRM

- X'2D'** Routine MSDRJMSG in module IATMSDR received a bad return code from the JESXCF Acknowledge Message Service (IXZXIAC) while attempting to acknowledge a message it had processed from a Main Service mailbox.
- Register 3 - Return code from IXZXIAC
 - Register 4 - Reason code from IXZXIAC
- X'2E'** Routine MSDRRQCN in module IATMSDR received a bad return code from the JESXCF Send Message Service (IXZXISM) while attempting to send a message to the global requesting permission to connect.
- Register 3 - Return code from IXZXISM
 - Register 4 - Reason code from IXZXISM
- X'2F'** Routine MSDRGRPM in module IATMSDR received a bad return code from the JESXCF Connect Service (IXZXICN) while attempting to inform JESXCF that JES3 Main processor connect processing was about to begin on the global.
- Register 3 - Return code from IXZXICN
 - Register 4 - Reason code from IXZXICN
- X'30'** Routine MSDRGRPM in module IATMSDR received a bad return code from the JESXCF Send Message Service (IXZXISM) while attempting to send a message to the local granting permission to connect.
- Register 3 - Return code from IXZXISM
 - Register 4 - Reason code from IXZXISM
- X'31'** Routine MSDRJMSG in module IATMSDR received a bad return code from the JESXCF Obtain Member Information service (IXZXIIF) while attempting to request new information about the Main represented by the active FCT.
- Register 3 - Return code from IXZXIIF
 - Register 4 - Reason code from IXZXIIF
- X'32'** Routine MSDRRSCN in module IATMSDR received a bad return code from the JESXCF Connect Service (IXZXICN) while attempting to reset the JESXCF connect state for the Main processor that was about to begin its connect processing.
- Register 3 - Return code from IXZXICN
 - Register 4 - Reason code from IXZXICN
- X'33'** Routine MSDRJMSG in module IATMSDR, while processing JESXCF messages in a Main Service mailbox, detected that the eyecatcher in the JESXCF Message Envelope (IXZYIEN) for the current message was not correct.
- X'34'** Routine MSDRCKRC in module IATMSDR received a bad return code from the JESXCF Update XCF User State Service (IXZXIUS) while attempting to update the user state for the JES3 global to indicate that all active JES3 mains had reconnected to the global.
- Register 3 - Return code from IXZXIUS
 - Register 4 - Reason code from IXZXIUS
- X'39'** Module IATMSR1 received a bad return code from the JESXCF Connect Service (IXZXICN) while attempting to reset the JESXCF connect state for the Main processor that was about to begin its connect processing. Field CONRETRS of the CONWORK DSECT (internally defined to IATMSR1) contains the return and reason codes from IXZXICN.
- X'3A'** Module IATMSR1 received a bad return code from the JESXCF Send Message Service (IXZXISM) while attempting to send a single segment restart record to the global. Field CONRETRS of the CONWORK DSECT (internally defined to IATMSR1) contains the return and reason codes from IXZXISM.
- X'3B'** Module IATMSR1 received a bad return code from the JESXCF Send Message Service (IXZXISM) while attempting to send the first segment of a multi-segment restart record to the global. Field CONRETRS of the CONWORK DSECT (internally defined to IATMSR1) contains the return and reason codes from IXZXISM.
- X'3C'** Module IATMSR1 received a bad return code from the JESXCF Send Message Service (IXZXISM) while attempting to send a middle segment of a multi-segment restart record to the global. Field CONRETRS of the CONWORK DSECT (internally defined to IATMSR1) contains the return and reason codes from IXZXISM.
- X'3D'** Module IATMSR1 received a bad return code from the JESXCF Send Message Service (IXZXISM) while attempting to send the last segment of a multi-segment restart record to the global. Field CONRETRS of the CONWORK DSECT (internally defined to IATMSR1) contains the return and reason codes from IXZXISM.
- X'49'** Module IATMSR3 received a bad return code from the JESXCF Connect Service (IXZXICN) while attempting to set the JESXCF connect state for the Main processor that had just completed its connect processing. Field CONRETRS of the CONWORK DSECT (internally defined to IATMSR3) contains the return and reason codes from IXZXICN.
- X'51'** During DSI processing on the new global, routine DSI1RMRC in module IATDSI1 received a bad return code from the JESXCF Update XCF User State Service (IXZXIUS) while attempting to reset the user state for the

new global to indicate that all active JES3 mains had not yet reconnected to the global.

- Register 3 - Return code from IXZXIXUS
- Register 4 - Reason code from IXZXIXUS

System Action: A dump is produced if requested by the installation. The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exist, or none of the JESTAE exits requires retry, the DSP is ended.

System Programmer Response: Analyze the dump to determine the cause of the problem.

If you determine you need to dump the JESXCF address space based on this DM759 reason code or other indications, such as system abend codes DC5 and EC5 and MVS IXZ0108E messages, refer to *z/OS MVS Programming: JES Common Coupling Services*. This publication contains procedures on how to dump the JESXCF address space and all associated data spaces.

Module: IATDSI1, IATINM3, IATMSDR, IATMSR1, IATMSR3, IATSSDS, IATSSRN

DM760

Explanation: A spool data integrity error was detected. Register 15 contains an error code describing the reason:

Code	Explanation
------	-------------

X'04'	The spool address supplied is incorrect; the M (from M.R) is zero.
X'08'	The IATXSAS service returned via its ERROR return. This could be because the extent number in the SRF buffer is incorrect.
X'0C'	The spool address supplied is incorrect; the R (from M.R) value is too low. It is outside of the extent.
X'10'	The spool address supplied is incorrect; the R (from M.R) value is too high. It is outside of the extent.
X'14'	The slot location routine (SLOTLOC in IATDMTK) returned in error. A possible cause is that the array pointer in IOPVLARR was incorrect.
X'18'	The track group is not allocated.
X'1C'	The spool address in the SRF buffer is not allocated to the same file as indicated by the SRFVLID field.
X'20'	The VALID field returned from the SLOTLOC routine doesn't match the VALID field from the track allocation table (TAT) FDB.

System Action: An SVC dump is taken and the system continues processing. The FCT associated with the request may fail or issue additional messages.

Note that the detecting FCT may not be the failing FCT. JES3 may re-drive I/O requests from an active FCT that has searched the file directory for eligible requests. Those requests may have come from a variety of FCTs.

System Programmer Response: Correct the cause of the problem.

Module: IATDMNC

DM761

Explanation: JES3 detected an error in the input provided to the IATXMLWO multi-line message service. The error reason code is provided in the IAT3713 failure logout as well as in register 2.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exit exists, or no JESTAE exits request retry, the DSP is ended.

Programmer Response: To determine the error, perform the following:

1. Locate the ACALL and RETURN trace entry for the IATXMLWO macro
2. Register 1 of the ACALL trace entry contains the address of the parameter list used by the IATXMLWO macro. The parameter list is mapped by a DSECT generated from an IATXMLWO MF=L call.
3. Register 2 in the failsoft logout (message IAT3713) contains one of the following reason codes to indicate why the IATXMLWO parameter list was incorrect.

Code	Explanation
------	-------------

X'04'	NO TEXT ON A BUILD REQUEST
X'08'	NO TOKEN ON A CLEANUP REQUEST
X'0C'	TOKEN SPECIFIED IS NOT VALID
X'10'	ZERO TEXT LENGTH IS NOT VALID

Module: IATCNRN

DM762

Explanation: JES3 RJP processing encountered an error while trying to obtain a console message from JESXCF. A request for a Message Data Block (MDB) was passed to JESXCF, which responded with a normal return code. However, the MDB could not be processed. The reason code describes the error.

System Action: JES3 issues message IAT3713. The failsoft processing passes control to the JESTAE exit for

IATRJPC which does clean-up processing.

Programmer Response: Check the dump to determine the cause of the error.

The reason codes are:

Code	Explanation
X'04'	The MDB address returned by JESXCF was zero.
X'08'	The MDB prefix eyecatcher was incorrect.
X'0C'	The MDB header eyecatcher was incorrect.
X'10'	The MDB header length was incorrect.
X'14'	The MDB object type is incorrect.
X'18'	The MDB object length is incorrect.

If you determine you need to dump the JESXCF address space based on this DM762 reason code or other indications, such as system abend codes DC5 and EC5 and MVS IXZ0108E messages, refer to *z/OS MVS Programming: JES Common Coupling Services*. This publication contains procedures on how to dump the JESXCF address space and all associated data spaces.

Module: IATRJPC

DM763

Explanation: An error return was taken from the IATXGCL service while attempting to add or delete a file directory (FD) entry.

System Action: JES3 issues message IAT3713. The failsoft processing passes control to the JESTAE exit, after which JES3 continues processing the affected job.

Programmer Response: Check the dump to determine the cause of the error.

Module: IATDMNC

DM764

Explanation: JES3 encountered an error while trying to access the JDS entry for a SYSOUT data set.

System Action: JES3 issues message IAT3713. The failsoft processing passes control to the JESTAE exit, after which JES3 continues processing the affected job.

Programmer Response: Check the dump to determine the cause of the error. The reason codes are:

Code	Explanation
X'04'	Process SYSOUT (PSO) encountered an error from the JDSPOINT service.
X'08'	Process SYSOUT (PSO) detected a zero JDS entry.

X'0C' SYSOUT Application Programming Interface (SAPI) encountered an error from the JDSPOINT service.

X'10' SYSOUT Application Programming Interface (SAPI) detected a zero JDS entry.

Module: IATOSPC, IATOSSO

DM765

Explanation: JES3 encountered an error when attempting to update the SAPI data space.

System Action: JES3 issues message IAT3713. The failsoft processing passes control to the JESTAE exit.

Programmer Response: Check the dump to determine the cause of the error.

Code **Explanation**

X'04' The operation specified on the IATXCWSV invocation was not valid.

X'08' The eyecatcher in the IATYCWSV parameter list was not valid.

X'0C' The IATYCWSV parameter list version is not valid.

X'10' The SAPI data space is not initialized.

X'14' The eyecatcher in the input COW is not valid.

X'18' The version number in the input COW is not valid.

X'1C' The thread count in the input COW is not valid.

X'20' The pointer to the input COW is not valid.

X'38' No storage cells were available in the SAPI data space.

Module: IATOSSO, IATOSSR

DM800

Explanation: A DSP has returned to JSS for termination with an open spool file. This usually results when a module called by an ACALL macro returns to JSS rather than to the calling module.

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: Correct and re-link-edit the DSP.

Module: IATGRJR

DM801

Explanation: A nonzero return code (other than end-of-data) was received from the JQE/JCT access routines (called by an IATXJQE or IATXJCT macro).

Possible errors are:

- Permanent JSAM I/O error
- Incorrect JCT record contents
- Release or delete without a previous read
- Duplicate job numbers
- Incorrect parameters
- Control block damage

System Action: JES3 failsoft processing receives control of the DSP. Recovery processing or end processing is dependent on the current JESTAEs. If the JSS DSP failed, JSS tries to place the job in operator hold and continues to schedule other jobs.

Programmer Response: If message IAT6311 follows the failsoft logout and this is the first occurrence of the failure, refer to the documentation for message IAT6311 in *z/OS JES3 Messages* for the appropriate response.

If the failure has occurred multiple times, isolate the error and determine the probable cause by performing the following:

1. Examine the failsoft logout to determine if the error occurred in the JSS DSP.
2. If the error occurred in the JSS DSP:
 - a. Examine the contents of the following registers in the failsoft banner.

Register	Contains						
0	Address within module IATGRJX where the error occurred. This address helps identify why JES3 could not access the JCT or JQE.						
1	Contains a return code from the JESREAD or AWRITE macro. The value in this register is only valid if register 3 contains a X'04'.						
3	The return code from the IATXJCT or IATXJQE macro. See <i>z/OS JES3 Customization</i> for information on the return codes.						
4	Contains a footprint and return code that should isolate the error in IATGRJS. The footprint identifies where in IATGRJS the macro was issued. One of the following footprints are located in the high-order byte of register 4.						
	<table border="1"> <thead> <tr> <th>Footprint</th> <th>Routine in module IATGRJS</th> </tr> </thead> <tbody> <tr> <td>X'04'</td> <td>JSSPOSTS</td> </tr> <tr> <td>X'08'</td> <td>JSSQSERV</td> </tr> </tbody> </table>	Footprint	Routine in module IATGRJS	X'04'	JSSPOSTS	X'08'	JSSQSERV
Footprint	Routine in module IATGRJS						
X'04'	JSSPOSTS						
X'08'	JSSQSERV						

	or
	QSERV080
X'0C'	QSERV020
X'10'	QSERV030
X'14'	QSERV060
X'18'	JSSQSCAN
X'1C'	JSSQMERG
X'20'	JSSQDSPS
X'24'	QDSPS020
X'28'	JSSSEEF
X'2C'	JSSSECHK
X'30'	JSSSESCH
X'34'	JSSJQEDQ
X'38'	JSENQ003
X'3C'	JSSNOTFY or JSSINTFY
X'40'	JSSJQENQ
X'44'	JSSJQEDQ
X'48'	JSSDUPDQ

The low-order byte of register 4 contains a **return code** from module IATGRJS. The return code indicates the macro that IATGRJS issued and the information IATGRJS was trying to obtain for the job. The possible return codes and their meanings are:

Code	Explanation
X'04'	Indicates JES3 encountered an error while processing a JQE that represented a job on the ready queue. JSS was releasing the resources allocated to the SE (ending-function processing). If possible, JES3 places the job in operator hold.
X'08'	Indicates JES3 encountered an error while processing a JQE that represented a job on the ready queue. JSS was scheduling the job to

be processed. If possible, JES3 places the job in operator hold.

- X'0C'** Indicates JES3 encountered an error while processing a JQE that represented a job on the ready queue. JSS was updating the JCT that represented the job on spool. If possible, JES3 places the job in operator hold.
- X'10'** Indicates JES3 encountered an error while prioritizing the JQEs on the ready queue. The order of the jobs on the ready queue remains unchanged.
- X'14'** Indicates JES3 encountered an error while scheduling a MAIN SE for a job. JES3 searches all the JQEs on the ready queue to ensure there is not another job with the same job name on the ready queue. If possible, JES3 places the job in operator hold.
- X'18'** Indicates JES3 encountered an error while releasing the resources allocated to the MAIN SE (ending-function processing). If possible, JES3 places the job in operator hold.
- X'1C'** Indicates JES3 encountered an error while deleting the JCT during purge processing. The job was already completed; no further action is required.

3. If the error occurred in a DSP other than the JSS DSP, correct the error, reassemble and re-link-edit as necessary.

Module: IATGRJS, IATGRRQ, IATIIFS, IATINJS, IATISEN, IATISNJ

DM802

Explanation: JSS encountered an error while attempting to process a job. JSS could not process the job because a control block associated with the job was incorrect. JSS found one of the control blocks to be incorrect:

- JCT
- RESQUEUE
- JQE

System Action: JES3 failsoft processing receives control of the DSP. Recovery processing or end processing is dependent on the current JESTAEs. If the JSS DSP failed, JSS tries to place the job in operator hold and continues to schedule other jobs.

System Programmer Response: If message IAT6311 follows the failsoft logout and this is the first occurrence of the failure, refer to the documentation for message IAT6311 in *z/OS JES3 Messages* for the appropriate response.

If the failure has occurred multiple times, isolate the error and determine the probable cause by performing the following:

1. Locate the failsoft logout and use the low-order byte of register 4 to determine the error. If the low-order byte of register 4 contains:

Code Explanation

- X'04'** JSS encountered an incorrect RSQ on the ending function queue
- X'08'** JSS encountered an incorrect RSQ on the OSSWAIT queue
- X'0C'** JSS was posted to schedule work but the ready queue did not contain a job ready for scheduling
- X'10'** JSS encountered an incorrect JQE while scheduling a job.
- X'14'** When JSS attempted to schedule a job, JSS found the scheduler element (SE) active. If possible, JES3 places the job in operator hold.
- X'18'** JSS attempted to schedule a job for main scheduling but another job with the same job name was already in the system. If possible, JES3 places the job in operator hold.
- X'1C'** JSS was scheduling the job for output service processing but the RESQUEUE was incorrect. JES3 indicated output service should use the RESQUEUE that was used by the job's previous scheduler element.

- X'20'** JSS encountered an incorrect RESQUEUE.
- X'24'** JSS was attempting to schedule a job that had completed processing. All the SEs in the JCT were marked complete. If possible, JES3 places the job in operator hold.
- X'28'** JSS was attempting to schedule a job but JSS could not locate the first SE in the job. If possible, JES3 places the job in operator hold.
- X'2C'** JSS was attempting to schedule a job but JSS could not locate the last SE in the job. If possible, JES3 places the job in operator hold.
- X'30'** JSS was attempting to send messages to the user. The JCT is required to send messages to the user. If possible, JES3 places the job in operator hold.
- X'34'** JSS encountered an error while attempting to add or remove a job from a queue. JSS could not add or delete the job because the requestor did not specify a valid queue or provided an incorrect JQE address. If possible, JES3 places the job in operator hold.
- X'38'** While processing a job on the OSSWAIT queue, either a JQE/RESQUEUE mismatch was found or the JQE for the RESQUEUE on the OSSWAIT queue was not found.
- X'3C'** JSS encountered an error while attempting to remove a job from a queue. JSS could not remove the job because the requestor did not specify a valid queue or provided an incorrect JQE address. If possible, JES3 places the job in operator hold.
- X'40'** A JQE was added to the ready queue and the RQOSWAIT bit is on but module IATGRJS has not posted the job. The job is put in hold by the IATGRJS retry routine.

2. Locate the routine in IATGRJS where the error occurred by using the following chart:

Table 6. Return Codes and their Routines

Return Code	Routine
X'04'	IATGRJS
X'08'	IATGRJS
X'0C'	QSERV
X'10'	QSERV
X'14'	SECHK
X'1C'	OSSCH
X'20'	SEEF
X'24'	NXTSE
X'28'	NXTSE

Table 6. Return Codes and their Routines (continued)

Return Code	Routine
X'2C'	NXTSE
X'30'	NOTFY
X'34'	JQENQ JQEDQ
X'3C'	JQEDQ
X'40'	JSSSEEF

3. Contact IBM with the:
 - Return code provided in register 4
 - Routine where the error occurred
 - Values provided in registers 0 and 1, if the return code is X'34'

Module: IATGRJS

DM803

Explanation: An error occurred when processing a Persistent JCL SSI request (SSI Function Code 77)

Code Explanation

X'04' While processing a Persistent JCL SSI request (SSI Function Code 77), an unknown request type was found.

System Action: JES3 continues processing.

Module: IATGRPJ

DM850

Explanation: A read or write error occurred during accessing of the deadline queue. The dump is taken prior to error recovery to allow a trouble analysis to be taken. Register 3 contains the error return code from the JESREAD or AWRITE macro processing.

System Action: JES3 attempts to recover the error, and issues message IAT7440 or IAT7445. A read error results in all or part of the deadline queue being purged.

Operator Response: Use the *I,A,D=DLINE command to display the entries that remain in the deadline queue. If the deadline function is needed for any job whose deadline entry has been lost, resubmit the affected job. Notify the system programmer.

Module: IATISDL, IATPURG, IATDLND

DM851

Explanation: The DEADLINE DSP has failed to complete abnormal end recovery.

System Action: JES3 failsoft processing ends the DEADLINE DSP.

Operator Response: Use the *X,DEADLINE command to call the DEADLINE DSP again.

Module: IATDLND

DM852

Explanation: The IATXERCV macro has returned an incorrect return code to the DEADLINE DSP.

System Action: The abend recovery routine is entered to free any resources that are being held by the DEADLINE DSP. An attempt to reinitialize the DEADLINE DSP is made. If this is unsuccessful, the DSP is failed with a DM851 completion code.

Module: IATDLTM, IATDLIN

DM871

Explanation: Input service was unable to recognize the return code or the accompanying reason code from the MVS common authorization check routine (IEFCMAUT). JES3 saved the return code in Register 3. You can locate the reason code in the check routine parameter list. The address in register seven points to the check routine parameter list which is mapped by MVS macro IEFCMAUP.

System Action: JES Failsoft fails the ISDRVR FCT. All jobs in that batch are lost, including the job being processed.

Problem Determination: See Table I, items 2, 4, and 7.

Module: IATISJB

DM872

Explanation: An error occurred while the internal reader job scheduler was writing job-related control blocks for an internal reader job. The internal reader job scheduler adds an job control table (JCT) for the internal reader job to the JCT chain and creates the following control blocks for the job:

- Job description accounting block (JDAB)
- Job data set control block (JDS)
- Job management record (JMR)

System Action: The JESTAE for the internal reader job scheduler is invoked. The JESTAE attempts to deallocate any resources that were obtained before the DSP abnormally ended.

System Programmer Response: Perform the following to determine the source of the error:

1. Use register 2 in the failsoft logout banner to determine the control block that the internal reader job scheduler was unable to write to spool. If the low order byte of register 2 contains:

X'F5' it indicates an unrecoverable error occurred while writing the JDAB to spool

X'F6' it indicates an unrecoverable error occurred while writing the JDS to spool

X'F7' it indicates an unrecoverable error occurred while writing the JMR to spool

X'08' it indicates an unrecoverable error occurred while adding a JCT to spool

2. If the contents of register 2 indicate the error was caused while JES3 was attempting to create a JCT for the internal reader job, perform the following to determine the error:
 - a. Locate the RETURN trace entry in the JES3 trace table for the IATXJQE macro.
 - b. Register 15 in the trace entry contains a return code from the IATXJCT macro. Refer to *z/OS JES3 Customization* for a list of the possible return codes and their meanings.
3. If the error was caused while JES3 was trying to write a control block to spool, perform the following to determine the error:
 - a. Locate the ACALL and RETURN entries in the JES3 trace table for the AWRITE macro that the internal reader job scheduler issued to write the control block to spool.
 - b. Examine the contents of the registers in the ACALL entry. Register 1 contains the address of the FDB of the record that the internal reader job scheduler is attempting to write to spool.
 - c. Examine the contents of the registers in the RETURN entry. Register 0 contains the abend code that was returned from the AWRITE routine. Register 1 contains the return code from the AWRITE routine.
 - d. Use the abend code in Register 0 to determine the error.

Module: IATISCD

DM953

Explanation: The unrecoverable I/O error routine in IATDCNC abnormally ended. This failure usually follows a FAILDSP when an unrecoverable I/O error is encountered during reading of a single-record file containing DJC network control blocks.

System Action: JES3 failsoft processing terminates the DSP in process.

Programmer Response: Rerun the DJC network. The error may not recur.

Module: IATDCNC

DM955

Explanation: The DISPDJC DSP is abnormally ending recursively.

System Action: JES3 failsoft processing ends the DISPDJC DSP.

Programmer Response: Analyze the dump to find the cause of the failure.

Module: IATUTDD

DM960

Explanation: The dump job DSP was invoked to transfer job control blocks into or out of the system in the format of a different release (that is, TRANS=YES was specified on the *CALL, DJ command). During this processing, a translation error occurred when attempting to convert a control block for a job to the target release. The contents of the following registers will be helpful:

Register	Contents
2	An error reason code indicating the type of translation error that occurred:
X'04'	Input IATYDJR not found.
X'08'	LENFLD= parameter field not found.
X'0C'	Input data area length error.
X'10'	Output IATYDJR not found.
X'14'	Pre-translation exit error.
X'18'	No matching output IATYDJF.
X'1C'	Incorrect field name in COND= parameter.
X'20'	Incorrect field definition in COND= parameter.
X'24'	Successful COND=(,,ERROR) parameter.
X'28'	Input field not within buffer.
X'2C'	Output field not within buffer.
X'30'	Undetected modification exit error.
X'34'	Field attribute mismatch.
X'38'	Field length mismatch.
X'3C'	Binary data mask error.
X'40'	Added field exit error.
X'44'	Delete field exit error.
X'48'	Field translation exit error.
X'4C'	No matching input IATYDJF.
X'50'	Post-translation exit error.
X'54'	Input variable segment exit error.
X'58'	Data area overflow error.

X'5C' Overflow exit error.

- | | |
|---|---|
| 5 | The address of IATYDJF for the output field |
| 6 | The address of IATYDJF for the input field |
| 7 | The address of IATYDJR for the output release |
| 8 | The address of IATYDJR for the input release. |

System Action: The DSP's JESTAE exits, if any exist, are invoked. If no JESTAE exits exists, or none of the JESTAE exits requires retry, the DSP is ended.

Programmer Response: Bypass the dump job transfer of the job being processed when the failure was encountered.

Module: IATDJTR

DM999

Explanation: JES3 Monitoring Facility (JMF) either encountered an error while collecting information or the DEBUG=Y parameter was specified on the *CALL JMF command. If DEBUG=Y did not cause the abend, JMF failed because either:

- The RVMT did not exist
- JMF did not build the RVMT

System Action: The JMF DSP's JESTAE exit is invoked, if it exists. If an exit does not exist, or if none of the JESTAE exits request retry, the JMF DSP is ended.

System Programmer Response: To determine the error, perform the following:

1. Examine the contents of register 2 in message IAT9605 to determine why JMF ended. If register 2 contains a:

Code	Meaning
------	---------

X'04'	DEBUG=Y was specified on the *CALL JMF command
-------	--

X'08'	JMF encountered a problem with the RVMT
-------	---

2. If there is a problem with the RVMT, the problem must be corrected before calling JMF again.
3. Obtain the address of the RVMT from register 4. Use the address in register 4 to locate the RVMT in storage.
4. Call IBM for support.

Module: IATMFDR

Problem Determination

Problem determination is the activity required to identify a failing hardware unit or program and determine who is responsible for support.

Problem determination is accomplished by using procedures specified by IBM. In some cases, these procedures may be initiated by a message or code which requires operator or programmer response. The response may include the requirement for additional problem-related data to be collected and will attempt, where possible, to indicate “probable” failure responsibility.

Problem determination information is included for applicable messages and codes under the heading “Problem Determination.” It is intended that the specified actions be taken before calling IBM for support.

TABLE I

If a problem occurs in JES3, one or more of the following steps may be taken to assist in determining the cause:

1. Take a stand-alone dump of the system by specifying DUMP=PRDMP on the OPTIONS card in the initialization deck and save the output (SYS1.DUMPnn).
2. Take a standard dump of the system by specifying DUMP=JES on the OPTIONS card in the initialization deck and save the output (JESABEND).
3. Take an operating system dump including the nucleus and SQA by specifying DUMP=MVS on the OPTIONS card in the initialization deck and save output (SYSABEND).
4. Save the hardcopy log.
5. Provide listing of initialization deck (JES3OUT).
6. Provide console log from initialization.
7. Ascertain OS/VS level and JES3 PTF level.
8. Provide OS/VS nucleus LOADMOD map.
9. Issue *F T,L=linename, SNAPON and *X RJPSNPS.
10. Issue *F T,L=linename,TRCEON. This will give an RJP event trace on the hardcopy log.
11. Take a system dump by placing an INTDEBUG,n, message-text\$\$ card in the initialization deck. The message-text field is compared for occurrences of the chosen message. The n field specifies the number of message occurrences before the system is dumped.
12. Issue *X DISPLAY and save output.
13. Issue *X DISPLAY,SNAPS and save the output.
14. Rerun job with /*PROCESS CBPRNT and save output.
 - a. After Interpreter DSP
 - b. After Main Service
 - c. After Input Service
15. Rerun job with EXEC PGM=JCLTEST and save output.
16. Rerun job with EXEC PGM=JSTTEST and save output.
17. Rerun job with TYPRUN=SCAN specified on JOB card and save output.
18. Issue *X DISPDJC when problem occurs and save output.
19. Restart system with specifying a start type of WA (Warmstart with queue analysis) and save output (JES3SNAP).
20. Check JESYSMSG data set for error indications.
21. Provide a listing of the JES3 startup procedure, containing all JCL used to start the subsystem.
22. Save the IOERR trace that will be printed.
23. Rerun job with DEBUG=All immediately following the PROCESS CI statement.

Chapter 7. JES3 Completion Codes

05C

Explanation: An error occurred during allocation of the data sets for a job step. Register 15 contains a hexadecimal reason code that you should report to the IBM Support Center.

The following are valid hexadecimal reason codes:

Code Explanation

001 System address space initialization denied the request to create the allocation address space.

002 The allocation address space received a nonzero return code from GETMAIN processing.

003 The display allocation tables manager received a request which, if processed, would cause the DALTUSE count to be less than zero.

004 An allocation module issued the POST macro instruction, and the macro processing has entered the routine specified on the ERRET parameter.

005 An allocation module issued the ESTAE macro instruction, and the return code from ESTAE processing was not zero.

006 An allocation module issued the STIMERM macro instruction, and the macro processing has entered the routine specified on the ERRET parameter.

101 The ATTACH macro instruction was issued for the eligible device table (EDT) verification routine during allocation initialization processing. The return code from the ATTACH routine was not zero.

201 Allocation was invoked during DDR SWAP to update the unit control block (UCB) pointer list (UPL) so that the UPL would reflect the swapped UCBs. However, one or both of the swapped UCB addresses is not in the UPL.

202 Error in read locate of a single SWA block or invalid UCB address passed to IEFAB4A4.

203 SIOTDDIB does not point to a DDIB.

224 IEFAUTOS ENQ not held.

225 No required device array.

226 No required device type array.

227 Invalid function request.

228 Coupling Facility (CF) locks already held.

229 Required XES locks not held.

230 Unknown return code from IEFSALOC.

301

At the end of processing all allocation requests for a job step, an unsatisfied request is detected. An incorrectly modified eligible device table (EDT) or specifying VSAM parameters for a non-VSAM data set is the probable cause.

303

Error encountered in the EDL storage manager.

304

Unexpected return code for IEFAB480.

305

Either the EDT library section does not exist or an error occurred while obtaining the library names from the current configuration.

306

Internal error.

307

Internal error.

308

Two jobs are allocated to the same tape drive.

309

Devices selected by JES3 are not in the Allocation Eligible Device List (EDL).

501

Undefined return code from JES3.

604

Internal error.

608

Internal error.

60C

Internal error.

610

Internal error.

614

Internal error.

618

Internal error.

701

The scheduler JCL facility (SJF) returned an unexpected return code or reason code.

702

SVC 99 caller does not hold the SYSZTIOT resource and has requested that TIOT resource be obtained.

704

SIOT to be dechained is not found in the SIOT chain.

804

Allocation tried to remove a DSAB entry from the dynamic communication table, but the entry did not exist.

807

Allocation tried to mark a DSAB entry in the dynamic communication table as eligible for remove in-use processing, but the entry did not exist.

80B

Allocation tried to change the TCB address of a DSAB entry in the dynamic communication table, but the entry did not exist.

8FF

Allocation's dynamic communication table manager was called with an invalid function code.

90001

LOAD of EXTR IEFHB431 failed.

90002

ATTACH of IEFHB430 failed.

90003 IXLCONN returned a parameter error.
90004 ENFREQ service failed.
90005 Failed to release an XES lock.
90006 ATTACH of IEFHB430 failed.
90007 Rebuild complete (IXLEERSP) response failed.
90008 IEFHB430 failed and is not restartable.
90009 Failed to release an XES lock.
9000A OASD list is corrupted.
9000B AWTR CPOOL create failed.
9000C IXLDISC service failed.
9000D AWTR CPOOL create failed.
9000E GRS latch create (ISGLCRT) failed.
9000F IXLCONN failed.
90010 IXLLIST service failed initializing IEFAUTOS.
90012 IXLLIST service failed initializing IEFAUTOS.
90013 IXLLIST service failed initializing IEFAUTOS.
90014 IXLLIST service failed initializing IEFAUTOS.
90015 IXLLIST service failed initializing IEFAUTOS.
90016 ATTACH of IEFHB430 failed.
90017 Failed to release an XES lock.
90018 IXLLIST failed during rebuild.
90019 LOCK failed during cleanup processing.
9001A IXLLIST failed during cleanup processing.
9001B Failed to release an XES lock.
9001C IXLLIST failed during cleanup processing.
9001D IXLLIST monitor list failed.
9001E Vector size too small.
9001F IEFAUTOS not defined during reconnect.
90020 No active policy during reconnect.
90021 IXLLIST service failed.
90022 IXLCONN service failed.
90023 IXLCONN service failed.
90025 IXLDISC service failed during rebuild.
90026 IXLEERSP failed for DISCFail.
90027 IXLREBLD failed.
90028 IXLEERSP failed for QUIESCE.
90029 IXLEERSP failed for CLEANUP.
9002A IXLEERSP failed for REBUILDSTOP.
9002B IXLREBLD failed.
9002D IEFAUTOS structure full.

9002E IXLCONN failed.
9002F IXLLIST service failed.
90030 IXLLIST monitor list failed.

Source: Allocation/unallocation

System Action: The system issues message IEF100I with the abend code and the reason code. The system stops allocation processing for the step. The system ends the job, writes an SVC dump, and writes a logrec data set error record.

System Programmer Response: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Report the reason code accompanying the abend.

0F1

Explanation: While processing a security request, JES3 received an unexpected return code. Register 15 contains a hexadecimal reason code that indicates the type of error.

For reason codes X'01, 02, 03, 04, or 07':

- Register 5 contains the offset in module IATGRSC where the error was detected.
- Register 6 contains the logical IATXSEC index, which indicates the type of processing in progress when the security request was made.
- Register 8 contains the address of the security check parameter list.

Code Explanation

01	IATUX58 exit returned an incorrect return code in register 2.
02	System authorization facility (SAF) returned an incorrect return code in register 2. Register 3 contains the security product return code, and register 4 contains the security product reason code.
03	IATUX59 exit returned an incorrect return code in register 2.
04	IATGRSC module issued this return code to cause entry into the caller's recovery routine.
05	The system rejected a security request for authorization to create a SYSIN data set.
06	The system rejected a security request for authorization to create a SYSOUT data set.
07	A multi-line write to operator text extraction service, IEAVM703, returned a non-zero return code in register 2. Register 3 contains the reason code.
08	The JES3 security subtask received incorrect input.

09 Unexpected return code from a SAF call in module IATISEN.

Source: JES3

System Action: The security request processing is ended.

Operator Response: Request a dump of the address space, save all associated print output, and notify the system programmer.

Programmer Response: Depending on the reason code, do the following:

- For reason code X'01', code a valid return code in installation exit IATUX58.
- For reason code X'03', code a valid return code in installation exit IATUX59.
- For reason codes X'02, 04, 05, 06, 07, 08', contact the IBM Support Center.

1FB

Explanation: JES3 may have issued one of the following messages because of the indicated error:

IAT1601

The user is trying to perform I/O to a data set that is closed.

An incorrect IATYDAT was found on the data buffer block (DAT) queue.

IAT1602

One of the following control blocks either (1) could not be validated or (2) contains incorrect data: IATYDAT, IATYDMC, IATYDSB or IATYDSS.

IAT1603

A JES3 module passed, as a parameter to IATDMEB, a code that requested an incorrect data management function.

IAT1604

A start I/O operation in the user's storage returned an error code.

IAT1605

A start I/O operation in the user's storage returned an error code.

IAT1606

IATDMEB found an incorrect unprotected buffer (IATYDAT) address or the associated IATYDMC address was incorrect.

IAT1607

IATDMEB could not allocate an unprotected buffer.

IAT1609

One of the following occurred:

- When module IATDMEB or IATSIAD attempted to set up a data management WAIT, the module found a data management function already waiting.

- When module IATDMEB or IATSIAD attempted to set up a subsystem interface WAIT, the module found a subsystem function already waiting.

IAT1610

During ENDREQ processing, a request for macro IATYJDS failed.

IAT1611

The JES3 SSVT was either (1) incorrect or (2) could not be found.

IAT1612

The SYSOUT class to be allocated is not alphanumeric.

IAT1614

A failure occurred while processing a started task or TSO logon internal reader data set.

IAT1803

An attempt to move data from a JES3 protected buffer in the JES3 auxiliary address space to a user storage unprotected buffer failed.

IAT6700

During deallocation, when attempting to update the JDSENTRY, the module could not find a job data set (JDS) entry.

IAT6703

When the module attempted communication, an error that disrupted operations occurred in the global processor.

IAT6704

OPEN could not allocate a user address space buffer to a data set.

IAT6707

At deallocation of the external writer data set, the module could not find an output scheduling element (OSE).

IAT6708

A permanent I/O error occurred on an output data set.

IAT6711

A SSISERV macro sent incorrect data to the global processor; the request could not be serviced.

IAT6309

A failure has occurred during an MVS LOAD or BLDL of a JES3 input service module.

If none of these messages appear, JES3 found an incorrect IFGACB, IATYDSS, or IATYDSB control block or received an error return code as a result of a SJFREQ request.

Source: JES3

System Action: Depending on the error, the system ends either the job step or the user address space.

Programmer Response: If the problem occurred in an

I/O operation, correct any I/O errors in your program. Then rerun the job.

If JES3 issued message IAT6309, correct the cause of the LOAD or BLDL failure. Then rerun the job. Otherwise, notify your system programmer, supplying a SYSABEND dump.

System Programmer Response: If messages accompany this abend, register 3 in the dump points to a copy of the data set status block (DSS). A hexadecimal reason code explains the error. Use this reason code to determine the cause of the error.

2FB

Explanation: The system has abnormally ended at one of the following points in processing:

1. A critical error occurred early in JES3 or the functional subsystem (FSS) initialization or late in JES3 abnormally ending. The JES3 ESTAE environment had not yet been established or is deleted, so no JES3-formatted ABEND dump is available.
2. Once JES3 initialization has successfully established the JES3 ESTAE routine (IATABMN), the retry routine (IATABRT) uses this ABEND code to return to IATABMN in order to percolate.

An MVS dump will always appear for a X'2FB' ABEND, regardless of the original abend code. The original abend code is shown in message IAT3713 to the operator and in the JES3-formatted dump. The dump by itself does not tell whether the failing JES3 function recovered or had to be ended.

Note: An MVS dump with a 2FB means that IATABRT or a routine used by module IATABRT failed, thereby producing the 2FB abend.

Source: JES3

System Action: In the first case, JES3 writes message IAT3702 to the operator and to a dump data set of the type specified during JES3 initialization. This message details critical debugging information.

Operator Response: In the first case, respond to message IAT3nnn.

Programmer Response: In the second case, analyze the abend dump to find the cause of the error.

System Programmer Response: Obtain the abend dump for the failing job step.

If the problem occurred in JES3 you should:

- Save the hardcopy log
- Provide a listing of the initialization deck (JES3OUT)
- Provide a console log from initialization
- Check the JESYSMSG data set for error indications

3FB

Explanation: JES3 could not obtain enough storage to either build a data set block (DSB) or to build a data set status block (DSS).

Source: JES3

System Action: The system ends the user address space.

System Programmer Response: Rerun the job with a SYSABEND DD statement. The problem may not recur. If it does, notify the IBM Support Center.

4FB

Explanation: One of the following errors occurred:

- JES3 could not obtain sufficient storage for a SSISERV macro request.
- JES3 could not obtain sufficient storage for user address space buffers.
- JES3 detected an error while processing the record allocation block (RAB) refresh element (RRE) for additional track groups.
- JES3 attempted to obtain storage in subpool 0, but failed.
- The specified REGION size value was too small.
- The specified REGION size value was correct for the EXEC statement, but it was overridden with a small REGION size value on the JOB statement.
- JES3 processing for an APPC message to be written to the indicated ACB failed.
- JES3 processing of output expression limits have encountered an SJF error.

If the abend is issued from modules IATSIWO, IATSIAD, or IATSSJM, one of the following reason codes is issued:

Code	Explanation
04	Module IATSIWO failed while attempting to do a PUT of a message received from WTO. The return code from the PUT service is contained in register 8.
08	Module IATSIAD could not obtain sufficient storage from subpool 230 for an SSISERV request.
0C	Module IATSIAD issued an abend because of a STORAGE service failure in module IATSIOD. The return code from STORAGE is contained in register 3.
10	Module IATSIAD issued an abend because of an SJFREQ failure in module IATSIOD. The SJFREQ reason code is contained in register 3.

14 Module IATSSJM issued an abend because of a SJFREQ failure in returning the storage for a JMU.

Source: JES3

System Action: The system ends the user address space.

System Programmer Response: The problem may not recur. If it does, obtain a ABEND dump by issuing the job with a SYSABEND DD statement and notify the IBM Support Center.

- The specified REGION size value was correct for the EXEC card, but it was overridden with a small REGION size value on the JOBcard.

Source: JES3

System Action: The system ends the user address space.

System Programmer Response: Rerun the job with a SYSABEND DD statement. The problem may not recur. If it does, notify the IBM Support Center.

5FB

Explanation: During processing of an MVS-JES3 allocation subsystem interface routine, an error occurred. A hexadecimal reason code in register 15 explains the error.

Code Explanation

- 01** In common allocation, the number of devices requested by MVS does not equal the number to be allocated by JES3. Register 3 contains the number requested by MVS; register 5 contains the number passed by JES3. Register 2 contains the address of the DDNAME.
- 02** During deallocation processing, JES3 cannot successfully issue an ESTAE macro.
- 03** JES3 cannot obtain storage for a dynamic allocation buffer.
- 04** JES3 cannot obtain storage for a change DDNAME buffer.
- 05** JES3 cannot find, in any address space header, the address space identifier (ASID) associated with the request. Register 2 contains the address of the job step control block (JSCB); register 3 contains the ASID.
- 06** A job summary table (JST) pointer error occurred during common allocation or deallocation.
- 07** Module IATSICA cannot find an active MEMDATA entry for the address space. Register 2 contains the address of the job step control block (JSCB); register 3 contains the address space ID (ASID) of the requesting

address space; register 8 contains the address of the MEMDATA header.

08 Module IATSIMS cannot find an active MEMDATA entry for the address space. Register 4 contains the address of the subsystem identification block (SSIB); register 6 contains field SSIBSUSE of the SSIB. However, both registers 4 and 6 may be incorrect.

09 JES3 found a duplicate volume. The volume cannot be loaded. Register 2 contains the address of the SETUNIT; register 6 contains the address of the job summary table (JST).

0A The GETMAIN macro failed for a work area for the subsystem interface (SSI).

0B JES3 cannot process the number of concatenated DD statements passed in a change DD name request. The number of DD statements is variable; the approximate maximum number is 187.

Register 3 contains the macro return code for reason code X'02', X'03', X'04', X'06', or X'0A'.

Source: JES3

System Action: The system abnormally ends the task.

System Programmer Response: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Provide the JCL and the program listing for the job.

6FB

Explanation: During JES3 processing, module IATSSCM, IATSSRN or IATSSRE detected an error related to the subsystem interface and issued this system completion code. The error is identified by a hexadecimal reason code in register 15.

Code Explanation

- 10** IATSSRN - Module IATSSRN received a bad return code from the JESXCF message reroute service (IXZXIXRR).
- Register 3 - Return Code from IXZXIXRR service
 - Register 4 - Reason Code from IXZXIXRR service
- 21** A bad SRB address was passed as input to the JES3 SRB reply exit routine (SSRECRXT) in module IATSSRE.
- 22** A bad service request block (SRB) extension address was passed as input to the JES3 SRB reply exit routine (SSRECRXT) in module IATSSRE.
- 23** The common area data space (CADS) buffer,

- provided as input to the JES3 SRB reply exit routine (SSRECRXT) in module IATSSRE, contained a bad JESXCF acknowledgement message. The eye-catcher for the JESXCF acknowledgement message was not correct.
- 24** The CADS buffer, provided as input to the JES3 SRB reply exit routine (SSRECRXT) in module IATSSRE, contained a bad staging area header. The eye-catcher for the staging area header was not correct.
- 25** The CADS buffer prefix, provided as input to the JES3 SRB reply exit routine (SSRECRXT) in module IATSSRE, contained a bad response exit address. The response exit address must be non-zero.
- 26** The CADS buffer prefix, provided as input to the JES3 SRB reply exit routine (SSRECRXT) in module IATSSRE, contained an incorrect buffer length. The buffer length must be non-zero.
- 27** The JESXCF Acknowledgement Message, passed as input within the CADS buffer to the JES3 SRB reply exit routine (SSRECRXT) in module IATSSRE, contained a bad user return code. The user return code was non-zero.
- 28** The JES3 SRB reply exit routine (SSRECRXT) within module IATSSRE attempted to obtain storage for the staging area buffer using the STORAGE service. The attempt was unsuccessful and a non-zero return code was returned from the STORAGE service.
- 31** The JES3 global status routine (SSRESTAT) in module IATSSRE invoked the IXZXIXIF service to obtain JES3 complex status information. The buffer returned by the service contains a bad JESXCF member information record. The eye-catcher was not correct.
- 32** The JES3 global status routine (SSRESTAT) in module IATSSRE was unable to find the global MPC entry within the main processor control table.
- 33** The JES3 global status routine (SSRESTAT) in module IATSSRE attempted to obtain storage for the JESXCF Information Record buffer (IXZXIXIF) via the STORAGE service. The attempt was unsuccessful and a non-zero return code was returned from the STORAGE service.
- 34** The JES3 global status routine (SSRESTAT) in module IATSSRE invoked the IXZXIXIF service to obtain JES3 complex status information. The service was unsuccessful and provided the SSRESTAT routine with a bad return and/or reason code.
- Register 3 - Return Code
 - Register 4 - Reason Code
- 35** The JES3 global status routine (SSRESTAT) in module IATSSRE invoked the IXZXIXIF service to obtain JES3 complex status information. The JESXCF Information Records returned by the service did not contain any information for the global processor.
- 100** Module IATSSCM encountered a JES3 subsystem communications service entrance list (SEL) which was already in use by another caller.
- 101** Module IATSSCM determined the caller was not authorized to issue the SSISERV service.
- 102** Module IATSSCM encountered a bad memory data block (MEMDATA) pointer. The eye-catcher for the MEMDATA header was not correct.
- 103** The JES3 subsystem communications service entrance list (SEL) passed into module IATSSCM had an incorrect length. This could be a result of a zero SELDATA pointer or a length of zero or a length exceeding the maximum staging area data size. This applies to all SSISERV service requests except TYPE=RESPONSE request.
- 104** Module IATSSCM encountered bad parameters specified for an SSISERV TYPE=WAIT request. One of the following problems was found with the parameters:
- A response buffer was not specified. A response buffer is required for SSISERV TYPE=WAIT.
 - An EXIT address was specified. An exit address must not be specified for SSISERV TYPE=WAIT.
- 105** Module IATSSCM encountered bad parameters specified for an SSISERV TYPE=REPLY request. One of the following problems was found with the parameters:
- Both the ECB and EXIT address were specified. Only one of these parameters can be specified.
 - A response buffer address was not specified for a request that did not specify an EXIT address. If a response buffer address is not specified, an EXIT address must be specified.
- 106** Module IATSSCM was unable to find an entry in the Main Processor Control table for the JESXCF member that is to receive this request.
- 107** Module IATSSCM attempted to create a TTOKEN for the current task using the TCBTOKEN service while processing an SSISERV TYPE=REPLY request. The attempt was unsuccessful and a non-zero return code was returned from the TCBTOKEN service.

- Register 2 - Return Code from TCBTOKEN service
- 110** Module IATSSCM attempted to obtain storage for a memory data block (IATYMEM) using the STORAGE service. The attempt was unsuccessful and a non-zero return code was returned from the STORAGE service.
 - Register 2 - Return Code from STORAGE service
- 111** Module IATSSCM attempted to release storage it had obtained for a memory data block (IATYMEM) using the STORAGE service. The attempt was unsuccessful and a non-zero return code was returned from the STORAGE service.
 - Register 2 - Return Code from STORAGE service
- 112** Module IATSSCM attempted to obtain a CADS buffer using the JESXCF IXZXCADS service. The attempt was unsuccessful and a non-zero return code was returned from the IXZXCADS service.
 - Register 2 - Return Code from IXZXCADS service
 - Register 3 - Reason Code from IXZXCADS service
- 113** Module IATSSCM attempted to release a CADS buffer using the JESXCF IXZXCADS service. The attempt was unsuccessful and a non-zero return code was returned from the IXZXCADS service.
 - Register 2 - Return Code from IXZXCADS service
 - Register 3 - Reason Code from IXZXCADS service
- 120** Module IATSSCM received a bad return code from the JESXCF acknowledge processed message service (IXZXIXAC) while processing an SSISERV TYPE=PURGE request.
 - Register 2 - Return Code from IXZXIXAC service
 - Register 3 - Reason Code from IXZXIXAC service
- 121** Module IATSSCM received a bad return code from the JESXCF send message service (IXZXIXSM) while processing an SSISERV TYPE=WAIT request.
 - Register 2 - Return Code from IXZXIXSM service
 - Register 3 - Reason Code from IXZXIXSM service
- 122** Module IATSSCM received a non-zero user return code from the response to a JESXCF send message service (IXZXIXSM) request while processing an SSISERV TYPE=WAIT request.
- 123** Module IATSSCM received a bad return code from the JESXCF acknowledge processed message service (IXZXIXAC) while processing an SSISERV TYPE=WAIT request.
 - Register 2 - Return Code from IXZXIXAC service
 - Register 3 - Reason Code from IXZXIXAC service
- 124** Module IATSSCM received a bad return code from the JESXCF send message service (IXZXIXSM) while processing an SSISERV TYPE=REPLY request.
 - Register 2 - Return Code from IXZXIXSM service
 - Register 3 - Reason Code from IXZXIXSM service
- 125** Module IATSSCM received a bad return code from the JESXCF send message service (IXZXIXSM) while processing an SSISERV TYPE=ACK request.
 - Register 2 - Return Code from IXZXIXSM service
 - Register 3 - Reason Code from IXZXIXSM service
- 126** Module IATSSCM received a bad return code from the JESXCF send message service (IXZXIXSM) while processing an SSISERV TYPE=COMM request.
 - Register 2 - Return Code from IXZXIXSM service
 - Register 3 - Reason Code from IXZXIXSM service
- 127** Module IATSSCM received a bad return code from the JESXCF acknowledge processed message service (IXZXIXAC) while processing an SSISERV TYPE=RESP request.
 - Register 2 - Return Code from IXZXIXAC service
 - Register 3 - Reason Code from IXZXIXAC service
- 128** Module IATSSCM received a zero response data address from the JESXCF send message service (IXZXIXSM) while processing an SSISERV TYPE=WAIT request.
 - Register 2 - Return Code from IXZXIXSM service
 - Register 3 - Reason Code from IXZXIXSM service

Source: JES3

System Action: The system writes the current

address space along with the JES3 and JESXCF address spaces and related storage areas to a SYS1.DUMP data set. If the current address space is not the JES3 address space, the system abnormally ends the current address space.

System Programmer Response: Search problem reporting data bases for a fix for the problem. If no fix exists and the problem occurred in JES3, you should:

- Save the hardcopy log
- Provide a listing of the initialization deck (JES3OUT)
- Provide a console log from initialization
- Check the JESYSMSG data set for error indications

After gathering the necessary data, contact the IBM Support Center. If an SVC dump was taken, provide the SVC dump, the reason code, and, if available, the data set error record.

722

Explanation: One of the following output limits was exceeded:

- The output limit specified by the OUTLIM keyword on the SYSOUT DD statement
- The job output limit specified in the LINES and CARDS parameters of the JES2 JOBPARM statement
- The job output limit specified in the BYTES, CARDS, LINES, and PAGES parameters on the STANDARDS initialization statement or the JES3 MAIN statement

Source: JES

System Action: The system ends processing of the job step.

Programmer Response: Check for input/output (I/O) loops. Verify that the parameter value does not conflict with any installation requirements. If no errors are found, increase the value in the statement. Then run the job again.

7C4

Explanation: JES3 encountered an error when calling a JESXCF console-related function. The abend reason code identifies the specific error.

Code Explanation

- | | |
|-----------|---|
| 01 | IATXCSIF SERVICE=XAUTH was passed a bad parameter list (service routine IATCS01). Analyze the parameter list to determine the problem. |
| 03 | IATXCSIF SERVICE=CONSTYPE was passed a bad parameter list (service routine IATCS03). Analyze the parameter list to determine the problem. |
| 04 | During JES3 initialization processing, module IATINC2 detected an error while invoking an IXZXCNSV order. An IXZXCNSV |

ORDER(START) returned with a bad return code. The return and reason code for the IXZXCNSV macro invocation is within the IXZXCNSV parameter list. The parameter list is contained within the automatic area of IATCS04. The automatic area is pointed to by general register 8 at the time of failure. Use the return and reason codes to determine why JESXCF failed to process the START order successfully.

- 05** During JES3 initialization processing, module IATINC2 detected an error while invoking an IXZXCNSV order. An IXZXCNSV ORDER(SYNCPT) returned with a bad return code. The return and reason code for the IXZXCNSV macro invocation is within the IXZXCNSV parameter list. The parameter list is contained within the automatic area of IATCS04. The automatic area is pointed to by general register 8 at the time of failure. Use the return and reason codes to determine why JESXCF failed to process the SYNCPT order successfully.

Source: JES3

System Action: For reason codes X'01' and X'03', varies with invoking function. For reason codes X'04' and X'05', JES3 initialization is terminated.

System Programmer Response: To determine the error, refer to reason code descriptions.

7FB

Explanation: An uncorrectable error occurred while one of the MVS-JES3 dynamic device reconfiguration (DDR) subsystem interface (SSI) routines was running.

Source: Dynamic device reconfiguration (DDR)

System Action: The system ends the reconfiguration.

Operator Response: If you initiated the reconfiguration, retry it. If the system initiated the reconfiguration, notify the system programmer.

System Programmer Response: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

8FB

Explanation: One of the following routines detected an error in a subtask:

- Converter/interpreter (C/I)
- Locate
- Main device scheduling (MDS)
- JES3 interface

A hexadecimal reason code in register 15 explains the error.

Code Explanation

- | <p>01 Module IATIIPL detected a subsystem interface error during storage management subsystem (SMS) pre-locate catalog orientation processing. Register 2 contains the subsystem interface return code.</p> <p>02 Storage management subsystem (SMS) pre-locate catalog orientation processing returned an unexpected return or reason code to module IATIIPL. Register 2 contains the return code from that processing, and register 3 contains the reason code.</p> <p>03 Module IATLVLC detected a subsystem interface error during storage management subsystem (SMS) pre-locate catalog orientation processing. Register 2 contains the subsystem interface return code.</p> <p>05 While creating the system work area (SWA), module IATIIII detected an error. The error occurred when the module was either reading or mapping SWA control blocks.</p> <p>06 Module IATDMGR detected an error in a JES3 user spool access method (USAM) POINT or WRITE operation. Register 2 contains the return code from the failing operation.</p> <p>07 Module IATDMGR detected an error during the initialization of either a data set status block (DSS) or a data set block (DSB). Register 2 contains the return code from the failing operation.</p> <p>08 Module IATDMGR detected a user spool access method (USAM) buffer initialization error. Register 2 contains the return code from the failing operation.</p> <p>09 While incrementing the JCL statement count, module IATIICX detected an overflow condition.</p> <p>0A Module IATLVLC detected a subsystem interface error during storage management subsystem (SMS) VOLREF services processing. Register 2 contains the subsystem interface return code.</p> <p>0C Module IATMDST detected a subsystem interface error during storage management subsystem (SMS) system select processing. Register 2 contains the subsystem interface return code.</p> <p>0D SMS system select processing returned an unexpected return or reason code to module IATMDST. Register 2 contains the return code from that processing, and register 3 contains the reason code.</p> <p>0E Module IATSISA detected an error during a PUT operation. Register 2 contains the return code from that operation.</p> <p>0F The reader/interpreter passed an incorrect return code to JES3.</p> | <p>10 Module IATIISP detected an error during a user spool access method (USAM) PUT operation.</p> <p>11 Module IATDMGR detected an incorrect function code.</p> <p>12 Module IATDMGR detected an error in the block spooler. Register 2 contains the return code from the block spooler.</p> <p>13 Module IATLVLC detected an error in the block spooler. Register 2 contains the return code from the block spooler.</p> <p>14 Module IATMDST detected an error in the block spooler. Register 2 contains the return code from the block spooler.</p> <p>15 Module IATSISA detected an error during a GET operation. Register 2 contains the return code from that operation.</p> <p>16 Module IATLVLC detected that the ESTAE service could not set up a recovery environment. Register 2 contains the return code from that service.</p> <p>17 Module IATMDST could not find a job data set (JDS) entry.</p> <p>18 Module IATLVLC either could not find a locate request table (LVS), or encountered an incorrect LVS entry.</p> <p>19 Module IATIIST detected an error during a PUT operation.</p> <p>1A Storage management subsystem (SMS) VOLREF services returned incorrect information to module IATLVLC.</p> <p>1C Catalog management (SVC 26) returned incorrect information to module IATLVLC.</p> <p>1D Module IATIIPL detected that the ESTAE service could not set up a recovery environment. Register 2 contains the return code from that service.</p> <p>20 Module IATIICX received a return code of 4 from IATUX03 indicating that the JCL limit has been exceeded.</p> <p>21 Module IATIIST detected a zero for the number of systems eligible to access SMS resources (field SSSABNUM in IEFSSSA).</p> <p>22 Module IATMDST detected a zero for the number of systems eligible to access SMS resources (field SSSACNUM in IEFSSSA).</p> <p>Source: JES3</p> <p>System Action: The system action depends on the abend reason code:</p> <table border="0"> <thead> <tr> <th style="text-align: left;">Code</th> <th style="text-align: left;">System Action</th> </tr> </thead> <tbody> <tr> <td>01, 02, 1D</td> <td>The system ends the generalized subtask; when the subtask's ESTAE</td> </tr> </tbody> </table> | Code | System Action | 01, 02, 1D | The system ends the generalized subtask; when the subtask's ESTAE |
|---|---|-------------|----------------------|-------------------|---|
| Code | System Action | | | | |
| 01, 02, 1D | The system ends the generalized subtask; when the subtask's ESTAE | | | | |

gets control, the system writes a dump. Then, with a DM146 abend, the system fails the converter/interpreter or postscan dynamic support program (DSP) that was using the subtask. Also, the system cancels with print the job that the DSP was processing.

03, 04, 06, 07, 08, 0A, 0B, 13, 18, 1A, 1B, 1C

The system ends the locate subtask; when the subtask's ESTAE gets control, the system produces a dump. Then, the system cancels with print the job that the subtask was processing.

05

The system ends the address space; when the ESTAE gets control, the system produces a dump. Then, the system cancels with print the job that was processing.

09, 10, 19, 21

The system ends the converter/interpreter (C/I) subtask. When the subtask's ESTAE receives control, the system produces a dump. Then, the system cancels and prints the job that the subtask was processing and reinstates the subtask.

0C, 0D, 14, 17, 22

The system ends the main device scheduling (MDS) subtask. When the subtask's ESTAE gets control, the system produces a dump. Then, the system either cancels and prints the job that the subtask was processing or places it on the MDS error queue. The system reinstates the subtask.

0E, 11, 12, 15

The system ends the subtask; when the subtask's ESTAE gets control, the system writes a dump. Then, the system cancels with print the job that the subtask was processing.

0F

The system ends the job and continues other processing.

16

The system ends the locate subtask.

Operator Response: Save all associated print output, and notify the system programmer.

System Programmer Response: Obtain the JCL for the job.

For a return code of X'05', rerun the job with the DEBUG=ALL option after a `/* PROCESS CI JECL` statement.

For a return code of X'21', examine the IEFSSSA data area and determine the reason for the zero in the SSSABNUM field. Also, examine the SSSABSAC and SSSABSAR fields (failing service return code and reason code). Notify SMS support.

For return code X'22', examine IEFSSSA and determine the reason for the zero in the SSSACNUM field. Also, examine the SSSACSAC and SSSACSAR fields (failing service return code and reason code). Notify SMS support.

For all other return codes, examine the print output to find and correct the error.

If the problem occurs in JES3 and the return code is an X'05' you should:

- Obtain a stand-alone dump of the system by specifying DUMP=PRDUMP on the OPTIONS card in the initialization deck.
- Save the hardcopy log
- Provide a listing of the initialization deck (JESOUT)
- Determine the MVS and JES3 PTF levels
- Rerun the job with `/*PROCESS CBPRINT` and save the output after interpreter DSP.

If the problem is not for X'05', check the JESYSMSG data set for error indications.

9FB

Explanation: JES3 output service module IATOSDR or IATOSPS abnormally ended an MVS service routine, usually SETPRT, in order to process a JES writer function or an operator command. This completion code does not indicate a program failure.

Source: JES3

System Action: The system continues processing.

AC4

Explanation: JES3 encountered an error while processing an IATXCNDB service call which specified (or defaulted to) ABEND=YES. The abend reason code identifies the specific error.

Code Explanation

- | | |
|-----------|--|
| 00 | Operation was successfully performed. |
| 04 | The OPERATION requested is not supported by the IATXCNDB macro. |
| 08 | An invalid IATXCNDB parameter list was passed to the IATCNDB module. The eyecatcher in the parameter list is not 'YCNDB', |
| 0C | An invalid IATXCNDB parameter list was passed to the IATCNDB module. The version indicator in the parameter list was not equal to the the current version. |
| 10 | The input IATYCNDB (INCNDB parameter) passed to the IATXCNDB INITIALIZE service did not have 'CNDB' as its eyecatcher. |
| 14 | The console id and console name parameters |

- were passed to the INITIALIZE service. These parameters are mutually exclusive.
- 18** An error return (>4) was received from the call to CONVCON by the IATXCNDDB INITIALIZE operation.
- 1C** The IATYCNDDB was successfully initialized, but the console name/ID passed to the INITIALIZE routine was not found in the JES3 console table. The IATYCNDDB has been initialized with a "non-JES3" console type and the console ID and console name passed on the IATXCNDDB invocation and returned by MCS.
- 20** The input IATYCNDDB (CNDB parameter) address passed to the IATXCNDDB TRANSFER service was zero.
- 24** The input IATYCNDDB (CNDB parameter) passed to the IATXCNDDB TRANSFER service did not have 'CNDB' as its eyecatcher.
- 28** The output IATYCNDDB (OUTCNDB parameter) address passed to the IATXCNDDB TRANSFER service was zero.
- 2C** The IATYCNDDB passed to the VERIFY service did not have 'CNDB' as its eyecatcher.
- 30** An error return (>4) was received from the call to CONVCON by the IATXCNDDB service VERIFY operation.
- 34** The IATYCNDDB was successfully converted to an IATYCNDDB at the current release level, but the console name in the down level CNDB was not found in the JES3 console table. The IATYCNDDB has been initialized with a "non-JES3" console type and the console ID returned by MCS.
- 38** The input IATYCNDDB (CNDB parameter) address passed to the IATXCNDDB TRANSCONSID service was zero.
- 3C** The input IATYCNDDB (CNDB parameter) passed to the IATXCNDDB TRANSCONSID service did not have 'CNDB' as its eyecatcher.
- 40** The output IATYCNDDB (OUTCNDB parameter) address passed to the IATXCNDDB TRANSCONSID service was zero.
- 44** The input IATYCNDDB (CNDB parameter) address passed to the IATXCNDDB TRANSROUT service was zero.
- 48** The input IATYCNDDB (CNDB parameter) passed to the IATXCNDDB TRANSROUT service did not have 'CNDB' as its eyecatcher.
- 4C** The output IATYCNDDB (OUTCNDB parameter) address passed to the IATXCNDDB TRANSROUT service was zero.
- 50** The input IATYCNDDB (CNDB parameter) address passed to the IATXCNDDB EXTRACTCONSID service was zero.
- 54** The input IATYCNDDB (CNDB parameter) passed to the IATXCNDDB EXTRACTCONSID service did not have 'CNDB' as its eyecatcher.
- 58** The OUTCONSID address passed to the IATXCNDDB EXTRACTCONSID service was zero.
- 5C** The input IATYCNDDB (CNDB parameter) address passed to the IATXCNDDB EXTRACTCONSNAME service was zero.
- 60** The input IATYCNDDB (CNDB parameter) passed to the IATXCNDDB EXTRACTCONSNAME service did not have 'CNDB' as its eyecatcher.
- 64** The OUTCONSNAME address passed to the IATXCNDDB EXTRACTCONSNAME service was zero.
- 68** The input IATYCNDDB (CNDB parameter) address passed to the IATXCNDDB EXTRACTCONSTYPE service was zero.
- 6C** The input IATYCNDDB (CNDB parameter) passed to the IATXCNDDB EXTRACTCONSTYPE service did not have 'CNDB' as its eyecatcher.
- 70** The OUTCONSTYPE address passed to the IATXCNDDB EXTRACTCONSTYPE service was zero.
- 74** The input IATYCNDDB (CNDB parameter) address passed to the IATXCNDDB EXTRACTROUT service was zero.
- 78** The input IATYCNDDB (CNDB parameter) passed to the IATXCNDDB EXTRACTROUT service did not have 'CNDB' as its eyecatcher.
- 7C** The OUTROUT address passed to the IATXCNDDB EXTRACTROUT service was zero.
- 80** The input IATYCNDDB (CNDB parameter) address passed to the IATXCNDDB UPDATE service was zero.
- 84** The input IATYCNDDB (CNDB parameter) passed to the IATXCNDDB UPDATE service did not have 'CNDB' as its eyecatcher.
- 88** An attempt was made to pass the CONSID and CONSNM parameters to the IATXCNDDB service for an UPDATE operation. These parameters are mutually exclusive.
- 8C** An error return (>4) was received from the call to CONVCON by the IATXCNDDB UPDATE operation.
- 90** The IATYCNDDB was successfully updated, but the console name/ID passed to the UPDATE routine was not found in the JES3 console

table. The IATXCNDDB has been Updated with a "non-JES3" console type and the console ID and console name passed on the IATXCNDDB invocation and returned by MCS.

- 94** The input IATXCNDDB (CNDDB parameter) address passed to the IATXCNDDB RESET service was zero.
- 98** The input IATXCNDDB (CNDDB parameter) passed to the IATXCNDDB RESET service did not have 'CNDDB' as its eyecatcher.
- A8** The input IATXCNDDB (CNDDB parameter) address passed to the IATXCNDDB EXTRACTCART service was zero.
- AC** The input IATXCNDDB (CNDDB parameter) passed to the IATXCNDDB EXTRACTCART service did not have 'CNDDB' as its eyecatcher.
- B0** The OUTROUT address passed to the IATXCNDDB EXTRACTCART service was zero.

Source: JES3

System Action: The IATXCNDDB request processing is ended.

System Programmer Response: To determine the error, perform the following:

1. If called from the JES3 main task, locate the ACALL and RETURN trace entry for the IATXCNDDB macro.
2. Register 1 of the ACALL trace entry contains the address of the parameter list used by the IATXCNDDB macro. The parameter list is mapped by a DSECT generated from an IATXCNDDB MF=L call.
3. Use the trace table to locate the module that issued the IATXCNDDB macro. Register 14 of the ACALL entry in the trace table contains the return address and register 10 contains the base register.
4. When IATXCNDDB is invoked from a user's address space, the caller issued a BASSM R14,R15 from the IATXCNDDB macro. The registers are then saved on the linkage stack by IATXCNDDB via 'BAKR R14,R0'.
5. Use the abend reason code to identify the cause of the error.
6. Correct the parameter list in the module that issued the IATXCNDDB macro.

AFB

Explanation: While JES3 dynamic support program (DSP) for systems network architecture (SNA) remote job processing (RJP) was executing as a JES3 subtask or under an SRB, a JES3 module IATSND, IATSNDM, IATSNDR, IATSNDT, IATSNDU, or IATSNDV attempted to reuse a still-active request parameter list (RPL).

Source: JES3

System Action: The system cancels the session associated with the RPL and writes a dump. The system

continues processing all other sessions, including those associated with the same work station.

Programmer Response: Analyze the dump to determine which RPL is about to be overlaid and what data is about to be sent or received.

BFB

Explanation: During JES3 abnormal termination recovery processing, JES3 was unable to invalidate the spool space allocation checkpoint record (PTC). The invalidation failed due to an error in the checkpoint access method or an unrecoverable I/O error in the checkpoint data set(s).

Message IAT6352 accompanies this completion code. JES3 could not invalidate the spool space allocation checkpoint record (PTC) during JES3 abnormal termination recovery processing.

When message IAT1025 accompanies this completion code, JES3 could not invalidate the only copy or both copies of a partition track allocation table (PTAT) during JES3 initialization or after JES3 failsoft processing.

Source: JES3

System Action: After issuing the message, JES3 ends. IAT6352 contains the checkpoint access method return code, which identifies the error.

If message IAT1025 appears, the system writes an error record to the logrec data set.

Programmer Response: Using message IAT6352, analyze the return code and correct the error, then restart JES3.

For message IAT1025, analyze the error record in the logrec data set and the accompanying messages. In case the error is caused by a bad track, assign another track to the checkpoint data set and restart JES3 with a warm start. Otherwise, reallocate the checkpoint data set and perform a cold start.

System Programmer Response: If the problem occurs in JES3, take a system dump by specifying DUMP=MVS on the OPTIONS card in the initialization deck. Make sure that the failing job step includes a SYSABEND statement.

CFB

Explanation: One of the following occurred:

- During JES3 initialization, JES3 could not attach the JES3 auxiliary task, module IATAUX. ATTACH processing writes message IAT3005 to the console.
- After JES3 initialization, the JES3 auxiliary task, module IATAUX, could not recover from an error and abnormally ended. The ESTAI routine in module IATABMN requests a dump of module IATAUX to the SYSABEND or SYSUDUMP data set.

Source: JES3

System Action: JES3 ends.

Programmer Response: If JES3 wrote message IAT3005 to the console, make sure that module IATAUX is in one of the following:

- The library concatenation defined by the JES3LIB initialization statements, if used.
- The STEPLIB concatenation defined in the JES3 procedure.
- The linklist specified in response to message IEA101A.

If JES3 did not write message IAT3005, look in the dump of module IATAUX to find the system completion code for the module's failure. Respond to that completion code.

System Programmer Response: If module IATAUX could not be attached, the system issues messages about the job. Make sure that the failing job step includes a SYSABEND statement.

Collect all printed output and output data sets related to the problem. If the problem occurs in JES3 you should:

- Obtain system dump by specifying DUMP=JES on the OPTIONS card in the initialization deck and save the output
- Provide a console log from initialization
- Provide a listing of the JES3 start up procedure, containing all JCL used to start the subsystem.

If module IATAUX abnormally ended, the system sends messages about the job to one of the following:

- The primary console
- The remote console, for a system with remote consoles
- The hard-copy log for a system with multiple console support (MCS)

Make sure that the failing job step includes a SYSABEND statement.

Collect all printed output and output data sets related to the problem.

DFB

Explanation: During processing in a functional subsystem (FSS) address space, a JES3 module detected an error. A hexadecimal reason code in register 15 and/or the SDWA explains the error. (Note: When the reason code is X'26', it will appear only in the SDWA, not in register 15.)

Code Explanation

01 The connect subsystem interface (SSI) routine in module IATSICD determined that the START command for the FSS address space did not contain a token.

- 02** The connect subsystem interface (SSI) routine in module IATSICD could not locate the MEMDATA header for the FSS address space.
- 03** The connect subsystem interface (SSI) routine in module IATSICD could not establish the listen task, IATFCLT, for the FSS or the FSA.
- 05** Module IATSICD encountered an error during JESXCF attach processing (IXZXIXAT service).
- 06** Module IATSICD encountered an error during JESXCF mailbox build processing (IXZXIXMB service) for the default mailbox.
- 07** Module IATSICD encountered an error during JESXCF mailbox delete processing (IXZXIXMD service) for the default mailbox.
- 08** Module IATSICD encountered an error during JESXCF detach processing (IXZXIXDT service).
- 0B** The common end-of-task exit routine in module IATSICD found that a task in the FSS address space had ended unexpectedly.
- 0C** The common end-of-task exit routine in module IATSICD could not identify a task that had ended.
- 15** The writer FSA specific connect routine, IATFPCC, could not initialize for GETDS spool access using the block spooler.
- 16** The writer FSA specific connect routine, IATFPCC, could not establish the read-ahead task for the FSA.
- 17** The writer FSA specific connect routine, IATFPCC, could not establish the checkpoint writer task for the FSA.
- 1F** The FSI order interface routine, IATFCOR, received a nonzero return code from the FSS or FSA order routine.
- 20** The FSI post interface routine, IATFCPT, received a nonzero return code from the FSA post routine.
- 21** Module IATFCLT encountered an error during JESXCF mailbox build processing (IXZXIXMB Service) for a FSS/FSA mailbox.
- 22** Module IATFCLT encountered an error during JESXCF mailbox clear processing (IXZXIXMC Service) for a FSS/FSA mailbox.
- 23** Module IATFCLT encountered an error during JESXCF receive message processing (IXZXIXRM Service) for a FSS/FSA mailbox.
- 24** Module IATFCLT encountered an error during JESXCF acknowledge message processing (IXZXIXAC Service) for a FSS/FSA mailbox.
- 25** Module IATFCLT encountered an error during

- JESXCF mailbox delete processing (IXZXIXMD) for a FSS/FSA mailbox.
- 26** A stop FSA abnormal order has been received from JES3. If a dump has been requested, a dump will be taken as part of abend processing of the FSA task.
- 29** The C/I FSS order processing routine, IATIIFO, found that the FSI parameter list did not contain an order.
- 2A** The C/I FSS order processing routine, IATIIFO, received an incorrect order type.
- 2B** The C/I FSS order processing routine, IATIIFO, received an incorrect stop FSS order.
- 2C** The C/I FSS order processing routine, IATIIFO, could not locate the C/I communications block (CCB).
- 33** The writer FSA quick-cell service routine, IATFPQC, failed to get an index, because the first free index was incorrect.
- 34** The writer FSA quick-cell service routine, IATFPQC, failed to get a buffer, because the first free buffer was incorrect.
- 35** The writer FSA quick-cell service routine, IATFPQC, failed to free an index, because the index passed in the request was incorrect.
- 36** The writer FSA quick-cell service routine, IATFPQC, failed to free a buffer, because the buffer passed in the request was incorrect.
- 3D** While reading a data set checkpoint record, the writer FSA GETDS routine, IATFPGD, received an error return from the block spooler routine; the error return indicated that the parameter list was incorrect.
- 3E** While reading a data set checkpoint record, the writer FSA GETDS routine, IATFPGD, received an error return from the block spooler routine; the error return indicated that the spool address was incorrect.
- 3F** While reading a data set checkpoint record, the writer FSA GETDS routine, IATFPGD, received an error return from the block spooler routine; the error return indicated that an error occurred during a cross-address space move.
- 47** While reading the scheduler work block (SWB), the writer FSA SWB processing service routine, IATFPSB, received an error return from the block spooler routine; the error return indicated that the parameter list was incorrect.
- 48** While reading the scheduler work block (SWB), the writer FSA SWB processing service routine, IATFPSB, received an error return from the block spooler routine; the error return indicated that the spool address was incorrect.
- 49** While reading the scheduler work block (SWB), the writer FSA SWB processing service routine, IATFPSB, received an error return from the block spooler routine; the error return indicated that an error occurred during a cross-address space move.
- 4A** The scheduler JCL facility (SJF) PUTSWB function returned an error code to the writer FSA scheduler work block (SWB) processing service routine, IATFPSB.
- 4B** The scheduler JCL facility (SJF) UPDATE function returned an error code to the writer FSA scheduler work block (SWB) processing service routine, IATFPSB.
- 4C** The scheduler JCL facility (SJF) DELETESWB function returned an error code to the writer FSA scheduler work block (SWB) processing service routine, IATFPSB.
- 51** The writer FSA read-ahead task, IATFPRA, could not initialize for spool access using the block spooler.
- 52** While reading data from spool, the writer FSA read-ahead task, IATFPRA, received an error return from the block spooler routine; the error return indicated that the parameter list was incorrect.
- 53** While reading data from spool, the writer FSA read-ahead task, IATFPRA, received an error return from the block spooler routine; the error return indicated that the spool address was incorrect.
- 54** While reading data from spool, the writer FSA read-ahead task, IATFPRA, received an error return from the block spooler routine; the error return indicated that an error occurred during a cross-address space move.
- 55** The writer FSA read-ahead task, IATFPRA, found an error in the format of a spool data buffer.
- 56** The writer FSA read-ahead task, IATFPRA, found an error in the format of a JESNEWS data buffer.
- 5B** The writer FSA checkpoint writer task, IATFPCW, could not initialize for spool access using the block spooler.
- 5C** While writing a data set checkpoint record, the writer FSA checkpoint writer task, IATFPCW, received an error return from the block spooler routine; the error return indicated that the parameter list was incorrect.
- 5D** While writing a data set checkpoint record, the writer FSA checkpoint writer task, IATFPCW, received an error return from the block spooler routine; the error return indicated that the spool address was incorrect.

5E While writing a data set checkpoint record, the writer FSA checkpoint writer task, IATFPCW, received an error return from the block spooler routine; the error return indicated that an error occurred during a cross-address space move.

Source: JES3

System Action: The system abnormally ends the task.

Most failures in the read-ahead task, IATFPRA, and in the checkpoint writer task, IATFPCW, cause processing of the current data set to be ended. The task is reinstated to resume processing with the next data set.

All other failures result in the FSA or of the entire FSS address space ending.

Operator Response: Notify the system programmer. If the FSS address space was ended and if this is not a recurring error, issue the appropriate command to restart the FSS.

System Programmer Response: Format the SVC dump with the interactive problem control system (IPCS).

If the problem occurs in JES3, save the hardcopy log.

EFB

Explanation: JES3 DLOG processing encountered an error. The abend reason code identifies the specific error.

Code Explanation

- 01** The ASEXT macro returned a non-zero return code while the JES3DLOG address space was attempting to extract the address space parameters. Registers 2 and 3 when the EFB abend is issued contain the return and reason codes from the ASEXT macro call.
- 02** The MCSOPER macro returned a non-zero return code while the JES3DLOG address space was attempting to activate its extended MCS console. Registers 2 and 3 when the EFB abend is issued contain the return and reason codes from the MCSOPER macro call.
- 03** Reserved - not used
- 04** The IXZXIXAT macro returned a non-zero return code while the JES3DLOG address space was attempting to attach to the JESXCF group. Registers 2 and 3 when the EFB abend is issued contain the return and reason codes from the IXZXIXAT macro call.
- 05** The IXZXIXMB macro returned a non-zero return code while the JES3DLOG address space was attempting to attach to the default mailbox. Registers 2 and 3 when the EFB abend is issued contain the return and reason codes from the IXZXIXMB macro call.

06 The IXZXIXMD macro returned a non-zero return code while the JES3DLOG address space was attempting to delete the default mailbox. Registers 2 and 3 when the EFB abend is issued contain the return and reason codes from the IXZXIXMD macro call.

07 The MCSOPMSG macro returned a return code greater than 12 while the JES3DLOG address space was attempting to access the next message in its message data space. Registers 2 and 3 when the EFB abend is issued contain the return and reason codes from the MCSOPMSG macro call.

08 IATCNDFM returned a non-zero return code when it was called by IATCNDFS to format an MDB in JES3 DLOG format. Registers 2 and 3 when the EFB abend is issued contain the return and reason codes from IATCNDFM.

09 An invalid function code was passed to IATCNDAI. Register 2 when the EFB abend is issued contains the function code.

0A An invalid function code was passed to IATCNDAI. Register 2 when the EFB abend is issued contains the function code.

0B An invalid function code was passed to IATCNDAI. Register 2 when the EFB abend is issued contains the function code.

0C An invalid message pointer cell was returned by IATCNDAI when it was called by IATCNDAI to format an MDB in JES3 DLOG format.

0D The RESMGR macro returned a non-zero return code while the JES3DLOG address space was attempting to setup a task level resource manager. Registers 2 and 3 when the EFB abend is issued contain the return and reason codes from the RESMGR macro call.

Source: JES3

System Action: A dump of the JES3DLOG address space and its message data space is taken, the JES3DLOG address space is terminated, and the DLOG facility is disabled.

Note: A dump will not be taken for reason code 2 if a return code of four (extended MCS console already active) is returned from the MCSOPER macro.

System Programmer Response: Contact IBM support and provide the following documentation:

- The EFB abend reason code
- The return and reason codes from the service that was called (if applicable)
- The dump taken by the JES3DLOG address space (if any)

- The SYSLOG around the time of error

Code Explanation

01 See *z/OS MVS Programming: Authorized Assembler Services Reference ALE-DYN* for a description of the ASEXT return and reason codes.

The following additional documentation should be provided:

- Compiler listings for modules IATCNDS and IATCNDIT.

02 See *z/OS MVS Programming: Authorized Assembler Services Reference LLA-SDU* for a description of the MCSOPER return and reason codes.

The following additional documentation should be provided:

- Compiler listing for module IATCNDIT.

04 See *z/OS MVS Programming: JES Common Coupling Services* for a description of the IXZXIXAT return and reason codes.

The following additional documentation should be provided:

- Compiler listing for module IATCNDIT.
- A non-zero return code from the IXZXIXAT macro is usually preceded by an ABEND from the IXZXIXAT service routine (e.g. DC5 abend). If a dump was taken of the JESXCF address space as a result of that abend, that dump should also be provided as part of the documentation.

05 See *z/OS MVS Programming: JES Common Coupling Services* for a description of the IXZXIXMB return and reason codes.

The following additional documentation should be provided:

- Compiler listing for module IATCNDIT.
- A non-zero return code from the IXZXIXMB macro is usually preceded by an ABEND from the IXZXIXMB service routine (e.g. DC5 abend). If a dump was taken of the JESXCF address space as a result of that abend, that dump should also be provided as part of the documentation.

06 See *z/OS MVS Programming: JES Common Coupling Services* for a description of the IXZXIXMD return and reason codes.

The following additional documentation should be provided:

- Compiler listing for module IATCNDIT.
- A non-zero return code from the IXZXIXMD macro is usually preceded by an ABEND from the IXZXIXMD service routine (e.g. DC5 abend). If a dump was taken of the

JESXCF address space as a result of that abend, that dump should also be provided as part of the documentation.

07 See *z/OS MVS Programming: Authorized Assembler Services Reference ENF-IXG* for a description of the MCSOPMSG return and reason codes.

The following additional documentation should be provided:

- Compiler listings for modules IATCNDIT and IATCNDMS.

08 See macro IATYCNDF for a description of the return codes from IATCNDFM.

The following additional documentation should be provided:

- Compiler listings for modules IATCNDMS and IATCNDFM.

09 The following additional documentation should be provided:

- Compiler listings for modules IATCNDTK and IATCNDAL.

0A The following additional documentation should be provided:

- Compiler listings for module IATCNDIT and the module that called IATCNDIT (usually IATCNDTK or IATCNDRR)

0B The following additional documentation should be provided:

- Compiler listings for module IATCNDTR and the module that invoked it via the IATXDLTR macro. The caller of IATCNDTR can be found by examining the linkage stack in the dump at the time of error. When the caller's registers and return address are saved on the linkage stack via a "BAKR R14,0" instruction.

0C The following additional documentation should be provided:

- Compiler listings for modules IATCNDFM and IATCNDMS.

0D See *z/OS MVS Programming: Authorized Assembler Services Reference LLA-SDU* for a description of the RESMGR return and reason codes.

The following additional documentation should be provided:

- Compiler listing for module IATCNDIT.

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Appendix B. Accessibility

Accessibility features help a user who has a physical disability, such as restricted mobility or limited vision, to use software products successfully. The major accessibility features in z/OS enable users to:

- Use assistive technologies such as screen-readers and screen magnifier software
- Operate specific or equivalent features using only the keyboard
- Customize display attributes such as color, contrast, and font size

Using assistive technologies

Assistive technology products, such as screen-readers, function with the user interfaces found in z/OS. Consult the assistive technology documentation for specific information when using it to access z/OS interfaces.

Keyboard navigation of the user interface

Users can access z/OS user interfaces using TSO/E or ISPF. Refer to *z/OS TSO/E Primer*, *z/OS TSO/E User's Guide*, and *z/OS ISPF User's Guide Volume I* for information about accessing TSO/E and ISPF interfaces. These guides describe how to use TSO/E and ISPF, including the use of keyboard shortcuts or function keys (PF keys). Each guide includes the default settings for the PF keys and explains how to modify their functions.

Glossary

This glossary defines technical terms and abbreviations used in JES3 documentation. If you do not find the term you are looking for, refer to the index of the appropriate JES3 manual or view *IBM Glossary of Computing Terms*, located at:

www.ibm.com/ibm/terminology

This glossary includes terms and definitions from:

American National Standard Dictionary for Information Systems, ANSI X3.172-1990, copyright 1990 by the American National Standards Institute (ANSI). Copies may be purchased from the American National Standards Institute, 11 West 42nd Street, New York, New York 10036. Definitions are identified by an asterisk (*) that appears between the term and the beginning of the definition; a single definition taken from ANSI is identified by an asterisk after the item number for that definition.

A

action message. A request for operator intervention from the operating system. In JES3, action messages are typically displayed on the operator's console.

address space. The virtual storage assigned to a job, TSO user, or a task initiated by the START command. Each address space consists of the same range of addresses.

Advanced Function Presentation (AFP). A set of licensed programs, together with user applications, that use the all-points-addressable concept to print on presentation devices. AFP includes creating, formatting, archiving, retrieving, viewing, distributing, and printing information. See *presentation device*.

Advanced Program-to-Program Communication (APPC). A set of inter-program communication services that support distributed transaction processing in a SNA network. See also *logical unit type 6.2*.

AFP. See *Advanced Function Presentation*.

all points addressability. The ability to address, reference, and position text, overlays, and images at any defined position or pel on the printable area of the paper. This capability depends on the ability of the hardware to address and to display each picture element.

APA. See *all points addressability*.

APPC. See *Advanced Program-to-Program Communication*.

APPC/VTAM. The implementation of APPC on VTAM.

auxiliary task. A subtask under the JES3 primary task. Writer DSPs and the General Services DSP do some of their processing under this task.

auxiliary task control block (ATCB). A control block that JES3 uses to manage work done under the auxiliary task.

auxiliary task dispatching element (ATDE). A control block that JES3 uses to determine whether to dispatch a function control table (FCT) under the JES3 auxiliary task.

B

binary synchronous communication (BSC). (1) Communication using binary synchronous transmissions. (2) A uniform procedure, using a standardized set of control characters and control character sequences, for synchronous transmission of binary-coded data between stations.

binary synchronous communications remote job processing (BSC RJP). A facility that permits the input and output of jobs to and from BSC workstations.

Bulk Data Transfer (MVS/BDT). (Multiple Virtual Storage/Bulk Data Transfer) An IBM program product that uses SNA protocols to copy sequential or partitioned data sets within an SNA network.

C

call. See *communication call*.

called job. A job created by JES3 in response to a JES3 CALL command.

called DSP. A job created by JES3 in response to a JES3 *CALL command.

channel-to-channel (CTC) adapter. A device for connecting two channels on the same processor or on different processors.

cold start. For JES3, the first start after system generation and after some unrecoverable failures. Spool data sets are initialized during a cold start.

common area. In MVS, an area of virtual storage that is addressable by all address spaces.

Common Programming Interface. Provides languages, commands and calls that allow the

Glossary

development of applications that are more easily integrated and moved across environments supported by Systems Application Architecture.

common service area (CSA). In MVS, a part of the common area that contains data areas accessible from all address spaces.

communication call. A conversation statement that transaction programs can issue to communicate through the LU 6.2 protocol boundary. The specific calls that a transaction program can issue are determined by the program's current conversation state. See also *verb*.

configuration. The arrangement of a computer system or network as defined by the nature, number, and chief characteristics of its functional units.

console authority level. A numeric value from 0-15 assigned to RJP consoles which governs the set of commands that can be issued from the console.

console destination classes. A set of named classes used by JES3 to direct messages to certain consoles. Also used in specifying the messages to be received at an RJP console.

control section (CSECT). The part of a program specified by the programmer to be a relocatable unit, all elements of which are to be loaded into adjoining main storage locations.

console service. A DSP that performs traffic management for consoles.

control statements. Statements placed into an input stream to identify special JES3 processing options for jobs.

converter/interpreter (C/I) DSP. A DSP that uses MVS converter/interpreter subroutines to process JCL statements. The C/I DSP creates internal JCL text for jobs being readied for MVS execution.

CPI. See *Common Programming Interface*.

CPU. Central processing unit (equivalent to the term **processor**).

CTC. Channel-to-channel.

D

data link. The physical connection and the connection protocols between a host and a communication controller nodes by using the host data channel.

DC. Dump core.

DDR. Dynamic device reconfiguration.

deadline scheduling. A method of scheduling jobs by time of day, or by week, month, or year.

deferred-printing mode. A printing mode that spools output through JES to a data set instead of printing it immediately. Output is controlled by JCL statements.

demand select job. A job created by MVS and passed to JES3 for processing. MVS creates demand select jobs in response to MVS START or MOUNT commands or the TSO LOGON command. (For processing of these commands, system resources are needed, hence JCL is used to define those resources. It is this JCL that JES3 processes.)

destination queue (DSQ). For JES3, a control block used by subsystem interface routines to route requests (represented by destination codes) to the JES3 routines responsible for servicing the requests.

dependent job control (DJC). The organizing of a collection of jobs that must execute in a specific order. DJC manages jobs that are dependent upon one another.

destination codes. For JES3, numeric codes used to represent information during communication between JES3 components on different processors by using the subsystem interface.

device fencing. Reserving devices for use only by jobs within a specified job group, or jobs with a specified job network.

DJ. Dump job.

DJC. Dependent job control.

DJC network. A set of jobs that JES3 must run in a predetermined order. Success or failure of one job can cause execution, holding, or cancelation of other jobs.

DR. Disk reader.

DSI. Dynamic system interchange.

dump job (DJ). A JES3 dynamic support program, invoked by operator command to write JES3 jobs to tape and later to restore them back to JES3 by reading them from tape back into the system.

dyadic. A multiprocessor that contains two CPUs (hardware term that is not normally used in software documentation).

dynamic destination queuing. The facility that allows the separate queueing of staging areas received by the JES3 global address space from the FSS address space.

dynamic allocation. For JES3, assignment of system resources to a job while it is executing rather than before it is executed.

dynamic device reconfiguration (DDR). A facility that allows a demountable volume to be moved, and

repositioned if necessary, without abnormally terminating the job or repeating the initial program load procedure.

dynamic support program (DSP). Multiprogrammed JES3 system components that are scheduled by JSS and cause the implementation of some function of JES3. DSPs can be directly related to job execution (e.g., main service, output service) or can be a background utility such as card-to-tape.

dynamic system interchange (DSI). A JES3 recovery facility that allows the operator to switch the JES3 global functions to a local processor in case of global processor failure.

dynamic writer. An output service function that controls printing or punching of data sets with characteristics that are not assigned to a specific device but are assigned by JES3 to appropriate devices as they become available.

E

early resource release. The releasing of resources (devices, volumes, and data sets) after they are no longer needed.

explicit setup. The programmer's specification, on a JES3 control statement, of precisely which devices are to be set up.

external writer. An MVS routine that directs system output to unsupported devices such as unit record printers and punches, magnetic tape devices, DASD, and plotters. External writers must be started by the operator as required. Once started, an external writer requests output data sets from the JES3 output service DSP via the subsystem interface.

F

FCB. Forms control buffer.

full function mode. The state that permits a printer to produce page-mode output.

function codes. Numeric codes used by MVS when requesting a service or control information from JES3 by using the subsystem interface.

function control table (FCT). The master dispatching queue for JES3. Entries in the FCT are arranged in priority order and each represents a DSP to be dispatched.

functional subsystem (FSS). A functional subsystem performs JES3 functions on behalf of the JES3 global address space while residing in its own address space, which may be on any processor in the complex. The functional subsystem off-loads some of the work from the JES3 address space.

functional subsystem application (FSA). Contained within the functional subsystem address space, these routines handle a specific piece of JES3 work normally done by the JES3 global processor.

functional subsystem intercommunication (FSI). Provides formal communication between JES3 and the functional subsystem application or FSS.

G

generalized main scheduling (GMS). A set of algorithms that allow the JES3 system programmer to tailor job scheduling and selection to the specific needs of the installation.

global processor. The processor that controls job scheduling and device allocation for a complex of processors. See also **local processor**.

global main (and local mains). The **global main** controls job scheduling and device allocation for a complex of JES3 processors. Each **local main** in the complex exists under control of the JES3 global main and is connected to the global main by CTC adapters. The JES3 on the global main can perform centralized job input, job scheduling, and job output services. Only the global main performs scheduling functions, although scheduled work executes on the local mains. See also **local main**.

GMS. Generalized main scheduling.

H

high watermark setup (HWS). An attempt to allocate a minimum number of unique device types that fulfill the requirements for each job step. Devices used in one step can be released and used again in later steps.

hot start. A restart of the global processor using information obtained from the last set of initialization statements processed. Recovery is attempted for all jobs that were in execution at the time of the failure.

hot start with analysis. A special form of hot start where the JES3 job queue is examined and the operator is given the opportunity to delete any jobs that would cause another restart.

hot start with refresh. A special form of hot start where the JES3 initialization stream is read.

hot writer. An output writer that must be started and stopped by the operator. Hot writers are typically used when operator intervention is anticipated (as for changing forms, etc.).

Glossary

I

initialization. In JES3, the process that reads the JES3 initialization statements and creates the tables and control blocks used throughout the JES3 program.

input service. The function that accepts and queues all jobs, entering the JES system, except those invoked via the *CALL command.

input service driver (ISDRVR) DSP. A DSP that reads batches of jobs from the spool data set and constructs a separate JCT entry for each job.

input service job. A job created by the card, tape, or disk reader DSP for each batch job written on the spool data set. An input service job is represented by a JCT containing two scheduler elements: one for the ISDRVR DSP and one for the PURGE DSP.

installation exit. A part of JES3 specifically designed for replacement by user-written routines.

internal reader. A JES3 routine that processes input streams contained in SYSOUT data sets obtained from MVS.

IPL. Initial program load.

J

JCL. See *Job Control Language*.

JECL. See *Job Entry Control Language*.

JES control table (JESCT). A control block in the MVS nucleus that contains information used by subsystem interface routines.

JES managed. The system mode of operation where JES3 batch initiators are controlled by JES3.

JES2. A subsystem that receives jobs into the MVS system and processes all output produced by the jobs. In multiple-processor complexes, the JES2 program manages independently-operating processors via a common job queue.

JES3. A subsystem that receives jobs into the MVS system, optionally schedules resources for the jobs, and processes output data produced by the jobs. In multiple-processor complexes, the JES3 program manages processors so that one processor exercises centralized control over the others and distributes jobs to the others by a common job queue.

JES3 auxiliary address space. An address space used exclusively by JES3 for data areas that would otherwise be placed into the CSA. Parameters in JES3 initialization statements specify whether a JES3 auxiliary address space is desired and, if so, the size of each data area.

JES3 devices. The devices that JES3 uses to communicate with the operator, read jobs, store jobs awaiting execution, and write job output. See also *shared devices*.

JES3-managed devices. The devices that JES3 allocates to jobs. See also *MVS-managed devices*, *jointly-managed devices*, *shared devices*.

JES3 spool access method (JSAM). Data management routines that serve JES3 address space requests such as allocation and deallocation of JES3 buffers.

job class. A named collection of JES3 job processing and scheduling rules. Use of job class names on JES3 control statements is a way of specifying what job processing and scheduling rules JES3 should use for jobs.

job class group. A named collection of resources to be associated with a job class. Use of job class names on JES3 control statements is a way of specifying what resources will be needed for jobs.

job control table (JCT). A table into which one entry is placed for each job that JES3 is to process. Entries are arranged in the JCT in job priority order to facilitate later job selection by priority.

job control table (JCT) entry. A control block into which JES3 places the description of a job to be processed, and scheduler elements representing the DSPs needed to process the job.

Job Control Language (JCL). A problem-oriented language designed to express statements in a job that identify the job or describe its requirements to an operating system.

Job Entry Control Language (JECL). A problem-oriented language designed to express statements in a job that describe its requirements to an operating system's job entry subsystem.

job ID. An 8-character identifier used by JES3 to uniquely identify any job in a JES3 complex at any moment in time. The job identifier is of the form "JOBnnnnn" where nnnnn is the job *number* with the appropriate number of leading zeroes, if the job number is 99,999 or less. Otherwise, the job identifier is of the form "Jnnnnnnn", where nnnnnnn is the job number with the appropriate number of leading zeroes.

job number. A unique number assigned to a job by JES3. To create a job ID, JES3 adds the letters JOB in front of the job number if the job number is 99,999 or less; otherwise the job number is left padded with zeroes up to seven digits and the letter J is added in front of this number.

job queue element (JQE). A control block containing a summary of information from a JCT entry. JQEs

remain in storage and are used by JES3 instead of JCT entries for scheduling of work.

job segment scheduler (JSS) DSP. A DSP that scans the job control table (JCT) to locate scheduler elements eligible for processing, and then builds function control table (FCT) entries so the corresponding DSPs can be dispatched. JSS itself is represented by an FCT entry.

job summary table (JST). A table into which the converter/interpreter DSP places job setup requirements.

job validation. The process during JES3 initialization where JES3 examines the job-related spool control blocks to verify their validity. If JES3 finds incorrect control blocks, JES3 gives the system operator an opportunity to take corrective action to insure that JES3 initialization completes.

job volume table (JVT). A table into which the converter/interpreter DSP places the volume information it obtains from data definition (DD) statements.

jointly-managed devices. A special case where the same device is both a JES3-managed device and an MVS-managed device. Only direct-access devices with volumes that cannot be physically removed can be jointly-managed devices.

JSAM. See *JES3 Spool Access Method*.

L

line mode. A type of data with format controls that only allow a printer to format data as a line.

line mode data. A type of data that is formatted on a physical page by a printer only as a single line.

local console. Any console that is dedicated to a single main within a JES3 installation. A remote job processing console cannot be a local console.

local device. A device attached to a host processor by using a channel.

local main. In a complex of processors under control of JES3, a processor connected to the global main by a CTC adapter, for which JES3 performs centralized job input, job scheduling and job output services by the global main.

local start. A restart of a local processor. Initialization is unnecessary and user jobs are not affected.

logical storage. The amount of central storage required by a job or a job step to execute efficiently on a processor when running under JES3.

loosely-coupled multiprocessing. Two or more computing systems interconnected by an I/O

channel-to-channel adapter. The processors can be of different types and have their own unique configurations.

logical unit. 1) a type of network addressable unit that enables end users to communicate with each other and gain access to network resources. 2) A port providing formatting, state synchronization, and other high-level services through which an end user communicates with another end user over an SNA network.

logical unit type 6.2. The SNA logical unit type that supports general communication between programs in a distributed printing environment; the SNA logical unit type on which CPI communications is built.

LU. See *logical unit*.

M

main. A processor named by a JES3 MAINPROC initialization statement, on which jobs can execute; represents a single instance of MVS. The two types of mains are (1) global main, and (2) local main.

MAINPROC. A JES3 initialization statement that defines a processor to JES3.

main device scheduler (MDS). Controls the setup of I/O devices associated with job execution.

main device scheduler (MDS). A phase of JES3 that controls the setup of I/O devices associated with job execution.

main DSP. A DSP that chooses jobs and supplies them to the MVS initiator(s).

main service. A dynamic support program that schedules problem programs for execution and manages the flow of data (system input, print, and punch) across the channel-to-channel adapter to and from the global processor.

MDS. Main device scheduler.

migration. The changing over from an installation's production operating system to an upgraded or entirely new operating system.

multifunction monitor (MFM). The master dispatcher for JES3. The MFM scans the function control table (FCT) for DSPs ready to be executed, and causes execution to begin.

multiple console support (MCS). A feature of MVS that permits selective message routing of up to 99 operator's consoles.

multiple virtual storage (MVS). A virtual storage facility that allows each user a private address space.

Glossary

multiprocessing system. A computing system employing two or more interconnected processing units to execute program simultaneously.

multiprocessor. A processor complex that consists of more than one CPU.

MVS. See *Multiple Virtual Storage*.

MVS/APPC. The implementation of APPC on an MVS system.

MVS-managed devices. The devices that MVS allocates to jobs. See also *JES3-managed devices*, *jointly-managed devices*.

N

network. For JES3, two or more systems and the connections over which jobs and data are distributed to the systems. One or more of the systems can be a JES3 global (and its local mains, if any). The other systems can be non-JES3 systems with compatible networking facilities. Connections can be established through communications paths using SNA or BSC protocol.

network job entry (NJE). The process in which a user at one installation can submit a job/output to be executed at or sent to a different installation (node to node). NJE is networking between installations using SNA or BSC protocol.

network job stream. A network job stream includes:

- a job header
- an MVS job comprised of JCL an/or SYSIN data
- a job trailer.

See also the definition of network SYSOUT stream.

network stream. A network stream contains either a network job stream or a network SYSOUT stream. See the respective definitions for each.

network job. Same as network stream.

network SYSOUT stream. A network SYSOUT stream includes:

- a job header
- a data set header (where there may be more than one data set header per SYSOUT data set transmitted)
- a SYSOUT data set
- a job trailer.

Note: There may be more than one SYSOUT data set-data set header pair. See also the definition of network job stream.

networking protocol. Rules for using communication lines. Protocols can identify the direction of data flow, where data begins and ends, how much data is being

transmitted, and whether data or control information is being sent. The two protocols that JES3 uses to establish a networking environment are binary synchronous communication (BSC) and systems network architecture (SNA).

NJE. An installation to installation data communication network.

node. 1) An end point of a link, or a junction common to two or more links in a network. Nodes can be processors, controllers, or workstations. Nodes can vary in routing and other functional capabilities. 2) In JES3, one of the systems in a network of systems connected by communication lines. Each node defined to itself is the home node. All others are defined as remote nodes, directly or indirectly connected. The home node and the remote nodes are identified as such in the installation's initialization stream (NJERMT statement).

non-partitionable processor complex. A processor complex that cannot be partitioned.

non-standard job. A job for which JES3 defines processing from input received on `/*PROCESS` control statements.

normal job. A job received by JES3 in an input stream. Normal jobs can be standard jobs or nonstandard jobs. Contrast with "called job".

O

operating system. The software that controls the operation of a processor complex.

operator commands. Statements that system operators may use to get information, alter operations, initiate new operations, or terminate operations.

operator messages. A message from an operating system directing the operator to perform a specific function, such as mounting a tape reel; or informing the operator of specific conditions within the system, such as an error condition.

output scheduling element (OSE). A control block that describes the characteristics of one or more output data sets of the same job.

output service. The function that processes SYSOUT data sets. Processing includes printing, punching, or directing output to an external writer.

output service (OUTSERV) DSP. A DSP that schedules output writers for printers or punches, and routes output data to TSO processor, MVS external writers, and the MVS internal reader.

output writer. A JES3 routine that transcribes output data sets to the printer or punch system output devices.

P

page mode. The mode of operation in which the AFP print (such as the 3800 Printing Subsystem) can accept a page of data from a host processor to be printed on an all points addressable output medium.

page mode data. A type of data that can be formatted anywhere on a physical page. This data requires specialized processing such as provided by the Print Services Facility for AFP printers, such as the 3800-3 and 3820.

page mode printer. An AFP printer, such as the 3800 model 3 and 3820, that can print page-mode data.

partition. Equivalent to the term **physical partition.**

partitionable processor complex. A processor complex that can be partitioned.

partitioned mode. Equivalent to the term **physically partitioned mode.**

partitioning. The process of forming multiple physical partitions from one processor complex.

physical partition. A set of hardware resources, formed by partitioning, that can support a single operating system.

pel. Picture element

physically partitioned mode. The state of a processor complex when its hardware resources are divided into multiple configurations.

pre-execution setup. That portion of setup performed by MDS prior to a job entering execution.

presentation device. A device that produces character shapes, graphics pictures, images, or bar code symbols on a physical medium. Examples of physical media are display screens, paper, foils, microfilm, and labels.

primary job entry subsystem. The active job entry subsystem. The primary job entry subsystem is determined during the system generation process.

primary task. The task under which most DSPs execute.

Print Services Facility (PSF). An IBM licensed program that produces printer commands from the data set to it. PSF programs run on the z/OS, OS/390, MVS, VM, VSE, OS/2, AIX, and OS/400 operating platforms. For JES, PSF programs operate the 3800 model 3 and 3820 printers. PSF operates as a functional subsystem.

process SYSOUT (PSO). An interface to JES3 to allow access and control of SYSOUT data sets from

other address spaces. It is used primarily by TSO OUTPUT and RECEIVE commands and external writers.

processor. A hardware unit that contains software to interpret and process instructions.

processor complex. The maximum set of hardware resources that support a single operating system.

protected buffer pool (PBUF). An area in the common storage area and JES3 auxiliary address space that has been divided into buffers.

protocol. The meaning of, and the sequencing rules for, requests and responses used for managing a network, transferring data, and synchronizing the states of network components.

purge DSP. A DSP that performs post-execution removal a job from the system, writes system management facilities (SMF) records, and frees spool space used by the job.

R

RACF. Resource Access Control Facility

reader DSP. A DSP that transfers a job's control statements and SYSIN data from an input device to the spool data set. Three types of readers exist: card reader, tape reader, and disk reader.

reader job. A called job created by JES3 each time the operator issues a CALL command for a card, tape, or disk reader.

reconfiguration. The process of adding hardware units to, or removing hardware units from, a configuration.

remote device. A device attached to a host processor by using a data link.

remote job entry (RJE). A process in which a user at a remote site is connected to the host system by a data link (telecommunication lines). RJE and RJP is networking between the user and the host system.

remote job processing (RJP). A facility that permits the input, processing, and output of jobs to and from terminals remote from the JES3 installation.

RJP. Remote job processing.

remote terminal processor (RTP). A programmable remote workstation.

resident queue (RESQUEUE). A control block built in storage by the job segment scheduler to represent a scheduler element during the life of the scheduler element. It contains status information and queuing pointers.

Glossary

Resource Access Control Facility (RACF). An IBM program product that provides for access control by identifying and verifying users to the system, authorizing and logging access to protected resources, and logging detected unauthorized attempts to enter the system.

RMT. Remote terminal processor program.

remote terminal processor (RMT). A self-loading object deck created as a result of an RMT generation. RTP programs allow JES3 to communicate with programmable remote workstations.

routing code. An MVS identifier that you use to route MVS messages to a specific console(s).

RTAM. Remote terminal access method.

RTP. Remote terminal processor.

S

SAA. See *Systems Application Architecture*.

scheduler element. A part of a job control table (JCT) entry. (Each JCT entry may contain multiple scheduler elements.) Each scheduler element represents one or more DSPs needed for JES3 processing of a job.

scheduling environment. A list of resource names along with their required states. If an MVS image satisfies all of the requirements in the scheduling environment associated with a given unit of work, then that unit of work can be assigned to that MVS image. If any of the requirements are not satisfied, then that unit of work cannot be assigned to that MVS image.

service class. A group of work which has the same performance goals, resource requirements, or business importance. For workload management, you assign a service goal and optionally a resource group to a service class.

server mode. A processing mode of the JES3 dump job function that runs in its own address space and can utilize any tape devices in the system.

session. A logical connection between two logical units that can be activated, tailored to provide various protocols, and deactivated as requested.

setup. The phase of JES3 processing that performs volume fetch, device, volume, and dataset allocation.

setup DSP. A DSP that performs volume fetch, job setup, high watermark setup, and explicit setup functions.

shared devices. (1) Devices that are connected to more than one processor. (2) Devices that are both JES3 devices and JES3-managed devices.

side. Equivalent to the term **physical partition**.

single-image mode. The state of a processor complex when all of its hardware resources are in a single configuration.

SNA. See *Systems Network Architecture*.

solicited message. A message that is a response to a command (also see unsolicited message).

spool data management. For JES3, the recording and retrieval of data on the spool data set and the management of space within the spool data set.

spool device. A direct-access device that JES3 uses for intermediate storage of control blocks and data needed for processing jobs. When JES3 is used for multiprocessing, the spool device becomes a collection point for job input data to be distributed to local processors, and for job output data coming from local processors enroute to I/O devices attached to the global processor.

spool device. A direct-access device that JES3 uses for intermediate storage of control blocks and data needed for processing jobs. When JES3 is used for multiprocessing, the spool device becomes a collection point for job input data to be distributed to local mains, and for job output data coming from local mains enroute to I/O devices attached to the global.

spool partition. A named collection of spool data sets.

staging area. An area into which subsystem interface routines store data to be transferred between address spaces. Staging areas can be contained in the common service area (CSA), or in an optional JES3 auxiliary address space. The staging areas are accessible from all address spaces.

staging drive group. A collection of staging drives for space management and recovery. It is created by the user with the Mass Storage Control Table Create program.

standard job. A job for which JES3 defines needed processing entirely from Input Service, Converter Interpreter, MAIN service, Output Service, and PURGE service.

statistics data area (SDA). A data area used to collect JES3 processing statistics by using the IATXSTAT macro.

Storage management subsystem (SMS). An MVS subsystem responsible for managing data sets and volumes. This subsystem supports JCL constructs such as storage class and storage group.

subsystem identification block (SSIB). The control block into which MVS places the name of the subsystem to which it is directing a request over the subsystem interface.

SSI. Subsystem interface.

subsystem interface (SSI). A set of program routines that allows two-way communication between a JES3 address space and other address spaces.

subsystem options block (SSOB). The control block into which MVS places a function code when communicating with JES3 over the subsystem interface. The function code identifies a requested service.

subsystem services common services. A term used to collectively identify JES3 routines that handle communication among JES3 modules running on separate processors. (For example, a subsystem interface service routine and a receiving DSP would be referred to as subsystem interface common services.)

system management facilities (SMF). An optional control program feature of MVS that provides the means for gathering and recording information that can be used to evaluate system usage.

systems application architecture (SAA). A set of software interfaces, conventions, and protocols that provide a framework for designing and developing applications with cross-system consistency.

systems network architecture (SNA). The total description of the logical structure, formats, protocols, and operational sequences for transmitting information units through a communication system.

systems network architecture remote job processing (SNA RJP). A facility that permits the input and output of jobs to and from SNA workstations.

systems network architecture/network job entry (SNA/NJE). A networking capability that works in combination with MVS/Bulk Data Transfer (MVS/BDT). Networking is established between nodes through MVS/BDT "sessions." Sessions can be established over telephone lines, microwave links, by satellite, or by channel-to-channel adapters.

T

TP. See *transaction program*.

transaction program. An application program that allows users to access resources in a SNA network.

U

uniprocessor. A processor complex that consists of only one CPU.

unsolicited message. A message that is not a response to a command (also see solicited message).

USAM. User spool access method.

user buffer pool (UBUF). An area in each user's address space that has been divided into buffers.

user spool access method (USAM). Data management routines that do not execute in the JES3 address space but provide the subsystem interface for allocation, deallocation, SYSIN/SYSOUT, OPEN, and CLOSE functions of user data sets.

V

volume. That portion of a single unit of storage that is accessible to a single read/write mechanism; for example, a drum, a disk pack, or part of a disk storage module.

VTAM. Virtual telecommunications access method.

W

warm start (W). For JES3, a restart where an IPL must be performed on all processors and there is a choice of using the last set of initialization statements processed or a new set of initialization statements.

warm start with analysis (WA). For JES3, a special form of warm start where the JES3 job queue is examined and any jobs that would cause another restart are automatically deleted.

warm start to replace a spool data set (WR). For JES3, a special form of warm start where a spool data set can be replaced by another data set with the same dname; all jobs with data on the replaced spool data set are lost.

warm start with analysis to replace a spool data set (WAR). For JES3, a special form of warm start (W) combining warm start with analysis (WA) and warm start to replace a spool data set (WR) processing.

WLM managed. The system mode of operation where JES3 batch initiators are controlled by the workload management component of MVS.

Workload Management (WLM). WLM is a component of MVS that manages system resources.

workstation. A station at which an individual can send data to or receive data from a computer for the purpose of performing a job.

writer. See *output writer*.

writer output multitasking. For JES3, a facility by which writer output processing can be performed concurrently with other JES3 functions on a multiprocessor global processor.

WTO. Write to operator.

WTO/R. Write to operator with a reply request.

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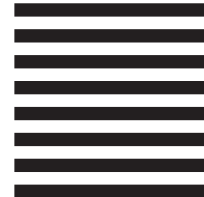
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