z/OS

JES2 Data Areas, Volume 2 ($FCLWORK - $OUTWORK)

GA22-7529-02

z/OS

JES2 Data Areas, Volume 2 ($FCLWORK - $OUTWORK)

GA22-7529-02

Note

Before using this information and the product it supports, be sure to read the general information under “Notices” on page 371.

Third Edition, September 2002

This is a major revision of GA22-7529-01.

This edition applies to Version 1 Release 4 of z/OS (5694-A01), and Version 1, Release 4 of z/OS.e (5655-G52), and to all subsequent releases and modifications until otherwise indicated in new editions.

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- Title and order number of this book
- Page number or topic related to your comment

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Contents

About This Book

This book provides graphic presentations of many data areas used by the MVS operating system and by application programs. This book provides the data areas that:

- Are used by two or more components
- Are programming interfaces
- Are needed for debugging or diagnosis

This book supports z/OS (5694-A01) and z/OS.e (5655-G52).

For the latest information updates that have been provided in PTF cover letters and Documentation APARS for z/OS and z/OS.e, see the online document at:

`http://www.s390.ibm.com:80/bookmgr-cgi/bookmgr.cmd/BOOKS/ZIDOCMST/CCONTENTS`

Who Should Use This Book

This book is for system programmers who diagnose and debug operating system and programming problems. It provides information for debugging installation-provided programs or diagnosing IBM-provided programs. The user of this publication should have a working knowledge of the operating system.

How To Use This Book

Data areas are sequenced alphanumerically by data area acronym. Each data area has up to three sections:

- Header
- Data area map
- Cross-reference, if the data area map is long enough

There are three volumes of *Data Areas*. The following list shows the range of data areas included in each volume:

z/OS JES2 Data Areas, Vol 1 $ALINDEX-$EVT	GA22-7528
z/OS JES2 Data Areas, Vol 2 $FCLWORK-$OUTWORK	GA22-7529
z/OS JES2 Data Areas, Vol 3 $PADDR-$XRQ	GA22-7530

The Header

The header includes some or all of the following:

Common Name: The descriptive name of the data area.

Macro ID: The name of the mapping macro for the data area. Mapping macros can be issued in programs to generate a copy of the data area.

DSECT Name: Name of the dummy control section (DSECT) created by the mapping macro.

Owning Component: Component name and component identifier in parentheses.

Eye-Catcher ID: Character string identifier of the eye-catcher (sometimes called the **control block id**) within the mapping macro. The offset and length of the eye-catcher are also included.

Storage Attributes: The storage attributes of the data area, including the following:

- **Main Storage:** Central storage attributes of the data area.
- **Virtual Storage:** Virtual storage attributes of the data area.
- **Auxiliary Storage:** Spool storage attributes of the data area.
- **Subpool and Key:** Subpool is the area of virtual storage that contains the data area. Key is the storage protect key for the storage represented by the data area.

Size: The size of the data area in decimal bytes.

Created by: Module, macro, or component whose use creates the data area.

Pointed to by: Registers or data area fields that contain the address of the data area.

Serialization: Method used to ensure that one user does not update a data area that is being updated or used by another user. The most common methods used for serialization are:

- Lock or locks
- ENQ and DEQ macros
- Compare and Swap (CS) instruction
- Disablement, which is disabling interruptions by setting bits in the program status word (PSW) of the program using the data area

Function: Brief description of the use of the data area.

Data Area Map

The data area is described field by field. These field descriptions are taken directly from the system code.

The following is an example of the field descriptions for the ANYAREA data area:

Offsets					
Dec	**Hex**	**Type**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	384	ANYAREA	
0	(0)	CHARACTER		ANYBEGIN	BEGINNING OF ANYAREA
0	(0)	CHARACTER	4	ANYACRO	ACRONYM IN EBCDIC -ANY-
4	(4)	ADDRESS	4	ANYADDR	ADDRESS OF NEXT ANYAREA ON QUEUE

For each field in the data area, the data area map provides the following information:

Offsets The address of the field, shown in both decimal (DEC) and hexadecimal (HEX in parentheses), relative to the beginning of the data area.

Type The kind of program data defined for this field, as follows:

Type	Description
ADDRESS	address constant
BITSTRING	Bitstring constant
CHARACTER	Character value
FIXED	Arithmetic signed or unsigned value
DBL WORD	Double word boundary
FIXED	Arithmetic signed or unsigned value
HEX	Hexadecimal value
SIGNED	Arithmetic signed value
STRUCTURE	Level 1 control block name
UNSIGNED	Unsigned value

Len Size of the field in decimal bytes.

Name (Dim) The name of the field, bit, or mask.

Bit or mask names are preceded by a description of bit position and value, as follows:

```
1... ....      Refers to bit 0.
.... ..11      Refers to bits 6 and 7.
...1 ....      Refers to bit 3.
11.. 1111      Refers to bits 0, 1, 4, 5, 6, and 7.
```

Description A description of the purpose or meaning of the field, bit, or mask.

Cross Reference

For each data area with more than 25 fields, Cross Reference shows the following:

Name The name of the field, bit, or mask.

Hex Offset The hexadecimal offset of the field into the data area. For bits, the hexadecimal offset of the field containing the bit.

Hex Value Hexadecimal values are shown only for bits. The hexadecimal value shown implies the position of the bit in the field containing the bit.

Bit ANYBIT in the following illustrations shows how to use the hexadecimal value. In the example, cross reference for the ANYBIT bit looks like this:

Name	Hex Offset	Hex Value
TCBACTIV	F0	80

In the map of the data area, the ANYBIT bit appears like this:

```
240    (F0)  FIXED      4   ANYWORD     DISPATCHER INTERSECT CONTROL WORD
240    (F0)  BITSTRING  1   ANYBYTE     FLAG BYTE (MDC323)

             1... ....      ANYBIT      "X'80'" BIT ON MEANS THIS . . .   .
```

X'F0' is the offset of field ANYWORD into the data area. ANYWORD is a 4-byte field, which contains a 1-byte field named ANYBYTE. Both ANYWORD and ANYBYTE have the same offset. The first bit in both fields is named ANYBIT. Ignoring the other bits in the field ANYBYTE, if the ANYBIT bit is on, the value of field ANYBYTE would be 1000 0000, which is equivalent to X'80'. This value (X'80') is shown both in the Description in the data area map and in the column of the cross reference.

Where to find more information

For complete titles and order numbers of the books for all products that are part of z/OS, see *z/OS Information Roadmap*.

Summary of Changes

Summary of changes
for GA22-7529-02
z/OS Version 1 Release 4

The document contains information previously presented in *z/OS JES2 Data Areas*, GA22-7529-01, which supports z/OS Version 1 Release 2.

New information

Information is added to indicate this document supports z/OS.e.

The following data areas have been added:

- $HCT
- $JESLOG
- $MONCB
- $MSCWORK
- $MSD
- $MWE

This document contains terminology, maintenance, and editorial changes.

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 GA22-7529-01
z/OS Version 1 Release 2

The document contains information previously presented in *z/OS JES2 Data Areas*, GA22-7529-00, which supports z/OS Version 1 Release 1.

This document contains terminology, maintenance, and editorial changes.

Summary of changes
for GA22-7529-00
z/OS Version 1 Release 1

The document contains information also presented in *OS/390 JES2 Data Areas*.

JES2 Data Areas - Volume 2 ($FCLWORK - $OUTWORK)

$FCLWORK Heading Information

Common Name: JES2 FSS Cleanup on EOM PCE Work Area
Macro ID: $FCLWORK
DSECT Name: PCE ($FCLWORK is part of the PCE DSECT)
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: 'PCE '
Offset: PCEEYE-PCE
Length: 4
Storage Attributes: Subpool: See $PCE
Key: See $PCE
Residency: See $PCE
Size: See symbol FCLPCEWS for the length of this work area. The overall length of the PCE is stored in field PCELENG.
Created by: See $PCE
Pointed to by: The $FCLPCE field of the $HCT data area
See $PCE for other pointer fields that apply to all PCE types.
Serialization: Normal PCE dispatch serialization
Function: The fields in this area are used by a JES2 FSS Cleanup on EOM Processor and by its support routines and exits. $FCLWORK maps the variable PCE work area that begins at label PCEWORK. The fields defined in $FCLWORK are actually part of the PCE DSECT, but only map PCEs with the value PCEFCLID in the second byte of field PCEID.

This PCE is not device related. Field PCEDCT is zero.

$FCLWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	PCE	, Continue PCE DSECT
240	(F0)	DBL WORD	8	(0)	Force double-word alignment
240	(F0)	X'0'	0	FCLPCEWS	"*-PCEWORK" Length of work area

$FSACB Programming Interface information

Programming Interface information

$FSACB

End of Programming Interface information

$FSACB Heading Information

Common Name: JES2 FSA Control Block
Macro ID: $FSACB
DSECT Name: FSACB
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: FSA
Offset: FSACBID-FSACB
Length: 4
Storage Attributes: Subpool: 241
Key: 1
Residency: Virtual and real storage is anywhere in CSA.
Size: See FSACBLEN
Created by: HASPFSSP
Pointed to by: FSSFSACH field of the $FSSCB data area
Serialization: The FSACB chain is serialized via the local and CMS locks.
Function: The FSACB is the function subsystem application level control block.

$FSACB Map

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	FSACB	FSA CONTROL BLOCK DSECT
0	(0)	CHARACTER	4	FSACBID	FSA CONTROL BLOCK ID
4	(4)	ADDRESS	4	FSAFSID	FSID FOR THIS FSA
4	(4)	X'6'	0	FSAID	"FSAFSID+2,2,C'A'" ID FOR THIS FSA WITHIN FSS
8	(8)	ADDRESS	4	FSAFSSA	POINTER TO PARENT FSS
12	(C)	ADDRESS	4	FSACHAIN	CHAIN PTR FOR FSA,LOCK SERIAL
16	(10)	ADDRESS	4	FSAEXTN	A(FSACB EXTENSION IN FSS ASID)
20	(14)	ADDRESS	4	FSATCB	ADDRESS OF TCB CONNECTING FSA
24	(18)	ADDRESS	4	FSAEDECB	ECB FOR ERROR DCON
28	(1C)	SIGNED	4	FSAXECB (0)	XECB TO POST FSS SERVICE PCE
48	(30)	CHARACTER	4	FSAUNIT	ADDRESS OF DEVICE OWNED BY FSA
48	(30)	X'31'	0	FSAUNIT3	"FSAUNIT+1,3" 3-digit devnum - note that FSAUNIT must begin with 0
52	(34)	CHARACTER	8	FSADEVN	NAME OF DEVICE OWNED BY FSA

Comment

THESE THREE FIELDS MUST REMAIN TOGETHER

End of Comment

60	(3C)	ADDRESS	4	FSAREQQS	A(REQUEST JIB STACK)
64	(40)	ADDRESS	4	FSAACTQS	A(ACTIVE JIB PSEUDO-STACK)
68	(44)	ADDRESS	4	FSARETQS	A(RETURN JIB STACK)
68	(44)	X'C'	0	FSALENQS	"*-FSAREQQS" LGTH OF JIB QUEUE POINTER FLDS
72	(48)	SIGNED	2	FSAJQECP	JOBNO OF PREV CANCELLED JOB
74	(4A)	SIGNED	2	FSAJOECT	COUNT OF JOES ASSIGNED TO FSA

Comment

PARAMETER LIST FOR PRTAUTH ROUTINE CALLED FROM HASPFSSM.
THIS MATCHES THE ONE DEFINED IN $PPPWORK.

End of Comment

76	(4C)	SIGNED	4	FSAAPARM (0)	PARM LIST FOR PRTAUTH
76	(4C)	ADDRESS	4	FSAJCTAD	JCT ADDRESS
80	(50)	ADDRESS	4	FSAPDDBA	PDDB ADDRESS
84	(54)	ADDRESS	4	FSAANEWS	JESNEWS ADDRESS

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
88	(58)	CHARACTER	40	FSALOGST	LOG STRING (ENTITY NAME WITH LENGTH IN THE FIRST BYTE)
128	(80)	ADDRESS	4		RESERVED FOR FUTURE USE END OF PRTAUTH PARM LIST
132	(84)	SIGNED	4	FSAFLAGS (0)	FSA FLAGS
132	(84)	BITSTRING	1	FSAFLAG1	FLAG BYTE - GENERAL USAGE
133	(85)	BITSTRING	1	FSAFLAG2	FLAG BYTE - GENERAL USAGE
134	(86)	BITSTRING	1	FSAFLAG3	FLAG BYTE - GENERAL USAGE
135	(87)	BITSTRING	1	FSAFLAG4	FLAG BYTE - GENERAL USAGE
136	(88)	SIGNED	4	FSAFLAG (0)	MORE FSA FLAGS
136	(88)	BITSTRING	1	FSAFLAGO	FLAG BYTE - FSI ORDER USAGE
137	(89)	BITSTRING	1	FSAFLAGI	FLAG BYTE - SETUP FOR FSA REQUIRES OPERATOR INTVNTN, SEE ORDIVFI IN IAZFSIP FOR BIT DEFINITIONS
138	(8A)	BITSTRING	1	FSAFLAGR	FLAG BYTE - RAS, TRACING
139	(8B)	BITSTRING	1	FSAFLAG5	FLAG BYTE - ESTAE INDICATOR

Comment

FSAFLAG5 FLAG5 BYTE - BIT DEFINITIONS

End of Comment

		1...		FSA5PCAB	"B'10000000'" ABEND OF PC'D ORDER/POST FSSM
		.1..		FSA5PINT	"B'01000000'" DEVICE INTERVENTION- REQUIRED CONDITION
		..1.		FSA5OINT	"B'00100000'" OPERATOR INTERVENTION ORDER REQUIRED
		...1		FSA5DONE	"B'00010000'" FSSP MAY NOW FREE FSACB
		.... 1...		FSA5DNRC	"B'00001000'" Device not responding condition
		.... .1..		FSA5DSRP	"B'00000100'" FSA repositioning within DS
		.... ..1.		FSA5BIT6	"B'00000010'" RESERVED FOR FUTURE USE
		1		FSA5BIT7	"B'00000001'" RESERVED FOR FUTURE USE
140	(8C)	ADDRESS	4	FSAPCE	ADDRESS OF ASSOCIATED PCE
144	(90)	SIGNED	4	FSAFLAGA (0)	Additional FSA flags
144	(90)	BITSTRING	1	FSAFLAG6	Flag byte - to be used in FSS address space only

Comment

FSAFLAG6 FLAG6 byte - bit def.

End of Comment

		1...		FSA6DSNA	"B'10000000'" Data set was not allocated in previous GETDS
145	(91)	BITSTRING	1	FSAFLAG7	Flag byte - modified only from JES address space

Comment

FSAFLAG7 FLAG7 byte - bit def.

End of Comment

		1...		FSA7JISF	"B'10000000'" JES initiated Stop FSA - order is not being simulated
		.1..		FSA701IS	"B'01000000'" For this FSA HASP701 - FSA FAILED TO DISCONNECT issued during response processing
146	(92)	BITSTRING	2		Reserved for future use
148	(94)	SIGNED	4		Reserved for future use
152	(98)	SIGNED	4	(0)	END OF FSA DSECT
152	(98)	X'98'	0	FSACBLEN	"*-FSACB" LENGTH OF THE FSA CONTROL BLOCK

Comment

FSAFLAG1

End of Comment

		1...		FSAOROUT	"B'10000000'" FSA ORDER OUTSTANDING
		.1..		FSARSOUT	"B'01000000'" FSA RESPONSE OUTSTANDING

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
		..1.		FSAQUIES	"B'00100000'" QUIESCE THE DEVICE
		...1		FSASTPDV	"B'00010000'" STOP THE DEVICE (DEV QUIESCED)
		.... 1...		FSADRAIN	"B'00001000'" STOP THE FSA (DEV DRAINED)
		.... .1..		FSAHALT	"B'00000100'" HALT THE DEVICE
		.... ..1.		FSAZDEV	"B'00000010'" SYNCH ORDER REQUIRED TO $Z DEV
		1		FSADVCST	"B'00000001'" DEVICE HAS BEEN STARTED

Comment

FSAFLAG2

End of Comment

		1...		FSACTIVE	"B'10000000'" FSA IS ACTIVE
		.1..		FSAHSERR	"B'01000000'" NO MATCHING DCT, JES2 HOT START
		..1.		FSAFJSPG	"B'00100000'" JOB SEPARATOR PRINTING ON
		...1		FSAFDSPG	"B'00010000'" DS SEPARATOR PRINTING ON
		.... 1...		FSAEDGMK	"B'00001000'" MARK FORMS ON
		.... .1..		FSABEND	"B'00000100'" ABNORMAL TERMINATION REQUESTED
		.... ..1.		FSADUMP	"B'00000010'" DUMP REQUESTED ON STOP DEVICE
		1		FSAOPIR	"B'00000001'" OPERATOR INTERVENTION REQUESTED

Comment

FSAFLAG3

End of Comment

		1...		FSAGTDSP	"B'10000000'" POST FSA FOR GETDS COMPLETION
		.1..		FSAOINIT	"B'01000000'" INITIAL OP. INTERVENTION NEEDED
		..1.		FSAFRMSC	"B'00100000'" SETUP REQUIRED FOR FORMS
		...1		FSAFLSHC	"B'00010000'" SETUP REQUIRED FOR FLASH
		.... 1...		FSABRSTC	"B'00001000'" SETUP REQUIRED FOR BURSTER
152	(98)	X'38'	0	FSASETUP	"FSAFRMSC+FSAFLSHC+FSABRSTC" SETUP REQUIRED MASK
		.... .1..		FSAUPDTK	"B'00000100'" OPERATOR INTERVENTION ORDER REQ'D TO UPDATE INTERVENTION TOKENS
		.... ..1.		FSASTCHG	"B'00000010'" OPERATOR ISSUED $T DURING SETUP REQUEST - FORCE GETDS
		1		FSA3JREQ	"B'00000001'" JIB REQUEST NEEDED BY GETDS

Comment

FSAFLAG4
THE BIT DEFINITIONS FOR COPYMARKS IN THE FSAFLAG4
BYTE HAVE TO MATCH THE BIT DEFINITIONS FOR COPYMARKS
IN THE DCTPPSW3 BYTE FOR HASPCOMM PROCESSING

End of Comment

		1...		FSA4TCEL	"B'10000000'" DEV SET TO TRK-CELL DESPOOL
		.1..		FSA4NPSL	"B'01000000'" NO DATA SET PRESELECTION
		..1.		FSA4FIT	"B'00100000'" FSA INITIATED TERM REQUEST
		...1		FSA4NHLT	"B'00010000'" DEV IS 'SETUP=NOHALT'
		.... 1...		FSA4CMNO	"B'00001000'" COPYMARKS NONE
		.... .1..		FSA4CMDS	"B'00000100'" INCREMENT COPYMARKS FOR DS
		.... ..1.		FSA4CMJB	"B'00000010'" INCREMENT COPYMARKS FOR JOB
		1		FSA4CNST	"B'00000001'" COPYMARKS REMAIN CONSTANT
152	(98)	X'F'	0	FSA4CPYM	"FSA4CMDS+FSA4CMJB+FSA4CNST+FSA4CMNO" COPYMARKS RESET

Comment

FSAFLAGO

End of Comment

		1...		FSABKWDO	"B'10000000'" SYNCH OUTSTANDING FOR $B

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
		.1..		FSAFWRDO	"B'01000000'" SYNCH OUTSTANDING FOR $F
		..1.		FSARSRTO	"B'00100000'" SYNCH OUTSTANDING FOR $E
		...1		FSACNCLO	"B'00010000'" SYNCH OUTSTANDING FOR $C
		.... 1...		FSAINRTO	"B'00001000'" SYNCH OUTSTANDING FOR $I
		.... .1..		FSAHALTO	"B'00000100'" SYNCH OUTSTANDING FOR $Z
		.... ..1.		FSACJPO	"B'00000010'" SYNCH OUTSTANDING FOR $CJ,P
		1		FSAQRYO	"B'00000001'" QUERY OUTSTANDING FOR $DU

Comment

FSAFLAGR

End of Comment

		1...		FSATRACE	"B'10000000'" PROCESSOR TRACING IS ON
		.1..		FSACNECT	"B'01000000'" FSA IS FULLY CONNECTED
		..1.		FSADCON	"B'00100000'" FSA IS(WILL) DISCONNECT
		...1		FSADCONX	"B'00010000'" JES2 IS EXPECTING DISCONNECT
		.... 1...		FSAEOT	"B'00001000'" FSA IS IN (THROUGH) EOT
		.... .1..		FSAFDRAN	"B'00000100'" FORCE DRAIN THE FSA
		.... ..1.		FSACMDA	"B'00000010'" FSS DEVICE COMMAND ACTIVE

$FSACB Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
FSAACTQS	40		FSAFLAG6	90	
FSAANEWS	54		FSAFLAG7	91	
FSAAPARM	4C		FSAFLSHC	98	10
FSABEND	98	4	FSAFRMSC	98	20
FSABKWDO	98	80	FSAFSID	4	
FSABRSTC	98	8	FSAFSSA	8	
FSACB	0		FSAFWRDO	98	40
FSACBID	0		FSAGTDSP	98	80
FSACBLEN	98	98	FSAHALT	98	4
FSACHAIN	C		FSAHALTO	98	4
FSACJPO	98	2	FSAHSERR	98	40
FSACMDA	98	2	FSAID	4	6
FSACNCLO	98	10	FSAINRTO	98	8
FSACNECT	98	40	FSAJCTAD	4C	
FSACTIVE	98	80	FSAJOECT	4A	
FSADCON	98	20	FSAJQECP	48	
FSADCONX	98	10	FSALENQS	44	C
FSADEVN	34		FSALOGST	58	
FSADRAIN	98	8	FSAOINIT	98	40
FSADUMP	98	2	FSAOPIR	98	1
FSADVCST	98	1	FSAOROUT	98	80
FSAEDECB	18		FSAPCE	8C	
FSAEDGMK	98	8	FSAPDDBA	50	
FSAEOT	98	8	FSAQRYO	98	1
FSAEXTN	10		FSAQUIES	98	20
FSAFDRAN	98	4	FSAREQQS	3C	
FSAFDSPG	98	10	FSARETQS	44	
FSAFJSPG	98	20	FSARSOUT	98	40
FSAFLAG	88		FSARSRTO	98	20
FSAFLAGA	90		FSASETUP	98	38
FSAFLAGI	89		FSASTCHG	98	2
FSAFLAGO	88		FSASTPDV	98	10
FSAFLAGR	8A		FSATCB	14	
FSAFLAGS	84		FSATRACE	98	80
FSAFLAG1	84		FSAUNIT	30	
FSAFLAG2	85		FSAUNIT3	30	31
FSAFLAG3	86		FSAUPDTK	98	4
FSAFLAG4	87		FSAXECB	1C	
FSAFLAG5	8B		FSAZDEV	98	2

$FSACB Cross Reference

Name	Hex Offset	Hex Value
FSA3JREQ	98	1
FSA4CMDS	98	4
FSA4CMJB	98	2
FSA4CMNO	98	8
FSA4CNST	98	1
FSA4CPYM	98	F
FSA4FIT	98	20
FSA4NHLT	98	10
FSA4NPSL	98	40
FSA4TCEL	98	80
FSA5BIT6	8B	2
FSA5BIT7	8B	1
FSA5DNRC	8B	8
FSA5DONE	8B	10
FSA5DSRP	8B	4
FSA5OINT	8B	20
FSA5PCAB	8B	80
FSA5PINT	8B	40
FSA6DSNA	90	80
FSA7JISF	91	80
FSA701IS	91	40

$FSAXB Programming Interface information

Programming Interface information

$FSAXB

End of Programming Interface information

$FSAXB Heading Information

Common Name: FSA Control Block Extension
Macro ID: $FSAXB
DSECT Name: FAXB
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: FAXB
Offset: FAXBCBID-FAXB
Length: L'FAXBCBID
Storage Attributes: Subpool: 230
Key: 1
Residency: Virtual and real storage is above the 16M line if the FSS supports running in 31 bit AMODE. Otherwise it is below the 16M line. Storage is located in the private area of the FSS address space.
Size: See FAXBLEN
Created by: HASPFSSM during FSA connect
Pointed to by: FSAEXTN field of the $FSACB data area
Serialization: None required
Function: This area provides private address space working storage for FSA level FSI requests.

$FSAXB Map

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	FAXB	FSA CNTL BLOCK EXTENSION DSECT
0	(0)	CHARACTER	4	FAXBCBID	FSA CONTROL BLOCK EXT ID
4	(4)	SIGNED	4	FAXBFSID	FUNCTIONAL SUBSYSTEM APPLICATION ID
8	(8)	ADDRESS	4	FAXBFSAA	A(FSACB) FOR THIS EXTENSION
12	(C)	ADDRESS	4	FAXBRECB	ECB FOR HALT DEVICE ($Z) CMD
16	(10)	SIGNED	4	FAXBFSIP (0)	ORDER FSIREQ PARM LIST
220	(DC)	SIGNED	4	FAXBFSIR (0)	ORDER RESPONSE AREA
280	(118)	SIGNED	4	FAXBPOST (0)	POST FSIREQ PARM LIST
316	(13C)	SIGNED	4	FAXBPSAV (18)	POST SAVE AREA
316	(13C)	X'13C'	0	FAXBOSAV	"FAXBPSAV" ORDER SAVE AREA
388	(184)	ADDRESS	4	FAXBSJIB	ADDR OF JIB REQUIRING SETUP
392	(188)	SIGNED	4	FAXBJCJP	Job number of $CJ,P job

Comment

THE FIELDS THROUGH FAXBBRST MUST REMAIN TOGETHER AND IN THE
SAME ORDER AS THE CORRESPONDING FIELDS STARTING AT FAXBFRMO
THESE FIELDS REPRESENT THE CURRENT DEVICE SETUP.

End of Comment

396	(18C)	BITSTRING	8	FAXBFRMS	CURRENT FORMS ID ON DEVICE
404	(194)	CHARACTER	0	FAXBWFRM (0)	
468	(1D4)	CHARACTER	4	FAXBFLSH	CURRENT FLASH ID ON DEVICE
472	(1D8)	CHARACTER	4	FAXBFCB	CURRENT FCB ID ON DEVICE
476	(1DC)	CHARACTER	4	FAXBUCS	CURRENT UCS ID ON DEVICE
480	(1E0)	CHARACTER	1	FAXBBRST	CURRENT BURST SETTING (Y/N)
480	(1E0)	X'55'	0	FAXBDLEN	"*-FAXBFRMS" LENGTH FOR SETUP PARMS
481	(1E1)	CHARACTER	1	FAXBFLSD	DEFAULT FLASH ID FOR DEVICE

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
				Comment	
				THE FIELDS THROUGH FAXBBSTO MUST REMAIN TOGETHER AND IN THE SAME ORDER AS THE CORRESPONDING FIELDS STARTING AT FAXBFRMS. THESE FIELD REPRESENT THE DEFAULT AT THE TIME OPERATOR INERVENTION WAS ORIGINATED. IF THE DEVICE IS RESTARTED VIA A CANCEL, RESTART OR INTERRUPT COMMAND THE DEFAULTS WILL BE RESET USING THESE FIELDS.	
				End of Comment	
485	(1E5)	BITSTRING	8	FAXBFRMO	ORIGINAL FORMS ID FOR DEVICE
493	(1ED)	CHARACTER	0	FAXBWFRO (0)	
557	(22D)	CHARACTER	4	FAXBFLSO	ORIGINAL FLASH ID FOR DEVICE
561	(231)	CHARACTER	4	FAXBFCBO	ORIGINAL FCB ID ON DEVICE
565	(235)	CHARACTER	4	FAXBUCSO	ORIGINAL UCS ID ON DEVICE
569	(239)	CHARACTER	1	FAXBBSTO	ORIGINAL BURST SETTING (Y/N)
				Comment	
				Work area for ASAXWC macros MACDATE -05/30/00-<0>	
				End of Comment	
0	(0)	X'23C'	0	M00M0922	"FAXLIST" ++ ASAXWC NAME
572	(23C)	SIGNED	4	FAXLIST (0)	++ ASAXWC PARM LIST
572	(23C)	ADDRESS	4	FAXLIST_XPATTERNSTR_ADDR	++ ADDR XPATTERNSTR
576	(240)	SIGNED	4	FAXLIST_XPATTERNSTRLEN	++ XPATTERNSTRLEN
580	(244)	ADDRESS	4	FAXLIST_XSTRING_ADDR	++ ADDR XSTRING
584	(248)	SIGNED	4	FAXLIST_XSTRINGLEN	++ XSTRINGLEN
588	(24C)	ADDRESS	4	FAXLIST_XZEROORMORE_ADDR	++ ADDR XZEROORMORE
592	(250)	ADDRESS	4	FAXLIST_XONECHAR_ADDR	++ ADDR XONECHAR
596	(254)	ADDRESS	4	FAXLIST_XDELIMITER_ADDR	++ ADDR XDELIMITER
596	(254)	X'1C'	0	FAXLISTL	"*-FAXLIST" ++ LENGTH OF PLIST
				Comment	
				ASAXWC-0	
				End of Comment	
600	(258)	BITSTRING	256	FAXAREA	Work area passed to ASAXWC
856	(358)	DBL WORD	8	(0)	
856	(358)	X'358'	0	FAXBLEN	"*-FAXB" LENGTH OF THE FSA CNTL BLOCK EXT

$FSAXB Cross Reference

Name	Hex Offset	Hex Value
FAXAREA	258	
FAXB	0	
FAXBBRST	1E0	
FAXBBSTO	239	
FAXBCBID	0	
FAXBDLEN	1E0	55
FAXBFCB	1D8	
FAXBFCBO	231	
FAXBFLSD	1E1	
FAXBFLSH	1D4	
FAXBFLSO	22D	
FAXBFRMO	1E5	
FAXBFRMS	18C	
FAXBFSAA	8	
FAXBFSID	4	
FAXBFSIP	10	
FAXBFSIR	DC	
FAXBJCJP	188	
FAXBLEN	358	358
FAXBOSAV	13C	13C
FAXBPOST	118	
FAXBPSAV	13C	
FAXBRECB	C	
FAXBSJIB	184	
FAXBUCS	1DC	
FAXBUCSO	235	
FAXBWFRM	194	
FAXBWFRO	1ED	
FAXLIST	23C	
FAXLIST_XDELIMITER_ADDR	254	
FAXLIST_XONECHAR_ADDR	250	
FAXLIST_XPATTERNSTR_ADDR	23C	
FAXLIST_XPATTERNSTRLEN	240	
FAXLIST_XSTRING_ADDR	244	
FAXLIST_XSTRINGLEN	248	
FAXLIST_XZEROORMORE_ADDR	24C	
FAXLISTL	254	1C
M00M0922	0	23C

$FSSCB Programming Interface information

Programming Interface information

$FSSCB

The following fields are **NOT** programming interface information:

- FSSAXL
- FSSETL
- FSSLXL
- FSSLXV

End of Programming Interface information

$FSSCB Heading Information

Common Name: JES2 FSS Control Block
Macro ID: $FSSCB
DSECT Name: FSSCB
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: 'FSS '
Offset: -8 (in the JES2 CSA storage prefix)
Length: 4
Storage Attributes: Subpool: 241
Key: 1
Residency: Virtual and real storage is anywhere.
Size: See FSSCBLEN
Created by: DYNFSS in HASPFSSP
Pointed to by: CCTFSSCB field of the HCCT data area (first FSSCB)
FSSCHAIN field of the previous FSSCB data area
Serialization: The chain can be added to by the JES2 main task. At this time the chain cannot be broken to accomplish a delete.
Function: The FSSCB represents a functional subsystem (FSS) defined to JES2. It points to the FSSXB in the FSS address space, and the chain of FSACB's for applications assigned to the FSS.

$FSSCB Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	FSSCB	FSS CONTROL BLOCK DSECT
0	(0)	CHARACTER	8	FSSNAME	FUNCTIONAL SUBSYSTEM NAME
8	(8)	CHARACTER	8	FSSPROCN	CATALOGED PROC NAME FOR FSS
16	(10)	CHARACTER	8	FSSFSSMN	FSS SUPPORT MODULE NAME (FSSM)
24	(18)	SIGNED	4	FSSFSSML	FSS SUPPORT MODULE LENGTH
28	(1C)	ADDRESS	4	FSSCHAIN	ADDR OF NEXT FSSCB OFF CCTFSSCB
32	(20)	ADDRESS	2	FSSASID	ASID FOR THE FSS ADDRESS SPACE
34	(22)	ADDRESS	2	FSSFSSID	FSS PORTION OF FSID FOR FSAS

Comment

HASPFSSM CROSS MEMORY SERVICE TABLES

End of Comment

36	(24)	SIGNED	4	FSSLXL (0)	LINKAGE INDEX (LX) LIST
36	(24)	SIGNED	4	FSSLXN	NUMBER OF LXS REQUESTED
40	(28)	SIGNED	4	FSSLXV	VALUE (LX) RETURNED BY LXRES
44	(2C)	SIGNED	4	FSSAXL (0)	AUTHORIZATION INDEX (AX) LIST
44	(2C)	SIGNED	2	FSSAXN	NUMBER OF AXS REQUESTED
46	(2E)	SIGNED	2	FSSAXV	VALUE (AX) RETURNED BY AXRES
48	(30)	SIGNED	2	FSSAXSV	ORIGINAL AX, SAVED AFTER AXSET
50	(32)	ADDRESS	2		RESERVED FOR FUTURE USE
52	(34)	SIGNED	4	FSSETL (0)	ENTRY TABLE (ET) LIST
52	(34)	SIGNED	4	FSSETN	NUMBER OF ETS CREATED
56	(38)	SIGNED	4	FSSETV	VALUE (TOKEN) RETURNED BY ETCRE

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
					Comment
					PC NUMBERS FOR CROSS MEMORY SERVICES ROUTINES IN HASPFSSM (MUST BE IN SAME ORDER AS PC ENTRY POINTS IN $HFCT) AND CROSS-MEMORY COMMUNICATION ECBS.
					End of Comment
60	(3C)	SIGNED	4	FSSPC (0)	
60	(3C)	ADDRESS	4	FSSORDPC	PC # OF XMS FSI-ORDER ROUTINE
64	(40)	ADDRESS	4	FSSPSTPC	PC # OF XMS FSI-POST ROUTINE
68	(44)	SIGNED	4	FSSXECB (0)	XECB TO POST PCE FOR FSS
68	(44)	X'48'	0	FSSDCTCH	"XECBPCE-XECB+FSSXECB" A(DCT CHAIN DURING JES2 INIT OR RE-INIT (HOT START)
88	(58)	SIGNED	4	FSSEDECB	ECB FOR DISCONNECT COORDINATION
					Comment
					MISCELLANEOUS CONTROL FIELDS AND FLAG BYTES
					End of Comment
92	(5C)	ADDRESS	4	FSSFJIBS	A(FREE JIB STACK IN FSS MEMORY)
96	(60)	ADDRESS	4	FSSHFCT	A(HFCT IN FSSM FOR THIS FSS)
100	(64)	ADDRESS	4	FSSRCRTN	A(FSMRCRTN SRB RECONNECT RTN)
104	(68)	ADDRESS	4	FSSFSACH	A(FSACB CHAIN FOR THIS FSS)
108	(6C)	ADDRESS	4	FSSEXTN	A(FSS EXTENSION-FSS ADDR SPACE)
112	(70)	ADDRESS	4	FSSTCB	ADDRESS OF TCB CONNECTING FSS
116	(74)	SIGNED	2	FSSFSAMI	MAX FSA ID IN FSIDS WITHIN FSS
118	(76)	SIGNED	2	FSSDIFM	COUNT OF DCTS IN FSS MODE
120	(78)	SIGNED	2	FSSFSVTE	NUMBER OF ENTRIES IN THE FSVT IF THE FSS IS ACTIVE
122	(7A)	SIGNED	2	(2)	RESERVED FOR FUTURE USE
126	(7E)	BITSTRING	1		Reserved for future use
127	(7F)	BITSTRING	1	FSSFLAG4	General status flag. This flag is set only by the FSS address space. No serialization is required
					Comment
					---------- FSSFLAG4 - If neither of the following bits is ON, then this FSS does NOT support IP-format destination routing. ----------
					End of Comment
		1...		FSS4IP	"B'10000000'" FSS supports ONLY IP-format
		.1..		FSS4BOTH	"B'01000000'" FSS supports BOTH IP&non-IP
128	(80)	SIGNED	4	FSSLWORD (0)	FSS 'LOCK' WORD WITH RAS FLAGS
128	(80)	BITSTRING	1	FSSFLAGA	FLAG BYTE
					Comment
					FSSFLAGA
					End of Comment
		1...		FSSABORD	"B'10000000'" ABEND IN PC'D TO FSMORDER FSSM
		.1..		FSSA$ACT	"B'01000000'" FSS included in $ACTVFSS
		..1.		FSSASTPI	"B'00100000'" FSS STOP order issued
		...1		FSSABIT3	"B'00010000'" RESERVED FOR FUTURE USE
		.... 1...		FSSABIT4	"B'00001000'" RESERVED FOR FUTURE USE
		.... .1..		FSSABIT5	"B'00000100'" RESERVED FOR FUTURE USE
		.... ..1.		FSSABIT6	"B'00000010'" RESERVED FOR FUTURE USE
		1		FSSABIT7	"B'00000001'" RESERVED FOR FUTURE USE
129	(81)	BITSTRING	1	FSSFLAG1	FLAG BYTE - GENERAL USAGE
130	(82)	BITSTRING	1	FSSFLAG2	FLAG BYTE - GENERAL USAGE

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
131	(83)	BITSTRING	1	FSSFLAG3	FLAG BYTE - RAS USE
		1		FSSLMASK	"B'0001'" MASK FOR FSSFLAG3 IN FSSLWORD
132	(84)	SIGNED	4	FSSWORK	Work area
136	(88)	SIGNED	4	FSSDOMID	DOMID FOR HASP706 MESSAGE
140	(8C)	BITSTRING	8		RESERVED FOR FUTURE IBM USE
152	(98)	DBL WORD	8	FSSASTKN	FSS address space STKN
160	(A0)	CHARACTER	8	FSSAPARN	HASPFSSM APARNUM value
168	(A8)	CHARACTER	8	FSSPTFN	HASPFSSM PTFNUM value
176	(B0)	SIGNED	4	(0)	END OF FSSCB DSECT
176	(B0)	X'B0'	0	FSSCBLEN	"*-FSSCB" LENGTH OF THE FSS CONTROL BLOCK

Comment

FLAG DEFINITIONS
FSSFLAG1

End of Comment

1...	FSSOROUT	"B'10000000'" FSS ORDER OUTSTANDING
.1..	FSSRSOUT	"B'01000000'" FSS RESPONSE OUTSTANDING
..1.	FSSTART	"B'00100000'" FSS START OUTSTANDING
...1	FSSTOP	"B'00010000'" About to issue STOP FSS ord
.... 1...	FSSDRAIN	"B'00001000'" ISSUE STOP FSS ORDER
.... .1..	FSSABEND	"B'00000100'" ABNORMAL TERMINATION REQUESTED
.... ..1.	FSSDUMP	"B'00000010'" DUMP REQUESTED ON STOP
....1	FSSFDRAN	"B'00000001'" FORCE FSS STOP PROCESSING

Comment

FSSFLAG2

End of Comment

1...	FSSACTIV	"B'10000000'" FSS ADDRESS SPACE IS ACTIVE
.1..	FSS2BIT2	"B'01000000'" RESERVED FOR FUTURE USE
..1.	FSS2ASD0	"B'00100000'" AUTOMATICALLY SHUT DOWN THE FSS IF THE FSA COUNT GOES TO ZERO
...1	FSS2PAF	"B'00010000'" If the FSS-Cleanup PCE finds an FSSCB with FSSEOM on, it posts the PCE for each FSA. It then sets this flag so that all the PCEs are post only once
.... 1...	FSSSTPE	"B'00001000'" PREVIOUS FSS STOP ERROR
.... .1..	FSS24DG	"B'00000100'" FSS supports 4-digit devs
.... ..1.	FSS2BIT6	"B'00000010'" RESERVED FOR FUTURE USE
....1	FSS2AM31	"B'00000001'" FSS supports AMODE 31

Comment

FSSFLAG3

End of Comment

1...	FSSCNCT1	"B'10000000'" FSS CONNECTING (LOCKS FSS CONNECT AND STAYS ON WHEN CONNECTED)
.1..	FSSCNCT2	"B'01000000'" FSS HAS COMPLETED CONNECT
..1.	FSSDCON	"B'00100000'" FSS IS(WILL) DISCONNECTING
...1	FSSDCONX	"B'00010000'" JES2 IS READY FOR DISCONNECT
.... 1...	FSSEOM	"B'00001000'" FSS MEMORY HAS ENDED
.... .1..	FSSEOT	"B'00000100'" FSS CONNECTING TCB HAS ENDED
.... ..1.	FSSRCOK	"B'00000010'" FSS RECONNECT SRB SUCCESSFUL
....1	FSSRCERR	"B'00000001'" FSS ERROR IN RECONNECT SRB RTN

$FSSCB Cross Reference

Name	Hex Offset	Hex Value
FSSA$ACT	80	40
FSSABEND	B0	4
FSSABIT3	80	10
FSSABIT4	80	8
FSSABIT5	80	4
FSSABIT6	80	2
FSSABIT7	80	1
FSSABORD	80	80
FSSACTIV	B0	80
FSSAPARN	A0	
FSSASID	20	
FSSASTKN	98	
FSSASTPI	80	20
FSSAXL	2C	
FSSAXN	2C	
FSSAXSV	30	
FSSAXV	2E	
FSSCB	0	
FSSCBLEN	B0	B0
FSSCHAIN	1C	
FSSCNCT1	B0	80
FSSCNCT2	B0	40
FSSDCON	B0	20
FSSDCONX	B0	10
FSSDCTCH	44	48
FSSDIFM	76	
FSSDOMID	88	
FSSDRAIN	B0	8
FSSDUMP	B0	2
FSSEDECB	58	
FSSEOM	B0	8
FSSEOT	B0	4
FSSETL	34	
FSSETN	34	
FSSETV	38	
FSSEXTN	6C	
FSSFDRAN	B0	1
FSSFJIBS	5C	
FSSFLAGA	80	
FSSFLAG1	81	
FSSFLAG2	82	
FSSFLAG3	83	
FSSFLAG4	7F	
FSSFSACH	68	
FSSFSAMI	74	
FSSFSSID	22	
FSSFSSML	18	
FSSFSSMN	10	
FSSFSVTE	78	
FSSHFCT	60	
FSSLMASK	83	1
FSSLWORD	80	
FSSLXL	24	
FSSLXN	24	
FSSLXV	28	
FSSNAME	0	
FSSORDPC	3C	
FSSOROUT	B0	80
FSSPC	3C	
FSSPROCN	8	
FSSPSTPC	40	
FSSPTFN	A8	
FSSRCERR	B0	1
FSSRCOK	B0	2
FSSRCRTN	64	
FSSRSOUT	B0	40
FSSSTPE	B0	8
FSSTART	B0	20
FSSTCB	70	
FSSTOP	B0	10
FSSWORK	84	
FSSXECB	44	
FSS2AM31	B0	1
FSS2ASD0	B0	20
FSS2BIT2	B0	40
FSS2BIT6	B0	2
FSS2PAF	B0	10
FSS24DG	B0	4
FSS4BOTH	7F	40
FSS4IP	7F	80

$FSSWORK Programming Interface Information

Programming Interface Information

$FSSWORK

End of Programming Interface Information

$FSSWORK Heading Information

Common Name: HASP FSS PCE WORK AREA DSECT
Macro ID: $FSSWORK
DSECT Name: PCE
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: Offset:
Length:
Storage Attributes: Subpool: 1
Key: 1
Size: SEE FSWLNGTH
Created by: $PCEDYN
Pointed to by: ANY OF THE PCE ANCHOR FIELDS
Serialization: JES2 REENTRANT TECHNIQUES
Function: THIS DSECT PROVIDES THE WORK AREA REQUIRED BY A JES2 PROCESSOR IN SUPPORT OF A FUNCTIONAL SUBSYSTEM APPLICATION. THERE ARE NO PCES OF A TYPE CALLED 'FSS', BUT INSTEAD A PCE OF ANOTHER TYPE (E.G. PRINTER) IS DEFINED TO ENSURE IT IS LARGE ENOUGH TO BE CHANGED INTO A PCE MAPPED BY $FSSWORK IF THAT PROCESSOR TYPE IS ALLOWED TO RUN IN FSS MODE. SEE THE $PCETAB FSS=YES DESCRIPTION FOR MORE DETAILS.

$FSSWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	PCE	HASP FSS PROCESSOR
240	(F0)	BITSTRING	1	FSWFLAG	PRINT/PUNCH FLAG BYTE
241	(F1)	BITSTRING	1		RESERVED FOR FUTURE USE
242	(F2)	ADDRESS	2	FSWORDID	ORDID FOR ORDER ISSUED BY PCE
244	(F4)	SIGNED	4	FSWFWORK	FULL WORD WORK AREA
248	(F8)	DBL WORD	8	FSWDWORK	DOUBLE WORD WORK AREA
256	(100)	SIGNED	4	FSWCMBAD	ADDRESS OF CMB FOR $DOM
260	(104)	SIGNED	4	FSWFBPCT	$F/$B PAGE COUNT
264	(108)	BITSTRING	12	FSWTQE	FSS TIME QUEUE ELEMENT
276	(114)	SIGNED	4	(0)	Insure fullword boundary
276	(114)	BITSTRING	12	FSWPELMT (0)	$XMPOST POST element
276	(114)	ADDRESS	4	FSWPERET	$XMPOST POST element ERRET
280	(118)	ADDRESS	4	FSWPECB	$XMPOST POST ELEMENT ECB ADDR
284	(11C)	ADDRESS	4	FSWPASCB	$XMPOST POST ELEMENT ASCB ADDR
288	(120)	ADDRESS	2	FSWNRCNT	WAITING FOR RESPONSE COUNT
288	(120)	X'12C'	0	FSWTIME	"300" TIME INTERVAL FOR CONNECT
292	(124)	ADDRESS	4	FSWFSSCB	ADDRESS OF FSSCB
296	(128)	SIGNED	4	FSWJ2TRP	Pointer to FSA level rolling trace storage
300	(12C)	SIGNED	4	FSWFSACT	Trace counter for FSA trace
304	(130)	SIGNED	4	(0)	
304	(130)	X'40'	0	FSWHLGTH	"*-PCEWORK" FSS PCE WORK AREA HEADER LENGTH

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
					Comment

					THE FSS PCE WORK AREA IS COMPRISED OF A HEADER AREA AND 3 VARIABLE LENGTH EXTENSIONS WHICH ARE ORGED OVER EACH OTHER. THESE 3 EXTENSIONS ARE THE MGCR, RELDS, AND GETDS WORK AREAS. THE LENGTH OF THE FSS PCE WORK AREA IS DETERMINED BY ADDING THE LENGTH OF THE HEADER AREA TO THAT OF THE GETDS WORK AREA, SINCE IT IS THE LARGEST OF THE 3 EXTENSIONS.

					End of Comment
304	(130)	CHARACTER	134	FSWRK	MGCR WORK AREA
304	(130)	CHARACTER	24	FSWJIBWK	JIB RELDS MVCP WORK AREA
304	(130)	CHARACTER	212		JIB GETDS MVCS WORK AREA
516	(204)	SIGNED	4	(0)	INSURE FULLWORD ALIGNMENT
516	(204)	X'114'	0	FSWLNGTH	"FSWHLGTH+*-FSWJIBWK" FSS PCE WORK AREA LENGTH
					Comment
					FSWFLAG FSWFLAG BIT DEFINITIONS
					End of Comment
		1...		FSWFORDI	"B'10000000'" CURRENT ORDER WAS ISSUED UNDER CONTROL OF THIS PCE AND A TIMER IS OUTSTANDING (FSWTQE)
		.1..		FSWFMODE	"B'01000000'" THIS PCE PROCESSING MODE SWITCH
		..1.		FSWFACTV	"B'00100000'" THIS PCE HAS ISSUED $ACTIVE
		...1		FSWFNONE	"B'00010000'" FLASH=NONE INDICATOR
		.... 1...		FSWFARET	"B'00001000'" FSSP tried recovery from abend once

$FSSWORK Cross Reference

Name	Hex Offset	Hex Value
FSWCMBAD	100	
FSWDWORK	F8	
FSWFACTV	204	20
FSWFARET	204	8
FSWFBPCT	104	
FSWFLAG	F0	
FSWFMODE	204	40
FSWFNONE	204	10
FSWFORDI	204	80
FSWFSACT	12C	
FSWFSSCB	124	
FSWFWORK	F4	
FSWHLGTH	130	40
FSWJIBWK	130	
FSWJ2TRP	128	
FSWLNGTH	204	114
FSWNRCNT	120	
FSWORDID	F2	
FSWPASCB	11C	
FSWPECB	118	
FSWPELMT	114	
FSWPERET	114	
FSWRK	130	
FSWTIME	120	12C
FSWTQE	108	
PCE	0	

$FSSXB Programming Interface Information

Programming Interface Information

$FSSXB

The following fields are **NOT** part of the programming interface:

FSXBFSIP
FSXBXETA

End of Programming Interface Information

$FSSXB Heading Information

Common Name: JES2 FSS Control Block Extension
Macro ID: $FSSXB
DSECT Name: FSXB
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: FSXB
Offset: Offset 0 and length 4
Subpool and Key: Subpool 230 and key 1
Size: 259 bytes
Created by: HASPFSSM
Pointed to by: FSSEXTN field of the FSSCB data area
Serialization: N/A
Function: The FSSXB is the private area extension to the FSSCB.

$FSSXB Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	FSXB	FSS CNTL BLOCK EXTENSION DSECT
0	(0)	CHARACTER	4	FSXBCBID	FSS CONTROL BLOCK EXT ID
4	(4)	CHARACTER	8	FSXBNAME	FUNCTIONAL SUBSYSTEM NAME
12	(C)	ADDRESS	4	FSXBFSSA	A(FSSCB) FOR THIS EXTENSION
16	(10)	SIGNED	4	FSXBFSIP (0)	ORDER FSIREQ PARM LIST
124	(7C)	SIGNED	4	FSXBFSIR (0)	ORDER RESPONSE AREA
184	(B8)	SIGNED	4	FSXBOSAV (18)	ORDER SAVE AREA
256	(100)	ADDRESS	4	FSXBXETA	ADDR OF ENTRY TABLE DESC (ETD)
256	(100)	X'104'	0	FSXBLEN	"*-FSXB" LENGTH OF THE FSS CNTL BLOCK EXT

$GGEQU Programming Interface Information

Programming Interface Information

$GGEQU

End of Programming Interface Information

$GGEQU Heading Information

Common Name: Generic Grouping Equates
Macro ID: $GGEQU
DSECT Name:
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: None
Storage Attributes: Subpool: N/A
Key: N/A
Residency: N/A
Size: N/A
Created by: N/A
Pointed to by: N/A
FREQUENCY: N/A
Serialization: N/A
Function: Defines equates related to the generic grouping services ($GASSIGN, $GKGET, $GKINIT, $GKTERM, $GSINIT, $GSTERM).

$GGEQU Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0		

Comment

```
,$MODULE - $CADDR WILL BE GENERATED, IT IS REQUIRED BY
,$MODULE - $HASPEQU WILL BE GENERATED, IT IS REQUIRED BY
,$MODULE - $MIT WILL BE GENERATED, IT IS REQUIRED BY
,$MODULE - $MITETBL WILL BE GENERATED, IT IS REQUIRED BY
,$MODULE - $PADDR WILL BE GENERATED, IT IS REQUIRED BY
,$MODULE - $PARMLST WILL BE GENERATED, IT IS REQUIRED BY
,$MODULE - $PSV WILL BE GENERATED, IT IS REQUIRED BY
,$MODULE - $USERCBS WILL BE GENERATED, IT IS REQUIRED BY
```

End of Comment

Comment

```
      $GGEQU - Generic grouping equates
  FUNCTION:
      Defines equates related to the generic grouping
      services ($GASSIGN, $GKGET, $GKINIT, $GKTERM,
      $GSINIT, $GSTERM).
  USED BY:
      Callers of the generic grouping services.
 CREATED BY: n/a FREED BY: n/a
 SUBPOOL: n/a KEY: n/a
 SIZE: n/a COMPONENT ID: 5752-SC1BH
 POINTED TO BY: n/a
 FREQUENCY: n/a
 RESIDENCY: n/a
 SERIALIZATION: n/a
 RESTRICTIONS: none
 CHANGE ACTIVITY:
 A000000-999999 Created for JES2 4.1.0
      Return codes
      Note: Return code 4 is reserved for future use
            for less severe (warning) conditions.
```

End of Comment

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	X'0'	0	GGRCOK	"0" Processing successful
0	(0)	X'8'	0	GGRCERR	"8" Error detected

Comment

Reason codes
Each service returns a subset of these reason codes.
Each service macro's prolog lists the reason codes that
the service returns.

End of Comment

0	(0)	X'0'	0	GGRSOK	"0" Processing successful
0	(0)	X'4'	0	GGRSJDVT	"4" JDVT name is undefined
0	(0)	X'8'	0	GGRSPVST	"8" Private storage is unavailable
0	(0)	X'C'	0	GGRSCMST	"12" Common storage is unavailable
0	(0)	X'10'	0	GGRSIPCE	"16" Caller is not the initialization PCE

Comment

Miscellaneous constants

End of Comment

0	(0)	X'20'	0	GGMAXFPL	"32" Maximum footprint length
0	(0)	X'20'	0	GGMAXMSL	"32" Maximum message length

$GGEQU Cross Reference

Name	Hex Offset	Hex Value
GGMAXFPL	0	20
GGMAXMSL	0	20
GGRCERR	0	8
GGRCOK	0	0
GGRSCMST	0	C
GGRSIPCE	0	10
GGRSJDVT	0	4
GGRSOK	0	0
GGRSPVST	0	8

$GTW Heading Information

Common Name: HASP $#GET trace work area dsect
Macro ID: $GTW
DSECT Name: GTW
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: 'GTW '
Offset: GTWID-GTW
Length: 4
Storage Attributes: Subpool: 1
Key: 1
Residency: Anywhere (above or below 16M) in the private storage of the JES2 address space.
Size: See GTWLEN
Created by: $#GET and $#POST service routines
Pointed to by: WSPGTW field of the $WSP data area ($#GET)
WSAPSGTW field of the $WSA data area ($#POST)
Serialization: No special serialization other than that currently implied by the $#GET service routine is required.
Function: This dsect maps a work area used by $#GET, $#POST, and $QGET services to save information to be included in the JES2 $TRACE id 20, 30, and 31 records.

$GTW Map

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	GTW	
0	(0)	CHARACTER	4	GTWID	GTW IDENTIFIER
4	(4)	BITSTRING	1	GTWVERS	GTW VERSION
5	(5)	BITSTRING	1	GTWFLAGP	Processing flag byte
		1...		GTWPTIME	"B'10000000'" CPU time has been set
6	(6)	BITSTRING	2		Reserved
8	(8)	SIGNED	4	GTWSTART (0)	START OF $TRACE DATA

Comment

Fields used by more than one routine

End of Comment

8	(8)	DBL WORD	8	GTWTIME	CPU Time used by this call in Milliseconds
16	(10)	SIGNED	4	GTWJSCR	NUMBER OF WS CALLS MADE
20	(14)	SIGNED	4	GTWJNUM	NUMBER OF JOES LOOKED AT
24	(18)	SIGNED	4	GTWBEST	Which JOE was selected out of the ones looked at
28	(1C)	ADDRESS	4	GTWCALER	Address of caller
32	(20)	SIGNED	4	GTWWSTAB	WS TABLE ADDRESS
36	(24)	CHARACTER	18	GTWDCTN	Dev name in one of 2 forms For non-SAPI: WSPDEVN2 For SAPI: jobname.sss2appl
36	(24)	X'24'	0	GTWPITN	"GTWDCTN,4" For initiators: PITPATID
54	(36)	ADDRESS	2	(0)	Ensure big enough
54	(36)	ADDRESS	2	(0)	
54	(36)	BITSTRING	1	GTWTFLG1	Caller type
		1...		GTWT1GET	"B'10000000'" $#GET
		.1..		GTWT1PST	"B'01000000'" $#POST
		..1.		GTWT1QGT	"B'00100000'" $QGET
		...1		GTWT1PSO	"B'00010000'" PSO
55	(37)	BITSTRING	88	GTWWS	Device work selection list

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
143	(8F)	BITSTRING	25	GTWMASK	Criteria value mask
168	(A8)	DBL WORD	8	GTWORG (0)	Start caller specific data

Comment

Fields used by $#GET/PSO only ($TRACE 20)

End of Comment

Comment

KEEP THE NEXT 4 BYTES TOGETHER FOR $TRACE FORMATTING

End of Comment

168	(A8)	BITSTRING	1	GTWDCT	DCT DEVICE TYPE
169	(A9)	BITSTRING	1	GTWFLAG1	1ST FLAG BYTE
		1...		GTW1WS	"B'10000000'" TYPE=WS REQUEST
		.1..		GTW1NET	"B'01000000'" TYPE=NET REQUEST
		..1.		GTW1HYES	"B'00100000'" HAVE=YES REQUEST
		...1		GTW1CNT	"B'00010000'" COUNT=YES request
		.... 1...		GTW1CYES	"B'00001000'" CHAIN=YES REQUEST
		.... .1..		GTW1NSAF	"B'00000100'" SAF=NO request
		.... ..1.		GTW1ALM	"B'00000010'" LINE MGR REQ, AUTOLOGN SCAN
170	(AA)	BITSTRING	1	GTWFLAG2	2ND FLAG BYTE
		1...		GTW2FAST	"B'10000000'" Fast exit from $#GET due to value in DCTPJOE/WSPPJOE
		..1.		GTW2NO	"B'00100000'" NO WORK FOUND
		1		GTW2SAFF	"B'00000001'" GET FAILURE DUE TO SAF CALL
171	(AB)	BITSTRING	1	GTWFLAG3	PSO selection flags
172	(AC)	SIGNED	4	GTWJOES	NUMBER OF JOES DEFINED
176	(B0)	SIGNED	4	GTWQNUM	NUMBER OF JOES IN USE

Comment

THE FOLLOWING TWO COUNTS APPLY ONLY TO CHAIN=YES REQUESTS

End of Comment

180	(B4)	SIGNED	4	GTWCHCNT	NUMBER OF JOES ON JOB CHAIN
184	(B8)	SIGNED	4	GTWCHSEL	NUMBER SELECTED FROM JQE/JOE CHAIN
188	(BC)	SIGNED	4	GTWROUTE (0)	REMOTE ID OF DATA SELECTED
188	(BC)	SIGNED	2	GTWNODE	NODE ID
190	(BE)	SIGNED	2	GTWRMT	REMOTE ID
192	(C0)	CHARACTER	8	GTWUSER	USERID
200	(C8)	BITSTRING	1	GTWCLASS	CLASS VALUE OF DATA
204	(CC)	SIGNED	4		Reserved

Comment

Fields used by $#POST only ($TRACE 30)

End of Comment

168	(A8)	CHARACTER	8	GTWJONAM	JOE OUTGRP name
176	(B0)	SIGNED	2	GTWJOID1	qualifier 1
178	(B2)	SIGNED	2	GTWJOID2	qualifier 2
180	(B4)	CHARACTER	8	GTWJQNAM	Job name
188	(BC)	SIGNED	4	GTWJBNUM	Job number
192	(C0)	BITSTRING	1	GTWJQTYP	Job type flags
193	(C1)	BITSTRING	3		Reserved
196	(C4)	SIGNED	4	GTWWSPCT	Number of WSPs scanned
200	(C8)	SIGNED	4	GTWPSTCT	Number of WSPs $POSTed

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
204	(CC)	SIGNED	4	GTWWTRCT	Number of XWTRs scanned
208	(D0)	SIGNED	4	GTWPSTWR	Number of XWTRs $POSTed
212	(D4)	SIGNED	4	GTWSPICT	Number of SAPIDs scanned
216	(D8)	SIGNED	4	GTWPSTSP	Number of SAPIDs $POSTed

Comment

```
-------------------------------------------------------------
      Fields used by $QGET only ($TRACE 31)
-------------------------------------------------------------
```

End of Comment

168	(A8)	SIGNED	4	GTWX14RC	Exit 14 return code
172	(AC)	BITSTRING	8	GTWX14TM	Time spent in exit 14
180	(B4)	BITSTRING	8	GTWX49TM	Time spent in exit 49
188	(BC)	SIGNED	4	GTWX49SK	# JOBS vetoed by exit 49
192	(C0)	BITSTRING	1	GTWQFLG1	Flags
		1...		GTWQ1X14	"B'10000000'" Exit 14 was entered
		.1..		GTWQ1X49	"B'01000000'" Exit 49 was entered
		..1.		GTWQ1W49	"B'00100000'" Exit 49 $WAITed
193	(C1)	BITSTRING	1	GTWQUEUE	Queue scanned by type
194	(C2)	BITSTRING	2		Reserved for future use
196	(C4)	SIGNED	4	GTWQJQAN	Number of JQAs obtained
200	(C8)	SIGNED	4	GTWJQMAX	Number of JQEs defined
204	(CC)	SIGNED	4	GTWJQFRE	Number of free JQEs

Comment

```
------ $QGET MF=L $QGET parameter list
```

End of Comment

208	(D0)	ADDRESS	4	GTWQGT	NODE TABLE ADDRESS
212	(D4)	ADDRESS	4		CONTROL BLOCK ADDRESS
216	(D8)	ADDRESS	4		CLASS LIST ADDRESS
220	(DC)	ADDRESS	4		ADDRESS OF JQE
224	(E0)	ADDRESS	1		CLASS LIST LENGTH
225	(E1)	ADDRESS	1		QUEUE TYPE SPECIFIED
226	(E2)	ADDRESS	1		WORK SELECTION TYPE FLAG
227	(E3)	ADDRESS	1		RESERVED FOR FUTURE USE
227	(E3)	X'14'	0	GTWQGTL	"*-GTWQGT" Length of $QGET parm list
228	(E4)	CHARACTER	36	GTWCLST	Class list for JES init WS (actual length used is in $QGET parameter list)
228	(E4)	X'E4'	0	GTWWSCN	"GTWCLST,8" Service class for WLM inits
264	(108)	SIGNED	4	GTWQGTRC	$QGET return code

Comment

```
-------------------------------------------------------------
      End of GTW
-------------------------------------------------------------
```

End of Comment

268	(10C)	X'104'	0	GTWSIZE	"*-GTWSTART" SIZE OF $#GET TRACE RECORD
268	(10C)	X'4'	0	GTWVERSN	"4" Version number
268	(10C)	X'10C'	0	GTWLEN	"*-GTW" LEN OF GTW WORK AREA

$GTW Cross Reference

Name	Hex Offset	Hex Value
GTW	0	
GTWBEST	18	
GTWCALER	1C	
GTWCHCNT	B4	
GTWCHSEL	B8	
GTWCLASS	C8	
GTWCLST	E4	
GTWDCT	A8	
GTWDCTN	24	
GTWFLAGP	5	
GTWFLAG1	A9	
GTWFLAG2	AA	
GTWFLAG3	AB	
GTWID	0	
GTWJBNUM	BC	
GTWJNUM	14	
GTWJOES	AC	
GTWJOID1	B0	
GTWJOID2	B2	
GTWJONAM	A8	
GTWJQFRE	CC	
GTWJQMAX	C8	
GTWJQNAM	B4	
GTWJQTYP	C0	
GTWJSCR	10	
GTWLEN	10C	10C
GTWMASK	8F	
GTWNODE	BC	
GTWORG	A8	
GTWPITN	24	24
GTWPSTCT	C8	
GTWPSTSP	D8	
GTWPSTWR	D0	
GTWPTIME	5	80
GTWQFLG1	C0	
GTWQGT	D0	
GTWQGTL	E3	14
GTWQGTRC	108	
GTWQJQAN	C4	
GTWQNUM	B0	
GTWQUEUE	C1	
GTWQ1W49	C0	20
GTWQ1X14	C0	80
GTWQ1X49	C0	40
GTWRMT	BE	
GTWROUTE	BC	
GTWSIZE	10C	104
GTWSPICT	D4	
GTWSTART	8	
GTWTFLG1	36	
GTWTIME	8	
GTWT1GET	36	80
GTWT1PSO	36	10
GTWT1PST	36	40
GTWT1QGT	36	20
GTWUSER	C0	
GTWVERS	4	
GTWVERSN	10C	4
GTWWS	37	
GTWWSCN	E4	E4
GTWWSPCT	C4	
GTWWSTAB	20	
GTWWTRCT	CC	
GTWX14RC	A8	
GTWX14TM	AC	
GTWX49SK	BC	
GTWX49TM	B4	
GTW1ALM	A9	2
GTW1CNT	A9	10
GTW1CYES	A9	8
GTW1HYES	A9	20
GTW1NET	A9	40
GTW1NSAF	A9	4
GTW1WS	A9	80
GTW2FAST	AA	80
GTW2NO	AA	20
GTW2SAFF	AA	1

$HASB Programming Interface information

Programming Interface information

$HASB

End of Programming Interface information

$HASB Heading Information

Common Name: HASP Address Space Block
Macro ID: $HASB
DSECT Name: HASB
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: HASB
Offset: HSBID
Length: L'HSBID
Storage Attributes: Subpool: 241 (ECSA)
Key: 1
Residency: The HASB resides in ECSA. Virtual and real storage are 31-bit.
Size: See HSBLEN
Created by: $SSIBEGN
Pointed to by: ASID*4 + HAVT (See below)
Serialization: Shared by TCBs in the address space.
One $HASB per address space. Local lock is required to increment use count in $HASXB. This ensures that the HASB/HASXB won't be FREEMAINed if it is considered to be temporary. It is not necessary to obtain the local lock to increment a permanent HASXB's use count because the HASB/HASXB will not be FREEMAINed. After the use count has been incremented in the $HASXB control block to indicate that both the $HASB and $HASXB are in use, compare and swaps may be used to modify fields. $SSIBEGN increments the use count upon entry. The use count in the $HASXB is for both the $HASB and the $HASXB.
Function: The HASB and HASXB are the main control blocks for an address space that invokes JES2 SSI functions. Address spaces that are started under JES2 (STCs, TSUs, batch initiators) have a "permanent" HASB and HASXB which exist for the life of the address space. Address spaces that request a job id from JES2 have a "system" HASB and HASXB which exist until the job id is returned. All other address spaces obtain a temporary HASB and HASXB which exist for the life of a SSI request.

$HASB Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	HASB	BEGINNING OF $HASB DSECT
0	(0)	CHARACTER	4	HSBID	EYECATCHER OF $HASB
4	(4)	ADDRESS	1	HSBVRSN	VERSION NUMBER FIELD
4	(4)	X'1'	0	HSBVRNUM	"1" THE CURRENT VERSION NUMBER
5	(5)	BITSTRING	1	HSBRSVRD	Reserved for future use
6	(6)	SIGNED	2	HSBASID	ASID
8	(8)	SIGNED	4	HSBCRSYS	CROSS SYSTEM REQUEST COUNT

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
					Comment
					This field, HSBCRSYS, must be zero for the HASB to be freed. However, it is not checked in the same way as the fields in the section below, so it is not there.
					End of Comment
12	(C)	ADDRESS	4	HSBHASXB	ADDR OF HASP ADDR SP EXT BLOCK
					Comment
					All fields encompassed by HSBCHECK must be zero for the $SSIEND routine to free the HASB at the end of the SSI call. (Unless it's an END-OF-MEMORY call).
					End of Comment
16	(10)	ADDRESS	4	HSBSJB	ADDRESS OF FIRST SJB
20	(14)	ADDRESS	4	HSBUSER1	RESERVED FOR USER
20	(14)	X'10'	0	HSBCHECK	"HSBSJB,*-HSBSJB" BEFORE HASB IS FREED THIS MUST BE 0
24	(18)	BITSTRING	8	HSBSTOKN	STOKEN OF ADDRESS SPACE
24	(18)	X'20'	0	HSBLEN	"*-HASB" LENGTH OF $HASB DSECT

$HASB Cross Reference

Name	Hex Offset	Hex Value
HASB	0	
HSBASID	6	
HSBCHECK	14	10
HSBCRSYS	8	
HSBHASXB	C	
HSBID	0	C8C1E2C2
HSBLEN	18	20
HSBRSVRD	5	
HSBSJB	10	
HSBSTOKN	18	
HSBUSER1	14	
HSBVRNUM	4	1
HSBVRSN	4	

$HASPEQU Programming Interface information

Programming Interface information

$HASPEQU

End of Programming Interface information

$HASPEQU Heading Information

Common Name: Equates for JES2
Macro ID: $HASPEQU
DSECT Name: None
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: None
Storage Attributes: Subpool: N/A
Key: N/A
Residency: N/A
Size: N/A
Created by: N/A
Pointed to by: N/A
Serialization: N/A
Function: The $HASPEQU macro is used to generate the register and other equates required by JES2. It also contains some executable macro in-line parameter list equates.

$HASPEQU Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0		

Comment

```
,$MODULE - $CADDR WILL BE GENERATED, IT IS REQUIRED BY
,$MODULE - $MIT WILL BE GENERATED, IT IS REQUIRED BY
,$MODULE - $MITETBL WILL BE GENERATED, IT IS REQUIRED BY
,$MODULE - $PADDR WILL BE GENERATED, IT IS REQUIRED BY
,$MODULE - $PARMLST WILL BE GENERATED, IT IS REQUIRED BY
,$MODULE - $PSV WILL BE GENERATED, IT IS REQUIRED BY
,$MODULE - $USERCBS WILL BE GENERATED, IT IS REQUIRED BY
```

End of Comment

Comment

```
    START OF SPECIFICATIONS
01 DESCRIPTIVE NAME: Equates for JES2
02 ACRONYM: $HASPEQU
01 MACRO NAME: $HASPEQU
01 DSECT NAME: None
01 LABEL PREFIX: N/A
01 COMPONENT ID: JES2 (SC1BH)
01 EXTERNAL CLASSIFICATION: PSPI
01 END OF EXTERNAL CLASSIFICATION:
01 EYE-CATCHER: None
02 OFFSET: N/A
02 LENGTH: N/A
01 STORAGE ATTRIBUTES:
02 SUBPOOL: N/A
02 KEY: N/A
02 RESIDENCY: N/A
01 SIZE: N/A
01 CREATED BY: N/A
```

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description

01 POINTED TO BY: N/A
01 SERIALIZATION: N/A
01 FUNCTION:
The $HASPEQU macro is used to generate the register
and other equates required by JES2. It also contains
some executable macro in-line parameter list equates.
01 METHOD OF ACCESS:
02 ASM:
Specify $HASPEQU as a DSECT name positional operand
on a $MODULE macro instruction to cause this mapping
to be generated.
02 PL/X:
This mapping is not available for compilations.
01 USED BY:
The equates in the $HASPEQU macro are used throughout
the code in JES2 and exits.
01 DELETED BY: N/A
01 FREQUENCY: N/A
01 RESTRICTIONS:
None.
END OF SPECIFICATIONS
01 CHANGE ACTIVITY:
@311 MVS/SP-JES2 VERSION 3 RELEASE 1 LEVEL 1
(SP3.1.1, HJE3311)
@311XX MAINTENANCE MERGED INTO MVS/SP-JES2 RELEASE 3.1.1
(MODULE HASPDOC DOCUMENTS THE APAR NUMBERS)
@313XX MAINTENANCE MERGED INTO MVS/SP-JES2 RELEASE 3.1.3
(MODULE HASPDOC DOCUMENTS THE APAR NUMBERS)
@410XX MAINTENANCE MERGED INTO MVS/SP-JES2 RELEASE 4.1.0
(MODULE HASPDOC DOCUMENTS THE APAR NUMBERS)
@420XX MAINTENANCE MERGED INTO MVS/SP-JES2 RELEASE 4.2.0
(MODULE HASPDOC DOCUMENTS THE APAR NUMBERS)
$313LELV=ELV HJE3313 880422 LJO: Early verify
$313LSUB=SUB HJE3313 880427 DBG: SAF call/subtasking
$313LTSO=TSO HJE3313 880910 DBG: TSO Commands/PSO Support
$313D002=WTR HJE3313 880901 MES1: Writer= DCR
$313D010=NJE HJE3313 890331 DBG: NJE security
$313P100=PTM HJE3313 890426 WXC: XWTR token
$313P058=PTM HJE3313 890519 DVB: $SEAS RC=12 support
$313P200=NJE HJE3313 890608 DBG: Ck for SECL access auth
$313LCMD=CMD HJE3313 890615 RAF: Command authorization
$313LNJE=NJE HJE3313 890602 RAF: NJE security
$313LBLD=BLD HJE3313 890715 WXC: Driver build
$313P190=PTM HJE3313 890914 TJW: JESNEWS processing
$313P248=PTM HJE3313 890915 RAF: GP subtask ACEEs
$313P207=PTM HJE3313 891004 SAA: Always audit
$313P270=PTM HJE3313 891017 RAF: Exit 36/37 info
$410LSPB=PJCI HJE4410 880428 LMD1: SPOOL DATA SET BROWSE
$410LCBI=$CBIO HJE4410 880505 SRP: $CBIO WITHOUT SJXB
$410LOPS=OPSSI HJE4410 881005 LMD1: OPSSI WTO EDITING ELIMIN
$410LODP=ENT_II HJE4410 881101 RAC1: OUTPUT GROUP DISPOSITION
$410LCMG=CMII HJE4410 881109 VLC: COMMAND REDIRECTION
$410LODP=ENT_II HJE4410 890309 RKK: OUTPUT GROUP DISPOSITION
$410LPPP=ENT_II HJE4410 890307 B_K: JES2 Separator Support
$410LSWB=ENT_II HJE4410 890309 TYT: SWB SERIALIZATION
$410LGRP=ENT_II HJE4410 890428 GMD: Generic Output Grouping
$410P131=SDSF HJE4410 890522 LMD1: 3.1.3 merge fix

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description

$410D007=SDSF HJE4410 890516 LMD1: CROSS SYSTEM TERMINATION
$410LNPM=NPM HJE4410 890611 TJW: NPM Recovery Part 2
$410LB16=MERGE HJE4410 891014 RKK: 3.1.3 driver 16 merge
$410D017=DCR17 HJE4410 891219 RPG: Notify User Serivce
$410LB17=MERGE HJE4410 891220 RKK: 3.1.3 driver 17 merge
$410P350=CMII HJE4410 900115 VLC: PGL0350 CONSOLE/AREA REU
$410P362=DCR17 HJE4410 900117 RPG: PTM 362 DCR17 CLEANUP
$410P410=NMSGs HJE4410 900226 RPG: PTM 410 NOTIFY CMB COUNT
$410P526=CKVR HJE4410 900427 GMD: Move $ERRORs out of $FRE
$410P532=PTM HJE4410 900427 SGJ: PGL0532 RDIRAREA syntax
$410P514=NMSG HJE4410 900516 RPG: MSG BUFFER FAILURE COUNT
$410P411=DCR_17 HJE4410 900516 GMD: Multiple forms for print
$420P161=PTMs HJE4420 901119 RAC1:
$420LSPN=APPC HJE4420 881208 R_R: SPIN 1
$420LTST=APPC HJE4420 890522 : Init Start/Term
$420LOPR=APPC HJE4420 890803 R_W1: Operations Support
$420LADD=DYNIO HJE4420 900327 : $ADD PRTnnnn / DCRR4
$420LNJE=NET HJE4420 900421 CLW: HASPNET split up code
$420LSFS=SWBMOD HJE4420 900606 RPG: SCHEDULER FACIL SERVICE
$420LRWL=ROLLUP HJE4420 900614 R_W1: Rollup fixes
$420LSWB=SWBMOD HJE4420 900628 RAH: $JOE updates
$420P105=SWBMOD HJE4420 900907 RPG: PTM 105 PCE Misc Wakeup
$420P035=PTM HJE4420 901003 KAP1: WARM START PROCESSING
$420P198=SWBMOD HJE4420 901024 T_H: PTM PIL0198
$420P066=PTMS HJE4420 910107 CLW: PTM PIL0066
$430P167=10X HJE4430 920218 CLW: Init parms modifiable fr
$430P172=10X HJE4430 920325 W_C1: HASP003 display error
$430P210=10X HJE4430 920507 W_C1: $MODLOAD changes
$430P267=10X HJE4430 920507 W_C1: Delete DOMed msg at Term
$430P306=10X HJE4430 920528 J_K2: Accounting info -> SMF26
$430P001=10X HJE4430 920614 W_C1: Initiator Restart
$430P636=10X HJE4430 920619 B_R2: PMX0636:9999 Lines
$430P077=10X HJE4430 920620 J_S10 $HASP688 -> $HASP686
$430P249=10X HJE4430 920620 CLW: $GETBUF check for maximum p
$430P389=10X HJE4430 920623 HGF: >999 initiators
$430P607=10X HJE4430 920623 W_C1: SCAN ERROR
$430P739=10X HJE4430 920623 W_C1: OC4 for Vector error
$430P481=10X HJE4430 920623 J_K2: 4.2.0 <-> 4.3.0 Migration
$430P750=10X HJE4430 920701 J_K2: $BLDMSG improvement
$430P476=10X HJE4430 920717 HGF: $MODLOAD MESSAGE=IFEXISTS
$430P278=10X HJE4430 920717 HGF: $D MODULE, LOADMOD, SSI
$430P125=10X HJE4430 920721 HGF: HASCxxxx lmods, >16meg
$430P544=10X HJE4430 920731 RMJ: $GETCMB WAIT=NO errors
$430P515=10X HJE4430 920803 W_C1: SMF Buffer Queueing
$430P234=10X HJE4430 920805 MAK: incomplete ckpt verify.
$430P270=10X HJE4430 920805 HGF: Review, PTM 125/270/etc
$430P811=10X HJE4430 920827 J_S10 Map macro prolog cleanup
$430P863=10X HJE4430 920903 W_C1: $PJES2 after PCES disposed
$510LAFF=HPCS HJE5510 910926 MAA: Support 32-Way MAS
$510P016=PTM HJE5510 920110 MAA: PTM PL10016
$510LSCQ=HPCS HJE5510 920117 RJH: SCQs out of QSE for HPCS
$510LRBS=MERGE HJE5510 921104 SAA: Code review comments
$510LCMD=CMD HJE5510 930107 MAA: SINGLE MEMB IMAGE/$D MEMB
$510LCFI=CKPTONCF HJE5510 930116 SAA: Msgs and $SCANTABs
$510LCFI=CKPTONCF HJE5510 930116 SAA: Msgs - code reivew
$510LCFI=CKPTONCF HJE5510 930116 SAA: Base services
$510LRL9=DRIVER HJE5510 930217 RAC1:

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description

$510P067=PTM HJE5510 930218 MAA: $E AND $C PROCESSING
$510P078=PTM HJE5510 930303 MAA: SYSTEM CHANGED TO MEMBER
$510LCFI=CKPTONCF HJE5510 930305 SAA: Support ENVIRON(JES2)
$510LCFI=CKPTONCF HJE5510 930305 SAA: CF services
$510LCFI=CKPTONCF HJE5510 930305 SAA: Post review CF updates
$510LSCR=RDRCR HJE5510 930414 CLW: $GETNHB, $FRENHB, $CPOOL
$510LSCR=RDRCR HJE5510 930414 CLW: Storage constraint relief
$510LNPM=NPM HJE5510 930418 TJW: HPCS Member one line item
$510LNPM=NPM HJE5510 930418 TJW: HPCS Member one line item
$510P079=HPCS HJE5510 930428 J_K2: Auto Restart K03
$510P088=HPCS HJE5510 930505 J_K2: Invalid JECL demand select
$510D001=HPCS HJE5510 930603 CLW: Faster restart
$510P171=HPCS HJE5510 930624 J_K2: $PD7 during warmstart
$510P111=NPM HJE5510 930622 TJW: Exploit JESXCF for member 1
$510D007=CKPTONCF HJE5510 930721 SAA: Usability changes
$510P203=NPM HJE5510 930721 TJW: Move XMAQ to CSA
$510P120=PERF HJE5510 930722 TJW: Initialization performance
$510P201=BASEQ HJE5510 930827 CLW: $SCAN line breaks
$510P355=NPM HJE5510 931026 TJW: Delete obsolete HASP003 RC
$520LARM=ARMJ2 HJE5520 931110 GMD: ARM
$520LSNF=SNIFFER HJE5520 940210 J_K2: SPOOL Management
$520LARM=ARMJ2 HJE5520 940212 GMD: ARM
$520LSNF=SNIFFER HJE5520 940310 J_K2: SPOOL Management
$520LROL=SPXJ2 HJE5520 940320 J_K2: JQE/JOE rolling trace
$520D001=MODRJE HJE5520 940414 T_K1: Dynamism of RJE Lines
$520P042=QVERIFY HJE5520 940512 W_C1: Extra Spool Validation
$520P032=JHPCS HJE5520 940512 J_K2: MAS Level Management
$520LROL=QVERIFY HJE5520 940630 J_K2: CTRACE for Rolling trace
$520P105=JHPCS HJE5520 940827 J_K2: JOE purge integrity
$520P091=MODRJE HJE5520 940912 T_K1: RMT Command Auth Errors
$520LPRF=PTM HJE5520 941011 TJW: Performance stats gathering
$520D004=PTM HJE5520 941014 TJW: CKPT versions performance
$R01LASM=BASEQ HJE6601 950825 CLW: High Level Assembler change
$R01P024=PTM HJE6601 951003 J_K: 5.1/5.2 compatibility
$R03LPSO=ENHPSO HJE6603 960122 J_K2: Extended PSO
$R03LSTA=TSOGR HJE6603 960129 TJW: Extended STATUS SSI
$R03LCPL=ENHPSO HJE6603 960226 TJW: Extended $CPOOL services
$R03P076=BASEQ HJE6603 960422 CLW: SNA Serviceability II
$R03P080=BASEQ HJE6603 960513 CLW: Serviceability
$R03P085=ENHPSO HJE6603 960701 J_K2: Updates after SAPI review
$R03P103=ENHPSO HJE6603 960830 J_K2: SWB support
$R04LBLD=PTMS HJE6604 960911 TJW: Release 4 setup
$R04LCMD=WLM HJE6604 960913 CLW: Job Commands
$R04LWLM=WLM HJE6604 961205 TJW: Queue Management
$R04P050=PTMS HJE6604 970305 NAW: FIN APAR OW23525
$R05LBLD=BUILD HJE6605 970415 JMS: Driver build
$R04P158=WLM HJE6604 970619 J_K2: $GETLOK/$DOGJQE & SPIN JQE
$R05LOPI=OPI HJE6605 970622 J_S10 ENF58 signal services
$R07LBLD=BUILD HJE6607 971024 JMS: Driver build
$R07LPRF=BUILD HJE6607 980302 CEM: Large MAS Performance
$R07LIO2=I/O2000 HJE6607 980303 TJW: I/O 2000 base support
$R07P009=PTMS HJE6607 980627 TJW: Confirm dialog TERM reply
$R07P022=PTMS HJE6607 980920 TJW: $GETMAIN BELOW,ANY
$R07P028=PTMS HJE6607 981006 TJW: Update HASP068 message
$R08LWCT=RAS HJE6608 981120 TJW: Dispatcher CTRACE
$R08LCFR=CFAUTOR HJE6608 981209 TJW: CF Auto rebuild support
$R08P006=PTMS HJE6608 990324 E_S7: Fix $GETWORK Pools

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$R10LBLD=BUILD HJE7703 990707 TJW: R10 setup
$R10LPRF=PERFDATA HJE7703 990930 TJW: $D PERFDATA(EVENT)
$R10LHIO=PERFDATA HJE7703 990930 TJW: HAM I/O performance
$R10LCMP=COMPAT HJE7703 991021 J_K2: Remove SP 5.1 tolerance
$R10LMSD=MSDUMP HJE7703 991101 E_S7: Multi System Dump
$R10P030=PTMS HJE7703 991217 TJW: TRACEDEF PAGES= limit
$R10LZAP=WLM HJE7703 000119 TJW: $ZAPJOB service
$R10P019=PTMS HJE7703 000201 TJW: Response to HASP272
$R10P026=PTMS HJE7703 000201 TJW: Fix CKPT format 1 CCW code
$R10P055=PTMS HJE7703 000313 TJW: CKPT time messages
$Z02P007=PROCLIB HJE7705 000605 TJW: Dynamic PROCLIB
$Z02LG64=G64KJOBS HJE7705 000806 JMS: >64k jobs support
$Z02P004=BASEQ HJE7705 000906 CLW: Dynamic NJE subdevices
$Z02P024=BASEQ HJE7705 000907 CLW: FIN APAR OW45572
$Z02LLRJ=LRJOB HJE7705 000919 J_K2: Long Running Job Support
$Z02P028=BASEQ HJE7705 010123 S_F: checkpoint problme
$OW35410=LRJ HJE7705 010209 J_K2:
$Z02P090=LRJ HJE7705 010212 J_K2: $TJQ( ),SPIN aborted early
$Z02P088=PTMS HJE7705 010213 TJW: Decrease CKPT values
$Z02P128=PTMS HJE7705 010424 TJW: $CKPT performace
$Z04LHIO=HAMIO HJE7707 010914 TJW: HAM I/O performance
$Z04LEOM=EOM HJE7707 011112 J_K2: EOM Support
$Z04LINC=INCLUDE HJE7707 020208 MTR: INCLUDE STMT IMPROVEMENTS
A000000-999999 CREATED FOR JES2 1.3.3
01 NOTES: None.
                    ABSOLUTE REGISTER DEFINITIONS
```

End of Comment

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	X'0'	0	R0	"0"
0	(0)	X'1'	0	R1	"1"
0	(0)	X'2'	0	R2	"2"
0	(0)	X'3'	0	R3	"3"
0	(0)	X'4'	0	R4	"4"
0	(0)	X'5'	0	R5	"5"
0	(0)	X'6'	0	R6	"6"
0	(0)	X'7'	0	R7	"7"
0	(0)	X'8'	0	R8	"8"
0	(0)	X'9'	0	R9	"9"
0	(0)	X'A'	0	R10	"10"
0	(0)	X'B'	0	R11	"11"
0	(0)	X'C'	0	R12	"12"
0	(0)	X'D'	0	R13	"13"
0	(0)	X'E'	0	R14	"14"
0	(0)	X'F'	0	R15	"15" Access register definitions
0	(0)	X'0'	0	AR0	"0"
0	(0)	X'1'	0	AR1	"1"
0	(0)	X'2'	0	AR2	"2"
0	(0)	X'3'	0	AR3	"3"
0	(0)	X'4'	0	AR4	"4"
0	(0)	X'5'	0	AR5	"5"
0	(0)	X'6'	0	AR6	"6"
0	(0)	X'7'	0	AR7	"7"
0	(0)	X'8'	0	AR8	"8"
0	(0)	X'9'	0	AR9	"9"
0	(0)	X'A'	0	AR10	"10"
0	(0)	X'B'	0	AR11	"11"
0	(0)	X'C'	0	AR12	"12"
0	(0)	X'D'	0	AR13	"13"
0	(0)	X'E'	0	AR14	"14"
0	(0)	X'F'	0	AR15	"15" Floating point registers
0	(0)	X'0'	0	FP0	"0"
0	(0)	X'2'	0	FP2	"2"
0	(0)	X'4'	0	FP4	"4"
0	(0)	X'6'	0	FP6	"6" VALUES FIXED BY THE HARDWARE

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	X'1000'	0	$PGESIZE	"4096" PROCESSOR PAGE SIZE -- 4K MISCELLANEOUS BC/BIT DEFINITIONS
0	(0)	X'0'	0	NONE	"0" NO BITS ON, NEVER BRANCH
0	(0)	X'FF'	0	FF	"255" ALL BITS ON, ALWAYS BRANCH EVENT CONTROL FIELD FLAG DEFINITIONS DEFINING JES2 DISPATCHER EVENTS FOR $WAIT,INHIBIT=YES AND $POSTS OF SPECIFIC PCES FOR EVENTS
		1...		$EWFPOST	"X'80'" INHIBIT SPECIFIC PCE $POST
		.1..		$EWFOPER	"X'40'" PROCESSOR DEACTIVATED
		..1.		$EWFIO	"X'20'" WAITING FOR I/O
		...1		$EWFWORK	"X'10'" WAITING FOR WORK
		.... 1...		$EWFHOLD	"X'08'" WAITING FOR $S COMMAND DISPATCHER RESOURCE DEFINITIONS (JES2 VALUES START AT 0 AND INCREASE WHILE USER VALUES START AT 63 AND DECREASE - SEE DOCUMENTATION IN THE $WAIT AND $POST MACROS)
0	(0)	X'0'	0	$DRMLLM	"0" 'Line manager resource $POSTS'
0	(0)	X'1'	0	$DRABIT	"1" 'Wait for one dispatcher cycle'
0	(0)	X'2'	0	$DRALOC	"2" 'HOSALLOC subtask serialization'
0	(0)	X'3'	0	$DRIMAGE	"3" 'Requested/executed image load'
0	(0)	X'4'	0	$DRBUF	"4" 'Need/freed JES2 buffer'
0	(0)	X'5'	0	$DRJOT	"5" 'Need/added selectable JOEs'
0	(0)	X'6'	0	$DRJOE	"6" 'Need/freed unused JOE'
0	(0)	X'7'	0	$DRTRACK	"7" 'Need/freed spool track group'
0	(0)	X'8'	0	$DRJOB	"8" 'Need job/changed a job's status'
0	(0)	X'9'	0	$DRUNIT	"9" 'Need/set device (DCT) undrained'
0	(0)	X'A'	0	$DRCKPT	"10" 'Need/--- CKPT WRITE cycle'
0	(0)	X'B'	0	$DRCKPTP	"11" '---/completed CKPT WRITE cycle'
0	(0)	X'C'	0	$DRCKPTW	"12" 'Need/completed CKPT WRITE cycle'
0	(0)	X'D'	0	$DRCKPTL	"13" 'Lurking for CKPT READ'
0	(0)	X'E'	0	$DRCMB	"14" 'Need/freed unused CMB'
0	(0)	X'F'	0	$DRSMF	"15" 'Need/freed unused SMF buffer'
0	(0)	X'10'	0	$DRLOCK	"16" 'Need/freed a job lock'
0	(0)	X'11'	0	$DRMAIN	"17" 'Need/freed main storage'
0	(0)	X'12'	0	$DRFSS	"18" 'FSS ORDER serialization'
0	(0)	X'13'	0	$DRPSO	"19" 'Want/added elements to PSO queue'
0	(0)	X'14'	0	$DRPURGE	"20" 'Want/added JQEs to PURGE queue'

Comment

Type 21,PURGS was deleted in Release 8

End of Comment

0	(0)	X'16'	0	$DRCNVT	"22" 'Want/added JQEs to CNVT queue'
0	(0)	X'17'	0	$DRHOPE	"23" 'Want/added JQEs to OUTPUT queue'
0	(0)	X'18'	0	$DRPCETM	"24" 'PCE waiting to be detached by resource manager'
0	(0)	X'19'	0	$DRRMWT	"25" 'PCE waiting to be $POSTed by resource manager'
0	(0)	X'1A'	0	$DRSTAC	"26" 'STATUS/CANCEL resource type'
0	(0)	X'1B'	0	$DRNEWS	"27" 'PCE waiting for a JNEW update (part of JESNEWS process)'
0	(0)	X'1C'	0	$DRGENL	"28" 'General resource - used by COMM/RDR for S INIT'
0	(0)	X'1D'	0	$DRSPIN	"29" 'Want/added: spin IOT on CCT or JQE on spin queue'
0	(0)	X'1E'	0	$DRJCMD	"30" 'PCE waiting for a JQE to restart or cancel'
0	(0)	X'1F'	0	$DRWARM	"31" 'PCE waiting for a member to warm start'
0	(0)	X'20'	0	$DRARMS	"32" 'ARM support processor'
0	(0)	X'21'	0	$DRHOMOG	"33" 'PCEs waiting for JESplex version change'
0	(0)	X'22'	0	$DRWSLOK	"34" 'Warm start lock'
0	(0)	X'23'	0	$DRMFMT	"35" 'PCEs waiting for SPOOL mini-format completion'
0	(0)	X'24'	0	$DRCCAN	"36" 'Cancel JOB/TSU/STC in conversion'
0	(0)	X'25'	0	$DRSPI	"37" 'PCEs waiting for Sysout API requests'
0	(0)	X'26'	0	$DRBERTW	"38" 'Waiting for a free BERT'
0	(0)	X'27'	0	$DRBERTL	"39" 'Waiting for a BERT lock to free'
0	(0)	X'28'	0	$DRBREG	"40" 'PCES waiting for WLM registration requests'
0	(0)	X'29'	0	$DRDILBERT	"41" 'PCES waiting for $DILBERT requests'

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	X'2A'	0	$DRXMITJOB	"42" 'Waiting for NJE JOB activity'
0	(0)	X'2B'	0	$DRALICE	"43" 'PCEs waiting for incomplete warmstart'
0	(0)	X'2C'	0	$DREOM	"44" 'PCES waiting for an EOM to occur'
0	(0)	X'40'	0	$DRTOTAL	"64" TOTAL NUMBER OF RESOURCES
0	(0)	X'8'	0	$DRQUEL	"8" LENGTH OF A RESOURCE QUEUE ELMT CIRCULAR FORWARD/BACKWARD PTRS, PCEPCEA/PCEPCEB ARE CHAIN FLDS $MSG PREFIX LENGTH EQU
0	(0)	X'2'	0	$MSGPFXL	"2" TWO BYTE PACKED DEC. MSG NO. DISPER= EQUATES FOR MESSAGES IN HASPMSG
		1...		$M064IBE	"B'10000000'" IOBE is present
		.1..		$M064NIB	"B'01000000'" No IOBE is available
		..1.		$M064SNS	"B'00100000'" Sense data is available
		...1		$M064DAD	"B'00010000'" DASD I/O was issued
		1...		$M068DEV	"B'10000000'" PCE is a device
		.1..		$M068NDV	"B'01000000'" PCE is not a device
		..1.		$M068LDV	"B'00100000'" PCE is a sub-device
		1...		$M281ALL	"B'10000000'" ALL members have I/O errors
		.1..		$M281SOM	"B'01000000'" Some memb have no I/O error
		1...		$M416LNG	"B'10000000'" LONG FORM OF MESSAGE
		.1..		$M416SHR	"B'01000000'" SHORT FORM OF MESSAGE
		1...		$M458CK1	"B'10000000'" CKPT1 FORM OF MESSAGE
		.1..		$M458CK2	"B'01000000'" CKPT2 FORM OF MESSAGE
		1...		$M478CK1	"B'10000000'" One data set in use
		.1..		$M478CK2	"B'01000000'" Two data sets in use
		1...		$M479IO	"B'10000000'" I/O ERROR
		.1..		$M479SID	"B'01000000'" SID=SYSID
		..1.		$M479INT	"B'00100000'" SID=INITIALIZATION
		...1		$M479VAL	"B'00010000'" Validation error
		1...		$M607IO	"B'10000000'" OUTSTANDING I/O
		.1..		$M607WTO	"B'01000000'" OUTSTANDING WTO ACTIVITY
		..1.		$M607ACT	"B'00100000'" ACTIVE PROCESSORS OR ADDRESS SPACES
		...1		$M607HLD	"B'00010000'" OUTSTANDING HELD PROCESSORS
		.... 1...		$M607LCK	"B'00001000'" STC/TSU INTERNAL READER LOCKS HELD
		.... .1..		$M607CRS	"B'00000100'" OUTSTANDING CROSS SYSTEM REQUESTS
		.... ..1.		$M607SPN	"B'00000010'" OUTSTANDING SPIN ACTIVITY
		1		$M607PCE	"B'00000001'" Clean withdrawal prohibited due to ended (disposed) processors
		1...		$M711CNT	"B'10000000'" Count of system PC routines changed on a hot start
		.1..		$M711ATT	"B'01000000'" Attributes of system PC routines changed on a hot start
		..1.		$M711RTN	"B'00100000'" Failed to connect to AUX address space
		1...		$M291CC1	"B'10000000'" CCW 1 address filled in
		.1..		$M291CC2	"B'01000000'" CCW 2 address filled in
		..1.		$M291NCW	"B'00100000'" No CCWs addresses available
		...1		$M291SNS	"B'00010000'" Sense data is available HASP STATUS BIT DEFINITIONS
		1...		$QSONDA	"X'80'" SHARED QUEUES ARE ON DA
		.1..		$ALMSGSW	"X'40'" ALL AVAILABLE FUNCTIONS MSG ISSUED
		..1.		$DRAINED	"X'20'" THIS SYSTEM IS DRAINED, FLAG IS ON INITIALIALLY, OFF AFTER 'NOREQ' WARM START, SET BY $S/$P
		...1		$CKPTW	"X'10'" CHECKPOINT WRITE REQUIRED
		.... 1...		$INDMODE	"X'08'" SYSTEM IS IN INDEPENDENT MODE
		.... .1..		$SYSEXIT	"X'04'" HASP SYSTEM IN TERMINATION PROCESS
		.... ..1.		$NPMDOWN	"X'02'" Network path manager has been disabled due to error
		1		$CKPTRSV	"X'01'" CHECKPOINT IS RESERVED HASP MVS OPTIONS FLAG

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
					Comment

					$TKNLEN and $TKNVERN are the length and version of the security token that is defined for RACROUTE calls with RELEASE=1.9.

					End of Comment
0	(0)	X'50'	0	$TKNLEN	"80" SAF SECURITY TOKEN LENGTH
		1		$TKNVERN	"X'01'" SAF SECURITY TOKEN VERSION
0	(0)	X'27'	0	$ENTYLEN	"39" LENGTH OF SECURITY ENTITY STRING
					Comment

					Equates for the type of JES2 start, used in the $WARMTYP and X024COND flag bytes.

					End of Comment
		1...		$WARM	"X'80'" SINGLE-SYSTEM WARMSTART
		.1..		$HOT	"X'40'" HOT START INDICATOR
		..1.		$QUICK	"X'20'" QUICK START INDICATOR
		...1		$CONFIG	"X'10'" CONFIGURATION-WIDE WARMSTART
		.... 1...		$ESYS	"X'08'" '$E SYS' RESTART
		.... .1..		$COLD	"X'04'" COLD START
		.... ..1.		$MVSIPL	"X'02'" MVS WAS IPL'D
		1		$COLDFMT	"X'01'" COLD START WITH FORMAT
0	(0)	X'1F4'	0	$WARMHD	"500" Minimum number of hundreths of seconds for minhold during warmstart HASP SUBTASK SYSTEM STATUS FLAG
		1...		$SUBERR	"B'10000000'" UNRECOVERABLE SUBTASK ERROR
		.1..		$SUBMULT	"B'01000000'" MULTIPLE SUBTASK FAILURES
0	(0)	X'8000'	0	$LRGSMFB	"32*1024" SIZE OF LARGE SMF BUFFER * D/T4245/4248 SETPRT OPTION * BIT DEFINITION * *
		...1		$PPVERIU	"X'10'" UCS VERIFY BIT SPPVERIU $RRTWA BIT DEFINITIONS
		1...		$RRTJOB	"B'10000000'" JOB-LEVEL CHECKING REQ'D HASPRTAM DEFINITIONS
0	(0)	X'120'	0	$MWORKSZ	"288" SIZE OF RTAM WORK AREA ADDRESSED VIA $MWORK -- MUST BE MULTIPLE OF 8 BYTES $EXTP OPTION AND PARAMETER LIST DEFNS
0	(0)	X'0'	0	EXTPLCMD	"0,1" (CCW) COMMAND TO BE PERFORMED
0	(0)	X'1'	0	EXTPLLEN	"1,3" LENGTH OF DATA (IF ANY) PASSED
0	(0)	X'4'	0	EXTPLDAT	"4,4" STARTING ADDRESS OF DATA
0	(0)	X'8'	0	EXTPLSIZ	"8" SIZE OF PARAMETER LIST
0	(0)	X'0'	0	$EXTPOPE	"0" ENTRY LIST INDEX FOR OPEN
0	(0)	X'1'	0	$EXTPGET	"1" ENTRY LIST INDEX FOR GET
0	(0)	X'2'	0	$EXTPPUT	"2" ENTRY LIST INDEX FOR PUT
0	(0)	X'3'	0	$EXTPCLO	"3" ENTRY LIST INDEX FOR CLOSE
0	(0)	X'4'	0	$EXTPNCL	"4" ENTRY LIST INDEX FOR NCLOSE
0	(0)	X'5'	0	$EXTPREA	"5" ENTRY LIST INDEX FOR READ
0	(0)	X'6'	0	$EXTPWRI	"6" ENTRY LIST INDEX FOR WRITE CSA STORAGE BLOCK PREFIX EQUATES
0	(0)	X'0'	0	$CSBID	"0,4" CSA STOR BLK EYE CATCHER OFFSET
0	(0)	X'4'	0	$CSBSPLN	"4" CSA STOR BLK SUBP, LNGTH OFFSET
0	(0)	X'8'	0	$CSBPRFX	"8" CSA STOR BLOCK PREFIX LENGTH HASP INITIALIZATION LIMITS
0	(0)	X'A'	0	$MINBUF	"10" Minimum # of HASP buffers
0	(0)	X'7'	0	$MAXNJEQ	"7" Maximum member number for NJE tests
0	(0)	X'7D0'	0	$MAXBUF	"2000" MAXIMUM NUMBER OF HASP BUFFERS
0	(0)	X'4'	0	$MINCMB	"4" Minimum # of CMBs
0	(0)	X'270F'	0	$MAXCMB	"9999" Maximum number of CMBs

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	X'4'	0	$MINCMDB	"4" Minimum # of command CMBs
0	(0)	X'270F'	0	$MAXCMDB	"9999" Maximum # of command CMBs
0	(0)	X'A'	0	$MINBUFX	"10" Minimum # of CB buffers
0	(0)	X'270F'	0	$MAXBUFX	"9999" Maximum # of CB buffers
0	(0)	X'A'	0	$MINBSC	"10" Minimum # of BSC Buffers
0	(0)	X'270F'	0	$MAXBSC	"9999" Maximum # of BSC buffers
0	(0)	X'A'	0	$MINVTAM	"10" Minimum # of VTAM buffers
0	(0)	X'270F'	0	$MAXVTAM	"9999" Maximum # of VTAM buffers
0	(0)	X'A'	0	$MINNHB	"10" Minimum # of NHB buffers
0	(0)	X'270F'	0	$MAXNHB	"9999" Maximum # of NHB buffers
0	(0)	X'C8'	0	$CPRIMXT	"200" NUMBER OF BUFFERS IN THE $CPOOL PRIMARY EXTENT
0	(0)	X'190'	0	$CPNHBMX	"400" Max number of NHB cells in the $CPOOL primary extent
0	(0)	X'FD'	0	$MAXDA	"253" MAXIMUM NUMBER OF SPOOL VOLUMES (($MAXDA+31)/32*4) IS USED TO DE- FINE THE NUMBER OF BYTES NEEDED IN DECLARES FOR SPOOL MASKS. EACH 32 VOLS NEEDS ONE WORD, TIMES 4, TO GET THE LENGTH IN BYTES
0	(0)	X'FF'	0	$MAXTGBE	"255" MAX NUMBER OF BLOB ENTRIES
0	(0)	X'1F4'	0	$MAXTINT	"500" MAX TIME (IN 100THS OF A SECOND) TO WAIT TO START A CKPT WRITE
0	(0)	X'F'	0	$MINTINT	"15" Min time (in 100th seconds) below which we will not do an intermediate write
0	(0)	X'2000'	0	$MAXTGV	"(65535+7)/8" NO. OF BYTES TO REPRESENT MAXIMUM NO. OF TRK GROUPS PER VOLUME (65535)
0	(0)	X'32'	0	$JMPREDO	"50" Rebuild JIX map after every 50 freed job numbers
0	(0)	X'30D40'	0	$MAXNJQE	"200000" Maximum number of JQEs
0	(0)	X'F423F'	0	$MAXJNUM	"999999" Maximum number of job nums
0	(0)	X'64'	0	$MINBERT	"100" Minimum number of BERTs
0	(0)	X'7A120'	0	$MAXBERT	"$MAXNJQE*5/2" Maximum number of BERTs
0	(0)	X'98967F'	0	$MAXDSKY	"9999999" MAXIMUM NUMBER OF DS PER JOB
0	(0)	X'4E20'	0	$MAXESIZ	"20000" Maximum JQE extensions
0	(0)	X'F5E0FF'	0	$MAXJOID	"99999999" MAXIMUM JOE ID NUMBER IN JQE
0	(0)	X'7FFF'	0	$MAXLNES	"32767" MAXIMUM NUMBER OF TP LINES
0	(0)	X'3E7'	0	$MAXLOGS	"999" MAXIMUM VTAM INTERFACES INTERFACES
0	(0)	X'7FFF'	0	$MAXNODE	"32767" MAXIMUM NUMBER OF NJE NODES
0	(0)	X'7D0'	0	$MAXRST	"2000" MAXIMUM SPECIFIABLE RESISTANCE
0	(0)	X'63'	0	$MAXCMPT	"99" MAXIMUM NUMBER OF CMPCTION TBLS
0	(0)	X'8'	0	$MAXOFFS	"8" MAXIMUM NUMBER OF OFFLOAD DEV
0	(0)	X'7FFF'	0	$MAXPRTS	"32767" MAX NUMBER OF LOCAL PRTs
0	(0)	X'63'	0	$MAXPUNS	"99" MAXIMUM NUMBER OF LOCAL PUNCHES
0	(0)	X'63'	0	$MAXRDRS	"99" MAXIMUM NUMBER OF LOCAL READERS
0	(0)	X'7FFF'	0	$MAXRJE	"32767" MAX NUMBER OF REMOTES
0	(0)	X'7FFF'	0	$MAXROUT	"32767" MAX ROUTE CODE
0	(0)	X'C8'	0	$MAXNMSG	"200" MAX NUMBER NOTIFY MSG BUFFS
0	(0)	X'1F4'	0	$MAXSJFR	"500" MAX NUM SJF SERVICE REQSTS
0	(0)	X'12'	0	$MAXRCLN	"18" Max symbolic routecde len
0	(0)	X'7F'	0	$MAXIPLN	"127" Max IP-format dest length
0	(0)	X'7FFF'	0	$MAXCPPG	"32767" MAXIMUM VALUE FOR CKPTPAGE
0	(0)	X'7FFF'	0	$MAXCPLN	"32767" MAXIMUM VALUE FOR CKPTLINE
0	(0)	X'7FFF'	0	$MAXCPTM	"32767" MAXIMUM VALUE FOR CKPTSEC
0	(0)	X'E10'	0	$MAXNPRO	"3600" MAXIMUM TIME BEFORE PRT NPRO
0	(0)	X'270F'	0	$MAXINIT	"9999" Maximum number, initiators
0	(0)	X'8'	0	$MAXFORM	"8" MAXIMUM NUMBER OF PRINTER FORMS FOR WORK SELECTION
0	(0)	X'FF'	0	$MAXPRMD	"255" MAXIMUM NUMBER OF PRMODES DEFINED FOR THIS SYSTEM
0	(0)	X'8'	0	$MAXPRDV	"8" DEFAULT NUMBER OF PROCESS MODES PER DEVICE
0	(0)	X'20'	0	$MAXSYSN	"32" Maximum number of members
0	(0)	X'20'	0	$MAXSYS	"(($MAXSYSN+7)/8)*8" Maximum # of members forced to multiple of 8
0	(0)	X'4'	0	$MXSYSBY	"($MAXSYS)/8" Number of bytes to hold affinity mask
0	(0)	X'4'	0	$MAXSNML	"4" MAX SYSTEM AFFINITY NAME LENGTH
0	(0)	X'80'	0	$MAXSAFL	"$MAXSYS*$MAXSNML" Max affinity list length

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	X'8'	0	$MAXLCK	"8" NUMBER OF LCK CKPT ELEMENTS
0	(0)	X'32'	0	$MAXVRSN	"50" MAX VERSIONS IN DATA SPACE
0	(0)	X'BB8'	0	$MAXTRC	"3000" Max trace table pages
0	(0)	BITSTRING	0	$MAXTLOG	"X'7FFFFFFF'" MAX TRACE LOG DATASET SIZE
0	(0)	X'1E'	0	$MAXSSZZ	"30" Max rest time for SJFR PCE
0	(0)	X'63'	0	$MXCKPCT	"99" Max allowable warning threshold %age for checkpointed resources

Comment

Release 4 constants (for compatibility code)

End of Comment

0	(0)	X'FFFE'	0	$MAXJQE_R4	"65534" Release 4 maximum JQEs
0	(0)	X'FFFE'	0	$MAXJNM_R4	"65534" Release 4 maximum job numb
0	(0)	X'27622'	0	$MAXJOE_R4	"161314" Release 4 maximum JOEs
0	(0)	X'FA0'	0	$MAXESIZ_R4	"4000" Release 4 maximum JQE extensions size
0	(0)	X'3FFF8'	0	$MAXBERT_R4	"4*$MAXJQE_R4" Release 4 maximum BERTs Rolling Trace Equates
0	(0)	X'3E8'	0	$ROTQNUM	"1000" Nr of elements in JQE tbl
0	(0)	X'3E8'	0	$ROTONUM	"1000" Nr of elements in JOE tbl
0	(0)	X'3E8'	0	$ROTDNUM	"1000" Elements in dispatcher tbl SRVSETUP ROUTINE EQUATES
0	(0)	X'4'	0	$VOLMAX	"4" MAXIMUM NUMBER OF VOLUMES
0	(0)	X'6'	0	$VOLLEN	"6" LENGTH OF VOLUME NAME
0	(0)	X'18'	0	$VOLFLDL	"$VOLMAX*$VOLLEN" VOLUME FIELD LENGTH
0	(0)	X'20'	0	$VOLMSKL	"(($MAXDA+31)/32*4)" VOLUME MASK SIZE KCPYMSTR "Direction" Equates
0	(0)	X'0'	0	$KCPMI2M	"0" Copy $MASTERI to $MASTER
0	(0)	X'1'	0	$KCPM2MI	"1" Copy $MASTER to $MASTERI HASP INITIALIZATION DEFAULTS
0	(0)	X'3E8'	0	$JQEDEF	"1000" DEFAULT NUMBER OF JQE'S
0	(0)	X'64'	0	$CMBDEF	"100" DEFAULT NUMBER OF CMB'S
0	(0)	X'270F'	0	$MAXJDEF	"9999" DEFAULT VALUE FOR MAX JOB#
0	(0)	X'1'	0	$MINJDEF	"1" DEFAULT VALUE FOR MIN JOB#
0	(0)	X'5'	0	$SMFDEF	"5" DEFAULT NUMBER OF SMF BUFFERS
0	(0)	X'12C'	0	$NPRODEF	"300" DEFAULT NPRO TIME
0	(0)	X'64'	0	$CKPGDEF	"100" DEFAULT CKPTPAGE VALUE
0	(0)	X'1'	0	$SSIRCVR	"1" NUMBER OF RECOVERABLE $ERRORS ALLOWED IN AN SSI FUNCTION
0	(0)	X'3E8'	0	$IOTRBGN	"1000" SPIN IOTS CREATED BEFORE REUSE
0	(0)	X'5'	0	$IOTRLMT	"5" MAX ATTEMPTS AT REUSE/ALLOC
0	(0)	X'3E8'	0	$PBUFLIM	"1000" MAX ADDITIONAL PBUFS/ASID
0	(0)	X'64'	0	$SEGLMDF	"100" DEFAULT SEGMENT LIMIT
0	(0)	X'100'	0	$QINDXL	"256" Length of QINDEX table HASP TRACK GROUP MAP ROUNDING AND MAX SIZE VALUES: $TGDEF=((4096-HDPLNGTH)/2)*8 $MAXTGS=(10000000/$TGDEF)*$TGDEF
0	(0)	X'3FA0'	0	$TGDEF	"16288" DEFAULT NUMBER OF TRACK GROUPS AND RESULTS IN 2 TRACK GROUP MAPS IN PAGE OF CKPT STORAGE
0	(0)	X'FD0240'	0	$MAXTGS	"16581184" Max number of track groups $CTENT VERSION NUMBER VALUES
0	(0)	X'1'	0	TGMVRSN	"1" TGM CKPT VERSION NUMBER
0	(0)	X'1'	0	SCQVRSN	"1" SCQ CKPT version number
0	(0)	X'2'	0	JIXVRSN	"2" JIX CKPT version number
0	(0)	X'2'	0	PSTVRSN	"2" PST CKPT VERSION NUMBER
0	(0)	X'1'	0	RSOVRSN	"1" RSO CKPT VERSION NUMBER ESTABLISH MVS EQUS AND GLOBALS
		...1 1...		IECITMOD	"X'18'" HASP ATTENTION INDEX

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
					Comment
					$MAXACCT represents the maximum number of characters allowed on an MVS JOB statement accounting string. In internal format, $MAXACCT+2 bytes are required to hold the string (a one byte counter of the number of subfields, and the one byte length of the first subfield. the length fields for the second and subsequent subfields do not require an extra byte as there was previously a one byte comma separating the subfields).
					End of Comment
0	(0)	X'8F'	0	$MAXACCT	"143" Max number of characters allowed for accounting on an MVS JOB statement $TRACE RECORD FORMATTING KEYS
0	(0)	X'0'	0	$TRK000D	"0" UNLABELED DUMP FORMAT CHECKPOINT DISPOSITION
		1...		$CKPAMWS	"X'80'" All member warm start in progress
		.1..		$CKPSPVL	"X'40'" Track group map rebuild in progress
		..1.		$CKPLOKB	"X'20'" OPERATOR BYPASSED LOCK
					Comment
					EQU X'10' RESERVED FOR FUTURE USE
					End of Comment
		.... 1...		$CKPDAMG	"X'08'" CHECKPOINT READ WAS DAMAGED
					Comment
					$CKPERRQ X'04' This bit used in 5.1 (cannot use in 5.2)
					End of Comment
		.... ..1.		$CKPBLDQ	"X'02'" JOB QUEUE REBUILT
					Comment
					$CKPERRJ X'01' This bit used in 5.1 (cannot use in 5.2) CHECKPOINT RECOVERY DIALOG FLAGS
					End of Comment
		1...		$CKRTOP	"B'10000000'" THIS SYSTEM HAS HIGHEST CKP
		.1..		$CKRNTOP	"B'01000000'" THIS SYSTEM DOES NOT HAVE HIGHEST CHECKPOINT
		..1.		$CKRCKP1	"B'00100000'" CKPT1 FILE IS ACTIVE
		...1		$CKRNKP1	"B'00010000'" CKPT1 FILE IS NOT ACTIVE
		.... 1...		$CKRCKP2	"B'00001000'" CKPT2 FILE IS ACTIVE
		.... .1..		$CKRNKP2	"B'00000100'" CKPT2 FILE IS NOT ACTIVE
		.... ..1.		$CKRIOE	"B'00000010'" PROCESSING I/O ERROR
		1		$CKRNIOE	"B'00000001'" NOT PROCESSING I/O ERROR
					Comment
					THESE NEXT TWO BIT DEFINITIONS MUST NOT BE THE SAME AS $CKRIOE OR $CKRNIOE. (MAPPED OVER $CKRTOP AND $CKRNTOP FOR THE HASP273 MESSAGE)
					End of Comment
		1...		$CKRSTRT	"B'10000000'" CHECKPOINT FILE BEING PLACED BACK INTO SERVICE (OPTION 7 OR 8) RESPONSE TO HASP271/272

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
		.1..		$CKRNSTR	"B'01000000'" CHECKPOINT FILE BEING ASSIGNED TO NEWCKPTN

Comment

THESE NEXT TWO BIT DEFINITIONS MUST BE MAPPED OVER $CKRTOP AND
$CKRNTOP FOR THE HASP282 AND HASP278 MESSAGES

End of Comment

		1...		$CKRDEL	"B'10000000'" DELETE OPTION VALID
		.1..		$CKRNDEL	"B'01000000'" DELETE OPTION IS NOT VALID EXTENSION AREA MAPPING
0	(0)	X'0'	0	$JEXTTGN	"0,2,C'H'" TRACK GROUP NUMBER, MUST BE 1ST
0	(0)	X'2'	0	$JEXTLEN	"L'$JEXTTGN" LENGTH OF EXTENSION AREA
		1...		$JEXTFRE	"X'80'" Extension area is free if high order bit is on
0	(0)	BITSTRING	0	$JEXTMAX	"X'7FFF'" Maximum TG count in JQT or in JQETGNUM

Comment

EQUATES USED TO MARK THE EXTRA CONTROL BYTES TO REFLECT
HOW THE PAGE WAS LAST UPDATED.
ALGORITHMS IN JES2 DEPEND ON THE FIRST FOUR EQUATES
RESIDING IN THE LOW NIBBLE OF THE CONTROL BYTE

End of Comment

		1		CKPCLCKP	"B'00000001'" $CKPT ROUTINE MARKED PAGE
		.... ..1.		CKPCLRDC	"B'00000010'" IN KAFTRD2, CHLOG ON OTHER
		.... .1..		CKPCLRDP	"B'00000100'" IN KAFTRD2, 4K PG ON OTHER
		.... 1...		CKPCLBCL	"B'00001000'" IN KBLDCHLG, IN OUR CHLOG
		 1111		CKPCLMRK	"B'00001111'" MARKED BY HASPCKAP SUBTASK (ALSO USED TO TEST LOW NIBBLE)
		1...		CKPCLCRW	"B'10000000'" PAGE UPDATED FOR CURRENT I/O
		.1..		CKPCLCMW	"B'01000000'" PAGE UPDATED SINCE LAST PRIMARY WRITE IN THIS CYCLE

Comment

Requests types for the CKPT on CF subtask (must be
the same as those in $CFCON)

End of Comment

0	(0)	X'1'	0	CFREQ_T1IO	"1" ID for track 1 I/O
0	(0)	X'2'	0	CFREQ_READ2	"2" ID for READ2 request
0	(0)	X'3'	0	CFREQ_WRITE	"3" ID for WRITE request
0	(0)	X'4'	0	CFREQ_LOCK	"4" ID for lock request
0	(0)	X'5'	0	CFREQ_UNLCK	"5" ID for unlock request
0	(0)	X'6'	0	CFREQ_FMT	"6" ID for FORMAT request JES PROCESSING SUBPOOLS
0	(0)	X'0'	0	$SP0	"0" General purpose subpool
0	(0)	X'4'	0	CKPTPOOL	"4" Subpool for CKC/CKB
0	(0)	X'5'	0	BATPOOL	"5" Subpool for BAT
0	(0)	X'6'	0	BSCPOOL	"6" Subpool for BSC
0	(0)	X'7'	0	CBPOOL	"7" Subpool for Control Blocks
0	(0)	X'8'	0	HASPPOOL	"8" Subpool for HASP Buffers
0	(0)	X'9'	0	NATPOOL	"9" Subpool for NAT
0	(0)	X'A'	0	B32KPOOL	"10" Subpool for 32K buffers
0	(0)	X'B'	0	NMAPPOOL	"11" Subpool for NMAP
0	(0)	X'C'	0	NSAPOOL	"12" Subpool for NSA
0	(0)	X'D'	0	NTQPOOL	"13" Subpool for NTQ
0	(0)	X'E'	0	PAGEPOOL	"14" Subpool for PAGE Buffers
0	(0)	X'F'	0	PPPOOL	"15" Subpool for PP Buffers
0	(0)	X'10'	0	VTAMPOOL	"16" Subpool for VTAM Buffers
0	(0)	X'11'	0	XRQPOOL	"17" Subpool for XCF requests
0	(0)	X'12'	0	SMFPOOL	"18" Subpool for SMF requests
0	(0)	X'13'	0	CFPOOL	"19" Subpool for CF data

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	X'14'	0	CMBPOOL	"20" Subpool for CMBs
0	(0)	X'15'	0	PLXPOOL	"21" Subpool for PLX dyn areas
0	(0)	X'16'	0	HEDRPOOL	"22" Subpool for NJE hdr/trlr buffers
0	(0)	X'17'	0	TINTPOOL	"23" Subpool for temporary CBs used during initialization
0	(0)	X'18'	0	PERFPOOL	"24" Subpool for performance tracking related storage
0	(0)	X'19'	0	PCEPOOL	"25" Subpool for PCEs
0	(0)	X'1A'	0	ICEPOOL	"26" Subpool for ICEs
0	(0)	X'1B'	0	PSOPOOL	"27" Subpool for PSOs
0	(0)	X'1C'	0	RNTPOOL	"28" Subpool for RNTs
0	(0)	X'84'	0	$SP132	"132" Non-fetch protected private
0	(0)	X'E5'	0	$STSUBP	"229" SUBPOOL FOR SECURITY TOKENS FETCH PROTECTED, USER KEY
0	(0)	X'E7'	0	$SPCSAF	"231" CSA, fetch protected, user key
0	(0)	X'F1'	0	$ENFPPOL	"241" Subpool for ENF parm lists; ENF parm lists must be in CSA EVENT TRACE FORMATTING EQUS
		.... 1..1		TRCCWSP1	"X'09'" WRITE-THEN-SPACE-1 CC
		...1 ...1		TRCCWSP2	"X'11'" WRITE-THEN-SPACE-2 CC
		...1 1..1		TRCCWSP3	"X'19'" WRITE-THEN-SPACE-3 CC
0	(0)	X'79'	0	TRCLRECL	"121" MAX LOGICAL RECORD LENGTH PRINTER LOG AREA LENGTHS
0	(0)	X'23A'	0	DYNL3211	"570" SIZE OF 3211 LOG AREA
0	(0)	X'10E'	0	DYNL3800	"270" SIZE OF 3800 MDR AREA
0	(0)	X'250'	0	DYNL3203	"592" SIZE OF 3203 LOG AREA
0	(0)	X'250'	0	DYNL4245	"592" SIZE OF 4245 LOG AREA
0	(0)	X'100'	0	DYNL4248	"256" SIZE OF 4248 LOG AREA

Comment

```
-----------------------------------------------------------------
      OUTPUT GROUP DISPOSITION COMMON EQUATES
-----------------------------------------------------------------
```

End of Comment

		...1		$ODPURGE	"B'00010000'" OUTDISP=PURGE
		.... 1...		$ODWRITE	"B'00001000'" OUTDISP=WRITE
		.... .1..		$ODHOLD	"B'00000100'" OUTDISP=HOLD
		.... ..1.		$ODKEEP	"B'00000010'" OUTDISP=KEEP
		1		$ODLEAVE	"B'00000001'" OUTDISP=LEAVE
0	(0)	X'F'	0	$ODANY	"$ODWRITE+$ODHOLD+$ODKEEP+$ODLEAVE" TEST FOR OUTDISP W/O PURGE
0	(0)	X'1F'	0	$ODANYWP	"$ODWRITE+$ODHOLD+$ODKEEP+$ODLEAVE+$ODPURGE" TEST FOR OUTDISP WITH PURGE MAPPING OF CATASTROPHIC ERROR USER ENTRY
0	(0)	X'0'	0	$ERRCDE	"0,4" POSITION/LENGTH OF CATA ERR CODE IN TABLE
0	(0)	X'4'	0	$ERRTEXT	"4,42" POSITION/LENGTH OF CATA ERR TEXT IN TABLE
0	(0)	X'2E'	0	$ERRENTY	"L'$ERRCDE+L'$ERRTEXT" LENGTH OF AN ENTRY IN TABLE HASP $SCAN CALLER ID FLAGS, USERS SHOULD USE IDS FROM 255 DOWN, IF NEEDED
0	(0)	X'1'	0	$SCOPTS	"1" IROPTS HASP OPTIONS
0	(0)	X'2'	0	$SCIRPL	"2" IRPL NONE-CONSOLE STMTS
0	(0)	X'3'	0	$SCIRPLC	"3" IRPL CONSOLE STMTS
0	(0)	X'4'	0	$SCDCMDS	"4" DISPLAY COMMANDS
0	(0)	X'5'	0	$SCSCMDS	"5" SET COMMANDS
0	(0)	X'6'	0	$SCDOCMD	"6" SHORT DISPLAY FORM
0	(0)	X'7'	0	$SCSTCMD	"7" START COMMANDS
0	(0)	X'8'	0	$SCPCMDS	"8" STOP COMMANDS
0	(0)	X'9'	0	$SCDDIAL	"9" DIALOG DISPLAY FORM
0	(0)	X'A'	0	$SCSDIAL	"10" DIALOG SET FORM
0	(0)	X'B'	0	$SCECMDS	"11" RESET COMMANDS (list)
0	(0)	X'C'	0	$SCACMDS	"12" ADD COMMANDS
0	(0)	X'D'	0	$SCRCMDS	"13" DELETE COMMANDS
0	(0)	X'E'	0	$SCIDIAL	"14" DIALOG (INITIALIZATION)
0	(0)	X'F'	0	$SCLTCMD	"15" Output long display
0	(0)	X'10'	0	$SCECMDA	"16" RESET COMMANDS (single)

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	X'11'	0	$SCZCMDS	"17" HALT commands
0	(0)	X'12'	0	$SCHCMDS	"18" HOLD commands
0	(0)	X'13'	0	$SCRLCMD	"19" RELEASE commands
0	(0)	X'14'	0	$SCCCMDS	"20" CANCEL commands
0	(0)	X'15'	0	$SCTOCMD	"21" $TO commands
0	(0)	X'16'	0	$SCCOCMD	"22" $CO commands
0	(0)	X'17'	0	$SCPOCMD	"23" $PO commands
0	(0)	X'18'	0	$SCOCMDS	"24" $O command
0	(0)	X'19'	0	$SCLOCMD	"25" Output short display
0	(0)	X'1A'	0	$SCLCMDS	"26" $L command
0	(0)	X'1B'	0	$SCACTCM	"27" $ACTIVATE command
0	(0)	X'1C'	0	$SCZAPCM	"28" $ZAP command HASP $SCAN WARNING MASK EQUATES
		1...		$SCWOBS	"B'10000000'" WARN FOR OBSOLETE PARAMETERS
		.1..		$SCWHOTS	"B'01000000'" WARN FOR HOT START
		..11 11..		$SCWIBM	"B'00111100'" RESERVED FOR FUTURE USE
		11		$SCWINST	"B'00000011'" RESERVED FOR INSTALLATION HASP $SCAN DIAGNOSTIC LEVEL TABLE EQUATE VALUES
0	(0)	X'0'	0	SDLTBADD	"0,4,C'A'" ADDR OF THE KEYWORD BACKUP AREA
0	(0)	X'4'	0	SDLTLEN	"4" LEN OF DIAG LVL TABLE ENTRY
0	(0)	X'A'	0	SDLTNUM	"10" Number of SDLT entries (one is reserved to end the table and will never point to a backup area HASP $SCAN EQUATES FOR INDEXING INTO THE DYNAMIC DIAGNOSTIC ERROR MESSAGES
0	(0)	X'0'	0	DIAGADDR	"0,4" ADDRESS OF THE DIAGNOSTIC TEMPLATE
0	(0)	X'4'	0	DIAGKLOC	"4,1" LEN INTO THE PHRASE WHERE OPERAND IS TO BE PLACED
0	(0)	X'5'	0	DIAGKLEN	"5,1" MAX LEN OF OPERAND TO BE PLACED

Comment

Equates for dynamic tables

End of Comment

0	(0)	X'0'	0	PAIRUSER	"0,4" User table
0	(0)	X'4'	0	PAIRHASP	"4,4" HASP table
0	(0)	X'8'	0	PAIRDYN	"8,4" Dynamic table (pointer to cell)
0	(0)	X'C'	0	PAIRLEN	"12" Table pair length

Comment

Dynamic cell mapping

End of Comment

0	(0)	X'0'	0	DYNTEYE	"0,4,C'C'" Eyecatcher
0	(0)	X'4'	0	DYNTNEXT	"4,4" Pointer to next cell
0	(0)	X'8'	0	DYNTTAB	"8,4" Pointer to table
0	(0)	X'C'	0	DYNTTYPE	"12,1" Table type (see MTETBTYP)
0	(0)	X'10'	0	DYNTLEN	"16" Length of dynamic table cell HASP $SCAN EQUATES FOR INDEX INTO THE DIAGNOSTIC MSG TABLE BASE ON THE REASON CODES
0	(0)	X'4'	0	SCNDR01	"4" PTR TO DIAGINV MESSAGE ADDR
0	(0)	X'8'	0	SCNDR03	"SCNDR01+4" PTR TO DIAGNSP MESSAGE ADDR
0	(0)	X'C'	0	SCNDR04	"SCNDR03+4" PTR TO DIAGSSER MESSAGE ADDR
0	(0)	X'10'	0	SCNDR05	"SCNDR04+4" PTR TO DIAGVERR MESSAGE ADDR
0	(0)	X'14'	0	SCNDR06	"SCNDR05+4" PTR TO DIAGIVAL MESSAGE ADDR
0	(0)	X'18'	0	SCNDR07	"SCNDR06+4" PTR TO DIAGRTYP MESSAGE ADDR
0	(0)	X'1C'	0	SCNDR08	"SCNDR07+4" PTR TO DIAGBRAN MSG ADDR
0	(0)	X'20'	0	SCNDR09	"SCNDR08+4" PTR TO DIAGSRNG MESSAGE ADDR
0	(0)	X'24'	0	SCNDR10	"SCNDR09+4" PTR TO DIAGLRNG MESSAGE ADDR
0	(0)	X'28'	0	SCNDR11	"SCNDR10+4" PTR TO DIAGDCOR MESSAGE ADDR
0	(0)	X'2C'	0	SCNDR12	"SCNDR11+4" PTR TO DIAGROM MESSAGE ADDR
0	(0)	X'30'	0	SCNDR13	"SCNDR12+4" PTR TO DIAGVND MESSAGE ADDR
0	(0)	X'34'	0	SCNDR14	"SCNDR13+4" PTR TO DIAGMLDX MESSAGE ADDR

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	X'38'	0	SCNDR17	"SCNDR14+4" PTR TO DIAGIRTE MESSAGE ADDR
0	(0)	X'3C'	0	SCNDR18	"SCNDR17+4" PTR TO DIAGIRC MESSAGE ADDR
0	(0)	X'40'	0	SCNDR19	"SCNDR18+4" PTR TO DIAGIACT MESSAGE ADDR
0	(0)	X'44'	0	SCNDR21	"SCNDR19+4" PTR TO DIAGIRDV MESSAGE ADDR
0	(0)	X'48'	0	SCNDR22	"SCNDR21+4" PTR TO DIAGNULI MESSAGE ADDR
0	(0)	X'4C'	0	SCNDR23	"SCNDR22+4" PTR TO DIAGCMT MESSAGE ADDR
0	(0)	X'50'	0	SCNDR24	"SCNDR23+4" PTR TO DIAGGMER MESSAGE ADDR
0	(0)	X'54'	0	SCNDR25	"SCNDR24+4" PTR TO DIAGDERR MESSAGE ADDR
0	(0)	X'58'	0	SCNDR26	"SCNDR25+4" PTR TO DIAGABND MESSAGE ADDR
0	(0)	X'5C'	0	SCNDR27	"SCNDR26+4" PTR TO DIAGINTR MESSAGE ADDR
0	(0)	X'60'	0	SCNDR28	"SCNDR27+4" PTR TO DIAGCBRD MESSAGE ADDR

Comment

IDS 31 - 38, 47 - 51 AND 60 - 61 RESERVED FOR $MODCHK

End of Comment

0	(0)	X'64'	0	SCNDR39	"SCNDR28+4" PTR TO DIAGINCM MESSAGE ADDR
0	(0)	X'68'	0	SCNDR40	"SCNDR39+4" PTR TO DIAGMWTO MESSAGE ADDR
0	(0)	X'6C'	0	SCNDR41	"SCNDR40+4" PTR TO DIAGSPIN MESSAGE ADDR

Comment

ID 42 IS RESERVED FOR FUTURE USE.

End of Comment

0	(0)	X'70'	0	SCNDR43	"SCNDR41+4" PTR TO DIAGMTTB MESSAGE ADDR
0	(0)	X'74'	0	SCNDR44	"SCNDR43+4" PTR TO DIAGOBS MESSAGE ADDR
0	(0)	X'78'	0	SCNDR45	"SCNDR44+4" PTR TO DIAGHOT MESSAGE ADDR
0	(0)	X'7C'	0	SCNDR46	"SCNDR45+4" PTR TO DIAGWARN MESSAGE ADDR
0	(0)	X'80'	0	SCNDR52	"SCNDR46+4" PTR TO DIAGNFL MESSAGE ADDR
0	(0)	X'84'	0	SCNDR54	"SCNDR52+4" PTR TO DIAGINOD MESSAGE ADDR
0	(0)	X'88'	0	SCNDR55	"SCNDR54+4" PTR TO DIAGACTE MESSAGE ADDR
0	(0)	X'8C'	0	SCNDR56	"SCNDR55+4" PTR TO DIAGNFLC MESSAGE ADDR
0	(0)	X'90'	0	SCNDR57	"SCNDR56+4" PTR TO DIAGTMO MESSAGE ADDR
0	(0)	X'94'	0	SCNDR58	"SCNDR57+4" PTR TO DIAGGENE MESSAGE ADDR
0	(0)	X'98'	0	SCNDR59	"SCNDR58+4" PTR TO DIAGIAER MESSAGE ADDR

Comment

THIS SPACE IS RESERVED FOR REASON CODE 60 FOR $MODCHK
THIS SPACE IS RESERVED FOR REASON CODE 61 FOR $MODCHK

End of Comment

0	(0)	X'9C'	0	SCNDR62	"SCNDR59+4" PTR TO DIAGCONV MSG ADDR
0	(0)	X'A0'	0	SCNDR63	"SCNDR62+4" PTR TO DIAGFCST MSG ADDR
0	(0)	X'A4'	0	SCNDR64	"SCNDR63+4" PTR TO DIAGNOPM MSG ADDR
0	(0)	X'A8'	0	SCNDR65	"SCNDR64+4" PTR TO DIAGUNSD MSG ADDR
0	(0)	X'AC'	0	SCNDR66	"SCNDR65+4" PTR TO DIAGNXST MSG ADDR
0	(0)	X'B0'	0	SCNDR67	"SCNDR66+4" PTR TO DIAGFUDF MSG ADDR
0	(0)	X'B4'	0	SCNDR68	"SCNDR67+4" PTR TO DIAGSSEL MSG ADDR
0	(0)	X'B8'	0	SCNDR69	"SCNDR68+4" PTR TO DIAGDUAL MSG ADDR
0	(0)	X'BC'	0	SCNDR70	"SCNDR69+4" PTR TO DIAGVVAL MSG ADDR
0	(0)	X'C0'	0	SCNDR71	"SCNDR70+4" PTR TO DIAGLNSH MSG ADDR
0	(0)	X'C4'	0	SCNDR72	"SCNDR71+4" PTR TO DIAGRJER MSG ADDR
0	(0)	X'C8'	0	SCNDR73	"SCNDR72+4" PTR TO DIAGLVL MSG ADDR
0	(0)	X'CC'	0	SCNDR74	"SCNDR73+4" Ptr to DIAGCKPT msg addr
0	(0)	X'D0'	0	SCNDR75	"SCNDR74+4" Ptr to DIAGDPLX msg addr
0	(0)	X'D4'	0	SCNDR76	"SCNDR75+4" PTR TO DIAGFLST MSG ADDR
0	(0)	X'D8'	0	SCNDR77	"SCNDR76+4" PTR TO DIAGFLRQ MSG ADDR
0	(0)	X'DC'	0	SCNDR78	"SCNDR77+4" PTR TO DIAGMULJ MSG ADDR
0	(0)	X'E0'	0	SCNDR79	"SCNDR78+4" PTR TO DIAGPSCN MSG ADDR
0	(0)	X'E4'	0	SCNDR80	"SCNDR79+4" PTR TO DIAGPSC2 MSG ADDR
0	(0)	X'E8'	0	SCNDR81	"SCNDR80+4" PTR TO DIAGCAUT MSG ADDR

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	X'EC'	0	SCNDR82	"SCNDR81+4" PTR TO DIAGFIKY MSG ADDR
0	(0)	X'F0'	0	SCNDR83	"SCNDR82+4" PTR TO DIAGFIDL MSG ADDR
0	(0)	X'F4'	0	SCNDR84	"SCNDR83+4" PTR TO DIAGBUSY MSG ADDR
0	(0)	X'F8'	0	SCNDR85	"SCNDR84+4" PTR TO DIAGPROT MSG ADDR
0	(0)	X'FC'	0	SCNDR86	"SCNDR85+4" PTR TO DIAGNOSP MSG ADDR
0	(0)	X'100'	0	SCNDR87	"SCNDR86+4" PTR TO DIAGGTLT MSG ADDR
0	(0)	X'104'	0	SCNDR88	"SCNDR87+4" PTR TO DIAGRCRG MSG ADDR
0	(0)	X'108'	0	SCNDR89	"SCNDR88+4" PTR TO DIAGNOCN MSG ADDR
0	(0)	X'10C'	0	SCNDR90	"SCNDR89+4" PTR TO DIAGSCH MSG ADDR
0	(0)	X'110'	0	SCNDR91	"SCNDR90+4" PTR TO DIAGSERV MSG ADDR
0	(0)	X'114'	0	SCNDR92	"SCNDR91+4" PTR TO DIAGDMND MSG ADDR
0	(0)	X'118'	0	SCNDR93	"SCNDR92+4" PTR TO DIAGNXEQ MSG ADDR
0	(0)	X'11C'	0	SCNDR94	"SCNDR93+4" Ptr to DIAGQERR msg addr
0	(0)	X'120'	0	SCNDR95	"SCNDR94+4" Ptr to DIAGNBRT msg addr
0	(0)	X'124'	0	SCNDR96	"SCNDR95+4" Ptr to DIAGNTSN msg addr
0	(0)	X'128'	0	SCNDR97	"SCNDR96+4" Ptr to DIAGLPRM msg addr
0	(0)	X'12C'	0	SCNDR98	"SCNDR97+4" Ptr to DIAGINCL msg addr HASP599 BLDMSG Parm list mapping
0	(0)	X'0'	0	$599PIT	"0,4" PIT address
0	(0)	X'4'	0	$599SQD	"4,4" SQD Return Code
0	(0)	X'8'	0	$599XINI	"8,4" XINITST return code
0	(0)	X'C'	0	$599LEN	"12" Length of work area HASP446 BLDMSG Parm list mapping (keep in synch with $CKEMIGR macro in HASPIRDA)
0	(0)	X'9'	0	$446MVER	"9,1" Checkpoint master version
0	(0)	X'A'	0	$446CVER	"10,8" Checkpoint cold start vsn.

Comment

JOE/Writer Exclude List mapping.
Be sure to update HASMJWEL if this mapping changes.

End of Comment

0	(0)	X'0'	0	$JWEPTR	"0,4,C'A'" ADDRESS OF NEXT ELEMENT
0	(0)	X'4'	0	$JWENUM	"4,8,C'F'" NUMBER OF WRITER EXCLUDED
0	(0)	X'C'	0	$JWEDVID	"12,3,C'C'" DEVICE ID VALUE
0	(0)	X'F'	0	$JWEFLAG	"15,1,C'B'" Flag byte
		1...		$JWELONG	"B'10000000'" $JWENUM 8 bytes (only first 4 bytes valid if $JWELONG is off)
		.1..		$JWEBULK	"B'01000000'" JOE has been processed by current SAPI bulk modify request
0	(0)	X'10'	0	$JWELEN	"16" LEN OF JWEL TABLE ELEMENT

Comment

JWELTBL Anchor Equates
Offset 0 ($JWEPTR) is the address of the first JWEL
for the corresponding JOE
Offset 4 ($JWECRTM) is the time stamp of the JOE
creation. If this time stamp and the
JOECRTME do not match, then it is known
that the JWEL chain is obsolete.

EQU 0,4,C'A' ADDRESS OF THE FIRST ELEMENT

End of Comment

0	(0)	X'0'	0	$JWEFLG1	"0,1,C'B'" Flag bit in JWELTBL
0	(0)	X'4'	0	$JWECRTM	"4,4,C'X'" JOE creation time
0	(0)	X'8'	0	$JWETBLL	"8" Length of JWEL table anchor $JWEFLG1 EQUATES
		1...		$JW1NCLR	"B'10000000'" DO NOT CLEAR JWEL ELEMENTS

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
				Comment	
					EQU B'01111111' Do not attempt to use other
				End of Comment	
				Comment	
					HAMSVC OPERATION CODES
				End of Comment	
0	(0)	X'6F'	0	HAMSVC	"111" SVC 111 INTERFACE TO HASPAM
				Comment	
					EQU 0 Obsolete EQU 4 Obsolete
				End of Comment	
0	(0)	X'8'	0	HSVCIRD	"8" INTERNAL READER PUT OPERATION
				Comment	
					EQU 12 Obsolete EQU 16 Obsolete EQU 20 Obsolete EQU 24 Obsolete EQU 32 Obsolete EQU 36 Obsolete EQU 40 Obsolete EQU 44 Obsolete ---------- Constants used to process the performace data table in HASPTABS (used for the $D PERFDATA command) ----------
				End of Comment	
0	(0)	X'0'	0	PRFDNAME	"0,8,C'C'" Subscript type name
0	(0)	X'8'	0	PRFDIND	"8,1,C'X'" Indicator for subscript
0	(0)	X'1'	0	PRFDINTS	"1" INITSTAT subscript
0	(0)	X'2'	0	PRFDQSUS	"2" QSUSE subscript
0	(0)	X'3'	0	PRFDPCES	"3" PCESTAT subscript
0	(0)	X'4'	0	PRFDSAMP	"4" SAMPDATA subscript
0	(0)	X'5'	0	PRFDCPUS	"5" CPUSTAT subscript
0	(0)	X'6'	0	PRFDEVNT	"6" EVENTS subscript
0	(0)	X'7'	0	PRFDCKPT	"7" CKPTSTAT subscript
0	(0)	X'C'	0	PRFDLEN	"12" Length of table entry
				Comment	
					---------- The following fields define the data area returned from XCFMSTAT. This data area is always 4096 in size. The first 2 words are the count of active 'NOT OUR MAS' members and the second is the number of active 'IN OUR MAS' members. For the 'NOT OUR MAS' members, an array of member names and reason they are not thought to be our MAS is provided. ----------
				End of Comment	
0	(0)	X'1000'	0	XCFMSIZE	"4096" Size of the data area

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	X'0'	0	XCFMTHEM	"0,4,C'F'" Number of active members in our group and not in our MAS
0	(0)	X'4'	0	XCFMUS	"4,4,C'F'" Number of active members in our group and our MAS
0	(0)	X'8'	0	XCFMLIST	"8,18,C'X'" First 'NOT US' member data
0	(0)	X'0'	0	XCFMMEMN	"0,16,C'C'" XCF member name
0	(0)	X'10'	0	XCFMMEMR	"16,1,C'X'" Reason 'NOT US'
0	(0)	X'11'	0	XCFMMEMF	"17,1,C'X'" Copy of XMAUSFLG
0	(0)	X'4'	0	XCFMRSJ2	"4" Not JES2
0	(0)	X'8'	0	XCFMRSNM	"8" Incorrect member name
0	(0)	X'C'	0	XCFMRSCS	"12" Different cold start

Comment

The following fields define the data area passed to
$BLDMSG to build the HASP791 message.

End of Comment

0	(0)	X'0'	0	M791NAME	"0,4" Member name
0	(0)	X'4'	0	M791GRP	"4,8" XCF GROUP name
0	(0)	X'C'	0	M791PLX	"12,8" XCF SYSPLEX name
0	(0)	X'14'	0	M791PXID	"20,8" XCF SYSPLEX id
0	(0)	X'1C'	0	M791LEN	"28" Entry length

Comment

The following fields define the data area passed to
$BLDMSG to build the HASP710 message.

End of Comment

0	(0)	X'0'	0	M710ENT	"0,5,C'X'" Table entry (1 per member)
0	(0)	X'0'	0	M710MEM	"0,4,C'C'" Member name
0	(0)	X'4'	0	M710RSN	"4,1,C'X'" Reason code
0	(0)	X'1'	0	M710UP	"1" Member is up level
0	(0)	X'2'	0	M710DOWN	"2" Member is down level

Comment

The following fields define the data area passed to
$BLDMSG to build the HASP474 message.

End of Comment

0	(0)	X'0'	0	M474ENT1	"0,12" Data area 1
0	(0)	X'C'	0	M474ENT2	"M474ENT1+L'M474ENT1,12" Data area 2
0	(0)	X'18'	0	M474BTRN	"M474ENT2+L'M474ENT2,4" CBTYPE BRTRANS
0	(0)	X'1C'	0	M474PRML	"M474BTRN+L'M474BTRN" Total length

Comment

Each of the 12-byte areas above is further mapped
as follows:

End of Comment

0	(0)	X'0'	0	M474ENBT	"0,4" BRTRANS address
0	(0)	X'4'	0	M474ENLO	"4,4" Low offset
0	(0)	X'8'	0	M474ENHI	"8,4" High offset

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
					Comment
					Define individual fields in each of the 2 areas
					End of Comment
0	(0)	X'0'	0	M474E1BT	"M474ENT1+M474ENBT,L'M474ENBT" BRTRANS addr 1
0	(0)	X'4'	0	M474E1LO	"M474ENT1+M474ENLO,L'M474ENLO" Low offset 1
0	(0)	X'8'	0	M474E1HI	"M474ENT1+M474ENHI,L'M474ENHI" High offset 1
0	(0)	X'C'	0	M474E2BT	"M474ENT2+M474ENBT,L'M474ENBT" BRTRANS addr 2
0	(0)	X'10'	0	M474E2LO	"M474ENT2+M474ENLO,L'M474ENLO" Low offset 2
0	(0)	X'14'	0	M474E2HI	"M474ENT2+M474ENHI,L'M474ENHI" High offset 2 HASP MODULE DIRECTORY ENTRY
0	(0)	X'0'	0	MAPNAME	"0,8" MODULE NAME
0	(0)	X'8'	0	MAPADDR	"8,4" MODULE ADDRESS
0	(0)	X'8'	0	MAPMITA	"8,4" MIT ADDRESS
0	(0)	X'C'	0	MAPBASE	"12,4" ALT MOD BASE FOR REP FACILITY
0	(0)	X'10'	0	MAPENTL	"16" MODMAP ENTRY LENGTH
0	(0)	X'10'	0	TMAPLMOD	"16,8" Load module name, in $SCAN temporary MODMAP only
0	(0)	X'18'	0	TMAPADDC	"24,4" Address check value for dup name/addr in temp MODMAP
0	(0)	X'1C'	0	TMAPENTL	"28" Temporary MODMAP entry len TAPE LABEL EQUATES FOR OFFLOADS
		1		$LABNL	"X'01'" NL - NON-LABELED
		.... ..1.		$LABSL	"X'02'" SL - STANDARD LABEL
		.... .1..		$LABNSL	"X'04'" NSL - NON-STANDARD LABEL
		.... 1.1.		$LABSUL	"X'0A'" SUL - STANDARD USER LABEL
		...1		$LABBLP	"X'10'" BLP - BYPASS LABEL PROCESS
		.1..		$LABAL	"X'40'" AL - AMERICAN NATIONAL STD
		.1.. 1...		$LABAUL	"X'48'" AUL - AMERICAL NATIONAL STD USER LABEL MISCELLANEOUS DYNALLOC EQUATES
0	(0)	BITSTRING	0	$DYNLOCF	"X'1708'" LOCATE FAILURE REASON CODE
		.... .1..		$DYNNEW	"X'04'" DISP=NEW TEXT VALUE Miscellaneous WLM Equates
0	(0)	X'E4C'	0	$HOURPLUS	"61*60" One hour plus (61 minutes)
					Comment
					WAIT ELEMENT MAPPING
					End of Comment
0	(0)	X'0'	0	WTCHAIN	"0,4" CHAIN FIELD (HDR IS IN CCTIRWT)
0	(0)	X'4'	0	WTUNECB	"4,4" ECB FOR UNALLOCATE TO POST
0	(0)	X'8'	0	WTXMECB	"8,4" ECB POINTER FOR XMPOST
0	(0)	X'C'	0	WTASCBPT	"12,4" ASCB POINTER FOR XMPOST
0	(0)	X'10'	0	WTERRET	"16,4" ERRET POINTER FOR XMPOST
0	(0)	X'14'	0	WTECBL1	"20,4" ECBLIST1 - POINTER TO CANCEL ECB
0	(0)	X'18'	0	WTECBL2	"24,4" ECBLIST2 - POINTER TO ABOVE ECB
0	(0)	X'1C'	0	WTASTOKN	"28,8" STOKEN for address space
0	(0)	X'24'	0	WTLENGTH	"36" Length of wait element
					Comment
					---------- Equates for $XMPOST parameter list mapping. ----------
					End of Comment
0	(0)	X'0'	0	$XMPERET	"0,4" ERRET address
0	(0)	X'4'	0	$XMPECBP	"4,4" Address of ECB to POST
0	(0)	X'8'	0	$XMPASCB	"8,4" Address of associated ASCB
0	(0)	X'C'	0	$XMPECB	"12,4" ECB to POST

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
				Comment	
					HAVT high bit definition.
				End of Comment	
		1...		HAVTNLOG	"B'10000000'" High bit on in HAVT entry ==> no job log
				Comment	
					$GETWORK table element mapping
				End of Comment	
0	(0)	X'0'	0	GTWKTSIZ	"0,2" Size of work area
0	(0)	X'2'	0	GTWKTPID	"2,1" Pool id
0	(0)	X'3'	0	GTWKTFLG	"3,1" Storage location flag
0	(0)	X'20'	0	GTWKTANY	"$GTWKLOC" Pool LOC=ANY
0	(0)	X'10'	0	GTWKRO	"$GTWKRO" Pool is read only
0	(0)	X'30'	0	GTWKDIS	"GTWKTANY+GTWKRO" Pool discriminates
0	(0)	X'4'	0	GTWKTNXT	"4,4" Address of next available work area
0	(0)	X'8'	0	GTWKTCEL	"8,4" Number of cells obtained
0	(0)	X'C'	0	GTWKTUSE	"12,4" Number of cells in use
0	(0)	X'10'	0	GTWKTESZ	"16" Size of table entry
				Comment	
					INLINE PARMLIST EQUATES GENERALIZED INLINE PARAMETER LIST EQUS
				End of Comment	
0	(0)	X'0'	0	$ILPSIZE	"0,1" OFFSET TO SIZE OF INLINE PARAMETER LIST (1 BYTE)
0	(0)	X'1'	0	$ILPFLG1	"1,1" OFFSET TO GENERAL FLAG BYTE 1
0	(0)	X'2'	0	$ILPFLG2	"2,1" OFFSET TO GENERAL FLAG BYTE 2
0	(0)	X'3'	0	$ILPFLG3	"3,1" OFFSET TO GENERAL FLAG BYTE 3
				Comment	
					SPECIFIC INLINE PARMLIST EQUATES $#GET MACRO OPTION FLAGS
				End of Comment	
		1...		$GTHAVNO	"B'10000000'" NO JOE RETURNED
		.1..		$GTCHNNO	"B'01000000'" NO CHAINING REQUIRED
		..1.		$GTIOTYS	"B'00100000'" RETURN THE IOT TO CALLER
		...1		$GTNET	"B'00010000'" NETWORK QUEUE
		.... 1...		$GTWRKSL	"B'00001000'" USE WORK SELECTION
		.... .1..		$GTWSP	"B'00000100'" WSP in R1, not DCT
		.... ..1.		$GTNOSAF	"B'00000010'" No SAF call
		1		$GTCOUNT	"B'00000001'" Count lines/pages/bytes
0	(0)	X'2'	0	$GTPARML	"2" $#GET Parameter list length $#POST MACRO OPTION FLAGS
		1...		$PSTMASP	"B'10000000'" RESET JOE'S JOTPOST FLAG
0	(0)	X'0'	0	$PSTJOE	"0" TYPE=JOE $#POST CALL
0	(0)	X'4'	0	$PSTJQE	"4" TYPE=JQE $#POST CALL
0	(0)	X'8'	0	$PSTXMIT	"8" TYPE=XMIT $#POST CALL
0	(0)	X'C'	0	$PSTMSG	"12" TYPE=MSG $#POST CALL $#REM MACRO OPTION FLAGS
		1...		$REMPURG	"B'10000000'" PURGE THE SPIN IOT TRACKS

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
					Comment
					REMWAIT EQU B'01000000' Not available for use due to coexistence with SP510
					End of Comment
		..1.		$REMLOCK	"B'00100000'" Caller has job lock
		...1		$REMKPJQ	"B'00010000'" JQE must not be purged even if last JOE is being REMed $SJIOBIT MACRO OPTION FLAGS
		1...		$SJITEMP	"B'10000000'" TEMPORARY SJIOB REQUESTED
		.1..		$SJIFREE	"B'01000000'" FREE SJIOB REQUESTED
		..1.		$SJINSJB	"B'00100000'" NO SJB REQUIRED
		...1		$SJIINIT	"B'00010000'" INIT SJIOB REQUESTED
		.... 1...		$SJIGNYC	"B'00001000'" UNCONDITIONAL GET SJIOB $QJIX MACRO ACTION FLAGSS
		1...		$JIXGET	"B'10000000'" FLAG FOR ALLOCATE JOB#
		.1..		$JIXFREE	"B'01000000'" FLAG FOR DEALLOCATE JOB#
		..1.		$JIXSWAP	"B'00100000'" FLAG FOR SWAP JOB NUMBER
		...1		$JIXFOMT	"B'00010000'" FLAG FOR INITIALIZE JIX
		.... 1...		$JIXVERI	"B'00001000'" FLAG FOR VERIFY JIX
		1		$JIXWYES	"B'00000001'" $WAIT IS REQUESTED FOR NEW JOB#
		....		$JIXWNO	"B'00000000'" NO $WAIT REQUESTED FOR NEW JOB# $CHECK MACRO OPTION FLAGS
		1...		$CHECINH	"B'10000000'" INHIBIT=YES WAS SPECIFIED
		.1..		$CHECNWA	"B'01000000'" WAIT=NO was specified $CKPALOC MACRO OPTION FLAGS
		1...		$CKAOLD	"B'10000000'" OLD=YES WAS SPECIFIED
		.1..		$CKANEW	"B'01000000'" NEW=YES WAS SPECIFIED
		..1.		$CKADEF	"B'00100000'" NEW=DEFER was specified $CKPT MACRO OPTION FLAGS
		1...		$CKPPOST	"B'10000000'" $POST CKPT
		.1..		$CKPUNK	"B'01000000'" Unknown ID $DCBDYN MACRO OPTION FLAGS
		1...		$BDYNATT	"B'10000000'" DCB ATTACH REQUEST
		.1..		$BDYNDET	"B'01000000'" DCB DETACH REQUEST $DCTDYN MACRO OPTION FLAGS
		1...		$DDYNATT	"B'10000000'" DCT ATTACH REQUEST
		.1..		$DDYNFND	"B'01000000'" DCT FIND REQUEST $DISTERR Macro options flags
		1...		$DSTRJQE	"B'10000000'" JQE= specified on macro
		.1..		$DSTRJCT	"B'01000000'" JCT= specified on macro $DTEDYN MACRO OPTION FLAGS
		1...		$DTEPARM	"B'10000000'" PARM PARMETER SPECIFIED
		.1..		$DTEPECB	"B'01000000'" ECB TYPE WAIT SPECIFIED
		..1.		$DTEPXCB	"B'00100000'" XECB TYPE WAIT SPECIFIED $EXCP MACRO OPTION FLAGS
		1...		$EXCPVR	"B'10000000'" I/O VIA EXCPVR INDICATOR
		.1..		$EXCPWT	"B'01000000'" $WAIT FOR I/O TO COMPLETE
		..1.		$EXCPMT	"B'00100000'" Validate MTTR $FRECMB MACRO OPTION FLAGS
		1...		$FCMBCNT	"B'10000000'" BUMP CMB COUNT $FREEBUF MACRO OPTION FLAGS
		1...		$FBUFMLT	"B'10000000'" FREE MULTIPLE BUFFERS $GETBUF MACRO OPTION FLAGS
		1...		$GBUFWT	"B'10000000'" INDICATE $WAIT ALLOWED $GETSMFB MACRO OPTIONS FLAGS
		1...		$GSMFBWT	"B'10000000'" INDICATE $WAIT ALLOWED
		.1..		$GSMFBLG	"B'01000000'" INDICATE LARGE SMF BUFFER SPECIFIED $GETWORK MACRO OPTION FLAGS
		1...		$GTWKCND	"B'10000000'" ERRET=, CONDITIONAL ENTRY
		.1..		$GTWKWAT	"B'01000000'" WAIT=YES, $WAIT FOR MAIN

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
					Comment
					---------- Ensure that chacterizing bits (ones that differentiate otherwise equal pools in the getwork table) are defined in the same way here as they in the GETPOOL equates in the $GETWORK routine. ----------
					End of Comment
		..1.		$GTWKLOC	"B'00100000'" LOC=ANY was specified
		...1		$GTWKRO	"B'00010000'" Pool is read only
					Comment
					---------- End of pool discriminates ----------
		- $MODCHK MACRO OPTION AND TEST FLAGS			
					End of Comment
		1...		$MCMSG	"B'10000000'" MESSAGE=YES SPECIFIED
0	(0)	X'2'	0	$MCBYTES	"2" NUMBER OF BYTES FOR TEST FLAGS $MCBYTES*8 MUST BE LARGER THAN OR EQUAL TO $MCNTEST
0	(0)	X'8'	0	$MCNTEST	"8" NUMBER OF TESTS NOW DEFINED
0	(0)	BITSTRING	0	$MCRMD24	"B'1000000000000000'" MODULE RESIDES BELOW 16MEG LINE
0	(0)	BITSTRING	0	$MCCOMMN	"B'0100000000000000'" MODULE IN COMMON STORAGE
0	(0)	BITSTRING	0	$MCMIT	"B'0010000000000000'" MODULE LARGE ENOUGH FOR MIT, MIT ID VALID, MITETBL IN MODULE
0	(0)	BITSTRING	0	$MCVERS	"B'0001000000000000'" HCT VERSION = VERSION IN MIT
0	(0)	BITSTRING	0	$MCNAME	"B'0000100000000000'" MODULE NAME = NAME IN MIT
0	(0)	BITSTRING	0	$MCPROPX	"B'0000010000000000'" PROPAGATE EXIT POINTS TO XIT
0	(0)	BITSTRING	0	$MCRSLVX	"B'0000001000000000'" RESOLVE EXIT RTN ADDRS TO XRT
0	(0)	BITSTRING	0	$MCTABL	"B'0000000100000000'" PROCESS DYNAMIC TABLES - $MODLOAD MACRO OPTION FLAGS
		1...		$MLMSGY	"B'10000000'" ISSUE DIAGNOSTIC MESSAGE
		.1..		$MLJ2MOD	"B'01000000'" LOAD A JES2 LOAD MODULE
		..1.		$MLDIRL	"B'00100000'" DIRECTED LOAD REQUEST
		...1		$MLDLPA	"B'00010000'" SEARCH FOR LPA MODULE
		.... 1...		$MLMSGI	"B'00001000'" Issue diagnostic message if the module is found but has other errors $PBLOCK MACRO OPTIONS FLAGS
		1...		$PBLKSLT	"B'10000000'" SLANT WAS SPECIFIED
		.1..		$PBLKCTR	"B'01000000'" CENTER WAS SPECIFIED $PCEDYN MACRO OPTION FLAGS
		1...		$PDYNAT	"B'10000000'" PCE ATTACH REQUEST
		.1..		$PDYNDT	"B'01000000'" PCE DETACH REQUEST
		..1.		$PDYNDTT	"B'00100000'" PCE DETACH TEST REQUEST
		...1		$PDYNALT	"B'00010000'" Alter PCEs defined
		.... 1...		$PDYNPCE	"B'00001000'" R1 INPUT IS A PCE ADDR
		.... .1..		$PDYNTAB	"B'00000100'" R1 INPUT IS A PTAB ADDR
		.... ..1.		$PDYNDCT	"B'00000010'" R1 INPUT IS A DCT ADDR PSOFRELK Service routine EQUs COMFRELK Service routine EQUs
0	(0)	X'0'	0	LEAVE_JOES_BUSY	"0" Don't unbusy any JOEs
0	(0)	X'1'	0	UNBUSY_JOES	"1" Unbusy JOEs $PGSRVC MACRO OPTION FLAGS
		1...		$PGSRVRL	"B'10000000'" RELEASE SPECIFIED
		.1..		$PGSFIX	"B'01000000'" FIX SPECIFIED
		..1.		$PGSFREE	"B'00100000'" FREE SPECIFIED
		...1		$PGSRPSL	"B'00010000'" PSL (PAGE SERV LIST) PASSED
		.... 1...		$PGSPRO	"B'00001000'" PROTECT specified
		.... .1..		$PGSUPRO	"B'00000100'" UNPROTECT specified $QGET MACRO OPTION FLAGS

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
		1...		$QGTLSTC	"B'10000000'" $OJTWSC SPECIFIED ON $QGET ... RUN $XEQ AND CLASS LIST QUEUES
		.1..		$QGTLST	"B'01000000'" $OJTWS SPECIFIED ON $QGET RUN CLASS LIST QUEUES
		..1.		$QGTINWS	"B'00100000'" $INWS SPECIFIED ON $QGET RUN CLASS LIST QUEUES
		...1		$QGTWLMQ	"B'00010000'" $INWLM SPECIFIED ON $QGET RUN WLM QUEUES
0	(0)	X'16C'	0	$QWALEN	"364" Length of the $QGET wrkarea $QMOD MACRO OPTION FLAGS
		1...		$LVALONE	"B'10000000'" Don't reset job busy bits
		.1..		$QSNPCHG	"B'01000000'" Disallow phase change
		..1.		$NPRICHG	"B'00100000'" Do not change priority
		...1		$QMDKEEP	"B'00010000'" Keep artificial JQE RACROUTE REASON CODES
		..1. .1..		RACDSECL	"X'24'" SECLABEL NOT ACCESSIBLE $RESERVE MACRO OPTION FLAGS
		1...		$RESVWT	"B'10000000'" $WAIT FOR RESERVE TO COMPLETE $ROLL macro parameter list
0	(0)	X'1'	0	$ROLLSRV	"1,1" Trace caller Service ID
0	(0)	X'2'	0	$ROLLOFF	"2,2" HCT offset of Trace Tbl addr
0	(0)	X'4'	0	$ROLLLEN	"4" Length of parameter list
0	(0)	BITSTRING	0	$ROLJQEI	"X'200'" CTRACE format ID for JQEs
0	(0)	BITSTRING	0	$ROLJOEI	"X'300'" CTRACE format ID for JOEs
0	(0)	BITSTRING	0	$ROLDSPI	"X'400'" CTRACE format ID for DISPs $SCAND PARAMETER LIST FLAG BITS
		1...		$SCNDDBK	"B'10000000'" BREAK OPTION REQUESTED
		.1..		$SCNDDBL	"B'01000000'" DEBLANKING OPTION REQUESTED
		..1.		$SCNDDMK	"B'00100000'" MARK TEXT FOR BACKOUT
		...1		$SCNDDCR	"B'00010000'" CRLF was requested
		.... 1...		$SCNDNBN	"B'00001000'" Disallow break on next display at this level
		.... .1..		$SCNDNUM	"B'00000100'" CONV=NUM was specified
		.... ..1.		$SCNDHEX	"B'00000010'" CONV=HEX was specified $SDUMP MACRO OPTION FLAGS
		1...		$SDHOME	"B'10000000'" DUMP HOME ADDRESS SPACE
		.1..		$SDAPPND	"B'01000000'" APPEND PASSED TITLE TO DEFAULT
		..1.		$SDDEFT	"B'00100000'" GENERATE ONLY DEFAULT TITLE
		...1		$SDRETRN	"B'00010000'" IF SDUMP FAILS, JUST RETURN
		.... 1...		$SDWAIT	"B'00001000'" IF SDUMP FAILS, WTOR, MVS WAIT
		.... .1..		$SDXSYS	"B'00000100'" Dump other MAS members $SEAS MACRO FUNCODE VALUES SEATABL (HASPNUC) ENTRIES
0	(0)	X'0'	0	$SEANJES	"0" NOT VALID FOR CODER=JES2
0	(0)	X'1'	0	$SEAINIT	"$SEANJES+1" INITIALIZE SECURITY ENVIRON
0	(0)	X'2'	0	$SEAVERC	"$SEAINIT+1" SECURITY ENVIRON CREATE
0	(0)	X'3'	0	$SEAVERD	"$SEAVERC+1" SECURITY ENVIRON DELETE
0	(0)	X'4'	0	$SEAXTRT	"$SEAVERD+1" ENVIRON EXTRACT
0	(0)	X'5'	0	$SEASIC	"$SEAXTRT+1" SYSIN DATA SET CREATE
0	(0)	X'6'	0	$SEASOC	"$SEASIC+1" SYSOUT DATA SET CREATE
0	(0)	X'7'	0	$SEASIP	"$SEASOC+1" SYSIN DATA SET OPEN
0	(0)	X'8'	0	$SEASOP	"$SEASIP+1" SYSOUT DATA SET OPEN
0	(0)	X'9'	0	$SEAPSO	"$SEASOP+1" PSO DATA SET OPEN
0	(0)	X'A'	0	$SEAPSS	"$SEAPSO+1" PSO DATA SET SELECT
0	(0)	X'B'	0	$SEATCAN	"$SEAPSS+1" TSO CANCEL
0	(0)	X'C'	0	$SEACMD	"$SEATCAN+1" COMMAND AUTHORIZATION
0	(0)	X'D'	0	$SEAPRT	"$SEACMD+1" PRINTER DATA SET SELECT
0	(0)	X'E'	0	$SEADEL	"$SEAPRT+1" DATA SET PURGE
0	(0)	X'F'	0	$SEANUSE	"$SEADEL+1" NOTIFY USER TOKEN EXTRACT
0	(0)	X'10'	0	$SEATBLD	"$SEANUSE+1" TOKEN BUILD
0	(0)	X'11'	0	$SEARJES	"$SEATBLD+1" RJE SIGNON
0	(0)	X'12'	0	$SEADEVA	"$SEARJES+1" DEVICE AUTHORIZATION
0	(0)	X'13'	0	$SEANJEA	"$SEADEVA+1" NJE SYSOUT DS AUTHORIZATION
0	(0)	X'14'	0	$SEAREXT	"$SEANJEA+1" REVERIFY TOKEN EXTRACT
0	(0)	X'15'	0	$SEARRT	"$SEAREXT+1" RESERVED
0	(0)	X'16'	0	$SEANEWS	"$SEARRT+1" JESNEWS UPDATE AUTH CALL

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	X'17'	0	$SEANWBL	"$SEANEWS+1" JESNEWS TOKEN BUILD CALL
0	(0)	X'18'	0	$SEAVERS	"$SEANWBL+1" Subtask VERIFY (build ACEE)
0	(0)	X'19'	0	$SEAAUD	"$SEAVERS+1" Audit for job in error
0	(0)	X'1A'	0	$SEADCHK	"$SEAAUD+1" $DESTCHK AUTH call
0	(0)	X'1B'	0	$SEATSOC	"$SEADCHK+1" TRACE SYSOUT DS CREATE
0	(0)	X'1C'	0	$SEASSOC	"$SEATSOC+1" SYSTEM SYSOUT DS CREATE
0	(0)	X'1D'	0	$SEANSOC	"$SEASSOC+1" NEWS SYSOUT DS CREATE
0	(0)	X'1E'	0	$SEASOX	"$SEANSOC+1" SYSOUT XMIT/OFFLOAD
0	(0)	X'1F'	0	$SEANJEV	"$SEASOX+1" NJE/OFFLOAD SYSOUT VERIFYX
0	(0)	X'20'	0	$SEAJOX	"$SEANJEV+1" JOB XMIT/OFFLOAD
0	(0)	X'21'	0	$SEASPBC	"$SEAJOX+1" RESERVED
0	(0)	X'22'	0	$SEASPBO	"$SEASPBC+1" SPOOL BROWSE DATA SET OPEN
0	(0)	X'23'	0	$SEASFS	"$SEASPBO+1" Scheduler Service TOKNXTR
0	(0)	X'24'	0	$SEASSWM	"$SEASFS+1" SWM Modify ALTER AUTH
0	(0)	X'25'	0	$SEASAPI	"$SEASSWM+1" Sysout API

Comment

If you add a new FUNCODE here then be sure to
update the following line accordingly.
(and also update the SEATBL in HASPNUC)

End of Comment

0	(0)	X'25'	0	$SEAUSED	"$SEASAPI" Highest FUNCODE used
0	(0)	X'FF'	0	$SEAMAX	"255" MAXIMUM SEAS FUNCODE $SEAS RETURN CODE VALUES
0	(0)	X'0'	0	$SEAOK	"0" $SEAS RC=0
0	(0)	X'4'	0	$SEAND	"4" $SEAS RC=4
0	(0)	X'8'	0	$SEAFAIL	"8" $SEAS RC=8
0	(0)	X'C'	0	$SEANSTO	"12" $SEAS RC=12 $STMTLOG MACRO OPTION FLAGS
		1...		$STMT	"B'10000000'" STATEMENT SHOULD BE LOGGED
		.1..		$STMTCOM	"B'01000000'" DIAGNOSTIC IS A COMMENT
		..1.		$STMTWAR	"B'00100000'" DIAGNOSTIC IS A WARNING
		...1		$STMTERR	"B'00010000'" DIAGNOSTIC IS AN ERROR MESSAGE $TTIMER MACRO OPTION FLAGS
		1...		$TIMETST	"B'10000000'" TEST TIME INTERVAL $WSSCAN DEVICE TYPE INDICATOR
		1...		$WSFRJE	"B'10000000'" WS PROCESSING FOR REMOTE
		.1..		$WSJSREC	"B'01000000'" WS PROCESSING FOR RECEIVERS HIGH ORDER BIT ON
		1...		$EQUHBIT	"B'10000000'" TURN ON HIGH ORDER BIT AUDSAF LOGST indicator
0	(0)	X'4'	0	$AUDIO	"4" I/O error during purge
0	(0)	X'8'	0	$AUDLOST	"8" Lost output during restart
0	(0)	X'C'	0	$AUDDEL	"12" Job deleted during restart
0	(0)	X'10'	0	$AUDMOVE	"16" Job lost during spool move
0	(0)	X'14'	0	$AUDINER	"20" Job had error in input
0	(0)	X'18'	0	$AUDSUB	"24" Subtask error during purge

Comment

Reason Code Equates for Main Task $ERROR calls

End of Comment

0	(0)	X'4'	0	$L01R004	"4" Message too long for command area.

Comment

Reason code equates for $ERROR (0F7 ABENDs) in the
user environment

End of Comment

0	(0)	X'0'	0	$ERRC000	"0" UNABLE TO CANCEL ESTAE
0	(0)	X'4'	0	$ERRC004	"4" ATTEMPT MADE TO LOCK TWO SJBS AT ONCE

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	X'8'	0	$ERRC008	"8" INVALID/UNCLAIMED CELL ADDRESS
0	(0)	X'C'	0	$ERRC012	"12" DISCONNECT DENIED - GETMAIN FAILURE
0	(0)	X'10'	0	$ERRC016	"16" UNABLE TO WRITE FINAL IOT CHAIN
0	(0)	X'1C'	0	$ERRC028	"28" ASXBJSVT DOES NOT CONTAIN FSVT ADDRES
0	(0)	X'20'	0	$ERRC032	"32" UNABLE TO WRITE JCT
0	(0)	X'24'	0	$ERRC036	"36" $SVJ LOCK REQUEST FAILED
0	(0)	X'28'	0	$ERRC040	"40" UNABLE TO OBTAIN SJB LOCK
0	(0)	X'4C'	0	$ERRC076	"76" HASCTP SELECT/TERMINATE FAILURE
0	(0)	X'50'	0	$ERRC080	"80" CALLER ADDRESS ARRAY FILLED UP
0	(0)	X'54'	0	$ERRC084	"84" NO ENTRY IN CALLER ADDRESS ARRAY
0	(0)	X'58'	0	$ERRC088	"88" $RETURN - SAVE AREA HAS IMPROPER FORM
0	(0)	X'5C'	0	$ERRC092	"92" ENTERED $SSIEND WITH AN OUTSTANDING $SAVE
0	(0)	X'60'	0	$ERRC096	"96" SJF SCANSWB FAILED IN ALLOC
0	(0)	X'64'	0	$ERRC100	"100" INVALID GROUPING STRINGS OBJECT
0	(0)	X'68'	0	$ERRC104	"104" SWBTUREQ RETRIEVE SERVICE FAILED IN $GASSIGN SERVICE
0	(0)	X'6C'	0	$ERRC108	"108" INVALID STORAGE BLOCK POINTER IN GROUPING STRINGS OBJECT
0	(0)	X'70'	0	$ERRC112	"112" SJF KEYLIST SERVICE FAILED IN GROUPING KEYS SERVICE
0	(0)	X'74'	0	$ERRC116	"116" UNEXPECTED NUMBER OF SWBIT BUFFERS PASSED TO GRPASGN ROUTINE
0	(0)	X'78'	0	$ERRC120	"120" ENTERED $SSIEND WITH $ESTAEs OUTSTANDING
0	(0)	X'7C'	0	$ERRC124	"124" SJB UNLOCK NOT BY LOCKHOLDER
0	(0)	X'80'	0	$ERRC128	"128" NOT ALL PROTECTED BUFFERS HAVE BEEN $FREEBUFed
0	(0)	X'84'	0	$ERRC132	"132" ATTEMPTED TO FREE A TRE IN THE $GETHP SERVICE
0	(0)	X'88'	0	$ERRC136	"136" LOOP IN THE CPOOL CHAIN IN THE $CRETSAV SERVICE
0	(0)	X'8C'	0	$ERRC140	"140" TRIED TO INITIALIZE TRE WHEN CELL IS NOT A TRE IN GETTRE
0	(0)	X'90'	0	$ERRC144	"144" ERROR RETURN FROM MVS ENQ DURING TRACE PROCESSING
0	(0)	X'94'	0	$ERRC148	"148" Truncate unprotected buffer failed in HFCLTRNC
0	(0)	X'98'	0	$ERRC152	"152" ERROR DETECTED BY HASCRQUE
0	(0)	X'9C'	0	$ERRC156	"156" INCORRECT $$POST RESOURCE
0	(0)	X'A0'	0	$ERRC160	"160" Reserved
0	(0)	X'A4'	0	$ERRC164	"164" An attempt was made to ENQ on the SVJ lock, but an unexpected RC was received
0	(0)	X'A8'	0	$ERRC168	"168" The SJB queue in the field SJBQUEUE does not point to a valid queue.
0	(0)	X'AC'	0	$ERRC172	"172" The SJB queue in the field SJBQUEUE does not point to a valid queue.
0	(0)	X'B0'	0	$ERRC176	"176" The SJB is not on the queue pointed to by SJBQUEUE.
0	(0)	X'B4'	0	$ERRC180	"180" The SJB is not on the queue
0	(0)	X'B8'	0	$ERRC184	"184" Channel end appendage requested re-drive after an unrecoverable error
0	(0)	X'BC'	0	$ERRC188	"188" An error was found during SJB rebuild processing.
0	(0)	X'C0'	0	$ERRC192	"192" A caller of $SJBRQ did not hold the SVJ lock.
0	(0)	X'C4'	0	$ERRC196	"196" An invalid SAPID pointer was passed in the SSS2 SSOB extension
0	(0)	X'C8'	0	$ERRC200	"200" Fields that should be zeros in the SSS2 SSOB extension are not
0	(0)	X'CC'	0	$ERRC204	"204" SJF Request error on GETDS/SAPI request
0	(0)	X'D4'	0	$ERRC212	"212" $CPOOL ACTION=GET failed to get specified cell
0	(0)	X'D8'	0	$ERRC216	"216" $CPOOL ACTION=FREE failed to free specified cell
0	(0)	X'E0'	0	$ERRC224	"224" $XMPOST parm list not valid
0	(0)	X'E4'	0	$ERRC228	"228" FIFOENQ circular queue
0	(0)	X'E8'	0	$ERRC232	"232" SJB memory not available

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
				Comment	
		Reason Codes for $CF1 Abends detected by assembler code. Note that the reason codes detected by PLX code are defined in $HASPEQP.			
				End of Comment	
0	(0)	X'4'	0	$CF1R004	"4" Could not read track 1
0	(0)	X'8'	0	$CF1R008	"8" Could not format ckpt
0	(0)	X'C'	0	$CF1R012	"12" Could not release lock
				Comment	
		Reason codes 16-32 are defined in $HASPEQP			
				End of Comment	
0	(0)	X'24'	0	$CF1R036	"36" Could not write track 1
				Comment	
		Reason Code Equates for CONVCON check of out-of-line area			
				End of Comment	
0	(0)	X'0'	0	$AIDOK	"0" Area ID is okay
0	(0)	X'4'	0	$AIDUSED	"4" Area ID defined but used
0	(0)	X'8'	0	$AIDUTRK	"8" Area ID in use by track cmd
0	(0)	X'C'	0	$AIDNDEF	"12" Area ID not defined
0	(0)	X'10'	0	$AIDNVAL	"16" Invalid area ID syntax
				Comment	
		JOB TRANSMITTER MISCELLANEOUS EQUATES			
				End of Comment	
		11..		SRCBJH	"X'C0'" JOB HEADER SRCB
		111.		SRCBDSH	"X'E0'" DATA SET HEADER SRCB
		11.1		SRCBJT	"X'D0'" JOB TRAILER SRCB
				Comment	
		MISCELLANEOUS EQUATES			
				End of Comment	
		1...		SRCBFLAG	"B'10000000'" FLAG BIT ALWAYS ON IN SRCB'S
		..11		SRCBCCTL	"B'00110000'" CARRIAGE CONTROL FLAGS
		..11		SRCBPAGE	"B'00110000'" PAGE CARRIAGR CONTROL FLAG
		..1.		SRCBANSI	"B'00100000'" ANSI CARRIAGE CONTROL
		...1		SRCBMCH	"B'00010000'" MACHINE CARRIAGE CONTROL
0	(0)	X'A0'	0	REGANSI	"SRCBFLAG+SRCBANSI" ANSI CARRIAGE CONTROL SRCB
		.... 11..		SRCBSPAN	"B'00001100'" SPANNED RECORD
		.... 1...		SRCB1ST	"B'00001000'" SPANNED FIRST SEGMENT
		.... .1..		SRCBMID	"B'00000100'" SPANNED MIDDLE SEGMENT
		.... 11..		SRCBLAST	"B'00001100'" SPANNED LAST SEGMENT
0	(0)	X'88'	0	SPAN1ST	"SRCBFLAG+SRCB1ST" SPANNED FIRST SEGMENT SRCB
0	(0)	X'84'	0	SPANMID	"SRCBFLAG+SRCBMID" SPANNED MIDDLE SEGMENT SRCB
0	(0)	X'8C'	0	SPANLAST	"SRCBFLAG+SRCBLAST" SPANNED LAST SEGMENT SRCB
		.... 1...		ENQHAVIT	"X'08'" ENQ RETURN CODE - ENQ HELD

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
					Comment
					Equates for the system affinity token
					End of Comment
0	(0)	X'0'	0	$AFTMASK	"0,1" One byte portion of entire system affinity mask
0	(0)	X'1'	0	$AFTOFF	"1,2" Offset within complete mask of the one byte portion
0	(0)	X'3'	0	$AFTOKEN	"L'$AFTMASK+L'$AFTOFF" Length of a sysaff token
					Comment
					Equates for IXLCONN error processing These equates are referenced in CFALOC (where they are set when the error conditions are detected) and in PRE536 (to convert the bit setting into more meaningful text).
					End of Comment
0	(0)	BITSTRING	0	$CONER01	"B'100000000000000000000000'"
0	(0)	BITSTRING	0	$CONER02	"B'010000000000000000000000'"
0	(0)	BITSTRING	0	$CONER03	"B'001000000000000000000000'"
0	(0)	BITSTRING	0	$CONER04	"B'000100000000000000000000'"
0	(0)	BITSTRING	0	$CONER05	"B'000010000000000000000000'"
0	(0)	BITSTRING	0	$CONER06	"B'000001000000000000000000'"
0	(0)	BITSTRING	0	$CONER07	"B'000000100000000000000000'"
0	(0)	BITSTRING	0	$CONER08	"B'000000010000000000000000'"
0	(0)	BITSTRING	0	$CONER09	"B'000000001000000000000000'"
0	(0)	BITSTRING	0	$CONER10	"B'000000000100000000000000'"
0	(0)	BITSTRING	0	$CONER11	"B'000000000010000000000000'"
0	(0)	BITSTRING	0	$CONER12	"B'000000000001000000000000'"
0	(0)	BITSTRING	0	$CONER13	"B'000000000000100000000000'"
0	(0)	BITSTRING	0	$CONER14	"B'000000000000010000000000'"
					Comment
					Equates for PLX Dynamic area CPOOLs
					End of Comment
0	(0)	X'14'	0	$PLXPCEL	"20" Primary cell count
0	(0)	X'14'	0	$PLXSCEL	"20" Secondary cell count
					Comment
					JECL validity Equates. Each JECL verb (e.g. OUTPUT, JOBPARM, ROUTE) and a subset of the operands for some of the verbs will have equates here. The value of each equate will be 0-255. These equates will be used to index into a $JECMAX byte vector. The values at the point in the vector will be used to determine if the verb (or operand) is valid in its context. The name of each equate will be in the form: $JECvvoo where vv is the verb (see examples below) and oo is the operand for that verb Make sure that $JECMAX is always at least one greater than the highest index defined.
					End of Comment
0	(0)	X'0'	0	$JECDE	"0" DEL
0	(0)	X'1'	0	$JECEO	"1" EOF
0	(0)	X'2'	0	$JECPU	"2" PURGE

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	X'3'	0	$JECJP	"3" JOBPARM
0	(0)	X'4'	0	$JECMS	"4" MESSAGE
0	(0)	X'5'	0	$JECNA	"5" NETACCT
0	(0)	X'6'	0	$JECNO	"6" NOTIFY
0	(0)	X'7'	0	$JECOU	"7" OUTPUT
0	(0)	X'8'	0	$JECPR	"8" PRIORITY
0	(0)	X'9'	0	$JECRO	"9" ROUTE
0	(0)	X'A'	0	$JECSC	"10" SCAN
0	(0)	X'B'	0	$JECSE	"11" SETUP
0	(0)	X'C'	0	$JECXQ	"12" XEQ
0	(0)	X'D'	0	$JECXM	"13" XMIT
0	(0)	X'E'	0	$JECNV	"14" Invalid JECL Statement
0	(0)	X'F'	0	$JECOC	"15" $ (operator command)

Comment

JOBPARM operands

End of Comment

0	(0)	X'1E'	0	$JECJPSA	"30" SYSAFF
0	(0)	X'1F'	0	$JECJPRE	"31" RESTART

Comment

ROUTE operands

End of Comment

0	(0)	X'C'	0	$JECROXQ	"$JECXQ" ROUTE XEQ equiv to XEQ

Comment

Update $JECMAX if the maximum index value changes.
$JECMAX is one greater than the maximum index.

End of Comment

0	(0)	X'20'	0	$JECMAX	"32" Maximum index value

Comment

Use the following equates in the vector elements
to indicate whether a particular verb or operand
is allowed (i.e. is "OK").

End of Comment

0	(0)	X'0'	0	$JECOK	"0" Verb or Operand is OK
0	(0)	X'4'	0	$JECNOK	"4" Verb or Operand is not OK

Comment

The following equates define offsets into the
header area of the parameter list for the IPADDR
processing routine HASJIDST in HASCSJFS.

End of Comment

0	(0)	X'0'	0	IPOUTLEN	"0,2" Offset of output area len
0	(0)	X'2'	0	IPCALLER	"2,2" Offset of caller type

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	X'4'	0	IPWJOE	"4,4" Offset of work-JOE address
0	(0)	X'4'	0	IPNODE	"IPWJOE,8" Offset of input node name
0	(0)	X'4'	0	IPRETC	"IPWJOE,4" Offset of return code
0	(0)	X'8'	0	IPWJOEA	"8,4" Offset of work-JOE ALET
0	(0)	X'C'	0	IPCJOE	"12,4" Offset of char-JOE address
0	(0)	X'C'	0	$IPUSER	"IPCJOE,8" Offset of input userid
0	(0)	X'10'	0	IPCJOEA	"16,4" Offset of char-JOE ALET
0	(0)	X'14'	0	IPEYE	"20,4" Offset of eye-catcher
0	(0)	X'18'	0	IPTUOUT	"24" Offset of TU output area

Comment

Checkpoint-related equates.
$PRWTHSH and $PRWRATE are used by the KPRIMW routine in HASPCKPT to determine when a primary write is needed. The lower value ($PRWTHSH) is used after the READ2 phase, while the higher value ($PRWRATE) is used at all other times. The intent of the lower limit is to force a primary write at the beginning of the checkpoint cycle if we are getting close to the actual write limit, rather than waiting until we are in the middle of the checkpoint cycle.

End of Comment

0	(0)	X'8'	0	$PRWTHSH	"8" READ2 primary write threshold
0	(0)	X'A'	0	$PRWRATE	"10" Primary write limit

Comment

JES2 release management Equates
In order to manage the Homogeneity/Heterogeneity of a JESplex, it is required that each JES2 deliverable (beginning with SP 5.1.0) have a non-zero monotonic increasing association. Each new combination of VRM (Version Release Modification) will have an equated value here.

End of Comment

0	(0)	X'5'	0	$JES2510	"5" JES2 SP 5.1.0
0	(0)	X'A'	0	$JES2520	"10" JES2 SP 5.2.0
0	(0)	X'F'	0	$JES2110	"15" JES2 OS/390 release 1
0	(0)	X'14'	0	$JES2130	"20" JES2 OS/390 release 3
0	(0)	X'19'	0	$JES2240	"25" JES2 OS/390 release 4
0	(0)	X'1E'	0	$JES2250	"30" JES2 OS/390 release 5
0	(0)	X'23'	0	$JES2270	"35" JES2 OS/390 release 7
0	(0)	X'28'	0	$JES2280	"40" JES2 OS/390 release 8
0	(0)	X'2D'	0	$JES2210	"45" JES2 OS/390 release 10
0	(0)	X'32'	0	$JES2Z102	"50" JES2 z/OS 1.2
0	(0)	X'37'	0	$JES2Z104	"55" JES2 z/OS 1.4
0	(0)	X'37'	0	$JES2HI	"$JES2Z104" The highest compatible JES2 version

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
					Comment
					JES2 product level / service level equates All product levels supported in multi-access spool with this release MUST have a $J2Pxxx equate defined. When a release is no longer supported in a MAS, its $J2Pxxx equate should be deleted so that obsolete $LEVEL invocations can be identified. These equates must be equal to the &J2PLVL global variable at that release level as defined in $MODULE/$HASPGBL. Releases that can not live with the current level in a MAS Dropped as of OS/390 Release 10 J2P510 EQU 24 JES2 SP 5.1.0 J2P520 EQU 25 JES2 SP 5.2.0 J2P110 EQU 26 JES2 OS/390 release 1 J2P130 EQU 27 JES2 OS/390 release 3 Dropped as of z/OS 1.2 J2P240 EQU 28 JES2 OS/390 release 4
					End of Comment
0	(0)	X'1D'	0	$J2P250	"29" JES2 OS/390 release 5
					Comment
					Dropped as of z/OS 1.4 J2P270 EQU 30 JES2 OS/390 release 7
					End of Comment
0	(0)	X'1F'	0	$J2P280	"31" JES2 OS/390 release 8
0	(0)	X'20'	0	$J2P210	"32" JES2 OS/390 release 10
0	(0)	X'21'	0	$J2PZ102	"33" JES2 z/OS 1.2
0	(0)	X'22'	0	$J2PZ104	"34" JES2 z/OS 1.4

$HASPEQU Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
$AFTMASK	0	0	$CKADEF	0	20
$AFTOFF	0	1	$CKANEW	0	40
$AFTOKEN	0	3	$CKAOLD	0	80
$AIDNDEF	0	C	$CKPAMWS	0	80
$AIDNVAL	0	10	$CKPBLDQ	0	2
$AIDOK	0	0	$CKPDAMG	0	8
$AIDUSED	0	4	$CKPGDEF	0	64
$AIDUTRK	0	8	$CKPLOKB	0	20
$ALMSGSW	0	40	$CKPPOST	0	80
$AUDDEL	0	C	$CKPSPVL	0	40
$AUDINER	0	14	$CKPTRSV	0	1
$AUDIO	0	4	$CKPTW	0	10
$AUDLOST	0	8	$CKPUNK	0	40
$AUDMOVE	0	10	$CKRCKP1	0	20
$AUDSUB	0	18	$CKRCKP2	0	8
$BDYNATT	0	80	$CKRDEL	0	80
$BDYNDET	0	40	$CKRIOE	0	2
$CF1R004	0	4	$CKRNDEL	0	40
$CF1R008	0	8	$CKRNIOE	0	1
$CF1R012	0	C	$CKRNKP1	0	10
$CF1R036	0	24	$CKRNKP2	0	4
$CHECINH	0	80	$CKRNSTR	0	40
$CHECNWA	0	40	$CKRNTOP	0	40

Name	Hex Offset	Hex Value
$CKRSTRT	0	80
$CKRTOP	0	80
$CMBDEF	0	64
$COLD	0	4
$COLDFMT	0	1
$CONER01	0	800000
$CONER02	0	400000
$CONER03	0	200000
$CONER04	0	100000
$CONER05	0	80000
$CONER06	0	40000
$CONER07	0	20000
$CONER08	0	10000
$CONER09	0	8000
$CONER10	0	4000
$CONER11	0	2000
$CONER12	0	1000
$CONER13	0	800
$CONER14	0	400
$CONFIG	0	10
$CPNHBMX	0	190
$CPRIMXT	0	C8
$CSBID	0	0
$CSBPRFX	0	8
$CSBSPLN	0	4
$DDYNATT	0	80
$DDYNFND	0	40
$DRABIT	0	1
$DRAINED	0	20
$DRALICE	0	2B
$DRALOC	0	2
$DRARMS	0	20
$DRBERTL	0	27
$DRBERTW	0	26
$DRBREG	0	28
$DRBUF	0	4
$DRCCAN	0	24
$DRCKPT	0	A
$DRCKPTL	0	D
$DRCKPTP	0	B
$DRCKPTW	0	C
$DRCMB	0	E
$DRCNVT	0	16
$DRDILBERT	0	29
$DREOM	0	2C
$DRFSS	0	12
$DRGENL	0	1C
$DRHOMOG	0	21
$DRHOPE	0	17
$DRIMAGE	0	3
$DRJCMD	0	1E
$DRJOB	0	8
$DRJOE	0	6
$DRJOT	0	5
$DRLOCK	0	10
$DRMAIN	0	11
$DRMFMT	0	23
$DRMLLM	0	0
$DRNEWS	0	1B
$DRPCETM	0	18
$DRPSO	0	13
$DRPURGE	0	14
$DRQUEL	0	8
$DRRMWT	0	19
$DRSMF	0	F
$DRSPI	0	25
$DRSPIN	0	1D
$DRSTAC	0	1A
$DRTOTAL	0	40
$DRTRACK	0	7
$DRUNIT	0	9
$DRWARM	0	1F
$DRWSLOK	0	22
$DRXMITJOB	0	2A
$DSTRJCT	0	40
$DSTRJQE	0	80
$DTEPARM	0	80
$DTEPECB	0	40
$DTEPXCB	0	20
$DYNLOCF	0	1708
$DYNNEW	0	4
$ENFPPOL	0	F1
$ENTYLEN	0	27
$EQUHBIT	0	80
$ERRCDE	0	0
$ERRC000	0	0
$ERRC004	0	4
$ERRC008	0	8
$ERRC012	0	C
$ERRC016	0	10
$ERRC028	0	1C
$ERRC032	0	20
$ERRC036	0	24
$ERRC040	0	28
$ERRC076	0	4C
$ERRC080	0	50
$ERRC084	0	54
$ERRC088	0	58
$ERRC092	0	5C
$ERRC096	0	60
$ERRC100	0	64
$ERRC104	0	68
$ERRC108	0	6C
$ERRC112	0	70
$ERRC116	0	74
$ERRC120	0	78
$ERRC124	0	7C
$ERRC128	0	80
$ERRC132	0	84
$ERRC136	0	88
$ERRC140	0	8C
$ERRC144	0	90
$ERRC148	0	94
$ERRC152	0	98
$ERRC156	0	9C
$ERRC160	0	A0
$ERRC164	0	A4
$ERRC168	0	A8
$ERRC172	0	AC
$ERRC176	0	B0
$ERRC180	0	B4
$ERRC184	0	B8
$ERRC188	0	BC
$ERRC192	0	C0
$ERRC196	0	C4
$ERRC200	0	C8
$ERRC204	0	CC
$ERRC212	0	D4
$ERRC216	0	D8
$ERRC224	0	E0

Name	Hex Offset	Hex Value
$ERRC228	0	E4
$ERRC232	0	E8
$ERRENTY	0	2E
$ERRTEXT	0	4
$ESYS	0	8
$EWFHOLD	0	8
$EWFIO	0	20
$EWFOPER	0	40
$EWFPOST	0	80
$EWFWORK	0	10
$EXCPMT	0	20
$EXCPVR	0	80
$EXCPWT	0	40
$EXTPCLO	0	3
$EXTPGET	0	1
$EXTPNCL	0	4
$EXTPOPE	0	0
$EXTPPUT	0	2
$EXTPREA	0	5
$EXTPWRI	0	6
$FBUFMLT	0	80
$FCMBCNT	0	80
$GBUFWT	0	80
$GSMFBLG	0	40
$GSMFBWT	0	80
$GTCHNNO	0	40
$GTCOUNT	0	1
$GTHAVNO	0	80
$GTIOTYS	0	20
$GTNET	0	10
$GTNOSAF	0	2
$GTPARML	0	2
$GTWKCND	0	80
$GTWKLOC	0	20
$GTWKRO	0	10
$GTWKWAT	0	40
$GTWRKSL	0	8
$GTWSP	0	4
$HOT	0	40
$HOURPLUS	0	E4C
$ILPFLG1	0	1
$ILPFLG2	0	2
$ILPFLG3	0	3
$ILPSIZE	0	0
$INDMODE	0	8
$IOTRBGN	0	3E8
$IOTRLMT	0	5
$IPUSER	0	C
$JECDE	0	0
$JECEO	0	1
$JECJP	0	3
$JECJPRE	0	1F
$JECJPSA	0	1E
$JECMAX	0	20
$JECMS	0	4
$JECNA	0	5
$JECNO	0	6
$JECNOK	0	4
$JECNV	0	E
$JECOC	0	F
$JECOK	0	0
$JECOU	0	7
$JECPR	0	8
$JECPU	0	2
$JECRO	0	9
$JECROXQ	0	C
$JECSC	0	A
$JECSE	0	B
$JECXM	0	D
$JECXQ	0	C
$JES2HI	0	37
$JES2Z102	0	32
$JES2Z104	0	37
$JES2110	0	F
$JES2130	0	14
$JES2210	0	2D
$JES2240	0	19
$JES2250	0	1E
$JES2270	0	23
$JES2280	0	28
$JES2510	0	5
$JES2520	0	A
$JEXTFRE	0	80
$JEXTLEN	0	2
$JEXTMAX	0	7FFF
$JEXTTGN	0	0
$JIXFOMT	0	10
$JIXFREE	0	40
$JIXGET	0	80
$JIXSWAP	0	20
$JIXVERI	0	8
$JIXWNO	0	0
$JIXWYES	0	1
$JMPREDO	0	32
$JQEDEF	0	3E8
$JWEBULK	0	40
$JWECRTM	0	4
$JWEDVID	0	C
$JWEFLAG	0	F
$JWEFLG1	0	0
$JWELEN	0	10
$JWELONG	0	80
$JWENUM	0	4
$JWEPTR	0	0
$JWETBLL	0	8
$JW1NCLR	0	80
$J2PZ102	0	21
$J2PZ104	0	22
$J2P210	0	20
$J2P250	0	1D
$J2P280	0	1F
$KCPMI2M	0	0
$KCPM2MI	0	1
$LABAL	0	40
$LABAUL	0	48
$LABBLP	0	10
$LABNL	0	1
$LABNSL	0	4
$LABSL	0	2
$LABSUL	0	A
$LRGSMFB	0	8000
$LVALONE	0	80
$L01R004	0	4
$MAXACCT	0	8F
$MAXBERT	0	7A120
$MAXBERT_R4	0	3FFF8
$MAXBSC	0	270F
$MAXBUF	0	7D0
$MAXBUFX	0	270F
$MAXCMB	0	270F

Name	Hex Offset	Hex Value
$MAXCMDB	0	270F
$MAXCMPT	0	63
$MAXCPLN	0	7FFF
$MAXCPPG	0	7FFF
$MAXCPTM	0	7FFF
$MAXDA	0	FD
$MAXDSKY	0	98967F
$MAXESIZ	0	4E20
$MAXESIZ_R4	0	FA0
$MAXFORM	0	8
$MAXINIT	0	270F
$MAXIPLN	0	7F
$MAXJDEF	0	270F
$MAXJNM_R4	0	FFFE
$MAXJNUM	0	F423F
$MAXJOE_R4	0	27622
$MAXJOID	0	F5E0FF
$MAXJQE_R4	0	FFFE
$MAXLCK	0	8
$MAXLNES	0	7FFF
$MAXLOGS	0	3E7
$MAXNHB	0	270F
$MAXNJEQ	0	7
$MAXNJQE	0	30D40
$MAXNMSG	0	C8
$MAXNODE	0	7FFF
$MAXNPRO	0	E10
$MAXOFFS	0	8
$MAXPRDV	0	8
$MAXPRMD	0	FF
$MAXPRTS	0	7FFF
$MAXPUNS	0	63
$MAXRCLN	0	12
$MAXRDRS	0	63
$MAXRJE	0	7FFF
$MAXROUT	0	7FFF
$MAXRST	0	7D0
$MAXSAFL	0	80
$MAXSJFR	0	1F4
$MAXSNML	0	4
$MAXSSZZ	0	1E
$MAXSYS	0	20
$MAXSYSN	0	20
$MAXTGBE	0	FF
$MAXTGS	0	FD0240
$MAXTGV	0	2000
$MAXTINT	0	1F4
$MAXTLOG	0	FFFFFF
$MAXTRC	0	BB8
$MAXVRSN	0	32
$MAXVTAM	0	270F
$MCBYTES	0	2
$MCCOMMN	0	4000
$MCMIT	0	2000
$MCMSG	0	80
$MCNAME	0	800
$MCNTEST	0	8
$MCPROPX	0	400
$MCRMD24	0	8000
$MCRSLVX	0	200
$MCTABL	0	100
$MCVERS	0	1000
$MINBERT	0	64
$MINBSC	0	A
$MINBUF	0	A
$MINBUFX	0	A
$MINCMB	0	4
$MINCMDB	0	4
$MINJDEF	0	1
$MINNHB	0	A
$MINTINT	0	F
$MINVTAM	0	A
$MLDIRL	0	20
$MLDLPA	0	10
$MLJ2MOD	0	40
$MLMSGI	0	8
$MLMSGY	0	80
$MSGPFXL	0	2
$MVSIPL	0	2
$MWORKSZ	0	120
$MXCKPCT	0	63
$MXSYSBY	0	4
$M064DAD	0	10
$M064IBE	0	80
$M064NIB	0	40
$M064SNS	0	20
$M068DEV	0	80
$M068LDV	0	20
$M068NDV	0	40
$M281ALL	0	80
$M281SOM	0	40
$M291CC1	0	80
$M291CC2	0	40
$M291NCW	0	20
$M291SNS	0	10
$M416LNG	0	80
$M416SHR	0	40
$M458CK1	0	80
$M458CK2	0	40
$M478CK1	0	80
$M478CK2	0	40
$M479INT	0	20
$M479IO	0	80
$M479SID	0	40
$M479VAL	0	10
$M607ACT	0	20
$M607CRS	0	4
$M607HLD	0	10
$M607IO	0	80
$M607LCK	0	8
$M607PCE	0	1
$M607SPN	0	2
$M607WTO	0	40
$M711ATT	0	40
$M711CNT	0	80
$M711RTN	0	20
$NPMDOWN	0	2
$NPRICHG	0	20
$NPRODEF	0	12C
$ODANY	0	F
$ODANYWP	0	1F
$ODHOLD	0	4
$ODKEEP	0	2
$ODLEAVE	0	1
$ODPURGE	0	10
$ODWRITE	0	8
$PBLKCTR	0	40
$PBLKSLT	0	80
$PBUFLIM	0	3E8
$PDYNALT	0	10

Name	Hex Offset	Hex Value
$PDYNAT	0	80
$PDYNDCT	0	2
$PDYNDT	0	40
$PDYNDTT	0	20
$PDYNPCE	0	8
$PDYNTAB	0	4
$PGESIZE	0	1000
$PGSFIX	0	40
$PGSFREE	0	20
$PGSPRO	0	8
$PGSRPSL	0	10
$PGSRVRL	0	80
$PGSUPRO	0	4
$PLXPCEL	0	14
$PLXSCEL	0	14
$PPVERIU	0	10
$PRWRATE	0	A
$PRWTHSH	0	8
$PSTJOE	0	0
$PSTJQE	0	4
$PSTMASP	0	80
$PSTMSG	0	C
$PSTXMIT	0	8
$QGTINWS	0	20
$QGTLST	0	40
$QGTLSTC	0	80
$QGTWLMQ	0	10
$QINDXL	0	100
$QMDKEEP	0	10
$QSNPCHG	0	40
$QSONDA	0	80
$QUICK	0	20
$QWALEN	0	16C
$REMKPJQ	0	10
$REMLOCK	0	20
$REMPURG	0	80
$RESVWT	0	80
$ROLDSPI	0	400
$ROLJOEI	0	300
$ROLJQEI	0	200
$ROLLLEN	0	4
$ROLLOFF	0	2
$ROLLSRV	0	1
$ROTDNUM	0	3E8
$ROTONUM	0	3E8
$ROTQNUM	0	3E8
$RRTJOB	0	80
$SCACMDS	0	C
$SCACTCM	0	1B
$SCCCMDS	0	14
$SCCOCMD	0	16
$SCDCMDS	0	4
$SCDDIAL	0	9
$SCDOCMD	0	6
$SCECMDA	0	10
$SCECMDS	0	B
$SCHCMDS	0	12
$SCIDIAL	0	E
$SCIRPL	0	2
$SCIRPLC	0	3
$SCLCMDS	0	1A
$SCLOCMD	0	19
$SCLTCMD	0	F
$SCNDDBK	0	80
$SCNDDBL	0	40

Name	Hex Offset	Hex Value
$SCNDDCR	0	10
$SCNDDMK	0	20
$SCNDHEX	0	2
$SCNDNBN	0	8
$SCNDNUM	0	4
$SCOCMDS	0	18
$SCOPTS	0	1
$SCPCMDS	0	8
$SCPOCMD	0	17
$SCRCMDS	0	D
$SCRLCMD	0	13
$SCSCMDS	0	5
$SCSDIAL	0	A
$SCSTCMD	0	7
$SCTOCMD	0	15
$SCWHOTS	0	40
$SCWIBM	0	3C
$SCWINST	0	3
$SCWOBS	0	80
$SCZAPCM	0	1C
$SCZCMDS	0	11
$SDAPPND	0	40
$SDDEFT	0	20
$SDHOME	0	80
$SDRETRN	0	10
$SDWAIT	0	8
$SDXSYS	0	4
$SEAAUD	0	19
$SEACMD	0	C
$SEADCHK	0	1A
$SEADEL	0	E
$SEADEVA	0	12
$SEAFAIL	0	8
$SEAINIT	0	1
$SEAJOX	0	20
$SEAMAX	0	FF
$SEAND	0	4
$SEANEWS	0	16
$SEANJEA	0	13
$SEANJES	0	0
$SEANJEV	0	1F
$SEANSOC	0	1D
$SEANSTO	0	C
$SEANUSE	0	F
$SEANWBL	0	17
$SEAOK	0	0
$SEAPRT	0	D
$SEAPSO	0	9
$SEAPSS	0	A
$SEAREXT	0	14
$SEARJES	0	11
$SEARRT	0	15
$SEASAPI	0	25
$SEASFS	0	23
$SEASIC	0	5
$SEASIP	0	7
$SEASOC	0	6
$SEASOP	0	8
$SEASOX	0	1E
$SEASPBC	0	21
$SEASPBO	0	22
$SEASSOC	0	1C
$SEASSWM	0	24
$SEATBLD	0	10
$SEATCAN	0	B

Name	Hex Offset	Hex Value
$SEATSOC	0	1B
$SEAUSED	0	25
$SEAVERC	0	2
$SEAVERD	0	3
$SEAVERS	0	18
$SEAXTRT	0	4
$SEGLMDF	0	64
$SJIFREE	0	40
$SJIGNYC	0	8
$SJIINIT	0	10
$SJINSJB	0	20
$SJITEMP	0	80
$SMFDEF	0	5
$SPCSAF	0	E7
$SP0	0	0
$SP132	0	84
$SSIRCVR	0	1
$STMT	0	80
$STMTCOM	0	40
$STMTERR	0	10
$STMTWAR	0	20
$STSUBP	0	E5
$SUBERR	0	80
$SUBMULT	0	40
$SYSEXIT	0	4
$TGDEF	0	3FA0
$TIMETST	0	80
$TKNLEN	0	50
$TKNVERN	0	1
$TRK000D	0	0
$VOLFLDL	0	18
$VOLLEN	0	6
$VOLMAX	0	4
$VOLMSKL	0	20
$WARM	0	80
$WARMHD	0	1F4
$WSFRJE	0	80
$WSJSREC	0	40
$XMPASCB	0	8
$XMPECB	0	C
$XMPECBP	0	4
$XMPERET	0	0
$446CVER	0	A
$446MVER	0	9
$599LEN	0	C
$599PIT	0	0
$599SQD	0	4
$599XINI	0	8
AR0	0	0
AR1	0	1
AR10	0	A
AR11	0	B
AR12	0	C
AR13	0	D
AR14	0	E
AR15	0	F
AR2	0	2
AR3	0	3
AR4	0	4
AR5	0	5
AR6	0	6
AR7	0	7
AR8	0	8
AR9	0	9
BATPOOL	0	5

Name	Hex Offset	Hex Value
BSCPOOL	0	6
B32KPOOL	0	A
CBPOOL	0	7
CFPOOL	0	13
CFREQ_FMT	0	6
CFREQ_LOCK	0	4
CFREQ_READ2	0	2
CFREQ_T1IO	0	1
CFREQ_UNLCK	0	5
CFREQ_WRITE	0	3
CKPCLBCL	0	8
CKPCLCKP	0	1
CKPCLCMW	0	40
CKPCLCRW	0	80
CKPCLMRK	0	F
CKPCLRDC	0	2
CKPCLRDP	0	4
CKPTPOOL	0	4
CMBPOOL	0	14
DIAGADDR	0	0
DIAGKLEN	0	5
DIAGKLOC	0	4
DYNL3203	0	250
DYNL3211	0	23A
DYNL3800	0	10E
DYNL4245	0	250
DYNL4248	0	100
DYNTEYE	0	0
DYNTLEN	0	10
DYNTNEXT	0	4
DYNTTAB	0	8
DYNTTYPE	0	C
ENQHAVIT	0	8
EXTPLCMD	0	0
EXTPLDAT	0	4
EXTPLLEN	0	1
EXTPLSIZ	0	8
FF	0	FF
FP0	0	0
FP2	0	2
FP4	0	4
FP6	0	6
GTWKDIS	0	30
GTWKRO	0	10
GTWKTANY	0	20
GTWKTCEL	0	8
GTWKTESZ	0	10
GTWKTFLG	0	3
GTWKTNXT	0	4
GTWKTPID	0	2
GTWKTSIZ	0	0
GTWKTUSE	0	C
HAMSVC	0	6F
HASPPOOL	0	8
HAVTNLOG	0	80
HEDRPOOL	0	16
HSVCIRD	0	8
ICEPOOL	0	1A
IECITMOD	0	18
IPCALLER	0	2
IPCJOE	0	C
IPCJOEA	0	10
IPEYE	0	14
IPNODE	0	4
IPOUTLEN	0	0

Name	Hex Offset	Hex Value
IPRETC	0	4
IPTUOUT	0	18
IPWJOE	0	4
IPWJOEA	0	8
JIXVRSN	0	2
LEAVE_JOES_BUSY		
	0	0
MAPADDR	0	8
MAPBASE	0	C
MAPENTL	0	10
MAPMITA	0	8
MAPNAME	0	0
M474BTRN	0	18
M474ENBT	0	0
M474ENHI	0	8
M474ENLO	0	4
M474ENT1	0	0
M474ENT2	0	C
M474E1BT	0	0
M474E1HI	0	8
M474E1LO	0	4
M474E2BT	0	C
M474E2HI	0	14
M474E2LO	0	10
M474PRML	0	1C
M710DOWN	0	2
M710ENT	0	0
M710MEM	0	0
M710RSN	0	4
M710UP	0	1
M791GRP	0	4
M791LEN	0	1C
M791NAME	0	0
M791PLX	0	C
M791PXID	0	14
NATPOOL	0	9
NMAPPOOL	0	B
NONE	0	0
NSAPOOL	0	C
NTQPOOL	0	D
PAGEPOOL	0	E
PAIRDYN	0	8
PAIRHASP	0	4
PAIRLEN	0	C
PAIRUSER	0	0
PCEPOOL	0	19
PERFPOOL	0	18
PLXPOOL	0	15
PPPOOL	0	F
PRFDCKPT	0	7
PRFDCPUS	0	5
PRFDEVNT	0	6
PRFDIND	0	8
PRFDINTS	0	1
PRFDLEN	0	C
PRFDNAME	0	0
PRFDPCES	0	3
PRFDQSUS	0	2
PRFDSAMP	0	4
PSOPOOL	0	1B
PSTVRSN	0	2
RACDSECL	0	24
REGANSI	0	A0
RNTPOOL	0	1C
RSOVRSN	0	1

Name	Hex Offset	Hex Value
R0	0	0
R1	0	1
R10	0	A
R11	0	B
R12	0	C
R13	0	D
R14	0	E
R15	0	F
R2	0	2
R3	0	3
R4	0	4
R5	0	5
R6	0	6
R7	0	7
R8	0	8
R9	0	9
SCNDR01	0	4
SCNDR03	0	8
SCNDR04	0	C
SCNDR05	0	10
SCNDR06	0	14
SCNDR07	0	18
SCNDR08	0	1C
SCNDR09	0	20
SCNDR10	0	24
SCNDR11	0	28
SCNDR12	0	2C
SCNDR13	0	30
SCNDR14	0	34
SCNDR17	0	38
SCNDR18	0	3C
SCNDR19	0	40
SCNDR21	0	44
SCNDR22	0	48
SCNDR23	0	4C
SCNDR24	0	50
SCNDR25	0	54
SCNDR26	0	58
SCNDR27	0	5C
SCNDR28	0	60
SCNDR39	0	64
SCNDR40	0	68
SCNDR41	0	6C
SCNDR43	0	70
SCNDR44	0	74
SCNDR45	0	78
SCNDR46	0	7C
SCNDR52	0	80
SCNDR54	0	84
SCNDR55	0	88
SCNDR56	0	8C
SCNDR57	0	90
SCNDR58	0	94
SCNDR59	0	98
SCNDR62	0	9C
SCNDR63	0	A0
SCNDR64	0	A4
SCNDR65	0	A8
SCNDR66	0	AC
SCNDR67	0	B0
SCNDR68	0	B4
SCNDR69	0	B8
SCNDR70	0	BC
SCNDR71	0	C0
SCNDR72	0	C4

Name	Hex Offset	Hex Value
SCNDR73	0	C8
SCNDR74	0	CC
SCNDR75	0	D0
SCNDR76	0	D4
SCNDR77	0	D8
SCNDR78	0	DC
SCNDR79	0	E0
SCNDR80	0	E4
SCNDR81	0	E8
SCNDR82	0	EC
SCNDR83	0	F0
SCNDR84	0	F4
SCNDR85	0	F8
SCNDR86	0	FC
SCNDR87	0	100
SCNDR88	0	104
SCNDR89	0	108
SCNDR90	0	10C
SCNDR91	0	110
SCNDR92	0	114
SCNDR93	0	118
SCNDR94	0	11C
SCNDR95	0	120
SCNDR96	0	124
SCNDR97	0	128
SCNDR98	0	12C
SCQVRSN	0	1
SDLTBADD	0	0
SDLTLEN	0	4
SDLTNUM	0	A
SMFPOOL	0	12
SPANLAST	0	8C
SPANMID	0	84
SPAN1ST	0	88
SRCBANSI	0	20
SRCBCCTL	0	30
SRCBDSH	0	E0
SRCBFLAG	0	80
SRCBJH	0	C0
SRCBJT	0	D0
SRCBLAST	0	C
SRCBMCH	0	10
SRCBMID	0	4
SRCBPAGE	0	30
SRCBSPAN	0	C
SRCB1ST	0	8
TGMVRSN	0	1
TINTPOOL	0	17
TMAPADDC	0	18
TMAPENTL	0	1C
TMAPLMOD	0	10
TRCCWSP1	0	9
TRCCWSP2	0	11
TRCCWSP3	0	19
TRCLRECL	0	79
UNBUSY_JOES	0	1
VTAMPOOL	0	10
WTASCBPT	0	C
WTASTOKN	0	1C
WTCHAIN	0	0
WTECBL1	0	14
WTECBL2	0	18
WTERRET	0	10
WTLENGTH	0	24
WTUNECB	0	4
WTXMECB	0	8
XCFMLIST	0	8
XCFMMEMF	0	11
XCFMMEMN	0	0
XCFMMEMR	0	10
XCFMRSCS	0	C
XCFMRSJ2	0	4
XCFMRSNM	0	8
XCFMSIZE	0	1000
XCFMTHEM	0	0
XCFMUS	0	4
XRQPOOL	0	11

$HASXB Programming Interface information

Programming Interface information

$HASXB

The following fields are **NOT** programming interface information:

- HXBDSB
- HXBSAPID
- HXBWRKSP

End of Programming Interface information

$HASXB Heading Information

Common Name: HASP address space extension block
Macro ID: $HASXB
DSECT Name: HASXB
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: HSXB
Offset: HXBID-HASXB
Length: L'HXBID
Storage Attributes: Subpool: 230
Key: 1
Residency: Virtual and real storage are anywhere (above or below 16M) in the private address space represented by the $HASXB.
Size: See HXBLEN
Created by: $SSIBEGN routine
Pointed to by: HSBHASXB field of the $HASB data area
Serialization: Shared by TCBs in the address space. The local lock is required to increment the use count in the $HASXB. This ensures that the control block won't be freed if it is considered to be temporary. It is not necessary to obtain the local lock to increment a permanent HASXB's use count because the HASB/HASXB will not be freed. After the use count has been incremented in the $HASXB control block to indicate that both the $HASB and $HASXB are in use, compare and swaps may be used to modify fields. $SSIBEGN increments the use count upon entry. The use count in the $HASXB is for both the $HASB and the $HASXB. Compare and swap is still needed to update the use count even with the local lock because the local lock is not obtained when decrementing the use count in $SSIEND for permanent HASB/HASXBs. The use of compare and swap is not needed for the system HASB/HASXB count because it is never updated without the local lock.
Function: The HASB and HASXB are the main control blocks for an address space that invokes JES2 SSI functions. Address spaces that are started under JES2 (STCs, TSUs, batch initiators) have a "permanent" HASB and HASXB which exist for the life of the address space. Address spaces that request a job id from JES2 have a "system" HASB and HASXB which exist until the job id is returned. All other address spaces obtain a temporary HASB and HASXB which exist for the life of a SSI request. The HASXB contains the information that is needed only in the user address space. The HASB contains the information that needs to be shared between the user and the subsystem address spaces.

$HASXB Map

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	HASXB	BEGINNING OF HASXB DSECT
0	(0)	CHARACTER	4	HXBID	EYECATCHER OF HASXB
4	(4)	ADDRESS	1	HXBVRSN	VERSION NUMBER FIELD
4	(4)	X'3'	0	HXBVRNUM	"3" Current version of HASXB
5	(5)	BITSTRING	1	HXBFLAG1	STATUS FLAG 1

Comment

For more information about the PERM and SYS bits
see the prolog for $SSIBEGN in HASCLINK.

End of Comment

		1...		HXB1PERM	"B'10000000'" PERMANENT HASB/HASXB CHAIN
		.1..		HXB1SYS	"B'01000000'" SYSTEM HASB/HASXB CHAIN
		..1.		HXB1REQ	"B'00100000'" A Request JobId call was made from this addr space
		...1		HXB1B32K	"B'00010000'" B32K cell pool created
6	(6)	BITSTRING	1	HXBRSVRD (2)	RESERVED FOR FUTURE USE
8	(8)	SIGNED	4	HXBUSECT	COUNT OF USERS OF THIS HSXB
12	(C)	SIGNED	4	HXBINTRD	COUNT OF BCP-ALLOCATED INTERNAL READERS
16	(10)	ADDRESS	4	HXBTRE	ADDRESS OF FIRST TRE ON CHAIN
20	(14)	ADDRESS	4	HXBWRKSP	ADDRESS OF WORK SPACE
24	(18)	ADDRESS	4	HXBUSER1	RESERVED FOR USER
28	(1C)	SIGNED	4	HXBRSVD1	RESERVED FOR FUTURE USE
32	(20)	ADDRESS	4	HXBCPTCB	TCB address to use with STORAGE OBTAIN
36	(24)	ADDRESS	4	HXBCPIDX	Address of CPINDEX table
40	(28)	ADDRESS	4	HXBALIDX	Address of ALINDEX table
44	(2C)	ADDRESS	4	HXBDSB	Chain of LOCAL DSBs
48	(30)	SIGNED	4	HXBSAPIA	ALET of SAPID queue for this address space
52	(34)	SIGNED	4	HXBSTACA	ALET of STAC data space for this address space
56	(38)	SIGNED	4	HXBPSOA	ALET of PSO data space for this address space
60	(3C)	ADDRESS	4	HXBSJIOB	Permanent SJIOB used for $SIGIO processing
64	(40)	ADDRESS	4	HXBDCB	Address of local DCB
68	(44)	ADDRESS	4	HXBDEB	Address of local DEB

Comment

SPOOL I/O vector
This vector achors the BAT control blocks for this
address space. There is one entry for every
possible SPOOL volume.

End of Comment

72	(48)	ADDRESS	4	HXBBATV (0)	SPOOL I/O vector
1088	(440)	DBL WORD	8	(0)	Alignment
1088	(440)	X'440'	0	HXBLEN	"*-HASXB" LENGTH OF HASXB DSECT

$HASXB Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
HASXB	0		HXBRSVD1	1C	
HXBALIDX	28		HXBRSVRD	6	
HXBBATV	48		HXBSAPIA	30	
HXBCPIDX	24		HXBSJIOB	3C	
HXBCPTCB	20		HXBSTACA	34	
HXBDCB	40		HXBTRE	10	
HXBDEB	44		HXBUSECT	8	
HXBDSB	2C		HXBUSER1	18	
HXBFLAG1	5		HXBVRNUM	4	3
HXBID	0	C8E2E7C2	HXBVRSN	4	
HXBINTRD	C		HXBWRKSP	14	
HXBLEN	440	440	HXB1B32K	5	10
HXBPSOA	38		HXB1PERM	5	80

$HASXB Cross Reference

Name	Hex Offset	Hex Value
HXB1REQ	5	20
HXB1SYS	5	40

$HCCT Programming Interface information

Programming Interface information

$HCCT

The following fields are **NOT** programming interface information:

- CCTASYNC
- CCTAUXCB
- CCTBMAP
- CCTCBRT
- CCTCKPTP
- CCTCOMM
- CCTCSHED
- CCTCSTAI
- CCTDSB
- CCTDSINR
- CCTECF
- CCTHTCBA
- CCTJOB
- CCTMLLM
- CCTMONCB
- CCTOFFM
- CCTPCEPE
- CCTPJCLQ
- CCTPSOQ
- CCTRCP
- CCTRCPCQ
- CCTSAPIQ
- CCTSCIDS
- CCTSJWEL
- CCTSLKST
- CCTSLKUS
- CCTSPOOL
- CCTTIMER
- CCTTRPCE
- CCTXESEV
- CCTXSTIM
- CCT1SAP
- CCT1SAPC

End of Programming Interface information

$HCCT Heading Information

Common Name: HASP Common-storage Communication Table
Macro ID: $HCCT
DSECT Name: HCCT
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: 'HCCT'
Offset: -8 (in the JES2 CSA storage prefix)
Length: 4
Storage Attributes: Subpool: 228
Key: 1
Residency: Virtual and real storage are below 16M, in CSA. The storage is fixed in memory. Below 16M because it contains an extended ECB.
Size: See the CCTLEN equate (plus an 8 byte prefix)
Created by: Initialization of a JES2 subsystem address space, except for a 'hot start' initialization (the HCCT in CSA is just re-located in that case).
Pointed to by:
- The SSCTSUS2 field of the MVS SSCVT control block for the defined JES2 subsystem.
- General register 11 when executing code in the 'USER' execution environment.
- The $HCCT field of the JES2 $HCT control block.
- The HFCTHCCT field of each JES2 $HFCT control block.
- The SDBHCCT field of each JES2 $SDB control block.
- The RIDHCCT field of each JES2 internal reader $DCT control block.
- The address word in the module entry labeled MAPHCCT in the JES2 $MODMAP control block.

Serialization:
- Serialization depends on the field in question.
- Fields might be serialized via Compare-and-swap.
- Fields might be serialized via the JES2 Job Communications Queues (JCQ) logical lock.
- Fields might be serialized implicitly, by being changeable only by the JES2 main task.
- Fields might be serialized by MVS resource ENQ.
- Fields might be serialized by the LOCAL/CMS locks.

Function: The HCCT is the central common storage control block for a JES2 subsystem. It can be located from the MVS control blocks defining the subsystems. It, in turn, points to the major control block in the JES2 address space ($HCT), those for application address spaces ($HAVT, $HASBs), those for FSS address spaces ($FSSCBs), etc.

The HCCT also contains or points to most data used for communication between address spaces, whether for direct support of application requests for subsystem service (e.g. executing jobs, creating and writing to SYSOUT datasets), for JES2 subsystem utilities (e.g. its $TRACE facility), or for other purposes. It also is the central location for any information that must be useable when JES2 experiences an outage, or that must be preserved across such an outage until a 'hot start' is performed.

The HCCT is used most importantly by the JES2 subsystem interface (SSI) function routines, which include all of the MVS/JES2 interactions in support of job execution and SYSOUT/SYSIN datasets.

$HCCT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	HCCT	
0	(0)	X'A'	0	CCTVRNUM	"10" HCCT version equate
0	(0)	ADDRESS	1	CCTVRSN	CONTROL BLOCK VERSION
1	(1)	BITSTRING	7		RESERVED FOR FUTURE USE
8	(8)	ADDRESS	4	CCTOFSTB	Address of offset table, at HCCT offset +8
12	(C)	ADDRESS	4	CCTLMT1	Address of first CSA LMT, if any
16	(10)	CHARACTER	8	CCTPVRSN	Copy of HCT $VERSION. Permanently set to 'SP 5.3.0' (Do not remove)

Comment

DEFINE CONSTANTS. MOVED FROM THE $HCT IN HASPIRMA.

End of Comment

24	(18)	CHARACTER	32	CCTBLNKS	32 CHARACTERS OF BLANKS
56	(38)	BITSTRING	64	CCTZEROS	64 CHARACTERS OF HEX ZERO
56	(38)	X'38'	0	CCTZERO	"CCTZEROS" Alternate name for CCTZEROS
120	(78)	ADDRESS	4	CCTFFS (16)	16 words of FF's
120	(78)	X'78'	0	CCTNEG1	"CCTFFS,4,C'F'" Fullword of X'FF's
120	(78)	X'78'	0	CCTALLFF	"CCTNEG1" ALTERNATE NAME FOR CCTNEG1
184	(B8)	SIGNED	4	CCTF1	FULLWORD CONSTANT 1
184	(B8)	X'BA'	0	CCTH1	"CCTF1+2,2,C'H'" HALFWORD CONSTANT 1
188	(BC)	SIGNED	4	CCTF2	FULLWORD CONSTANT 2
188	(BC)	X'BE'	0	CCTH2	"CCTF2+2,2,C'H'" HALFWORD CONSTANT 2
192	(C0)	SIGNED	4	CCTF4	FULLWORD CONSTANT 4
192	(C0)	X'C2'	0	CCTH4	"CCTF4+2,2,C'H'" HALFWORD CONSTANT 4
196	(C4)	SIGNED	4	CCTF6	FULLWORD CONSTANT 6
196	(C4)	X'C6'	0	CCTH6	"CCTF6+2,2,C'H'" HALFWORD CONSTANT 6
200	(C8)	SIGNED	4	CCTF8	FULLWORD CONSTANT 8
200	(C8)	X'CA'	0	CCTH8	"CCTF8+2,2,C'H'" HALFWORD CONSTANT 8
204	(CC)	SIGNED	4	CCTF12	FULLWORD CONSTANT 12
204	(CC)	X'CE'	0	CCTH12	"CCTF12+2,2,C'H'" HALFWORD CONSTANT 12
208	(D0)	SIGNED	4	CCTF16	FULLWORD CONSTANT 16
208	(D0)	X'D2'	0	CCTH16	"CCTF16+2,2,C'H'" HALFWORD CONSTANT 16
212	(D4)	SIGNED	4	CCTF255	FULLWORD CONSTANT 255
212	(D4)	X'D6'	0	CCTH255	"CCTF255+2,2,C'H'" HALFWORD CONSTANT 255
212	(D4)	X'D4'	0	CCT000F	"CCTF255" Fullword X'000000FF'
216	(D8)	SIGNED	4	CCTF4096	FULLWORD CONSTANT 4096
216	(D8)	X'DA'	0	CCTH4096	"CCTF4096+2,2,C'H'" HALFWORD CONSTANT 4096
220	(DC)	BITSTRING	4	CCT0FFF	FULLWORD THREE BYTE MASK
224	(E0)	BITSTRING	4	CCT7FFF	FULLWORD HIGH BIT OFF MASK
224	(E0)	X'E0'	0	CCTFMAX	"CCT7FFF" Fullword largest + number
224	(E0)	X'E0'	0	CCTHMAX	"CCT7FFF,2,C'H'" Halfword largest + number
228	(E4)	ADDRESS	4	CCTHIBIT (0)	Fullword high bit on
232	(E8)	ADDRESS	4	CCTBADA (16)	BAD value

Comment

SAF CLASS Value. Reference in RACROUTEs should be to name on the EQUate.

End of Comment

296	(128)	ADDRESS	1	CCTJSPLL	Length of JESSPOOL class
297	(129)	CHARACTER	8	CCTJSPLV	JESSPOOL class

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
297	(129)	X'128'	0	CCTJSPL	"CCTJSPLL,*-CCTJSPLL,C'X'" JESSPOOL SAF class
305	(131)	BITSTRING	3		Reserved for future use

Comment

HEX translate table

End of Comment

305	(131)	X'44'	0	CCTXTRAN	"*-C'0'" Hexadecimal-to-EBCDIC
308	(134)	CHARACTER	16		translate table

Comment

COMMUNICATION CONTROL FIELDS

End of Comment

324	(144)	ADDRESS	4	CCTSSVT	SUBSYSTEM VECTOR TABLE ADDRESS
328	(148)	ADDRESS	4	CCTCADDR	ADDR OF COMMON STORAGE ADDR TBL
332	(14C)	ADDRESS	4	CCTCTABS	Addr of CPOOL tables
336	(150)	ADDRESS	4	CCTCPIDX	Addr of CSA CPOOL index
340	(154)	ADDRESS	4	CCTHCT	ADDRESS OF HASP HCT
344	(158)	ADDRESS	4	CCTHTCBA	JES2 MAIN-TASK TCB ADDRESS
348	(15C)	BITSTRING	8	CCTJSTKN	STOKEN of the JES2 addrspc, unique for this MVS IPL, see CCTASCB for ASCB addr
356	(164)	ADDRESS	4	CCTAMVEC	VECTOR TABLE FOR
360	(168)	ADDRESS	4		SVC111 INTERFACE
364	(16C)	ADDRESS	4	CCTSSCT	ADDRESS OF SSCT
368	(170)	ADDRESS	4	CCTKAC	ADDRESS OF KAC CONTROL BLOCK
372	(174)	ADDRESS	4	CCTSCIDS	ADDR CKPT SCID CONTROL BLCK
376	(178)	ADDRESS	4	CCTHAVT	JES2 ADR SPACE VECTOR TABLE
380	(17C)	ADDRESS	4	CCTHASP	HASP CONDITION = 0 - STILL UP = -1 - ABENDED OR ABENDING = +1 - $PJES2 ACCEPTED
380	(17C)	X'1'	0	CCTPJES2	"1" $PJES2 accepted
		1...		CCTHOTST	"X'80'" Hot Start Indicated
380	(17C)	BITSTRING	0	CCTABEND	"X'FFFFFFFF'" JES2 has abended
384	(180)	BITSTRING	1	CCTSTUS	SUBSYSTEM STATUS BYTE
		1...		CCTSTUSP	"X'80'" THIS IS THE PRIMARY SUBSYSTEM
		.1..		CCTSTUST	"X'40'" HASP TERMINATION COMPLETE
		..1.		CCTSTUSR	"X'20'" HASP IS RESTARTING
		...1		CCTSMVFN	"X'10'" Spool fencing active
		.... 1...		CCTSTIRV	"X'08'" CHKPT DEVICE RESERVED BY INIT
		.... .1..		CCTSTPJF	"X'04'" $PJES2,ABEND,FORCE ISSUED

Comment

EQU X'02' RESERVED FOR FUTURE USE

End of Comment

		1		CCTSTRPL	"X'01'" A RE-IPL IS REQUIRED
385	(181)	BITSTRING	1	CCTTSLOK	TSU ABEND INTERLOCK FLAG
386	(182)	CHARACTER	1	CCTCOMCH	JES2 Command character (OS/390 command input)
387	(183)	BITSTRING	1	CCTDSTFL	USERDEST flags - see HCT field $DESTFLG
388	(184)	CHARACTER	4	CCTSID	Alphanumeric member name
392	(188)	CHARACTER	8	CCTMVSNM	MVS system name
400	(190)	DBL WORD	8	CCTJ2WAT	Time of last main task wait
408	(198)	DBL WORD	8	CCTJ2DSP	Time of last main task post
416	(1A0)	ADDRESS	4	CCTRBGN	IOT REUSE START THRESHOLD
420	(1A4)	ADDRESS	4	CCTRLMT	SPIN IOT REUSE FAILURE LIMIT
424	(1A8)	ADDRESS	4	CCTEXTBL	ADDRESS OF REASON TEXTABLE
428	(1AC)	ADDRESS	4	CCTINXTB	ADDRESS OF REASON INDEXTBLE
432	(1B0)	ADDRESS	4	CCTQINDX	Address of Que Index table
436	(1B4)	ADDRESS	4	CCTXMAQ	Address of XMAQENTs (XCF member status table)

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
440	(1B8)	ADDRESS	4	CCTRCPCQ	Remote Console Processor FIFO CSA CMB queue
444	(1BC)	BITSTRING	4	CCTMEMUP	Copy of XMAMEMUP (members that HASPXCF considers up)
448	(1C0)	ADDRESS	4	(4)	Reserved for future use

Comment

USER COMMON STORAGE FIELDS.

End of Comment

464	(1D0)	ADDRESS	4	CCTCUCT	COMMON USER COMMUNICATION TABLE
468	(1D4)	ADDRESS	4	CCTUCADD	ADDR OF USER COMMON ADDR TABLE
472	(1D8)	ADDRESS	4	CCTUSER1	USER FIELD ONE
476	(1DC)	ADDRESS	4	CCTUSER2	USER FIELD TWO
480	(1E0)	ADDRESS	4	CCTUSER3	USER FIELD THREE
484	(1E4)	ADDRESS	4	CCTUSER4	USER FIELD FOUR

Comment

THE ESTIMATED COUNT FIELDS MUST BE KEPT TOGETHER AND ARE
MAPPED BY THE EST DSECT GENERATED BY THE $EST MACRO.
EACH ELEMENT IS CURRENTLY 8 BYTES LONG. SIMILIAR FIELDS
ALSO EXIST IN THE $HCT AND THE $SJXB. DO NOT USE THE
RESERVED FIELDS FOR ANYTHING OTHER THAN ESTIMATED COUNT TYPE
OF INFORMATION AND VERIFY THAT THE $HCT AND $SJXB ARE ALSO
UPDATED. DO NOT DELETE ANY RESERVED FIELDS IN HERE EITHER.

End of Comment

488	(1E8)	ADDRESS	4	CCTEST1 (0)	FIRST ESTIMATED COUNT TABLE
488	(1E8)	SIGNED	8	(0)	NEXT 8 BYTES MUST BE TOGETHER
488	(1E8)	ADDRESS	4	CCTPGINT	EST PAGE MSG INTERVAL
492	(1EC)	ADDRESS	1		EXECUTION PAGE OPTION
493	(1ED)	ADDRESS	3		RESERVED
496	(1F0)	SIGNED	8	(0)	NEXT 8 BYTES MUST BE TOGETHER
496	(1F0)	ADDRESS	4	CCTOTINT	EST BYTE MSG INTERVAL
500	(1F4)	ADDRESS	1		EXECUTION BYTE OPTION
501	(1F5)	ADDRESS	3		RESERVED
504	(1F8)	SIGNED	8	(0)	NEXT 8 BYTES MUST BE TOGETHER
504	(1F8)	ADDRESS	4	CCTLNINT	EST LINE MSG INTERVAL
508	(1FC)	ADDRESS	1		EXECUTION LINE OPTION
509	(1FD)	ADDRESS	3		RESERVED
512	(200)	SIGNED	8	(0)	NEXT 8 BYTES MUST BE TOGETHER
512	(200)	ADDRESS	4	CCTPUINT	EST CARD MSG INTERVAL
516	(204)	ADDRESS	1		EXECUTION PUNCHED CARD OPTION
517	(205)	ADDRESS	3		RESERVED
520	(208)	SIGNED	8	(0)	NEXT 8 BYTES MUST BE TOGETHER
520	(208)	ADDRESS	4	CCTTMINT	XEQ TIME MSG INTERVAL
524	(20C)	ADDRESS	1	CCTTIMOP	EXECUTION TIME OPTION
525	(20D)	ADDRESS	3		RESERVED

Comment

END OF THE ESTIMATED COUNT FIELDS

End of Comment

528	(210)	ADDRESS	3	CCTTO (0)	OWN NODE INFORMATION
528	(210)	ADDRESS	2	CCTTONOD	OWN NODE ID (BINARY)
530	(212)	ADDRESS	1	CCTTOQUL	OWN NODE SYSTEM ID (EBCDIC)
531	(213)	CHARACTER	9	CCTNDE (0)	Node name and length
531	(213)	BITSTRING	1	CCTNDENL	Actual length of node name
532	(214)	CHARACTER	8	CCTNDENM	NODE NAME
540	(21C)	ADDRESS	2	CCTNONOD	MAXIMUM NODE NUMBER
542	(21E)	ADDRESS	2	CCTROUT	HIGHEST DEFINED RJE
544	(220)	ADDRESS	4	CCTRRT	ADDR OF RMT ROUTING EQUIV TABLE
548	(224)	ADDRESS	4	CCTRDT	ADDRESS OF REMOTE DESTINATION TABLE

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
552	(228)	ADDRESS	4	CCTRDTF	FREE RDT ENTRY STACK
556	(22C)	ADDRESS	4	CCTRDTB	FIRST RDB (RDT BLOCK)
560	(230)	ADDRESS	4	CCTBATMD	Address of the BATCH internal reader model DCT
564	(234)	ADDRESS	4	CCTSTCMD	Address of the STC internal reader model DCT
568	(238)	ADDRESS	4	CCTTSOMD	Address of the TSO internal reader model DCT
572	(23C)	ADDRESS	4	CCTIRDRS	ADDRESS OF FIRST INTRDR DCT
576	(240)	ADDRESS	4	CCTBATRD	Address of first BATCH- capable internal reader DCT
580	(244)	ADDRESS	4	CCTSTCRD	Address of first STC- capable internal reader DCT
584	(248)	ADDRESS	4	CCTTSORD	Address of first TSO- capable internal reader DCT
588	(24C)	ADDRESS	4	CCTIRWT	INTRDR WAIT ELEMENT CHAIN HEADER
592	(250)	ADDRESS	4	CCTXITA	ADDRESS OF XIT TABLE
596	(254)	ADDRESS	4	CCTXRTA	ADDRESS OF XRT TABLE
600	(258)	ADDRESS	2	CCTNINRS	INTRDR RDINUM + 2 (FOR STC/TSU) (THIS IS THE ACTUAL NUMBER OF CSA DCTS, AND MATCHES $NUMINRS)
602	(25A)	ADDRESS	2	CCTRDINM	Number of Batch-capable internal reader DCTs
604	(25C)	ADDRESS	2	CCTSTCNM	Number of STC-capable internal reader DCTs
606	(25E)	ADDRESS	2	CCTTSONM	Number of TSO-capable internal reader DCTs
608	(260)	BITSTRING	1	CCTFLAG1	FLAG BYTE
		.1..		CCT1PRDF	"B'01000000'" PREFIX DEFINED
		..1.		CCT1SSYS	"B'00100000'" CONDEF SCOPE=SYSTEM
		...1		CCT1SSYP	"B'00010000'" CONDEF SCOPE=SYSPLEX
		.... 1...		CCT1CKWI	"B'00001000'" Coupling facility write is in progress
		.... .1..		CCT1PJSA	"B'00000100'" $PJES2,ABEND issued
		.... ..1.		CCT1PJAC	"B'00000010'" $PJES2,ABEND seen
609	(261)	BITSTRING	1	CCTFLAG2	Flag byte #2 For proper serialization updates to this field should be done via an OIL/NIL.
		1...		CCT2IRDR	"B'10000000'" Internal readers can be allocated
		.1..		CCT2BATR	"B'01000000'" Internal readers can be used to submit BATCH jobs
		..1.		CCT2PITC	"B'00100000'" PIT(s) with no SJB need to be cleaned up
		...1		CCT2CRCF	"B'00010000'" CKPT RECONFIG is pending or is in progress
		.... 1...		CCT2OPRQ	"B'00001000'" Operator requested CKPT reconfiguration
		.... .1..		CCT2SAPI	"B'00000100'" SAPID scan needed
		.... ..1.		CCT2USJB	"B'00000010'" One or more SJBs have unspun IOTs to be processed
		1		CCT2PSO	"B'00000001'" PSO scan needed
610	(262)	BITSTRING	1	CCTDEBUG	Debug options ($DEBGOPS)
611	(263)	BITSTRING	1	CCTRSV1	Reserved for future use
612	(264)	SIGNED	4	(0)	ALIGN HFAME'S
612	(264)	CHARACTER	72	CCTCKPT1	CKPT1 HFAME
684	(2AC)	CHARACTER	72	CCTCKPT2	CKPT2 HFAME
756	(2F4)	SIGNED	4	CCTSEGLM	SEGMENT LIMIT FOR A GIVEN SYSOUT DATA SET
760	(2F8)	SIGNED	4	CCTSPLCL	MAX SPECIAL LOCAL ROUTE

Comment

CONSOLE SERVICE ELEMENTS

End of Comment

764	(2FC)	BITSTRING	4	CCTCKCON	Console ID for operator requested CKPT reconfig.
768	(300)	SIGNED	4	CCTDOM86	DOM ID for HASP086
772	(304)	ADDRESS	4	CCTCOMMQ	COMMAND PROCESSOR QUEUE
776	(308)	SIGNED	4	CCTCOMCT	In use count for commands
780	(30C)	SIGNED	4	CCTCMDMX	Maximum number of commands (CMDNUM on CONDEF)
784	(310)	SIGNED	4	CCTNMCUR	Current number notify CMBs
788	(314)	SIGNED	4	CCTNMMAX	Maximum no.of notify CMBs
792	(318)	SIGNED	4	CCTNMFAL	No. of NOTIFY failures
796	(31C)	ADDRESS	4	CCTIINFO	Addr of installation info for version SSI call
800	(320)	ADDRESS	4	CCTSINFO	Addr of system information for version SSI call
804	(324)	ADDRESS	4	(3)	Reserved for future use

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
					Comment
					---------- CROSS-SYSTEM REQUESTS CONTROL INFORMATION. THIS MUST BE MAINTAINED WITH COMPARE AND SWAP. NEW CROSS-SYSTEM REQUESTS ACCEPTED INDICATOR AND COUNT OF CROSS SYSTEM SERVICE REQUESTS (SPOOL DATA SET BROWSE AND JOB INFORMATION SERVICES). INITIALIZED BY HASPIRMA. ----------
					End of Comment
816	(330)	DBL WORD	8	CCTXSYS (0)	DOUBLE WORD FOR CDS
816	(330)	BITSTRING	3		RESERVED FOR IBM USE
819	(333)	BITSTRING	1	CCTXSYSF	CROSS-SYSTEM REQUESTS ACCEPTED FLAG
		1		CCTNXSYS	"X'01'" NO NEW CROSS-SYSTEM REQUESTS ARE TO BE ACCEPTED
820	(334)	SIGNED	4	CCTXSYSN	COUNT OF CROSS-SYSTEM REQ'S
					Comment
					$$POST ELEMENTS -- REQUESTS FOR PCE SERVICE These post elements match order of PCEs listen in HCT. Any change made here must also be reflected in HCT.
					End of Comment
824	(338)	DBL WORD	8	CCTECF (0)	ECF FIELD FOR $$POST, IF BIT IS 1 PCES WAITING FOR CORRESPONDING RESOURCE SHOULD BE $POSTED
832	(340)	ADDRESS	4	CCTPCEPE (0)	START OF PCE $$POST ELEMENTS
832	(340)	BITSTRING	1	CCTCOMM	$COMMPCE - COMMANDS
833	(341)	BITSTRING	1	CCTJOB	$EXECPCE - XEQ SERVICES
		1...		CCTJOBPF	"X'80'" Job post flag
834	(342)	BITSTRING	1	CCTASYNC	$ASYNPCE - ASYNCH I/O
835	(343)	BITSTRING	1	CCTXSTIM	$XTIMPCE - TIME EXCESSION
836	(344)	BITSTRING	1	CCTTIMER	$TIMEPCE - STIMER
837	(345)	BITSTRING	1	CCTTRPCE	$TRCPCE - EVENT TRACE LOG
838	(346)	BITSTRING	1	CCTSPOOL	$SPOLPCE - SPOOL
839	(347)	BITSTRING	1	CCTMLLM	$MLLMPCE - LINE MANAGER
840	(348)	BITSTRING	1	CCTOFFM	$SOMPCE - SPOOL OFFLOAD
841	(349)	BITSTRING	1	CCTCKPTP	$CKPTPCE - CHECKPOINT
842	(34A)	BITSTRING	1	CCTRCP	$MCONPCE -Remote Console
843	(34B)	BITSTRING	1	CCTSSPCE	$SFSPCE -Schedulr Service
844	(34C)	BITSTRING	1	CCTENFP	$ENFPCE - ENF LISTEN PCE
844	(34C)	X'D'	0	CCTPCENO	"*-CCTPCEPE" NUMBER OF PCE $$POST ELMTS
845	(34D)	BITSTRING	3	CCTPCEFL	Reserved - fill to boundry
848	(350)	ADDRESS	4	CCTDCTMD	STORAGE FOR IRDCT MODELS
					Comment
					---------- DECLARE THE MAJOR NAME AND FIELD TO HOLD THIS SUBSYSTEM'S NAME FOR ENQ/DEQ USE OF THE CSA CELL FIELDS. ----------
					End of Comment
852	(354)	CHARACTER	8	CCTQNAM (0)	QNAME FOR ALL HASP ENQS
852	(354)	CHARACTER	4		'SYSZ'

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
				Comment	
				---------- NEXT THREE FIELDS MUST BE KEPT TOGETHER FOR USE WITH RACROUTE ----------	
				End of Comment	
856	(358)	CHARACTER	8	CCTSNV (0)	JES NAME AND VERSION
856	(358)	CHARACTER	4	CCTSSNM	NAME OF SUBSYSTEM
860	(35C)	CHARACTER	4	CCTSSVS	VERSION, RELEASE, MOD
864	(360)	BITSTRING	1	CCTSSNML	HOLDS ACTUAL LENGTH OF SUBSYSTEM NAME IN CCTSSNM FIELD
865	(361)	BITSTRING	1	(3)	Reserved for future use
				Comment	
				CHAINING FIELD FOR THE CSA CELL SERVICES. $GETCEL AND $FRECEL IN HASCLINK. ALSO, THE CELL STORAGE ALLOCATED AND CELL STORAGE ALLOCATED BUT NOT IN USE FIELDS.	
				End of Comment	
868	(364)	ADDRESS	4	CCTCSACH	CSA CELL CHAIN HEADER
872	(368)	SIGNED	4	CCTCALLC	CSA ALLOCATED CELL STORAGE
876	(36C)	SIGNED	4	CCTCFREE	CSA FREE CELL STORAGE
				Comment	
				---------- MINOR RESOURCE NAME FOR INTERNAL READER RESOURCE ----------	
				End of Comment	
880	(370)	CHARACTER	8	CCTRDRSC	Minor name for internal reader resource
				Comment	
				---------- Minor resource name for ENQ/DEQ of SVJ Lock ----------	
				End of Comment	
888	(378)	CHARACTER	8	CCTSVJLK	RNAME name for SVJ lock resource
				Comment	
				---------- Minor resource name for ENQ/DEQ of SAPID lock ----------	
				End of Comment	
896	(380)	CHARACTER	8	CCTSAPLK	RNAME name for SAPID lock resource

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
					Comment
					Communication queues and WAIT/POST elements for main task communication with user address spaces.

					Cross-memory POST parameter list for use by $$POST. The ECB address actually points to a piece of fixed CSA containing the ECB, CCTPOSTW, and CCTBLANKs.

					CTPOSTE POST - , POST word 1 = main task ECB addr
					ASCB= - , POST word 2 = JES2 ASCB addr
					ERRET=CCTBR14 POST word 3 = CCTBR14
					ECBKEY=YES POST word 4 = Key of ECB
					MACDATE 07/02/90
					End of Comment
904	(388)	ADDRESS	4	CCTPOSTE	. 1ST WORD - ECB ADDRESS
908	(38C)	ADDRESS	4		. 2ND WORD - ASCB ADDRESS
912	(390)	ADDRESS	4		. 3RD WORD - ERRET ADDRESS
916	(394)	ADDRESS	4		. 4TH WORD - BYTE0,ECBKEY
916	(394)	X'388'	0	CCTHECBA	"CCTPOSTE" ADDRESS OF MAIN HASP ECB
916	(394)	X'38C'	0	CCTASCB	"CCTPOSTE+4,4,C'A'" ADDRESS OF HASP ASCB
916	(394)	X'394'	0	CCTHECBK	"CCTPOSTE+12,1" Storage key of HASP ECB
916	(394)	X'4'	0	CCTPOSTW	"4" OFFSET TO $$POST WORK INDICATOR
916	(394)	X'8'	0	CCTBLANK	"8" 48 FIXED BLANKS
916	(394)	X'38'	0	CCTFIXL	"4+1+3+48" LENGTH OF FIXED CSA SPACE
920	(398)	SIGNED	4	(0)	Align CCTCGECB
920	(398)	BITSTRING	1	CCTCGECB	CSA general ECB/XECB
					Comment

					The SJB job communication queues.

					HASCSRJB is dependent on any SJB queue that could be a valid value for the SJBQUEUE field in the SJB to be between CCTSJBB and CCTSJBE.
					End of Comment
940	(3AC)	ADDRESS	4	CCTSJBB (0)	Beginning of SJB queues <----
940	(3AC)	ADDRESS	4	CCTJPCLS	SJBS PENDING JOB-BY-CLASS |
944	(3B0)	ADDRESS	4	CCTJPWLM	SJBS PENDING WLM init |
948	(3B4)	ADDRESS	4	CCTJPNUM	SJBS PENDING JOB-BY-NUMBER |
952	(3B8)	ADDRESS	4	CCTJXCLS	SJBS EXECUTING JOB-BY-CLASS |
956	(3BC)	ADDRESS	4	CCTJXNUM	SJBS EXECUTING JOB-BY-NUMBER|
960	(3C0)	ADDRESS	4	CCTJTERM	SJBS WITH JOBS TO TERMINATE |
964	(3C4)	ADDRESS	4	CCTJRENQ	SJBS WITH JOBS TO RE-ENQUEUE|
968	(3C8)	ADDRESS	4	CCTSJBE (0)	End of SJB queues <----
968	(3C8)	ADDRESS	4	CCTJTEOM (2)	Address of first and last SJB on EOM queue
					Comment
					THE CCTTRIDS BYTES SERVE A DUAL PURPOSE. THE TRACE ID BIT DEFINITIONS START WITH BIT 0 AND USE INCREASING BIT NUMBERS WHILE THE SSI FUNCTION BIT DEFINITIONS START AT BIT 7 AND USE DECREASING BIT NUMBERS. UNUSED BITS IN THE MIDDLE ARE RESERVED FOR FUTURE USE. SEE THE CCTTRIDS BIT DEFINITIONS NEAR THE BOTTOM OF THE $HCCT MACRO FOR FURTHER DETAILS.
					End of Comment
976	(3D0)	BITSTRING	1	(3)	Reserved for future use
979	(3D3)	BITSTRING	1	CCTTRFLG	TRACE FACILITY FLAG BYTE
		1...		CCTTRACT	"B'10000000'" EVENT TRACING ACTIVATED

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
		.1..		CCTTRLOG	"B'01000000'" EVENT TRACE LOG ACTIVE
980	(3D4)	BITSTRING	256	CCTTRIDS	TRACE/SSI BYTE TABLE
980	(3D4)	X'3D5'	0	CCTTIDTB	"CCTTRIDS+1,1,C'X'" TRACE ID=1-255. (ID=0 IS USED INTERNALLY FOR DISCARDING)
		1...		CCTTRDEF	"B'10000000'" TRACE ID IS DEFINED
		.1..		CCTTRDON	"B'01000000'" TRACE ID IS BEING TRACED
		1		CCTSSION	"B'00000001'" SSI FUNCTION BEING TRACED
1236	(4D4)	SIGNED	4	(0)	ENSURE CCTTRBTH IS ON FULLWORD
1236	(4D4)	SIGNED	8	CCTTRBTH (0)	NEXT TWO FIELDS STAY TOGETHER
1236	(4D4)	ADDRESS	4	CCTTRTBL	ADDRESS OF CURRENT TRACE TABLE
1240	(4D8)	ADDRESS	4	CCTTRLGG	ADDR OF TABLE BEING LOGGED
1244	(4DC)	ADDRESS	4	CCTTRPLG	ADDR OF PREVIOUS LOG TABLE
1248	(4E0)	SIGNED	4	CCTTRSIZ	TRACE TABLE SIZE (IN BYTES)
1252	(4E4)	ADDRESS	4		RESERVED FOR FUTURE USE
1256	(4E8)	DBL WORD	8	CCTTRTOT (0)	NEXT TWO FIELDS ARE CDS
1256	(4E8)	SIGNED	4	CCTTRRLC	COUNT OF RECENT DISCARDS
1260	(4EC)	SIGNED	4	CCTTRCTL	COUNT OF TOTAL DISCARDS
1264	(4F0)	SIGNED	4	CCTTRCUR	COUNT OF CURRENT TRACE TABLES
1268	(4F4)	SIGNED	4	CCTTRNEW	COUNT OF TARGET TRACE TABLES
1272	(4F8)	SIGNED	4	CCTTRFRE	COUNT OF FREE TRACE TABLES
1276	(4FC)	ADDRESS	4	CCTDM654	ADDRESS OF DOMID FOR 654 MSG
1280	(500)	SIGNED	4	CCTTM654	TIME THE 654 MSG WAS ISSUED
1284	(504)	ADDRESS	2	CCTTRCPG	TRACEDEF PAGES PARAMETER
1286	(506)	ADDRESS	2	CCTTRCWP	HASP050 WARNING PERCENTAGE
1288	(508)	SIGNED	4	CCTTRLGS	TRACE LOG SPIN SIZE, IN LINES
1292	(50C)	CHARACTER	1	CCTTRCLS	TRACE LOG SYSOUT CLASS
1293	(50D)	ADDRESS	3		RESERVED FOR FUTURE USE

Comment

MISCELLANEOUS SERVICE QUEUES, ADDRESSES AND COUNTS

End of Comment

1296	(510)	ADDRESS	4	CCTAUXCB	Addr of AUX AS Work area
1300	(514)	ADDRESS	4	CCTETDEF	Common PC routines ETDEFs
1304	(518)	SIGNED	4	CCTSYSLX	JES2's system LX
1308	(51C)	ADDRESS	4	CCTXASCB	AUX address space ASCB
1312	(520)	ADDRESS	4	CCTMONCB	Addr of monitor AS workarea
1316	(524)	ADDRESS	4	CCTMASCB	Monitor address space ASCB

Comment

CCTMSMPC is the current sampling buffer being used by the monitor. CCTMSMPS is a frozen sampling buffer captured for dump processing. Under normal processing CCTMSMPC and CCTMSMPS point to the same buffer. To freeze a buffer, clear CCTMSMPC. The monitor will get another buffer for processing.
To release a frozen buffer, clear CCTMSMPS. The next sample will reset CCTMSMPS.

End of Comment

1320	(528)	ADDRESS	4	CCTMSMPC	Cur monitor sampling buffer
1324	(52C)	ADDRESS	4	CCTMSMPS	Frozen sampling buffer
1328	(530)	ADDRESS	4	CCTCBRT	$CATBERT pointer
1332	(534)	ADDRESS	4	CCTBMAPS	BERT translation maps
1336	(538)	SIGNED	4	CCTJLMAX	Local maximum job number (from $JNT)
1340	(53C)	SIGNED	4	CCTSLKST	Number of times $SJBLOCK was stolen - update using CS logic
1344	(540)	SIGNED	4	CCTSLKUS	Number of times $SJBLOCK was usurped - update using CS logic
1348	(544)	SIGNED	4	CCTBEGN	Number of times $SSIBEGN removed stale HASBs - update using CS logic

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
1352	(548)	ADDRESS	4	CCTCSHED	Head of STAC FIFO queue
1356	(54C)	ADDRESS	4	CCTCSTAI	Tail of STAC FIFO queue
1360	(550)	ADDRESS	4	CCTPSO	Head of PSO LIFO queue
1364	(554)	ADDRESS	4	CCTPSOQ	Addr of MTQH for PSO
1368	(558)	ADDRESS	4	CCTSPIOT	CHAIN OF IOTS AWAITING SPIN
1372	(55C)	ADDRESS	4	CCTFIFOQ	FIFO REORDERED SPIN/HOLD REQUESTS
1376	(560)	SIGNED	4	CCTSPINC	COUNT OF SPIN IOTS SPUN
1384	(568)	DBL WORD	8	(0)	Ensure CCT1SAP aligned <---
1384	(568)	ADDRESS	4	CCT1SAP	Address of first SAPID in | the SAPID data space |
1388	(56C)	SIGNED	4	CCT1SAPC	Counter used in CDS <---
1392	(570)	SIGNED	4	CCTSJWEL	Last unique JWEL key assigned to a SAPID
1396	(574)	ADDRESS	4	CCTSAPIQ	Address of MTQH for SAPI requests
1400	(578)	ADDRESS	4	CCTIOERR	SPOOL PROCESSOR I/O ERROR QUEUE
1404	(57C)	ADDRESS	4	CCTNOUSQ	Notify User Request Queue

Comment

Following fields contain the queue heads and counts for resource management of Scheduler Facility Service SFRBs acquired in ECSA. The CCTSFREQ/CCTSSRCT fields are serialized using CDS and must be kept in a doubleword.

End of Comment

1408	(580)	DBL WORD	8	CCTSFREQ (0)	Scheduler Facilty Request Q
1408	(580)	ADDRESS	4		Request queue header
1412	(584)	SIGNED	4	CCTSSRCT	Count of SFRBs on Request Q
1416	(588)	ADDRESS	4	CCTSFPNQ	Scheduler Facilty Pending Q
1420	(58C)	SIGNED	4	CCTSSNCT	Count of SFRBs on Pending Q
1424	(590)	ADDRESS	4	CCTSFPRQ	Scheduler Facilty Process Q
1428	(594)	SIGNED	4	CCTSSPCT	Count of SFRBs on Process Q
1432	(598)	SIGNED	4	CCTSSMAX	Maximum no.of SFRBs
1436	(59C)	BITSTRING	1	CCTSSTAT	Status flag for Sched.Serv
		1...		CCTSSDWN	"B'10000000'" Scheduler PCE disabled
		.1..		CCTSSDIS	"B'01000000'" Scheduler PCE disabling
1437	(59D)	ADDRESS	3		Reserved for future IBM use
1440	(5A0)	ADDRESS	4	CCTFSSCB	ADDR OF FIRST FSSCB IN CHAIN
1444	(5A4)	ADDRESS	4	CCTTOKA	Address of JES2 token
1448	(5A8)	ADDRESS	4	CCTPIT	ADDR OF FIRST INITIATOR PIT
1452	(5AC)	ADDRESS	2	CCTPITNM	NUMBER OF PITS IN CSA
1454	(5AE)	ADDRESS	2	(3)	RESERVED FOR FUTURE USE

Comment

SPOOL DATA MANAGEMENT

End of Comment

1460	(5B4)	ADDRESS	4	CCTSRCH	TGB ENTRY TO BEGIN TG SEARCH FROM FOR $STRAK AND $TRACK
1464	(5B8)	ADDRESS	4	CCTPDDB1	OFFSET WITHIN IOT OF 1ST PDDB
1468	(5BC)	ADDRESS	4	CCTTGAEL	TGAE AREA LENGTH FOR A NON-SPIN PRIMARY ALLOCATION IOT
1472	(5C0)	ADDRESS	2	CCTBFSIZ	SPOOL BUFFER SIZE
1474	(5C2)	SIGNED	2	CCTNSPL	Max number of spool volumes
1474	(5C2)	X'5C3'	0	CCTNSPB	"CCTNSPL+1,1" allowed (one byte version)
1476	(5C4)	ADDRESS	1		Reserved for future use
1477	(5C5)	ADDRESS	1	CCTTKCEL	TRAKCELL SIZE IN BUFFERS
1478	(5C6)	SIGNED	2		Reserved for future use
1480	(5C8)	DBL WORD	8	(0)	Doubleword alignment to force optimum MVC performance
1480	(5C8)	BITSTRING	32	CCTMTSPL	SPOOLS WHICH HAVE SPACE
1512	(5E8)	BITSTRING	32	CCTSPLAF	Spools with affinity for this member
1544	(608)	BITSTRING	32	CCTVBLOB	Spools with space in the BLOB
1576	(628)	ADDRESS	4	CCTDAS1	ADDRESS OF FIRST DAS
1580	(62C)	BITSTRING	12	CCTTGBA (0)	TGB VALUES FOR BLOB

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
1580	(62C)	ADDRESS	4	CCTTGBF	FIRST TGB ENTRY ADDRESS
1584	(630)	ADDRESS	4	CCTTGBS	TGB ENTRY SIZE
1588	(634)	ADDRESS	4	CCTTGBL	Last TGB entry
1592	(638)	ADDRESS	4	CCTKBYTS	THOUSANDS OF BYTES OF SPOOL
1596	(63C)	BITSTRING	1	CCTNQCNT	SPOOL ENQ COUNTER
1597	(63D)	BITSTRING	1	CCTFNCNT	Number of volumes to fence a job to
1598	(63E)	ADDRESS	2		RESERVED FOR FUTURE USE
1600	(640)	DBL WORD	8	(0)	FORCE DOUBLEWORD ALIGNMENT
1600	(640)	ADDRESS	4	CCTTGASC	TGB REQUEST ASCB
1604	(644)	ADDRESS	4	CCTTGECB	TGB REQUEST ECB

Comment

RETURN CONTROL ELEMENTS

End of Comment

1610	(64A)	ADDRESS	2		RESERVED FOR FUTURE USE

Comment

MAIN TASK AUTHORIZATION INDEX FOR CROSS MEMORY

End of Comment

1612	(64C)	SIGNED	4	CCTAXL (0)	AUTHORIZATION INDEX (AX) LIST
1612	(64C)	SIGNED	2	CCTAXN	NUMBER OF AXS REQUESTED
1614	(64E)	SIGNED	2	CCTAXV	VALUE (AX) RETURNED BY AXRES

Comment

DATA BLOCKS

End of Comment

1576	(628)	X'628'	0	CCTDCB	"*" SYS1.HASPACE DCB
1616	(650)	ADDRESS	4	(3)	12-BYTE MEAT OF DCB
1628	(65C)	ADDRESS	4	CCTDEB	ADDR OF JES2 DIRECT ACCESS DEB

Comment

SWB MANAGEMENT

End of Comment

1632	(660)	ADDRESS	4	CCTKEYTB	ADDRESS OF KEYLIST TABLE
1640	(668)	DBL WORD	8	CCTJDVT	SJF JDVT NAME

Comment

GENERIC GROUPING KEY LISTS.

End of Comment

1648	(670)	SIGNED	2	CCTGGDKN	NUMBER OF GROUPING KEYS FOR SYSTEM-DEFAULT JDVT
1650	(672)	CHARACTER	2	CCTGGRSV	RESERVED FOR FUTURE USE
1652	(674)	ADDRESS	4	CCTGGDKL	ADDRESS OF KEY LIST FOR SYSTEM-DEFAULT JDVT
1656	(678)	ADDRESS	4	CCTGGDKB	ADDRESS OF KEY LIST BLOCK FOR SYSTEM-DEFAULT JDVT
1660	(67C)	ADDRESS	4	CCTGGFKB	ADDRESS OF KEY LIST BLOCK FOR FIRST NON-DEFAULT JDVT
1664	(680)	ADDRESS	4	CCTELCMB	Addr of first CMB for reset ckpt lock command. Use CS logic to update.
1668	(684)	ADDRESS	4	CCTPJCLQ	Address of main task queue header for PJCL requests

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
				Comment	
					Data space control block (DSB) anchors
				End of Comment	
1672	(688)	ADDRESS	4	CCTDSB	Anchor for all JES2 DSBs
1676	(68C)	ADDRESS	4	CCTDSINR	ADDR OF DATASPACE BLOCK FOR INTERNAL READER PROTECTED BUFFER DATASPACE
				Comment	
					Routine addresses for the MVS callable services.
				End of Comment	
1680	(690)	ADDRESS	4	CCTCPLB	MVS CPOOL BUILD ROUTINE
1684	(694)	ADDRESS	4	CCTCPLX	MVS CPOOL EXPAND ROUTINE
1688	(698)	ADDRESS	4	CCTCPLF	MVS CPOOL FREE ROUTINE
1692	(69C)	ADDRESS	4	CCTCPLG	MVS CPOOL GET ROUTINE
1696	(6A0)	ADDRESS	4	CCTCPLM	MVS CPOOL MODIFY ROUTINE
1700	(6A4)	ADDRESS	4	CCTCPLQC	MVS CPOOL QUERY CELL RTN
1704	(6A8)	ADDRESS	4	CCTCPLQX	MVS CPOOL QUERY EXTENT RTN
1708	(6AC)	ADDRESS	4	CCTCPLQP	MVS CPOOL QUERY POOL RTN
1712	(6B0)	ADDRESS	4	CCTNTCR	MVS NAME/TOKEN Create rtn
1716	(6B4)	ADDRESS	4	CCTNTRT	MVS NAME/TOKEN Retrieve rtn
1720	(6B8)	ADDRESS	4	CCTNTDL	MVS NAME/TOKEN Delete rtn
1724	(6BC)	SIGNED	4	(4)	RESERVED FOR FUTURE USE
				Comment	
					XCF Group token
				End of Comment	
1740	(6CC)	ADDRESS	4	CCTIXVT	XCF Group token
1744	(6D0)	CHARACTER	8	CCTGPNM	XCF group name
1752	(6D8)	ADDRESS	4	CCTSDADR (0)	Address of ECB extension with bits on indicating initialized
1756	(6DC)	SIGNED	4	CCTSDECX (0)	ECB Extension for $EXCP <-- issued in USER environ. | that uses a $SDB |
1760	(6E0)	ADDRESS	4	CCTSDPEX	"V(HAMPSTER)" EXCP Post Exit address in | USER environment <--
1764	(6E4)	ADDRESS	4	CCTSCATP	Pointer to SCAT
				Comment	
					---------- Keep the EBCDIC level and binary product/service levels together. ----------
				End of Comment	
1768	(6E8)	BITSTRING	10	CCTJES2_LEVEL (0)	<---+ Level information
1768	(6E8)	CHARACTER	8	CCTLEVEL	| OS V.R.M, product version | of JES2, copy of $LEVEL, | pointed to by SSCTSUSE
1776	(6F0)	ADDRESS	1	CCTPLVL	| Binary product level
1777	(6F1)	ADDRESS	1	CCTSLVL	<---+ Binary service level
1778	(6F2)	BITSTRING	14		Reserved for future use
				Comment	
					Queue heads for ENF LISTEN Event processor.
				End of Comment	

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
1792	(700)	ADDRESS	4	CCTENFLF	LIFO stack of $EVTs
1796	(704)	ADDRESS	4	CCTENFFF	FIFO queue of $EVTs

Comment

Each time a structure available ENF is received, the JES2 listen exit increments this count. This is used to determine when structures become available for processing.

End of Comment

1800	(708)	SIGNED	4	CCTXESEV	Structure avail ENF count

Comment

Patch space for code that uses R11 addressability to the HCCT, and the SYSOUT Class Attribute Table (SCAT). These should be the last HCCT fields.

End of Comment

1804	(70C)	SIGNED	4		Reserved
1808	(710)	DBL WORD	8	(0)	
1808	(710)	BITSTRING	256	CCTPATCH (2)	Patch spc for R11-HCCT code

Comment

Use the address in CCTSCATP to reference the SCAT rather than doing a LA of CCTSCAT. This helps to prevents massive reassemblies of modules if the length of $HCCT is changed in an APAR.

End of Comment

2320	(910)	SIGNED	2	CCTSCAT (0)	SYSOUT CLASS ATTRIBUTE TABLE
2320	(910)	BITSTRING	1	(0)	SYSOUT CLASSES A-Z, 0-9
2320	(910)	X'C0'	0	CCTSTLEN	"*-CCTSCAT" LENGTH OF SCAT TABLE
2512	(9D0)	ADDRESS	2	(0)	Force asmbly error if SCAT not last
2512	(9D0)	X'9D0'	0	CCTLEN	"*-HCCT" LENGTH OF HCCT

$HCCT Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
CCTABEND	17C	FFFFFF	CCTCFREE	36C	0
CCTALLFF	78	78	CCTCGECB	398	0
CCTAMVEC	164		CCTCKCON	2FC	
CCTASCB	394	38C	CCTCKPTP	349	0
CCTASYNC	342	0	CCTCKPT1	264	40404040
CCTAUXCB	510		CCTCKPT2	2AC	40404040
CCTAXL	64C		CCTCMDMX	30C	
CCTAXN	64C		CCTCOMCH	182	40
CCTAXV	64E		CCTCOMCT	308	
CCTBADA	E8		CCTCOMM	340	0
CCTBATMD	230		CCTCOMMQ	304	
CCTBATRD	240		CCTCPIDX	150	
CCTBEGN	544	0	CCTCPLB	690	
CCTBFSIZ	5C0		CCTCPLF	698	
CCTBLANK	394	8	CCTCPLG	69C	
CCTBLNKS	18	40404040	CCTCPLM	6A0	
CCTBMAPS	534		CCTCPLQC	6A4	
CCTCADDR	148		CCTCPLQP	6AC	
CCTCALLC	368	0	CCTCPLQX	6A8	
CCTCBRT	530		CCTCPLX	694	

Name	Hex Offset	Hex Value
CCTCSACH	364	
CCTCSHED	548	
CCTCSTAI	54C	
CCTCTABS	14C	
CCTCUCT	1D0	
CCTDAS1	628	
CCTDCB	628	628
CCTDCTMD	350	
CCTDEB	65C	
CCTDEBUG	262	
CCTDM654	4FC	
CCTDOM86	300	
CCTDSB	688	
CCTDSINR	68C	
CCTDSTFL	183	0
CCTECF	338	0
CCTELCMB	680	
CCTENFFF	704	
CCTENFLF	700	
CCTENFP	34C	0
CCTEST1	1E8	
CCTETDEF	514	
CCTEXTBL	1A8	
CCTFFS	78	
CCTFIFOQ	55C	
CCTFIXL	394	38
CCTFLAG1	260	0
CCTFLAG2	261	0
CCTFMAX	E0	E0
CCTFNCNT	63D	0
CCTFSSCB	5A0	
CCTF1	B8	1
CCTF12	CC	C
CCTF16	D0	10
CCTF2	BC	2
CCTF255	D4	FF
CCTF4	C0	4
CCTF4096	D8	1000
CCTF6	C4	6
CCTF8	C8	8
CCTGGDKB	678	
CCTGGDKL	674	
CCTGGDKN	670	
CCTGGFKB	67C	
CCTGGRSV	672	
CCTGPNM	6D0	
CCTHASP	17C	
CCTHAVT	178	
CCTHCT	154	
CCTHECBA	394	388
CCTHECBK	394	394
CCTHIBIT	E4	
CCTHMAX	E0	E0
CCTHOTST	17C	80
CCTHTCBA	158	
CCTH1	B8	BA
CCTH12	CC	CE
CCTH16	D0	D2
CCTH2	BC	BE
CCTH255	D4	D6
CCTH4	C0	C2
CCTH4096	D8	DA
CCTH6	C4	C6
CCTH8	C8	CA
CCTIINFO	31C	
CCTINXTB	1AC	
CCTIOERR	578	
CCTIRDRS	23C	
CCTIRWT	24C	
CCTIXVT	6CC	
CCTJDVT	668	
CCTJES2_LEVEL	6E8	
CCTJLMAX	538	0
CCTJOB	341	0
CCTJOBPF	341	80
CCTJPCLS	3AC	
CCTJPNUM	3B4	
CCTJPWLM	3B0	
CCTJRENQ	3C4	
CCTJSPL	129	128
CCTJSPLL	128	
CCTJSPLV	129	D1C5E2E2
CCTJSTKN	15C	0
CCTJTEOM	3C8	
CCTJTERM	3C0	
CCTJXCLS	3B8	
CCTJXNUM	3BC	
CCTJ2DSP	198	0
CCTJ2WAT	190	0
CCTKAC	170	
CCTKBYTS	638	
CCTKEYTB	660	
CCTLEN	9D0	9D0
CCTLEVEL	6E8	
CCTLMT1	C	
CCTLNINT	1F8	
CCTMASCB	524	
CCTMEMUP	1BC	
CCTMLLM	347	0
CCTMONCB	520	
CCTMSMPC	528	
CCTMSMPS	52C	
CCTMTSPL	5C8	0
CCTMVSNM	188	40404040
CCTNDE	213	
CCTNDENL	213	0
CCTNDENM	214	
CCTNEG1	78	78
CCTNINRS	258	0
CCTNMCUR	310	
CCTNMFAL	318	
CCTNMMAX	314	
CCTNONOD	21C	0
CCTNOUSQ	57C	
CCTNQCNT	63C	0
CCTNSPB	5C2	5C3
CCTNSPL	5C2	0
CCTNTCR	6B0	
CCTNTDL	6B8	
CCTNTRT	6B4	
CCTNXSYS	333	1
CCTOFFM	348	0
CCTOFSTB	8	
CCTOTINT	1F0	
CCTPATCH	710	0
CCTPCEFL	34D	0
CCTPCENO	34C	D
CCTPCEPE	340	
CCTPDDB1	5B8	

Name	Hex Offset	Hex Value
CCTPGINT	1E8	
CCTPIT	5A8	
CCTPITNM	5AC	0
CCTPJCLQ	684	
CCTPJES2	17C	1
CCTPLVL	6F0	
CCTPOSTE	388	
CCTPOSTW	394	4
CCTPSO	550	
CCTPSOQ	554	
CCTPUINT	200	
CCTPVRSN	10	
CCTQINDX	1B0	
CCTQNAM	354	
CCTRBGN	1A0	
CCTRCP	34A	0
CCTRCPCQ	1B8	
CCTRDINM	25A	0
CCTRDRSC	370	C9D5E3D9
CCTRDT	224	
CCTRDTB	22C	
CCTRDTF	228	
CCTRLMT	1A4	
CCTROUT	21E	0
CCTRRT	220	
CCTRSV1	263	
CCTSAPIQ	574	
CCTSAPLK	380	E2C1D7C9
CCTSCAT	910	
CCTSCATP	6E4	
CCTSCIDS	174	
CCTSDADR	6D8	
CCTSDECX	6DC	
CCTSDPEX	6E0	
CCTSEGLM	2F4	
CCTSFPNQ	588	
CCTSFPRQ	590	
CCTSFREQ	580	
CCTSID	184	40404040
CCTSINFO	320	
CCTSJBB	3AC	
CCTSJBE	3C8	
CCTSJWEL	570	0
CCTSLKST	53C	0
CCTSLKUS	540	0
CCTSLVL	6F1	
CCTSMVFN	180	10
CCTSNV	358	
CCTSPINC	560	0
CCTSPIOT	558	
CCTSPLAF	5E8	0
CCTSPLCL	2F8	
CCTSPOOL	346	0
CCTSRCH	5B4	
CCTSSCT	16C	
CCTSSDIS	59C	40
CCTSSDWN	59C	80
CCTSSION	3D4	1
CCTSSMAX	598	
CCTSSNCT	58C	
CCTSSNM	358	5C5C5C5C
CCTSSNML	360	0
CCTSSPCE	34B	0
CCTSSPCT	594	
CCTSSRCT	584	

Name	Hex Offset	Hex Value
CCTSSTAT	59C	0
CCTSSVS	35C	5C5C5C5C
CCTSSVT	144	
CCTSTCMD	234	
CCTSTCNM	25C	0
CCTSTCRD	244	
CCTSTIRV	180	8
CCTSTLEN	910	C0
CCTSTPJF	180	4
CCTSTRPL	180	1
CCTSTUS	180	0
CCTSTUSP	180	80
CCTSTUSR	180	20
CCTSTUST	180	40
CCTSVJLK	378	E2E5D140
CCTSYSLX	518	0
CCTTGAEL	5BC	
CCTTGASC	640	
CCTTGBA	62C	
CCTTGBF	62C	
CCTTGBL	634	
CCTTGBS	630	
CCTTGECB	644	
CCTTIDTB	3D4	3D5
CCTTIMER	344	0
CCTTIMOP	20C	
CCTTKCEL	5C5	
CCTTMINT	208	
CCTTM654	500	
CCTTO	210	
CCTTOKA	5A4	
CCTTONOD	210	0
CCTTOQUL	212	
CCTTRACT	3D3	80
CCTTRBTH	4D4	
CCTTRCLS	50C	
CCTTRCPG	504	
CCTTRCTL	4EC	
CCTTRCUR	4F0	
CCTTRCWP	506	
CCTTRDEF	3D4	80
CCTTRDON	3D4	40
CCTTRFLG	3D3	0
CCTTRFRE	4F8	
CCTTRIDS	3D4	0
CCTTRLGG	4D8	
CCTTRLGS	508	
CCTTRLOG	3D3	40
CCTTRNEW	4F4	
CCTTRPCE	345	0
CCTTRPLG	4DC	
CCTTRRLC	4E8	
CCTTRSIZ	4E0	
CCTTRTBL	4D4	
CCTTRTOT	4E8	
CCTTSLOK	181	0
CCTTSOMD	238	
CCTTSONM	25E	0
CCTTSORD	248	
CCTUCADD	1D4	
CCTUSER1	1D8	
CCTUSER2	1DC	
CCTUSER3	1E0	
CCTUSER4	1E4	
CCTVBLOB	608	0

Name	Hex Offset	Hex Value
CCTVRNUM	0	A
CCTVRSN	0	
CCTXASCB	51C	
CCTXESEV	708	
CCTXITA	250	
CCTXMAQ	1B4	
CCTXRTA	254	
CCTXSTIM	343	0
CCTXSYS	330	
CCTXSYSF	333	0
CCTXSYSN	334	0
CCTXTRAN	131	44
CCTZERO	38	38
CCTZEROS	38	0
CCT0FFF	DC	FFFFFF
CCT000F	D4	D4
CCT1CKWI	260	8
CCT1PJAC	260	2
CCT1PJSA	260	4
CCT1PRDF	260	40
CCT1SAP	568	
CCT1SAPC	56C	0
CCT1SSYP	260	10
CCT1SSYS	260	20
CCT2BATR	261	40
CCT2CRCF	261	10
CCT2IRDR	261	80
CCT2OPRQ	261	8
CCT2PITC	261	20
CCT2PSO	261	1
CCT2SAPI	261	4
CCT2USJB	261	2
CCT7FFF	E0	7FFFFFFF
HCCT	0	

$HCT Programming Interface information

Programming Interface information

$HCT

The following fields are **NOT** programming interface information:

- $BERTPTR
- $CALCUR
- $CALONE
- $CHLOG
- $CHLOGLN
- $CKC
- $CKG1
- $CKG2
- $CKPTFG1
- $CKPTFG2
- $CKPTFG3
- $CKPTFG4
- $CKPTFG5
- $CKPTFLG
- $CKPTIO
- $CKPTPTR
- $CKRECN
- $CKW
- $CLCB
- $CTLB
- $CTLBIO
- $CTLBX
- $CURPCE
- $DILHEAD
- $DILPCE
- $DILTAIL
- $DRQUES
- $DTECKCF
- $DTEEOM
- $ECBEXTN
- $EOMPCE
- $EXTECBQ
- $FIXCHLG
- $FIXLIST
- $HASCB
- $HASPDCB
- $HASPECB
- $HASPECF
- $HASPRB
- $JQXPTR
- $KITPTR
- $LCKPTR
- $MASECF
- $MASTER
- $MASTERI
- $MASTERL
- $MISCPCE
- $MLLMECF
- $MSTRID
- $MSTRVER
- $MSTRVRN
- $MVSDISP
- $MVSWAIT
- $NWECB
- $PAD
- $PCELAST
- $PCEORG
- $READY
- $READYF
- $READYL
- $SCLPEND
- $SPIPCE
- $SPLCNT
- $TBLNUM
- $TGBAD
- $TGMADDR
- $TGMAP
- $TGMHEAD
- $VERSACT
- $VERSINI
- $VERSKPT
- $VERSSTT
- $WCHECK
- $XECBQ
- $XECBQF
- $XECBQL

End of Programming Interface information

$HCT Heading Information

Common Name: HASP Communication Table
Macro ID: $HCT
DSECT Name: HCT
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: MIT entry for HASPNUC ('MIT HASPNUC ')
Offset: HASPCT-HCT
Length: 12
Storage Attributes: Subpool: The subpool of the HASJES20 load module.
Key: 1
Residency: Virtual and real storage are below 16M, in the private storage of the JES2 address space. The storage is page fixed.
Size: See HCTLEN
Created by: The HCT is assembled into the front of the HASPNUC module and is loaded when the HASJES20 load module is loaded.
Pointed to by:
- As one of the key JES2 control blocks for processing from the JES2 address space, the HCT address is usually in general purpose register 11 in the assembly environments known as JES2 and SUBTASK.
- The label HASPCT in HASPNUC, defined as an external symbol for code in the HASJES20 load module, is the address of the HCT.
- The HCT is at the front of the HASJES20 load module so the module storage address in the MVS CDE for HASJES20 points to the HCT.
- The CCTHCT field of the HCCT common storage control block points to the HCT.
- The DTEHCT field in each JES2 subtask's DTE control block points to the HCT.
- The CIRHCT field in the initialization PCE work area, the CIRWORK, points to the HCT.

Serialization:
- Serialization depends on the field in question.
- Fields might be serialized via Compare-and-swap.
- Fields might be serialized implicitly, by being changeable only by the JES2 main task.
- Fields might be serialized by the LOCAL/CMS locks.
- Fields might be implicitly serialized by being changeable only by a specific JES2 main task processor.
- Fields might be implicitly serialized by being changeable only when the JES2 main task owns the checkpoint queues ($QSUSE).
- Fields may be usable only for a short-term period (ie., serialization is lost as soon as the processor does a $WAIT).

Function: The $HCT is the major JES2 control block when executing code which was generated in the JES2 or subtask assembly environment. Register 11 will normally point to this control block in those environments.

The $HCT contains routine addresses. pointers to data structures, constants, work areas, fields which contain current values for various types of parameters, a checkpointed section, patch space, Etc..

$HCT Map

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	HCT	, HASP Communications Table
0	(0)	BITSTRING	80		HASPNUC Module Info Table
80	(50)	CHARACTER	8	$VERSION	Obsolete. Permanently set to SP 5.3.0 (Do not remove)
88	(58)	CHARACTER	8	$UVERS	Installation version of the JES2 product defined when HASPNUC was assembled
96	(60)	CHARACTER	1	$MACVERS	SP version of MVS maclibs used to assemble HASPNUC
97	(61)	ADDRESS	1		RESERVED FOR FUTURE USE
98	(62)	ADDRESS	2	$SAVEBOF	Offset to $SAVEBEG (used by IPCS logic)

Comment

Pointer to HASP module directory and LMT anchors

End of Comment

100	(64)	ADDRESS	4	$HASPMAP	"V($REPTABL)" HASP MODULE DIRECTORY ADDRESS
104	(68)	ADDRESS	4	$LMT1	Addr of 1st Pvt LMT, if any
108	(6C)	ADDRESS	4	$LMT1C	Addr of 1st CSA LMT, if any
112	(70)	ADDRESS	4	$LMTPBOT	Addr of bot'm PVT LMT entry

Comment

WAIT ELEMENTS, EACH SET MUST STAY TOGETHER

End of Comment

116	(74)	ADDRESS	4	$HASPECB	ADDR OF HASP EVENT CONTROL BLK
120	(78)	SIGNED	4	$ECBEXTN (0)	ECB EXTENSION FOR POST
124	(7C)	ADDRESS	4	$DSPXITA	"V(HASPPXIT)" EXIT DISPATCHING
128	(80)	SIGNED	4	$XFRECBX (0)	ECB EXTENSION FOR SPOOL OFFLOAD
132	(84)	ADDRESS	4	$POSTEXA	"V($POSTEX)" DECB'S .. SPECIFIES POST EXIT
136	(88)	SIGNED	4	$XCPECBX (0)	ECB EXTENSION FOR $EXCP
140	(8C)	ADDRESS	4	$EXCPEXA	"V($IOPSTEX)" EXCP POST EXIT
144	(90)	ADDRESS	4	$NWECB	ECB FOR MISCELLANEOUS USES OF MVS ASYNCHRONOUS SERVICES BY PCES THAT WON'T WAIT ON IT (PAGEFIX)

Comment

Addresses of Remote Work Lookup tables

End of Comment

148	(94)	ADDRESS	4	$RWL	"V(HASPRWL)" Address of table
152	(98)	ADDRESS	4	$RWLRDRS	"V(HASPRWLR)" Remote reader sub-table
156	(9C)	ADDRESS	4	$RWLPRTS	"V(HASPRWLP)" Remote printer sub-table
160	(A0)	ADDRESS	4	$RWLPUNS	"V(HASPRWLU)" Remote punch sub-table
164	(A4)	ADDRESS	4	$RWLNJRS	"V(HASPRWJR)" Job receiver sub-table
168	(A8)	ADDRESS	4	$RWLNJTS	"V(HASPRWJT)" Job xmitter sub-table
172	(AC)	ADDRESS	4	$RWLNSRS	"V(HASPRWSR)" SYSOUT receiver sub-table
176	(B0)	ADDRESS	4	$RWLNSTS	"V(HASPRWST)" SYSOUT xmitter sub-table
180	(B4)	ADDRESS	4	$STABNDA	"V($STABEND)" ENTRY TO SUBTASK ESTAE RTN
184	(B8)	ADDRESS	4	$REQJID	Request jobid specifications
188	(BC)	ADDRESS	4	(6)	Reserved for future use
212	(D4)	ADDRESS	4	$TJEVTOK	Thread JOE Exclusion List data space ALET
216	(D8)	ADDRESS	4	$SAPTOK	SAPID data space ALET
220	(DC)	ADDRESS	4	$STACTOK	STAC Data space ALET
224	(E0)	ADDRESS	4	$PSOTOK	PSO Data space ALET
228	(E4)	ADDRESS	4	$DILHEAD	Address of first queued DWA element

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
232	(E8)	ADDRESS	4	$DILTAIL	Address of last queued DWA element
236	(EC)	ADDRESS	4	$ACTRNUM	Number of entries in RSO
240	(F0)	ADDRESS	4	$JIXJNUM_R4	Number of entries in JIX (should only be used in R4 mode)

Comment

ENTRIES FOR INSTALLATION EXIT, TABLE EXTENSION SERVICES

End of Comment

244	(F4)	ADDRESS	4	$PRPUSRV	"V(PRPUXSRV)" ADDRESS OF PRPU EXIT SERVICES
248	(F8)	ADDRESS	4	$MCT	"V($MCTABLE)" ADDR HASP MASTER CONTROL TABLE
252	(FC)	ADDRESS	4		Reserved for future use
256	(100)	ADDRESS	4	$UCT	"V(USERCT)" ADDR USER COMMUNICATION TABLE
260	(104)	ADDRESS	4	$SXADDR	"V(SXADDR)" SXADDR address
264	(108)	ADDRESS	4	$DIAGTBL	"V(SCNDIAGT)" ENTRY TO DIAGNOSTIC MSGS TABLE

Comment

Entries for MVS Service Routines

End of Comment

268	(10C)	ADDRESS	4	$MSGXTR	WPL message extract routine
272	(110)	ADDRESS	4	$SYMBM	Symbol translation Service

Comment

CHAIN HEADS (ORIGIN AND LAST) FOR ALL DTES

End of Comment

276	(114)	ADDRESS	4	$DTEORG	ORIGIN DTE ADDR (DTENEXT CHAIN)
280	(118)	ADDRESS	4	$DTELAST	LAST DTE ADDR (DTEPREV CHAIN)

Comment

SUBTASK 'TYPE' POINTERS INTO THE DTENEXT CHAIN.
NOTE THAT THESE POINTERS ARE ZERO IF NO SUBTASK
FOR THAT 'TYPE' IS CURRENTLY ATTACHED.

End of Comment

284	(11C)	ADDRESS	4	$DTEIMAG	IMAGE DTE(S) (HASPIMAG)
288	(120)	ADDRESS	4	$DTEALOC	ALLOCATE DTE (HOSALLOC)
292	(124)	ADDRESS	4	$DTESPOL	SPOOL DTE(S) (HOSPOOL)
296	(128)	ADDRESS	4	$DTESMF	SMF DTE (HASPACCT)
300	(12C)	ADDRESS	4	$DTEVTM	VTAM DTE (HASPVTAM)
304	(130)	ADDRESS	4	$DTEWTO	WTO DTE (HASPWTO)
308	(134)	ADDRESS	4	$DTECNVT	CONVERT DTE(S) (HOSCNVT)
312	(138)	ADDRESS	4	$DTEOFF	OFFLOAD DTE(S) (HASPOFF)
316	(13C)	ADDRESS	4	$DTECKVR	VERSCOPY DTE (HASPCKVR)
320	(140)	ADDRESS	4	$DTECKCF	CKPTONCF DTE (HASPCKCF)
324	(144)	ADDRESS	4	$DTEGSUB	GENERAL DTE(S) (HASPSUBS)
328	(148)	ADDRESS	4	$DTEEOM	EOM DTE(S) (HASPEOM)

Comment

SPECIAL DTE POINTERS

End of Comment

332	(14C)	ADDRESS	4	$IMAGE	IMAGE LIBRARY LOADER DTE ADDR

Comment

ERROR STACK POINTERS FOR RECOVERY OPTIONS

End of Comment

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
336	(150)	ADDRESS	4	$MAINSTK	"V(STKMAIN)" ADDR OF MAIN TASK ERROR STACK
340	(154)	ADDRESS	4	$DSTRSTK	"V(STKDSTR)" ADDR OF $DISTERR ERROR STACK
344	(158)	ADDRESS	4	$STERSTK	"V(STKSUBT)" SUBTASK ERROR STACK ORIGIN, SUBTASK STACKS ARE CONTIGUOUS.
344	(158)	X'A'	0	$SPLIOER	"10" Number of SPOOL I/O errors allowed before operator prompted to end warmstart

Comment

HASP CONTROL BLOCK DIRECTORY

End of Comment

348	(15C)	ADDRESS	4	$ACTABLE	ADDR OF AUTOMATIC COMMAND TABLE
352	(160)	ADDRESS	4	$APPLTBL	ADDRESS NJE/SNA APPLICATION TBL
356	(164)	ADDRESS	4	$AQSE	Addr of this sys's QSE
360	(168)	ADDRESS	4	$ASYNCQ	ADDR ASYNC I/O COMPLETION QUEUE
364	(16C)	ADDRESS	4	$ASYPCIQ	ADDRESS OF ASYNC PCIE EXEC QUE
368	(170)	ADDRESS	4	$BERTPTR	Address of BERT CTENT
372	(174)	ADDRESS	4	$BITSONA	"V($BITSON)" ADDR OF TBLE BITS ON IN A BYTE
376	(178)	ADDRESS	4	$BUSYQUE	ADDRESS OF COMM TASK INPUT QUE
380	(17C)	ADDRESS	4	$BUSYRQ	ADDR REMOTE CONSOLE BUSY QUEUE
384	(180)	ADDRESS	4	$CALONE	ADDR FIRST CH LOG ADDR LIST
388	(184)	ADDRESS	4	$CALCUR	ADDR CRNT CH LOG ADDR LIST
392	(188)	ADDRESS	4	$CATPTR	Addr of private CATs (not valid when CATs in CKPT)
396	(18C)	ADDRESS	4	$CHLOG	ADDRESS OF THE CHANGE LOG
400	(190)	ADDRESS	4	$CKG1	ADDRESS OF CKPT1 CKGPAR
404	(194)	ADDRESS	4	$CKG2	ADDRESS OF CKPT2 CKGPAR
408	(198)	ADDRESS	4	$CKBCRNT	ADDRESS OF CURRENT CKB
412	(19C)	ADDRESS	4	$CKC	ADDRESS OF CKPT CCW PACKETS
416	(1A0)	ADDRESS	4	$CKPTIO	ADDRESS OF CHECKPOINT I/O AREA
420	(1A4)	ADDRESS	4	$CKPTPTR	ADDRESS OF 1ST 4K CKPT RECORD
424	(1A8)	ADDRESS	4	$CLCB	ADDRESS CH LOG CNTL BYTES
428	(1AC)	ADDRESS	4	$CKPTQHD	CKPT work queue head
432	(1B0)	ADDRESS	4	$CKW	ADDRESS OF CKPT WORK AREA
436	(1B4)	ADDRESS	4	$COMEXTN	ADDR OF COMM EXTENDED AREA
440	(1B8)	ADDRESS	4	$COMMQUE	ADDR COMMAND PROCESSOR WORK Q
444	(1BC)	ADDRESS	4	$COMMQTP	Queue of CMBs from RDR/RTAM
448	(1C0)	ADDRESS	4	$CONWKQ	ADDRESS OF COMM TASK WORK QUEUE
452	(1C4)	ADDRESS	4	$CPTMAP	ADDR OF CPT QUICK INDEX
456	(1C8)	ADDRESS	4	$CPTPOOL	ADDRESS OF FIRST HASP CPT
460	(1CC)	ADDRESS	4	$CTLB	ADDR OF CKPT CNTRL BYTES
464	(1D0)	ADDRESS	4	$CTLBIO	ADDR OF CKPT I/O CNTRL BYTES
468	(1D4)	ADDRESS	4	$CTLBX	ADDR OF EXTRA CKPT CNTRL BYTES
472	(1D8)	ADDRESS	4	$DADEBAD	ADDRESS HASP DIRECT ACCESS DEB
476	(1DC)	ADDRESS	4	$DASAREA	Addr of DAS header
480	(1E0)	ADDRESS	4	$DASFRST	Addr of first DAS
484	(1E4)	ADDRESS	4	$DASEXT	ADDRESS OF DAS EXT AREA
488	(1E8)	ADDRESS	4	$DOMQUE	ADDRESS OF CMBS AWAITING ACTION
492	(1EC)	ADDRESS	4	$DOMQUEA	ADDR CMBS DESTINED FOR $DOMQUE
496	(1F0)	BITSTRING	4	$EMEMAFF	AFFINITY MASK FOR RESET
500	(1F4)	ADDRESS	4	$FIXCHLG	ADDR CHANGE LOG FIXED LIST
504	(1F8)	ADDRESS	4	$FIXLIST	ADDR FIXED LIST TABLE FOR KITS
508	(1FC)	ADDRESS	4	$XMASADR	ADDR of Cross MAS XCF CB
512	(200)	ADDRESS	4	$GTWKTAB	"V(GTWKTABL)" ADDRESS OF GETWORK TABLE
516	(204)	ADDRESS	4	$GETWRKA	"V($GETWORK)" Addr of GETWORK routine
520	(208)	ADDRESS	4	$HASCB	ADDRESS OF HASP ASCB
524	(20C)	ADDRESS	4	$HASPDCB	ADDR OF HASP DIRECT ACCESS DCB
528	(210)	ADDRESS	4	$HASPRB	ADDR OF HASP RB
532	(214)	ADDRESS	4	$HASPTCB	ADDR OF HASP TASK CONTROL BLOCK
536	(218)	ADDRESS	4	$HFAM	ADDR OF HASP FILE ALLOC MAP
540	(21C)	ADDRESS	4	$ICELOST	ADDR OF Frozen ICE queue
544	(220)	ADDRESS	4	$#INDEXA	"V($#INDEX)" ADDR OF SYSOUT CLS QUEUE INDEX
548	(224)	ADDRESS	4	$INIWARM	Addr of INIWARM passed from HASPIR* to HASPWARM
552	(228)	ADDRESS	4	$JESACCT	ADDR OF JES2-TO-NET ACCT TABLE

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
556	(22C)	ADDRESS	4	$JESTOKA	ADDR OF JES2 SECURITY TOKEN
560	(230)	ADDRESS	4	$JNEW	ADDR MOST RECENT JESNEWS CB
564	(234)	ADDRESS	4	$JNTPTR	ADDR OF HASP JOB NUMBER TABLE
568	(238)	ADDRESS	4	$JOBQBUF	ADDR OF HASP JOB QUEUE BUFFER
572	(23C)	ADDRESS	4	$JOBQPTR	ADDR OF HASP JOB QUEUE ORIGIN
576	(240)	ADDRESS	4	$JOTABLE	ADDRESS OF HASP JOT ORIGIN
580	(244)	ADDRESS	4	$JOTPOST	ADDRESS OF JOTPOST MAP
584	(248)	ADDRESS	4	$JQEEXT	ADDRESS OF EXTENSION AREA
588	(24C)	ADDRESS	4	$JQXPTR	Addr of HASP JQX CTENT
592	(250)	ADDRESS	4	$JWELTBL	ADDR OF JOE/WRITER EXCLUDE LIST TABLE
596	(254)	ADDRESS	4	$JWEHAVT	ADDR OF ADDRESS SPACE VECTOR TABLE TO CONTAIN WRITER ID NUM
600	(258)	ADDRESS	4	$KITPTR	ADDRESS OF HASP KIT ORIGIN
604	(25C)	ADDRESS	4	$LCKPTR	ADDRESS OF HASP LOAD CKPT TABLE
608	(260)	ADDRESS	4	$LSPTR	Pointer to main JES2 linkage stack for main task
612	(264)	ADDRESS	4	$MASTER	ADDRESS OF MASTER CKPT AREA
616	(268)	ADDRESS	4	$MASTERI	ADDRESS OF MSTR CKP I/O AREA
620	(26C)	ADDRESS	4	$MCONMSG	ADDR REMOTE CONSOLE MSG QUEUE
624	(270)	ADDRESS	4	$MWORK	ADDR OF RTAM GENERAL WORK AREA
628	(274)	ADDRESS	4	$NETACCT	ADDR OF NET-TO-JES2 ACCT TABLE
632	(278)	ADDRESS	4	$NITABLE	ADDR OF NODE INFORMATION TABLE
636	(27C)	ADDRESS	4	$NUCFIXD	"V($FIXEND)" ADDR OF NUC PAGEFIXED AREA END
640	(280)	ADDRESS	4	$PAD	Addr of PROCLIB alloc DSECT
644	(284)	ADDRESS	4	$PADDR	"V(PADDR)" ADDR OF PRIVATE RTN LIST
648	(288)	ADDRESS	4	$PCT	Addr Path Manager Comm tabl
652	(28C)	ADDRESS	4	$PERFCB	Perfomance data anchor CB
656	(290)	ADDRESS	4	$PRFDATA	"V(PRFTABLE)" Addr of PERFDATA subscripts
660	(294)	ADDRESS	4	$PITABLE	ADDR HASP PARTITION INFO TABLE
664	(298)	ADDRESS	4	$PRMDTBL	ADDRESS OF PRMODE TABLE
668	(29C)	CHARACTER	8	$HASPPRM	INITIALIZATION PARMS DD NAME
676	(2A4)	CHARACTER	8	$PRMMEMB	DEFAULT PARM MEMBER NAME
684	(2AC)	ADDRESS	4	$PSLIST	ADDR OF PAGE SERVICE LIST
688	(2B0)	ADDRESS	4	$QINDEXA	"V($QINDEX)" ADDR OF JOB CLASS QUEUE INDEX
692	(2B4)	ADDRESS	4	$QSE1	ADDRESS OF 1ST HASP QSE
696	(2B8)	ADDRESS	4	$RATABLE	ADDR OF REMOTE ATTRIBUTE TABLE
700	(2BC)	ADDRESS	4	$RPLCOMQ	Addr of SNA/RPL compl queue
704	(2C0)	ADDRESS	4	$RMTSON	ADDRESS OF REMOTE SIGN-ON TABLE
708	(2C4)	ADDRESS	4	$RTIMTAB	"V($TIMETAB)" ADDR ESTIMATED TIME PRIO TABLE

Comment

The following 2 fields must be kept together

End of Comment

712	(2C8)	ADDRESS	4	$SAVAREA	--+ Addr next available general | save area
716	(2CC)	ADDRESS	4	$SAVEARS	--+ Addr next available access register save area
720	(2D0)	ADDRESS	4	$SFWA	ADDR OF SWBTU FUNCTIONS WORK AREA ($SFW)
724	(2D4)	ADDRESS	4	$SCQADDR	Address SCQ CTENT
728	(2D8)	ADDRESS	4	$SCT	Address of Spin Comm Table
732	(2DC)	ADDRESS	4	$SMFBUSY	ADDR SMF BUFFER QUEUED FOR I/O
736	(2E0)	ADDRESS	4	$SPOOLQ	BAD TRACK GROUPS TO FORMAT QUES
740	(2E4)	ADDRESS	4	$STWORK	ADDR OF SUBTASK WORK AREA
744	(2E8)	ADDRESS	4	$HCCT	HASP COMMON COMMUNICATION TABLE
748	(2EC)	ADDRESS	4	$STQEACT	ADDR OF 1ST ACTIVE STQE
752	(2F0)	ADDRESS	4	$BADTRTG	Addr of TG map specified via BADTRACK statements
756	(2F4)	ADDRESS	4	$BSCCHEQ	ADDR of BSC channel end Q
760	(2F8)	ADDRESS	4	$TQEQUE	ADDR OF HASP TIMER Q ELEMENT Q
764	(2FC)	ADDRESS	4	$TRGENER	"V(TRGENER)" Generic translate table
768	(300)	ADDRESS	4	$VLOGQUE	VTAM OPEN/CLOSE ACB SUBTASK QUE
772	(304)	ADDRESS	4	$WLMDATA	Addr of WLM data bundle
776	(308)	ADDRESS	4	$WSAPTR	ADDR OF WORK SELECTION AREA
780	(30C)	ADDRESS	4	$XFRACTV	ADDRESS OF 1ST ACTIVE XFR DCT
784	(310)	ADDRESS	4	$XFRBEND	ADDR OF XFR BUFFER COMPLETION Q
788	(314)	ADDRESS	4	$XFRDEND	ADDR OF XFR DCT SUBTASK COMP Q

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
792	(318)	ADDRESS	4	$XITADDR	ADDR OF EXIT INFO TABLE (XIT)
796	(31C)	SIGNED	4	$PLXDYNI	CPOOL ID for PLX dynamic areas

Comment

```
-------------------------------------------------------------
    Keep the EBCDIC level and binary product/service
    levels together.
-------------------------------------------------------------
```

End of Comment

800	(320)	BITSTRING	10	$JES2_LEVEL (0)	Level information
800	(320)	CHARACTER	8	$LEVEL	Version of the JES2 macros used to assemble HASPNUC <--+
808	(328)	ADDRESS	1	$PLVL	Binary product level |
809	(329)	ADDRESS	1	$SLVL	Binary service level <--+
810	(32A)	ADDRESS	2	(0)	Ensure product level is defined correctly
810	(32A)	SIGNED	2		Reserved for future use

Comment

JECL validity vectors

End of Comment

812	(32C)	ADDRESS	4	$STCJECL	Addr STC JECL validity tbl
816	(330)	ADDRESS	4	$TSUJECL	Addr TSU JECL validity tbl
820	(334)	ADDRESS	4	$JOBJECL	Addr JOB JECL validity tbl

Comment

TRACK GROUP MAP TABLE

End of Comment

824	(338)	SIGNED	4	$TGMADDR (0)	ADDR HEADER OF TRACK GROUP
824	(338)	ADDRESS	4	$TGMHEAD	HEADER OF TGM GROUP
828	(33C)	ADDRESS	4	$TGMAP	ADDR OF MASTER TRACK GROUP MAP
832	(340)	ADDRESS	4	$TGBAD	ADDR OF BAD TRACK GROUP MAP
832	(340)	X'2'	0	$TBLNUM	"(*-$TGMAP)/4" CALCULATE NUMBER IN TGM TABLE
836	(344)	ADDRESS	4	$TGRADDR	Addr checkpointed BLOB
836	(344)	X'28'	0	$TGRHDR	"40" Length of BLOB header

Comment

RESERVED AREA FOR USER FIELDS

End of Comment

840	(348)	ADDRESS	4	$UPADDR	ADDR OR USER PRIVATE ADD TABLE
844	(34C)	ADDRESS	4	$USXADDR	USXADDR address
848	(350)	ADDRESS	4	$USER1	RESERVED FOR USER
852	(354)	ADDRESS	4	$USER2	RESERVED FOR USER
856	(358)	ADDRESS	4	$USER3	RESERVED FOR USER
860	(35C)	ADDRESS	2	$USER4	RESERVED FOR USER
862	(35E)	ADDRESS	2	$USER5	RESERVED FOR USER

Comment

HASP OPERATING CONSTRAINTS

End of Comment

864	(360)	SIGNED	2	$PPBSIZE	Size of the PCE Perf block
866	(362)	ADDRESS	2	$NUMCPTS	NUMBER OF CPTS
868	(364)	ADDRESS	4	$PRIOUT	"V($OUTTAB)" OUTPUT PRIORITY TABLE
872	(368)	ADDRESS	4	$SYNCTOL	TOD CLOCK SYNC ERROR TOLERANCE
880	(370)	DBL WORD	8	$CKPTLEV	LEVEL NUMBER OF CKPT DATA

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
880	(370)	X'370'	0	$CKPTLVP	"$CKPTLEV,8,C'C'" Define character version of field since PLX and the offset table don't handle doublewords well
880	(370)	X'374'	0	$CKLEVNM	"$CKPTLEV+4,4,C'F'" Fullword level for messages and CTLB comparisons
888	(378)	SIGNED	4	$CKOLDLV	Original checkpoint level # for JOTPOST comparison
892	(37C)	SIGNED	4	$TOTCKSZ	Size of the checkpoint data set in 4K pages
896	(380)	ADDRESS	4	$DELAYTM	MODEL 20 DELAY TIME
900	(384)	SIGNED	2	$KITNUM	NUM KITS PRESENT IN SYSTEM
902	(386)	SIGNED	2	$WARMACT	Nr of active warmstart PCEs
904	(388)	SIGNED	4	$LOCKOUT	LOCKOUT WARN TIME, SECS/100
908	(38C)	SIGNED	4	$MINHOLD	MINIMUM HOLD TIME, SECS/100
912	(390)	SIGNED	4	$ORIGMHD	Original minhold (used to restore $MINHOLD after all warmstart PCEs have gone dormant)
916	(394)	ADDRESS	4	$MAXINT	MAX INT FOR CKPTW, SECS/100
920	(398)	SIGNED	4	$MINDORM	MINIMUM DORMANT TIME, SECS/100
924	(39C)	SIGNED	4	$MAXDORM	MAXIMUM DORMANT TIME, SECS/100
928	(3A0)	ADDRESS	4	$DDSEGLM	SEGLIM VALUE
932	(3A4)	ADDRESS	2	$MAXDELT	MAXIMUM MESSAGE DELAY TIME
934	(3A6)	ADDRESS	2	$MAXMSGQ	MAXIMUM MSGS TO QUEUE ON SPOOL
936	(3A8)	ADDRESS	2	$NUMPATH	NUMBER OF PATHS PER NIT
938	(3AA)	ADDRESS	2	$MAXHOP	MAXIMUM NJE HOP COUNT
940	(3AC)	ADDRESS	2	$AUTOINV	SNA AUTOLOGON SCAN INTERVAL
942	(3AE)	ADDRESS	2	$NUMAUTO	NUMBER OF AUTOLOGON REMOTES
944	(3B0)	SIGNED	4	$NUMGCRE	Number of MGCRE's HASPCOMM is processing in a subtask
948	(3B4)	CHARACTER	1	$BADJNC	Char for bad jobname
949	(3B5)	CHARACTER	3		Reserved space for future use

Comment

```
$OPTSTAT INITIALIZATION OPTION DEFINITIONS
$OPTSTAT IS PART OF SMF RECORD 43
```

End of Comment

952	(3B8)	BITSTRING	1	$OPTSTAT (0)	HASP Init Options (Use BL1 so offset table will be satisfied, but you need AL1 to assign initial value to the byte)
		1...		$OPTFMT	"B'10000000'" FORMAT-- FORCE FORMAT OPTION (OPP IS NOFMT = DEFAULT)
		.1..		$OPTCOLD	"B'01000000'" COLD -- COLD START OPTION (OPP IS WARM = DEFAULT)
		..1.		$OPTREQ	"B'00100000'" REQ -- REQUEST OPTION = DEFAULT (OPPOSITE IS NOREQ)
		...1		$OPTLIST	"B'00010000'" LIST -- HASPPARM LIST = DEFAULT (OPPOSITE IS NOLIST)
		.... 1...		$OPTLOG	"B'00001000'" LOG -- HASPPARM LOG = DEFAULT (OPPOSITE IS NOLOG)
		.... ..1.		$OPTCONS	"B'00000010'" CONSOLE- CONSOLE OPTION
		1		$OPTQWIK	"B'00000001'" QUICK-- NON-ALL-SYSTEMS WARM START (FMT/COLD MUST BE OFF)
952	(3B8)	X'38'	0	$OPTSTD	"$OPTREQ+$OPTLIST+$OPTLOG" DEFAULTS = NOFMT, WARM, REQ, LIST, LOG

Comment

```
$OPTSTA1 MORE INITIALIZATION OPTION DEFINITIONS
CKPTN OPTION SETS THE FOLLOWING BITS IN $OPTSTA1
        $OP1SPEC $OP1CKPT
DEFAULT 0 0
CKPT1 1 0
CKPT2 1 1
```

End of Comment

953	(3B9)	BITSTRING	3	$OPTSTA1 (0)	MORE INIT OPTIONS
		1...		$OP1SPEC	"B'10000000'" CKPTN -- READ FROM A SPECIFIC DATA SET

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
		.1..		$OP1CKPT	"B'01000000'" CKPTN -- WHICH CKPT TO READ FROM FIRST
		..1.		$OP1PJS2	"B'00100000'" $PJES2 - TERMINATE JES2 OPT
		...1		$OP1SVAL	"B'00010000'" Do spool validation
		.... 1...		$OP1SFCE	"B'00001000'" Whether spool validation done or not was a forced condition
		.... .1..		$OP1UNAC	"B'00000100'" UNACTIVATE system

Comment

EQU B'00000010' RESERVED
EQU B'00000001' RESERVED

End of Comment

953	(3B9)	X'0'	0	$OPT1STD	"0" Default is no SPOOL validation
954	(3BA)	BITSTRING	3	$RUNOPTS (0)	JES2 RUN OPTIONS
		.... .1..		$PRTYOUT	"X'04'" OUTPUT card 'PRTY=' option
		.... ..1.		$PRIOOPT	"X'02'" PRIORITY card option
		1		$PRTYJOB	"X'01'" Job card 'PRTY=' option
955	(3BB)	ADDRESS	1	$PRTOPTS	PRINT OPTIONS
		1...		$PRTBOPT	"X'80'" Local print dbl-buffering option
		.1..		$PUNBOPT	"X'40'" Local punch dbl-buffering option
		..1.		$RPRBOPT	"X'20'" Remote print dbl-buffering option
		...1		$RPUBOPT	"X'10'" Remote punch dbl-buffering option
		.... 1...		$PRTRANS	"X'08'" Print translate option
		.... .1..		$DMNDSET	"X'04'" Specify demand setup option
		.... ..1.		$USERSET	"X'02'" Specify user setup option
		1		$CREATE	"X'01'" JOE create time updated only at create time
956	(3BC)	ADDRESS	1	$RJEOPTS	HASP REMOTE JOB ENTRY OPTIONS
		1...		$ADDSYNS	"X'80'" Additional synchronous idles option
957	(3BD)	ADDRESS	1	$RJOBOPT	JOB CARD SCAN OPTION FLAG
		1...		$ACTIGN	"B'10000000'" Job account information is ignored
		.1..		$ACTREQ	"B'01000000'" Job account information is required
		..1.		$JCLERR	"B'00100000'" Terminate job if JCL scan error
958	(3BE)	ADDRESS	1	$LINECT	MAXIMUM LINES PER PAGE
959	(3BF)	ADDRESS	1	$NJEOPTS	HASP NJE OPTIONS
		1...		$MAILMSG	"B'10000000'" ISSUE MAIL NOTIFY MSG

Comment

If there is a problem performing a job or output queue verify, the reason and related data are stored in the following fields.

End of Comment

960	(3C0)	SIGNED	4	$QVERDAT	Queue verification data
964	(3C4)	BITSTRING	1	$QVERRSN	Queue verification reason

Comment

JQE verification error indicator

End of Comment

		1		$QVRNJTE	"X'01'" JNT validation error
		.... ..1.		$QVRNFRE	"X'02'" Job on free que not free
		11		$QVRNFRC	"X'03'" Free JQE count is bad
		.... .1..		$QVRNRQE	"X'04'" Error on rebuild queue
		.... .1.1		$QVRNBDQ	"X'05'" Bad queue in JQE
		.... .11.		$QVRNBDC	"X'06'" Wrong class from JQE
		.... .111		$QVRNBDF	"X'07'" Wrong flags in JQE's CAT
		.... 1...		$QVRNBDI	"X'08'" Wrong index in JQE's CAT
		.... 1..1		$QVRNMJN	"X'09'" Missing job number

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
		.... 1.1.		$QVRNJXE	"X'0A'" JIX error
		.... 1.11		$QVRNJXM	"X'0B'" JQE not in JIX
		.... 11..		$QVRNART	"X'0C'" Artificial bit on in JQE
		.... 11.1		$QVRNXTH	"X'0D'" JQE extension too high
		.... 111.		$QVRNXTO	"X'0E'" JQE extension is odd
		 1111		$QVRNXTF	"X'0F'" JQE extension is free
		...1		$QVRNWQE	"X'10'" JQE on WLM queue

Comment

EQU X'11' Reserved for future use

End of Comment

		...1 ..1.		$QVRNJQC	"X'12'" JQE in use count bad
		...1 ..11		$QVRNWQP	"X'13'" WLMQ bad prev pointer
		...1 .1..		$QVRNWQX	"X'14'" WLMQ JQE/JQX loop
		...1 .1.1		$QVRNJQO	"X'15'" Invalid JQE chain field
		...1 .11.		$QVRNJQL	"X'16'" JQE loop detected

Comment

JQE extensions verification error indicator $QEXTVER

End of Comment

		.1.. ...1		$QVRNETH	"X'41'" JQE extension too high
		.1.. ..1.		$QVRNETO	"X'42'" JQE extension is odd
		.1.. ..11		$QVRNENF	"X'43'" JQE extension not free

Comment

BERT verification error found $BERTFIX

End of Comment

		.1.1 ...1		$QVRNBER	"X'51'" BERT error found/fixed

Comment

CAT verification error found $CATINIT

End of Comment

		.11. ...1		$QVRNCER	"X'61'" CAT error found

Comment

JOE verification error indicator

End of Comment

		1... ...1		$QVRNOTE	"X'81'" JOE type error
		1... ..1.		$QVRNOJE	"X'82'" JOE chain error
		1... ..11		$QVRNORQ	"X'83'" JOE rebuild queue error
		1... .1..		$QVRNORE	"X'84'" JOE rebuild chaining err
		1... .1.1		$QVRNOR2	"X'85'" JOE rebuild chaining err
		1... .11.		$QVRNOR3	"X'86'" JOE rebuild chaining err
		1... .111		$QVRNOR4	"X'87'" JOE rebuild chaining err
		1... 1...		$QVRNOR5	"X'88'" JOE rebuild chaining err
		1... 1..1		$QVRNOCE	"X'89'" Char JOE error
		1... 1.1.		$QVRNOCO	"X'8A'" Char JOE order error
		1... 1.11		$QVRNOCQ	"X'8B'" Char JOE queue error
		1... 11..		$QVRNOC1	"X'8C'" Char JOE queue error
		1... 11.1		$QVRNOCC	"X'8D'" Char JOE count error
		1... 111.		$QVRNOC2	"X'8E'" Char JOE queue error
		1... 1111		$QVRNOWE	"X'8F'" Work JOE error
		1..1		$QVRNOWQ	"X'90'" Work JOE queue error
		1..1 ...1		$QVRNOWC	"X'91'" Work JOE class error

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
		1..1 ..1.		$QVRNOW1	"X'92'" Work JOE queue error
		1..1 ..11		$QVRNOW2	"X'93'" Work JOE queue error
		1..1 .1..		$QVRNOW3	"X'94'" Work JOE queue error
		1..1 .1.1		$QVRNOW4	"X'95'" Work JOE queue error
		1..1 .11.		$QVRNOW5	"X'96'" Work JOE queue error
		1..1 .111		$QVRNOW6	"X'97'" Work JOE queue error
		1..1 1...		$QVRNOW7	"X'98'" Work JOE queue error
		1..1 1..1		$QVRNOW8	"X'99'" Work JOE queue error
		1..1 1.1.		$QVRNCQ1	"X'9A'" Work/char JOE queue error
		1..1 1.11		$QVRNCQ2	"X'9B'" Work/char JOE queue error
		1..1 11..		$QVRNCQ3	"X'9C'" Work/char JOE queue error
		1..1 11.1		$QVRNCQ4	"X'9D'" Work/char JOE queue error
		1..1 111.		$QVRNCQ5	"X'9E'" Work/char JOE queue error
		1..1 1111		$QVRNCQ6	"X'9F'" Work/char JOE queue error
		1.1.		$QVRNCQ7	"X'A0'" Work/char JOE queue error
		1.1. ...1		$QVRNCQ8	"X'A1'" Work/char JOE queue error
		1.1. ..1.		$QVRNTQE	"X'A2'" JOE queue error
		1.1. ..11		$QVRNTRE	"X'A3'" JOE route error
		1.1. .1..		$QVRNTR2	"X'A4'" JOE route error
		1.1. .1.1		$QVRNTUE	"X'A5'" JOE user error
		1.1. .11.		$QVRNTU2	"X'A6'" JOE user error
		1.1. .111		$QVRNTU3	"X'A7'" JOE user error
		1.1. 1...		$QVRNTU4	"X'A8'" JOE user error
		1.1. 1..1		$QVRNTPE	"X'A9'" JOE priority error
		1.1. 1.1.		$QVRNTP2	"X'AA'" JOE priority error
		1.1. 1.11		$QVRNTP3	"X'AB'" JOE priority error
		1.1. 11..		$QVRNTCE	"X'AC'" JOE class error
965	(3C5)	ADDRESS	1		Reserved for future use
966	(3C6)	ADDRESS	1	$SPVLRSN	Reason code for forced spool validation
966	(3C6)	X'1'	0	$SPV1QER	"1" Forced on, queue error
966	(3C6)	X'2'	0	$SPV1VAL	"2" Forced on, prior error
966	(3C6)	X'3'	0	$SPV1OPT	"3" Forced on, init option
966	(3C6)	X'4'	0	$SPV1SPL	"4" Forced off, missing spools
966	(3C6)	X'5'	0	$SPV1BRT	"5" Forced off, BERT shortage

Comment

$DEBUG Option Definitions

End of Comment

967	(3C7)	BITSTRING	1	$DEBGOPS (0)	DEBUG option flag $DEBGOPS bit definitions
		1...		$DBGBERT	"B'10000000'" BERT debug support
		.1..		$DBGCKPT	"B'01000000'" CKPT debug support
		..1.		$DBGVERS	"B'00100000'" VERSION debug support
		...1		$DBGAPPC	"B'00010000'" APPLCOPY debug support
		.... 1...		$DBGSTRG	"B'00001000'" STORAGE debug support
		.... .1..		$DBGMISC	"B'00000100'" MISC debug support (Miscellaneous)
		.... ..1.		$DBGSYMR	"B'00000010'" SYMREC debug option
		1		$DBGSAF	"B'00000001'" SECURITY debug option
967	(3C7)	X'FF'	0	$DBGALL	"FF"

Comment

ESTIMATED COUNT FIELDS DEFAULTS, MAPPED BY THE $EST MACRO

End of Comment

968	(3C8)	ADDRESS	4	$EST1 (0)	FIRST ESTIMATED COUNT TABLE
968	(3C8)	X'5'	0	$ESTTCNT	"5" NUMBER OF ESTIMATED CNT TABLES
968	(3C8)	ADDRESS	4	$ESTPAGE	
968	(3C8)	X'8'	0	$ESTPG9L	"8" 9'S LIMIT FOR ESTNUM
980	(3D4)	ADDRESS	4	$ESTBYTE	
980	(3D4)	X'6'	0	$ESTMX9L	"6" 9'S LIMIT FOR ESTNUM
992	(3E0)	ADDRESS	4	$ESTLNCT	
992	(3E0)	X'6'	0	$ESTLN9L	"6" 9'S LIMIT FOR ESTNUM

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
1004	(3EC)	ADDRESS	4	$ESTPUN	
1004	(3EC)	X'8'	0	$ESTPN9L	"8" 9'S LIMIT FOR ESTNUM
1016	(3F8)	ADDRESS	4	$ESTIME	
1016	(3F8)	X'4'	0	$ESTIM9L	"4" 9'S LIMIT FOR ESTNUM

Comment

Values for buffer management - limits, threshholds,
free counts, wait counts, etc.

End of Comment

1028	(404)	SIGNED	2	$NUMBSC	HASP BSC BUFFER LIMIT
1030	(406)	SIGNED	2	$BSCPRCT	BSC BUF THRESHOLD PERCENT
1032	(408)	SIGNED	2	$BSCLIM	Old BSC buffer limit used by $T to calc free count
1034	(40A)	SIGNED	2	$BSCFREC	Free BSC buffer count
1036	(40C)	SIGNED	2	$BSCWBF	Number of BSC buffers being $WAITed for
1038	(40E)	SIGNED	2	$BSCNWBF	Number of non-wait requests for BSC buffers
1040	(410)	SIGNED	2	$BSCLGRQ	Largest unfulfilled request for BSC buffers
1042	(412)	SIGNED	2	$NUMBUF	HASP BUFFER LIMIT
1044	(414)	SIGNED	2	$BUFPRCT	BUFFER THRESHOLD PERCENTAGE
1046	(416)	SIGNED	2	$BUFLIM	Old HASP buffer limit used by $T to calc free count
1048	(418)	SIGNED	2	$LBFREC	Free LBUF buffer count
1050	(41A)	SIGNED	2	$BUFWBF	Number of HASP buffers being $WAITed for
1052	(41C)	SIGNED	2	$BUFNWBF	Number of non-wait requests for HASP buffers
1054	(41E)	SIGNED	2	$BUFLGRQ	Largest unfulfilled request for HASP buffers
1056	(420)	SIGNED	2	$NUMBUFX	Control Block buffer limit
1058	(422)	SIGNED	2	$BFXPRCT	CB THRESHOLD PERCENTAGE
1060	(424)	SIGNED	2	$BUFXLIM	Old CB buffer limit used by $T to calc free count
1062	(426)	SIGNED	2	$LBXFREC	Free XBUF buffer count
1064	(428)	SIGNED	2	$BFXWBF	Number of CB buffers being $WAITed for
1066	(42A)	SIGNED	2	$BFXNWBF	Number of non-wait requests for CB buffers
1068	(42C)	SIGNED	2	$BFXLGRQ	Largest unfulfilled request for CB buffers
1070	(42E)	SIGNED	2	$NUMVTAM	HASP VTAM BUFFER LIMIT
1072	(430)	SIGNED	2	$VTMPRCT	VTAM BUF THRESHOLD PERCENT
1074	(432)	SIGNED	2	$VTMLIM	Old VTAM buffer limit used by $T to calc free count
1076	(434)	SIGNED	2	$VTMFREC	Free VTAM buffer count
1078	(436)	SIGNED	2	$VTMWBF	Number of VTAM buffers being $WAITed for
1080	(438)	SIGNED	2	$VTMNWBF	Number of non-wait requests for VTAM buffers
1082	(43A)	SIGNED	2	$VTMLGRQ	Largest unfulfilled request for VTAM buffers
1084	(43C)	SIGNED	2	$NUMNHB	HASP NHB buffer limit
1086	(43E)	SIGNED	2	$NHBPRCT	NHB BUF threshold percent
1088	(440)	SIGNED	2	$NHBLIM	Old NHB buffer limit used by $T to calc free count
1090	(442)	SIGNED	2	$NHBFREC	Free NHB count
1092	(444)	SIGNED	2	$NHBWBF	Number of NHB buffers being $WAITed for
1094	(446)	SIGNED	2	$NHBNWBF	Number of non-wait requests for NHB buffers
1096	(448)	SIGNED	2	$NHBLGRQ	Largest unfulfilled request for NHB buffers
1098	(44A)	ADDRESS	2		Reserved
1100	(44C)	SIGNED	2	$MAXSESS	MAXIMUM NUMBER OF SESSIONS
1102	(44E)	ADDRESS	2	$ICEPRCT	Threshold of ICEs

Comment

ICE free count must be in the second half of a
fullword for use by compare and swap logic.
$ICEFREC is defined in the second half of the
word which also contains $ICELIM, which is the
old (not actual) count of ICEs.

End of Comment

1104	(450)	SIGNED	4	(0)	
1104	(450)	SIGNED	2	$ICELIM	(OLD) count of ICEs
1106	(452)	SIGNED	2	$ICEFREC	Free count of ICES

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
1108	(454)	SIGNED	2	$ICEFRZC	Number of frozen ICEs
1110	(456)	ADDRESS	2		Reserved
1112	(458)	ADDRESS	2	$NUMCMDS	HASP CMBs for commands (default set in IRPL) Mirrored in CCTCMDMX
1114	(45A)	ADDRESS	2	$CMDPRCT	CMD THRESHOLD PERCENTAGE
1116	(45C)	ADDRESS	2	$NUMCMBS	HASP CONSOLE MESSAGE BUFFERS
1118	(45E)	ADDRESS	2	$CMBPRCT	CMB THRESHOLD PERCENTAGE
1120	(460)	SIGNED	2	$CMBLIM	Old CMB limit used by $T to calculate free count
1122	(462)	ADDRESS	2		Reserved

Comment

```
------------------------------------------------------------
      CMB free count must be in the second half of a
      fullword for use by compare and swap logic.
      $CMBFRER is a fullword with the first half
      reserved, and $CMBFREC in the second half.
------------------------------------------------------------
```

End of Comment

1124	(464)	SIGNED	4	(0)	Force fullword alignment
1124	(464)	SIGNED	2		and reserve first half
1126	(466)	ADDRESS	2	$CMBFREC	COUNT OF FREE CMBS
1128	(468)	ADDRESS	2	$NMSGPRC	Notify msg threshold perct
1130	(46A)	ADDRESS	2		Reserved
1132	(46C)	SIGNED	4	$NMSGNUM	Current # of notify buffers
1136	(470)	SIGNED	4	$NMSGFRE	Free Notify msg buf count
1140	(474)	ADDRESS	2	$DISPCNT	PASS NUMBER THROUGH DISPATCHER CODE W/O RUNNING OUT OF WORK
1142	(476)	ADDRESS	2	$DISPACE	PACING VALUE (EFFECTS HOW OFTEN CERTAIN DISPATCHER FUNCTIONS ARE DONE IN A BUSY SYSTEM.
1144	(478)	ADDRESS	2	$NUMSMFB	NUMBER OF HASP SMF BUFFERS
1146	(47A)	ADDRESS	2	$SMFPRCT	SMF BUFFER THRESHOLD PERCENTAGE
1150	(47E)	ADDRESS	2	$SMFFREC	COUNT OF FREE SMF BUFFERS
1152	(480)	ADDRESS	2		Reserved
1154	(482)	ADDRESS	2	$TGSIZE	NO. OF BUFFERS PER TRACK GROUP
1156	(484)	SIGNED	4	$TGFREEB (0)	TGs free (set at end of KBLOB for JES2 monitor)
1160	(488)	ADDRESS	2	$TTBPRCT	TRACE TABLE THRESHOLD PERCENT (ONLY ACCURATE DURING THRESHOLD PROCESS, CCTTRCWP FIELD ALWAYS CORRECT
1162	(48A)	ADDRESS	2		Reserved
1164	(48C)	SIGNED	2	$VERSNUM	NUMBER OF CKPT VERSIONS
1166	(48E)	SIGNED	2	$VERSFRE	NUMBER CKPT VERS FREE
1168	(490)	SIGNED	2	$VERSWRN	USAGE THRESHLD FOR WTO WRN
1170	(492)	BITSTRING	3	$VERSSTT (0)	VERSIONING STATUS
		1...		$VERSACT	"B'10000000'" ACTIVE
		..1.		$VERSKPT	"B'00100000'" SUSPENDED
		...1		$VERSINI	"B'00010000'" INITIALIZING
1171	(493)	ADDRESS	1	$SPINACT	Count of active SPIN PCEs
1172	(494)	SIGNED	4	$MAXVUSE	Max Number versions in use
1176	(498)	SIGNED	4	$MAXFAIL	SEQUENCE FAIL COUNT
1180	(49C)	SIGNED	4	$NUMFAIL	TOTAL FAIL COUNT
1184	(4A0)	ADDRESS	1	$NOPRCCW	MAXIMUM CCW'S USED BY PRINT
1185	(4A1)	ADDRESS	1	$NOPUCCW	MAXIMUM CCW'S USED BY PUNCH
1186	(4A2)	ADDRESS	1	$SEPPAGE	Separator page options
		1...		$LSEPNON	"B'10000000'" Local sep size of NONE
		.1..		$LSEPHAF	"B'01000000'" Local sep size of HALF
		..1.		$LSEPFUL	"B'00100000'" Local sep size of FULL
		...1		$LSEPDBL	"B'00010000'" Local sep size of DOUBLE
		.... 1...		$RSEPNON	"B'00001000'" Remote sep size of NONE
		.... .1..		$RSEPHAF	"B'00000100'" Remote sep size of HALF
		.... ..1.		$RSEPFUL	"B'00000010'" Remote sep size of FULL
		1		$RSEPDBL	"B'00000001'" Remote sep size of DOUBLE
1187	(4A3)	ADDRESS	1		Reserved

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
1188	(4A4)	SIGNED	4	$CKCSIZE	SIZE OF GETMAINED CKC AREA
1192	(4A8)	ADDRESS	4	$RSRVCKG	CKG OF RESERVED CKPT DS
1196	(4AC)	CHARACTER	44	$DSNSPOL	DATA SET NME FOR SPOOL DATA SET

Comment

TABLE FOR HASP497 DOM ID

End of Comment

1240	(4D8)	ADDRESS	4	$DOMID1 (0)	DOMID TABLE HEADER
1240	(4D8)	ADDRESS	4	$ERDM497	DOMID MSG497 (ERROR CORRECTION)
1244	(4DC)	ADDRESS	4	$RBDM497	DOMID MSG497 (REBUILD)
1244	(4DC)	X'2'	0	$DOMIDN	"(*-$DOMID1)/4" NUMBER OF TABLE ENTRIES
1248	(4E0)	ADDRESS	4	$SCLPEND	Address of $SJ service classes pending dereg.
1252	(4E4)	BITSTRING	1	$PRTOPT2 (0)	Additional Print Opts
		1...		$PRTCALL	"B'10000000'" All chnls are new pages
1253	(4E5)	CHARACTER	1	$CCOMCHR	HASP COMMAND ID CHAR (OS INPUT)
1254	(4E6)	CHARACTER	1	$RCOMCHR	HASP COMMAND ID CHAR (RDR/RMT)
1255	(4E7)	BITSTRING	1	$PRFXFLG	PREFIX FLAG
		..1.		$SCOPSYS	"B'00100000'" SCOPE=SYSTEM - DEFAULT
		...1		$SCOPSPL	"B'00010000'" SCOPE=SYSPLEX
1256	(4E8)	SIGNED	4	(0)	ALIGN FOR CL INSTRUCTIONS
1256	(4E8)	CHARACTER	8	$STDFORM	STANDARD FORMS ID
1264	(4F0)	CHARACTER	4	$PRTFCB	STANDARD FCB IMAGE ID
1268	(4F4)	CHARACTER	4	$PRTUCS	STANDARD UCS IMAGE ID
1272	(4F8)	CHARACTER	4	$NIPFCB	3800 INSTALLATION FCB DEFAULT
1276	(4FC)	CHARACTER	4	$NIPUCS	3800 INSTALLATION UCS DEFAULT
1280	(500)	CHARACTER	4	$NIPFLSH	3800 INSTALLATION FLASH FRAME DFT
1284	(504)	ADDRESS	2	$RMTNUM	Highest Allowed Remote
1286	(506)	ADDRESS	2		Reserved for future use
1288	(508)	ADDRESS	2	$MLBFSIZ	HASP MULTI-LEAVING BUFFER SIZE
1290	(50A)	ADDRESS	2	$BFSZBSC	HASP BSC RJE Buffer Size
1292	(50C)	ADDRESS	2	$BFSZSNA	HASP SNA RJE BUFFER SIZE
1294	(50E)	ADDRESS	2	$BFSZPP	HASP Print/Punch buf size
1296	(510)	SIGNED	2		Reserved for future use
1298	(512)	ADDRESS	1	$STIMASK	SPOOL OFFLOAD I/O MGR SCAN MASK
		1...		$STIMBUF	"B'10000000'" $STIMASK BIT FOR BUFFER SCAN
		.1..		$STIMTIM	"B'01000000'" $STIMASK BIT FOR TIMER SCAN
		..1.		$STIMDCT	"B'00100000'" $STIMASK BIT FOR DCT SCAN
		...1		$STIMSBT	"B'00010000'" $STIMASK BIT FOR SUB-TASK SCAN
1299	(513)	ADDRESS	1	$SPOLMSG	MAX SPOOL BUFFERS FOR MSGS/RMT
1300	(514)	ADDRESS	1	$BSPGCT	PAGES BETWEEN BSP TABLE ENTRIES
1301	(515)	ADDRESS	1	$BSPNTE	BSP TABLE ENTRIES
1302	(516)	ADDRESS	2	$BSPSIZ	BSP TABLE SIZE
1304	(518)	ADDRESS	1	$JCOPYLM	OUTPUT JOB COPY LIMIT
1305	(519)	CHARACTER	1	$CCOMCH	TEMP FOR $T PREFIX CHAR
1306	(51A)	ADDRESS	2	$HTDIST	2770/2780 HORIZONTAL TAB SPACING
1308	(51C)	ADDRESS	2	$NUMACE	NUMBER OF AUTOMATIC CMD ELEMENTS
1310	(51E)	ADDRESS	2	$MAXPART	MAXIMUM ACTIVE BATCH INITIATORS
1312	(520)	ADDRESS	1	$SPOFERR	SPOOL OFFLOAD ERROR THRESHOLD
1313	(521)	CHARACTER	1	$RDRAREA	CMD REDIRECT AREA DEFAULT
1314	(522)	BITSTRING	2		Reserved
1316	(524)	ADDRESS	4	$TRTIME	TRACE TABLE TRUNCATION TIME
1320	(528)	ADDRESS	2	$LIRCT	CKPT LOST INTERRUPT RETRY CT
1322	(52A)	BITSTRING	2		Reserved
1324	(52C)	ADDRESS	2	$RETRYCT	CKPT I/O ERROR RETRY CTR
1326	(52E)	ADDRESS	2	$SCANPDL	LENGTH USED FOR $SCAN PARAMETER DISPLAYS (INIT, COMMANDS)
1328	(530)	SIGNED	4	$SCANMDL	MAXIMUM DISPLAY LINES FOR $SCAN CALLS FOR INIT AND CMDS FROM NJE, RJE, OR MCS WITHOUT L=CCA
1332	(534)	ADDRESS	4	$CTBADA (16)	BAD value
1396	(574)	ADDRESS	4	$ROTJQE	Addr JQE Rolling Trace Tbl
1400	(578)	ADDRESS	4	$ROTJOE	Addr JOE Rolling Trace Tbl
1404	(57C)	ADDRESS	4	$ROTDISP	Dispatcher rolling trace tb

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
					Comment
					GENERAL WORK AREA FOR USE BY MAIN TASK
					End of Comment
1408	(580)	DBL WORD	8	(0)	ALIGN $SCANXWA
1408	(580)	CHARACTER	12	$SCANXWA	WORK AREA FOR HASPSXIT, PASSING DATA BETWEEN PRE/POST EXITS, STABS
1408	(580)	CHARACTER	18		ASSURE SUFFICIENT $DEST LENGTH
					Comment
					---------- Remap $SCANXWA for use in HASP581 message ----------
					End of Comment
1408	(580)	CHARACTER	8	$M581DVN	Logical device name
1416	(588)	SIGNED	4	$M581RC	DYNALLOC return code
1420	(58C)	BITSTRING	2	$M581ERR	DYNALLOC error code
1422	(58E)	BITSTRING	2	$M581INF	DYNALLOC info code
1424	(590)	BITSTRING	1	$M581FLG	Flags for HASP581 msg
		1...		$M581FGF	"B'10000000'" - $GETWORK failed for DAIRFAIL parm list
		.1..		$M581FL1	"B'01000000'" - DAIRFAIL formatted text (level 1) to display
		..1.		$M581FL2	"B'00100000'" - DAIRFAIL formatted text (level 2) to display
		...1		$M581FNT	"B'00010000'" - No formatted text (needed to ensure a non-zero DISPER= byte)
					Comment
					---------- Remap $SCANXWA for us by $D/$T PCE command ----------
					End of Comment
1408	(580)	SIGNED	2	$DPCEDEF	Number of PCEs defined
1410	(582)	SIGNED	2	$DPCEALC	Number of PCEs allocated
1412	(584)	SIGNED	2	$DPCEEND	Number of PCEs ENDed
1416	(588)	SIGNED	4	$DPCEACT	$ACTIVE count for PCEs
1420	(58C)	BITSTRING	1	$DPCEFLG	Flag byte
		1...		$DPCETON	"B'10000000'" Trace on flag
		.1..		$DPCETOF	"B'01000000'" Trace off flag
		1		$DPCETMD	"B'00000001'" Trace modified
1420	(58C)	X'C0'	0	$DPCETMX	"$DPCETON+$DPCETOF" Trace mixed
1420	(58C)	X'81'	0	$DPCETSO	"$DPCETON+$DPCETMD" Trace set on
1420	(58C)	X'41'	0	$DPCETSF	"$DPCETOF+$DPCETMD" Trace set OFF
1420	(58C)	X'D'	0	$DPCELEN	"*-$DPCEDEF" Length of work area
1432	(598)	DBL WORD	8	$GENWORK (0)	GENERAL WORK AREA FOR MAIN TASK
					Comment
					THIS AREA IS USED BY HASPSCAN AND HASPSXIT AS A WORK AREA
					End of Comment
1432	(598)	BITSTRING	24	$SCNDL24	WORK AREA FOR $SCAN SERVICE
1432	(598)	X'598'	0	$SCNDWKA	"$GENWORK+00,08,C'D'" WORK AREA FOR $SCAN SERVICE
1432	(598)	X'5A0'	0	$SCNDWKB	"$GENWORK+08,08,C'D'" WORK AREA FOR $SCAN SERVICE
1432	(598)	X'5A8'	0	$SCNDWKC	"$GENWORK+16,08,C'X'" WORK AREA FOR $SCAN SERVICE

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
1432	(598)	X'598'	0	$SCNDL16	"$GENWORK+00,16,C'X'" WORK AREA FOR $SCAN SERVICE
1456	(5B0)	SIGNED	4	$SCNLLIM	$SCAN lower limit work area

Comment

THIS WORK AREA IS USED BY THE SRVPRSCN ROUTINE IN
HASPSERV TO PROCESS A $TDEVN COMMAND OR A PRINT/PUNCH
INITIALIZATION STATEMENT

End of Comment

1432	(598)	BITSTRING	8	$PRMDSAV	SAVE AREA FOR PRMODE OPERAND
1440	(5A0)	BITSTRING	8	$PRMDINX	PRMODE INDEX LIST FROM DCT
1448	(5A8)	BITSTRING	1	$PRMDFLG	PRMODE FLAG BYTE
		1...		$PRMDEND	"B'10000000'" END OF OPERAND FOUND
1448	(5A8)	X'11'	0	$PRMDWKL	"*-$GENWORK" LENGTH OF PRMODE SCAN WORK AREA

Comment

THIS WORK AREA IS USED BY THE $DTEDYN SERVICE ROUTINE
FOR THE MVS ATTACH MACRO PARAMETER LIST

End of Comment

Comment

MACDATE 11/11/91

End of Comment

1432	(598)	SIGNED	4	$DTELSTF (0)	
1432	(598)	ADDRESS	4		DE OR EPLOC ADDRESS
1436	(59C)	ADDRESS	4		DCB ADDRESS
1440	(5A0)	ADDRESS	4		NEW FORMAT + ECB ADDR
1444	(5A4)	ADDRESS	4		GSPL OR GSPV
1448	(5A8)	ADDRESS	4		SHSPV OR SHSPL
1452	(5AC)	ADDRESS	4		EXIT ROUTINE ADDRESS
1456	(5B0)	ADDRESS	2		DPMOD VALUE
1458	(5B2)	ADDRESS	1		LPMOD VALUE
1459	(5B3)	ADDRESS	1		STATUS BYTE
1460	(5B4)	ADDRESS	4	(2)	EP NAME SPACE
1468	(5BC)	ADDRESS	4		ADDRESS OF JSCB
1472	(5C0)	ADDRESS	4		(E)STAI PARM LIST
1476	(5C4)	ADDRESS	4		EXIT ADDRESS
1480	(5C8)	ADDRESS	4		TASKLIB
1484	(5CC)	ADDRESS	1		FLAG BYTE
1485	(5CD)	ADDRESS	1		TASK ID
1486	(5CE)	ADDRESS	2		PARM LIST LENGTH
1488	(5D0)	ADDRESS	4		SUBPOOL LIST ADDRESS/VALUE
1492	(5D4)	ADDRESS	1		SET FLAGS
1493	(5D5)	ADDRESS	1		SET UP FORMAT NUMBER
1494	(5D6)	BITSTRING	10		RESERVED BYTES FOR FUTURE
1494	(5D6)	X'598'	0	$DTELIST	"$DTELSTF,*-$DTELSTF" EQUATE FOR BASE AND LENGTH

Comment

This work area is used by the $SCAN facility to
build certain variations of the $HASP003 message

End of Comment

1432	(598)	SIGNED	4	$SCANWKA (0)	
1432	(598)	BITSTRING	40		List of diagnostic levels
1472	(5C0)	CHARACTER	100		Work area
1572	(624)	X'8C'	0	$GENWRKL	"*-$GENWORK"

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
					Comment
					This work area is used by $#POST to XMPOST a PSO address space. The PSOXMPL is copied here.
					End of Comment
1432	(598)	BITSTRING	12	$PSOXMPL	Cross-mem POST parm list
1432	(598)	X'C'	0	$PSOXMPS	"*-$PSOXMPL" Length of list
					Comment
					This work area is used by anyone that might have to reference the entire system affinity mask
					End of Comment
1432	(598)	BITSTRING	4	$GENSYS	Sys affinity work area
					Comment
					PROCESSOR DEPENDENT FLAG BYTES
					End of Comment
1572	(624)	BITSTRING	3	$PROCESS (0)	General process flg
1572	(624)	X'3'	0	$PROCDFT	"$RASSIGN+$ECKTRMJ" Flags on by default
		1...		$PRONEWS	"B'10000000'" JNEW CB being updated
		.1..		$SPINJQE	"B'01000000'" JQE added to $SPIN queue
		..1.		$PRSCNWB	"B'00100000'" Bypass $SCAN FILTER=WB optimization
		...1		$PRODISP	"B'00010000'" Processors have been ended (disposed)
		.... 1...		$ARMVR	"B'00001000'" Verification of ARM registrations required
		.... ..1.		$RASSIGN	"B'00000010'" Assign original job number, even if outside JOBDEF RANGE
		.... .1..		$INTRDCB	"B'00000100'" Use DCB attributes associated with INTRDR for SYSIN data sets. See comment for RID1UDCB in $DCT.
		1		$ECKTRMJ	"B'00000001'" Remote Member Jettison flag - $ECKPTLOCK done whenever a member fails
1573	(625)	BITSTRING	1	$MCONFG1	REMOTE CONSOLE PROCESSOR FLAG
		1...		$MCONACT	"X'80'" Remote console has output activity
		.1..		$MCONWAT	"X'40'" Remote console waiting for jobqueue
		..1.		$MCONNPM	"X'20'" Network path manager busy
		...1		$MCONWPM	"X'10'" Console waiting on path manager
1574	(626)	BITSTRING	1	$COMMFG1	COMMAND PROCESSOR FLAG
		1...		$COMMDWN	"X'80'" XEQ/CKPT/SPIN Shutdown complete
		.1..		$COMMWAT	"X'40'" HASPCOMM waiting for checkpoint
		..1.		$COMMABT	"X'20'" Command being aborted
1575	(627)	BITSTRING	1	$EXECFG1	EXECUTION PROCESSOR FLAG
		1...		$EXECDWN	"X'80'" XEQ shutdown complete
		.1..		$EXECSPN	"X'40'" XEQ is ready for SPIN to do its final processing
1576	(628)	BITSTRING	1	$CKPTFG1 (0)	Ckpt Processor flag
1576	(628)	X'39'	0	$CK1DFLT	"$CKPTDPY+$CKPTLDP+$CKPTTMD+$CKPTDPS" CKPTDEF DEFAULT: MODE=DUPLEX,DUPLEX=ON
		1...		$CKPTDWN	"B'10000000'" XEQ,CKPT SHUTDOWN COMPLETE
		.1..		$CKPTMSG	"B'01000000'" Do not issue HASP479 msg
		..1.		$CKPTTMD	"B'00100000'" TELLS SCAN WE'RE IN DPLX MD
		...1		$CKPTDPS	"B'00010000'" INDICATES SET TO DUPLEX ON
		.... 1...		$CKPTDPY	"B'00001000'" INDICATES IN DUPLEX MODE
		.... .1..		$CKPTTEK	"B'00000100'" $T'D NEWCKPTN FIELD
		.... ..1.		$CKPTPRI	"B'00000010'" INDICATES PRIO AGING USED
		1		$CKPTLDP	"B'00000001'" INDICATES DUPLEXING LOCALLY
1577	(629)	BITSTRING	1	$CKPTFG2	Checkpoint processor flag
		1...		$CK2LOCK	"B'10000000'" LOCKING OPERATION
		.1..		$CK2READ	"B'01000000'" READ OPERATION
		..1.		$CK2WRT	"B'00100000'" WRITE OPERATION
		...1		$CK2FMT	"B'00010000'" FORMAT OPERATION

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
		.... 1...		$CK2DIAG	"B'00001000'" We're in the dialog
		.... .1..		$CK2LOKD	"B'00000100'" CKPT LOCK IS HELD
		.... ..1.		$CK2PRIM	"B'00000010'" PRIMARY CKPT OPERATION
		1		$CK2INIT	"B'00000001'" INITIALIZATION OPERATION
1578	(62A)	BITSTRING	1	$CKPTFG3	CHECKPOINT PROCESSOR FLAG

Comment

EQU B'10000000' Reserved for future use

End of Comment

		.1..		$CK3BYLK	"B'01000000'" CKPT lock msg bypassed
		..1.		$CK3CHLG	"B'00100000'" BUILDING CH LOG PACKETS
		...1		$CK34KPG	"B'00010000'" BUILDING 4K PAGE PACKETS
		.... 1...		$CK3WTCP	"B'00001000'" CKPT2 IS WRITE CHECKPOINT
		.... .1..		$CK3RDCP	"B'00000100'" CKPT2 IS READ CHECKPOINT
		.... ..1.		$CK3NMEM	"B'00000010'" $CKPT RAN OUT OF MEMORY

Comment

EQU B'00000001' RESERVED FOR FUTURE USE

End of Comment

1579	(62B)	BITSTRING	1	$CKPTFG4	CHECKPOINT PROCESSOR FLAG
		1...		$CK4ECOP	"B'10000000'" EXTRA COPY OF CKPT REQ
		.1..		$CK4ECSA	"B'01000000'" EXTRA COPY IS IN ECSA
		..1.		$CK4OPVY	"B'00100000'" Request to change OPVERIFY to YES
		...1		$CK4OPVN	"B'00010000'" Request to change OPVERIFY to NO
		.... 1...		$CK4OPRQ	"B'00001000'" Work bit for $SCAN to set operator request
		.... .1..		$CK4HRSV	"B'00000100'" Hardware reserve or CF lock
		.... ..1.		$CK4CKPC	"B'00000010'" KFORMAT needed because CKPT size was changed via operator command or init has deferred format to end of warmstart
		1		$CK4CFAB	"B'00000001'" CF subtask ABENDed and cannot find CKG to post
1580	(62C)	BITSTRING	1	$TRCFG1	TRACE LOG PROCESSOR FLAG
		1		$TRCDWN	"B'00000001'" Tell XEQ of trace log shutdown

Comment

$CKPTLOC is used in combination with $CKPTUPD to determine if the CKPT data set size (the size of a CTENT) has changed. Every time the size is altered $CKPTUPD is incremented. If $CKPTLOC is not the same as $CKPTUPD, then an update has occured and the CKPT control blocks need to be updated.

End of Comment

1581	(62D)	BITSTRING	1	$CKPTLOC	Local copy of $CKPTUPD
1582	(62E)	BITSTRING	1	$CKPTFG5	Checkpoint flag
		1...		$CK5QSUS	"B'10000000'" PCE obtained the queues
1583	(62F)	BITSTRING	1		Reserved

Comment

MISCELLANEOUS HASP CONTROL FIELDS

End of Comment

1584	(630)	ADDRESS	4	$MSAVE (5)	RTAM NON-REENTRANT REG SAVE AREA
1608	(648)	DBL WORD	8	$POSTSAV (4)	Save area for $POST et al

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
					Comment
					Work area used very early during JES2 initialization. These fields are not used once HASPIRA (HASPINIT) gets control.
					End of Comment
1608	(648)	X'630'	0	$STARTTM	"$MSAVE,8" STCK time at label HASP
1608	(648)	X'638'	0	$STARTCP	"$MSAVE+8,8" CPU time at label HASP
1640	(668)	SIGNED	4	$GETWKSV (10)	Save area for $GET/$RETWORK
1640	(668)	X'66C'	0	$GETWKSF	"$GETWKSV+4,4" $GETWKSV R15 SLOT
1640	(668)	X'674'	0	$GETWKS1	"$GETWKSV+12,4" $GETWKSV R1 SLOT
1640	(668)	X'678'	0	$GETWKS2	"$GETWKSV+16,4" $GETWKSV R2 SLOT
1640	(668)	X'668'	0	$CKPTSAV	"$GETWKSV,4*9" SAVE AREA FOR $CKPT
1640	(668)	X'678'	0	$CKPTSR0	"$CKPTSAV+16,4" $CKPTSAV R0 SLOT
1640	(668)	X'67C'	0	$CKPTSR1	"$CKPTSAV+20,4" $CKPTSAV R1 slot
1680	(690)	DBL WORD	8	$DOUBLE	JES2 MAIN-TASK SCRATCH WORK AREA
1688	(698)	DBL WORD	8	$DWORK	JES2 MAIN-TASK SCRATCH WORK AREA
1696	(6A0)	DBL WORD	8	$DWORK2	JES2 MAIN-TASK SCRATCH WRK AREA
1696	(6A0)	X'690'	0	$WORK16	"$DOUBLE,16,C'X'" JES2 MAIN-TASK 16 BYTE AREA
1696	(6A0)	X'690'	0	$WORK24	"$DOUBLE,24,C'X'" JES2 MAIN-TASK 24 BYTE AREA
1704	(6A8)	BITSTRING	1	$JOEWRKA	WORK A FOR ADDING JOES TO Q
1705	(6A9)	BITSTRING	3		Reserved for future use
1708	(6AC)	ADDRESS	4	$MSGWRKA	Pointer to 256 byte message work area
1712	(6B0)	SIGNED	4	(0)	Ensure fullword allignment
1712	(6B0)	BITSTRING	32	$SPMSKWA	SPOOL MASK WORK AREA
1744	(6D0)	CHARACTER	8	$BLANKS	8 CHARACTERS OF BLANKS
1752	(6D8)	DBL WORD	8	$ZEROS	8 CHARACTERS OF HEX ZERO
1752	(6D8)	X'6D8'	0	$ZEROES	"$ZEROS" ALTERNATE NAME FOR $ZEROS
1752	(6D8)	X'6D8'	0	$ZERO	"$ZEROS" Another name for $ZEROS
1760	(6E0)	BITSTRING	4	$ZEROFFF	QUEUE ELEMENT CHAIN MASK
1760	(6E0)	X'6E0'	0	$0FFF	"$ZEROFFF" ALTERNATE NAME FOR $ZEROFFF
1764	(6E4)	BITSTRING	4	$000F	INDEX ELEMENT MASK
1768	(6E8)	BITSTRING	4	$ALLFFS	FULLWORD OF X'FF'S
1768	(6E8)	X'6E8'	0	$MINUS1	"$ALLFFS" ALTERNATE NAME FOR $ALLFFS
1772	(6EC)	BITSTRING	4	$MINUS2	CONSTANT -2
		1...		$WSUSER	"X'80'" WS USER CRITERION INDICATION
1776	(6F0)	BITSTRING	4	$WSBITOF	USED TO TURN USER ID BIT OFF
1780	(6F4)	BITSTRING	8	$MAXDBLE	MAX POSITIVE NUMBER IN DOUBLEWORD
1780	(6F4)	X'6F4'	0	$MAXFULL	"$MAXDBLE,4" MAX POSITIVE NUMBER IN FULLWORD
1780	(6F4)	X'6F4'	0	$MAXHALF	"$MAXDBLE,2" MAX POSITIVE NUMBER IN HALFWORD
1780	(6F4)	X'6F4'	0	$7FFF	"$MAXDBLE,2" HIGH BIT OFF MASK
1780	(6F4)	X'6F4'	0	$HIBITOF	"$MAXDBLE,4" FULL WORD HI-ORDER BIT MASK
1788	(6FC)	SIGNED	4	$F1	FULLWORD CONSTANT 1
1788	(6FC)	X'6FE'	0	$H1	"$F1+2,2,C'H'" HALFWORD CONSTANT 1
1792	(700)	SIGNED	4	$F2	FULLWORD CONSTANT 2
1792	(700)	X'702'	0	$H2	"$F2+2,2,C'H'" HALFWORD CONSTANT 2
1796	(704)	SIGNED	4	$F4	FULLWORD CONSTANT 4
1796	(704)	X'706'	0	$H4	"$F4+2,2,C'H'" HALFWORD CONSTANT 4
1800	(708)	SIGNED	4	$F6	FULLWORD CONSTANT 6
1800	(708)	X'70A'	0	$H6	"$F6+2,2,C'H'" HALFWORD CONSTANT 6
1804	(70C)	SIGNED	4	$F8	FULLWORD CONSTANT 8
1804	(70C)	X'70E'	0	$H8	"$F8+2,2,C'H'" HALFWORD CONSTANT 8
1808	(710)	SIGNED	4	$F255	FULLWORD CONSTANT 255
1808	(710)	X'712'	0	$H255	"$F255+2,2,C'H'" HALFWORD CONSTANT 255
1812	(714)	SIGNED	4	$F4096	FULLWORD CONSTANT 4096
1812	(714)	X'716'	0	$H4096	"$F4096+2,2,C'H'" HALFWORD CONSTANT 4096
1816	(718)	SIGNED	4	$HIBITON (0)	FULL WORD HI-ORDER BIT MASK
1816	(718)	X'62C'	0	$HEXTRAN	"*-C'0'" HEXADECIMAL-TO-EBCDIC
1820	(71C)	CHARACTER	16		TRANSLATE TABLE
1836	(72C)	BITSTRING	1	$CTLBFFS (0)	X'FF's to test cntl bytes

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
					Comment
					---------- SAF CLASS Value. Reference in RACROUTEs should be to name on the EQUate. ----------
					End of Comment
1841	(731)	ADDRESS	1	$JSPLL	Length of JESSPOOL class
1842	(732)	CHARACTER	8	$JSPLV	JESSPOOL class
1842	(732)	X'731'	0	$JSPL	"$JSPLL,*-$JSPLL,C'X'" JESSPOOL SAF class
1852	(73C)	SIGNED	4	(0)	Ensure alignment
1856	(740)	DBL WORD	8	$CLOCK	LAST INTERVAL TIMER CLOCK VALUE
1864	(748)	DBL WORD	8	$MVSWAIT	STCK Time of MVS WAIT
1872	(750)	DBL WORD	8	$MVSDISP	STCK Time when JES2 is dispatched from MVS WAIT
1880	(758)	ADDRESS	4	$REGSAVC (18)	NON-REENTRANT REG. SAVE AREA
1880	(758)	X'760'	0	$REGSAVE	"$REGSAVC+2*4,4" NON-REENTRANT REG SAVE AREA (16 WORDS-NOTE OVERLAY DEFINITION)
1952	(7A0)	ADDRESS	1	$PSWSAVE	NON-REENTRANT PSW CC SAVE BYTE
1953	(7A1)	ADDRESS	1	$PSWMODE	Non-reentrant PSW ASC save byte (copied from PSVMODE)
1960	(7A8)	BITSTRING	10		Reserved
					Comment
					---------- The $XCFFLG1 and $XCFFLG2 flags indicate the states of the automatic restart function. $XCFFLG1 can only be modified in the main task. $XCFFLG1 is manipulated by SCAN which can return the field to a previous state. This is done via the method SCAN uses to backup the storage that it is modifying (see $SCANB macro). $XCFFLG2 is modified when JESXCF has failed. The $XCF1STR flag indicates a request to start the automatic restart function (AUTOESYS=ON by the operator). The $XCF1STP flag indicates a request to stop the automatic restart function (AUTOESYS=OFF by the operator). The $XCF1NXC in the off state indicates that the automatic restart function is active (ON). The $XCF1NXC in the on state indicates that the automatic restart function is inactive (OFF). The $XCF1ERR flag on indicates that the main task XCF function or the group exit has had an error. With the $XCF1ERR flag set, the display for MASDEF will show AUTOESYS=FAILED. The $XCF2ERR flag on indicates that the group exit has had an error. The $XCF1NRS indicates that RESTART=NO was selected on the MASDEF statement. The $XCF1NRS flag off will indicate that RESTART=YES was chosen. ----------
					End of Comment
1970	(7B2)	ADDRESS	1	$XCFFLG1	XCF status flags
		1...		$XCF1NAR	"B'10000000'" Request no auto restart
		.1..		$XCF1NRS	"B'01000000'" No XCF restart from this member
		..1.		$XCF1ERR	"B'00100000'" XCF environment failed
		...1		$XCF1STR	"B'00010000'" Request to set AUTOESYS on
		.... 1...		$XCF1STP	"B'00001000'" Request to set AUTOESYS off
		.... .1..		$XCF1SGO	"B'00000100'" An MVS has left the Sysplex
		.... ..1.		$XCF1MUD	"B'00000010'" A member has changed state
1971	(7B3)	ADDRESS	1	$XCFFLG2	JESXCF status flag

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
		1...		$XCF2ERR	"B'10000000'" JESXCF environment failed
1972	(7B4)	ADDRESS	4	$XCFIXVT	JESXCF Group token this is a copy of the $HCCT field CCTIXVT
1976	(7B8)	SIGNED	4	$TOTCKRN	Total number of 4K records in the checkpoint (this includes the checkpoint records, master record and change log)

Comment

Save area (PCE prefix) used by the JES2 dispatcher, JES2 initialization, STAM and JES2 termination. The initialization PCE id is placed in the work area so that if a $WAIT with MVSWAIT=PCEINTID is done, an MVS wait will be performed (rather than a call to the dispatcher with this work area).

End of Comment

1980	(7BC)	SIGNED	4	(0)	ENSURE FULLWORD BOUNDARY
1980	(7BC)	BITSTRING	240	$DISPSAV	DISPATCHER SAVE AREA
2114	(842)	ADDRESS	1	(2)	Set initialization PCE
2220	(8AC)	SIGNED	4	$CKPTOAC	TOKEN CURRENT CKPT I/O
2224	(8B0)	SIGNED	4	$CKPTONX	TOKEN NEXT SCHED CKPT I/O
2232	(8B8)	DBL WORD	8	$SIDTIME	TOD OF LAST CKPT FOR THIS SYSTEM
2240	(8C0)	CHARACTER	4	$SID	Member name (SMF) for this member
2244	(8C4)	ADDRESS	4	$OWNNIT	ADDR OF THIS SYSTEM'S NIT ENTRY
2248	(8C8)	CHARACTER	8	$SNV (0)	JES NAME AND VERSION
2248	(8C8)	CHARACTER	4	$SSNM	NAME OF SUBSYSTEM
2252	(8CC)	CHARACTER	4	$SSVS	VERSION, RELEASE, MOD
2256	(8D0)	ADDRESS	3	$SYSID (0)	SYSTEM IDENTIFICATION
2256	(8D0)	ADDRESS	2	$OWNNODE	NUMBER OF THIS NODE
2258	(8D2)	ADDRESS	1	$SIDBUSY	SYSTEM ID OF THIS NODE
2260	(8D4)	SIGNED	2	$CHLOGSZ	SIZE THIS SYSTEMS CH LOG
2262	(8D6)	ADDRESS	1	$SUBTASK	HASP SUBTASK SYSTEM STATUS
2263	(8D7)	ADDRESS	1	$STATUS	HASP SYSTEM STATUS
2264	(8D8)	ADDRESS	4	$IOTPDDB	OFFSET WITHIN IOT OF 1ST PDDB
2268	(8DC)	ADDRESS	4	$CYLMAPL	Direct access allocation map len ($NUMTG/8)
2272	(8E0)	SIGNED	2	$TGAELEN	TRACK GROUP ALLOC AREA LENGTH FOR NON-SPIN PRIMARY ALLOC IOT'S
2274	(8E2)	SIGNED	2	$TGAENUM	NUMBER OF TGAE'S IN PRIMARY ALLOC IOT (MIN 50) - RESET TO ACTUAL VALUE DURING INITIALIZATION
2276	(8E4)	ADDRESS	4	$AFFLEN	Number of bytes needed to hold system affinity bits
2276	(8E4)	X'8E6'	0	$AFFLENH	"$AFFLEN+2,2" Halfword of SYSAFF bytes
2276	(8E4)	X'4'	0	$CTLBLEN	"L'$CKLEVNM" Size of the control byte entries CTLB's and CLCB's
2280	(8E8)	BITSTRING	1	$STATUS1 (0)	More HASP status flags

Comment

If a $PJES2,ABEND is issued and a coupling facility checkpoint write is still active, COMM will issue the HASP552 message and wait for a post from CKPT to indicate the write is done. This bit will be set by COMM when CKPT is NOT to wait for XEQ processing to finish before posting COMM that checkpoint processing is complete.

End of Comment

		1...	$SDWNFST	"B'10000000'" Shut down fast. CKPT don't wait for XEQ
		.1..	$JINITIP	"B'01000000'" JES2 initialization is in progress
		..1.	$ST1PJTM	"B'00100000'" $PJES2,TERM issued
		...1	$WRMDONE	"B'00010000'" Warm start completed
		.... 1...	$STOPXEQ	"B'00001000'" $P XEQ issued
		.... .1..	$CATMAX	"B'00000100'" CAT max JOBs has been newly reached or has been $T'ed

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
		.... ..1.		$WLMDIFF	"B'00000010'" This member at WLM Service definition different from JESplex level
		1		$WLMRGOK	"B'00000001'" Force registration of all queues successful
2281	(8E9)	BITSTRING	1	$STATUS2	More HASP status flags
		1...		$BRTCLN	"B'10000000'" PREBERTs owned by ABENDed PCEs exist
		.1..		$XEQINT	"B'01000000'" Call $CATJCNT to initialize CATCURJ (xeq) class cnt
		..1.		$PDYNDET	"B'00100000'" At least one ENDED PCE has been dynamically detached
2282	(8EA)	SIGNED	2	$CTLBLNH (0)	Size of cntl bytes
2284	(8EC)	BITSTRING	1		Reserved for future IBM use
2285	(8ED)	BITSTRING	3	$AFFINTY	Our system affinity token
2288	(8F0)	BITSTRING	4		Reserved for future IBM use
2292	(8F4)	ADDRESS	4	$MAXREST	Max resistance of a path
2296	(8F8)	ADDRESS	2	$NODREST	RESISTANCE OF THIS NODE
2298	(8FA)	ADDRESS	2	$NODETOL	PATH RESISTANCE TOLERANCE
2300	(8FC)	ADDRESS	2	$NITESIZ	SIZE OF NIT ELEMENT
2302	(8FE)	BITSTRING	1	$MASPOST	CROSS-SYSTEM POST FLAG BYTES
2303	(8FF)	BITSTRING	1	$PCEPOST	$$POST FLAG BYTE
		1...		$PCEASYN	"B'10000000'" ASYNCH POST FLAG BIT
2304	(900)	ADDRESS	2	$BUFLENG	HASP IN-CORE BUFFER SIZE
2306	(902)	ADDRESS	2	$SONWORK	SIGN-ON WORK SPACE
2308	(904)	ADDRESS	4	$ACTIVE	COUNT OF ACTIVE FUNCTIONS
2312	(908)	ADDRESS	4	$ACTVFSS	COUNT OF ACTIVE FSS'S
2316	(90C)	BITSTRING	8	$SJFJDVT	DEFAULT JDVT NAME
2324	(914)	BITSTRING	8	$MSKNODE	MASK NODE NUMBER (MDCTNODE)
2332	(91C)	ADDRESS	4	$ERRTRCA	"V(HASPTRCA)" TERM/RECOVERY CONTROL AREA
2336	(920)	SIGNED	4	$HETOKEN	HASP MAIN TASK ESTAE TOKEN
2340	(924)	ADDRESS	2		RESERVED FOR FUTURE USE
2342	(926)	SIGNED	2	$RECVCNT	NUMBER OF PCES IN RECOVERY
2344	(928)	ADDRESS	4	$ERRERPL	ADDR OF ERPL IF $ERROR, ELSE 0
2348	(92C)	SIGNED	4	$ERRREGS (3)	REGS 15, 0, 1 BEFORE $ERROR
2348	(92C)	X'930'	0	$ERRREG0	"$ERRREGS+4,4" REG 0 SLOT IN $ERRREGS
2360	(938)	SIGNED	4	$ERRCODE	CATASTROPHIC ERROR REASON CODE
2364	(93C)	ADDRESS	2	$EXCPCT	ACTIVE HASP I/O COUNT
2366	(93E)	ADDRESS	1	$XWTRFLG	EXTERNAL WRITERS FLAG
		1...		$XWTRACT	"B'10000000'" POST XWTR ACTIVE
2367	(93F)	ADDRESS	1	$MAXCMCT	MAXIMUM CONSOLE MESSAGE COUNT
2368	(940)	ADDRESS	4	$FSSETIM	TIME INTERVAL FOR ERROR ASSUMED FOR FSS/FSA/ORDERS (5 MINUTES)
2372	(944)	ADDRESS	4	$RBFADDR	ADDR FOR TERM AS FAILING ADDR AT OUR RB LEVEL, IF NON-ZERO REGS ARE $REGSAVE/$CURPCE (NOT SDWA)
2376	(948)	BITSTRING	1	$WARMTYP	Warmstart type descriptor FLAG.

Comment

```
WARM EQU X'80' Single-member warmstart
HOT EQU X'40' Hot start indicator
QUICK EQU X'20' Quick start indicator
CONFIG EQU X'10' All-member warmstart
ESYS EQU X'08' $E MEMBER(x) warmstart
COLD EQU X'04' Cold start
MVSIPL EQU X'02' MVS was IPLed
COLDFMT EQU X'01' Cold start with format
```

End of Comment

2377	(949)	BITSTRING	1	$BRTDTYP	$DOGBERT working value for BERT type
2378	(94A)	ADDRESS	2		Reserved for future use
2380	(94C)	SIGNED	4	$WRMINIT (0)	# OF USER REQUESTED WARM PCES
2380	(94C)	SIGNED	2	$WRMREG	# OF PCES FOR REGULAR WARMSTART
2382	(94E)	SIGNED	2	$WRMESYS	# OF PCES FOR $E SYS RESTART
2384	(950)	ADDRESS	4	$ERDOMID	DOM id for $HASP400 message
2388	(954)	ADDRESS	4	$ACCMBAD	CMB ADDRESS FOR HASP601 MESSAGE
2392	(958)	ADDRESS	4	$NDDOMID	MESSAGE ID FOR HASP607 MSG

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
2396	(95C)	ADDRESS	4	$SDCMBAD	CMB ADDRESS FOR HASP623 MESSAGE
2400	(960)	ADDRESS	4	$PBELST	List of PREBERTs
2404	(964)	ADDRESS	2	$PITNUM	NUMBER OF PITS FOR SCANTAB ($MAXINIT, LATER $MAXPART)
2406	(966)	ADDRESS	2	$NITECNT	COUNT OF NIT ENTRIES FOR SCANTAB, ($MAXNODE, LATER $NUMNODE)
2408	(968)	ADDRESS	4	$BRTFREC	Free BERT count (accurate only during thrshld proc)

Comment

HASP DEVICE CONTROL TABLE CHAIN POINTERS AND RELATED FIELDS. LOCAL/LINE/LOGON DCTS ARE CHAINED IN $DCTPOOL USING THE DCTCHAIN FIELD. ALL OTHER DCTS ARE CHAINED IN $DCTPOL2 USING DCTCHAIN. OTHER DCT CHAINING IS AS COMMENTED BELOW AND IN THE $DCT MACRO PROLOG.

End of Comment

2412	(96C)	ADDRESS	4	$DCTPOOL	FIRST HASP DCT IN LOCAL DEVICE, LINE, AND LOGON CHAIN
2416	(970)	ADDRESS	4	$DCTPOL2	FIRST HASP DCT IN CHAIN OF ALL OTHER DCTS
2420	(974)	ADDRESS	4	$RDRDCT	FIRST LOCAL READER DCT ADDR
2424	(978)	ADDRESS	4	$INRDCT	FIRST INTRDR DCT ADDR (CSA)
2428	(97C)	ADDRESS	4	$PRTDCT	FIRST LOCAL PRINTER DCT ADDR
2432	(980)	ADDRESS	4	$PUNDCT	FIRST LOCAL PUNCH DCT ADDR
2436	(984)	ADDRESS	4	$ROUTDCT	FIRST NJE ROUTE DCT ADDR
2440	(988)	ADDRESS	4	$LNEDCT	FIRST LINE DCT ADDR
2444	(98C)	ADDRESS	4	$MLNEDCT	FIRST MAS LINE DCT ADDR
2448	(990)	ADDRESS	4	$LOGNDCT	FIRST LOGON DCT ADDR
2452	(994)	ADDRESS	4	$XEQDCT	First Request-Job-ID/internal job DCT
2456	(998)	ADDRESS	4	$NETLDCT	First network xmitter/ receiver DCT
2460	(99C)	ADDRESS	4	$NETDCTS	FIRST FREE NETWORK DCT GROUP ADDR, GROUP CHAIN PTR = DCTDCB, IN-GROUP CHAIN = MDCTDCT
2464	(9A0)	ADDRESS	4	$RMTDCTS	RMT RDR/PRPU DCTS, DCTCHAIN CONNCTS ALL (R1 RDRS/PRTS/PUNS, R2, ETC), IN-RMT VIA RATRDCT/MDCTDCT
2468	(9A4)	ADDRESS	4	$OLDDCTS	Chain of unused DCTs that are eligible for reuse (these are not in any other chain of DCTs)
2472	(9A8)	ADDRESS	4	$OFFDCT	FIRST OFFLOAD DCT ADDRESS, TRANSMITTERS/RECEIVERS ARE CHAINED OFF THESE DCTS WITH XDCTDCT
2476	(9AC)	ADDRESS	4	$OJRDCT	FIRST OFF.JR DCT ADDRESS
2480	(9B0)	ADDRESS	4	$OSRDCT	FIRST OFF.SR DCT ADDRESS
2484	(9B4)	ADDRESS	4	$OJTDCT	FIRST OFF.JT DCT ADDRESS
2488	(9B8)	ADDRESS	4	$OSTDCT	FIRST OFF.ST DCT ADDRESS

Comment

Pointers to active (not drained) DCTs.
Pointers are pairs, heads and tails. Queue is FIFO

End of Comment

2492	(9BC)	ADDRESS	4	$NJEADCT (2)	Network SYSOUT xmitter DCTs
2500	(9C4)	ADDRESS	4	$OFFADCT (2)	Spl offload xmitter DCTs
2508	(9CC)	ADDRESS	4	$LCLADCT (2)	Local printer/punch DCTs

Comment

DCT COUNT FIELDS FOR DEVICES THAT DO NOT CORRESPOND WITH PROCESSORS (PCES) ON A ONE-FOR-ONE BASIS.

End of Comment

2516	(9D4)	SIGNED	2	$NUMLNES	NUMBER OF NJE/RJE LINES
2518	(9D6)	SIGNED	2	$NUMMLNE	NUMBER OF MAS LINES
2520	(9D8)	SIGNED	2	$NETLNES	NUMBER OF NETWORK LINES

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
2522	(9DA)	SIGNED	2	$NUMLOGS	NUMBER OF LOGON DCTS
2524	(9DC)	SIGNED	2	$NUMOFFS	NUMBER OF OFFLOAD DEVICE DCTS
2526	(9DE)	ADDRESS	4	$NUMLDEV (0)	Sub-device counts
2526	(9DE)	ADDRESS	1	$NUMNJT	JOB XMITTERS PER NETLNE
2527	(9DF)	ADDRESS	1	$NUMNJR	JOB RECEIVERS PER NETLNE
2528	(9E0)	ADDRESS	1	$NUMNST	SYSOUT XMITTERS PER NETLNE
2529	(9E1)	ADDRESS	1	$NUMNSR	SYSOUT RECEIVERS PER NETLNE

Comment

THE HASP PROCESSOR CONTROL ELEMENT (PCE) CHAIN POINTERS AND
COUNT FIELDS. EACH SUBSECTION IS MAPPED USING THE OFFSETS
PROVIDED BELOW. THE PCE TABLE ($PCETAB) ENTRIES IN HASPTABS
CONTAIN HCT OFFSETS TO THESE FIELDS.
EACH PCE CHAIN POINTER POINTS TO THE FIRST PCE OF THAT PCE
TYPE IN THE HASP PCE CHAIN, OR IS ZERO TO INDICATE NO PCES.
EACH PAIR OF PCE COUNTS REPRESENTS THE NUMBER OF PCES OF
THAT TYPE THAT IS 'DEFINED', E.G. THE NUMBER OF DEVICES
(DCTS) DEFINED, AND THE NUMBER FOR WHICH PCES ARE CURRENTLY
EXISTING, RESPECTIVELY.
THE FIRST SETS OF FIELDS MUST BE TOGETHER BECAUSE OF THE
$HCCT MAPPING AND IT'S USE BY $$POST.

End of Comment

2529	(9E1)	X'8'	0	$PCEHCTE	"8" PROCESSOR HCT ENTRY LENGTH
2529	(9E1)	X'0'	0	$PCEHCTP	"0,4" PCE POINTER
2529	(9E1)	X'4'	0	$PCEHCTC	"4,4" PROCESSOR COUNTS, WITH FOLLOWING SUBMAPPING OF FIELDS
2529	(9E1)	X'0'	0	$PCEHCTD	"0,2" DEFINED PROCESSOR COUNT
2529	(9E1)	X'2'	0	$PCEHCTA	"2,2" ALLOCATED PROCESSOR COUNT

Comment

SPECIAL PROCESSORS, MAPPING MUST MATCH CCTPCEPE ORDER

End of Comment

2532	(9E4)	SIGNED	4	$POSTELS (0)	START OF PCE ELEMENTS
2532	(9E4)	ADDRESS	4	$COMMPCE	COMMAND PROCESSOR
2536	(9E8)	SIGNED	2	$NUMCOMM	
2540	(9EC)	ADDRESS	4	$EXECPCE	EXECUTION PROCESSOR
2544	(9F0)	SIGNED	2	$NUMEXEC	
2548	(9F4)	ADDRESS	4	$ASYNPCE	ASYNC I/O PROCESSOR
2552	(9F8)	SIGNED	2	$NUMASYN	
2556	(9FC)	ADDRESS	4	$XTIMPCE	TIME EXCESSION PROCESSOR
2560	(A00)	SIGNED	2	$NUMXTIM	
2564	(A04)	ADDRESS	4	$TIMEPCE	STIMER/TTIMER PROCESSOR
2568	(A08)	SIGNED	2	$NUMTIMR	
2572	(A0C)	ADDRESS	4	$TRCPCE	EVENT TRACE LOG PROCESSOR
2576	(A10)	SIGNED	2	$NUMEVTL	
2580	(A14)	ADDRESS	4	$SPOLPCE	SPOOL MANAGER PROCESSOR
2584	(A18)	SIGNED	2	$NUMSPOL	
2588	(A1C)	ADDRESS	4	$MLLMPCE	LINE MANAGER PROCESSOR
2592	(A20)	SIGNED	2	$NUMMLLM	
2596	(A24)	ADDRESS	4	$SOMPCE	SPOOL OFFLOAD PROCESSOR
2600	(A28)	SIGNED	2	$NUMSOM	
2604	(A2C)	ADDRESS	4	$CKPTPCE	CHECKPOINT PROCESSOR
2608	(A30)	SIGNED	2	$NUMCKPT	
2612	(A34)	ADDRESS	4	$MCONPCE	REMOTE CONSOLE PROCESSOR
2616	(A38)	SIGNED	2	$NUMMCON	
2620	(A3C)	ADDRESS	4	$SFSPCE	SCHEDULER FACILITY SRV PCE
2624	(A40)	SIGNED	2	$NUMSFS	
2628	(A44)	ADDRESS	4	$ENFPCE	ENF LISTEN Processor
2632	(A48)	SIGNED	2	$NUMENF	

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
				Comment	
END OF COMMON HCCT MAPPING					
				End of Comment	
2636	(A4C)	ADDRESS	4	$RDRPCE	LOCAL READERS
2640	(A50)	SIGNED	2	$NUMRDRS	
2644	(A54)	ADDRESS	4	$INRPCE	INTERNAL READERS
2648	(A58)	SIGNED	2	$NUMINRS	
2652	(A5C)	ADDRESS	4	$TPRDPCE	RJE READERS
2656	(A60)	SIGNED	2	$NUMTPRD	
2660	(A64)	ADDRESS	4	$JCLPCE	CONVERSION PROCESSOR
2664	(A68)	SIGNED	2	$NUMCNVT	
2668	(A6C)	ADDRESS	4	$PSOPCE	PSO PROCESSORS
2672	(A70)	SIGNED	2	$NUMPSO	
2676	(A74)	ADDRESS	4	$OUTPCE	OUTPUT PROCESSOR
2680	(A78)	SIGNED	2	$NUMOUT	
2684	(A7C)	ADDRESS	4	$PRTPCE	LOCAL PRINTERS
2688	(A80)	SIGNED	2	$NUMPRTS	
2692	(A84)	ADDRESS	4	$TPPRPCE	RJE PRINTERS
2696	(A88)	SIGNED	2	$NUMTPPR	
2700	(A8C)	ADDRESS	4	$PUNPCE	LOCAL PUNCHES
2704	(A90)	SIGNED	2	$NUMPUNS	
2708	(A94)	ADDRESS	4	$TPPUPCE	RJE PUNCHES
2712	(A98)	SIGNED	2	$NUMTPPU	
2716	(A9C)	ADDRESS	4	$PURGPCE	PURGE PROCESSORS
2720	(AA0)	SIGNED	2	$NUMPURG	
2724	(AA4)	ADDRESS	4	$PRTYPCE	PRIORITY AGING PROCESSOR
2728	(AA8)	SIGNED	2	$NUMPRTY	
2732	(AAC)	ADDRESS	4	$PRYOPCE	OUTPUT PRIO AGING PROCESSOR
2736	(AB0)	SIGNED	2	$NUMPRYO	
2740	(AB4)	ADDRESS	4	$WARMPCE	WARM START PROCESSORS
2744	(AB8)	SIGNED	2	$NUMWARM	
2744	(AB8)	X'4'	0	$WARMCNT	"4" Number of $E SYS warmstart PCEs after init complete
2748	(ABC)	ADDRESS	4	$NJTPCE	NJE JOB TRANSMITTERS
2752	(AC0)	SIGNED	2	$NUMNJTS	
2756	(AC4)	ADDRESS	4	$OJTPCE	OFFLOAD JOB TRANSMITTERS
2760	(AC8)	SIGNED	2	$NUMOJTS	
2764	(ACC)	ADDRESS	4	$NJRPCE	NJE JOB RECEIVERS
2768	(AD0)	SIGNED	2	$NUMNJRS	
2772	(AD4)	ADDRESS	4	$OJRPCE	OFFLOAD JOB RECEIVERS
2776	(AD8)	SIGNED	2	$NUMOJRS	
2780	(ADC)	ADDRESS	4	$NSTPCE	NJE SYSOUT TRANSMITTERS
2784	(AE0)	SIGNED	2	$NUMNSTS	
2788	(AE4)	ADDRESS	4	$OSTPCE	OFFLOAD SYSOUT TRANSMITTERS
2792	(AE8)	SIGNED	2	$NUMOSTS	
2796	(AEC)	ADDRESS	4	$NSRPCE	NJE SYSOUT RECEIVERS
2800	(AF0)	SIGNED	2	$NUMNSRS	
2804	(AF4)	ADDRESS	4	$OSRPCE	OFFLOAD SYSOUT RECEIVERS
2808	(AF8)	SIGNED	2	$NUMOSRS	
2812	(AFC)	ADDRESS	4	$NPMPCE	NETWORK PATH MANAGER
2816	(B00)	SIGNED	2	$NUMNPM	
2820	(B04)	ADDRESS	4	$NRRPCE	NJE ROUTE RECEIVER
2824	(B08)	SIGNED	2	$NUMNRR	
2828	(B0C)	ADDRESS	4	$NRTPCE	NJR ROUTE TRANSMITTER
2832	(B10)	SIGNED	2	$NUMNRT	
2836	(B14)	ADDRESS	4	$RESMPCE	RESOURCE MANAGER
2840	(B18)	SIGNED	2	$NUMRESM	
2844	(B1C)	ADDRESS	4	$STACPCE	STATUS/CANCEL PROCESSOR
2848	(B20)	SIGNED	2	$NUMSTAC	
2852	(B24)	ADDRESS	4	$SPINPCE	SPIN PROCESSOR
2856	(B28)	SIGNED	2	$NUMSPIN	
2860	(B2C)	ADDRESS	4	$FCLPCE	FSS CLEANUP ON EOM PCES

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
2864	(B30)	SIGNED	2	$NUMFCL	
2868	(B34)	ADDRESS	4	$JCMDPCE	Job command processor
2872	(B38)	SIGNED	2	$NUMJCMD	
2876	(B3C)	ADDRESS	4	$XCFPCE	COUPLING PROCESSOR
2880	(B40)	SIGNED	2	$NUMXCF	
2884	(B44)	ADDRESS	4	$XCMPCE	XCF Command processor
2888	(B48)	SIGNED	2	$NUMXCM	
2892	(B4C)	ADDRESS	4	$ARMPCE	ARM SUPPORT PROCESSOR
2896	(B50)	SIGNED	2	$NUMARM	
2900	(B54)	ADDRESS	4	$SNFPCE	SPOOL Management Processor
2904	(B58)	SIGNED	2	$NUMSNF	
2908	(B5C)	ADDRESS	4	$SPIPCE	Sysout API Processor
2912	(B60)	SIGNED	2	$NUMSPI	
2916	(B64)	ADDRESS	4	$DILPCE	Do It Later Processor
2920	(B68)	SIGNED	2	$NUMDIL	
2924	(B6C)	ADDRESS	4	$ALIPCE	Acquire Lock & Initiate
2928	(B70)	SIGNED	2	$NUMALI	Cleanup Executor
2932	(B74)	ADDRESS	4	$MISCPCE	Miscellaneous processor
2936	(B78)	SIGNED	2	$NUMMISC	
2940	(B7C)	ADDRESS	4	$EOMPCE	EOM Processor
2944	(B80)	SIGNED	2	$NUMEOM	
2944	(B80)	X'B7C'	0	$POSTLST	"*-$PCEHCTE" ADDR OF LAST PCE ELEMENT
2948	(B84)	BITSTRING	16	$RSV3 (0)	RESERVED FOR FUTURE IBM USE

Comment

HASP PROCESSOR CONTROL ELEMENT DISPATCHER FIELDS

End of Comment

2964	(B94)	ADDRESS	4	$PCEORG	ADDRESS OF FIRST PCE
2968	(B98)	ADDRESS	4	$PCELAST	ADDRESS OF LAST PCE
2972	(B9C)	ADDRESS	4	$CURPCE	ADDRESS OF CURRENT PCE (IF ANY)
2976	(BA0)	DBL WORD	8	(0)	ALIGN DISPATCHER ECF FIELDS
2976	(BA0)	BITSTRING	8	$HASPECF	MASTER EVENT CONTROL FIELD, IF BIT IS 1 PCES WAITING FOR CORRESPONDING RESOURCE SHOULD BE POSTED
2984	(BA8)	BITSTRING	8	$MASECF	CROSS-SYSTEM EVENT CONTROL FIELD, RESOURCES $POSTED IN THIS ECF WILL BE PROPAGATED TO OTHER MEMBERS
2992	(BB0)	BITSTRING	1	$MLLMECF	LINE MGR ECF, IF BIT IS 1 LINE MGR SHOULD BE $POSTED IF SAME $HASPECF FLAG $POSTED AND $DRMLLM IS ON

Comment

PROCESSOR QUEUES
There are 2 queues of $XECBs in JES2. The first is the queue of $XECBs that have been $WAITed on. This is a double threaded queue with $XECBQF pointing to the first element and $XECBQL pointing to the last. This queue has both converted and unconverted $XECBs on it. The second queue is the queue of converted $XECBs that have been posted. $XECBs are added out of the MVS POST exit and removed by the main task. This is a single threaded stack pointed to by $EXTECBQ. Note: a $XECB can only be placed on this queue if it is currently being $WAITED on (it is on the $XECBQF). To ensure this a CDS is used in JES2's MVS POST exit. This requires the 3 pointers to be arranged with the POSTED queue chain fields be between the 2 waited on chain fields. Do not change the order of these fields.

End of Comment

3000	(BB8)	BITSTRING	0	$XECBQ (0)	Queue head of all $XECBs currently defined to JES2 dispatcher (serialized by JES2 main task)

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
3000	(BB8)	ADDRESS	4	$XECBQF	1st $XECB on chain
3004	(BBC)	ADDRESS	4	$EXTECBQ	QUEUE HEAD OF XECBS FOR PCES TO BE DISPATCHED.
3008	(BC0)	ADDRESS	4	$XECBQL	Last $XECB on chain
3012	(BC4)	ADDRESS	4	$DRQUES	DISPATCHER RESOURCE WAIT QUEUES, DOUBLE WORDS, FORWARD/BACKWARD POINTERS FOR CIRCULAR QUEUES
3016	(BC8)	SIGNED	4	$READY (0)	PCES READY FOR DISPATCH
3016	(BC8)	ADDRESS	4	$READYF	First $PCE on queue
3020	(BCC)	ADDRESS	4	$READYL	Last $PCE on queue

Comment

ALL VARIABLE LOCATED BETWEEN $SAVEBEG AND $SAVEEND WILL BE
REGULARLY CHECKPOINTED BY JES2 AND WILL BE RESTORED ON ANY
WARM START OF JES2.

End of Comment

3024	(BD0)	SIGNED	4	$SAVEBEG (0)	BEGINNING OF SAVE AREA
3024	(BD0)	CHARACTER	4	$MSTRID	MASTER RECORD EYECATCHER
3028	(BD4)	SIGNED	4	$MASTERL	CHECKPOINT MASTER RCD LEN

Comment

New $MSTRVER values require a change to the $SCANTAB
for $ACTIVATE/$D ACTIVATE.
Also the equates for $MSTRVER must be defined for
the $HCCT and $HFCT master record version fields

End of Comment

3032	(BD8)	ADDRESS	1	$MSTRVER	Master record version
3032	(BD8)	X'6'	0	$MSTRVRN	"6" Pre-OS 240 version #
3032	(BD8)	X'7'	0	$MSTRVR4	"7" OS 240 - OS 210 version #
3032	(BD8)	X'8'	0	$MSTRV12	"8" z/OS 1.2 version #

Comment

When the size of the checkpoint is updated, the
count in $CKPTUPD is updated. If the count in the
master record does not match the count on the local
member ($CKPTLOC), then the checkpoint has been
updated.

End of Comment

3033	(BD9)	BITSTRING	1	$CKPTUPD	CKPT update pending mask
3034	(BDA)	SIGNED	2	$MSTHCTL (0)	Length of CKPT HCT area
3036	(BDC)	ADDRESS	4	$CHLOGLN	LENGTH USED PART CH LOG
3040	(BE0)	SIGNED	2	$CKRECN	NUMBER OF 4K CHECKPNT RECS
3042	(BE2)	SIGNED	1	$WCHECK	CKPT WRITE-CHECK-RCD Value
3043	(BE3)	BITSTRING	1	$CKPTFLG	CHECKPOINT DISPOSITION
3044	(BE4)	BITSTRING	8	$CKPUSER	CHECKPOINTED USER FIELD
3052	(BEC)	BITSTRING	4	$NEWSJQE	OFFSET OF JES2-NEWS JQE OR ZERO
3056	(BF0)	BITSTRING	4	$NEWSIOT	MTTR OF JES2-NEWS IOT, OR 0
3060	(BF4)	BITSTRING	2	$NEWSCLV	Level of current NEWS (one matching IOT in $NEWSIOT)
3062	(BF6)	BITSTRING	2	$NEWSLVL	Level number of news data set being created (same as $NEWSCVL if none being created)
3064	(BF8)	ADDRESS	2	$QSELEN	Length of a QSE

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
					Comment
					COMPATIBILITY CODE Field $JQEFREC_R4 should be used for the job number when the checkpoint is R4 mode and field $JQEFRCN should be used when the checkpoint is z2 mode.
					End of Comment
3066	(BFA)	ADDRESS	2	$JQEFREC_R4	Count of free JQEs
3068	(BFC)	ADDRESS	4	$JQFREEI	First free JQE (offset in R4 mode and index in z2 mode)
					Comment
					$JQHEADI through $JQRBLDI (including the equate $JQRBDTY) must remain together. The scanning of the job queues depends on this.
					End of Comment
3072	(C00)	ADDRESS	4	$JQHEADI (47)	Heads of active job queue element (JQE) chains (offset in R4 mode and index in z2 mode)
3072	(C00)	X'4'	0	$JQHEADL	"4" LENGTH OF JOB QUE HEAD ENTRY
3072	(C00)	X'2F'	0	$JQTYPES	"(*-$JQHEADI)/$JQHEADL" NUMBER OF JOB QUEUES
3072	(C00)	X'90'	0	$JQCLSSZ	"36*$JQHEADL" NUMBER OF EXEC JOB CLASS QUEUES
3260	(CBC)	ADDRESS	4	$JQRBLDI	Job Rebuild Queue head (offset in R4 mode and index in z2 mode)
3260	(CBC)	X'30'	0	$JQRBDTY	"(*-$JQHEADI)/$JQHEADL" Number of job queues including rebuild queue
3264	(CC0)	SIGNED	2	$REBLDS	Total number of job/output rebuilds since last cold or all member warm start
3266	(CC2)	SIGNED	2	$KITNUM2	Num KITs in the checkpoint
3268	(CC4)	SIGNED	2	$JQELEN	TOTAL LENGTH OF A JQE
3270	(CC6)	SIGNED	2	$JQEMSKL	LENGTH-1 OF JQE SPLS USED MASK
3272	(CC8)	SIGNED	2	$JQEEXFR	OFFSET TO POSSIBLE FREE EXTENSION AREA IN MASTER RECORD
3274	(CCA)	ADDRESS	2	$MAXEXSZ	Maximum size of extension
					Comment
					---------- $HASP355 and some $HASP050 resources have a sysplex scope and need to be CKPTed. Here we maintain the member id of the JES that has issued the message for each resource. Also the threshold for each resource is maintained here. The time stamp for the HASP355 message is saved for comparison within the sysplex. Any new $HASP050 resources with a sysplex scope must have a SYSID and threshold percent pair, such as the ones below, added somewhere in the checkpointed portion of the HCT. Also the list of resources to be dealt with on a restart must be updated in HASPIRDA. ----------
					End of Comment
3276	(CCC)	SIGNED	2	$RSCTABL (0)	Starting point of member ids and threshold values
3276	(CCC)	BITSTRING	1	$JQSYSID	SYSID for JQE message
3277	(CCD)	ADDRESS	2	$JQEPRCT	JQE threshold percentage
3279	(CCF)	BITSTRING	1	$JOSYSID	SYSID for JOE message
3280	(CD0)	ADDRESS	2	$JOEPRCT	JOE threshold percentage
3282	(CD2)	BITSTRING	1	$JNSYSID	SYSID for JOB num message
3283	(CD3)	ADDRESS	2	$JNOPRCT	JOB NUM threshold percent
3285	(CD5)	BITSTRING	1	$TGSYSID	SYSID for TRK GRP message

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
3286	(CD6)	ADDRESS	2	$TGPRCT	TRK GRP threshold percent
3288	(CD8)	SIGNED	4	$SPFTIME	Time HASP355 message issued
3292	(CDC)	ADDRESS	4	$LASNIFF (0)	Extent number, Extent TG offset and bit of last trackgroup examined by sniffer (HASPSNF)
3292	(CDC)	SIGNED	1	$LASNIFM	Last extent sniffed
3293	(CDD)	SIGNED	2	$LASNIFO	Last offset sniffed within extent
3295	(CDF)	BITSTRING	1	$LASNIFB	Last bit sniffed within byte
3296	(CE0)	BITSTRING	4	$RSOCLDP	RSO cleaned up for mem mask
3300	(CE4)	SIGNED	4		Used in 5.1 for $TGLOST
3304	(CE8)	SIGNED	4	$SCQJQE	OFFSET OF SHRD COMM QUEUE JQE
3308	(CEC)	BITSTRING	32	$SPLEXST	BIT MSK OF EXISTNG SPLS
3340	(D0C)	BITSTRING	32	$SPLSLCT	SPLS ABLE TO SELECT WRK
3372	(D2C)	BITSTRING	1	$SPLINAC	MASK OF INACTIVE SPOOLS

Comment

$TGALLOC = $TGTOTAL-$TGFREE The number of track groups
in use for all active spool volumes.
Note: track groups assigned to the BLOB are
considered allocated for purposes of this count
$TGTOTAL = Number of track groups on STATUS=ACTIVE spool
volumes.
$TGDEFND = Number of track groups associated with any spool
volume.
$TGFREE = Number of track groups available for allocation
(on STATUS=ACTIVE spool volumes.)
Note: track groups assigned to the BLOB are
not considered free for purposes of this count
$NUMTG = Initialization Statement number of track groups
in the system (size of TGM).

End of Comment

3404	(D4C)	ADDRESS	4	$TGALLOC	NUM OF AVAILABLE TGS ALLOCATED
3408	(D50)	ADDRESS	4	$TGTOTAL	TOTAL NUMBER OF AVAILABLE TGS
3412	(D54)	ADDRESS	4	$TGDEFND	NUMBER OF DEFINED TGS
3416	(D58)	ADDRESS	4	$TGFREE	FREE TG COUNT
3420	(D5C)	ADDRESS	2	$QSEMAX	Number of members possible
3422	(D5E)	ADDRESS	2	$QSENDEF	NUMBER OF DEFINED SYSTEMS
3424	(D60)	ADDRESS	4	$KBYTS	THOUSANDS OF BYTES ON SPOOL
3428	(D64)	SIGNED	4	$DASWRKQ	OFFSET OF 1ST DAS ON DAS WORK Q
3432	(D68)	SIGNED	4	$DASTRKQ	OFFSET OF 1ST DAS REP. IN TGM
3436	(D6C)	SIGNED	4	$DATAKEY	MASTER PERIPHERAL DATA SET KEY
3440	(D70)	CHARACTER	4	$HASPID	CHECKPOINT RECORD IDENTIFICATION
3444	(D74)	CHARACTER	8	$NDENAME	Node name

Comment

The following 2 fields are used for $HASP050 processing

End of Comment

3452	(D7C)	BITSTRING	1	$BTSYSID	SYSID for BERT message
3453	(D7D)	ADDRESS	2	$BRTPRCT	BERT threshold percentage
3455	(D7F)	BITSTRING	1	$FNCCNT	Number of volumes to fence a job to
3456	(D80)	SIGNED	4	$ZAPTIME	Time last ZAPJOB executed
3460	(D84)	ADDRESS	4	(3)	Reserved for future use

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
				Comment	
					---------- The next two fields represent the highest and lowest VRM (Version, Release, Modification) JES2s active in the JESplex. See the $JES2xxx equates in $HASPEQU. ----------
				End of Comment	
3472	(D90)	SIGNED	2	$MASVER (0)	Versions active in JESplex
3472	(D90)	SIGNED	1	$HIGHVER (0)	Highest active JES2
3473	(D91)	SIGNED	1	$LOWVER (0)	Lowest active JES2
3474	(D92)	ADDRESS	2	$PRIRATE	PRIORITY AGING RATE
3476	(D94)	ADDRESS	1	$PRIHIGH	JOB PRIORITY AGING UPPER
3477	(D95)	ADDRESS	1	$PRILOW	AND LOWER LIMITS
3478	(D96)	ADDRESS	2	$PRORATE	OUTPUT PRIORITY AGING RATE
3480	(D98)	ADDRESS	2	$PRTYOHI	OUTPUT PRIORITY AGING UPPER
3482	(D9A)	ADDRESS	2	$PRTYOLO	AND LOWER LIMITS
3484	(D9C)	BITSTRING	1	$FLAG1	Checkpointed flag byte
		1...		$UNSPUN	"B'10000000'" UNPROC SPIN IOTS QUEUED
		.1..		$NONSHR	"B'01000000'" NON-SHARED SPOOLS ALLOWED
		..1.		$MASACTV	"B'00100000'" SPECIFIES MORE THAN ONE RUNNING SYSTEM FOR MAS AND IS SET EVERY CHECKPOINT CYCLE
		...1		$MVFENCE	"B'00010000'" SPOOL FENCING (MINIMUM NUMBER OF VOLUMES PER JOB) IN EFFECT
		.... 1...		$EXECDUP	"B'00001000'" Duplicate job checking is suppressed
		.... .1..		$CNVTWEE	"B'00000100'" Indicates the converter should wait for EXCL ENQs
		.... ..1.		$BRDCST	"B'00000010'" SHARED BROADCAST BEING USED
		1		$PRUNSP	"B'00000001'" PROCESSING UNSPUN OUTPUT
3485	(D9D)	BITSTRING	1	$FLAG2 (0)	2nd ckpointed flag byte
		1...		$WTBSYJO	"B'10000000'" AN OUTPUT PROCESSOR IS WAITING AVAILABILITY OF A BUSY JOE
		.1..		$CF1VOL	"B'01000000'" MAS knows CKPT1 is volatile
		..1.		$CF2VOL	"B'00100000'" MAS knows CKPT2 is volatile
		...1		$CKOPVER	"B'00010000'" CKPTDEF OPVERIFY=YES
				Comment	
					---------- $SPLADRA and $SPLADRS control the format of spool addresses (MTTRs). The TT in MTTR can be absolute or relative to the start of the data set. These bit are only used when spool volumes are started. $SPLADRA $SPLADRS Results 1 n/a Always use relative tracks (useful for testing) 0 1 Only use relative tracks for spool data sets that have space above track 64K 0 0 Never use relative track addresses. Fail any spool start that requires relative addressing. ----------
				End of Comment	
		.... 1...		$SPLADRA	"B'00001000'" Always use relative addr.
		.... .1..		$SPLADRS	"B'00000100'" Use relative addr as needed

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
					Comment

					$CKPCTPW is incremented after a checkpoint write
					(intermediate write or final write). It's used
					to determine when a primary write is needed.

					End of Comment
3486	(D9E)	SIGNED	2	$CKPCTPW	Count of checkpoint writes
3488	(DA0)	SIGNED	4	$OPSPJNO	LAST JOB IN JIX EXAMINED FOR UNSPUN WORK
3492	(DA4)	SIGNED	2	$CLRECN	NUMBER OF 4K RECS IN CH LG
					Comment
					COLD START INFORMATION - VERSION, SYSID, DATE, TIME
					End of Comment
3494	(DA6)	CHARACTER	5	$COLDJSN	NAME OF JOB ENTRY SUBSYSTEM
3499	(DAB)	CHARACTER	8	$COLDVSN	VERSION OF JES2
3507	(DB3)	CHARACTER	11	$COLDJSP	
3518	(DBE)	CHARACTER	4	$COLDSID	SMF SYSID FOLLOWED BY A SPACE
3523	(DC3)	ADDRESS	3		RESERVED FOR FUTURE USE
3528	(DC8)	SIGNED	4	$COLDDTM (2)	DATE AND TIME STAMP IN 'TIME BIN' FORMAT
3536	(DD0)	SIGNED	4	$LASTCLD	STCK time of cold start
3540	(DD4)	SIGNED	4	$LASTSPV	STCK time of last track group map rebuild
3544	(DD8)	CHARACTER	4	$SPVMNAM	Member name of system doing spool validation
3548	(DDC)	SIGNED	4	$LASTAMW	STCK time of last all member warm start
3552	(DE0)	CHARACTER	4	$AMWMNAM	Member name of system doing all member warm start
					Comment
					THE FOLLOWING FIELDS ARE USED FOR CHECKPOINT VERIFICATION
					DURING A WARM START OF JES2
					End of Comment
3556	(DE4)	ADDRESS	2	$NUMNODE	MAXIMUM NUMBER OF NODES
3558	(DE6)	CHARACTER	5	$SPOOL	SPOOL VOLUME PREFIX
3563	(DEB)	SIGNED	1	$SPLLEN	NUMBER-1 OF CHARS OF $SPOOL
3564	(DEC)	SIGNED	2	$SPOLNUM	NUMBER OF SPOOL VOLUMES
3564	(DEC)	X'DED'	0	$SPLNUMB	"$SPOLNUM+1,1" ALLOWED (ONE BYTE VERSION)
3566	(DEE)	ADDRESS	2	$BUFSIZE	HASP BUFFER SIZE
					Comment
					COMPATIBILITY CODE
					Field $MAXJOBS_R4 should be used for the job number
					when the checkpoint is R4 mode and field $JQENUM
					should be used when the checkpoint is z2 mode.
					End of Comment
3568	(DF0)	ADDRESS	2	$MAXJOBS_R4	Max num. of jobs in system
3570	(DF2)	BITSTRING	2		Reserved
3572	(DF4)	ADDRESS	4	$NUMJOES	NUMBER OF JOB OUTPUT ELEMENTS
3576	(DF8)	ADDRESS	2	$NODEID	NUMBER OF THIS NODE
3578	(DFA)	ADDRESS	1	$RECINCR	RECORD ALTERNATION PARAMETER
3579	(DFB)	ADDRESS	1	$TCELSIZ	NBR OF BUFFERS IN A TRAKCELL
3580	(DFC)	ADDRESS	4	$NUMTG	TOTAL NUMBER OF TRACK GROUPS
3584	(E00)	BITSTRING	1	$DESTFLG	USERDEST flag
		1...		$DESTNNN	"B'10000000'" Nnnnn is a userid
		.1..		$DESTRNN	"B'01000000'" Rnnnn is a userid
		..1.		$DESTRMN	"B'00100000'" RMnnnn is a userid
		...1		$DESTRMT	"B'00010000'" RMTnnnn is a userid

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
		.... 1...		$DESTUNN	"B'00001000'" Unnnn is a userid
		.... .1..		$DESTDLC	"B'00000100'" Display 'LOCAL.' if userid (only set in HCCT)
		.... ..1.		$DESTNNR	"B'00000010'" DEST=userid is not allowed; Must use nodename.userid
3585	(E01)	SIGNED	1	$JIXMPCN	Count of job numbers freed since last JIX map update
3586	(E02)	ADDRESS	2	$JNTSIZE	JNT size (JIX prefix)
3588	(E04)	SIGNED	4	$BERTNUM	Number of BERTs
3592	(E08)	ADDRESS	4		Reserved for future use
3596	(E0C)	CHARACTER	8	$XCFGPNM	XCF Group Name
3604	(E14)	SIGNED	4	$SAVEEND_R4 (0)	R4 end of checkpointed HCT
3604	(E14)	X'244'	0	$SAVELEN_R4	"$SAVEEND_R4-$SAVEBEG" Length of R4 checkpointed HCT

Comment

COMPATIBILITY CODE
Field $JQEFREC_R4 should be used for the job number when the checkpoint is R4 mode and field $JQEFRCN should be used when the checkpoint is z2 mode.

End of Comment

3604	(E14)	SIGNED	4	$JQEFRCN	Count of free JQEs (z2 mode)

Comment

COMPATIBILITY CODE
Field $MAXJOBS_R4 should be used for the job number when the checkpoint is R4 mode and field $JQENUM should be used when the checkpoint is z2 mode.

End of Comment

3608	(E18)	ADDRESS	4	$JQENUM	Max number of jobs in the system (z2 mode)
3612	(E1C)	SIGNED	4	(10)	Reserved for future use
3652	(E44)	SIGNED	4	$SAVEEND (0)	z/OS 1.2 end of CKPTed HCT
3652	(E44)	X'274'	0	$SAVELEN	"$SAVEEND-$SAVEBEG" Length of z/OS 1.2 checkpointed HCT

Comment

HASP R11-ADDRESSABLE PATCH SPACE. CODE IS GENERATED AS S-TYPE ADDRESS CONSTANTS WHEN DSECT=NO. VER/REP LOGIC SHOULD ASSUME S( ) HALFWORDS, NOT ZEROS, IN THIS AREA.

End of Comment

3652	(E44)	X'1BC'	0	$HCTPSZ	"4096-(*-HCT)"
3652	(E44)	BITSTRING	1	$PATCHSP (0)	DEFINE PATCH SPACE
3652	(E44)	X'1000'	0	$HCTLEN	"*-HCT" LENGTH OF ENTIRE HCT

$HCT Cross Reference

Name	Hex Offset	Hex Value
$#INDEXA	220	
$ACCMBAD	954	
$ACTABLE	15C	
$ACTIGN	3BD	80
$ACTIVE	904	
$ACTREQ	3BD	40
$ACTRNUM	EC	
$ACTVFSS	908	
$ADDSYNS	3BC	80
$AFFINTY	8ED	0
$AFFLEN	8E4	
$AFFLENH	8E4	8E6
$ALIPCE	B6C	
$ALLFFS	6E8	FFFFFFFF
$AMWMNAM	DE0	40404040
$APPLTBL	160	
$AQSE	164	
$ARMPCE	B4C	
$ARMVR	624	8
$ASYNCQ	168	
$ASYNPCE	9F4	
$ASYPCIQ	16C	
$AUTOINV	3AC	
$BADJNC	3B4	6F
$BADTRTG	2F0	
$BERTNUM	E04	0
$BERTPTR	170	
$BFSZBSC	50A	208
$BFSZPP	50E	0
$BFSZSNA	50C	190
$BFXLGRQ	42C	0
$BFXNWBF	42A	0
$BFXPRCT	422	50
$BFXWBF	428	0
$BITSONA	174	
$BLANKS	6D0	40404040
$BRDCST	D9C	2
$BRTCLN	8E9	80
$BRTDTYP	949	0
$BRTFREC	968	
$BRTPRCT	D7D	
$BSCCHEQ	2F4	
$BSCFREC	40A	0
$BSCLGRQ	410	0
$BSCLIM	408	0
$BSCNWBF	40E	0
$BSCPRCT	406	50
$BSCWBF	40C	0
$BSPGCT	514	
$BSPNTE	515	
$BSPSIZ	516	1C
$BTSYSID	D7C	0
$BUFLENG	900	0
$BUFLGRQ	41E	0
$BUFLIM	416	0
$BUFNWBF	41C	0
$BUFPRCT	414	50
$BUFSIZE	DEE	F98
$BUFWBF	41A	0
$BUFXLIM	424	0
$BUSYQUE	178	
$BUSYRQ	17C	
$CALCUR	184	
$CALONE	180	
$CATMAX	8E8	4
$CATPTR	188	
$CCOMCH	519	5B
$CCOMCHR	4E5	5B
$CF1VOL	D9D	40
$CF2VOL	D9D	20
$CHLOG	18C	
$CHLOGLN	BDC	
$CHLOGSZ	8D4	0
$CKBCRNT	198	
$CKC	19C	
$CKCSIZE	4A4	0
$CKG1	190	
$CKG2	194	
$CKLEVNM	370	374
$CKOLDLV	378	
$CKOPVER	D9D	10
$CKPCTPW	D9E	0
$CKPTDPS	628	10
$CKPTDPY	628	8
$CKPTDWN	628	80
$CKPTFG1	628	39
$CKPTFG2	629	0
$CKPTFG3	62A	0
$CKPTFG4	62B	0
$CKPTFG5	62E	0
$CKPTFLG	BE3	0
$CKPTIO	1A0	
$CKPTLDP	628	1
$CKPTLEV	370	0
$CKPTLOC	62D	0
$CKPTLVP	370	370
$CKPTMSG	628	40
$CKPTOAC	8AC	
$CKPTONX	8B0	
$CKPTPCE	A2C	
$CKPTPRI	628	2
$CKPTPTR	1A4	
$CKPTQHD	1AC	
$CKPTSAV	668	668
$CKPTSR0	668	678
$CKPTSR1	668	67C
$CKPTTEK	628	4
$CKPTTMD	628	20
$CKPTUPD	BD9	0
$CKPUSER	BE4	0
$CKRECN	BE0	0
$CKW	1B0	
$CK1DFLT	628	39
$CK2DIAG	629	8
$CK2FMT	629	10
$CK2INIT	629	1
$CK2LOCK	629	80
$CK2LOKD	629	4
$CK2PRIM	629	2
$CK2READ	629	40
$CK2WRT	629	20
$CK3BYLK	62A	40
$CK3CHLG	62A	20
$CK3NMEM	62A	2
$CK3RDCP	62A	4
$CK3WTCP	62A	8

Name	Hex Offset	Hex Value
$CK34KPG	62A	10
$CK4CFAB	62B	1
$CK4CKPC	62B	2
$CK4ECOP	62B	80
$CK4ECSA	62B	40
$CK4HRSV	62B	4
$CK4OPRQ	62B	8
$CK4OPVN	62B	10
$CK4OPVY	62B	20
$CK5QSUS	62E	80
$CLCB	1A8	
$CLOCK	740	0
$CLRECN	DA4	0
$CMBFREC	466	0
$CMBLIM	460	0
$CMBPRCT	45E	
$CMDPRCT	45A	
$CNVTWEE	D9C	4
$COLDDTM	DC8	0
$COLDJSN	DA6	D1C5E2F2
$COLDJSP	DB3	40C3D6D3
$COLDSID	DBE	
$COLDVSN	DAB	40404040
$COMEXTN	1B4	
$COMMABT	626	20
$COMMDWN	626	80
$COMMFG1	626	0
$COMMPCE	9E4	
$COMMQTP	1BC	
$COMMQUE	1B8	
$COMMWAT	626	40
$CONWKQ	1C0	
$CPTMAP	1C4	
$CPTPOOL	1C8	
$CREATE	3BB	1
$CTBADA	534	
$CTLB	1CC	
$CTLBFFS	72C	FFFFFFFF
$CTLBIO	1D0	
$CTLBLEN	8E4	4
$CTLBLNH	8EA	4
$CTLBX	1D4	
$CURPCE	B9C	
$CYLMAPL	8DC	
$DADEBAD	1D8	
$DASAREA	1DC	
$DASEXT	1E4	
$DASFRST	1E0	
$DASTRKQ	D68	0
$DASWRKQ	D64	0
$DATAKEY	D6C	0
$DBGALL	3C7	FF
$DBGAPPC	3C7	10
$DBGBERT	3C7	80
$DBGCKPT	3C7	40
$DBGMISC	3C7	4
$DBGSAF	3C7	1
$DBGSTRG	3C7	8
$DBGSYMR	3C7	2
$DBGVERS	3C7	20
$DCTPOL2	970	
$DCTPOOL	96C	
$DDSEGLM	3A0	
$DEBGOPS	3C7	80
$DELAYTM	380	

Name	Hex Offset	Hex Value
$DESTDLC	E00	4
$DESTFLG	E00	0
$DESTNNN	E00	80
$DESTNNR	E00	2
$DESTRMN	E00	20
$DESTRMT	E00	10
$DESTRNN	E00	40
$DESTUNN	E00	8
$DIAGTBL	108	
$DILHEAD	E4	
$DILPCE	B64	
$DILTAIL	E8	
$DISPACE	476	A
$DISPCNT	474	0
$DISPSAV	7BC	0
$DMNDSET	3BB	4
$DOMIDN	4DC	2
$DOMID1	4D8	
$DOMQUE	1E8	
$DOMQUEA	1EC	
$DOUBLE	690	0
$DPCEACT	588	
$DPCEALC	582	
$DPCEDEF	580	
$DPCEEND	584	
$DPCEFLG	58C	
$DPCELEN	58C	D
$DPCETMD	58C	1
$DPCETMX	58C	C0
$DPCETOF	58C	40
$DPCETON	58C	80
$DPCETSF	58C	41
$DPCETSO	58C	81
$DRQUES	BC4	
$DSNSPOL	4AC	E2E8E2F1
$DSPXITA	7C	
$DSTRSTK	154	
$DTEALOC	120	
$DTECKCF	140	
$DTECKVR	13C	
$DTECNVT	134	
$DTEEOM	148	
$DTEGSUB	144	
$DTEIMAG	11C	
$DTELAST	118	
$DTELIST	5D6	598
$DTELSTF	598	
$DTEOFF	138	
$DTEORG	114	
$DTESMF	128	
$DTESPOL	124	
$DTEVTM	12C	
$DTEWTO	130	
$DWORK	698	0
$DWORK2	6A0	0
$ECBEXTN	78	1800000
$ECKTRMJ	624	1
$EMEMAFF	1F0	0
$ENFPCE	A44	
$EOMPCE	B7C	
$ERDM497	4D8	
$ERDOMID	950	
$ERRCODE	938	0
$ERRERPL	928	
$ERRREGS	92C	

Name	Hex Offset	Hex Value
$ERRREG0	92C	930
$ERRTRCA	91C	
$ESTBYTE	3D4	
$ESTIME	3F8	
$ESTIM9L	3F8	4
$ESTLNCT	3E0	
$ESTLN9L	3E0	6
$ESTMX9L	3D4	6
$ESTPAGE	3C8	
$ESTPG9L	3C8	8
$ESTPN9L	3EC	8
$ESTPUN	3EC	
$ESTTCNT	3C8	5
$EST1	3C8	
$EXCPCT	93C	0
$EXCPEXA	8C	
$EXECDUP	D9C	8
$EXECDWN	627	80
$EXECFG1	627	0
$EXECPCE	9EC	
$EXECSPN	627	40
$EXTECBQ	BBC	
$FCLPCE	B2C	
$FIXCHLG	1F4	
$FIXLIST	1F8	
$FLAG1	D9C	0
$FLAG2	D9D	10
$FNCCNT	D7F	0
$FSSETIM	940	
$F1	6FC	1
$F2	700	2
$F255	710	FF
$F4	704	4
$F4096	714	1000
$F6	708	6
$F8	70C	8
$GENSYS	598	0
$GENWORK	598	
$GENWRKL	624	8C
$GETWKSF	668	66C
$GETWKSV	668	0
$GETWKS1	668	674
$GETWKS2	668	678
$GETWRKA	204	
$GTWKTAB	200	
$HASCB	208	
$HASPDCB	20C	
$HASPECB	74	
$HASPECF	BA0	0
$HASPID	D70	D1C5E2F2
$HASPMAP	64	
$HASPPRM	29C	C8C1E2D7
$HASPRB	210	
$HASPTCB	214	
$HCCT	2E8	
$HCTLEN	E44	1000
$HCTPSZ	E44	1BC
$HETOKEN	920	0
$HEXTRAN	718	62C
$HFAM	218	
$HIBITOF	6F4	6F4
$HIBITON	718	80000000
$HIGHVER	D90	37
$HTDIST	51A	A
$H1	6FC	6FE
$H2	700	702
$H255	710	712
$H4	704	706
$H4096	714	716
$H6	708	70A
$H8	70C	70E
$ICEFREC	452	0
$ICEFRZC	454	0
$ICELIM	450	0
$ICELOST	21C	
$ICEPRCT	44E	50
$IMAGE	14C	
$INIWARM	224	
$INRDCT	978	
$INRPCE	A54	
$INTRDCB	624	4
$IOTPDDB	8D8	
$JCLERR	3BD	20
$JCLPCE	A64	
$JCMDPCE	B34	
$JCOPYLM	518	
$JESACCT	228	
$JESTOKA	22C	
$JES2_LEVEL	320	
$JINITIP	8E8	40
$JIXJNUM_R4	F0	
$JIXMPCN	E01	0
$JNEW	230	
$JNOPRCT	CD3	
$JNSYSID	CD2	0
$JNTPTR	234	
$JNTSIZE	E02	
$JOBJECL	334	
$JOBQBUF	238	
$JOBQPTR	23C	
$JOEPRCT	CD0	
$JOEWRKA	6A8	
$JOSYSID	CCF	0
$JOTABLE	240	
$JOTPOST	244	
$JQCLSSZ	C00	90
$JQEEXFR	CC8	0
$JQEEXT	248	
$JQEFRCN	E14	0
$JQEFREC_R4	BFA	0
$JQELEN	CC4	0
$JQEMSKL	CC6	3
$JQENUM	E18	
$JQEPRCT	CCD	
$JQFREEI	BFC	
$JQHEADI	C00	
$JQHEADL	C00	4
$JQRBDTY	CBC	30
$JQRBLDI	CBC	
$JQSYSID	CCC	0
$JQTYPES	C00	2F
$JQXPTR	24C	
$JSPL	732	731
$JSPLL	731	
$JSPLV	732	D1C5E2E2
$JWEHAVT	254	
$JWELTBL	250	
$KBYTS	D60	
$KITNUM	384	
$KITNUM2	CC2	0

Name	Hex Offset	Hex Value
$KITPTR	258	
$LASNIFB	CDF	0
$LASNIFF	CDC	
$LASNIFM	CDC	0
$LASNIFO	CDD	0
$LASTAMW	DDC	0
$LASTCLD	DD0	0
$LASTSPV	DD4	0
$LBFREC	418	0
$LBXFREC	426	0
$LCKPTR	25C	
$LCLADCT	9CC	
$LEVEL	320	A961D6E2
$LINECT	3BE	
$LIRCT	528	1
$LMTPBOT	70	
$LMT1	68	
$LMT1C	6C	
$LNEDCT	988	
$LOCKOUT	388	3E8
$LOGNDCT	990	
$LOWVER	D91	37
$LSEPDBL	4A2	10
$LSEPFUL	4A2	20
$LSEPHAF	4A2	40
$LSEPNON	4A2	80
$LSPTR	260	
$MACVERS	60	F6
$MAILMSG	3BF	80
$MAINSTK	150	
$MASACTV	D9C	20
$MASECF	BA8	0
$MASPOST	8FE	0
$MASTER	264	
$MASTERI	268	
$MASTERL	BD4	0
$MASVER	D90	
$MAXCMCT	93F	
$MAXDBLE	6F4	7FFFFFFF
$MAXDELT	3A4	78
$MAXDORM	39C	1F4
$MAXEXSZ	CCA	4E20
$MAXFAIL	498	0
$MAXFULL	6F4	6F4
$MAXHALF	6F4	6F4
$MAXHOP	3AA	0
$MAXINT	394	
$MAXJOBS_R4	DF0	3E8
$MAXMSGQ	3A6	C8
$MAXPART	51E	3
$MAXREST	8F4	
$MAXSESS	44C	FFFF
$MAXVUSE	494	0
$MCONACT	625	80
$MCONFG1	625	0
$MCONMSG	26C	
$MCONNPM	625	20
$MCONPCE	A34	
$MCONWAT	625	40
$MCONWPM	625	10
$MCT	F8	
$MINDORM	398	64
$MINHOLD	38C	5F5E0FF
$MINUS1	6E8	6E8
$MINUS2	6EC	FFFFFFFE
$MISCPCE	B74	
$MLBFSIZ	508	190
$MLLMECF	BB0	0
$MLLMPCE	A1C	
$MLNEDCT	98C	
$MSAVE	630	
$MSGWRKA	6AC	
$MSGXTR	10C	
$MSKNODE	914	80402010
$MSTHCTL	BDA	274
$MSTRID	BD0	D4E2E3D9
$MSTRVER	BD8	
$MSTRVRN	BD8	6
$MSTRVR4	BD8	7
$MSTRV12	BD8	8
$MVFENCE	D9C	10
$MVSDISP	750	
$MVSWAIT	748	
$MWORK	270	
$M581DVN	580	
$M581ERR	58C	
$M581FGF	590	80
$M581FLG	590	
$M581FL1	590	40
$M581FL2	590	20
$M581FNT	590	10
$M581INF	58E	
$M581RC	588	
$NDDOMID	958	
$NDENAME	D74	40404040
$NETACCT	274	
$NETDCTS	99C	
$NETLDCT	998	
$NETLNES	9D8	0
$NEWSCLV	BF4	0
$NEWSIOT	BF0	0
$NEWSJQE	BEC	0
$NEWSLVL	BF6	0
$NHBFREC	442	0
$NHBLGRQ	448	0
$NHBLIM	440	0
$NHBNWBF	446	0
$NHBPRCT	43E	50
$NHBWBF	444	0
$NIPFCB	4F8	5C5C5C5C
$NIPFLSH	500	5C5C5C5C
$NIPUCS	4FC	C7C6F1F0
$NITABLE	278	
$NITECNT	966	0
$NITESIZ	8FC	0
$NJEADCT	9BC	
$NJEOPTS	3BF	
$NJRPCE	ACC	
$NJTPCE	ABC	
$NMSGFRE	470	0
$NMSGNUM	46C	0
$NMSGPRC	468	
$NODEID	DF8	1
$NODETOL	8FA	0
$NODREST	8F8	64
$NONSHR	D9C	40
$NOPRCCW	4A0	
$NOPUCCW	4A1	
$NPMPCE	AFC	
$NRRPCE	B04	

Name	Hex Offset	Hex Value
$NRTPCE	B0C	
$NSRPCE	AEC	
$NSTPCE	ADC	
$NUCFIXD	27C	
$NUMACE	51C	14
$NUMALI	B70	10000
$NUMARM	B50	10000
$NUMASYN	9F8	10000
$NUMAUTO	3AE	0
$NUMBSC	404	FFFF
$NUMBUF	412	FFFF
$NUMBUFX	420	FFFF
$NUMCKPT	A30	10000
$NUMCMBS	45C	64
$NUMCMDS	458	0
$NUMCNVT	A68	20000
$NUMCOMM	9E8	10000
$NUMCPTS	362	0
$NUMDIL	B68	70000
$NUMENF	A48	10000
$NUMEOM	B80	30000
$NUMEVTL	A10	10000
$NUMEXEC	9F0	10000
$NUMFAIL	49C	0
$NUMFCL	B30	10000
$NUMGCRE	3B0	0
$NUMINRS	A58	640000
$NUMJCMD	B38	10000
$NUMJOES	DF4	
$NUMLDEV	9DE	
$NUMLNES	9D4	0
$NUMLOGS	9DA	0
$NUMMCON	A38	10000
$NUMMISC	B78	10000
$NUMMLLM	A20	10000
$NUMMLNE	9D6	0
$NUMNHB	43C	FFFF
$NUMNJR	9DF	
$NUMNJRS	AD0	0
$NUMNJT	9DE	
$NUMNJTS	AC0	0
$NUMNODE	DE4	1
$NUMNPM	B00	10000
$NUMNRR	B08	0
$NUMNRT	B10	0
$NUMNSR	9E1	
$NUMNSRS	AF0	0
$NUMNST	9E0	
$NUMNSTS	AE0	0
$NUMOFFS	9DC	0
$NUMOJRS	AD8	0
$NUMOJTS	AC8	0
$NUMOSRS	AF8	0
$NUMOSTS	AE8	0
$NUMOUT	A78	20000
$NUMPATH	3A8	1
$NUMPRTS	A80	0
$NUMPRTY	AA8	10000
$NUMPRYO	AB0	10000
$NUMPSO	A70	20000
$NUMPUNS	A90	0
$NUMPURG	AA0	20000
$NUMRDRS	A50	0
$NUMRESM	B18	10000
$NUMSFS	A40	10000

Name	Hex Offset	Hex Value
$NUMSMFB	478	5
$NUMSNF	B58	10000
$NUMSOM	A28	10000
$NUMSPI	B60	20000
$NUMSPIN	B28	30000
$NUMSPOL	A18	10000
$NUMSTAC	B20	20000
$NUMTG	DFC	
$NUMTIMR	A08	10000
$NUMTPPR	A88	0
$NUMTPPU	A98	0
$NUMTPRD	A60	0
$NUMVTAM	42E	FFFF
$NUMWARM	AB8	10000
$NUMXCF	B40	10000
$NUMXCM	B48	10000
$NUMXTIM	A00	10000
$NWECB	90	
$OFFADCT	9C4	
$OFFDCT	9A8	
$OJRDCT	9AC	
$OJRPCE	AD4	
$OJTDCT	9B4	
$OJTPCE	AC4	
$OLDDCTS	9A4	
$OPSPJNO	DA0	0
$OPTCOLD	3B8	40
$OPTCONS	3B8	2
$OPTFMT	3B8	80
$OPTLIST	3B8	10
$OPTLOG	3B8	8
$OPTQWIK	3B8	1
$OPTREQ	3B8	20
$OPTSTAT	3B8	38
$OPTSTA1	3B9	0
$OPTSTD	3B8	38
$OPT1STD	3B9	0
$OP1CKPT	3B9	40
$OP1PJS2	3B9	20
$OP1SFCE	3B9	8
$OP1SPEC	3B9	80
$OP1SVAL	3B9	10
$OP1UNAC	3B9	4
$ORIGMHD	390	0
$OSRDCT	9B0	
$OSRPCE	AF4	
$OSTDCT	9B8	
$OSTPCE	AE4	
$OUTPCE	A74	
$OWNNIT	8C4	
$OWNNODE	8D0	1
$PAD	280	
$PADDR	284	
$PATCHSP	E44	0
$PBELST	960	
$PCEASYN	8FF	80
$PCEHCTA	9E1	2
$PCEHCTC	9E1	4
$PCEHCTD	9E1	0
$PCEHCTE	9E1	8
$PCEHCTP	9E1	0
$PCELAST	B98	
$PCEORG	B94	
$PCEPOST	8FF	0
$PCT	288	

Name	Hex Offset	Hex Value
$PDYNDET	8E9	20
$PERFCB	28C	
$PITABLE	294	
$PITNUM	964	0
$PLVL	328	
$PLXDYNI	31C	0
$POSTELS	9E4	
$POSTEXA	84	
$POSTLST	B80	B7C
$POSTSAV	648	0
$PPBSIZE	360	
$PRFDATA	290	
$PRFXFLG	4E7	20
$PRIHIGH	D94	
$PRILOW	D95	
$PRIOOPT	3BA	2
$PRIOUT	364	
$PRIRATE	D92	0
$PRMDEND	5A8	80
$PRMDFLG	5A8	
$PRMDINX	5A0	
$PRMDSAV	598	
$PRMDTBL	298	
$PRMDWKL	5A8	11
$PRMMEMB	2A4	40404040
$PROCDFT	624	3
$PROCESS	624	3
$PRODISP	624	10
$PRONEWS	624	80
$PRORATE	D96	0
$PRPUSRV	F4	
$PRSCNWB	624	20
$PRTBOPT	3BB	80
$PRTCALL	4E4	80
$PRTDCT	97C	
$PRTFCB	4F0	F6404040
$PRTOPTS	3BB	
$PRTOPT2	4E4	80
$PRTPCE	A7C	
$PRTRANS	3BB	8
$PRTUCS	4F4	F0404040
$PRTYJOB	3BA	1
$PRTYOHI	D98	FF0
$PRTYOLO	D9A	0
$PRTYOUT	3BA	4
$PRTYPCE	AA4	
$PRUNSP	D9C	1
$PRYOPCE	AAC	
$PSLIST	2AC	
$PSOPCE	A6C	
$PSOTOK	E0	
$PSOXMPL	598	
$PSOXMPS	598	C
$PSWMODE	7A1	
$PSWSAVE	7A0	
$PUNBOPT	3BB	40
$PUNDCT	980	
$PUNPCE	A8C	
$PURGPCE	A9C	
$QINDEXA	2B0	
$QSELEN	BF8	C8
$QSEMAX	D5C	20
$QSENDEF	D5E	1
$QSE1	2B4	
$QVERDAT	3C0	0

Name	Hex Offset	Hex Value
$QVERRSN	3C4	
$QVRNART	3C4	C
$QVRNBDC	3C4	6
$QVRNBDF	3C4	7
$QVRNBDI	3C4	8
$QVRNBDQ	3C4	5
$QVRNBER	3C4	51
$QVRNCER	3C4	61
$QVRNCQ1	3C4	9A
$QVRNCQ2	3C4	9B
$QVRNCQ3	3C4	9C
$QVRNCQ4	3C4	9D
$QVRNCQ5	3C4	9E
$QVRNCQ6	3C4	9F
$QVRNCQ7	3C4	A0
$QVRNCQ8	3C4	A1
$QVRNENF	3C4	43
$QVRNETH	3C4	41
$QVRNETO	3C4	42
$QVRNFRC	3C4	3
$QVRNFRE	3C4	2
$QVRNJQC	3C4	12
$QVRNJQL	3C4	16
$QVRNJQO	3C4	15
$QVRNJTE	3C4	1
$QVRNJXE	3C4	A
$QVRNJXM	3C4	B
$QVRNMJN	3C4	9
$QVRNOCC	3C4	8D
$QVRNOCE	3C4	89
$QVRNOCO	3C4	8A
$QVRNOCQ	3C4	8B
$QVRNOC1	3C4	8C
$QVRNOC2	3C4	8E
$QVRNOJE	3C4	82
$QVRNORE	3C4	84
$QVRNORQ	3C4	83
$QVRNOR2	3C4	85
$QVRNOR3	3C4	86
$QVRNOR4	3C4	87
$QVRNOR5	3C4	88
$QVRNOTE	3C4	81
$QVRNOWC	3C4	91
$QVRNOWE	3C4	8F
$QVRNOWQ	3C4	90
$QVRNOW1	3C4	92
$QVRNOW2	3C4	93
$QVRNOW3	3C4	94
$QVRNOW4	3C4	95
$QVRNOW5	3C4	96
$QVRNOW6	3C4	97
$QVRNOW7	3C4	98
$QVRNOW8	3C4	99
$QVRNRQE	3C4	4
$QVRNTCE	3C4	AC
$QVRNTPE	3C4	A9
$QVRNTP2	3C4	AA
$QVRNTP3	3C4	AB
$QVRNTQE	3C4	A2
$QVRNTRE	3C4	A3
$QVRNTR2	3C4	A4
$QVRNTUE	3C4	A5
$QVRNTU2	3C4	A6
$QVRNTU3	3C4	A7
$QVRNTU4	3C4	A8

Name	Hex Offset	Hex Value
$QVRNWQE	3C4	10
$QVRNWQP	3C4	13
$QVRNWQX	3C4	14
$QVRNXTF	3C4	F
$QVRNXTH	3C4	D
$QVRNXTO	3C4	E
$RASSIGN	624	2
$RATABLE	2B8	
$RBDM497	4DC	
$RBFADDR	944	
$RCOMCHR	4E6	5B
$RDRAREA	521	E9
$RDRDCT	974	
$RDRPCE	A4C	
$READY	BC8	
$READYF	BC8	
$READYL	BCC	
$REBLDS	CC0	0
$RECINCR	DFA	
$RECVCNT	926	0
$REGSAVC	758	
$REGSAVE	758	760
$REQJID	B8	
$RESMPCE	B14	
$RETRYCT	52C	2
$RJEOPTS	3BC	
$RJOBOPT	3BD	
$RMTDCTS	9A0	
$RMTNUM	504	0
$RMTSON	2C0	
$ROTDISP	57C	
$ROTJOE	578	
$ROTJQE	574	
$ROUTDCT	984	
$RPLCOMQ	2BC	
$RPRBOPT	3BB	20
$RPUBOPT	3BB	10
$RSCTABL	CCC	
$RSEPDBL	4A2	1
$RSEPFUL	4A2	2
$RSEPHAF	4A2	4
$RSEPNON	4A2	8
$RSOCLDP	CE0	0
$RSRVCKG	4A8	
$RSV3	B84	0
$RTIMTAB	2C4	
$RUNOPTS	3BA	2
$RWL	94	
$RWLNJRS	A4	
$RWLNJTS	A8	
$RWLNSRS	AC	
$RWLNSTS	B0	
$RWLPRTS	9C	
$RWLPUNS	A0	
$RWLRDRS	98	
$SAPTOK	D8	
$SAVAREA	2C8	
$SAVEARS	2CC	
$SAVEBEG	BD0	
$SAVEBOF	62	
$SAVEEND	E44	
$SAVEEND_R4	E14	
$SAVELEN	E44	274
$SAVELEN_R4	E14	244
$SCANMDL	530	64

Name	Hex Offset	Hex Value
$SCANPDL	52E	40
$SCANWKA	598	
$SCANXWA	580	40404040
$SCLPEND	4E0	
$SCNDL16	598	598
$SCNDL24	598	
$SCNDWKA	598	598
$SCNDWKB	598	5A0
$SCNDWKC	598	5A8
$SCNLLIM	5B0	
$SCOPSPL	4E7	10
$SCOPSYS	4E7	20
$SCQADDR	2D4	
$SCQJQE	CE8	0
$SCT	2D8	
$SDCMBAD	95C	
$SDWNFST	8E8	80
$SEPPAGE	4A2	
$SFSPCE	A3C	
$SFWA	2D0	
$SID	8C0	40404040
$SIDBUSY	8D2	
$SIDTIME	8B8	0
$SJFJDVT	90C	0
$SLVL	329	
$SMFBUSY	2DC	
$SMFFREC	47E	0
$SMFPRCT	47A	
$SNFPCE	B54	
$SNV	8C8	
$SOMPCE	A24	
$SONWORK	902	0
$SPFTIME	CD8	0
$SPINACT	493	
$SPINJQE	624	40
$SPINPCE	B24	
$SPIPCE	B5C	
$SPLADRA	D9D	8
$SPLADRS	D9D	4
$SPLEXST	CEC	0
$SPLINAC	D2C	0
$SPLIOER	158	A
$SPLLEN	DEB	
$SPLNUMB	DEC	DED
$SPLSLCT	D0C	0
$SPMSKWA	6B0	0
$SPOFERR	520	
$SPOLMSG	513	
$SPOLNUM	DEC	20
$SPOLPCE	A14	
$SPOOL	DE6	E2D7D6D6
$SPOOLQ	2E0	
$SPVLRSN	3C6	
$SPVMNAM	DD8	40404040
$SPV1BRT	3C6	5
$SPV1OPT	3C6	3
$SPV1QER	3C6	1
$SPV1SPL	3C6	4
$SPV1VAL	3C6	2
$SSNM	8C8	5C5C5C5C
$SSVS	8CC	5C5C5C5C
$STABNDA	B4	
$STACPCE	B1C	
$STACTOK	DC	
$STARTCP	648	638

Name	Hex Offset	Hex Value
$STARTTM	648	630
$STATUS	8D7	
$STATUS1	8E8	40
$STATUS2	8E9	0
$STCJECL	32C	
$STDFORM	4E8	E2E3C440
$STERSTK	158	
$STIMASK	512	
$STIMBUF	512	80
$STIMDCT	512	20
$STIMSBT	512	10
$STIMTIM	512	40
$STOPXEQ	8E8	8
$STQEACT	2EC	
$STWORK	2E4	
$ST1PJTM	8E8	20
$SUBTASK	8D6	
$SXADDR	104	
$SYMBM	110	
$SYNCTOL	368	
$SYSID	8D0	
$TBLNUM	340	2
$TCELSIZ	DFB	
$TGAELEN	8E0	0
$TGAENUM	8E2	32
$TGALLOC	D4C	
$TGBAD	340	
$TGDEFND	D54	
$TGFREE	D58	
$TGFREEB	484	7FFFFFFF
$TGMADDR	338	
$TGMAP	33C	
$TGMHEAD	338	
$TGPRCT	CD6	
$TGRADDR	344	
$TGRHDR	344	28
$TGSIZE	482	1E
$TGSYSID	CD5	0
$TGTOTAL	D50	
$TIMEPCE	A04	
$TJEVTOK	D4	
$TOTCKRN	7B8	
$TOTCKSZ	37C	
$TPPRPCE	A84	
$TPPUPCE	A94	
$TPRDPCE	A5C	
$TQEQUE	2F8	
$TRCDWN	62C	1
$TRCFG1	62C	0
$TRCPCE	A0C	
$TRGENER	2FC	
$TRTIME	524	
$TSUJECL	330	
$TTBPRCT	488	
$UCT	100	
$UNSPUN	D9C	80
$UPADDR	348	
$USERSET	3BB	2
$USER1	350	
$USER2	354	
$USER3	358	
$USER4	35C	0
$USER5	35E	0
$USXADDR	34C	
$UVERS	58	40404040

Name	Hex Offset	Hex Value
$VERSACT	492	80
$VERSFRE	48E	0
$VERSINI	492	10
$VERSION	50	E2D740F5
$VERSKPT	492	20
$VERSNUM	48C	0
$VERSSTT	492	10
$VERSWRN	490	50
$VLOGQUE	300	
$VTMFREC	434	0
$VTMLGRQ	43A	0
$VTMLIM	432	0
$VTMNWBF	438	0
$VTMPRCT	430	50
$VTMWBF	436	0
$WARMACT	386	0
$WARMCNT	AB8	4
$WARMPCE	AB4	
$WARMTYP	948	
$WCHECK	BE2	0
$WLMDATA	304	
$WLMDIFF	8E8	2
$WLMRGOK	8E8	1
$WORK16	6A0	690
$WORK24	6A0	690
$WRMDONE	8E8	10
$WRMESYS	94E	1
$WRMINIT	94C	
$WRMREG	94C	1
$WSAPTR	308	
$WSBITOF	6F0	7F
$WSUSER	6EC	80
$WTBSYJO	D9D	80
$XCFFLG1	7B2	
$XCFFLG2	7B3	
$XCFGPNM	E0C	40404040
$XCFIXVT	7B4	
$XCFPCE	B3C	
$XCF1ERR	7B2	20
$XCF1MUD	7B2	2
$XCF1NAR	7B2	80
$XCF1NRS	7B2	40
$XCF1SGO	7B2	4
$XCF1STP	7B2	8
$XCF1STR	7B2	10
$XCF2ERR	7B3	80
$XCMPCE	B44	
$XCPECBX	88	1800000
$XECBQ	BB8	
$XECBQF	BB8	
$XECBQL	BC0	
$XEQDCT	994	
$XEQINT	8E9	40
$XFRACTV	30C	
$XFRBEND	310	
$XFRDEND	314	
$XFRECBX	80	1800000
$XITADDR	318	
$XMASADR	1FC	
$XTIMPCE	9FC	
$XWTRACT	93E	80
$XWTRFLG	93E	
$ZAPTIME	D80	0
$ZERO	6D8	6D8
$ZEROES	6D8	6D8

Name	Hex Offset	Hex Value
$ZEROFFF	6E0	FFFFFF
$ZEROS	6D8	0
$0FFF	6E0	6E0
$000F	6E4	FF
$7FFF	6F4	6F4
HCT	0	

$HFAM Programming Interface information

Programming Interface information

$HFAM

End of Programming Interface information

$HFAM Heading Information

Common Name: HASP File Allocation Map
Macro ID: $HFAM
DSECT Name: HFAM
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: HFAM
Offset: HFAMID-HFAM
Length: L'HFAMID
Storage Attributes: Subpool: 0
Key: 1
Residency: Virtual and real storage are anywhere in the JES2 address space.
Size: See HFAMLEN
Created by: JES2 Initialization
Pointed to by: $HFAM field of the $HCT data area
Serialization: The JES2 Checkpoint data set lock ($QSUSE) is used.
NOTE: This is a checkpointed control block and part of check record. Any change to this control block will be reflected across systems.
Function: This dsect is used to map file identification and use information about the two checkpoint data sets and their backups (NEWCKPTS). For the mapping of the individual entries, see the $HFAME control block.

$HFAM Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	HFAM	HASP FILE ALLOCATION MAP
0	(0)	CHARACTER	308	HFAMREC (0)	Offset table needs hard coded length
0	(0)	CHARACTER	4	HFAMID	HFAM EYE CATCHER
4	(4)	ADDRESS	1	HFAMVER	CONTROL BLOCK VERSION NUMBER
4	(4)	X'3'	0	HFAMVERN	"03" CONTROL BLOCK VER. NUMBER
5	(5)	BITSTRING	1	HFAMLSYS	System # of last system to update the ckpt.($SIDBUSY)
6	(6)	BITSTRING	1	HFAMFLAG	FLAG BYTE
		1...		HFAMDPLX	"B'10000000'" 0 - COMPLEX IS IN DUAL MODE 1 - COMPLEX IS IN DUPLEX MODE
		.1..		HFAMIDSN	"B'01000000'" IGNORE DSN/VOL IN HFAMES
7	(7)	BITSTRING	1		RESERVED FOR FUTURE USE
8	(8)	SIGNED	4	HFAMCSTR (2)	COLD START TIME STAMP
16	(10)	SIGNED	4	HFAMUSR1	RESERVED FOR USER
20	(14)	CHARACTER	72	HFAMCKP1	DATA SET SPEC FOR CHECKPOINT 1
92	(5C)	CHARACTER	72	HFAMCKP2	DATA SET SPEC FOR CHECKPOINT 2
164	(A4)	CHARACTER	72	HFAMCKN1	DATA SET SPEC FOR NEW CKPT1
236	(EC)	CHARACTER	1	HFAMCKN2	DATA SET SPEC FOR NEW CKPT2
236	(EC)	X'134'	0	HFAMLEN	"*-HFAM" LENGTH OF HFAM
308	(134)	ADDRESS	2	(0)	Ensure hardcoded value
308	(134)	ADDRESS	2	(0)	is accurate

$HFAM Cross Reference

Name	Hex Offset	Hex Value
HFAM	0	
HFAMCKN1	A4	
HFAMCKN2	EC	
HFAMCKP1	14	
HFAMCKP2	5C	
HFAMCSTR	8	
HFAMDPLX	6	80
HFAMFLAG	6	
HFAMID	0	C8C6C1D4
HFAMIDSN	6	40
HFAMLEN	EC	134
HFAMLSYS	5	
HFAMREC	0	
HFAMUSR1	10	
HFAMVER	4	
HFAMVERN	4	3

$HFAME Programming Interface information

Programming Interface information

$HFAME

End of Programming Interface information

$HFAME Heading Information

Common Name: HASP File Allocation Map Entry
Macro ID: $HFAME
DSECT Name: HFE
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: None
Storage Attributes: Subpool: N/A
Key: N/A
Residency: See $HFAM control block, or $HCCT control block, or $CKPRECV control block.
Size: See HFELEN
Created by: See $HFAM control block, or $HCCT control block, or $CKPRECV control block.
Pointed to by: HFAMCKP1 field of the $HFAM data area
HFAMCKP2 field of the $HFAM data area
HFAMCKN1 field of the $HFAM data area
HFAMCKN2 field of the $HFAM data area
CCTCKPT1 field of the $HCCT data area
CCTCKPT2 field of the $HCCT data area
CKRHFAME field of the $CKPRECV data area
Various fields in the processor work areas and parameter lists.
Serialization: None required
Function: This dsect maps the entry for one file in the HASP File Allocation Map (HFAM). See $HFAM control block for more information.

$HFAME Map

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	HFE	HASP FILE ALOC MAP ELEMENT

Comment

HFEDSVOL IS USED AS RNAME FOR RESERVE/DEQ MACROS. DO NOT CHANGE THE ORDER OF VOLSER AND DSNAME.

End of Comment

0	(0)	CHARACTER	0	HFESPEC (0)	Data set spec
0	(0)	CHARACTER	0	HFEDASD (0)	Data set volser and dsn (Used as RNAME when ckpt is on DASD)
0	(0)	CHARACTER	6	HFEVOL	VOL SERIAL NUMBER OF DS
6	(6)	CHARACTER	44	HFEDSN	NAME OF DATA SET
50	(32)	CHARACTER	16	HFESTR	XES Structure name
66	(42)	BITSTRING	1	HFEFLAG1	FLAG BYTE FOR DATA SET
		1...		HFE1INUS	"B'10000000'" DATA SET IN USE
		.1..		HFE1DASD	"B'01000000'" Checkpoint is on DASD
		..1.		HFE1CF	"B'00100000'" Checkpoint is on CF
67	(43)	BITSTRING	1		RESERVED FOR FUTURE USE
68	(44)	SIGNED	4	HFEUSER1	RESERVED FOR USER
68	(44)	X'48'	0	HFELEN	"*-HFE" LENGTH OF HFAME

$HFAME Cross Reference

Name	Hex Offset	Hex Value
HFE	0	
HFEDASD	0	
HFEDSN	6	
HFEFLAG1	42	
HFELEN	44	48
HFESPEC	0	
HFESTR	32	
HFEUSER1	44	
HFEVOL	0	
HFE1CF	42	20
HFE1DASD	42	40
HFE1INUS	42	80

$HFCT Programming Interface information

Programming Interface information

$HFCT

End of Programming Interface information

$HFCT Heading Information

Common Name: HASP FSS Communication Table
Macro ID: $HFCT
DSECT Name: HFCT
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: MIT entry for HASPFSSM ('MIT HASPFSSM')
Offset: 0
Length: 12
Storage Attributes: Subpool: The subpool of the HASPFSSM load module.
Key: 1
Residency: Virtual and real storage are below 16M, in the private storage of an FSS address space.
Size: See the HFCTLEN equate.
Created by: The HASPFSSM load module is loaded during an FSS CONNECT request through the Functional Subsystem Interface (FSI). The HFCT is part of HASPFSSM.
Pointed to by: - As one of the key JES2 control blocks for processing from an FSS address space, the HFCT address is usually in general purpose register 11 in the assembly environment known as FSS.
- Label HASPFCT in HASPFSSM, defined as an external symbol for code in the HASPFSSM load module, is the address of the HFCT.
- The HFCT is at the front of the HASPFSSM load module so the module storage address in the MVS CDE for HASPFSSM (if one exists) points to the HFCT.
- The FSSHFCT field of the FSS's FSSCB common storage control block points to the FSS's HFCT.
Serialization: The HFCT is loaded and altered during an FSS CONNECT FSI request. From that point in time on, multiple tasks may be executing under the FSS and its Functional Subsystem Applications (FSAs). The HFCT fields are read-only, or used with compare-and-swap techniques.
Function: The HFCT is the central control block used for JES2 processing in the address space of a Functional Subsystem (FSS) connected to the JES2 subsystem. It is used for most processing within Functional Subsystem Interface (FSI) requests made by FSSs and their applications (FSAs), or directed to them.

The HFCT address is normally in general purpose register 11 during processing in the FSS assembly environment. Register 11 addressing for the HFCT is assumed in FSS-oriented JES2 service macros, routines, exits, and general linkage.

$HFCT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	HFCT	HASP FSS COMMUNICATION TABLE
0	(0)	BITSTRING	80		HASPFSSM Module Info Table
80	(50)	CHARACTER	8	HFCTVER	Permanently set to SP 5.3.0

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
				Comment	
				Keep the next three fields intact.	
				End of Comment	
88	(58)	BITSTRING	10	HFCTJES2_LEVEL (0)	
					Level information
88	(58)	CHARACTER	8	HFCTLEVL	HASP Version <---+
96	(60)	ADDRESS	1	HFCTPLVL	Product Level |
97	(61)	ADDRESS	1	HFCTSLVL	Service Level <---+
98	(62)	SIGNED	2		Reserved for future use
				Comment	
				HASPFSSM ENTRY POINTS FOR FUNCTIONAL SUBSYSTEM INTERFACE SUPPORTED FSS FUNCTIONS.	
				End of Comment	
100	(64)	SIGNED	4	HFCTFSSF (0)	FSI SUPPORTED FSS FUNCTIONS
100	(64)	ADDRESS	4	HFCTSCNI	CONNECT IDENTIFIER
104	(68)	ADDRESS	4	HFCTSCNA	"V(FSMCONCT)" CONNECT ENTRY POINT
108	(6C)	ADDRESS	4	HFCTSDCI	DISCONNECT IDENTIFIER
112	(70)	ADDRESS	4	HFCTSDCA	"V(FSMCONCT)" DISCONNECT ENTRY POINT
116	(74)	ADDRESS	4	HFCTSGDI	GETDS IDENTIFIER
120	(78)	ADDRESS	4	HFCTSGDA	"V(FSMERROR)" GETDS UNSUPPORTED ON FSS LEVEL
124	(7C)	ADDRESS	4	HFCTSRDI	RELDS IDENTIFIER
128	(80)	ADDRESS	4	HFCTSRDA	"V(FSMERROR)" RELDS UNSUPPORTED ON FSS LEVEL
132	(84)	ADDRESS	4	HFCTSGRI	GETREC IDENTIFIER
136	(88)	ADDRESS	4	HFCTSGRA	"V(FSMERROR)" GETREC UNSUPPORTED ON FSS LEVEL
140	(8C)	ADDRESS	4	HFCTSFRI	FREEREC IDENTIFIER
144	(90)	ADDRESS	4	HFCTSFRA	"V(FSMERROR)" FREEREC UNSUPPORTD ON FSS LEVEL
148	(94)	ADDRESS	4	HFCTSCKI	CHKPT IDENTIFIER
152	(98)	ADDRESS	4	HFCTSCKA	"V(FSMERROR)" CHKPT UNSUPPORTED ON FSS LEVEL
156	(9C)	ADDRESS	4	HFCTSSNI	SEND IDENTIFIER
160	(A0)	ADDRESS	4	HFCTSSNA	"V(FSMSEND)" SEND ENTRY POINT
160	(A0)	X'6'	0	HFCTSIDN	"(*-HFCTSGDI)/8" NUM OF HASPFSSM ENTRY PTS
				Comment	
				HASPFSSM ENTRY POINTS FOR FUNCTIONAL SUBSYSTEM INTERFACE FSA SUPPORTED FUNCTIONS.	
				End of Comment	
164	(A4)	SIGNED	4	HFCTFSAF (0)	FSI SUPPORTED FSA FUNCTIONS
164	(A4)	ADDRESS	4	HFCTACNI	CONNECT IDENTIFIER
168	(A8)	ADDRESS	4	HFCTACNA	"V(FSMERROR)" CONNECT UNSUPPORTD ON FSA LEVEL
172	(AC)	ADDRESS	4	HFCTADCI	DISCONNECT IDENTIFIER
176	(B0)	ADDRESS	4	HFCTADCA	"V(FSMERROR)" DISCONT UNSUPPORTD ON FSA LEVEL
180	(B4)	ADDRESS	4	HFCTAGDI	GETDS IDENTIFIER
184	(B8)	ADDRESS	4	HFCTAGDA	"V(FSMGETDS)" GETDS ENTRY POINT
188	(BC)	ADDRESS	4	HFCTARDI	RELDS IDENTIFIER
192	(C0)	ADDRESS	4	HFCTARDA	"V(FSMRELDS)" RELDS ENTRY POINT
196	(C4)	ADDRESS	4	HFCTAGRI	GETREC IDENTIFIER
200	(C8)	ADDRESS	4	HFCTAGRA	"V(FSMGETRC)" GETREC ENTRY POINT
204	(CC)	ADDRESS	4	HFCTAFRI	FREEREC IDENTIFIER
208	(D0)	ADDRESS	4	HFCTAFRA	"V(FSMFRERC)" FREEREC ENTRY POINT
212	(D4)	ADDRESS	4	HFCTACKI	CHKPT IDENTIFIER
216	(D8)	ADDRESS	4	HFCTACKA	"V(FSMCHKPT)" CHKPT ENTRY POINT
220	(DC)	ADDRESS	4	HFCTASNI	SEND IDENTIFIER
224	(E0)	ADDRESS	4	HFCTASNA	"V(FSMSEND)" SEND ENTRY POINT

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
				Comment	
				ENTRY POINTS FOR PC ROUTINES	
				End of Comment	
228	(E4)	SIGNED	4	HFCTPCS (0)	PC ROUTINE ID/ADDR PAIRS
228	(E4)	ADDRESS	4	HFCTORDI	ORDER IDENTIFIER
232	(E8)	ADDRESS	4	HFCTORDA	"V(FSMORDER)" ORDER ENTRY POINT
236	(EC)	ADDRESS	4	HFCTPSTI	POST IDENTIFIER
240	(F0)	ADDRESS	4	HFCTPSTA	"V(FSMPOST)" POST ENTRY POINT
240	(F0)	X'2'	0	HFCTPCNO	"(*-HFCTPCS)/8" NUMBER OF PC ROUTINES
240	(F0)	X'54'	0	HFCTETDL	"ETDLEN+(HFCTPCNO*ETDELEN)" LENGTH OF ETD CNTL BLOCK
				Comment	
				DEFINED CONSTANTS	
				End of Comment	
244	(F4)	CHARACTER	8	HFCTBLNK	DOUBLEWORD OF BLANKS
256	(100)	DBL WORD	8	HFCTZERO	DOUBLEWORD OF HEX 0
256	(100)	X'100'	0	HFCT0000	"HFCTZERO" ALTERNATE NAME FOR HFCTZERO
264	(108)	BITSTRING	4	HFCT000F	FULLWORD LOW ORDER BYTE MASK
268	(10C)	BITSTRING	4	HFCT00FF	FULLWORD LOW HALFWORD MASK
272	(110)	BITSTRING	4	HFCT0FFF	FULLWORD 3 BYTE MASK
276	(114)	BITSTRING	4	HFCTALLF	FULLWORD ALL X'FF'S
276	(114)	X'114'	0	HFCTFFFF	"HFCTALLF" ALTERNATE NAME FOR HFCTALLF
280	(118)	ADDRESS	4	HFCTBADA (16)	BAD value
				Comment	
				DEFINITIONS FOR GENERAL USE	
				End of Comment	
344	(158)	ADDRESS	4	HFCTFSSA	ADDR OF FSSCB
348	(15C)	ADDRESS	4	HFCTHCCT	ADDR OF HCCT
352	(160)	ADDRESS	4	HFCTBUFS	I/O BUFFER STACK HEAD
356	(164)	ADDRESS	4	HFCTRPLS	RPL CELL STACK HEAD
360	(168)	ADDRESS	4	HFCTGTRS	GETR CELL STACK HEAD
364	(16C)	ADDRESS	4	HFCTSJFS	SJFP CELL STACK HEAD
368	(170)	ADDRESS	4	HFCTDBUF	Data buffer stack head
372	(174)	BITSTRING	8		Reserved
				Comment	
				DEFINITIONS FOR QUICKCELL POOL MANAGEMENT	
				End of Comment	
380	(17C)	ADDRESS	4	HFCTGTQC	"V(FSMGETQC)" ADDR OF GET QUICKCELL ROUTINE
384	(180)	ADDRESS	4	HFCTFRQC	"V(FSMFREQC)" ADDR OF FREE QUICKCELL ROUTINE
388	(184)	ADDRESS	4	HFCTBLQC	"V(FSMBLDQC)" ADDR OF BUILD CELLPOOL ROUTINE
392	(188)	ADDRESS	4	HFCTQCSU	"V(FSMQCT)" ADDR OF QCT SETUP ROUTINE
396	(18C)	ADDRESS	4	HFCTQCTH	ADDR OF FIRST QCT
400	(190)	SIGNED	4	HFCTQCS1 (18)	FSMBLDQC + FSMEXTQC SAVE AREA
472	(1D8)	SIGNED	4	HFCTQCS2 (18)	VSM BLDCPOOL MACRO SAVE AREA
				Comment	
				DEFINITIONS FOR SAVE AREA AND ERROR SERVICES, ETC	
				End of Comment	
544	(220)	ADDRESS	4	HFCTSAVE	"V(FSMSAVE)" FSMSAVE $SAVE ROUTINE ADDR
548	(224)	ADDRESS	4	HFCTRET	"V(FSMRETRN)" FSMRETRN $RETURN ROUTINE ADDR

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
552	(228)	ADDRESS	4		Reserved for future use
556	(22C)	SIGNED	4	HFCTSVSV (18)	SAVE AREA FOR FSMSAVE
628	(274)	SIGNED	4	HFCTSRBS (18)	SAVE AREA FOR SRBS (FSMRCRTN)
700	(2BC)	SIGNED	4	HFCTESAV (18)	SAVE AREA FOR $ERRORS
772	(304)	ADDRESS	4	HFCTETCB	TCB OWNING $ERROR SAVE
776	(308)	BITSTRING	1	HFCTESVS	$ERROR SAVE AREA SERIALIZATION
777	(309)	BITSTRING	1	HFCTSAVF	SAVE AREA FLAG BYTE
778	(30A)	BITSTRING	1	HFCTCONF	FSS CONNECT/DISCONNECT FLAG
		1...		HFCTGTMN	"B'10000000'" FSVT/ETD/ETC GETMAIN WAS DONE
		.1..		HFCTAXRS	"B'01000000'" AXRES WAS DONE FOR FSS AX
		..1.		HFCTAXST	"B'00100000'" AXSET WAS DONE FOR FSS AX
		...1		HFCTLXRS	"B'00010000'" LXRES WAS DONE FOR FSS LX
		.... 1...		HFCTETCR	"B'00001000'" ETCRE WAS DONE FOR FSS ETD
		.... .1..		HFCTATST	"B'00000100'" ATSET WAS DONE FOR JES2 AX
779	(30B)	BITSTRING	1		RESERVED FOR FUTURE USE

Comment

SERVICE ROUTINE ENTRY POINTS

End of Comment

780	(30C)	ADDRESS	4	HFCTFSIL	"V(FSMFSLNK)" FSSLINK SERVICE ROUTINE
784	(310)	ADDRESS	4	HFCTGTLK	"V(FSMGETLK)" GETLOCK SERVICES ROUTINE
788	(314)	ADDRESS	4	HFCTFRLK	"V(FSMFRELK)" FRELOCK SERVICES ROUTINE
792	(318)	ADDRESS	4	HFCTGBLK	"V(FSMGTBLK)" GETBLOCK SERVICE ROUTINE
796	(31C)	ADDRESS	4	HFCTRBLK	"V(FSMRTBLK)" RETBLOCK SERVICE ROUTINE
800	(320)	ADDRESS	4	HFCTCATE	"V(FSMCATER)" ADDR OF CAT ERROR ROUTINE

Comment

The following fields are used to maintain and serialize the save area queue. These fields must be kept together to ensure proper serialization of the save area queue.

End of Comment

808	(328)	DBL WORD	8	HFCTSACS (0)	CDS field used when adding or deleting elements off the save area queue
808	(328)	ADDRESS	4	HFCTSAVS	Save area stack head
812	(32C)	ADDRESS	4	HFCTSASN	Save area sequence number

Comment

HASPFSSM R11-ADDRESSABLE PATCH SPACE. CODE IS GENERATED AS S-TYPE ADDRESS CONSTANTS WHEN DSECT=NO. VER/REP LOGIC SHOULD ASSUME S( ) HALFWORDS, NOT ZEROS, IN THIS AREA.

End of Comment

812	(32C)	X'CD0'	0	HFCTPSZ	"4096-(*-HFCT)"
816	(330)	BITSTRING	1	HFCTPCH (0)	DEFINE PATCH SPACE
816	(330)	X'1000'	0	HFCTLEN	"*-HFCT" Length of the HFCT

$HFCT Cross Reference

Name	Hex Offset	Hex Value
HFCT	0	
HFCTACKA	D8	
HFCTACKI	D4	
HFCTACNA	A8	
HFCTACNI	A4	
HFCTADCA	B0	
HFCTADCI	AC	
HFCTAFRA	D0	
HFCTAFRI	CC	
HFCTAGDA	B8	
HFCTAGDI	B4	
HFCTAGRA	C8	
HFCTAGRI	C4	
HFCTALLF	114	FFFFFFFF
HFCTARDA	C0	
HFCTARDI	BC	
HFCTASNA	E0	
HFCTASNI	DC	
HFCTATST	30A	4
HFCTAXRS	30A	40
HFCTAXST	30A	20
HFCTBADA	118	
HFCTBLNK	F4	40404040
HFCTBLQC	184	
HFCTBUFS	160	
HFCTCATE	320	
HFCTCONF	30A	0
HFCTDBUF	170	
HFCTESAV	2BC	0
HFCTESVS	308	0
HFCTETCB	304	
HFCTETCR	30A	8
HFCTETDL	F0	54
HFCTFFFF	114	114
HFCTFRLK	314	
HFCTFRQC	180	
HFCTFSAF	A4	
HFCTFSIL	30C	
HFCTFSSA	158	
HFCTFSSF	64	
HFCTGBLK	318	
HFCTGTLK	310	
HFCTGTMN	30A	80
HFCTGTQC	17C	
HFCTGTRS	168	
HFCTHCCT	15C	
HFCTJES2_LEVEL	58	
HFCTLEN	330	1000
HFCTLEVL	58	A961D6E2
HFCTLXRS	30A	10
HFCTORDA	E8	
HFCTORDI	E4	
HFCTPCH	330	0
HFCTPCNO	F0	2
HFCTPCS	E4	
HFCTPLVL	60	
HFCTPSTA	F0	
HFCTPSTI	EC	
HFCTPSZ	32C	CD0
HFCTQCSU	188	
HFCTQCS1	190	0
HFCTQCS2	1D8	0
HFCTQCTH	18C	
HFCTRBLK	31C	
HFCTRET	224	
HFCTRPLS	164	
HFCTSACS	328	
HFCTSASN	32C	
HFCTSAVE	220	
HFCTSAVF	309	0
HFCTSAVS	328	
HFCTSCKA	98	
HFCTSCKI	94	
HFCTSCNA	68	
HFCTSCNI	64	
HFCTSDCA	70	
HFCTSDCI	6C	
HFCTSFRA	90	
HFCTSFRI	8C	
HFCTSGDA	78	
HFCTSGDI	74	
HFCTSGRA	88	
HFCTSGRI	84	
HFCTSIDN	A0	6
HFCTSJFS	16C	
HFCTSLVL	61	
HFCTSRBS	274	0
HFCTSRDA	80	
HFCTSRDI	7C	
HFCTSSNA	A0	
HFCTSSNI	9C	
HFCTSVSV	22C	0
HFCTVER	50	E2D740F5
HFCTZERO	100	0
HFCT0FFF	110	FFFFFF
HFCT00FF	10C	FFFF
HFCT000F	108	FF
HFCT0000	100	100

$HJCT Heading Information

Common Name: JES2 Monitor Communication Table
Macro ID: $HJCT
DSECT Name: HJCT
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: HJCT
Offset: JMTID-HJCT
Length: L'JMTID
Storage Attributes: Subpool: 1
Key: 1
Residency: Virtual is in 31 bit storage and real can in in 64 bit storage. The $HJCT resides in the JES2 monitor address space.
Size: See JMTSIZE
Created by: HASJMON
Pointed to by: - MHBHJCT field of the MONCB data area
- MWEHJCT field of the MWE data area
- General register 11 when executing code in the 'MONITOR' execution environment.
Serialization: None required
Function: The HJCT is the anchor private storage control block for the JES2 monitor address space

$HJCT Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	HJCT	, HASP Communications Table
0	(0)	CHARACTER	4	JMTID	Eyecatcher
4	(4)	ADDRESS	1	JMTVRSN	HJCT version
4	(4)	X'1'	0	JMTVRNUM	"1" Current version number
5	(5)	BITSTRING	3		Reserved (and frozen)
8	(8)	ADDRESS	4	JMTOFSTB	Address of offset table, at HJCT offset +8
12	(C)	SIGNED	4		Reserved (and frozen)
16	(10)	ADDRESS	4	JMTHCT	HCT address
20	(14)	ADDRESS	4	JMTHCCT	HCCT address
24	(18)	ADDRESS	4	JMTMONCB	MONCB address
28	(1C)	ADDRESS	4	JMTMODMP	Monitor module map
32	(20)	ADDRESS	4	JMTBADA (16)	BAD address value
96	(60)	SIGNED	4	JMTZEROS (16)	Constant zeros
160	(A0)	SIGNED	4	JMTJES2A	JES2 address space ALET
164	(A4)	ADDRESS	4	JMTJASCB	JES2 ASCB address
168	(A8)	CHARACTER	4	JMTSSNM	JES2 subsystem name
172	(AC)	ADDRESS	4	JMTJ2WAT	JES2 Main MVS wait
176	(B0)	ADDRESS	4	JMTMWE	JES2 monitor work areas
180	(B4)	ADDRESS	4	JMTMSD	Monitor sampling data
184	(B8)	CHARACTER	1	JMTCOMCH	CONCHAR for termination messages
185	(B9)	BITSTRING	1	JMTJSTAT	JES2 status flags (set by sampler)
		1...		JMTJSINI	"B'10000000'" JES2 in initialization
		.1..		JMTJSTRM	"B'01000000'" JES2 is terminating
186	(BA)	BITSTRING	2		Reserved
188	(BC)	ADDRESS	4	JMTMWT	MVS Wait list

Comment

General work area (for MF=L areas messages, etc).

End of Comment

192	(C0)	BITSTRING	128	JMTGWORK	General work area

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
320	(140)	SIGNED	4	JMTLWTO (0)	
320	(140)	ADDRESS	2		TEXT LENGTH
322	(142)	BITSTRING	2		MCSFLAGS
324	(144)	ADDRESS	4		MESSAGE TEXT ADDRESS
328	(148)	ADDRESS	1		VERSION LEVEL
329	(149)	BITSTRING	1		MISCELLANEOUS FLAGS
330	(14A)	ADDRESS	1		REPLY LENGTH
331	(14B)	ADDRESS	1		LENGTH OF WPX
332	(14C)	BITSTRING	2		EXTENDED MCS FLAGS
334	(14E)	ADDRESS	2		RESERVED
336	(150)	ADDRESS	4		REPLY BUFFER ADDRESS
340	(154)	ADDRESS	4		REPLY ECB ADDRESS
344	(158)	ADDRESS	4		CONNECT ID
348	(15C)	BITSTRING	2		DESCRIPTOR CODES
350	(15E)	ADDRESS	2		RESERVED
352	(160)	BITSTRING	16		
368	(170)	BITSTRING	2		MESSAGE TYPE
370	(172)	ADDRESS	2		MESSAGE'S PRIORITY
372	(174)	CHARACTER	8		JOB ID
380	(17C)	CHARACTER	8		JOB NAME
388	(184)	CHARACTER	8		RETRIEVAL KEY
396	(18C)	ADDRESS	4		TOKEN FOR DOM
400	(190)	ADDRESS	4		CONSOLE ID
404	(194)	CHARACTER	8		SYSTEM NAME
412	(19C)	CHARACTER	8		CONSOLE NAME
420	(1A4)	ADDRESS	4		REPLY CONSOLE NAME/ID ADDR
424	(1A8)	ADDRESS	4		CART ADDRESS
428	(1AC)	ADDRESS	4		WSPARM ADDRESS
432	(1B0)	DBL WORD	8	(0)	

Comment

HEX translate table

End of Comment

432	(1B0)	X'C0'	0	JMTXTRAN	"*-C'0'" Hexadecimal-to-EBCDIC
432	(1B0)	CHARACTER	16		translate table

Comment

Probe message areas (mapped by PRBM DSECT in $MSD)

End of Comment

448	(1C0)	DBL WORD	8	JMTPROBL (0)	Probe message list
448	(1C0)	ADDRESS	4	JMTPMAIN	Main task activity
452	(1C4)	ADDRESS	4	JMTPBRTL	Bert lock contention
456	(1C8)	ADDRESS	4	JMTPJOBL	Job lock contention
460	(1CC)	ADDRESS	4	JMTPCKPH	Long CKPT hold time
460	(1CC)	X'4'	0	JMTPROBC	"(*-JMTPROBL)/4" Count of message areas

Comment

Patch space for code that uses R11 addressability
to the HJCT

End of Comment

464	(1D0)	SIGNED	4		Reserved
472	(1D8)	DBL WORD	8	(0)	
472	(1D8)	BITSTRING	256	JMTPATCH (2)	Patch space for R11-HJCT code
984	(3D8)	DBL WORD	8	(0)	Ensure alignment
984	(3D8)	X'3D8'	0	JMTSIZE	"*-HJCT" HJCT length

$HJCT Cross Reference

Name	Hex Offset	Hex Value
HJCT	0	
JMTBADA	20	
JMTCOMCH	B8	
JMTGWORK	C0	0
JMTHCCT	14	
JMTHCT	10	
JMTID	0	C8D1C3E3
JMTJASCB	A4	
JMTJES2A	A0	0
JMTJSINI	B9	80
JMTJSTAT	B9	
JMTJSTRM	B9	40
JMTJ2WAT	AC	
JMTLWTO	140	
JMTMODMP	1C	
JMTMONCB	18	
JMTMSD	B4	
JMTMWE	B0	
JMTMWT	BC	
JMTOFSTB	8	
JMTPATCH	1D8	0
JMTPBRTL	1C4	
JMTPCKPH	1CC	
JMTPJOBL	1C8	
JMTPMAIN	1C0	
JMTPROBC	1CC	4
JMTPROBL	1C0	
JMTSIZE	3D8	3D8
JMTSSNM	A8	D1C5E2F2
JMTVRNUM	4	1
JMTVRSN	4	
JMTXTRAN	1B0	C0
JMTZEROS	60	0

$ICE Programming Interface information

Programming Interface information

$ICE

The following fields are **NOT** programming interface information:

- ICE#MSTR
- ICEACPTN
- ICEALCHN
- ICEAPCHN
- ICEFLAGS
- ICEFLGS2
- ICEFLGS3
- ICEFRZRC
- ICEINCT
- ICEINDEX
- ICEINHD
- ICEINLM
- ICEINTL
- ICELOST
- ICENJEF1
- ICENJEF2
- ICEOUTBF
- ICEOUTCT
- ICEOUTHD
- ICEOUTLM
- ICEOUTTL
- ICERCPTN
- ICERCVST
- ICERSPCT
- ICERULEN
- ICESDCT
- ICESNDST
- ICESTAT
- ICESUSFL
- ICETEA
- ICETNTRY
- ICETTIME
- ICEXRFBK
- ICEXTWRK

End of Programming Interface information

$ICE Heading Information

Common Name: Interface Control Element
Macro ID: $ICE
DSECT Name: ICE ICETNTRY
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: None
Storage Attributes: Subpool: 0
Key: 1
Residency: Virtual and real storage are above 16M, in the private storage of the JES2 address space.
Size: See ICESIZE
Created by: HASPIRRE
HASPSNA
Pointed to by: $ICELOST field of the $HCT data area
MDCTICE field of the $DCT data area
ICEAPCHN field of the $ICE data area
ICEALCHN field of the $ICE data area
ICETEMP field of the $ICE data area
MLMICEQ field of the $MLMWORK data area
MLMICEQ2 field of the $MLMWORK data area
MLMXICE field of the $MLMWORK data area
MLMWRKIQ field of the $MLMWORK data area
Serialization: Normal PCE dispatch serialization
Function: The ICE control block represents a VTAM session between JES2 and an NJE or RJE partner. The ICE is used to hold information about that session.

At the end of the ICE there is a rolling trace. Entries are added to this trace whenever a significant event occurs on this session. The trace entries are mapped by the ICETNTRY DSECT.

$ICE Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	ICE	INTERFACE CONTROL ELEMENT DSECT
0	(0)	BITSTRING	1	ICESTAT	ICE STATUS INDICATORS
1	(1)	BITSTRING	1	ICEFLAGS	SESSION STATUS INDICATORS
2	(2)	BITSTRING	1	ICERCVST	RECEIVE PATH INDICATORS
3	(3)	BITSTRING	1	ICESNDST	SEND PATH INDICATORS
4	(4)	ADDRESS	1	ICEINDEX	SERVICE ROUTINE INDEX POINTER
5	(5)	ADDRESS	1	ICERSPCT	CNT OF OUTSTANDING RESPONSES
6	(6)	ADDRESS	2	ICERULEN	MAXIMUM REQUEST UNIT LENGTH
8	(8)	CHARACTER	8	ICESYMB	VTAM SYMBOLIC NAME OF TERMINAL
8	(8)	X'10'	0	ICETRCLN	"*-ICESTAT" Len. of ICE trace ID 5 info
16	(10)	BITSTRING	4	ICECID	VTAM COMMUNICATION IDENTIFIER
20	(14)	ADDRESS	4	ICEAPCHN	ADDR OF NEXT LOGGED ON ICE
24	(18)	ADDRESS	4	ICEALCHN	ADDR OF NEXT ALLOCATED ICE
28	(1C)	BITSTRING	1	ICESUSFL	ICE SUSPEND FLAG
29	(1D)	BITSTRING	1	ICEFRZRC	ICE FREEZE REASON CODE
29	(1D)	X'1'	0	ICEFRZAB	"1" ACTIVE BUFFER FOUND
29	(1D)	X'2'	0	ICEFRZNL	"2" NOT ON LOGON CHAIN
29	(1D)	X'3'	0	ICEFRZCR	"3" CRITICAL ERROR
30	(1E)	BITSTRING	2		RESERVED
32	(20)	ADDRESS	2	ICEINLM	INBOUND QUEUE LIMIT
34	(22)	ADDRESS	2	ICEINCT	INBOUND QUEUE COUNTER

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
36	(24)	BITSTRING	1	ICEACPTN	COMPACTION TABLE NUMBER ACTIVE
37	(25)	BITSTRING	1	ICERCPTN	COMPACTION TABLE LAST REQUESTED
38	(26)	BITSTRING	1	ICEXRFBK	EXCEPTION RESPONSE FEEDBACK BITS
39	(27)	BITSTRING	1	ICE#MSTR	NUMBER OF MASTERS
40	(28)	ADDRESS	4	ICEINHD	INBOUND QUEUE HEAD BUFFER PTR
44	(2C)	ADDRESS	4	ICEINTL	INBOUND QUEUE TAIL BUFFER PTR
48	(30)	ADDRESS	2	ICEOUTLM	OUTBOUND QUEUE LIMIT
50	(32)	ADDRESS	2	ICEOUTCT	OUTBOUND QUEUE COUNTER
52	(34)	ADDRESS	4	ICEOUTBF	OUTBOUND OUTSTANDING BUFFER PTR
56	(38)	ADDRESS	4	ICEOUTHD	OUTBOUND QUEUE HEAD BUFFER PTR
60	(3C)	ADDRESS	4	ICEOUTTL	OUTBOUND QUEUE TAIL BUFFER PTR
64	(40)	ADDRESS	4	ICEADCT	ADDR OF ASSOCIATED LOGON DCT
68	(44)	ADDRESS	4	ICELDCT	ADDR OF ASSOCIATED LINE DCT
72	(48)	ADDRESS	4	ICERDCT	ADDR OF ASSOCIATED REMOTE DCT (RAT addr during autologon)
76	(4C)	ADDRESS	4	ICESDCT	ADDR OF FIRST SUSPND RJE DCT ADDR OF NEXT TO POST NJE DCT
80	(50)	ADDRESS	4	ICEBUFAD	ADDR OF CURRENLY SCHED BUFFER
84	(54)	ADDRESS	4	ICECPT	SESSION COMPACTION TABLE ADDR
88	(58)	ADDRESS	4	ICEDCPT	SESSION DECOMPACTION TABLE ADDR
92	(5C)	ADDRESS	4	ICEATE	ADDR OF SESS PARTNRS APT ENTRY
96	(60)	BITSTRING	4	ICEWTIME	SESSION ALLOC WAIT TIME STAMP
100	(64)	ADDRESS	4	ICECNTRS (0)	SESSION STATISTICS COUNTERS
100	(64)	ADDRESS	4	ICETOTAL	SESSION TOTAL SEND/REC COUNT
104	(68)	ADDRESS	4	ICEXRESP	SESSION EXECPTION RESP COUNT
108	(6C)	ADDRESS	4	ICELUSTA	SESSION LOG UNIT STATUS COUNT
112	(70)	ADDRESS	4	ICEBDREJ	SESSION BID REJECTED COUNT
116	(74)	ADDRESS	4	ICETEMP	SESSION TEMPORARY ERROR COUNT
120	(78)	BITSTRING	1	ICEFLGS2	SESSION STATUS FLAGS
121	(79)	BITSTRING	1	ICENJEF1	NJE FLAG BYTE1-SESS START FLAG
122	(7A)	BITSTRING	1	ICENJEF2	NJE FLAG BYTE2-SESS SHTDWN FLAG
123	(7B)	BITSTRING	1	ICEFLGS3	ADDITIONAL SESSION STATUS
124	(7C)	BITSTRING	40	ICEBAREA (0)	BIND/NSP DATA AREA
124	(7C)	BITSTRING	36	ICEBIND	SESSION BIND IMAGE
160	(A0)	BITSTRING	4		Additional space for NSP
164	(A4)	ADDRESS	4	ICELOST	Chain of frozen ICEs
168	(A8)	DBL WORD	8	ICEXTWRK (0)	VTAM EXIT ROUTINE WORK AREA
168	(A8)	SIGNED	4	ICEXTWCD (0)	VTAM EXIT ROUT ACTION CODE WORD
168	(A8)	BITSTRING	3		RESERVED
171	(AB)	BITSTRING	1	ICEXTCOD	VTAM EXIT ROUTINE ACTION CODE
172	(AC)	ADDRESS	4	ICEXTCHN	VTAM EXIT ROUTINE ICE CHAIN
176	(B0)	CHARACTER	8	ICELMODE	VTAM LOGMODE
184	(B8)	DBL WORD	8	ICECLR (0)	End of area to be cleared when ICE is initialized

Comment

ICE Trace area
This trace area is updated regularly with activity related to this ICE. ICETEA is the address of the current (last used) trace area. The trace wraps when it reaches the end.

End of Comment

184	(B8)	X'C'	0	ICETNUM	"12" Number of entries in trace
184	(B8)	ADDRESS	4	ICETEA	Addr of current trace entry
188	(BC)	SIGNED	4		Reserved
192	(C0)	DBL WORD	8	ICETTIME	Time of last trace
200	(C8)	DBL WORD	8	ICET1ST (0)	First trace entry
200	(C8)	BITSTRING	0	(0)	Actual trace entries
848	(350)	BITSTRING	1	ICETEND (0)	End of ICE trace table
848	(350)	DBL WORD	8	(0)	Double word align ICE
848	(350)	X'350'	0	ICESIZE	"*-ICE" LENGTH OF ICE DSECT

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
				Comment	
				ICESTAT	
				End of Comment	
		1...	....	ICEDRAIN	"B'10000000'" ICE DRAIN REQ PENDING
		.1..	....	ICEALLOC	"B'01000000'" ICE ALLOCATED INDICATOR
		..1.	....	ICETIMER	"B'00100000'" ICE AWAITING TIMER INTRPT
		...1	....	ICEHOLD	"B'00010000'" ICE TEMPORARY HOLD STATUS
		....	1...	ICERTRPD	"B'00001000'" ICE AWAITING RTR STATUS
		....	.1..	ICERCVSP	"B'00000100'" ICE RECEIVE CS STATUS
		....	..1.	ICEABORT	"B'00000010'" ICE ABORT INDICATOR
		....	...1	ICECLOSE	"B'00000001'" ICE CLOSE INDICATOR
		1111	1111	ICEAVAIL	"B'11111111'" ICE AVAILABLE INDICATOR
				Comment	
				ICEFLAGS	
				End of Comment	
		1...	....	ICEINBND	"B'10000000'" SESSION INBOUND ALLOCATED HDX-FF
		.1..	....	ICEOUTBD	"B'01000000'" SESSION OUTBOUND ALLOCATED HDX-FF
		..1.	....	ICEREVFL	"B'00100000'" SESSION REVERSED DIRECTION HDX-FF
		...1	....	ICEINBRK	"B'00010000'" SESSION IN BRACKET STATE
		....	1...	ICEBBPND	"B'00001000'" SESSION BB PENDING STATE
		....	.1..	ICEEBPND	"B'00000100'" SESSION EB PENDING STATE
		....	..1.	ICECHDIR	"B'00000010'" SESSION CD PENDING STATE
		....	...1	ICECNECT	"B'00000001'" SESSION IS CONNECTED (OPNDST)
		...1	11..	ICEBRCKT	"B'00011100'" BRACKET STATUS INDICATOR ICEFLGS2
		1...	....	ICEFREEZ	"B'10000000'" ICE FREEZE INDICATOR
		.1..	....	ICEBDS	"B'01000000'" BEGIN DESTINATION SEL. RCVD
		..1.	....	ICEEDS	"B'00100000'" END DESTINATION SEL. RECVD
		...1	....	ICESTATI	"B'00010000'" STATE ERROR DETECTED
		....	1...	ICE1STLU	"B'00001000'" FIRST SESSION FOR SMF
		....	.1..	ICESIGNL	"B'00000100'" DATAFLOW INRPT PENDING
		....	..1.	ICEOUTBK	"B'00000010'" DF INRPT OUTBD FOR OUTBD
		....	...1	ICEBREAK	"B'00000001'" DATAFLOW BREAK PENDING
				Comment	
				ICERCVST/ICESNDST	
				End of Comment	
		1111	....	ICEDSTRM	"B'11110000'" STATE MASK
		....	....	ICERESUM	"B'00000000'" RESUME SUSPENDED DATA SET
		...1	....	ICENMEND	"B'00010000'" NORMAL END OF DATA SET
		..1.	....	ICEBEGIN	"B'00100000'" BEGINNING OF DATA SET
		..11	....	ICEODS	"B'00110000'" BEGIN/END OF DATA SET
		.1..	....	ICESPEND	"B'01000000'" SUSPEND DATA SET
		.1.1	....	ICEABEND	"B'01010000'" ABORT DATA SET (NO RESUME)
		.11.	....	ICECONT	"B'01100000'" CONTINUE DESTINATION
		.111	....	ICESTRS1	"B'01110000'" RESERVED
		1...	....	ICESTRS2	"B'10000000'" RESERVED
		1..1	....	ICESTRS3	"B'10010000'" RESERVED
		1.1.	....	ICESTRS4	"B'10100000'" RESERVED
		1.11	....	ICESTRS5	"B'10110000'" RESERVED
		11..	....	ICESTRS6	"B'11000000'" RESERVED
		11.1	....	ICESTRS7	"B'11010000'" RESERVED
		111.	....	ICENOFMH	"B'11100000'" DATAFLOW HAS NO FMH PENDING
		1111	....	ICEINSTR	"B'11110000'" DATAFLOW NO FMH PEND
		....	1...	ICEINCHN	"B'00001000'" DATAFLOW IN CHAIN STATE
		....	.1..	ICEOCPND	"B'00000100'" DATAFLOW EOC PEND STATE
		....	..1.	ICECNCEL	"B'00000010'" DATAFLOW CHAIN CANCELED

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
		1		ICEWTRSP	"B'00000001'" DATAFLOW WAITING FOR RESPONSE
				Comment	
ICENJEF1					
				End of Comment	
		1...		ICENJE	"B'10000000'" ICE BEING USED BY NJE SESSION
		.1..		ICEPRIME	"B'01000000'" ICE REPRESENTS PRIMARY NJE APPL
		.... 1...		ICEFMHR4	"B'00001000'" NJE FMH (TYPE 4) RECEIVED
		.... .1..		ICEFMHRV	"B'00000100'" ALL NJE HDRS (INCLUDING TYPE 3 IF REQ'D) RECEIVED
		.... ..1.		ICEFMHS4	"B'00000010'" NJE FM HDR 4 SUCCESSFULLY SENT (+RSP TO HDR RECEIVED)
		1		ICEFMHST	"B'00000001'" ALL NJE HDRS (INCLUDING TYPE 3 IF REQ'D) SUCCESSFULLY SENT
				Comment	
ICENJEF2					
				End of Comment	
		1...		ICEQUIET	"B'10000000'" ORDERLY SHUTDOWN IN PROGRESS
		.1..		ICEUNBD	"B'01000000'" UNBIND RECEIVED FROM PLU
		..1.		ICERSHUT	"B'00100000'" REQUEST SHUTDOWN CONTROL RCVD
		...1		ICETERMS	"B'00010000'" TERMSESS ISSUED
		.... 1...		ICETSC	"B'00001000'" TERMSESS COMPLETE
		.... .1..		ICERCON	"B'00000100'" ICE ALLOCATED TO RCP
		.... ..1.		ICERSCN	"B'00000010'" RESCAN LINES FOR PASSWORD
				Comment	
ICEFLGS3					
				End of Comment	
		1...		ICE3SIMI	"B'10000000'" SIMLOGON ISSUED
		.1..		ICE3SIMA	"B'01000000'" SIMLOGON ACCEPTED
		..1.		ICE3SIMC	"B'00100000'" SIMLOGON COMPLETE
		...1		ICE3LOGX	"B'00010000'" LOGON EXIT18 INVOKED
		.... 1...		ICE3RATA	"B'00001000'" ICERDCT FIELD CONTAINS A RAT ADDRESS
		.... .1..		ICE3WINC	"B'00000100'" Wait for inbound buffer count to go to zero
				Comment	
ICEADCT/ICESDCT (SUSPEND FLAGS)					
				End of Comment	
		1...		ICESIMPL	"B'10000000'" IMPLIED SUSPEND WITHOUT FM HEADER
		.1..		ICESUSPD	"B'01000000'" SUSPEND IN PROGRESS. $WAIT NEEDED
				Comment	
ICEXRFBK					
				End of Comment	
		1...		ICEXRDNA	"B'10000000'" DEST NOT ACCEPTING FURTHER DATA
		.1..		ICEXRCPY	"B'01000000'" DEST NOT HANDLING MULTIPLE COPIES
		..1.		ICENSXIT	"B'00100000'" NSXIT SCHEDULED FLAG
		...1		ICEQUIES	"B'00010000'" QUIESCE THEN SHUTDOWN FLAG
		.... 1...		ICERSTSR	"B'00001000'" RESETSR CS MODE RPL ISSUED

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	ICETNTRY	, ICE trace entry DSECT
0	(0)	SIGNED	2	ICETTYPE (0)	Trace identifier
0	(0)	BITSTRING	1	ICETID1	Trace identifier 1
0	(0)	X'1'	0	ICETBUF	"1" Buffer end proc
0	(0)	X'2'	0	ICETICE	"2" ICE exit processing
0	(0)	X'3'	0	ICETPEND	"3" TPEND exit processing
0	(0)	X'4'	0	ICETSRMT	"4" Start Remote
0	(0)	X'5'	0	ICETERPL	"5" Execute RPL
0	(0)	X'6'	0	ICETFBUF	"6" Buffer free
0	(0)	X'7'	0	ICETSSAL	"7" Autolog SAF completion
1	(1)	BITSTRING	1	ICETID2	Trace identifier 2 (Meaning based on id 1)
1	(1)	X'2'	0	ICETCLC1	"*-ICETNTRY" Length for compare
2	(2)	SIGNED	2	ICETSEQ	Trace sequence number
4	(4)	BITSTRING	1	ICETREST (0)	Used to skip SEQ in CLC

Comment

```
-------------------------------------------------------------
    ICE status fields
-------------------------------------------------------------
```

End of Comment

4	(4)	BITSTRING	1	ICETSTAT	ICESTAT
5	(5)	BITSTRING	1	ICETFLGS	ICEFLAGS
6	(6)	BITSTRING	1	ICETRCTS	ICERCVST
7	(7)	BITSTRING	1	ICETSNDS	ICESNDST
8	(8)	BITSTRING	1	ICETINDX	ICEINDEX
9	(9)	BITSTRING	2	ICETCID	ICECID+2
11	(B)	BITSTRING	1	ICETSUSF	ICESUSFL
12	(C)	BITSTRING	1	ICETFLG2	ICEFLGS2
13	(D)	BITSTRING	1	ICETFLG3	ICEFLGS3
14	(E)	BITSTRING	1	ICETNJF1	ICENJEF1
15	(F)	BITSTRING	1	ICETNJF2	ICENJEF2

Comment

```
-------------------------------------------------------------
    RPL status fields (if no RPL then all fields are
    X'FF')
-------------------------------------------------------------
```

End of Comment

16	(10)	ADDRESS	4	ICETRPLA	RPL address
20	(14)	BITSTRING	1	ICETRREQ	RPLREQ
21	(15)	BITSTRING	1	ICETSRTY	RPLSRTYP
22	(16)	BITSTRING	2	ICETSEQN	RPLSEQNO
24	(18)	BITSTRING	1	ICETVFL2	RPLVTFL2
25	(19)	BITSTRING	3	ICETCNTR	RPLCNTRL
28	(1C)	BITSTRING	1	ICETCHN	RPLCHN
29	(1D)	BITSTRING	1	ICETRH3	RPLRH3
30	(1E)	BITSTRING	1	ICETRTNC	RPLRTNCD
31	(1F)	BITSTRING	1	ICETFDB2	RPLFDB2
32	(20)	BITSTRING	4	ICETFDBK	RPLFDBK2
36	(24)	BITSTRING	1	ICETRWHH	RPLWHRCH
37	(25)	BITSTRING	1	ICETRWH2	RPLWHRC2

Comment

```
-------------------------------------------------------------
    LOGON DCT fields (if no DCT then all fields are
    X'FF')
-------------------------------------------------------------
```

End of Comment

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
38	(26)	BITSTRING	1	ICETASTA	Logon DCTSTAT
39	(27)	BITSTRING	1	ICETAFLS	Logon DCTFLAGS
40	(28)	BITSTRING	1	ICETAFL2	Logon DCTFLAG2
41	(29)	BITSTRING	1	ICETAMST	Logon MDCTSTAT

Comment

LINE DCT fields (if no DCT then all fields are X'FF')

End of Comment

42	(2A)	BITSTRING	1	ICETLSTA	Line DCTSTAT
43	(2B)	BITSTRING	1	ICETLFLS	Line DCTFLAGS
44	(2C)	BITSTRING	1	ICETLFL2	Line DCTFLAG2
45	(2D)	BITSTRING	1	ICETLMST	Line MDCTSTAT

Comment

DEVICE DCT fields (if no device DCT - ICERDCT - then all fields are X'FF')

End of Comment

46	(2E)	BITSTRING	1	ICETRSTA	Device DCTSTAT
47	(2F)	BITSTRING	1	ICETRFLS	Device DCTFLAGS
48	(30)	BITSTRING	1	ICETRFL2	Device DCTFLAG2
49	(31)	BITSTRING	1	ICETRDID	Device DCTDEVID

Comment

ICETCNT is a count of the number of events which have occured which would have created trace entries which were identical except for the sequence number. The trace entry contains the most recent sequence number.

End of Comment

52	(34)	BITSTRING	1		Reserved for future
52	(34)	X'31'	0	ICETCLC2	"*-ICETREST" Length for compare
53	(35)	BITSTRING	1	ICETCNT	Count of duplicate traces
53	(35)	X'36'	0	ICETEALN	"*-ICETNTRY" Length of a single entry

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	ICE	Re-establish ICE DSECT

$ICE Cross Reference

Name	Hex Offset	Hex Value
ICE	0	
ICE	0	
ICE#MSTR	27	
ICEABEND	350	50
ICEABORT	350	2
ICEACPTN	24	0
ICEADCT	40	
ICEALCHN	18	
ICEALLOC	350	40
ICEAPCHN	14	
ICEATE	5C	
ICEAVAIL	350	FF
ICEBAREA	7C	
ICEBBPND	350	8
ICEBDREJ	70	
ICEBDS	350	40
ICEBEGIN	350	20
ICEBIND	7C	0
ICEBRCKT	350	1C
ICEBREAK	350	1
ICEBUFAD	50	
ICECHDIR	350	2
ICECID	10	0
ICECLOSE	350	1
ICECLR	B8	
ICECNCEL	350	2
ICECNECT	350	1
ICECNTRS	64	
ICECONT	350	60
ICECPT	54	
ICEDCPT	58	
ICEDRAIN	350	80
ICEDSTRM	350	F0
ICEEBPND	350	4
ICEEDS	350	20
ICEFLAGS	1	0
ICEFLGS2	78	0
ICEFLGS3	7B	0
ICEFMHRV	350	4
ICEFMHR4	350	8
ICEFMHST	350	1
ICEFMHS4	350	2
ICEFREEZ	350	80
ICEFRZAB	1D	1
ICEFRZCR	1D	3
ICEFRZNL	1D	2
ICEFRZRC	1D	
ICEHOLD	350	10
ICEINBND	350	80
ICEINBRK	350	10
ICEINCHN	350	8
ICEINCT	22	
ICEINDEX	4	
ICEINHD	28	
ICEINLM	20	
ICEINSTR	350	F0
ICEINTL	2C	
ICELDCT	44	
ICELMODE	B0	40404040
ICELOST	A4	
ICELUSTA	6C	
ICENJE	350	80
ICENJEF1	79	0
ICENJEF2	7A	0
ICENMEND	350	10
ICENOFMH	350	E0
ICENSXIT	350	20
ICEOCPND	350	4
ICEODS	350	30
ICEOUTBD	350	40
ICEOUTBF	34	
ICEOUTBK	350	2
ICEOUTCT	32	
ICEOUTHD	38	
ICEOUTLM	30	
ICEOUTTL	3C	
ICEPRIME	350	40
ICEQUIES	350	10
ICEQUIET	350	80
ICERCON	350	4
ICERCPTN	25	0
ICERCVSP	350	4
ICERCVST	2	0
ICERDCT	48	
ICERESUM	350	0
ICEREVFL	350	20
ICERSCN	350	2
ICERSHUT	350	20
ICERSPCT	5	
ICERSTSR	350	8
ICERTRPD	350	8
ICERULEN	6	
ICESDCT	4C	
ICESIGNL	350	4
ICESIMPL	350	80
ICESIZE	350	350
ICESNDST	3	0
ICESPEND	350	40
ICESTAT	0	0
ICESTATI	350	10
ICESTRS1	350	70
ICESTRS2	350	80
ICESTRS3	350	90
ICESTRS4	350	A0
ICESTRS5	350	B0
ICESTRS6	350	C0
ICESTRS7	350	D0
ICESUSFL	1C	
ICESUSPD	350	40
ICESYMB	8	40404040
ICETAFLS	27	0
ICETAFL2	28	0
ICETAMST	29	0
ICETASTA	26	0
ICETBUF	0	1
ICETCHN	1C	0
ICETCID	9	0
ICETCLC1	1	2
ICETCLC2	34	31
ICETCNT	35	0
ICETCNTR	19	0
ICETEA	B8	
ICETEALN	35	36
ICETEMP	74	
ICETEND	350	
ICETERMS	350	10

Name	Hex Offset	Hex Value
ICETERPL	0	5
ICETFBUF	0	6
ICETFDBK	20	0
ICETFDB2	1F	0
ICETFLGS	5	0
ICETFLG2	C	0
ICETFLG3	D	0
ICETICE	0	2
ICETID1	0	
ICETID2	1	
ICETIMER	350	20
ICETINDX	8	0
ICETLFLS	2B	0
ICETLFL2	2C	0
ICETLMST	2D	0
ICETLSTA	2A	0
ICETNJF1	E	0
ICETNJF2	F	0
ICETNTRY	0	
ICETNUM	B8	C
ICETOTAL	64	
ICETPEND	0	3
ICETRCLN	8	10
ICETRCTS	6	0
ICETRDID	31	0
ICETREST	4	
ICETRFLS	2F	0
ICETRFL2	30	0
ICETRH3	1D	0
ICETRPLA	10	
ICETRREQ	14	0
ICETRSTA	2E	0
ICETRTNC	1E	0
ICETRWHH	24	0
ICETRWH2	25	0
ICETSC	350	8
ICETSEQ	2	
ICETSEQN	16	0
ICETSNDS	7	0
ICETSRMT	0	4
ICETSRTY	15	0
ICETSSAL	0	7
ICETSTAT	4	0
ICETSUSF	B	0
ICETTIME	C0	
ICETTYPE	0	
ICETVFL2	18	0
ICET1ST	C8	
ICEUNBD	350	40
ICEWTIME	60	0
ICEWTRSP	350	1
ICEXRCPY	350	40
ICEXRDNA	350	80
ICEXRESP	68	
ICEXRFBK	26	0
ICEXTCHN	AC	
ICEXTCOD	AB	0
ICEXTWCD	A8	
ICEXTWRK	A8	
ICE1STLU	350	8
ICE3LOGX	350	10
ICE3RATA	350	8
ICE3SIMA	350	40
ICE3SIMC	350	20
ICE3SIMI	350	80
ICE3WINC	350	4

$INIWARM Heading Information

Common Name: HASPIR* to HASPWARM Communications block.
Macro ID: $INIWARM
DSECT Name: INW
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: INIW
Offset: INWID
Length: 4
Storage Attributes: Subpool: 0
Key: 1
Residency: Real and virtual anywhere
Size: See INWSIZE
Created by: HASPIRA
Pointed to by: $INIWARM field of the $HCT data area
Serialization: None necessary. HASPIR* modules are only modules updating the area.
Function: There is data and circumstances uncovered by initialization modules which need to be known by warmstart. The warmstart PCE is created late in initialization and thus is unavailable for storing the data. The initialization PCE is removed after initialization completes and thus is unavailable to warmstart. This block fills the gap.

$INIWARM Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	INW	,
0	(0)	CHARACTER	4	INWID	Eye catcher
4	(4)	BITSTRING	200	INWQSE	Qse for this member that existed before initialization began
204	(CC)	BITSTRING	1	INWFLAG1	Flags
		.1..		INW1BRTD	"B'01000000'" BERT $DISTERR issued
205	(CD)	ADDRESS	4	INDOM493	DOM id for HASP493 issued from initialization
212	(D4)	ADDRESS	4	INWBRTMP	BERT usage map
212	(D4)	X'D8'	0	INWSIZE	"*-INW" Length of INIWARM

$IOT Programming Interface information

Programming Interface information

$IOT

The following field is **NOT** programming interface information:

- IOTTGADR

End of Programming Interface information

$IOT Heading Information

Common Name: JES2 Input/Output Table
Macro ID: $IOT
DSECT Name: IOT
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: IOT
Offset: IOTID-IOT
Length: L'IOTID
Storage Attributes: Subpool: 0 for Main Task, 230 for User Environment, 231 for Spin IOT.
Key: 1 for Main Task, 5 for User Environment, 1 for Spin IOT.
Residency: The $IOT is a JES2 spool resident control block. Real and virtual storage can be anywhere (above or below 16M).
Size: See IOTLENG
Created by: Primary Allocation IOT - Most commonly created at reader time (HASPRDR), but also created dynamically when spin data sets are allocated.
Secondary Allocation IOT - $TRACK routine in HASPTRAK and $STRAK routine in HASCSRIC as are needed.
PDDB only IOT - HASPNET, HASPRDR, HASCDSAL or HASCJBST.
Pointed to by: CHKIOTTC field of the $CHK data area (addr on spool)
GCBIOTTR field of the $GCB data area (addr on spool)
CCTSPIOT field of the $HCCT data area (LIFO spin Q)
CCTSPIOT field of the $HCCT data area (FIFO spin Q)
$NEWSIOT field of the $HCT data area (addr on spool)
JCTSPIOT field of the $JCT data area (addr on spool)
JCTIOT field of the $JCT data area (addr on spool)
JIBIOT field of the $JIB data area
JIBIOTTR field of the $JIB data area (addr on spool)
JIBFIOTR field of the $JIB data area (addr on spool)
JNEWIOTT field of the $JNEW data area (addr on spool)
JOEIOTTR field of the $JOE data area (addr on spool)
JQETRAK field of the $JQE data area (addr on spool)
MTLMTTR field of the $MTL data area (addr on spool)
PDBPLIOT field of the $PDDB data area
PDBSPTTR field of the $PDDB data area (addr on spool)
PSOIOT field of the $PSO data area (addr on spool)
PSOANCHR field of the $PSO data area (addr on spool)
SDBPIOT field of the $SDB data area
SDBAIOT field of the $SDB data area
SJBIOT field of the $SJB data area
SJBSPIOT field of the $SJB data area
SJXBSIOT field of the $SJXB data area
SJXRIOT field of the $SJXB data area
TABAIOT field of the $TAB data area
Various fields in the processor work areas and parameter lists.

Serialization: While a job is in execution, the IOT resides in the user address space, so that no other JES2 PCE will update the IOT. At other times, various types of serialization are used for the different types of IOTs. ENQ/DEQ logic is used for Secondary Allocation IOTs. Compare-and-swap logic is used for Spin IOTs.

Function: The IOT is a spool resident control block that describes the spool space used by a job (all the space allocated to data sets, control blocks, etc.). It also holds the information on the job's data sets.

$IOT Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	IOT	HASP INPUT/OUTPUT TABLE DSECT

Comment

```
-----------------------------------------------------------
    The following fields are defined over
    the buffer prefix in order to ensure that they
    are never written to SPOOL.
-----------------------------------------------------------
    BUFMEMD1, BUFMEMW1, BUFMEMW2, BUFMEMW3, and BUFMEMW5
    are used by HAM when writing out IOTs for SYSOUT data
    sets. They cannot be used in the IOT if it could be
    written by HASCHAM.
```

End of Comment

0	(0)	X'48'	0	IOTJOE	"BUFMEMW3-BFPDSECT+IOT,4" Offset of JOE for SPIN IOT while in HASPSPIN
0	(0)	X'4C'	0	IOTSJB	"BUFMEMW4-BFPDSECT+IOT,4" Addr of SJB for executing JOB
0	(0)	X'50'	0	IOTFLAG4	"BUFMFLG1-BFPDSECT+IOT,1" Fourth flag byte (memory resident only)
0	(0)	X'80'	0	IOT4CKPT	"BUFM1CKP" Rewrite this IOT
0	(0)	X'40'	0	IOT4CSDB	"BUFM1CK2" Write IOT in HAM (under the SDB)
0	(0)	X'54'	0	IOTCSASP	"BUFMEMW5-BFPDSECT+IOT,4" CSA spin IOT chain pointer
0	(0)	X'58'	0	IOTJCT	"BUFMEMW6-BFPDSECT+IOT,4" Storage address of JCT (referenced only in allocation IOTs)
0	(0)	X'5C'	0	IOTIOT	"BUFMEMW7-BFPDSECT+IOT,4" Storage address of next IOT

Comment

```
-----------------------------------------------------------
    End of buffer prefix fields
-----------------------------------------------------------
```

End of Comment

0	(0)	BITSTRING	1	(0)	BUFFER CONTROL INFORMATION
0	(0)	X'68'	0	IOTSTART	"*" START OF DATA WRITTEN TO SPOOL

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
				Comment	

```
-----------------------------------------------------------
   The following sub-section, generated by the SPID
   macro, must reside immediately after the I/O control
   data in every spool buffer.
   The following fields are defined:
   Eyecatcher - 4 bytes
   Job name - 8 bytes
   Job number - 4 bytes
   Job key - 4 bytes
   Dataset key - 4 bytes (or reserved if not applicable)
-----------------------------------------------------------
```

End of Comment

104	(68)	CHARACTER	4	IOTID	Eyecatcher
108	(6C)	CHARACTER	8	IOTJNAME	Job name
116	(74)	SIGNED	4	IOTJBNUM	Job number
120	(78)	SIGNED	4	IOTJBKEY	Job key
124	(7C)	BITSTRING	4		Reserved
124	(7C)	X'18'	0	IOTSPLNG	"*-IOTID"
128	(80)	ADDRESS	2	IOTLENG	LENGTH OF IOT INCLUDING PREFIX
130	(82)	BITSTRING	1	IOTFLAG1	FIRST FLAG BYTE
131	(83)	BITSTRING	1	IOTFLAG2	SECOND FLAG BYTE
132	(84)	BITSTRING	4	IOTTRACK	TRACK ADDRESS OF THIS IOT
136	(88)	BITSTRING	4	IOTIOTTR	TRACK ADDRESS OF NEXT IOT

Comment

```
-----------------------------------------------------------
      IOTMTHER is the allocation IOT associated with the
      PDDBs in this IOT. It is the job allocation IOT in
      non-spin PDDB-only IOTs, and the spin 'mother' IOT
      in spin-daughter PDDB IOTs. It is zero in the job
      (primary) allocation IOT and spin mother (primary)
      allocation IOTs and in secondary allocation IOTs.
      IOTMTHER is not normally set until JOEs are built
      that point, via JOTIOTTR, to the IOT.
-----------------------------------------------------------
```

End of Comment

140	(8C)	SIGNED	4	IOTMTHER	MTTR of mother alloc IOT
144	(90)	SIGNED	4	IOTMULTR	MTTR of Multiple Output Charact- eristic (MOC) spool chain
148	(94)	BITSTRING	4	IOTTGATR	TRACK ADDRESS OF NEXT SECONDARY ALLOCATION IOT
152	(98)	SIGNED	4	IOTTGADR	STORAGE OFFSET OF NXT FREE TGAE
156	(9C)	SIGNED	4	IOTJQOFF	JQE OFFSET
160	(A0)	BITSTRING	1	IOTFLAG3	Third flag byte

Comment

IOTFLAG3

End of Comment

		1...		IOT3NUTK	"B'10000000'" New track obtained after a close failure
		.1..		IOT3MOCF	"B'01000000'" Mother instance counting has failed
161	(A1)	BITSTRING	3		Reserved for future use
164	(A4)	SIGNED	4	(2)	Reserved for future use
172	(AC)	SIGNED	4	IOTPDDBP	OFFSET BEYOND LAST PDDB IN IOT
176	(B0)	SIGNED	4	IOTPDDB	OFFSET TO FIRST PDDB IN IOT
180	(B4)	SIGNED	4	IOTDSCT	Offset of DSCT in IOT
184	(B8)	BITSTRING	4	IOTCKRC	MTTR OF CHK SPL REC - SPIN IOTS
188	(BC)	SIGNED	4	IOTMUCTR	Multiple Output Characteristics (MOC) Counter
192	(C0)	SIGNED	4	IOTCKTKN	Checkpoint token for spin data sets

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
196	(C4)	CHARACTER	8	IOTUSER	Userid which allocated datasets in this IOT (Only set by spool reload)
208	(D0)	DBL WORD	8		Reserved for future use

Comment

ALLOCATION IOT (BOTH PRIMARY AND SECONDARY)

End of Comment

216	(D8)	DBL WORD	8	IOTMSTAB (0)	MASTER TAB (DWORD ALIGNED FOR CDS ON TABMTTR)
232	(E8)	DBL WORD	8	(0)	ALIGN FOLLOWING DOUBLEWORD
232	(E8)	SIGNED	4	IOTCYMXM	MAX TTR THIS TRACK GROUP
236	(EC)	SIGNED	4	IOTCELL	MTTR OF NEXT AVAILABLE TRAKCELL
236	(EC)	X'E8'	0	IOTRCPBA	"IOTCYMXM,*-IOTCYMXM" BACK-UP AREA FOR RCPXTTR FOR MAS SPOOL MESSAGES IN RTAM
240	(F0)	BITSTRING	32	IOTSPMSK	MASK OF SPOOLS ALLOCATED ON
272	(110)	BITSTRING	32	IOTSAMSK	SPOOLS ALLOWED MASK
304	(130)	SIGNED	3	IOTFAMLY	Family ID for MOCA IOTs
307	(133)	BITSTRING	1		Reserved for future use
308	(134)	ADDRESS	4		Reserved for future use
312	(138)	DBL WORD	8		Reserved for future use
312	(138)	X'3'	0	IOTTGAEL	"3" LENGTH OF ONE TGAE
312	(138)	X'140'	0	IOTTGAE	"*" START OF TRACK GROUP ALLOCATION ENTRIES (TGAE'S)

Comment

NON-ALLOCATION IOT (PDDB IOT)

End of Comment

216	(D8)	DBL WORD	8	(2)	RESERVED FOR FUTURE USE
232	(E8)	SIGNED	4	IOTPDDB1 (0)	FIX IOT OFFSET TO LOCATION OF FIRST PDDB WITHIN A PDDB IOT

Comment

IOTFLAG1

End of Comment

.1..	IOT1UNSP	"B'01000000'" IOT IS UNSPUN
..1.	IOT1ALO2	"B'00100000'" IOT IS SECONDARY ALLOCATION IOT
...1	IOT1SPIN	"B'00010000'" IOT TYPE IS SPIN
.... 1...	IOT1ALOC	"B'00001000'" IOT IS AN ALLOCATION IOT
.... .1..	IOT1NTPR	"B'00000100'" TO BE PROC. BY SPIN/HOLD
.... ..1.	IOT1NEWS	"B'00000010'" JESNEWS IOT
....1	IOT1NEW	"B'00000001'" 2NDARY ALLOC IOT HAS BEEN BUILT

Comment

IOTFLAG2

End of Comment

1...	IOT2UNAL	"B'10000000'" IOT HAS BEEN UNALLOCATED
.1..	IOT2RUBL	"B'01000000'" IOT IS REUSABLE
..1.	IOT2RUED	"B'00100000'" IOT HAS BEEN REUSED
...1	IOT2NLPL	"B'00010000'" IOT CONTAINS ONLY NULL PLACEHOLDER PDDBS
.... 1...	IOT2NSPN	"B'00001000'" SPIN IOT WAS UNALLOCATED AS NO-SPIN
.... .1..	IOT2DSCT	"B'00000100'" DSCT contains valid info
.... ..1.	IOT2SPNB	"B'00000010'" IOT is busy in HASPSPIN
....1	IOT2SPER	"B'00000001'" I/O error incurred writing IOT

$IOT Cross Reference

Name	Hex Offset	Hex Value
IOT	0	
IOTCELL	EC	
IOTCKRC	B8	
IOTCKTKN	C0	
IOTCSASP	0	54
IOTCYMXM	E8	
IOTDSCT	B4	
IOTFAMLY	130	
IOTFLAG1	82	
IOTFLAG2	83	
IOTFLAG3	A0	
IOTFLAG4	0	50
IOTID	68	
IOTIOT	0	5C
IOTIOTTR	88	
IOTJBKEY	78	
IOTJBNUM	74	
IOTJCT	0	58
IOTJNAME	6C	
IOTJOE	0	48
IOTJQOFF	9C	
IOTLENG	80	
IOTMSTAB	D8	
IOTMTHER	8C	
IOTMUCTR	BC	
IOTMULTR	90	
IOTPDDB	B0	
IOTPDDBP	AC	
IOTPDDB1	E8	
IOTRCPBA	EC	E8
IOTSAMSK	110	
IOTSJB	0	4C
IOTSPLNG	7C	18
IOTSPMSK	F0	
IOTSTART	0	68
IOTTGADR	98	
IOTTGAE	138	140
IOTTGAEL	138	3
IOTTGATR	94	
IOTTRACK	84	
IOTUSER	C4	
IOT1ALOC	140	8
IOT1ALO2	140	20
IOT1NEW	140	1
IOT1NEWS	140	2
IOT1NTPR	140	4
IOT1SPIN	140	10
IOT1UNSP	140	40
IOT2DSCT	140	4
IOT2NLPL	140	10
IOT2NSPN	140	8
IOT2RUBL	140	40
IOT2RUED	140	20
IOT2SPER	140	1
IOT2SPNB	140	2
IOT2UNAL	140	80
IOT3MOCF	A0	40
IOT3NUTK	A0	80
IOT4CKPT	0	80
IOT4CSDB	0	40

$JCMWORK Heading Information

Common Name: JES2 Job Command PCE Work Area
Macro ID: $JCMWORK
DSECT Name: PCE ($JCMWORK is part of the PCE DSECT)
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: 'PCE '
Offset: PCEEYE-PCE
Length: 4
Storage Attributes: Subpool: See $PCE
Key: See $PCE
Residency: See $PCE
Size: See symbol JCMPCEWS for the length of this work area. The overall length of the PCE is stored in field PCELENG.
Created by: See $PCE
Pointed to by: The $JCMDPCE field of the $HCT data area
See $PCE for other pointer fields that apply to all PCE types.
Serialization: Normal PCE dispatch serialization
Function: The fields in this area are used by the JES2 Job Command Processor and by its support routines and exits. $JCMWORK maps the variable PCE work area that begins at label PCEWORK. The fields defined in $JCMWORK are actually part of the PCE DSECT, but only map PCEs with the value PCEJCMID in the second byte of field PCEID.

This PCE is not device related. Field PCEDCT is zero.

$JCMWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	PCE	, Continue PCE DSECT
240	(F0)	ADDRESS	4	JCMDSJBQ	Address of current SJB queue head
248	(F8)	DBL WORD	8	(0)	Force double-word alignment
248	(F8)	X'8'	0	JCMPCEWS	"*-PCEWORK" Length of work area

$JCT Programming Interface information

Programming Interface information

$JCT

End of Programming Interface information

$JCT Heading Information

Common Name: JES2 Job Control Table
Macro ID: $JCT
DSECT Name: JCT
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: 'JCT '
Offset: JCTID-JCT
Length: 4
Storage Attributes: Subpool: 7 in JES2 main task environment; 230 in USER or SUBTASK environments
Key: 1
Residency: The $JCT is a JES2 spool resident control block. Virtual storage can be anywhere (above or below 16M) in the JES2 main task and must be below 16M in all other environments. Real storage can be anywhere.
Size: JCTFEND-JCT is the length of the fixed portion.
The JCT is contained in a buffer of size $BUFSIZE which is a field in $HCT.
Created by: Initially created by HASPRDR or HASPNSR when a job enters the system.
In-storage versions of the control block are created by $CBIO READ VERIFY=JCT.
Pointed to by: FSAJCTAD field of the $FSACB data area
IOTJCT field of the $IOT data area
JIBJCT field of the $JIB data area
JIBJCTA field of the $JIB data area (address on spool)
JQETRAK field of the $JQE data area (address on spool)
SJBJCT field of the $SJB data area
Various fields in the processor work areas and parameter lists.
Serialization: Serialized under the JES2 TCB.
Function: The Job Control Table is the primary job oriented control block. It is created by the input service processor and written to spool. Other processors then read this control block and rewrite it to spool as needed. The control block contains two types of information: Accounting information from the accounting field of the JOB card or /*JOBPARM control card and accounting information gathered during job processing. This control block is the primary contributor to the SMF Purge record (Type 26) as well as many other SMF records.

$JCT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	JCT	JOB CONTROL TABLE DSECT

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
					Comment
					---------- The following fields are defined over the buffer prefix in order to ensure that they are never written to SPOOL. ----------
					End of Comment
0	(0)	X'50'	0	JCTFLAG5	"BUFMFLG1-BFPDSECT+JCT,1" Memory-only flag byte
0	(0)	X'80'	0	JCT5CKPT	"BUFM1CKP" Rewrite this JCT
					Comment
					---------- End of buffer prefix fields ----------
					End of Comment
0	(0)	BITSTRING	1	(0)	BUFFER CONTROL INFORMATION
0	(0)	X'68'	0	JCTSTART	"*" START OF DATA WRITTEN TO SPOOL
					Comment
					---------- The following sub-section, generated by the SPID macro, must reside immediately after the I/O control data in every spool buffer. The following fields are defined: Eyecatcher - 4 bytes Job name - 8 bytes Job number - 4 bytes Job key - 4 bytes Dataset key - 4 bytes (or reserved if not applicable) ----------
					End of Comment
104	(68)	CHARACTER	4	JCTID	Eyecatcher
108	(6C)	CHARACTER	8	JCTJNAME	Job name
116	(74)	SIGNED	4	JCTJBNUM	Job number
120	(78)	SIGNED	4	JCTJBKEY	Job key
124	(7C)	BITSTRING	4		Reserved
124	(7C)	X'18'	0	JCTSPLNG	"*-JCTID"
128	(80)	ADDRESS	2	JCTLENG	LENGTH OF JCT INCLUDING PREFIX
130	(82)	BITSTRING	1	JCTFLAG1	FLAGS 1 ---
		1...		JCT1SJOB	"X'80'" Job ran because of $S J
		.1..		JCTBURST	"X'40'" JOB OUTPUT BURST OPTION
		..1.		JCT1INTJ	"X'20'" Internally created job (Job has no subsystem datasets)
		...1		JCT1LDR	"X'10'" JOB CREATED BY LOADER DEV.
		.... 1...		JCT1RECV	"X'08'" JOB RECEIVED ON SYSOUT RCVR
		.... .1..		JCT1NUNK	"X'04'" Token is NJE unknown
		.... ..1.		JCT1UNDF	"X'02'" JCTJUSID is undefined user
		1		JCT1ODEL	"X'01'" Job offloaded DISP=DELETE
131	(83)	BITSTRING	1	JCTJTFLG	JOB TERM FLAGS (SSJTFLG1)
132	(84)	CHARACTER	8	JCTJDVT	JDVT NAME
140	(8C)	BITSTRING	4	JCTTRAK	TRACK ADDRESS OF THIS JCT
144	(90)	BITSTRING	4	JCTSPIOT	TRACK ADDRESS OF 1ST SPIN IOT
148	(94)	BITSTRING	4	JCTIOT	TRACK ADDRESS OF 1ST REGULAR IOT
152	(98)	BITSTRING	4	JCTOCTTR	TRACK ADDRESS OF OCR TABLE
156	(9C)	BITSTRING	4	JCTXTRK	TRACK ADDRESS OF 1ST XMIT TRACK
160	(A0)	BITSTRING	4	JCTXBUFO	BUFFER OFFSET IN 1ST XMIT TRACK
164	(A4)	BITSTRING	32	JCTSAMSK	SPOOLS ALLOWED MASK
196	(C4)	SIGNED	4	JCTPDDBK	PERIPHERAL DATA SET KEY

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
200	(C8)	SIGNED	4	JCTPDDBO	DS KEY FOR LAST INPUT PDDB OR 100 (X'64') IF NO SYSIN
204	(CC)	SIGNED	4	JCTCNVRC	RETURN CODE FROM JCL CONVERTER
204	(CC)	X'0'	0	JCTCOK	"0" JCL converted without err
204	(CC)	X'4'	0	JCTCJCL	"4" JCL error detected by CNV
204	(CC)	X'8'	0	JCTCIO	"8" I/O error detected by CNV
204	(CC)	X'4'	0	JCTCDUPL	"JCTCJCL" Duplicate logon executing
204	(CC)	X'C'	0	JCTCSECF	"12" Security envir. could not be established for the job
204	(CC)	X'10'	0	JCTCNWT	"16" JCL couldn't be converted The referenced JCLLIB data set not available
204	(CC)	X'24'	0	JCTCABND	"36" Unrecoverable err in CNV
204	(CC)	X'38'	0	JCTGMFAL	"56" Converter GETMAIN failed
208	(D0)	SIGNED	4	JCTUSER0	RESERVED FOR USER
212	(D4)	SIGNED	4	JCTUSER1	RESERVED FOR USER
216	(D8)	SIGNED	4	JCTUSER2	RESERVED FOR USER
220	(DC)	SIGNED	4	JCTUSER3	RESERVED FOR USER
224	(E0)	SIGNED	4	JCTUSER4	RESERVED FOR USER
228	(E4)	SIGNED	4	JCTUSER5	RESERVED FOR USER
232	(E8)	SIGNED	4	JCTUSER6	RESERVED FOR USER
236	(EC)	SIGNED	4	JCTUSER7	RESERVED FOR USER
240	(F0)	SIGNED	4	JCTUSER8	RESERVED FOR USER
244	(F4)	SIGNED	4	JCTUSER9	RESERVED FOR USER
248	(F8)	SIGNED	4	JCTUSERA	RESERVED FOR USER
252	(FC)	SIGNED	4	JCTUSERB	RESERVED FOR USER
256	(100)	SIGNED	4	JCTUSERC	RESERVED FOR USER
260	(104)	SIGNED	4	JCTUSERD	RESERVED FOR USER
264	(108)	SIGNED	4	JCTUSERE	RESERVED FOR USER
268	(10C)	SIGNED	4	JCTUSERF	RESERVED FOR USER
272	(110)	CHARACTER	2	JCTPRTY	PRIORITY OR JOB CARD 'PRTY='
274	(112)	SIGNED	2	JCTJSSTP	JOB SELECT RESTART STEP (SSRQSTEP)
276	(114)	SIGNED	2	JCTASID	ASID OF JOB
278	(116)	SIGNED	1	JCTVER	JCT version
278	(116)	X'22'	0	JCTCVER	"34" Current version
279	(117)	BITSTRING	1		Reserved for future use
280	(118)	BITSTRING	1	JCTFLAG2	FLAG BYTE
		1...		JCT2TWOJ	"B'10000000'" Two jobcards XMIT
		.1..		JCT2AVDP	"B'01000000'" DO NOT DO AUTH VERIFICATION IN JOB INITIATION, ALREADY DONE, JOB PASSED VERIFICATION CHECK
		..1.		JCT2AVF	"B'00100000'" JOB FAILED AUTH VERIFICATION IN CALL FROM JES2
		...1		JCT2AVD	"B'00010000'" AUTH VERIFICATION DONE
		.... 1...		JCT2TJOB	"B'00001000'" Job token received
		.... .1..		JCT2EXEC	"B'00000100'" Job entered execution OK
		.... ..1.		JCT2SDCR	"B'00000010'" SAF CALL FOR SYSIN CREATE NOT YET DONE FOR SYSIN DATA SETS
		1		JCT2IOT2	"B'00000001'" SYSTEM DATA SETS SPAN 2 IOTS (NOT INCLUDING MULTI-DEST COPIES)
281	(119)	BITSTRING	1	JCTFLAG3	Flag Byte
		1...		JCT3TPI	"X'80'" Transaction initiator
		.1..		JCT3BATI	"X'40'" Batch initiator
		..1.		JCT3JDSP	"X'20'" JESDS PROCESSING COMPLETED
		...1		JCT3NCF	"X'10'" Suppress notification of store-and-forward
		.... 1...		JCT3NCA	"X'08'" Suppress notification of reached ultimate dest
		.... .1..		JCT3NOTK	"X'04'" At least one D/S needs a Job Level Token
		.... ..1.		JCT3FORM	"X'02'" FORMS specified in JCL
		1		JCT3RJCS	"X'01'" Job card processed locally
282	(11A)	BITSTRING	1	JCTJSFLG	JOB SELECT FLAGS (SSRQFLG1)
283	(11B)	BITSTRING	1	JCTSMFLG	SMF FLAGS
		11.1 1...		JCTSMFL0	"B'11011000'" Reserved
		..1.		JCTNOUSO	"B'00100000'" Do not take IEFUSO exit
		.... .1..		JCTNOTY6	"B'00000100'" Do not produce Type 6 SMF record
		.... ..1.		JCTNOUJP	"B'00000010'" Do not take IEFUJP exit
		1		JCTNOT26	"B'00000001'" Do not produce Type 26 SMF record

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
					Comment
					KEEP THE FIELDS JCTJOBFL AND JCTJBOPT TOGETHER FOR SMF
					End of Comment
284	(11C)	BITSTRING	1	JCTJOBFL	HASP Job flags (same as CATJOBFL)
		1...		JCTBATCH	"B'10000000'" Batch job
		.1..		JCTTSUJB	"B'01000000'" Time sharing user
		..1.		JCTSTCJB	"B'00100000'" System task
284	(11C)	X'E0'	0	JCTVALJB	"JCTBATCH+JCTTSUJB+JCTSTCJB" valid types
		...1		JCTNOJNL	"B'00010000'" No journal option
		.... 1...		JCTNOUPT	"B'00001000'" No output option
		.... .1..		JCTTSCAN	"B'00000100'" TYPRUN=SCAN was specified
		.... ..1.		JCTTCOPY	"B'00000010'" TYPRUN=COPY was specified
		1		JCTRSTRT	"B'00000001'" Allow warmstart to re-queue to XEQ
285	(11D)	BITSTRING	1	JCTJBOPT	HASP Job options (same as CATJBOPT)
		1...		JCTPRICD	"B'10000000'" PRIORITY card or JOB card 'PRTY=' present (not used in CATJBOPT field)
		.1..		JCTSETUP	"B'01000000'" SETUP card(S) present (not used in CATJOBOPT field)
		..1.		JCTTHOLD	"B'00100000'" TYPRUN=HOLD
		...1		JCTNOLOG	"B'00010000'" NO job log option
		.... 1...		JCTXBMII	"B'00001000'" XBM II job
		.... .1..		JCTINRDR	"B'00000100'" Job was entered on INTRDR (not used in CATJBOPT field
		.... ..1.		JCTRERUN	"B'00000010'" Job was re-run (not used in CATJBOPT field)
		1		JCTQHELD	"B'00000001'" Not used in JCTJBOPT, indicates class queue is held in CATJBOPT
286	(11E)	BITSTRING	2		Reserved
288	(120)	SIGNED	4	(0)	
288	(120)	CHARACTER	8	JCTJOBID	HASP ASSIGNED JOB IDENTIFICATION
					Comment
					Keep next 24 bytes intact for SMF - JCTPNAME thru JCTPRIO
					End of Comment
296	(128)	CHARACTER	20	JCTPNAME	PROGRAMMER'S NAME FROM JOB CARD
316	(13C)	CHARACTER	1	JCTMCLAS	MSGCLASS FROM JOB CARD
317	(13D)	CHARACTER	1	JCTJCLAS	HASP EXECUTION JOB CLASS
318	(13E)	BITSTRING	1	JCTIPRIO	HASP INITIAL JOB SELECTION PRIORITY
319	(13F)	BITSTRING	1	JCTPRIO	HASP EXECUTION SELECTION PRIORITY
320	(140)	BITSTRING	1	JCTIOPRI	HASP INITIAL OUTPUT SELECTION PRIO
321	(141)	BITSTRING	1	JCTOPRIO	HASP OUTPUT SELECTION PRIORITY
322	(142)	SIGNED	2		Used by R10 and earlier
324	(144)	SIGNED	4	JCTROUTE (0)	INPUT ROUTE CODE
324	(144)	SIGNED	2	JCTRNODE	NODE NUMBER
326	(146)	SIGNED	2	JCTRRMT	REMOTE NUMBER
					Comment
					Keep next 28 bytes intact for SMF - JCTINDEV thru JCTESTPU
					End of Comment
328	(148)	CHARACTER	8	JCTINDEV	HASP INPUT DEVICE NAME
336	(150)	CHARACTER	4	JCTACCTN	JOB ACCOUNTING NUMBER FROM JOB CARD
340	(154)	CHARACTER	4	JCTROOMN	PROGRAMMER'S ROOM NUMBER
344	(158)	SIGNED	4	JCTETIME	ESTIMATED EXECUTION TIME
348	(15C)	SIGNED	4	JCTESTLN	ESTIMATED OUTPUT LINES
352	(160)	SIGNED	4	JCTESTPU	ESTIMATED PUNCHED OUTPUT
356	(164)	CHARACTER	8	JCTFORMS	JOB OUTPUT FORMS
364	(16C)	BITSTRING	1	JCTFLAG4	Flag byte 4
		1...		JCT4PASE	"B'10000000'" Password is encrypted

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
		.1..		JCT4NPSE	"B'01000000'" New password is encrypted

Comment

EQU B'00100000' Used pre-R7 for JCT4NOIE

End of Comment

		...1		JCT4RCST	"B'00010000'" Return code info set (JCTMAXRC and JCTLSTAB)
		.... 1...		JCT4WINI	"B'00001000'" Job ran under a WINIT (Work Load Manager INIT)
		.... .1..		JCT4EJOB	"B'00000100'" Job restarted
		.... ..1.		JCT4LCDF	"B'00000010'" JCTLINCT value from $LINECT
		1		JCT4STAB	"B'00000001'" JCTLSTAB set by JES2
365	(16D)	BITSTRING	1	JCTCPYCT	JOB PRINT COPY COUNT

Comment

JCTJLOGD is a date token used to determine if a date line is needed in the job log. The token is remainder after dividing the number of days since JAN 1, 1900 by 254 plus 1. A value of zero indicates there is no date in the job log yet, a value of X'FF' indicates no dates are to be placed into the job log.

End of Comment

366	(16E)	BITSTRING	1	JCTJLOGD	JOB log date token
367	(16F)	BITSTRING	1	JCTLINCT	LINES PER PAGE
368	(170)	SIGNED	4	JCTESTPG	ESTIMATED PAGE OUTPUT
372	(174)	SIGNED	4	JCTESTBY	ESTIMATED BYTE OUTPUT
376	(178)	SIGNED	4	JCTPROUT (0)	JOB PRINT ROUTE CODE
376	(178)	SIGNED	2	JCTPRNOD	NODE NUMBER
378	(17A)	SIGNED	2	JCTPRRMT	REMOTE NUMBER
380	(17C)	CHARACTER	8	JCTPRRID	PRINTER EBCDIC RMT/USERID
388	(184)	SIGNED	4	JCTPUOUT (0)	JOB PUNCH ROUTE CODE
388	(184)	SIGNED	2	JCTPUNOD	NODE NUMBER
390	(186)	SIGNED	2	JCTPURMT	REMOTE NUMBER
392	(188)	CHARACTER	8	JCTPURID	PUNCH EBCDIC RMT/USERID
400	(190)	CHARACTER	8	JCTPROCN	PROCEDURE DDNAME
408	(198)	CHARACTER	8	JCTPASS	CURRENT PASSWORD
416	(1A0)	CHARACTER	8	JCTNUPAS	NEW PASSWORD
424	(1A8)	CHARACTER	8	JCTGRPID	GROUPID
432	(1B0)	CHARACTER	8	JCTNOTUS	Notify user id
432	(1B0)	X'1B0'	0	JCTTSUID	"JCTNOTUS,7" TIME SHARING USR FOR NOTIFY
440	(1B8)	BITSTRING	1	JCTTSUAF	INPUT SYSAF FOR NOTIFY
441	(1B9)	CHARACTER	9	JCTIDLEN (0)	FOLLOWING TWO FIELDS MUST BE KEPT TOGETHER FOR RACROUTE USE
441	(1B9)	CHARACTER	1	JCTUIDL	USERID LENGTH
442	(1BA)	CHARACTER	8	JCTJUSID	USERID (FROM JOB CARD)
450	(1C2)	CHARACTER	8	JCTENCKY	Password encryption key
458	(1CA)	SIGNED	2	JCTRXLEN	Free space in JCT for JCT extensions
460	(1CC)	SIGNED	3	JCTFAMLY	Highest family ID used by MOCA IOTs
463	(1CF)	SIGNED	1		Reserved for future use
464	(1D0)	SIGNED	4	(0)	Ensure fullword for token
464	(1D0)	BITSTRING	1	JCTTOKEN	Security TOKEN for job

Comment

KEEP NEXT 48 BYTES INTACT FOR SMF - JCTCNVON THROUGH JCTODTOF

End of Comment

544	(220)	SIGNED	4	JCTCNVON	TIME ON JCL CONVERSION PROCESSOR
548	(224)	SIGNED	4	JCTCDTON	DATE ON JCL CONVERSION PROCESSOR

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
552	(228)	SIGNED	4	JCTCNVOF	TIME OFF JCL CONVERSION PROCESSOR
556	(22C)	SIGNED	4	JCTCDTOF	DATE OFF JCL CONVERSION PROCESSOR
560	(230)	SIGNED	4	JCTXEQON	TIME ON EXECUTION PROCESSOR
564	(234)	SIGNED	4	JCTXDTON	DATE ON EXECUTION PROCESSOR
568	(238)	SIGNED	4	JCTXEQOF	TIME OFF EXECUTION PROCESSOR
572	(23C)	SIGNED	4	JCTXDTOF	DATE OFF EXECUTION PROCESSOR
576	(240)	SIGNED	4	JCTOUTON	TIME ON OUTPUT PROCESSOR
580	(244)	SIGNED	4	JCTODTON	DATE ON OUTPUT PROCESSOR
584	(248)	SIGNED	4	JCTOUTOF	TIME OFF OUTPUT PROCESSOR
588	(24C)	SIGNED	4	JCTODTOF	DATE OFF OUTPUT PROCESSOR

Comment

KEEP NEXT 28 BYTES INTACT FOR SMF - JCTCARDS THROUGH JCTOTSID

End of Comment

592	(250)	SIGNED	4	JCTCARDS	TOTAL NUMBER OF INPUT CARDS
596	(254)	SIGNED	4	JCTLINES	GENERATED OUTPUT LINES
600	(258)	SIGNED	4	JCTPUNCH	GENERATED PUNCHED OUTPUT
604	(25C)	CHARACTER	4	JCTRDSID	INPUT PROCESSOR SYSTEM ID
608	(260)	CHARACTER	4	JCTCVSID	CONVERSION PROCESSOR SYSTEM ID
612	(264)	CHARACTER	4	JCTEXSID	EXECUTION PROCESSOR SYSTEM ID
616	(268)	CHARACTER	4	JCTOTSID	OUTPUT PROCESSOR SYSTEM ID
620	(26C)	SIGNED	4	JCTPAGES	GENERATED OUTPUT PAGES
624	(270)	SIGNED	4	JCTBYTES	GENERATED OUTPUT BYTES
628	(274)	SIGNED	4	JCTSPUNB	TOTAL BYTES IN SPUN DATASET(S)
632	(278)	SIGNED	2	JCTXEQND	INITIAL EXECUTION NODE
634	(27A)	SIGNED	2	JCTXNODE	ACTUAL EXECUTION NODE
636	(27C)	CHARACTER	4	JCTNJSID	JOB XMITTER PROCESSOR SYSTEM ID
640	(280)	SIGNED	4	JCTNJTON	TIME ON JOB TRANSMITTER PROCESSOR
644	(284)	SIGNED	4	JCTNDTON	DATE ON JOB TRANSMITTER PROCESSOR
648	(288)	SIGNED	4	JCTNJTOF	TIME OFF JOB TRANSMITTER PROCESSOR
652	(28C)	SIGNED	4	JCTNDTOF	DATE OFF JOB TRANSMITTER PROCESSOR
656	(290)	CHARACTER	8	JCTNACCT	NETWORK ACCOUNTING NUMBER
664	(298)	CHARACTER	8	JCTNOJID	ORIGINAL JOB IDENTIFICATION
672	(2A0)	CHARACTER	8	JCTNNDEV	JOB TRANSMITTER DEVICE NAME
680	(2A8)	CHARACTER	8	JCTNONDE	NETWORK ORIGINAL NODE NAME
688	(2B0)	CHARACTER	8	JCTNOUSR	SUBMITTING USERID
696	(2B8)	CHARACTER	8	JCTNXNDE	NETWORK EXECUTION NODE NAME
704	(2C0)	CHARACTER	8	JCTNNNDE	NETWORK NEXT NODE NAME
712	(2C8)	CHARACTER	8	JCTNLNDE	NETWORK LAST NODE NAME
720	(2D0)	SIGNED	4	JCTESOUT	ESTIMATED OUTPUT (LINES+CARDS)
724	(2D4)	SIGNED	4	JCTXOUT	GENERATED OUTPUT RECORDS
728	(2D8)	CHARACTER	8	JCTPSN1	STEP NAME FROM EXEC STEP
736	(2E0)	CHARACTER	8	JCTPSN2	STEP NAME OF CALLING STEP
744	(2E8)	DBL WORD	8	(0)	Ensure doubleword boundary
744	(2E8)	BITSTRING	144	JCTWORK	144-BYTE WORK AREA
888	(378)	BITSTRING	80	JCTXWRK	80-BYTE WORK AREA FOR RDR EXITS
888	(378)	X'3C8'	0	JCTJMRST	"*" START OF JMR AREA

Comment

KEEP THE FIELDS JCTJMRJN, JCTRDRON, AND JCTRDTON TOGETHER FOR SMF

End of Comment

968	(3C8)	CHARACTER	8	JCTJMRJN	JMR JOB NAME
976	(3D0)	SIGNED	4	JCTRDRON	TIME ON INPUT PROCESSOR
980	(3D4)	SIGNED	4	JCTRDTON	DATE ON INPUT PROCESSOR
984	(3D8)	BITSTRING	4	JCTCPUID	JMR CPU IDENTIFICATION
988	(3DC)	CHARACTER	8	JCTUSEID	JMR installation data field
996	(3E4)	BITSTRING	1	JCTSTEP	CURRENT STEP NUMBER
997	(3E5)	BITSTRING	1	JCTINDC	JMR SMF OPTIONS
998	(3E6)	BITSTRING	2	JCTJTCC (0)	CONDITION CODE
999	(3E7)	BITSTRING	1	JCTCLASS	HASP EXECUTION JOB CLASS

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
1000	(3E8)	SIGNED	4	JCTUCOM	JMR USER COMMUNICATION AREA
1004	(3EC)	SIGNED	4	JCTUJVP	JMR ADDRESS OF USER EXIT ROUTINE

Comment

KEEP THE FIELDS JCTRDROF AND JCTRDTOF TOGETHER FOR SMF

End of Comment

1008	(3F0)	SIGNED	4	JCTRDROF	TIME OFF INPUT PROCESSOR
1012	(3F4)	SIGNED	4	JCTRDTOF	DATE OFF INPUT PROCESSOR
1016	(3F8)	SIGNED	4	JCTJOBIN	JMR JOB SYSIN COUNT
1020	(3FC)	BITSTRING	2	JCTRDR	READER DEVICE TYPE AND CLASS
1022	(3FE)	BITSTRING	1	JCTJMOPT	JMR SMF OPTIONS
		..1.		JCTJMRUX	"B'00100000'" Take user exits for SMF
1023	(3FF)	BITSTRING	1		RESERVED
1024	(400)	SIGNED	4	JCTJMRND (0)	END OF JMR
1024	(400)	X'3C8'	0	JCTJMR	"JCTJMRST,*-JCTJMRST" REFERENCE FOR ENTIRE JMR AREA
1024	(400)	BITSTRING	32	JCTXMASK	EXIT JOB MASK
1056	(420)	SIGNED	4	JCTJQE	OFFSET OF HASP JOB QUEUE ENTRY
1060	(424)	CHARACTER	8	JCTNNODE	NOTIFICATION NODE
1068	(42C)	SIGNED	2	JCTCHNDX	CREATED HEADER TABLE INDEX
1070	(42E)	BITSTRING	10	JCTCHDRT	CREATED HEADER TABLE
1080	(438)	ADDRESS	4	JCTNJHTR	MTTR OF JOB HEADER
1084	(43C)	ADDRESS	4	JCTNJTTR	MTTR OF JOB TRAILER
1088	(440)	BITSTRING	1	JCTAXCLS	Actual execution class
1089	(441)	BITSTRING	1	JCTAXPR	Actual execution priority
1096	(448)	DBL WORD	8	JCTXSTRT	Execution start time (STCK)
1104	(450)	DBL WORD	8	JCTXSTOP	Execution stop time (STCK)
1112	(458)	DBL WORD	8	JCTETS	System entry Time (STCK)
1120	(460)	CHARACTER	8	JCTDEPT	Programmer's department id
1128	(468)	CHARACTER	8	JCTBLDG	Programmer's building id
1136	(470)	CHARACTER	8	JCTROOM	PROGRAMMER'S ROOM
1144	(478)	CHARACTER	8	JCTSGRP	Submitting group

Comment

```
The job accounting packet format is:
  DC Y(length) length of packet not including
             this halfword
  followed by a variable length string of this
  format:
  DC AL1(number-of-pairs-that-follow)
    followed by 0 or more accounting pairs
Accounting pairs are of the form:
  DC AL1(length),C'string of length "length"'
  A length of 0 indicates an omitted field
Example:
  (X3600,42,,ABC) on the JOB card will result
  in the packet looking like:
DC H'15' Length of following
DC FL1'4' Nr of fields
DC FL1'5' Length of field 1
DC C'X3600' Field 1
DC FL1'2' Length of field 2
DC C'42' Field 2
DC FL1'0' Length of field 3 (null)
DC FL1'3' Length of field 4
DC C'ABC' Field 4
```

End of Comment

1152	(480)	SIGNED	2	JCTACCTL (0)	Beginning of acct. packet
1152	(480)	SIGNED	2	JCTACTLG	Length of job accounting
1154	(482)	BITSTRING	145	JCTJOBAC	Job accounting string

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
1299	(513)	BITSTRING	1		Reserved
1300	(514)	SIGNED	4	(0)	Ensure alignment
1300	(514)	CHARACTER	8	JCTSECLB	SECLABEL of job
1308	(51C)	SIGNED	4	JCTJPERD	STCK for end of READER
1312	(520)	DBL WORD	8	JCTJPEST	Program entry start time for JSAB (Time off JCL conversion processor STCK)
1320	(528)	CHARACTER	8	JCTNXUID	Network execution userid (from XMIT or XEQ)
1328	(530)	CHARACTER	8	JCTMVSNM	Execution MVS System name
1336	(538)	BITSTRING	3	JCTMAXRC	Max return code
1339	(53B)	BITSTRING	3	JCTLSTAB	Last ABEND code
1342	(53E)	CHARACTER	8	JCTWSCN	WLM service class name
1350	(546)	CHARACTER	8	JCTWOSCN	WLM (original) srv cls name
1358	(54E)	BITSTRING	4	JCTWEARR	TOD when job re-enqueued
1362	(552)	CHARACTER	16	JCTSCHEN	SCHENV for job
1378	(562)	BITSTRING	2		RESERVED FOR FUTURE USE
1380	(564)	SIGNED	4		RESERVED FOR FUTURE USE
1384	(568)	SIGNED	4		RESERVED FOR FUTURE USE
1388	(56C)	SIGNED	4		RESERVED FOR FUTURE USE
1392	(570)	SIGNED	4		RESERVED FOR FUTURE USE
1396	(574)	SIGNED	4		RESERVED FOR FUTURE USE
1400	(578)	SIGNED	4	JCTFEND (0)	End of fixed portion of JCT

Comment

It is required that the JCT have enough space left after the fixed portion of the JCT (i.e. after JCTFEND) for $JCT extensions.
Enough space is arbitrarily declared to be 512 bytes in a buffer which is at its minimum size (2048).
If the following SCON gets an assembly error, then there is not enough space left over.

End of Comment

1400	(578)	ADDRESS	2	JCTLEFT (0)

$JCT Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
JCT	0		JCTCNWT	CC	10
JCTACCTL	480		JCTCOK	CC	0
JCTACCTN	150		JCTCPUID	3D8	
JCTACTLG	480		JCTCPYCT	16D	
JCTASID	114		JCTCSECF	CC	C
JCTAXCLS	440		JCTCVER	116	22
JCTAXPR	441		JCTCVSID	260	
JCTBATCH	11C	80	JCTDEPT	460	
JCTBLDG	468		JCTENCKY	1C2	
JCTBURST	82	40	JCTESOUT	2D0	
JCTBYTES	270		JCTESTBY	174	
JCTCABND	CC	24	JCTESTLN	15C	
JCTCARDS	250		JCTESTPG	170	
JCTCDTOF	22C		JCTESTPU	160	
JCTCDTON	224		JCTETIME	158	
JCTCDUPL	CC	4	JCTETS	458	
JCTCHDRT	42E		JCTEXSID	264	
JCTCHNDX	42C		JCTFAMLY	1CC	
JCTCIO	CC	8	JCTFEND	578	
JCTCJCL	CC	4	JCTFLAG1	82	
JCTCLASS	3E7		JCTFLAG2	118	
JCTCNVOF	228		JCTFLAG3	119	
JCTCNVON	220		JCTFLAG4	16C	
JCTCNVRC	CC		JCTFLAG5	0	50

Name	Hex Offset	Hex Value
JCTFORMS	164	
JCTGMFAL	CC	38
JCTGRPID	1A8	
JCTID	68	
JCTIDLEN	1B9	
JCTINDC	3E5	
JCTINDEV	148	
JCTINRDR	11D	4
JCTIOPRI	140	
JCTIOT	94	
JCTIPRIO	13E	
JCTJBKEY	78	
JCTJBNUM	74	
JCTJBOPT	11D	
JCTJCLAS	13D	
JCTJDVT	84	
JCTJLOGD	16E	
JCTJMOPT	3FE	
JCTJMR	400	3C8
JCTJMRJN	3C8	
JCTJMRND	400	
JCTJMRST	378	3C8
JCTJMRUX	3FE	20
JCTJNAME	6C	
JCTJOBAC	482	
JCTJOBFL	11C	
JCTJOBID	120	
JCTJOBIN	3F8	
JCTJPERD	51C	
JCTJPEST	520	
JCTJQE	420	
JCTJSFLG	11A	
JCTJSSTP	112	
JCTJTCC	3E6	
JCTJTFLG	83	
JCTJUSID	1BA	
JCTLEFT	578	
JCTLENG	80	
JCTLINCT	16F	
JCTLINES	254	
JCTLSTAB	53B	
JCTMAXRC	538	
JCTMCLAS	13C	
JCTMVSNM	530	
JCTNACCT	290	
JCTNDTOF	28C	
JCTNDTON	284	
JCTNJHTR	438	
JCTNJSID	27C	
JCTNJTOF	288	
JCTNJTON	280	
JCTNJTTR	43C	
JCTNLNDE	2C8	
JCTNNDEV	2A0	
JCTNNNDE	2C0	
JCTNNODE	424	
JCTNOJID	298	
JCTNOJNL	11C	10
JCTNOLOG	11D	10
JCTNONDE	2A8	
JCTNOTUS	1B0	
JCTNOTY6	11B	4
JCTNOT26	11B	1
JCTNOUJP	11B	2
JCTNOUPT	11C	8
JCTNOUSO	11B	20
JCTNOUSR	2B0	
JCTNUPAS	1A0	
JCTNXNDE	2B8	
JCTNXUID	528	
JCTOCTTR	98	
JCTODTOF	24C	
JCTODTON	244	
JCTOPRIO	141	
JCTOTSID	268	
JCTOUTOF	248	
JCTOUTON	240	
JCTPAGES	26C	
JCTPASS	198	
JCTPDDBK	C4	
JCTPDDBO	C8	
JCTPNAME	128	
JCTPRICD	11D	80
JCTPRIO	13F	
JCTPRNOD	178	
JCTPROCN	190	
JCTPROUT	178	
JCTPRRID	17C	
JCTPRRMT	17A	
JCTPRTY	110	
JCTPSN1	2D8	
JCTPSN2	2E0	
JCTPUNCH	258	
JCTPUNOD	184	
JCTPUOUT	184	
JCTPURID	188	
JCTPURMT	186	
JCTQHELD	11D	1
JCTRDR	3FC	
JCTRDROF	3F0	
JCTRDRON	3D0	
JCTRDSID	25C	
JCTRDTOF	3F4	
JCTRDTON	3D4	
JCTRERUN	11D	2
JCTRNODE	144	
JCTROOM	470	
JCTROOMN	154	
JCTROUTE	144	
JCTRRMT	146	
JCTRSTRT	11C	1
JCTRXLEN	1CA	
JCTSAMSK	A4	
JCTSCHEN	552	
JCTSECLB	514	
JCTSETUP	11D	40
JCTSGRP	478	
JCTSMFLG	11B	
JCTSMFL0	11B	D8
JCTSPIOT	90	
JCTSPLNG	7C	18
JCTSPUNB	274	
JCTSTART	0	68
JCTSTCJB	11C	20
JCTSTEP	3E4	
JCTTCOPY	11C	2
JCTTHOLD	11D	20
JCTTOKEN	1D0	
JCTTRAK	8C	
JCTTSCAN	11C	4

Name	Hex Offset	Hex Value
JCTTSUAF	1B8	
JCTTSUID	1B0	1B0
JCTTSUJB	11C	40
JCTUCOM	3E8	
JCTUIDL	1B9	
JCTUJVP	3EC	
JCTUSEID	3DC	
JCTUSERA	F8	
JCTUSERB	FC	
JCTUSERC	100	
JCTUSERD	104	
JCTUSERE	108	
JCTUSERF	10C	
JCTUSER0	D0	
JCTUSER1	D4	
JCTUSER2	D8	
JCTUSER3	DC	
JCTUSER4	E0	
JCTUSER5	E4	
JCTUSER6	E8	
JCTUSER7	EC	
JCTUSER8	F0	
JCTUSER9	F4	
JCTVALJB	11C	E0
JCTVER	116	
JCTWEARR	54E	
JCTWORK	2E8	
JCTWOSCN	546	
JCTWSCN	53E	
JCTXBMII	11D	8
JCTXBUFO	A0	
JCTXDTOF	23C	
JCTXDTON	234	
JCTXEQND	278	
JCTXEQOF	238	
JCTXEQON	230	
JCTXMASK	400	
JCTXNODE	27A	
JCTXOUT	2D4	
JCTXSTOP	450	
JCTXSTRT	448	
JCTXTRK	9C	
JCTXWRK	378	
JCT1INTJ	82	20
JCT1LDR	82	10
JCT1NUNK	82	4
JCT1ODEL	82	1
JCT1RECV	82	8
JCT1SJOB	82	80
JCT1UNDF	82	2
JCT2AVD	118	10
JCT2AVDP	118	40
JCT2AVF	118	20
JCT2EXEC	118	4
JCT2IOT2	118	1
JCT2SDCR	118	2
JCT2TJOB	118	8
JCT2TWOJ	118	80
JCT3BATI	119	40
JCT3FORM	119	2
JCT3JDSP	119	20
JCT3NCA	119	8
JCT3NCF	119	10
JCT3NOTK	119	4
JCT3RJCS	119	1
JCT3TPI	119	80
JCT4EJOB	16C	4
JCT4LCDF	16C	2
JCT4NPSE	16C	40
JCT4PASE	16C	80
JCT4RCST	16C	10
JCT4STAB	16C	1
JCT4WINI	16C	8
JCT5CKPT	0	80

$JCTX Programming Interface information

Programming Interface information

$JCTX

End of Programming Interface information

$JCTX Heading Information

Common Name: JES2 Job Control Table Extension
Macro ID: $JCTX
DSECT Name: JCTX
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: 'JCTX'
Offset: JCXEYE-JCTX
Length: 4
Storage Attributes: Subpool: 7 in JES2 main task environment; 230 in USER or SUBTASK environments
Key: 1
Residency: The $JCTX is an extension of the $JCT, currently residing in the same spool buffer as the $JCT. No code dependencies (other than in the $JCTX service routines themselves) should rely on this. Virtual storage can be anywhere (above or below 16M) in the JES2 main task and must be below 16M in all other environments. Real storage can be anywhere.
Size: JCXORG-JCTX defines the length of the base section of the JCTX. JCXLEN contains the total length of the extension.
Created by: $JCTXADD routine in HASCXJCT.
In-storage versions of the control block are created by $CBIO READ VERIFY=JCT.
Pointed to by: $JCTXGET macro should be used to find the address of the extension.
Serialization: Serialization is the same as for the $JCT.
Function: The Job Control Table Extension gives an installation the ability to associate their own information with a job without modifying the Job Control Table. These extensions may be manipulated using the $JCTXADD, $JCTXEXP, $JCTXGET, and $JCTXREM services.

The $JCTX mapping is also used as the parameter list to the $JCTX service routines. These parameter lists are created by the $JCTXxxx macros and deleted by the corresponding routines.

$JCTX Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	JCTX	,
0	(0)	CHARACTER	4	JCXEYE	JCTX Eyecatcher
4	(4)	CHARACTER	4	JCXTYPE	Extension Type
8	(8)	SIGNED	2	JCXMOD	Extension Modifier
10	(A)	SIGNED	2	JCXLEN	Extension Length

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
					Comment
					The variable information in the $JCTX begins at label JCXORG. Note that different mappings will exist for different values of TYPE and MOD. The instruction "ORG ," should not be used in the mappings for any extension, as this sets the location counter to the highest value defined so far. If multiple sections are defined, this could lead to an erroneous mapping.
					End of Comment
12	(C)	SIGNED	4	JCXORG (0)	Origin for variable data portions of $JCT extension.
12	(C)	X'C'	0	JCXBASLN	"JCXORG-JCTX" Length of base section of the $JCTX
					Comment
					IBM supplied extension for JESLOG spin control. The JCXTYPE is "IBM" The JCXMOD is JCXJLGM
					End of Comment
12	(C)	X'1'	0	JCXJLGM	"1" Modifier
					Comment

START OF SPECIFICATIONS
01 DESCRIPTIVE NAME: JES log control
02 ACRONYM: $JESLOG
01 MACRO NAME: $JESLOG
01 DSECT NAME: JLG
01 LABEL PREFIX: JLG
01 COMPONENT ID: JES2 (SC1BH)
01 EXTERNAL CLASSIFICATION: PSPI
01 END OF EXTERNAL CLASSIFICATION:
01 EYE-CATCHER: "None"
02 OFFSET: N/A
02 LENGTH: N/A
01 STORAGE ATTRIBUTES:
02 SUBPOOL: n/a
02 KEY: n/a
02 RESIDENCY:
This block is included in JCTs, SJXBs, CATs and CNVWORK. See the description of those "hosting" blocks for storage attributes.
01 SIZE:
See JLGLEN
01 CREATED BY:
See "hosting" control blocks
01 POINTED TO BY:
No pointers
01 SERIALIZATION:
None required
01 FUNCTION:
The JESLOG describes how the spinning of JESLOG (JESYSMG and JESJOBLG) is to be supported.
01 METHOD OF ACCESS:
02 ASM:
Specify $JESLOG as a positional operand on a $MODULE macro instruction to cause this mapping to be generated. A USING of the following form is used: USING JLG,xxxx where xxxx is the label within the "hosting" block where the JESLOG

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description

```
     mapping begins. For example when referencing the
     JESLOG within the JCT, code USING JLG,JCTJLOG
02 PL/X:
     This mapping is not available for compilations.
01 USED BY:
    Spin processing for the the two JESLOG data sets use
    the information for their decisions.
01 DELETED BY:
    See "hosting" blocks.
01 FREQUENCY:
    See "hosting" blocks
01 RESTRICTIONS:
    None
     END OF SPECIFICATIONS
01 CHANGE ACTIVITY:
 $Z02LLRJ=LRJOB HJE7705 001101 J_K2: Long running jobs
 $Z02P049=LRJ HJE7705 001218 J_K2: RJI SSOB JESLOG Support
01 A000000-999999 CREATED for JES2 OS/390 Release 12
```

End of Comment

12	(C)	BITSTRING	6	JCXJLOG	JES log control
12	(C)	X'12'	0	JCXJLEN	"*-JCTX" Extension length

$JCTX Cross Reference

Name	Hex Offset	Hex Value
JCTX	0	
JCXBASLN	C	C
JCXEYE	0	D1C3E3E7
JCXJLEN	C	12
JCXJLGM	C	1
JCXJLOG	C	
JCXLEN	A	
JCXMOD	8	
JCXORG	C	
JCXTYPE	4	

$JESLOG Programming Interface information

Programming Interface information

$JESLOG

End of Programming Interface information

$JESLOG Heading Information

Common Name: JES log control
Macro ID: $JESLOG
DSECT Name: JLG
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: "None"
Offset: N/A
Length: N/A
Storage Attributes: Subpool: n/a
Key: n/a
Residency: This block is included in JCTs, SJXBs, CATs and CNVWORK. See the description of those "hosting" blocks for storage attributes.
Size: See JLGLEN
Created by: See "hosting" control blocks
Pointed to by: No pointers
Serialization: None required
Function: The JESLOG describes how the spinning of JESLOG (JESYSMG and JESJOBLG) is to be supported.

$JESLOG Map

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	JLG	,
0	(0)	BITSTRING	1	JLGFLAG1	Flags - JESMSGLG/JESYSMSG
		1...		JLG1ELIG	"B'10000000'" Spin eligible
		.1..		JLG1TIMI	"B'01000000'" Spin on time interval
		..1.		JLG1TIMD	"B'00100000'" Spin on time of day
		...1		JLG1LINE	"B'00010000'" Spin upon line delta
		.... 1...		JLG1SUP	"B'00001000'" Suppress
		.... .1..		JLG1NOSP	"B'00000100'" No Spin
1	(1)	SIGNED	1	JLGSOURC	Source of JESLOG info
1	(1)	X'0'	0	JLGSEXIT	"0" JESLOG from Exit
1	(1)	X'1'	0	JLGSJCL	"1" JESLOG from JCL
1	(1)	X'2'	0	JLGSCAT	"2" JESLOG from CAT
1	(1)	X'3'	0	JLGSSRR	"3" JESLOG from IEFSSRR

Comment

JLGVALUE has one of the following values:
- o 0 if no bit on in JLGFLAG1 or just JLG1ELIG on or just JLG1SUP on
- o Increment in seconds if JLG1TIMI on
- o Increment in TOD clock units if JLG1TIMI on and embedded in the SJXB
- o Number of seconds past midnight if JLG1TIMD on
- o Number of TOD clock units past midnight if JLG1TIMD on and embedded in the SJXB
- o Line delta if JLG1LINE on

End of Comment

2	(2)	SIGNED	4	JLGVALUE	Value used for JESLOG spin decisions (see above)
2	(2)	X'6'	0	JLGLEN	"*-JLG" Length of area
6	(6)	ADDRESS	2	(0)	Ensure length is 5

$JESLOG Cross Reference

Name	Hex Offset	Hex Value
JLG	0	
JLGFLAG1	0	
JLGLEN	2	6
JLGSCAT	1	2
JLGSEXIT	1	0
JLGSJCL	1	1
JLGSOURC	1	
JLGSSRR	1	3
JLGVALUE	2	
JLG1ELIG	0	80
JLG1LINE	0	10
JLG1NOSP	0	4
JLG1SUP	0	8
JLG1TIMD	0	20
JLG1TIMI	0	40

$JIB Programming Interface information

Programming Interface information

$JIB

The following fields are **NOT** programming interface information:

- JIBGCB
- JIBJSPA

End of Programming Interface information

$JIB Heading Information

Common Name: JES2 JOE Information Block
Macro ID: $JIB
DSECT Name: JIB
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: JIB
Offset: JIBID-JIB
Length: L'JIBID
Storage Attributes: Subpool: 230
Key: 1
Residency: If the FSS supports AMODE 31, then ANY. If the FSS only supports AMODE 24, then storage is obtained below the line. Real storage is anywhere.
Size: See JIBSIZE
Created by: HASPFSSM
Pointed to by: FSAREQQS field of the FSACB data area
FSAACTQS field of the FSACB data area
FSARETQS field of the FSACB data area
FSSFJIBS field of the FSSCB data area
JIBNEXT field of the JIB data area
Serialization: Standard FSA level control block serialization.
Function: The JIB is used to pass JOE level information between the JES2 main task (in HASPFSSP) and the FSS address space (HASPFSSM). In addition, HASPFSSM uses the JIB to store JOE level information.

$JIB Map

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	JIB	JOE INFORMATION BLOCK
0	(0)	CHARACTER	4	JIBID	JIB IDENTIFIER
4	(4)	SIGNED	4	JIBNEXT	POINTER TO NEXT JIB ON QUEUE
8	(8)	SIGNED	4	JIBJ2RAB (0)	BEGIN JES2 RELDS CMS COPY AREA
8	(8)	CHARACTER	8	JIBMIDSE	JIB unprintable reason code
16	(10)	SIGNED	4	JIBFLAGS (0)	JIB FLAG BYTES
16	(10)	BITSTRING	1	JIBFLG1	FIRST FLAG BYTE
		1...		JIBFREQ	"B'10000000'" JIB IS A REQUEST FOR A JOE
		.1..		JIBFACT	"B'01000000'" JIB IS ACTIVE ON DEVICE
		..1.		JIBFRET	"B'00100000'" JIB IS BEING RETURNED TO JES
		...1		JIBFINIT	"B'00010000'" JIB IS INITIALIZED
		.... 1...		JIBFCOMP	"B'00001000'" JIB COMPLETELY PROCESSED
		.... .1..		JIBFINCP	"B'00000100'" JIB NOT COMPLETELY PROCESSED
		.... ..1.		JIBFCPB	"B'00000010'" CHECKPOINT BUFFER ACQUIRED
		1		JIBIOERR	"B'00000001'" I/O ERROR ON JCT/IOT READ
17	(11)	BITSTRING	1	JIBFLG2	SECOND FLAG BYTE
		1...		JIBFSTOP	"B'10000000'" $Z COMMAND
		.1..		JIBFDEL	"B'01000000'" $C COMMAND
		..1.		JIBFRST	"B'00100000'" $E COMMAND
		...1		JIBFINT	"B'00010000'" $I COMMAND
		.... 1...		JIBFBKSP	"B'00001000'" $B COMMAND
		.... .1..		JIBFJHPG	"B'00000100'" JOB HEADER PAGE REQUIRED
		.... ..1.		JIBFJTPG	"B'00000010'" JOB TRAILER PAGE REQUIRED
		1		JIBFNEWS	"B'00000001'" JES2 NEWS DATA SET ACQUIRED
18	(12)	BITSTRING	1	JIBFLG3	THIRD FLAG BYTE
		1...		JIBFFSTP	"B'10000000'" 1ST PDDB BEING GETDSD FROM JOE
		.1..		JIBFLSTP	"B'01000000'" LAST PDDB BEING GETDSD FROM JOE
		..1.		JIBFCPVL	"B'00100000'" VALID CKPT RECORD READ FOR JOE
		...1		JIBFCPER	"B'00010000'" I/O ERROR ON SPOOL CKPT RECORD

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
		.... 1...		JIBFUNPR	"B'00001000'" UNPRINTABLE JOE IN JIB
		.... .1..		JIBFONDV	"B'00000100'" ON DEVICE MSG NEEDED FOR JOE
		.... ..1.		JIBFOPIC	"B'00000010'" JIB CANCELLED DURING SETUP
		1		JIB3AUTH	"B'00000001'" JESNEWS AUTHORIZATION FAILURE
19	(13)	BITSTRING	1	JIBFLG4	FOURTH FLAG BYTE
		1...		JIB4RSV1	"B'10000000'" Reserved for future use
		.1..		JIB4DUMD	"B'01000000'" Dummy data set being processed
		..1.		JIB4FSSR	"B'00100000'" HASP704 for FSS reason
		...1		JIBSWBER	"B'00010000'" SWB error
		.... 1...		JIB4RDIP	"B'00001000'" FSA posted for GETDS as dataset RELDSed incomplete & FSA was waiting for work
		.... .1..		JIB4OPIN	"B'00000100'" Operator intervention requested for dataset within JIB
		.... ..1.		JIB4REPO	"B'00000010'" JIB's dataset going thru reposition
20	(14)	BITSTRING	1	JIBUNPRR	REASON PRT DS UNPRINTABLE
21	(15)	BITSTRING	3		Reserved for future use
24	(18)	SIGNED	4	JIBJ2GAB (0)	BEGIN JES2 GETDS CMS COPY AREA
24	(18)	SIGNED	4		RESERVED FOR FUTURE USE
28	(1C)	SIGNED	4	JIBJOEOF	OFFSET OF JOE IN THE JOT
32	(20)	SIGNED	4	JIBJ2RAE (0)	END OF JES2 RELDS CMS COPY AREA
32	(20)	BITSTRING	4	JIBJCTA	JCT TRACK ADDRESS (JQEJCT)
36	(24)	SIGNED	4	JIBJBNUM	Job number
40	(28)	CHARACTER	8	JIBJOBID	HASP JOB IDENTIFIER
48	(30)	ADDRESS	4	JIBJKEY	HDBDSKEY FOR CB VERIFICATION
52	(34)	BITSTRING	184	JIBNEWS	Copy of current JNEW CB (used for JESNEWS)
236	(EC)	SIGNED	4	JIBJ2GAE (0)	END OF JES2 GETDS CMS COPY AREA
236	(EC)	SIGNED	4	JIBWORK (4)	WORK AREA FOR $VERIFY IN FSSM
252	(FC)	ADDRESS	4	JIBSJIOB	Normal SJIOB pointer
256	(100)	ADDRESS	4	JIBCSJIO	CHK record SJIOB pointer
260	(104)	ADDRESS	4	JIBJCT	POINTER TO JCT
264	(108)	ADDRESS	4	JIBIOT	POINTER TO IOT
268	(10C)	ADDRESS	4	JIBIOTTR	IOT MTTR (CURRENT OR RESET)
272	(110)	ADDRESS	4	JIBPDDB	POINTER TO NEXT ASSIGNABLE PDDB
276	(114)	ADDRESS	4	JIBFPDB	FIRST PDDB OFFSET IN JIB
280	(118)	ADDRESS	4	JIBFIOTR	IOT MTTR OF FIRST PDDB
284	(11C)	ADDRESS	4	JIBCPBUF	CHECKPOINT I/O BUFFER ADDRESS
288	(120)	ADDRESS	4	JIBGCB	POINTER TO GCB CHAIN
292	(124)	SIGNED	4	JIBDSACT	DATA SETS ASSIGNED COUNT
296	(128)	SIGNED	4	JIBDSEQN	DATA SET SEQUENCE NUMBER
300	(12C)	CHARACTER	8	JIBSECLB	Security label of the job
308	(134)	BITSTRING	104	JIBWJOE	COPY OF WORK-JOE
412	(19C)	BITSTRING	76	JIBCJOE	COPY OF CHAR-JOE
488	(1E8)	BITSTRING	1	JIBJSPA	JSPA AREA
488	(1E8)	X'2C8'	0	JIBSIZE	"*-JIB" LENGTH OF JIB

$JIB Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
JIB	0		JIBFINIT	10	10
JIBCJOE	19C		JIBFINT	11	10
JIBCPBUF	11C		JIBFIOTR	118	
JIBCSJIO	100		JIBFJHPG	11	4
JIBDSACT	124		JIBFJTPG	11	2
JIBDSEQN	128		JIBFLAGS	10	
JIBFACT	10	40	JIBFLG1	10	
JIBFBKSP	11	8	JIBFLG2	11	
JIBFCOMP	10	8	JIBFLG3	12	
JIBFCPB	10	2	JIBFLG4	13	
JIBFCPER	12	10	JIBFLSTP	12	40
JIBFCPVL	12	20	JIBFNEWS	11	1
JIBFDEL	11	40	JIBFONDV	12	4
JIBFFSTP	12	80	JIBFOPIC	12	2
JIBFINCP	10	4	JIBFPDB	114	

$JIB Cross Reference

Name	Hex Offset	Hex Value
JIBFREQ	10	80
JIBFRET	10	20
JIBFRST	11	20
JIBFSTOP	11	80
JIBFUNPR	12	8
JIBGCB	120	
JIBID	0	
JIBIOERR	10	1
JIBIOT	108	
JIBIOTTR	10C	
JIBJBNUM	24	
JIBJCT	104	
JIBJCTA	20	
JIBJKEY	30	
JIBJOBID	28	
JIBJOEOF	1C	
JIBJSPA	1E8	
JIBJ2GAB	18	
JIBJ2GAE	EC	
JIBJ2RAB	8	
JIBJ2RAE	20	
JIBMIDSE	8	
JIBNEWS	34	
JIBNEXT	4	
JIBPDDB	110	
JIBSECLB	12C	
JIBSIZE	1E8	2C8
JIBSJIOB	FC	
JIBSWBER	13	10
JIBUNPRR	14	
JIBWJOE	134	
JIBWORK	EC	
JIB3AUTH	12	1
JIB4DUMD	13	40
JIB4FSSR	13	20
JIB4OPIN	13	4
JIB4RDIP	13	8
JIB4REPO	13	2
JIB4RSV1	13	80

$JNEW Programming Interface information

Programming Interface information

$JNEW

End of Programming Interface information

$JNEW Heading Information

Common Name: JNEW Control Block
Macro ID: $JNEW
DSECT Name: JNEW
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: JNEW
Offset: JNEWID-JNEW
Length: L'JNEWID
Storage Attributes: Subpool: 0
Key: 1
Residency: Virtual storage is 31 bit. No restriction on real storage
Size: See JNEWSIZE
Created by: JESNEWS processing in HASPJOS
Pointed to by: $JNEW field of the $HCT data area
JNEWNEXT field of the $JNEW data area
PPPANEWS field of the $PPPWORK data area
JIBNEWS field of the $JIB data area
Serialization: Creation is serialized by the $PRONEWS flag of the $PROCESS byte in the HCT
Function: The JNEW is the control block representing the JESNEWS data set. It contains the JESNEWS data set resource name and the TOKEN associated with the data set. The format of the entity name is "nodeid.jes_userid.$JESNEWS.jesnews_jobid. Dnews_level.JESNEWS".

The JNEW is located in the JES2 address space. It is created by $#NEWS when a new news data set is created and by $#GTNEWS when a printer requests the current news.

$JNEW Map

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	JNEW	
0	(0)	CHARACTER	4	JNEWID	JNEW identifier
4	(4)	ADDRESS	1	JNEWVERS	Version
		1		JNEWVRSN	"X'01'" Version equate
5	(5)	BITSTRING	1	JNEWFLAG	Flag byte
		1...		JNEWMOVD	"B'10000000'" JESNEWS was moved
6	(6)	ADDRESS	2		Reserved
8	(8)	SIGNED	4	JNEWUSE	Use Count
12	(C)	ADDRESS	4	JNEWNEXT	Address of next JNEW
16	(10)	SIGNED	4	JNEWJNUM	Job number of JQE
20	(14)	SIGNED	4	JNEWLEVL	Level of the news
24	(18)	ADDRESS	4	JNEWMTTR	MTTR of JESNEWS data set
28	(1C)	ADDRESS	4	JNEWIOTT	MTTR of JESNEWS IOT
32	(20)	SIGNED	4	JNEWRECT	Data set record count
36	(24)	SIGNED	4	JNEWPGCT	Page data page count
40	(28)	BITSTRING	80	JNEWTOKN	JESNEWS Security token
120	(78)	CHARACTER	53	JNEWENTY	JESNEWS entity name
173	(AD)	BITSTRING	1	JNEWRECF	Data set record format
174	(AE)	BITSTRING	2	JNEWRECL	Maximum data set record lng
176	(B0)	BITSTRING	4		Reserved
184	(B8)	DBL WORD	8	(0)	Ensure boundry
184	(B8)	X'B8'	0	JNEWSIZE	"*-JNEW" Size of JNEW control block

$JNEW Cross Reference

Name	Hex Offset	Hex Value
JNEW	0	
JNEWENTY	78	
JNEWFLAG	5	
JNEWID	0	
JNEWIOTT	1C	
JNEWJNUM	10	
JNEWLEVL	14	
JNEWMOVD	5	80
JNEWMTTR	18	
JNEWNEXT	C	
JNEWPGCT	24	
JNEWRECF	AD	
JNEWRECL	AE	
JNEWRECT	20	
JNEWSIZE	B8	B8
JNEWTOKN	28	
JNEWUSE	8	
JNEWVERS	4	
JNEWVRSN	4	1

$JNT Programming Interface information

Programming Interface information

$JNT

End of Programming Interface information

$JNT Heading Information

Common Name: HASP Job Number Table
Macro ID: $JNT
DSECT Name: JNT
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: 'JNT '
Offset: JNTID-JNT
Length: 4
Storage Attributes: Subpool: 0, 231, dataspace
Key: 1
Residency: Virtual storage is anywhere (below or above 16M) in the JES2 address space. Virtual storage for the APPLCOPY is in ECSA. Real storage is anywhere.
Size: JNTLEN + (2 * 32768) - R4 mode <32K jobs
JNTLEN + (2 * 65534) - R4 mode >=32K jobs
JNTLENZ2 + (4 * 65536) - z2 mode
Created by: JES2 initialization allocates storage for the JNT.
The checkpoint versions subtask creates copies of the JNT in the APPLCOPY and the checkpoint versions data space.
Pointed to by: The $JNTPTR field of the $HCT data area.
The KACJNTP field of the $KAC data area.
The DSRVJNPT field of the IAZDSERV data area.
Serialization: JES2 checkpoint data set lock ($QSUSE)
Function: Maps the job number table in the 4K checkpoint page area. Contains all job number information including the JIX (job number index).

$JNT Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	JNT	JOB NUMBER TABLE DSECT
0	(0)	CHARACTER	4	JNTID	JNT IDENTIFIER
4	(4)	ADDRESS	1	JNTVRSN	JNT VERSION
4	(4)	X'3'	0	JNTVERS	"3" JNT VERSION NUMBER
5	(5)	ADDRESS	3	JNTRSV1	RESERVED
8	(8)	SIGNED	4	JNTLCMIN	LOCAL MINIMUM JOB NUMBER
12	(C)	SIGNED	4	JNTLCMAX	LOCAL MAXIMUM JOB NUMBER
16	(10)	SIGNED	4	JNTLSTAL	LAST ALLOCATED JOB NUMBER
20	(14)	SIGNED	4	JNTFRCNT	NUMBER OF FREE JOB NUMBERS
24	(18)	ADDRESS	4	JNTJBMAX	TOTAL NUMBER OF JOB NUMBERS
28	(1C)	SIGNED	4	(2)	Reserved for future use
36	(24)	SIGNED	4	JNTBSEND (0)	End of base section

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
				Comment	
				---------- The format of the JIX is different depending on the mode of the JES2 checkpoint. If the JES2 checkpoint is R4 mode, the JIX either contains 32K or 64K two byte entries (depending on the number of job numbers allowed). Each entry contains the offset of the JQE using the job number. If the JES2 checkpoint is z2 mode, the JIX contains 64K four byte entries. Each entry is the index of the first JQX on a chain of JQXs. ----------	
				End of Comment	
36	(24)	SIGNED	4	JNTJIX_R4 (0)	Start of R4 JIX
36	(24)	X'2'	0	JNTESZ_R4	"2" Length of R4 JIX entry
36	(24)	X'24'	0	JNTLEN_R4	"*-JNT" Length of the R4 JNT
				Comment	
				---------- JNTJXMAP is a map of the allocated job numbers in the JIX. The map contains one bit for every 32 job numbers. Therefore, a bit being on indicates that one or more job numbers within the 32 job number range are allocated in the JIX. We selected one bit to represent 32 job numbers because 999999 job numbers could be accounted for and still keep the z2 JNT in a single buffer (not including the JIX). ----------	
				End of Comment	
36	(24)	BITSTRING	1	JNTJXMAP	Jix map of allocated job numbers
36	(24)	X'F43'	0	JNTJXMLN	"*-JNTJXMAP" Length of JNTJXMAP
3944	(F68)	SIGNED	4	JNTJIXZ2 (0)	Start of z2 JIX
3944	(F68)	X'F68'	0	JNTLENZ2	"*-JNT" Length of the z2 JNT
3944	(F68)	X'10000'	0	JNTJXENT	"65536" Number of JIX entries (only valid in z/OS 1.2 mode)

$JNT Cross Reference

Name	Hex Offset	Hex Value
JNT	0	
JNTBSEND	24	
JNTESZ_R4	24	2
JNTFRCNT	14	
JNTID	0	D1D5E340
JNTJBMAX	18	
JNTJIX_R4	24	
JNTJIXZ2	F68	
JNTJXENT	F68	10000
JNTJXMAP	24	
JNTJXMLN	24	F43
JNTLCMAX	C	
JNTLCMIN	8	
JNTLEN_R4	24	24
JNTLENZ2	F68	F68
JNTLSTAL	10	
JNTRSV1	5	
JNTVERS	4	3
JNTVRSN	4	

$JOE Programming Interface information

Programming Interface information

$JOE

End of Programming Interface information

$JOE Heading Information

Common Name: Job Output Element
Macro ID: $JOE
DSECT Name: JOE
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: The pool of JOEs is preceded by an eyecatcher '**JOE POOL**' in the header for the pool.
Offset: HDPID-HDP
Length: 13
Storage Attributes: Subpool: 0 for the JES2 main copy; 231 for the APPLCOPY copy; dataspace for the checkpoint version copy.
Key: 1
Residency: The JOE is a checkpoint resident control block. Virtual storage is anywhere (below or above 16M) in the JES2 address space for the JES2 main copy. Virtual storage for the APPLCOPY copy is in ECSA.
Size: See JOESIZE.
Created by: JES2 Initialization allocates memory for the pool of JOEs. The APPLCOPY subtask creates the APPLCOPY instances. The checkpoint versions subtask creates the dataspace copies. The $#ADD service routine creates elements within the pool.

Pointed to by:

The following fields contain offsets (R4 level of the checkpoint) or indexes (z2 level of the checkpoint) to $JOEs from the address in field $JOTABLE in the $HCT data area. The offsets are converted to addresses by adding the value in $JOTABLE to the offset. The indexes are converted to addresses by multipling by JOESIZE and then adding the value in $JOTABLE to the calculated offset.
JOTFREQI field of the $JOT data area
JOTCHRQI field of the $JOT data area
JOTPRGQI field of the $JOT data area
JOTHLDQI field of the $JOT data area
JOTCLSQI field of the $JOT data area
JOTNTWQI field of the $JOT data area
JQEJOEI field of the $JQE data area
JOENEXTI field of the $JOE data area
JOEPREVI field of the $JOE data area
JOENXJQI field of the $JOE data area
JOECHARI field of the $JOE data area
JOECHNXI field of the $JOE data area
JOEWKPTI field of the $JOE data area

The following fields contain offsets to $JOEs:
PSOWKOFF field of the $PSO data area
PSOCHOFF field of the $PSO data area

The following fields contain addresses of $JOEs:
PQEJWJOE field of the $PQE data area
PQEDWJOE field of the $PQE data area
PQHXJOE field of the $PQH data area

Various fields in the processor work areas and parameter lists contain offsets or addresses of JOEs.

Serialization:

The JES2 checkpoint ($QSUSE) for change, the owning job's job lock for selection. JOEs in the main copy of the checkpoint may not be examined by anything other than the JES2 main task since they could be changing, they may be page-released or they may be all zeros.

Function:

The JOE control block represents group of sysout data sets (PDDBs) with compatible output grouping characteristics. It is a checkpointed control block that represents queued and active output work.

There are two main types of JOEs, work JOEs and characteristics JOEs. Work JOEs are the queue elements used to select, hold, track, etc. an output group. The chains that are run to select output work are those of work JOEs. Work JOEs contain attributes of JOEs that vary frequently such as class, record counts and page counts. One characteristics JOE exists for each unique combination of other characteristics not in the work JOE that vary less frequently such as userid, writer id and security label for all the JOEs in the MAS. One characteristics JOE may represent multiple work JOEs.

The work JOEs are chained by SYSOUT classes, from anchors in the Job Output Table (JOT). The JOT anchors are in the CKPT, located in the front of the section for the JOEs.

The JOEs written to the checkpoint exist in multiple copies: main and I/O checkpoint areas. The main and I/O CKPT areas in storage each have a copy, and are in subpool 0. There may be 1 or more versions in the CKPT Versions dataspace as well. Also, if the APPLCOPY option is used another copy may be in subpool 0 or subpool 231 CSA.

Copies of JOEs may be made in other control blocks, for example in the JIB that flows through the FSS output logic in an FSS address space (copied from the JES2 address space).

$JOE Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	JOE	JOB OUTPUT ELEMENT DSECT

Comment

JOE fields common to both Work and Char JOEs

End of Comment

0	(0)	X'7'	0	JOEVRSN	"7" JOE control block version
0	(0)	BITSTRING	1	JOETYPE	JOE TYPE
		1...		JOEWORK	"B'10000000'" THIS IS A WORK JOE
		.1..		JOECHARJ	"B'01000000'" THIS IS A CHAR JOE
		11..		JOEFREE	"B'11000000'" THIS IS A FREE JOE
1	(1)	ADDRESS	3	JOENEXTI	Next WORK-JOE in class q or next CHAR-JOE (offset in R4 mode and index in z2 mode)
4	(4)	BITSTRING	1	JOECURCL	JOE CURRENT SYSOUT CLASS (reserved in the CHAR JOE)

Comment

As of z/OS 1.2 checkpoint structure:
When the JOE is the first JOE on the queue, the right-most 23 bits of the JOEPREVI value will be the offset of the JOT queue head representing the "0th" JOE. The left-most bit will be on to indicate it is an offset and not an index.
Prior to z/OS 1.2:
JOEPREVI always has offset of prior JOE even if the prior JOE is the "0th" JOE.

End of Comment

5	(5)	ADDRESS	3	JOEPREVI	Previous WORK-JOE in class queue or previous CHAR-JOE (offset in R4 mode and index in z2 mode)
8	(8)	BITSTRING	1	JOEFLAG5	Common area JOE flag byte
		1		JOE5RBLD	"B'00000001'" This JOE is on the Rebuild queue
		.... ..1.		JOE5ZAP	"B'00000010'" JOE (and JQE) zapped by ZAPJOB
9	(9)	BITSTRING	3		Reserved for future use
12	(C)	SIGNED	4	JOECSEND (0)	End of common section

Comment

JOE fields used only in Work JOEs

End of Comment

12	(C)	BITSTRING	1	JOEFLAG1	WORK-JOE FLAGS

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
		1...		JOE1CKV	"B'10000000'" CHECKPOINT ELEMENT VALID FLAG
		.1..		JOE1SPIN	"B'01000000'" SPIN JOE FLAG
		..1.		JOE1PRT	"B'00100000'" JOE ON-PRINTER FLAG
		...1		JOE1PUN	"B'00010000'" JOE ON-PUNCH FLAG
		.... 1...		JOE1CJES	"B'00001000'" ckpted by JES (not by FSS). If JOE is interrupted and later processed by FSS, bit indicates to invalidate ckpt + reset counts

Comment

JOE1CPDS is set on when a JOE is built and when PDDBs are grouped into the JOE. JOE1CPDS is never turned off even if there are no more PDDBs with PDB3PAGE on

---

End of Comment

		.... .1..		JOE1CPDS	"B'00000100'" One or more PDDBs within this JOE are Page mode (i.e. PDB3PAGE is on)

Comment

JOE1CTKN is set on when a JOE is built if a PDDB being represented by the JOE has a client token associated with it (a client token was returned on the dynamic allocation for the SYSOUT data set represented by the PDDB).

End of Comment

		.... ..1.		JOE1CTKN	"B'00000010'" A PDDB within this JOE has a client token associated with it(i.e. PDB9CTKN on)
13	(D)	ADDRESS	3	JOEJQEI	JQE for this JOE (offset in R4 mode and index in z2 mode)
16	(10)	BITSTRING	1	JOEFLAG2	MORE WORK JOE FLAGS
		1...		JOE2TCEL	"B'10000000'" TRACK-CELL JOE FLAG
		.1..		JOE2DMND	"B'01000000'" DEMAND-SETUP JOE FLAG
		..1.		JOE2SYSN	"B'00100000'" SYSTEM GENERATED JOE NAME FLAG
		...1		JOE2CLNE	"B'00010000'" SET MULTIPLE COPIES OF THIS JOE
		.... 1...		JOE2UPRI	"B'00001000'" USER SPECIFY PRIORITY FLAG
		.... .1..		JOE2IPAD	"B'00000100'" Destination is in IP-format
		.... ..1.		JOE2NUNK	"B'00000010'" Tokens are NJE unknown user
		1		JOE2UNSP	"B'00000001'" JOE CREATED BY UNSPUN PROC
17	(11)	ADDRESS	3	JOENXJQI	Next WORK-JOE with same job (offset in R4 mode and index in z2 mode)
20	(14)	BITSTRING	1	JOEFLAG3	THIRD WORK JOE FLAG
		1...		JOE3CPER	"B'10000000'" PERM I/O ERROR ON CHK SPOOL REC
		.1..		JOE3IOTV	"B'01000000'" JOE'S IOT HAS BEEN WRITTEN
		..1.		JOE3NWTG	"B'00100000'" GET NEW TRK GRP FOR CHK
20	(14)	X'10'	0	JOE3TODP	"$ODPURGE" JOE IS OUTDISP=PURGE
20	(14)	X'8'	0	JOE3TODW	"$ODWRITE" JOE IS OUTDISP=WRITE
20	(14)	X'4'	0	JOE3TODH	"$ODHOLD" JOE IS OUTDISP=HOLD
20	(14)	X'2'	0	JOE3TODK	"$ODKEEP" JOE IS OUTDISP=KEEP
20	(14)	X'1'	0	JOE3TODL	"$ODLEAVE" JOE IS OUTDISP=LEAVE
20	(14)	X'1F'	0	JOE3TODA	"$ODANYWP" ALL OUTDISP BIT SETTINGS
21	(15)	ADDRESS	3	JOECHARI	Characteristic JOE for this WORK-JOE (offset in R4 mode and index in z2 mode)
24	(18)	BITSTRING	1	JOEOFFSL	OFFLOAD SELECT BYTE
25	(19)	ADDRESS	3	JOECHNXI	Next WORK-JOE, same CHAR (offset in R4 mode and index in z2 mode)
28	(1C)	BITSTRING	1	JOEFLAG4	FOURTH WORK JOE FLAG
		1...		JOE4JNEW	"B'10000000'" JESNEWS JOE FLAG
		.1..		JOE4RES2	"B'01000000'" Reserved for future use

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
		..1.		JOE4DAUG	"B'00100000'" JOE created from daughter spin IOT
		...1		JOE4DSCT	"B'00010000'" Valid DSCT in spin IOT
		.... 1...		JOE4PRIO	"B'00001000'" Installation set Priority
		.... .1..		JOE4DSID	"B'00000100'" DSID= 3540 HELD DATA SET
		.... ..1.		JOE4NPSO	"B'00000010'" JOE IS NOT AVAILABLE TO PSO
		1		JOE4PRST	"B'00000001'" JOE priority has been set by $#BLD

Comment

```
-------------------------------------------------------------
      Flag byte JOEFLGT2 is used by various processors
      (HASPFSSM, HASPNST, HASPPRPU, HASPPSO) to determine
      whether or not to update the corresponding PDDBs,
      hence causing the PDDBs to be re-grouped.
      These flags are currently being set by both $TO and
      $R command processing.
-------------------------------------------------------------
```

End of Comment

29	(1D)	BITSTRING	1	JOEFLGT2	Indications of JOE modified by operator commands, JOE fields should override corresponding fields in PDDB. See also JOEFLAGT.
		.1..		JOE2TUSE	"B'01000000'" Userid changed via commands
		..1.		JOETPSOC	"B'00100000'" JOE created by PSO/SAPI
		...1		JOETPSOA	"B'00010000'" PSO/SAPI added PDDB to JOE
		.... 1...		JOETPSOD	"B'00001000'" PSO/SAPI deleted PDDB from JOE
30	(1E)	BITSTRING	1	JOEHOLD	DATA SET HOLD REASON

Comment

```
OHLDOPER B'10000000' OPERATOR HOLD
OHLDSYS B'00100000' SYSTEM HOLD
OHLDALL B'11111111' ALL HOLD
```

End of Comment

31	(1F)	BITSTRING	1	JOEHSRSN	SYSTEM HOLD REASON

Comment

```
OHLDJX01 X'01' FSI RELDS UNPRINTABLE SWB ERROR
OHLDJX02 X'02' FSI RELDS UNPRINTABLE FSA
OHLDJX03 X'03' SAF CALL FAILED IN HASPPRPU
OHLDJX04 X'04' TRANSMISSION FAILED IN HASPNET
OHLDJX05 X'05' NJE Hop Count Exceeded
OHLDJX06 X'06' Held by Sysout API
OHLDJ233 X'33' OFFLOAD WITH HOLD
OHLDJ234 X'34' PROGRAM CHECK IN HASPPRPU
OHLDJ235 X'35' PROGRAM CHECK IN USER EXIT
OHLDJ236 X'36' PROGRAM CHECK IN SWBTUREQ
```

End of Comment

32	(20)	SIGNED	4	JOEFSID	FSID IF JOE ACTIVE ON AN FSA
32	(20)	X'20'	0	JOEFSSID	"JOEFSID,2,C'H'" FSS ID
32	(20)	X'22'	0	JOEFSAID	"JOEFSID+2,2,C'H'" FSA ID
32	(20)	X'20'	0	JOENETCH	"JOEFSID,4,C'A'" Offset of next JOE on SYSOUT transmitter chain
36	(24)	SIGNED	2	JOEPRIO	JOE PRIORITY X'0000' - X'0FF0'
38	(26)	SIGNED	2	JOEJNEWL	Job number for JESNEWS JQE if R4 mode, JESNEWS num for JESNEWS if z2 mode
40	(28)	BITSTRING	4	JOECPADR	CKPT SPOOL RECORD ADDR (MTTR)

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
					Comment
		THESE FIELDS MUST BE KEPT TOGETHER			
					End of Comment
44	(2C)	BITSTRING	4	JOERECCT	TOTAL RECORD COUNT
48	(30)	BITSTRING	4	JOEPGCT	TOTAL PAGE RECORD COUNT
52	(34)	BITSTRING	4	JOEWRECN	NUM OF RECS PROCESSED SO FAR
56	(38)	BITSTRING	4	JOEWPAGN	NUM OF PAGES PROCESSED SO FAR
					Comment
		END OF SECTION THAT MUST BE KEPT TOGETHER			
					End of Comment
60	(3C)	BITSTRING	4	JOEIOTTR	JOE IOT TRACK ADDR
64	(40)	BITSTRING	3	JOEDEVID	USER DEVICE IDENTIFICATION
					Comment
		---------- Flag byte JOEFLAGT is used by various processors (HASPFSSM, HASPNST, HASPPRPU, HASPPSO) to determine whether or not to update the corresponding PDDBs, hence causing the PDDBs to be re-grouped. These flags are currently being set by both $TO and $R command processing. ----------				
					End of Comment
67	(43)	BITSTRING	1	JOEFLAGT	Indications of JOE modified by operator commands, JOE fields should override corresponding fields in PDDB. See also JOEFLGT2.
		1...		JOEFTMOD	"B'10000000'" JOE overrides PDDB settings or network data set header settings
		.1..		JOEFTFMS	"B'01000000'" FORMS CHANGED
		..1.		JOEFTFCB	"B'00100000'" FCB CHANGED
		...1		JOEFTUCS	"B'00010000'" UCS CHANGED
		.... 1...		JOEFTWRT	"B'00001000'" WRITER CHANGED
		.... .1..		JOEFTFLH	"B'00000100'" FLASH CHANGED
		.... ..1.		JOEFTBRT	"B'00000010'" BURST CHANGED
		1		JOEFTPRM	"B'00000001'" PRMODE CHANGED
68	(44)	SIGNED	4	JOEROUT (0)	REMOTE ID OF DATA
68	(44)	SIGNED	2	JOERNODE	NODE NUMBER
70	(46)	SIGNED	2	JOEREMOT	REMOTE NUMBER
70	(46)	X'46'	0	JOERUNIT	"JOEREMOT" UNIT ADDRESS
72	(48)	CHARACTER	12	JOEID (0)	JOE IDENTIFICATION BLOCK
72	(48)	CHARACTER	8	JOENAME	JOE'S OUTPUT GROUP NAME
72	(48)	X'4F'	0	JOESGNB1	"JOENAME+7" JOENAME SIGN NIBBLE FOR EBCDIC
80	(50)	SIGNED	2	JOEID1	JOE'S OUTPUT GROUP 1ST ID
82	(52)	SIGNED	2	JOEID2	JOE'S OUTPUT GROUP 2ND ID
84	(54)	SIGNED	4	JOECRTME	JOE CREATION TIME
88	(58)	CHARACTER	8	JOECRUID	Creator userid for Dataset
96	(60)	SIGNED	4	JOESWBOT	Starting track address of JOE SWBIT chain for SWBTU overrides
100	(64)	BITSTRING	1	JOEBUSY	JOE busy system id
101	(65)	SIGNED	3	JOEFAMLY	Mother/Daughter Family ID
104	(68)	SIGNED	4	JOE1END (0)	END OF WORK-JOE
104	(68)	X'68'	0	JOEWSIZE	"*-JOE" Size of Work JOE

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
					Comment
					JOE fields used only in Characteristics JOEs
					End of Comment
12	(C)	BITSTRING	1		RESERVED FOR FUTURE USE
13	(D)	ADDRESS	3	JOEWKPTI	WORK-JOE with like CHAR-JOE (offset in R4 mode and index in z2 mode)
					Comment
					IF YOU ADD OR DELETE SETUP FIELDS, YOU MUST UPDATE THE EQUATES FOR THE $D F COMMAND IN HASPCOMM
					End of Comment
16	(10)	CHARACTER	8	JOEFORM	FORMS NAME
24	(18)	CHARACTER	4	JOEFCB	FCB NUMBER
28	(1C)	CHARACTER	4	JOEUCS	UCS NUMBER
32	(20)	CHARACTER	8	JOEWTRID	DATA SET EXTERNAL WRITER NAME
40	(28)	CHARACTER	8	JOEUSER	USER ID
48	(30)	CHARACTER	4	JOEFLASH	OVERLAY-FRAME
52	(34)	CHARACTER	8	JOEPRMD	PROCESS MODE OF THIS JOE
60	(3C)	CHARACTER	8	JOESECLB	Security label for Dataset
68	(44)	BITSTRING	1	JOEFLAGC	CHARACTERISTICS FLAGS
		1...		JOEFCBRT	"B'10000000'" BURST=YES FLAG
69	(45)	BITSTRING	1	JOEFLAGD	DEMAND CHARACTERISTIC FLAGS
		1...		JOEFDFMS	"B'10000000'" FORMS DEMAND '0' NO '1' YES
		.1..		JOEFDFLH	"B'01000000'" FLASH DEMAND '0' NO '1' YES
		..1.		JOEFDFCB	"B'00100000'" FCB DEMAND '0' NO '1' YES
		...1		JOEFDUCS	"B'00010000'" UCS DEMAND '0' NO '1' YES
		.... 1...		JOEFDBRT	"B'00001000'" BURST DEMAND '0' NO '1' YES
69	(45)	X'10'	0	JOESETUP	"JOEFORM,*-JOEFORM" DEVICE SETUP CHARACTERISTICS
70	(46)	BITSTRING	2		RESERVED FOR FUTURE USE
72	(48)	SIGNED	4	JOEUSE	# OF JOES USING THIS ELEMENT
76	(4C)	SIGNED	4	JOE2END (0)	END OF CHAR-JOE
76	(4C)	X'4C'	0	JOECSIZE	"*-JOE" Size of Char JOE
104	(68)	X'68'	0	JOESIZE	"*-JOE" LENGTH OF MAX JOE

$JOE Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
JOE	0		JOEFLAGC	44	
JOEBUSY	64		JOEFLAGD	45	
JOECHARI	15		JOEFLAGT	43	
JOECHARJ	0	40	JOEFLAG1	C	
JOECHNXI	19		JOEFLAG2	10	
JOECPADR	28		JOEFLAG3	14	
JOECRTME	54		JOEFLAG4	1C	
JOECRUID	58		JOEFLAG5	8	
JOECSEND	C		JOEFLASH	30	
JOECSIZE	4C	4C	JOEFLGT2	1D	
JOECURCL	4		JOEFORM	10	
JOEDEVID	40		JOEFREE	0	C0
JOEFAMLY	65		JOEFSAID	20	22
JOEFCB	18		JOEFSID	20	
JOEFCBRT	44	80	JOEFSSID	20	20
JOEFDBRT	45	8	JOEFTBRT	43	2
JOEFDFCB	45	20	JOEFTFCB	43	20
JOEFDFLH	45	40	JOEFTFLH	43	4
JOEFDFMS	45	80	JOEFTFMS	43	40
JOEFDUCS	45	10	JOEFTMOD	43	80

Name	Hex Offset	Hex Value
JOEFTPRM	43	1
JOEFTUCS	43	10
JOEFTWRT	43	8
JOEHOLD	1E	
JOEHSRSN	1F	
JOEID	48	
JOEID1	50	
JOEID2	52	
JOEIOTTR	3C	
JOEJNEWL	26	
JOEJQEI	D	
JOENAME	48	
JOENETCH	20	20
JOENEXTI	1	
JOENXJQI	11	
JOEOFFSL	18	
JOEPGCT	30	
JOEPREVI	5	
JOEPRIO	24	
JOEPRMD	34	
JOERECCT	2C	
JOEREMOT	46	
JOERNODE	44	
JOEROUT	44	
JOERUNIT	46	46
JOESECLB	3C	
JOESETUP	45	10
JOESGNB1	48	4F
JOESIZE	68	68
JOESWBOT	60	
JOETPSOA	1D	10
JOETPSOC	1D	20
JOETPSOD	1D	8
JOETYPE	0	
JOEUCS	1C	
JOEUSE	48	
JOEUSER	28	
JOEVRSN	0	7
JOEWKPTI	D	
JOEWORK	0	80
JOEWPAGN	38	
JOEWRECN	34	
JOEWSIZE	68	68
JOEWTRID	20	
JOE1CJES	C	8
JOE1CKV	C	80
JOE1CPDS	C	4
JOE1CTKN	C	2
JOE1END	68	
JOE1PRT	C	20
JOE1PUN	C	10
JOE1SPIN	C	40
JOE2CLNE	10	10
JOE2DMND	10	40
JOE2END	4C	
JOE2IPAD	10	4
JOE2NUNK	10	2
JOE2SYSN	10	20
JOE2TCEL	10	80
JOE2TUSE	1D	40
JOE2UNSP	10	1
JOE2UPRI	10	8
JOE3CPER	14	80
JOE3IOTV	14	40
JOE3NWTG	14	20
JOE3TODA	14	1F
JOE3TODH	14	4
JOE3TODK	14	2
JOE3TODL	14	1
JOE3TODP	14	10
JOE3TODW	14	8
JOE4DAUG	1C	20
JOE4DSCT	1C	10
JOE4DSID	1C	4
JOE4JNEW	1C	80
JOE4NPSO	1C	2
JOE4PRIO	1C	8
JOE4PRST	1C	1
JOE4RES2	1C	40
JOE5RBLD	8	1
JOE5ZAP	8	2

$JOT Programming Interface information

Programming Interface information

$JOT

End of Programming Interface information

$JOT Heading Information

Common Name: Job Output Table
Macro ID: $JOT
DSECT Name: JOT
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: 'JOT '
Offset: JOTID-JOT
Length: 4
Storage Attributes: Subpool: 0 for the JES2 main copy; 231 for the APPLCOPY copy; dataspace for the checkpoint version copy.
Key: 1
Residency: The JOT is a checkpoint resident control block. Virtual storage is anywhere (below or above 16M) in the JES2 address space for the JES2 main copy. Virtual storage for the APPLCOPY copy is in ECSA.
Size: See JOESIZE.
Created by: JES2 Initialization allocates memory for the JOT.
The APPLCOPY subtask creates the APPLCOPY instances.
The checkpoint versions subtask creates the dataspace copies.
Pointed to by: $JOTABLE field of the $HCT data area
KACJOTP field of the $KAC data area
Serialization: The JES2 checkpoint ($QSUSE) for change. The copy of the JOT in the main copy of the checkpoint may not be examined by anything other than the JES2 main task since it could be changing, it may be page-released or it may be all zeros
Function: The JOT control block contains the headers to all the job output queues and contains all the Job Output Elements (JOEs). See $JOE for more information on JOEs.

$JOT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	JOT	JOB OUTPUT TABLE DSECT
0	(0)	CHARACTER	4	JOTID	JOB OUTPUT TABLE ID
4	(4)	SIGNED	4	JOTFREC	COUNT OF FREE JOES
8	(8)	ADDRESS	2	JOTCLMU	CLASS MULTIPLIER
10	(A)	SIGNED	2		RESERVED FOR FUTURE USE
12	(C)	ADDRESS	4	JOTCLSEN	SIZE OF CLASS QUEUE ENTRY
16	(10)	ADDRESS	4	JOTUSER1	USER FIELD ONE
20	(14)	ADDRESS	4	JOTUSER2	USER FIELD TWO
24	(18)	ADDRESS	4	JOTUSER3	USER FIELD THREE
28	(1C)	ADDRESS	4	JOTUSER4	USER FIELD FOUR

Comment

The contents of the queue head (value used to locate the JOE) vary depending upon the mode of the JES2 checkpoint. In R4 mode the queue head will contain a JOE offset. In R12 mode, the queue head will contain a JOE index.

End of Comment

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
32	(20)	ADDRESS	4	JOTQHEAD (0)	Beginning of JOE q heads
32	(20)	ADDRESS	4	JOTFREQI	Queue of free JOEs
36	(24)	ADDRESS	4	JOTCHRQI	Queue of CHAR-JOEs
40	(28)	ADDRESS	4	JOTPRGQI	Queue of purge JOEs

Comment

```
-----------------------------------------------------------------
    HOLD QUEUE - AVAILABLE FOR ANY OFFLOAD DEVICES
-----------------------------------------------------------------
```

End of Comment

44	(2C)	ADDRESS	4	JOTHLDQI	Queue of hold JOEs

Comment

```
-----------------------------------------------------------------
    READY QUEUE -
    AVAILABLE FOR ANY PROCESSOR THAT IS ELIGIBLE TO SELECT JOES
-----------------------------------------------------------------
```

End of Comment

48	(30)	BITSTRING	0	JOTRDWQI (0)	Ready work JOE queues
48	(30)	ADDRESS	4	JOTNTWQI	Queue of network JOEs
52	(34)	ADDRESS	4	JOTCLSQI (0)	Queue of class WORK-JOEs
52	(34)	ADDRESS	4	(0)	OFFSET QUEUE OF CLASS WORK-JOES BY LOCAL AND NON-LOCAL DEST (QUEUE HEADS)
52	(34)	X'6D'	0	JOTNUMWQ	"(1+3*36)" NUMBER OF READY WORK QUEUE
52	(34)	X'1B0'	0	JOTCLSSZ	"(*-JOTCLSQI)" Size of class queue heads
52	(34)	X'4'	0	JOTHEADL	"4" LENGTH OF A CLASS QUEUE HEAD
52	(34)	X'8'	0	JOTPRHDL	"2*JOTHEADL" LENGTH OF PAIR OF CLASS Q HEADS
52	(34)	X'0'	0	JOTLQOFF	"0" OFFSET OF LCL Q FROM CLS
52	(34)	X'4'	0	JOTUQOFF	"JOTHEADL" OFFSET OF USER Q FROM CLS
52	(34)	X'8'	0	JOTRQOFF	"2*JOTHEADL" OFFSET OF REM Q FROM CLASS
52	(34)	X'C'	0	JOTTHEDL	"3*JOTHEADL" TOTAL LENGTH OF CLS Q HDS
484	(1E4)	ADDRESS	4	JOTRBLQI	JOE rebuild queue header
484	(1E4)	X'1C8'	0	JOTQUEL	"*-JOTQHEAD" Length of all JOE q headers
488	(1E8)	SIGNED	4	(2)	Reserved for future use

Comment

```
-----------------------------------------------------------
    Ensure JOT header size is exact multiple of JOE size.
    There cannot be anything between the next DC
    and JOTJOES.
-----------------------------------------------------------
```

End of Comment

496	(1F0)	BITSTRING	1	(0)	
520	(208)	SIGNED	4	JOTJOES (0)	START OF JOB OUTPUT ELEMENTS
520	(208)	X'208'	0	JOTJOESO	"*-JOT" Offset of first real JOE
520	(208)	X'5'	0	JOTJOESI	"(*-JOT)/JOESIZE" Index of first real JOE
520	(208)	X'7A120'	0	JOTMXJOE	"500000" Maximum number of JOEs

Comment

```
-----------------------------------------------------------
    If the following does not assemble due to a user
    modification to the JOE that alters its size, then
    the $MAXJOE_R4 field in $HASPEQU must also be
    altered (to match JOTMXJOE_R4).
-----------------------------------------------------------
```

End of Comment

$JOT Cross Reference

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
520	(208)	X'27622'	0	JOTMXJOE_R4	"((X'FFFFFF'-(JOTJOES-JOT))/JOESIZE)" Maximum number of JOEs that will accomodate 3-byte offsets
520	(208)	ADDRESS	2	(0)	
520	(208)	ADDRESS	2	(0)	

$JOT Cross Reference

Name	Hex Offset	Hex Value
JOT	0	
JOTCHRQI	24	
JOTCLMU	8	
JOTCLSEN	C	
JOTCLSQI	34	
JOTCLSSZ	34	1B0
JOTFREC	4	
JOTFREQI	20	
JOTHEADL	34	4
JOTHLDQI	2C	
JOTID	0	
JOTJOES	208	
JOTJOESI	208	5
JOTJOESO	208	208
JOTLQOFF	34	0
JOTMXJOE	208	7A120
JOTMXJOE_R4	208	27622
JOTNTWQI	30	
JOTNUMWQ	34	6D
JOTPRGQI	28	
JOTPRHDL	34	8
JOTQHEAD	20	
JOTQUEL	1E4	1C8
JOTRBLQI	1E4	
JOTRDWQI	30	
JOTRQOFF	34	8
JOTTHEDL	34	C
JOTUQOFF	34	4
JOTUSER1	10	
JOTUSER2	14	
JOTUSER3	18	
JOTUSER4	1C	

$JPAWORK Heading Information

Common Name: JES2 Job Priority Aging PCE Work Area
Macro ID: $JPAWORK
DSECT Name: PCE ($JPAWORK is part of the PCE DSECT)
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: 'PCE '
Offset: PCEEYE-PCE
Length: 4
Storage Attributes: Subpool: See $PCE
Key: See $PCE
Residency: See $PCE
Size: See symbol JPAPCEWS for the length of this work area. The overall length of the PCE is stored in field PCELENG.
Created by: See $PCE
Pointed to by: The $PRTYPCE field of the $HCT data area
See $PCE for other pointer fields that apply to all PCE types.
Serialization: Normal PCE dispatch serialization
Function: The fields in this area are used by a JES2 Job Priority Aging Processor and by its support routines and exits. $JPAWORK maps the variable PCE work area that begins at label PCEWORK. The fields defined in $JPAWORK are actually part of the PCE DSECT, but only map PCEs with the value PCEJPAID in the second byte of field PCEID.

This PCE is not device related. Field PCEDCT is zero.

$JPAWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	PCE	, Continue PCE DSECT
240	(F0)	BITSTRING	12	JPATQE	HASP Timer Queue Element
252	(FC)	SIGNED	4		Reserved for future use
256	(100)	DBL WORD	8	(0)	Force double-word alignment
256	(100)	X'10'	0	JPAPCEWS	"*-PCEWORK" Length of work area

$JQE Programming Interface information

Programming Interface information

$JQE

End of Programming Interface information

$JQE Heading Information

Common Name: JES2 Job Queue Element
Macro ID: $JQE
DSECT Name: JQE
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: The pool of JQEs is preceded by an eyecatcher '**JQE POOL**' in the header for the pool.
Offset: HDPID-HDP
Length: 13
Storage Attributes: Subpool: 0, 231, dataspace
Key: 1
Residency: Virtual storage is anywhere (below or above 16M) in the JES2 address space. Virtual storage for the APPLCOPY is in ECSA. Real storage is anywhere.
Size: JQEBLEN (base length) + 4*((SPOLNUM+31)/32) (size of the SPOOLS used mask which is dependent on the number of SPOOL volumes; 4 bytes for every 32 spool volumes)
$JQELEN in the $HCT data area is the total length.
Created by: Storage is obtained by HASPIRDA for the JES2 private version and by HASPCKVR for the data space and APPLCOPY versions. The control block is filled in by the $QADD service.

Pointed to by:

The following fields contain offsets (R4 level of the checkpoint) or indexes (z/OS 1.2 level of the checkpoint) to $JQEs from the address in field $JOBQPTR in the $HCT data area. The offsets are converted to addresses by adding the value in $JOBQPTR to the offset. The indexes are converted to addresses by multiplying by $JQELEN and then adding the value in $JOBQPTR to the calculated offset.
CATQHDI field of the $CAT data area
$JQFREEI field of the $HCT data area
$JQHEADI field of the $HCT data area
$JQRBLDI field of the $HCT data area
JOEJQEI field of the $JOE data area
JQENEXTI field of the $JQE data area

The following fields contain offsets to $JQEs:
$NEWSJQE field of the $HCT data area
$SCQJQE field of the $HCT data area
IOTJQOFF field of the $IOT data area
JCTJQE field of the $JCT data area
PITJQOFF field of the $PIT data area
PSOJQEP field of the $PSO data area
QSEPRGJQ field of the $QSE data area
RATRMJQE field of the $RAT data area
SJBJQOFF field of the $SJB data area
TGBJQE field of the $TGB data area

The following fields contain addresses of $JQEs:
$JOBQPTR field of the $HCT data area
PCEJQE field of the $PCE data area

Various fields in the processor work areas and parameter lists contain offsets or addresses of JQEs.

Serialization:

The JES2 Checkpoint data set lock ($QSUSE), the job lock (in the JQE), and JQE1BUSY bits are used for serialization.

Function:

The job queue element is a control block that represents an element of work for the system (a job) and is moved from queue to queue as that work moves through each successive stage of JES2 processing.

The heads of the JES2 queues reside at $JQHEADI in the HCT. These queue heads are used when locating JQEs on a specific queue.

The JQEs are checkpointed control blocks. There are, therefore, at least two copies of each JQE in storage (the actual and I/O copies of the ckpt, in subpool 0). There may also 1 or more copies in the ckpt versions dataspace, and perhaps an applcopy copy in subpool 0 private or subpool 231 CSA.

$JQE Map

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	JQE	HASP JOB QUEUE ENTRY DSECT
0	(0)	X'0'	0	JQA	"JQE,0,C'J'" JQE is sometimes a JQA
0	(0)	X'8'	0	JQEVRSN	"8" JQE control block version
0	(0)	X'0'	0	JQEBB1	"*" Begin of move block 1
0	(0)	SIGNED	1	JQEPRIO	JOB PRIORITY
1	(1)	BITSTRING	1	JQETYPE	LOGICAL QUEUE TYPE

Comment

IF THE $XEQ BIT IS ON THEN THE JOB CAN BE IN OR AWAITING CONVERSION OR EXECUTION. THE JOB IS IN OR AWAITING CONVERSION IF THE $XEQ BIT IS ON AND THERE IS NO JOB CLASS DEFINED IN THE LOW ORDER SIX BITS. THE JOB IS AWAITING XEQ IF THERE IS A JOB CLASS DEFINED AND THE JOB IS NOT BUSY. IF THE JOB IS BUSY AND A CLASS IS DEFINED THEN THE JOB IS BUSY IN EXECUTION.
If a new JQETYPE flag is added, then the $QJQE macro and $QINDEX must be updated for the queue type

End of Comment

		.111 1111		$XEQCLAS	"X'7F'" CLASS OF JOB QUEUED FOR EXECUTION
		1...		$SPIN	"X'80'" SPIN QUEUE
		.1..		$XEQ	"X'40'" OS EXECUTION QUEUE, LOW ORDER SIX BITS DEFINE WHICH JOB CLASS
		..1.		$INPUT	"X'20'" INPUT QUEUE
		...1		$XMIT	"X'10'" TRANSMISSION QUEUE
		.... 1...		$SETUP	"X'08'" SETUP QUEUE
		.... .1..		$RECEIVE	"X'04'" SYSOUT RECEIVER QUEUE
		.... ..1.		$OUTPUT	"X'02'" OUTPUT QUEUE
		1		$HARDCPY	"X'01'" OUTPUT IN-PROGRESS QUEUE
		....		$PURGE	"X'00'" PURGE QUEUE
		1111 1111		$FREE	"X'FF'" FREE QUEUE
1	(1)	X'41'	0	$XEQJOB1	"C'A'-(FF-$XEQCLAS)" OFFSET TO FIRST $QINDEX ENTRY FOR JOB XEQ CLASS QUEUES (JQETYPE)
		.1.1		$XEQSTC	"X'D0'-(FF-$XEQCLAS)" OFFSET TO THE $QINDEX ENTRY FOR STC XEQ CLASS QUEUE (JQETYPE) (REFERENCE CATSTCCL, CATSTCID)
		.11.		$XEQTSU	"X'E0'-(FF-$XEQCLAS)" OFFSET TO THE $QINDEX ENTRY FOR TSU XEQ CLASS QUEUE (JQETYPE) (REFERENCE CATTSUCL, CATTSUID)
1	(1)	X'79'	0	$XEQJOBL	"C'9'-(FF-$XEQCLAS)" Offset to Last $QINDEX entry for job XEQ class queues (JQETYPE)

Comment

COMPATIBILITY CODE
Field JQEJOBNO_R4 should be used for the job number when the checkpoint is R4 mode and field JQEJBNUM should be used when the checkpoint is in z/OS 1.2 mode.

End of Comment

2	(2)	SIGNED	2	JQEJOBNO_R4	HASP job number
4	(4)	BITSTRING	1	JQEFLAG1	JOB QUEUE FLAGS
		1...		JQE1HLDA	"B'10000000'" HOLD ALL JOBS
		.1..		JQE1HLD1	"B'01000000'" HOLD SINGLE JOB
		..1.		JQE1HLD2	"B'00100000'" HOLD FOR DUPLICATE JOB NAME
		...1		JQE1PURG	"B'00010000'" JOB IS TO BE PURGED
		.... 1...		JQE1OCAN	"B'00001000'" OPERATOR ISSUED $C OR $P JOB
		.... .1..		JQE1ARMR	"B'00000100'" The Automatic Restart Manager has registered the job. Hold it (JQE1ARMH) when it ends execution.
		.... ..1.		JQE1ARMH	"B'00000010'" The job is held awaiting a restart decision by the Automatic Restart Manager
		1		JQE1ARME	"B'00000001'" $E the job if ARM does not restart it

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
4	(4)	X'4'	0	JQEEB1	"*-1" End of first move block
4	(4)	X'0'	0	JQESB1	"JQEBB1,JQEEB1-JQEBB1+1,C'X'" Size of 1st block
5	(5)	ADDRESS	3	JQENEXTI	Next JQE (offset in R4 mode and index in z/OS 1.2 mode)
5	(5)	X'8'	0	JQEBB2	"*" Begin of 2nd move block
8	(8)	BITSTRING	1	JQEFLAG2	MORE JOB QUEUE FLAGS
		1...		JQE2IND	"B'10000000'" JOB HAS INDEPENDENT MODE AFFINITY
		.1..		JQE2REST	"B'01000000'" JOB has been restarted
		..1.		JQE2STAR	"B'00100000'" JOB to be started by $S J
		...1		JQE2PEOM	"B'00010000'" JOB pending EOM subtask
		.... ..1.		JQE2ZAP	"B'00000010'" JQE zapped (ZAPJOB)
		1		JQE2ART	"B'00000001'" This is artificial JQE
8	(8)	X'8'	0	JQEEB2	"*-1" End of 2nd move block
8	(8)	X'8'	0	JQESB2	"JQEBB2,JQEEB2-JQEBB2+1,C'X'" Size of 2nd block
9	(9)	ADDRESS	3	JQEJOEI	First WORK-JOE for this JQE (offset in R4 mode and index in z/OS 1.2 mode)
9	(9)	X'C'	0	JQEBB3	"*" Begin of 3rd move block
12	(C)	BITSTRING	1	JQEFLAG3	SOME MORE JOB QUEUE FLAGS
		11		JQE3JOB	"B'00000011'" BATCH JOB TYPE (WHEN BITS ZERO)
		1		JQE3STC	"B'00000001'" STC JOB TYPE
		.... ..1.		JQE3TSU	"B'00000010'" TSU JOB TYPE
		.... .1..		JQE3XMIT	"B'00000100'" JOB DESTINED FOR ANOTHER NODE XMIT OR INTERMEDIATE NODE JOB
		.... 1...		JQE3TMOD	"B'00001000'" JOB IS BEING PROCESSED BY $TO OR $R
		1...		JQE3MVRQ	"B'10000000'" MOVE JOB FOR SPOOL COMMANDS
		.1..		JQE3UNSP	"B'01000000'" JOB HAS UNSPUN SPIN IOTS
		..1.		JQE3NDMP	"B'00100000'" NON SELECTABLE BY DUMPER
		...1		JQE3SYSD	"B'00010000'" JQE REPRESENTS SYSTEM DATA SET, IMPLIES JQETRAK POINTS TO IOT
13	(D)	CHARACTER	1	JQEJCLAS	JOB CLASS

Comment

COMPATIBILITY CODE
Field JQEINJNO_R4 should be used for the initial job number when the checkpoint is R4 mode and field JQXIJNUM should be used when the checkpoint is in z/OS 1.2 mode

End of Comment

14	(E)	SIGNED	2	JQEINJNO_R4	Initial job number
16	(10)	BITSTRING	4	JQEJBKEY	JOB IDENTIFER KEY
20	(14)	BITSTRING	4	JQETRAK	TRACK ADDRESS OF JCT OR IOT TRACK ADDRESS IF JQE3SYSD
24	(18)	SIGNED	2	JQEINPND	INPUT NODE (BINARY)
26	(1A)	SIGNED	2	JQEXEQND	EXECUTION NODE (BINARY)
28	(1C)	SIGNED	4	(0)	FORCE ALIGNMENT
28	(1C)	BITSTRING	1	JQEFLAG4	More job queue flags
		1...		JQE4CAN	"B'10000000'" FORCE SELECT WHEN VOL INACTIVE
		.1..		JQE4NEWS	"B'01000000'" JOB IS JES2NEWS.
		..1.		JQE4SPHA	"B'00100000'" SPOF HOLD ALL JOBS REQUIRED AFTER AUTH CHECK IN CNVT PROCESSOR
		...1		JQE4SPOF	"B'00010000'" JQE HELD BY SYSOUT RECEIVER OR JOB RECEIVER
		.... 1...		JQE4MOLD	"B'00001000'" OLD (ORIGINAL) JOB FOR SPL MOVE
		.... .1..		JQE4MNEW	"B'00000100'" NEWLY CREATED JOB FROM SPL MOVE
		.... ..1.		JQE4TWOJ	"B'00000010'" TWO JOBCARDS FOR JOB XMIT
		1		JQE4JCLH	"B'00000001'" TYPRUN=JCLHOLD, HOLD REQUIRED AFTER AUTH CHK IN CNVT PROCESSOR
29	(1D)	ADDRESS	3	JQEDEVID	Device Identify (DCTDEVID)

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
					Comment
					COMPATIBILITY CODE Equate JQEARMID_R4 should be used for the ARM member id when the checkpoint is R4 mode and field JQEARMMI should be used when the checkpoint is in z/OS 1.2 mode
					End of Comment
32	(20)	BITSTRING	1	JQEARMMI	Member ID on which a job is registered by ARM
					Comment
					COMPATIBILITY CODE Equate JQEWSLOK_R4 should be used for the warm start lock when the checkpoint is R4 mode and field JQEWSLCK should be used when the checkpoint in z/OS 1.2 mode
					End of Comment
33	(21)	BITSTRING	1	JQEWSLCK	Warm start lock
					Comment
					COMPATIBILITY CODE Equate JQENEWSU_R4 is only valid for a JESNEWS job when the checkpoint is R4 mode. JQENEWSU_R4 is the number of jobs currently using the JESNEWS JQE. The count starts at one when the JESNEWS job structure is created. JQENWUSE should be used in z/OS 1.2 mode
					End of Comment
33	(21)	X'20'	0	JQENEWSU_R4	"JQEARMMI,2,C'H'" For a JESNEWS job, the num of jobs currently using it
34	(22)	BITSTRING	1	JQEBUSY	JQE busy system id
35	(23)	BITSTRING	1	JQEJLOK	Job lock busy system id
36	(24)	CHARACTER	8	JQEJNAME	JOB NAME FROM JOB CARD
44	(2C)	CHARACTER	8	JQEUSRID	USERID OF JOB OWNER
52	(34)	CHARACTER	8	JQESECLB	SECURITY LABEL OF JOB
					Comment
					---------- JQEJOEID is the current JOE identifier used when building JOEs for this job unless this is JESNEWS. For an active JESNEWS job this is either: - A count that uniquely identifies this instance of JESNEWS (OS/390 Release 4 mode) - The count of active users of this instance of JESNEWS (z/OS 1.2 mode) ----------
					End of Comment
60	(3C)	SIGNED	4	JQENWSID_R4 (0)	R4 JESNEWS id (level)
60	(3C)	SIGNED	4	JQENWUSE (0)	News use count (z2 mode)
60	(3C)	SIGNED	4	JQEJOEID	Current JOE id number (unless this is JESNEWS)
64	(40)	BITSTRING	1	JQEFLAG5	FLAG BYTE
		1...		JQE5XUSD	"B'10000000'" USING EXTENSION FOR TG COUNT
		.1..		JQE5NSL	"B'01000000'" JOB REJECTED BY SELECTIVE LOAD
		..1.		JQE5NUNK	"B'00100000'" Job tkn is NJE unknwn user
		...1		JQE5NOTF	"B'00010000'" NOTIFY PROCESSING COMPLETE
		.... 1...		JQE5EOM	"B'00001000'" Job terminated at end of memory

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
		.... .1..		JQE5RUNS	"B'00000100'" Job has new unspun work
		.... ..1.		JQE5PUPS	"B'00000010'" Job may have unprocessed spin output (Flag only valid before unspun processing starts)
65	(41)	BITSTRING	1	JQEOFFSL	OFFLOAD SELECT BYTE

Comment

In z2 mode, the total number of trackgroups allocated to a given JQE is in two pieces. One piece is in the JQX (JQXTGWRP) and the other piece is in the JQE (if JQE5XUSD is off) or in the JQT (if JQE5XUSD is on.) The one byte value in the JQX is the number of multiples of X'8000' trackgroups that the JQE owns. The value in the second piece is the number of trackgroups owned above the multiple of X'8000'.
If JQE5XUSD is on, then JQETGNBR is the index of the JQT entry which holds the two byte value.
In R4 mode, the halfword either has the total number of track groups for the job (JQE5XUSD off) or it has the offset (JQE5XUSD on) of the JQE extension.

End of Comment

66	(42)	SIGNED	2	JQETGNBR	See above
68	(44)	BITSTRING	1	JQEFLAG6	FLAG BYTE

Comment

EQU B'10000000' Obsolete (JQE6DUPC in

End of Comment

		.1..		JQE6PRG	"B'01000000'" Purge auditing required
		..1.		JQE6TGAE	"B'00100000'" TG counter has overflowed

Comment

B'00010000' This bit used in 5.1
(cannot use in 5.2)

End of Comment

		.... 1...		JQE6HOPR	"B'00001000'" Reset NJE hop count when retransmitting job
		.... .1..		JQE6PRT	"B'00000100'" Priority change by $T
		.... ..1.		JQE6PRAG	"B'00000010'" Priority change by aging
		1		JQE6NCSA	"B'00000001'" Job has no more CSA IOTs (only valid after job has completed execution)
69	(45)	BITSTRING	1	JQEFLAG7	FLAG BYTE
		1...		JQE7PROT	"B'10000000'" Job's output is protected
		.1..		JQE7TP	"B'01000000'" Transaction initiator
		..1.		JQE7INIT	"B'00100000'" Batch initiator
		...1		JQE7IOTE	"B'00010000'" IOT error
		.... 1...		JQE7SPIN	"B'00001000'" Spin IOTs outstanding
		.... .1..		JQE7SPOT	"B'00000100'" Spin output produced
		.... ..1.		JQE7RJI	"B'00000010'" Request job id indicator
		1		JQE7SYSL	"B'00000001'" SYSLOG indicator
70	(46)	BITSTRING	1	JQEFLAG8	FLAG BYTE
		1...		JQE8HLDS	"B'10000000'" JOB HAS HELD 3540 DATA SET
		.1..		JQE8DUPL	"B'01000000'" Job has been held at least once for duplicate job name
		..1.		JQE8CNWT	"B'00100000'" Job must convert on a PCE that can wait for OS CNVT
		...1		JQE8BOUT	"B'00010000'" Use abnormal outdisp
		.... 1...		JQE8OPCD	"B'00001000'" Job cancelled by oper with dump
		.... .1..		JQE8NJIX	"B'00000100'" Job is not in JIX

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
		.... ..1.		JQE8RBLD	"B'00000010'" Job is on Rebuild Queue
		1		JQE8NOQ	"B'00000001'" Job is not on a queue

Comment

The use of JQEFLAG9 should be reserved for use by the job command processor only.

End of Comment

71	(47)	BITSTRING	1	JQEFLAG9	FLAG BYTE - JCMD processor
		1...		JQE9$E	"B'10000000'" Mark JQE for Restart
		.1..		JQE9$C	"B'01000000'" Cancel the JQE
		.11.		JQE9$CD	"B'01100000'" Cancel JQE with dump
		.1.1		JQE9$CAR	"B'01010000'" Cancel JQE with ARM restart
		.... 1...		JQE9$SPN	"B'00001000'" Spin JESLOG files
		.... .1..		JQE9$TSC	"B'00000100'" Reset the service class

Comment

COMPATIBILITY CODE
Field JQEJOBNO_R4 should be used for the job number when the checkpoint is R4 mode and field JQEJBNUM should be used when the checkpoint is in z/OS 1.2 mode.

End of Comment

72	(48)	SIGNED	4	JQEJBNUM	HASP job number (z2 mode)

Comment

COMPATIBILITY CODE
Equate JQEARMID_R4 should be used for the ARM member id when the checkpoint is R4 mode and field JQEARMMI should be used when the checkpoint is in z/OS 1.2 mode.

End of Comment

72	(48)	X'48'	0	JQEARMID_R4	"JQEJBNUM,1,C'X'" Member ID on which a job is registered by ARM

Comment

COMPATIBILITY CODE
Equate JQEWSLOK_R4 should be used for the warm start lock when the checkpoint is R4 mode and field JQEWSLCK should be used when the checkpoint is in z/OS 1.2 mode

End of Comment

72	(48)	X'49'	0	JQEWSLOK_R4	"JQEJBNUM+1,1,C'X'" Warm start lock

Comment

The following default route fields should only be used for command/console authorization purposes. They initially match the JCT fields when a job is created, but are not complete in that only one of the userid valids is in the JQE. They are not used in any dataset destination resolution (the JCT fields are used), and apply (for compatibility) only to console operator job ownership.

End of Comment

76	(4C)	SIGNED	4	JQEDRPRT	Default print routing, initially same as JCTPROUT

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
80	(50)	CHARACTER	8	JQEDRPRU	Default print routing user for SDSF compatibility
88	(58)	SIGNED	4	JQEDRPUN	Default punch routing, initially same as JCTPUOUT
88	(58)	X'0'	0	JQEDRNO	"0,2,C'H'" Offset of node in route
88	(58)	X'2'	0	JQEDRRO	"2,2,C'H'" Offset of rmt in route
92	(5C)	BITSTRING	4	JQESAF	Full system affinity mask
96	(60)	SIGNED	4	(0)	INSURE FULL-WORD BOUNDARY
96	(60)	X'60'	0	JQEEB3	"*" End of 3rd move block
96	(60)	X'C'	0	JQESB3	"JQEBB3,JQEEB3-JQEBB3,C'X'" Size of 3rd block
96	(60)	X'60'	0	JQEBEND	"*" End of base JQE
96	(60)	X'60'	0	JQEBLEN	"*-JQE" LENGTH OF BASE JOB QUEUE ENTRY
96	(60)	SIGNED	4	JQESUMSK (0)	START OF SPOOLS-USED MASK, VARIABLE LEN (NUMBER OF BITS=SPOOLNUM), LEN IS MULTIPLE OF FOUR BYTES
96	(60)	BITSTRING	1	JQASUMSK	Max spools used mask

Comment

The following fields appear only within an artificial JQE. Artificial JQEs are constructed using the $DOGJQE service.

End of Comment

128	(80)	SIGNED	4	JQX (0)	Beginning of JQX
128	(80)	X'80'	0	JQXBB1	"*" Begin of 1st move block
128	(80)	SIGNED	4	JQXRECCT	Pre-execution record count

Comment

JQX maximum completion code information, by design, matches the mapping in the network job trailer. Consult NJE Formats and Protocols before adding a new type.

End of Comment

132	(84)	BITSTRING	4	JQXMAXRC (0)	--+ Maximum Job Return Code
132	(84)	BITSTRING	1	JQXMXIND	| Job completion indicator
		1...		JQXMXAB	"X'80'" | Abend code exists
		.1..		JQXMXCDE	"X'40'" | Condition code exists
132	(84)	X'0'	0	JQXMXUNK	"0" | No completion info
132	(84)	X'1'	0	JQXMXNRM	"1" | Job ended normally +
132	(84)	X'2'	0	JQXMXCC	"2" | Job ended by CC +
132	(84)	X'3'	0	JQXMXJCL	"3" | Job had a JCL error
132	(84)	X'4'	0	JQXMXCAN	"4" | Job was canceled
132	(84)	X'5'	0	JQXMXABN	"5" | Job ABENDed +
132	(84)	X'6'	0	JQXMXCAB	"6" | Converter ABENDed
132	(84)	X'7'	0	JQXMXSEC	"7" | Security error
132	(84)	X'8'	0	JQXMXEOM	"8" | Job failed in EOM +
133	(85)	BITSTRING	3	JQXMAXCC	--+ Completion code (set for '+' conditions)
136	(88)	BITSTRING	4	JQXBERTT	Token representing the BERTS for this JQE
140	(8C)	BITSTRING	4	JQXCRTME	JQE creation time
140	(8C)	X'90'	0	JQXEB1	"*" End of 1st move block
140	(8C)	X'80'	0	JQXSB1	"JQXBB1,JQXEB1-JQXBB1,C'X'" Size of 1st block
144	(90)	SIGNED	4	JQXWSNXT	Index of next JQE on WSC Q
148	(94)	SIGNED	4	JQXWSPRV	Index of prev JQE on WSC Q
148	(94)	X'98'	0	JQXBB2	"*" Begin of 2nd move block
152	(98)	CHARACTER	8	JQXJCLAS	Job class

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
					Comment
					---------- The JQX1WLM flag has special case code in $DOGJQE. This flag should be modified using the real JQX. The other flags in JQXFLAG1 should be modified using the JQA. ----------
					End of Comment
160	(A0)	BITSTRING	1	JQXFLAG1	Flags
		1...		JQX1TSRV	"B'10000000'" SRVCLASS has been $Ted to a non-null value
		.1..		JQX1WLM	"B'01000000'" Job on WLM queue
		..1.		JQX1CTKN	"B'00100000'" Job has data set(s) for which DYNALLOC returned a client token
		...1		JQX1DFQ	"B'00010000'" Job pending WLM requeue
		.... 1...		JQX1LSPN	"B'00001000'" Job went thru unspun in its lifetime
		.... .1..		JQX1XWTR	"B'00000100'" At least one JOE purged due to external device
161	(A1)	SIGNED	1	JQXTGWRP	Number of times JQETGNBR wrapped over 7FFF (z2 only)
162	(A2)	BITSTRING	2		Reserved
					Comment
					COMPATIBILITY CODE Field JQEINJNO_R4 should be used for the initial job number when the checkpoint is R4 mode and field JQXIJNUM should be used when the checkpoint is in z/OS 1.2 mode Field JQENWSID_R4 should be used for the JESNEWS id number when the checkpoint is R4 mode and field JQENWSID should be used when the checkpoint is in z/OS 1.2 mode
					End of Comment
164	(A4)	SIGNED	4	JQXNWSID (0)	JESNEWS id (z/OS 1.2 mode)
164	(A4)	SIGNED	4	JQXIJNUM	Initial job number (z/OS 1.2 mode)
168	(A8)	SIGNED	4	(2)	Reserved for future use
176	(B0)	BITSTRING	4	JQXIT141	Reserved for Exit 14
180	(B4)	BITSTRING	4	JQXIT142	Reserved for Exit 14
180	(B4)	X'B8'	0	JQXEB2	"*" End of 2nd move block
180	(B4)	X'98'	0	JQXSB2	"JQXBB2,JQXEB2-JQXBB2,C'X'" Size of 2nd block
					Comment
					---------- JQXJNUMQ is used to make JIX processing faster. By having this value in the real JQX, the real JQE does not need to be obtained to do job number comparisons in $QLOC. Note: JQXJNUMQ is not included in the JQA since it is only useful for chaining (along with field JQXNJIXI). ----------
					End of Comment
184	(B8)	BITSTRING	1	JQXJNUMQ	The quotient of the JQE job number divided by 64K
185	(B9)	ADDRESS	3	JQXNJIXI	Index of next JQE/JQX on the JIX chain (z/OS 1.2 mode only)
185	(B9)	X'BC'	0	JQXEND	"*" End of JQX section
185	(B9)	X'3C'	0	JQXSIZE	"*-JQX" Size of JQX

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
					Comment
					The following fields are pseudo fields. They are artificially constructed from other fields in the JQE/JQX/BERT-backed fields. There are no $BERTTABs defining these fields, so DOGBERT does not know of their existence. The field names begin with JQP for Job Queue Pseudo
					----------
					JQPTGNBR field is constructed from the two fields JQETGNBR and JQXTGWRP. This pseudo field should be used as an input field only. Any updates made to it will not be reflected back into the JQE/JQX or the JQT.

					End of Comment
188	(BC)	SIGNED	4	JQPTGNBR	Track groups
					Comment
					End of Pseudo fields
					End of Comment
192	(C0)	SIGNED	4	JQABERT (0)	Begin BERT resident data
192	(C0)	BITSTRING	148	JQAACCT	Job accounting information
340	(154)	SIGNED	4	JQAXEQ (0)	Start of XEQ section of JQE
340	(154)	CHARACTER	3	JQAPERF	Performance group
343	(157)	BITSTRING	1	JQAFLAG1	Flags
		1...		JQA1EHLD	"B'10000000'" Job was held by the end user via TYPRUN=HOLD or SETUP
		.1..		JQA1JCLH	"B'01000000'" Job held for JCLHOLD
		..1.		JQA1THLD	"B'00100000'" Hold start time in JQATIMER
		...1		JQA1TSCH	"B'00010000'" SCHENV start time in JQATIMER
		.... 1...		JQA1DUPJ	"B'00001000'" Possible duplicate jobname exists
		.... .1..		JQA1NPUR	"B'00000100'" JQE has been JES managed for part of its life
		.... ..1.		JQA1TBAD	"B'00000010'" Hold/SCHENV timers should not be maintained
		1		JQA1SPIN	"B'00000001'" JESLOG is spinable
344	(158)	BITSTRING	4	JQASTOK	Service class token
348	(15C)	CHARACTER	8	JQAWSCN	Service Class Queue Name
356	(164)	SIGNED	4	JQARRIV	Time job arrived in XEQ Q
360	(168)	SIGNED	4	JQAQTIME	Time job entered current execution queue
364	(16C)	BITSTRING	2	JQASID	ASID where executing
366	(16E)	BITSTRING	4	JQASCHAF	Affinity mask of systems where scheduling environ is available
370	(172)	BITSTRING	1	JQASTARM	Member on which $S J is to occur.
372	(174)	SIGNED	4	JQARHLD	Duration when job held
376	(178)	SIGNED	4	JQARRSC	Duration when SCHENV not available
380	(17C)	SIGNED	4	JQARTOC	Conversion time
384	(180)	SIGNED	4	JQATIMER	STCK value when hold or SCHENV timer last started
388	(184)	SIGNED	4	JQAUTIME	STCK value when JQARHLD last updated
392	(188)	BITSTRING	1	JQAFLAG2	Flags
		1...		JQA2SCHE	"B'10000000'" SCHENV is a default
		.1..		JQA2SINV	"B'01000000'" SCHENV (JQASCHE) no longer valid
		..1.		JQA2TSCH	"B'00100000'" SCHENV has been $Ted to a non-null value
393	(189)	BITSTRING	3		Reserved for future use
393	(189)	X'38'	0	JQAXEQL	"*-JQAXEQ" Length of XEQ section
396	(18C)	SIGNED	4	JQAXBAT (0)	Start of batch execution section
396	(18C)	SIGNED	4	JQAXSRMT	SRM Token from classify
396	(18C)	X'4'	0	JQAXBATL	"*-JQAXBAT" Length of section
400	(190)	CHARACTER	16	JQASCHE	Scheduling environment
400	(190)	X'E0'	0	JQABERTL	"*-JQABERT" Length of BERT data defined in this DSECT
400	(190)	X'1A0'	0	JQABLEN	"*-JQE" Length of JQE + extensions defined in this DSECT

$JQE Cross Reference

Name	Hex Offset	Hex Value
$FREE	1	FF
$HARDCPY	1	1
$INPUT	1	20
$OUTPUT	1	2
$PURGE	1	0
$RECEIVE	1	4
$SETUP	1	8
$SPIN	1	80
$XEQ	1	40
$XEQCLAS	1	7F
$XEQJOBL	1	79
$XEQJOB1	1	41
$XEQSTC	1	50
$XEQTSU	1	60
$XMIT	1	10
JQA	0	0
JQAACCT	C0	
JQABERT	C0	
JQABERTL	190	E0
JQABLEN	190	1A0
JQAFLAG1	157	
JQAFLAG2	188	
JQAPERF	154	
JQAQTIME	168	
JQARHLD	174	
JQARRIV	164	
JQARRSC	178	
JQARTOC	17C	
JQASCHAF	16E	
JQASCHE	190	
JQASID	16C	
JQASTARM	172	
JQASTOK	158	
JQASUMSK	60	
JQATIMER	180	
JQAUTIME	184	
JQAWSCN	15C	
JQAXBAT	18C	
JQAXBATL	18C	4
JQAXEQ	154	
JQAXEQL	189	38
JQAXSRMT	18C	
JQA1DUPJ	157	8
JQA1EHLD	157	80
JQA1JCLH	157	40
JQA1NPUR	157	4
JQA1SPIN	157	1
JQA1TBAD	157	2
JQA1THLD	157	20
JQA1TSCH	157	10
JQA2SCHE	188	80
JQA2SINV	188	40
JQA2TSCH	188	20
JQE	0	
JQEARMID_R4	48	48
JQEARMMI	20	
JQEBB1	0	0
JQEBB2	5	8
JQEBB3	9	C
JQEBEND	60	60
JQEBLEN	60	60
JQEBUSY	22	
JQEDEVID	1D	
JQEDRNO	58	0
JQEDRPRT	4C	
JQEDRPRU	50	
JQEDRPUN	58	
JQEDRRO	58	2
JQEEB1	4	4
JQEEB2	8	8
JQEEB3	60	60
JQEFLAG1	4	
JQEFLAG2	8	
JQEFLAG3	C	
JQEFLAG4	1C	
JQEFLAG5	40	
JQEFLAG6	44	
JQEFLAG7	45	
JQEFLAG8	46	
JQEFLAG9	47	
JQEINJNO_R4	E	
JQEINPND	18	
JQEJBKEY	10	
JQEJBNUM	48	
JQEJCLAS	D	
JQEJLOK	23	
JQEJNAME	24	
JQEJOBNO_R4	2	
JQEJOEI	9	
JQEJOEID	3C	
JQENEWSU_R4	21	20
JQENEXTI	5	
JQENWSID_R4	3C	
JQENWUSE	3C	
JQEOFFSL	41	
JQEPRIO	0	
JQESAF	5C	
JQESB1	4	0
JQESB2	8	8
JQESB3	60	C
JQESECLB	34	
JQESUMSK	60	
JQETGNBR	42	
JQETRAK	14	
JQETYPE	1	
JQEUSRID	2C	
JQEVRSN	0	8
JQEWSLCK	21	
JQEWSLOK_R4	48	49
JQEXEQND	1A	
JQE1ARME	4	1
JQE1ARMH	4	2
JQE1ARMR	4	4
JQE1HLDA	4	80
JQE1HLD1	4	40
JQE1HLD2	4	20
JQE1OCAN	4	8
JQE1PURG	4	10
JQE2ART	8	1
JQE2IND	8	80
JQE2PEOM	8	10
JQE2REST	8	40
JQE2STAR	8	20
JQE2ZAP	8	2
JQE3JOB	C	3
JQE3MVRQ	C	80

Name	Hex Offset	Hex Value
JQE3NDMP	C	20
JQE3STC	C	1
JQE3SYSD	C	10
JQE3TMOD	C	8
JQE3TSU	C	2
JQE3UNSP	C	40
JQE3XMIT	C	4
JQE4CAN	1C	80
JQE4JCLH	1C	1
JQE4MNEW	1C	4
JQE4MOLD	1C	8
JQE4NEWS	1C	40
JQE4SPHA	1C	20
JQE4SPOF	1C	10
JQE4TWOJ	1C	2
JQE5EOM	40	8
JQE5NOTF	40	10
JQE5NSL	40	40
JQE5NUNK	40	20
JQE5PUPS	40	2
JQE5RUNS	40	4
JQE5XUSD	40	80
JQE6HOPR	0	8
JQE6NCSA	0	1
JQE6PRAG	0	2
JQE6PRG	0	40
JQE6PRT	0	4
JQE6TGAE	0	20
JQE7INIT	45	20
JQE7IOTE	45	10
JQE7PROT	45	80
JQE7RJI	45	2
JQE7SPIN	45	8
JQE7SPOT	45	4
JQE7SYSL	45	1
JQE7TP	45	40
JQE8BOUT	46	10
JQE8CNWT	46	20
JQE8DUPL	46	40
JQE8HLDS	46	80
JQE8NJIX	46	4
JQE8NOQ	46	1
JQE8OPCD	46	8
JQE8RBLD	46	2
JQE9$C	47	40
JQE9$CAR	47	50
JQE9$CD	47	60
JQE9$E	47	80
JQE9$SPN	47	8
JQE9$TSC	47	4
JQPTGNBR	BC	
JQX	80	
JQXBB1	80	80
JQXBB2	94	98
JQXBERTT	88	
JQXCRTME	8C	
JQXEB1	8C	90
JQXEB2	B4	B8
JQXEND	B9	BC
JQXFLAG1	A0	
JQXIJNUM	A4	
JQXIT141	B0	
JQXIT142	B4	
JQXJCLAS	98	
JQXJNUMQ	B8	

Name	Hex Offset	Hex Value
JQXMAXCC	85	
JQXMAXRC	84	
JQXMXAB	84	80
JQXMXABN	84	5
JQXMXCAB	84	6
JQXMXCAN	84	4
JQXMXCC	84	2
JQXMXCDE	84	40
JQXMXEOM	84	8
JQXMXIND	84	
JQXMXJCL	84	3
JQXMXNRM	84	1
JQXMXSEC	84	7
JQXMXUNK	84	0
JQXNJIXI	B9	
JQXNWSID	A4	
JQXRECCT	80	
JQXSB1	8C	80
JQXSB2	B4	98
JQXSIZE	B9	3C
JQXTGWRP	A1	
JQXWSNXT	90	
JQXWSPRV	94	
JQX1CTKN	A0	20
JQX1DFQ	A0	10
JQX1LSPN	A0	8
JQX1TSRV	A0	80
JQX1WLM	A0	40
JQX1XWTR	A0	4

$KAC Programming Interface information

Programming Interface information

$KAC

End of Programming Interface information

$KAC Heading Information

Common Name: Checkpoint Application Copy DSECT
Macro ID: $KAC
DSECT Name: KAC
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: KAC
Offset: KACIDENT
Length: L'KACIDENT
Storage Attributes: Subpool: 241
Key: 1
Residency: Virtual and real storage are above 16M, in the private storage of the JES2 address space.
Size: See KACSIZE
Created by: Checkpoint versions subtask
Pointed to by: CCTKAC field of the HCCT data area
Serialization: Can only be modified by the Checkpoint Versions SUBTASK.
Function: The KAC describes the application copy of the checkpoint data set. It describes the status and location of the copy of the checkpoint data set.

$KAC Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	KAC	CHECKPOINT APPL COPY DSECT
0	(0)	CHARACTER	4	KACIDENT	KAC EYE CATCHER
4	(4)	SIGNED	1	KACVER	SET EQUAL TO KACVERN
4	(4)	X'3'	0	KACVERN	"03" Current version number
5	(5)	BITSTRING	1	KACFLAG1	FLAG BYTE
		1...		KAC1UIP	"B'10000000'" INDICATE UPDATE IN PROGRESS
		.1..		KAC1BADC	"B'01000000'" COPY OF CKPT IS BAD
		..1.		KAC1GONE	"B'00100000'" COPY OF CKPT DOES NOT EXIST
		...1		KAC1ECSA	"B'00010000'" COPY OF CKPT IS IN ECSA
		.... 1...		KAC1EPVT	"B'00001000'" COPY OF CKPT IS EXT PRIVATE
6	(6)	BITSTRING	1		RESERVED FOR FUTURE USE
7	(7)	SIGNED	1	KACSUBP	SUBPOOL OF COPY
8	(8)	SIGNED	4	KACCLEN	LENGTH OF COPY
16	(10)	DBL WORD	8	KACLEV	Ckpt level number
16	(10)	X'10'	0	KACLEVP	"KACLEV,8,C'C'" Define character version of field since PLX and the offset table don't handle doublewords well
24	(18)	SIGNED	4	KACKLE	LEVEL NUMBER OF THE COPY
28	(1C)	SIGNED	4	(3)	RESERVED FOR FUTURE USE
40	(28)	DBL WORD	8	(0)	Alignment for KACTUP field
40	(28)	CHARACTER	8	KACTUP	TIME (STCK) OF LAST UPDATE TO THE APPLICATION COPY (MAINTAINED BY JES)
48	(30)	DBL WORD	8	(0)	Alignment for KACWTILL fld
48	(30)	CHARACTER	8	KACWTILL	TIME BEFORE WHICH JES WILL NOT UPDATE THE COPY (MAINTAINED BY APPL PGM)
56	(38)	ADDRESS	4	KACCKPTA	ADDRESS OF 3RD COPY OF CKPT
60	(3C)	ADDRESS	4	KACMSTRA	ADDRESS OF 3RD COPY OF MSTR REC
64	(40)	SIGNED	4	(2)	RESERVED FOR FUTURE USE
72	(48)	ADDRESS	4	KACJOBQP	ADDR OF JES2 JOB QUEUE ORIGIN
76	(4C)	ADDRESS	4	KACJOTP	ADDRESS OF JES2 JOT ORIGIN
80	(50)	ADDRESS	4	KACQSE1	ADDRESS OF FIRST JES2 QSE
84	(54)	ADDRESS	4	KACJNTP	Address of JNT
88	(58)	SIGNED	4	(2)	RESERVED FOR FUTURE USE
96	(60)	SIGNED	4	KACRESVA (20)	RESERVED FOR APPLICATION PGMS
176	(B0)	SIGNED	4	KACRESVU (4)	RESERVED FOR USERS

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
192	(C0)	SIGNED	4	KACEND (0)	END OF KAC
192	(C0)	X'C0'	0	KACSIZE	"*-KAC" LENGTH OF CONTROL BLOCK

$KAC Cross Reference

Name	Hex Offset	Hex Value
KAC	0	
KACCKPTA	38	
KACCLEN	8	
KACEND	C0	
KACFLAG1	5	
KACIDENT	0	D2C1C340
KACJNTP	54	
KACJOBQP	48	
KACJOTP	4C	
KACKLE	18	
KACLEV	10	
KACLEVP	10	10
KACMSTRA	3C	
KACQSE1	50	
KACRESVA	60	
KACRESVU	B0	
KACSIZE	C0	C0
KACSUBP	7	
KACTUP	28	
KACVER	4	
KACVERN	4	3
KACWTILL	30	
KAC1BADC	5	40
KAC1ECSA	5	10
KAC1EPVT	5	8
KAC1GONE	5	20
KAC1UIP	5	80

$KAWA Heading Information

Common Name: Checkpoint Allocation Work Area
Macro ID: $KAWA
DSECT Name: KAW
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: KAWA
Offset: 0
Length: 4
Storage Attributes: Subpool: 0
Key: 1
Residency: During Allocation, virtual and real storage are below 16M in the JES2 address space. During Unallocation, virtual and real storage are anywhere in the JES2 address space.
Size: See KAWALEN
Created by: JES2 Checkpoint Allocation and Unallocation
Pointed to by: N/A
Serialization: None required
Function: The KAWA is used to map out a work area obtained by CKPTALOC and CKPTUNAL. It is also returned to CKPTALOC's caller if the routine detects an error.

$KAWA Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	KAW	CHECKPOINT ALOC WORK AREA
0	(0)	CHARACTER	4		EYE CATCHER
4	(4)	ADDRESS	1	KAWAVER	VERSION NUMBER
4	(4)	X'2'	0	KAWAVERN	"2" VERSION EQUATE
5	(5)	BITSTRING	1	KAWFLAG1	FLAG BYTE
		1...		KAW1ALOC	"B'10000000'" ALLOCATE WAS DONE
		.1..		KAW1NEW	"B'01000000'" ALLOCATE DISP=NEW WAS USED
		..1.		KAW1OPEN	"B'00100000'" MVS OPEN WAS DONE
6	(6)	BITSTRING	1	KAWPARM	PARAMETERS PASSED TO CKPTALOC
7	(7)	BITSTRING	1		RESERVED FOR FUTURE USE
8	(8)	SIGNED	4		Reserved for future IBM use
12	(C)	SIGNED	4	KAWALORT	RETURN CODE FROM MVS DYNALLOC
16	(10)	ADDRESS	4	KAWDCBA	ADDRESS OF THE NEW DCB
20	(14)	CHARACTER	8	KAWDDNAM	DDNAME FOR DATA SET
28	(1C)	ADDRESS	4	KAWTOTA	ADDRESS OF THE TRACK ONE TABLE
32	(20)	ADDRESS	4	KAWCKG	ADDRESS OF THE CKG
36	(24)	ADDRESS	4	KAWUCB	Address of the UCB
40	(28)	ADDRESS	4	KAWUCBPX	Address of the UCB Prefix
44	(2C)	SIGNED	4	KAWBYTRK	Number of Bytes or Tracks needed for DS (HASP295-6)
48	(30)	SIGNED	4	KAWOBFCC	Error Code from OBTAIN
52	(34)	ADDRESS	4	KAWRBPTR	REQUEST BLOCK POINTER
56	(38)	BITSTRING	20	KAWRB	DYNALLOC REQUEST BLOCK
76	(4C)	SIGNED	4	KAWTXTPT (0)	TEXT POINTERS
76	(4C)	ADDRESS	4	KAWTXTP1	ADDRESS OF TEXT UNIT 1
80	(50)	ADDRESS	4	KAWTXTP2	ADDRESS OF TEXT UNIT 2
84	(54)	ADDRESS	4	KAWTXTP3	ADDRESS OF TEXT UNIT 3
88	(58)	ADDRESS	4	KAWTXTP4	ADDRESS OF TEXT UNIT 4
92	(5C)	ADDRESS	4	KAWTXTP5	ADDRESS OF TEXT UNIT 5
96	(60)	ADDRESS	4	KAWTXTP6	ADDRESS OF TEXT UNIT 6
100	(64)	ADDRESS	4	KAWTXTP7	ADDRESS OF TEXT UNIT 7
104	(68)	ADDRESS	4	KAWTXTP8	ADDRESS OF TEXT UNIT 8
108	(6C)	ADDRESS	4	KAWTXTP9	ADDRESS OF TEXT UNIT 9
112	(70)	SIGNED	4	KAWTXT (0)	TEXT UNITS

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
112	(70)	BITSTRING	6	KAWTXT1	TEXT UNIT 1
118	(76)	BITSTRING	8	KAWTXT1D	TEXT UNIT 1 PARM
126	(7E)	BITSTRING	6	KAWTXT2	TEXT UNIT 2
132	(84)	BITSTRING	8	KAWTXT2D	TEXT UNIT 2 PARM
140	(8C)	BITSTRING	6	KAWTXT3	TEXT UNIT 3
146	(92)	BITSTRING	8	KAWTXT3D	TEXT UNIT 3 PARM
154	(9A)	BITSTRING	6	KAWTXT4	TEXT UNIT 4
160	(A0)	BITSTRING	8	KAWTXT4D	TEXT UNIT 4 PARM
168	(A8)	BITSTRING	6	KAWTXT5	TEXT UNIT 5
174	(AE)	BITSTRING	8	KAWTXT5D	TEXT UNIT 5 PARM
182	(B6)	BITSTRING	6	KAWTXT6	TEXT UNIT 6
188	(BC)	CHARACTER	44	KAWDSN (0)	DATASET NAME
188	(BC)	BITSTRING	44	KAWTXT6D	TEXT UNIT 6 PARM
232	(E8)	BITSTRING	6	KAWTXT7	TEXT UNIT 7
238	(EE)	BITSTRING	8	KAWTXT7D	TEXT UNIT 7 PARM
246	(F6)	BITSTRING	6	KAWTXT8	TEXT UNIT 8
252	(FC)	BITSTRING	8	KAWTXT8D	TEXT UNIT 8 PARM
260	(104)	BITSTRING	6	KAWTXT9	TEXT UNIT 9
266	(10A)	BITSTRING	8	KAWTXT9D	TEXT UNIT 9 PARM
276	(114)	SIGNED	4	KAWCMLST (4)	CAMLIST FOR OBTAIN
296	(128)	DBL WORD	8	(0)	DOUBLE WORD FOR DSCB
296	(128)	BITSTRING	148	KAWDSCB	DSCB FROM OBTAIN
296	(128)	X'128'	0	KAWTRKCL	"KAWDSCB,12" TRKCALC WORK AREA
296	(128)	X'128'	0	KAWPURGE	"KAWDSCB,PPLLEN" PURGE PARAMETER LIST
444	(1BC)	CHARACTER	1	KAWDVA	DEVTYPE WORK AREA

Comment

```
------- IOSCAPU MF=(L,KAWCAPU) IOSCAPU PARM LIST
        MACDATE -01/22/01-<1>
```

End of Comment

0	(0)	X'1D8'	0	M00M0975	"KAWCAPU" ++ IOSCAPU NAME
472	(1D8)	DBL WORD	8	KAWCAPU (0)	++ IOSCAPU PARM LIST
472	(1D8)	BITSTRING	1	KAWCAPU_XVERSION	++ INPUT XVERSION
473	(1D9)	BITSTRING	1	KAWCAPU_XFLAGS1	++ FIELD_LABEL
		1...		KAWCAPU_KEYUSED_CAPTUCB	"B'10000000'" ++ KEYUSED.CAPTUCB KEYWORD
		.1..		KAWCAPU_KEYUSED_UCAPTUCB	"B'01000000'" ++ KEYUSED.UCAPTUCB KEYWORD
		..1.		KAWCAPU_KEYUSED_CAPTOACT	"B'00100000'" ++ KEYUSED.CAPTOACT KEYWORD
		...1		KAWCAPU_KEYUSED_ASID	"B'00010000'" ++ KEYUSED.ASID KEYWORD
		.... 1...		KAWCAPU_KEYUSED_UCBPTR	"B'00001000'" ++ KEYUSED.UCBPTR KEYWORD
		.... .1..		KAWCAPU_KEYUSED_CAPTPTR	"B'00000100'" ++ KEYUSED.CAPTPTR KEYWORD
474	(1DA)	CHARACTER	2	KAWCAPU_XRESERVED1	++ FIELD_LABEL XRESERVED1
476	(1DC)	ADDRESS	4	KAWCAPU_XUCBPTR	++ XUCBPTR
480	(1E0)	ADDRESS	4	KAWCAPU_XCAPTPTR	++ XCAPTPTR
484	(1E4)	CHARACTER	1	KAWCAPU_XRESERVED2	++ FIELD_LABEL XRESERVED2
485	(1E5)	BITSTRING	1	KAWCAPU_XMASK	++ FIELD_LABEL
		1...		KAWCAPU_XMSIFREE_YES	"B'10000000'" ++ XMSIFREE.YES KEYWORD
		.1..		KAWCAPU_XLASTING_YES	"B'01000000'" ++ XLASTING.YES KEYWORD

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
		..1.		KAWCAPU_XCAPTCOM_YES	
					"B'00100000'" ++ XCAPTCOM.YES KEYWORD
		...1		KAWCAPU_XCAPTCOM_NEVER	
					"B'00010000'" ++ XCAPTCOM.NEVER KEYWORD
486	(1E6)	BITSTRING	2	KAWCAPU_XASID	
					++ XASID
488	(1E8)	CHARACTER	16	KAWCAPU_XRESERVED3	
					++ FIELD_LABEL XRESERVED3
488	(1E8)	X'20'	0	KAWCAPUL	"*-KAWCAPU" ++ LENGTH OF PLIST

Comment

IOSCAPU-1

End of Comment

0	(0)	X'1F8'	0	KAWALEN	"*-KAW" LENGTH OF THE KAWA

$KAWA Cross Reference

Name	Hex Offset	Hex Value
KAW	0	
KAWALEN	0	1F8
KAWALORT	C	
KAWAVER	4	
KAWAVERN	4	2
KAWBYTRK	2C	
KAWCAPU	1D8	
KAWCAPU_KEYUSED_ASID		
	1D9	10
KAWCAPU_KEYUSED_CAPTOACT		
	1D9	20
KAWCAPU_KEYUSED_CAPTPTR		
	1D9	4
KAWCAPU_KEYUSED_CAPTUCB		
	1D9	80
KAWCAPU_KEYUSED_UCAPTUCB		
	1D9	40
KAWCAPU_KEYUSED_UCBPTR		
	1D9	8
KAWCAPU_XASID		
	1E6	
KAWCAPU_XCAPTCOM_NEVER		
	1E5	10
KAWCAPU_XCAPTCOM_YES		
	1E5	20
KAWCAPU_XCAPTPTR		
	1E0	
KAWCAPU_XFLAGS1		
	1D9	
KAWCAPU_XLASTING_YES		
	1E5	40
KAWCAPU_XMASK		
	1E5	
KAWCAPU_XMSIFREE_YES		
	1E5	80
KAWCAPU_XRESERVED1		
	1DA	
KAWCAPU_XRESERVED2		
	1E4	
KAWCAPU_XRESERVED3		
	1E8	
KAWCAPU_XUCBPTR		
	1DC	
KAWCAPU_XVERSION		
	1D8	
KAWCAPUL	1E8	20
KAWCKG	20	
KAWCMLST	114	
KAWDCBA	10	
KAWDDNAM	14	
KAWDSCB	128	
KAWDSN	BC	
KAWDVA	1BC	
KAWFLAG1	5	
KAWOBFCC	30	
KAWPARM	6	
KAWPURGE	128	128
KAWRB	38	
KAWRBPTR	34	
KAWTOTA	1C	
KAWTRKCL	128	128
KAWTXT	70	
KAWTXTPT	4C	
KAWTXTP1	4C	
KAWTXTP2	50	
KAWTXTP3	54	
KAWTXTP4	58	
KAWTXTP5	5C	
KAWTXTP6	60	
KAWTXTP7	64	
KAWTXTP8	68	
KAWTXTP9	6C	
KAWTXT1	70	
KAWTXT1D	76	
KAWTXT2	7E	
KAWTXT2D	84	
KAWTXT3	8C	
KAWTXT3D	92	
KAWTXT4	9A	
KAWTXT4D	A0	
KAWTXT5	A8	
KAWTXT5D	AE	
KAWTXT6	B6	
KAWTXT6D	BC	
KAWTXT7	E8	
KAWTXT7D	EE	

$KAWA Cross Reference

Name	Hex Offset	Hex Value
KAWTXT8	F6	
KAWTXT8D	FC	
KAWTXT9	104	
KAWTXT9D	10A	
KAWUCB	24	
KAWUCBPX	28	
KAW1ALOC	5	80
KAW1NEW	5	40
KAW1OPEN	5	20
M00M0975	0	1D8

$LMT Heading Information

Common Name: Load Module Table
Macro ID: $LMT
DSECT Name: LMT
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: 'LMT '
Offset: LMT-$CSBPRFX+$CSBID
Length: 4
Storage Attributes: Subpool: 0 (private chain), 241 (CSA chain)
Key: 1
Residency: Virtual storage is below 16M and real storage is anywhere (above or below 16M). There are two chains of LMTs. One is in the private storage of the JES2 address space, the other is in CSA.
Size: LMTLEN plus standard CSA prefix (CSBPRFX equate in the $HASPEQU data area) per entry, whether PVT or CSA
Created by: $MODLOAD
Pointed to by: Private LMT chain pointers:
$LMT1 field of the HCT data area -
Points to head of chain, which connects also to the CSA chain. This is the only anchor that should be used by LMT search routines.
$LMTPBOT field of the HCT data area -
Points to the last private entry, for internal use by $MODLOAD only
---
Common LMT chain pointers:
CCTLMT1 field of the HCCT data area -
Points to head of CSA chain (middle of composite private/CSA chain).
$LMTC field of the HCT data area -
An HCT copy of the CCTLMT1 value, for internal use by $MODLOAD only.

LMTCHAIN field of the $LMT data area
Serialization: Entries cannot be removed from the chains once added, and should be added in a way that allows multi-tasking references.
Function: The LMT contains an entry for each JES2 module loaded via $MODLOAD. $MODLOAD adds the entries. $MODELET invalidates an entry.

There are two LMT chains. One is chained from the HCCT for entries for those modules loaded into common storage. The other has entries for those loaded into private storage and is chained from the HCT. On abnormal termination the common LMTs are not freed. On a hot start the common LMTs are still valid, so only the private LMTs are rebuilt from new LOADMOD initialization parameters.

The LMT chains are built with dynamic storage for each $MODLOAD call. At any given time the last element in the private LMT chain points to the first in the CSA chain, thereby allowing a single LMT chain loop to access all LMT entries (starting from the HCT anchor).

$LMT Map

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	LMT	HASP LOAD MODULE TABLE DSECT
					Comment

					The following fields are used by internal tools.
					Do not change the offsets of these fields.

					End of Comment
0	(0)	CHARACTER	8	LMTMODNM	LOAD MODULE NAME
8	(8)	ADDRESS	4	LMTMITAD	POINTER TO MIT
12	(C)	SIGNED	4	LMTESIZE (0)	Module subpool and length
12	(C)	BITSTRING	1	LMTSUBPL	Subpool, only if direct ld
13	(D)	ADDRESS	3	LMTMODLN	Module length in all cases
16	(10)	ADDRESS	4	LMTBASEA	ALT. MODULE BASE FOR REP FACIL.
20	(14)	BITSTRING	1	LMTFLG1	FLAG FOR LMT ENTRY
		1...		LMT1DIRL	"B'10000000'" MODULE DIRECTLY LOADED
		.1..		LMT1CMN	"B'01000000'" MODULE LOADED INTO COMMON STOR
		..1.		LMT1PVT	"B'00100000'" MODULE LOADED INTO PRIVATE
		...1		LMT1INVD	"B'00010000'" INVALID LMT ENTRY
		.... 1...		LMT1LOAD	"B'00001000'" LOADED VIA LOADMOD PARM STMT
		.... .1..		LMT1IBM	"B'00000100'" THIS IS AN IBM LOAD MODULE
		.... ..1.		LMT1BSPL	"B'00000010'" Bypass SPLEVEL check
21	(15)	BITSTRING	1	LMTFLG2	FLAG 2 FOR LMT ENTRY
		1...		LMT2CMNR	"B'10000000'" REQUEST FROM LOADMOD STATEMENT TO PLACE MODULE IN COMMON STOR
		.1..		LMT2PVTR	"B'01000000'" REQUEST FROM LOADMOD STATEMENT TO PLACE MODULE IN PRIVATE STOR
		..1.		LMT2LPAR	"B'00100000'" REQUEST FROM LOADMOD STATEMENT TO USE LPA COPY OF MODULE
		...1		LMT2RM24	"B'00010000'" Load module was loaded below the line
		.... 1...		LMT2RM31	"B'00001000'" Load module was loaded above the line
22	(16)	BITSTRING	2		RESERVED FOR FUTURE USE
24	(18)	ADDRESS	4	LMTCHAIN	CHAIN POINTER TO NEXT LMT
					Comment

					End of fields used by internal tools.

					End of Comment
28	(1C)	ADDRESS	4	LMTENTRY	Entry addr returned by LOAD
32	(20)	SIGNED	4	(0)	ASSURE LMTLEN WORD MULTIPLE
32	(20)	X'20'	0	LMTLEN	"*-LMT" LENGTH
32	(20)	X'1'	0	LMTVERSN	"1" VERSION NUMBER OF LMT

$LMT Cross Reference

Name	Hex Offset	Hex Value
LMT	0	
LMTBASEA	10	
LMTCHAIN	18	
LMTENTRY	1C	
LMTESIZE	C	
LMTFLG1	14	
LMTFLG2	15	
LMTLEN	20	20
LMTMITAD	8	
LMTMODLN	D	
LMTMODNM	0	
LMTSUBPL	C	
LMTVERSN	20	1
LMT1BSPL	14	2
LMT1CMN	14	40
LMT1DIRL	14	80
LMT1IBM	14	4
LMT1INVD	14	10
LMT1LOAD	14	8
LMT1PVT	14	20
LMT2CMNR	15	80
LMT2LPAR	15	20
LMT2PVTR	15	40
LMT2RM24	15	10
LMT2RM31	15	8

$MCT Programming Interface information

Programming Interface information

$MCT

ONLY the following fields are part of the programming interface information:

- MCTAPLTU
- MCTBADTU
- MCTBFHTU
- MCTBFXTU
- MCTBRTTU
- MCTBSCTU
- MCTBUFTU
- MCTCATTU
- MCTCKLTU
- MCTCKTTU
- MCTCNDTU
- MCTCOMTU
- MCTCONTU
- MCTDCTTU
- MCTDESTU
- MCTDSTTU
- MCTDTETU
- MCTEBYTU
- MCTEKNTU
- MCTELCTU
- MCTEPGTU
- MCTEPNTU
- MCTERRTU
- MCTETMTU
- MCTFENTU
- MCTFSSTU
- MCTHDRTU
- MCTINCTU
- MCTINRTU
- MCTJOBTU
- MCTJPYTU
- MCTJQETU
- MCTJRWTU
- MCTJSPTU
- MCTJTWTU
- MCTKPNTU
- MCTLINTU
- MCTLJRTU
- MCTLJTTU
- MCTLJWTU
- MCTLNETU
- MCTLODTU
- MCTLOGTU
- MCTLOTTU
- MCTLSRTU
- MCTLSTTU
- MCTLSWTU
- MCTMASTU
- MCTMEMTU
- MCTMGTU
- MCTMODTU
- MCTMPSTU
- MCTNAUTU
- MCTNDPTU
- MCTNETTU
- MCTNJETU
- MCTNODTU
- MCTOFFTU
- MCTOFLTU
- MCTOJMTU
- MCTOJRTU
- MCTOJTTU
- MCTOPDTU
- MCTOPTTU
- MCTOPYTU
- MCTOSMTU
- MCTOSRTU
- MCTOSTTU
- MCTOTPTU
- MCTOUTTU
- MCTPARTU
- MCTPCCTU
- MCTPCDTU
- MCTPCETU
- MCTPCNTU
- MCTPCRTU
- MCTPDDTU
- MCTPITTU
- MCTPRLTU
- MCTPRTTU
- MCTPRWTU
- MCTPTDTU
- MCTPTHTU
- MCTPUDTU
- MCTPUNTU
- MCTPUWTU
- MCTRAUTU
- MCTRCNTU
- MCTRCVTU
- MCTRDITU
- MCTRDRTU
- MCTRDTTU
- MCTRDVTU
- MCTREDTU
- MCTRMTTU
- MCTRPRTU
- MCTRPUTU
- MCTRQJIU
- MCTRRDTU
- MCTSAWTU
- MCTSBDTU
- MCTSCTTU
- MCTSEPTU
- MCTSMFTU
- MCTSNATU
- MCTSPDTU
- MCTSPLTU
- MCTSRWTU
- MCTSSITU
- MCTSTATU
- MCTSTCTU
- MCTSTWTU
- MCTSTYTU
- MCTSUBTU
- MCTTGLTU
- MCTTGSTU
- MCTTIDTU
- MCTTLGTU
- MCTTPDTU
- MCTTRCTU
- MCTTRITU
- MCTTSUTU
- MCTVIATU
- MCTVKPTU
- MCTVLTTU
- MCTVUNTU
- MCTXITTU

End of Programming Interface information

$MCT Heading Information

Common Name: HASP Master Control Table
Macro ID: $MCT
DSECT Name: MCT
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: None
Storage Attributes: Subpool: Part of the HASJES20 load module
Key: 1
Residency: Part of the HASJES20 load module in the JES2 address space.
Size: See field MCTLEN
Created by: Load of module HASJES20.
Pointed to by: $MCT field of the $HCT data area
Serialization: None required.
Function: The master control table contains pointers to table pairs within JES2.

The naming convention for tables and table pairs is as follows:

Select a unique three character id for the entity (for example ZZZ).

The MCT fields are:

MCTZZZTP - Label for the table pair

MCTZZZTU - Label for the USER table

MCTZZZTH - Label for the JES2 (HASP) table

MCTZZZTD - Label for dynamic table list

The VCONS (and weak externals for user tables) are:

USERZZZT - Label for the USER table and WXTRN

HASPZZZT - Label for the JES2 (HASP) table

User table addresses can be placed in the $MCT either by an exit routine storing the address into field MCTZZZTU or by the user table being named USERZZZT and being link-edited with the HASJES20 load module.

Dynamic tables can be placed in the $MCT via the $PUTABLE service, which is caled automatically when a load module containing dynamic tables is processed by the JES2 LOAD initialization statement.

$MCT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	MCT	HASP MASTER CONSOLE TABLE

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
				Comment	
				$GETABLE TABLE-PAIRS, AND ASSOCIATED TABLE ACCESS ROUTINES.	
				End of Comment	
0	(0)	ADDRESS	4	MCTPCETP (0)	$PCETAB table pair
0	(0)	ADDRESS	4	MCTPCETU	"V(USERPCET)" User table
4	(4)	ADDRESS	4	MCTPCETH	"V(HASPPCET)" HASP table
8	(8)	ADDRESS	4	MCTPCETD	Dynamic table array
12	(C)	ADDRESS	4	MCTDCTTP (0)	$DCTTAB table pair
12	(C)	ADDRESS	4	MCTDCTTU	"V(USERDCTT)" User table
16	(10)	ADDRESS	4	MCTDCTTH	"V(HASPDCTT)" HASP table
20	(14)	ADDRESS	4	MCTDCTTD	Dynamic table array
24	(18)	ADDRESS	4	MCTDTETP (0)	$DTETAB table pair
24	(18)	ADDRESS	4	MCTDTETU	"V(USERDTET)" User table
28	(1C)	ADDRESS	4	MCTDTETH	"V(HASPDTET)" HASP table
32	(20)	ADDRESS	4	MCTDTETD	Dynamic table array
36	(24)	ADDRESS	4	MCTRDTTP (0)	$RDIRTAB table pair
36	(24)	ADDRESS	4	MCTRDTTU	"V(USERRDTT)" User table
40	(28)	ADDRESS	4	MCTRDTTH	"V(HASPRDTT)" HASP table
44	(2C)	ADDRESS	4	MCTRDTTD	Dynamic table array
48	(30)	ADDRESS	4	MCTTIDTP (0)	$TIDTAB table pair
48	(30)	ADDRESS	4	MCTTIDTU	"V(USERTIDT)" User table
52	(34)	ADDRESS	4	MCTTIDTH	"V(HASPTIDT)" HASP table
56	(38)	ADDRESS	4	MCTTIDTD	Dynamic table array
60	(3C)	ADDRESS	4	MCTPCRTP (0)	$PCTAB table pair
60	(3C)	ADDRESS	4	MCTPCRTU	"V(USERPCRT)" User table
64	(40)	ADDRESS	4	MCTPCRTH	"V(HASPPCRT)" HASP table
68	(44)	ADDRESS	4	MCTPCRTD	Dynamic table array
72	(48)	ADDRESS	4	MCTBRTTP (0)	$BERTTAB table pair
72	(48)	ADDRESS	4	MCTBRTTU	"V(USERBRTT)" User table
76	(4C)	ADDRESS	4	MCTBRTTH	"V(HASPBRTT)" HASP table
80	(50)	ADDRESS	4	MCTBRTTD	Dynamic table array
				Comment	
				$SCAN FACILITY PRIMARY HASP/USER TABLE PAIRS - TABLE PAIRS FOR THE INITIALIZATION OPTIONS AND FOR PARAMETERS STMTS.	
				End of Comment	
84	(54)	ADDRESS	4	MCTOPTTP (0)	HASP OPTIONS $SCAN TABLE
84	(54)	ADDRESS	4	MCTOPTTU	"V(USEROPTT)" User table
88	(58)	ADDRESS	4	MCTOPTTH	"V(HASPOPTT)" HASP table
92	(5C)	ADDRESS	4	MCTOPTTD	Dynamic table array
96	(60)	ADDRESS	4	MCTMPSTP (0)	HASP MAIN-PARM-STMT TABLE
96	(60)	ADDRESS	4	MCTMPSTU	"V(USERMPST)" User table
100	(64)	ADDRESS	4	MCTMPSTH	"V(HASPMPST)" HASP table
104	(68)	ADDRESS	4	MCTMPSTD	Dynamic table array
108	(6C)	ADDRESS	4	MCTMGTP (0)	HASP MSG-GEN TABLE PAIR
108	(6C)	ADDRESS	4	MCTMGTU	"V(USERMGST)" User table
112	(70)	ADDRESS	4	MCTMGTH	"V(HASPMGST)" HASP table
116	(74)	ADDRESS	4	MCTMGTD	Dynamic table array
				Comment	
				$SCAN FACILITY HASP/USER TABLE PAIRS FOR SUBSCANNING OF DEVICE RELATED PARAMETER STATEMENTS.	
				End of Comment	
120	(78)	ADDRESS	4	MCTINRTP (0)	INTRDR PARM-STMT SUBSCAN
120	(78)	ADDRESS	4	MCTINRTU	"V(USERINRT)" User table
124	(7C)	ADDRESS	4	MCTINRTH	"V(HASPINRT)" HASP table
128	(80)	ADDRESS	4	MCTINRTD	Dynamic table array

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
132	(84)	ADDRESS	4	MCTLNETP (0)	LINENNNN PARM-STMT SUBSCAN
132	(84)	ADDRESS	4	MCTLNETU	"V(USERLNET)" User table
136	(88)	ADDRESS	4	MCTLNETH	"V(HASPLNET)" HASP table
140	(8C)	ADDRESS	4	MCTLNETD	Dynamic table array
144	(90)	ADDRESS	4	MCTLINTP (0)	Ln.DVn PARM-STMT SUBSCAN
144	(90)	ADDRESS	4	MCTLINTU	"V(USERLINT)" User table
148	(94)	ADDRESS	4	MCTLINTH	"V(HASPLINT)" HASP table
152	(98)	ADDRESS	4	MCTLINTD	Dynamic table array
156	(9C)	ADDRESS	4	MCTLJRTP (0)	Ln.JR PARM-STMT SUBSCAN
156	(9C)	ADDRESS	4	MCTLJRTU	"V(USERLJRT)" User table
160	(A0)	ADDRESS	4	MCTLJRTH	"V(HASPLJRT)" HASP table
164	(A4)	ADDRESS	4	MCTLJRTD	Dynamic table array
168	(A8)	ADDRESS	4	MCTLJTTP (0)	Ln.JT PARM-STMT SUBSCAN
168	(A8)	ADDRESS	4	MCTLJTTU	"V(USERLJTT)" User table
172	(AC)	ADDRESS	4	MCTLJTTH	"V(HASPLJTT)" HASP table
176	(B0)	ADDRESS	4	MCTLJTTD	Dynamic table array
180	(B4)	ADDRESS	4	MCTLSRTP (0)	Ln.SR PARM-STMT SUBSCAN
180	(B4)	ADDRESS	4	MCTLSRTU	"V(USERLSRT)" User table
184	(B8)	ADDRESS	4	MCTLSRTH	"V(HASPLSRT)" HASP table
188	(BC)	ADDRESS	4	MCTLSRTD	Dynamic table array
192	(C0)	ADDRESS	4	MCTLSTTP (0)	Ln.ST PARM-STMT SUBSCAN
192	(C0)	ADDRESS	4	MCTLSTTU	"V(USERLSTT)" User table
196	(C4)	ADDRESS	4	MCTLSTTH	"V(HASPLSTT)" HASP table
200	(C8)	ADDRESS	4	MCTLSTTD	Dynamic table array
204	(CC)	ADDRESS	4	MCTLOGTP (0)	LOGONN PARM-STMT SUBSCAN
204	(CC)	ADDRESS	4	MCTLOGTU	"V(USERLOGT)" User table
208	(D0)	ADDRESS	4	MCTLOGTH	"V(HASPLOGT)" HASP table
212	(D4)	ADDRESS	4	MCTLOGTD	Dynamic table array
216	(D8)	ADDRESS	4	MCTOFLTP (0)	OFFLOADN PARM-STMT SUBSCAN PAIR
216	(D8)	ADDRESS	4	MCTOFLTU	"V(USEROFLT)" User table
220	(DC)	ADDRESS	4	MCTOFLTH	"V(HASPOFLT)" HASP table
224	(E0)	ADDRESS	4	MCTOFLTD	Dynamic table array
228	(E4)	ADDRESS	4	MCTOFFTP (0)	OFFN.DV PARM-STMT SUBSCAN PAIR
228	(E4)	ADDRESS	4	MCTOFFTU	"V(USEROFFT)" User table
232	(E8)	ADDRESS	4	MCTOFFTH	"V(HASPOFFT)" HASP table
236	(EC)	ADDRESS	4	MCTOFFTD	Dynamic table array
240	(F0)	ADDRESS	4	MCTOJRTP (0)	OFFN.JR PARM-STMT SUBSCAN PAIR
240	(F0)	ADDRESS	4	MCTOJRTU	"V(USEROJRT)" User table
244	(F4)	ADDRESS	4	MCTOJRTH	"V(HASPOJRT)" HASP table
248	(F8)	ADDRESS	4	MCTOJRTD	Dynamic table array
252	(FC)	ADDRESS	4	MCTOJTTP (0)	OFFN.JT PARM-STMT SUBSCAN PAIR
252	(FC)	ADDRESS	4	MCTOJTTU	"V(USEROJTT)" User table
256	(100)	ADDRESS	4	MCTOJTTH	"V(HASPOJTT)" HASP table
260	(104)	ADDRESS	4	MCTOJTTD	Dynamic table array
264	(108)	ADDRESS	4	MCTOSRTP (0)	OFFN.SR PARM-STMT SUBSCAN PAIR
264	(108)	ADDRESS	4	MCTOSRTU	"V(USEROSRT)" User table
268	(10C)	ADDRESS	4	MCTOSRTH	"V(HASPOSRT)" HASP table
272	(110)	ADDRESS	4	MCTOSRTD	Dynamic table array
276	(114)	ADDRESS	4	MCTOSTTP (0)	OFFN.ST PARM-STMT SUBSCAN PAIR
276	(114)	ADDRESS	4	MCTOSTTU	"V(USEROSTT)" User table
280	(118)	ADDRESS	4	MCTOSTTH	"V(HASPOSTT)" HASP table
284	(11C)	ADDRESS	4	MCTOSTTD	Dynamic table array
288	(120)	ADDRESS	4	MCTPRTTP (0)	PRINTERNN PARM-STMT SUBSCAN
288	(120)	ADDRESS	4	MCTPRTTU	"V(USERPRTT)" User table
292	(124)	ADDRESS	4	MCTPRTTH	"V(HASPPRTT)" HASP table
296	(128)	ADDRESS	4	MCTPRTTD	Dynamic table array
300	(12C)	ADDRESS	4	MCTPRLTP (0)	PROCLIB(nnnnnnnn) PARM-STMT SUBSCAN
300	(12C)	ADDRESS	4	MCTPRLTU	"V(USERPRLT)" User table
304	(130)	ADDRESS	4	MCTPRLTH	"V(HASPPRLT)" HASP table
308	(134)	ADDRESS	4	MCTPRLTD	Dynamic table array
312	(138)	ADDRESS	4	MCTPUNTP (0)	PUNCHNN PARM-STMT SUBSCAN
312	(138)	ADDRESS	4	MCTPUNTU	"V(USERPUNT)" User table
316	(13C)	ADDRESS	4	MCTPUNTH	"V(HASPPUNT)" HASP table
320	(140)	ADDRESS	4	MCTPUNTD	Dynamic table array

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
324	(144)	ADDRESS	4	MCTRDITP (0)	RDI PARM-STMT SUBSCAN PAIR
324	(144)	ADDRESS	4	MCTRDITU	"V(USERRDIT)" User table
328	(148)	ADDRESS	4	MCTRDITH	"V(HASPRDIT)" HASP table
332	(14C)	ADDRESS	4	MCTRDITD	Dynamic table array
336	(150)	ADDRESS	4	MCTRDRTP (0)	READERNN PARM-STMT SUBSCAN
336	(150)	ADDRESS	4	MCTRDRTU	"V(USERRDRT)" User table
340	(154)	ADDRESS	4	MCTRDRTH	"V(HASPRDRT)" HASP table
344	(158)	ADDRESS	4	MCTRDRTD	Dynamic table array
348	(15C)	ADDRESS	4	MCTRQJTP (0)	REQJOBID PARM-STMT SUBSCAN
348	(15C)	ADDRESS	4	MCTRQJTU	"V(USERRQJT)" User table
352	(160)	ADDRESS	4	MCTRQJTH	"V(HASPRQJT)" HASP table
356	(164)	ADDRESS	4	MCTRQJTD	Dynamic table array
360	(168)	ADDRESS	4	MCTRDVTP (0)	RNNNNDVX PARM-STMT SUBSCAN PAIR
360	(168)	ADDRESS	4	MCTRDVTU	"V(USERRDVT)" User table
364	(16C)	ADDRESS	4	MCTRDVTH	"V(HASPRDVT)" HASP table
368	(170)	ADDRESS	4	MCTRDVTD	Dynamic table array
372	(174)	ADDRESS	4	MCTRPRTP (0)	RNNNNPRX PARM-STMT SUBSCAN
372	(174)	ADDRESS	4	MCTRPRTU	"V(USERRPRT)" User table
376	(178)	ADDRESS	4	MCTRPRTH	"V(HASPRPRT)" HASP table
380	(17C)	ADDRESS	4	MCTRPRTD	Dynamic table array
384	(180)	ADDRESS	4	MCTRPUTP (0)	RNNNNPUX PARM-STMT SUBSCAN
384	(180)	ADDRESS	4	MCTRPUTU	"V(USERRPUT)" User table
388	(184)	ADDRESS	4	MCTRPUTH	"V(HASPRPUT)" HASP table
392	(188)	ADDRESS	4	MCTRPUTD	Dynamic table array
396	(18C)	ADDRESS	4	MCTRRDTP (0)	RNNNNRDX PARM-STMT SUBSCAN
396	(18C)	ADDRESS	4	MCTRRDTU	"V(USERRRDT)" User table
400	(190)	ADDRESS	4	MCTRRDTH	"V(HASPRRDT)" HASP table
404	(194)	ADDRESS	4	MCTRRDTD	Dynamic table array
408	(198)	ADDRESS	4	MCTRCNTP (0)	RNNNNCN PARM-STMT SUBSCAN
408	(198)	ADDRESS	4	MCTRCNTU	"V(USERRCNT)" User table
412	(19C)	ADDRESS	4	MCTRCNTH	"V(HASPRCNT)" HASP table
416	(1A0)	ADDRESS	4	MCTRCNTD	Dynamic table array
420	(1A4)	ADDRESS	4	MCTSUBTP (0)	SUBNET PARM-STMT SUBSCAN
420	(1A4)	ADDRESS	4	MCTSUBTU	"V(USERSUBT)" User table
424	(1A8)	ADDRESS	4	MCTSUBTH	"V(HASPSUBT)" HASP table
428	(1AC)	ADDRESS	4	MCTSUBTD	Dynamic table array
432	(1B0)	ADDRESS	4	(3)	Reserved for future use

Comment

$SCAN FACILITY HASP TABLE FOR SUBSCANNING OF VECTOR TYPE
PARAMETER STATEMENTS.

End of Comment

444	(1BC)	ADDRESS	4	MCTADRTP (0)	BAD TRACK ADDRESS OPERAND VECTR
444	(1BC)	ADDRESS	4	MCTADRTH	"V(HASPVADR)" HASP VECTOR table
448	(1C0)	ADDRESS	4	MCTVTMTP (0)	TIME OPERAND VECTOR
448	(1C0)	ADDRESS	4	MCTVTMTH	"V(HASPVTIM)" HASP VECTOR table
452	(1C4)	ADDRESS	4	MCTAUTTP (0)	AUTHORITY OPERAND VECTOR
452	(1C4)	ADDRESS	4	MCTAUTTH	"V(HASPVAUT)" HASP VECTOR table
456	(1C8)	ADDRESS	4	MCTMSGTP (0)	MESSAGE OPERAND VECTOR
456	(1C8)	ADDRESS	4	MCTMSGTH	"V(HASPVMSG)" HASP VECTOR table
460	(1CC)	ADDRESS	4	MCTCHRTP (0)	CHARACTER OPERAND VECTOR
460	(1CC)	ADDRESS	4	MCTCHRTH	"V(HASPVCHR)" HASP VECTOR table
464	(1D0)	ADDRESS	4	MCTXRTTP (0)	ROUTINE OPERAND VECTOR
464	(1D0)	ADDRESS	4	MCTXRTTH	"V(HASPVXRT)" HASP VECTOR table
468	(1D4)	ADDRESS	4	MCTJRNTP (0)	JOB RANGE OPERAND VECTOR (INIT)
468	(1D4)	ADDRESS	4	MCTJRNTH	"V(HASPVJRN)" HASP VECTOR table
472	(1D8)	ADDRESS	4	MCTRANTP (0)	JOB RANGE OPERAND VECTOR($T/$D)
472	(1D8)	ADDRESS	4	MCTRANTH	"V(HASPVJBR)" HASP VECTOR table
476	(1DC)	ADDRESS	4	MCTDRMTP (0)	DORMANCY OPERAND VECTOR
476	(1DC)	ADDRESS	4	MCTDRMTH	"V(HASPVDRM)" HASP VECTOR table
480	(1E0)	ADDRESS	4	MCTRNGTP (0)	RANGE OPERAND VECTOR
480	(1E0)	ADDRESS	4	MCTRNGTH	"V(HASPVRNG)" HASP VECTOR table

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
484	(1E4)	ADDRESS	4	MCTRN2TP (0)	RANGE OPERAND VECTOR 2
484	(1E4)	ADDRESS	4	MCTRN2TH	"V(HASPVRN2)" HASP VECTOR table
488	(1E8)	ADDRESS	4	MCTPRCTP (0)	ROUTE CODE OPERAND VECTOR
488	(1E8)	ADDRESS	4	MCTPRCTH	"V(HASPVPRC)" HASP VECTOR table
492	(1EC)	ADDRESS	4	MCTSAFTP (0)	SYSTEM AFFINITY OPERAND VECTOR
492	(1EC)	ADDRESS	4	MCTSAFTH	"V(HASPVSAF)" HASP VECTOR table
496	(1F0)	ADDRESS	4	MCTVOLTP (0)	VOLUME OPERAND VECTOR
496	(1F0)	ADDRESS	4	MCTVOLTH	"V(HASPVVOL)" HASP VECTOR table
500	(1F4)	ADDRESS	4	MCTFRMTP (0)	FORMS OPERAND VECTOR
500	(1F4)	ADDRESS	4	MCTFRMTH	"V(HASPVFRM)" HASP VECTOR table
504	(1F8)	ADDRESS	4	MCTPPRTP (0)	PRMODE OPERAND VECTOR
504	(1F8)	ADDRESS	4	MCTPPRTH	"V(HASPVPPR)" HASP VECTOR table
508	(1FC)	ADDRESS	4	MCTLIMTP (0)	LIMIT OPERAND VECTOR
508	(1FC)	ADDRESS	4	MCTLIMTH	"V(HASPVLIM)" HASP VECTOR table
512	(200)	ADDRESS	4	MCTMSMTP (0)	MODULE ASSEMBLE= VECTOR
512	(200)	ADDRESS	4	MCTMSMTH	"V(HASPMSMT)" HASP VECTOR table
516	(204)	ADDRESS	4	MCTPLMTP (0)	PLIM OPERAND VECTOR
516	(204)	ADDRESS	4	MCTPLMTH	"V(HASPVPLM)" HASP VECTOR table
520	(208)	ADDRESS	4	MCTOUNTP (0)	OFFLOAD UNIT= OPERAND
520	(208)	ADDRESS	4	MCTOUNTH	"V(HASPOUNT)" HASP VECTOR table
524	(20C)	ADDRESS	4	MCTVWSTP (0)	WS OPERAND VECTOR
524	(20C)	ADDRESS	4	MCTVWSTH	"V(HASPVWST)" HASP VECTOR table
528	(210)	ADDRESS	4	MCTVOSTP (0)	OUTDISP OPERAND VECTOR
528	(210)	ADDRESS	4	MCTVOSTH	"V(HASPVODS)" HASP VECTOR table
532	(214)	ADDRESS	4	MCTVOJTP (0)	OUTDISP OPERAND
532	(214)	ADDRESS	4	MCTVOJTH	"V(HASPVODJ)" HASP VECTOR table
536	(218)	ADDRESS	4	MCTVSRTP (0)	OUTDISP OPERAND VECTOR
536	(218)	ADDRESS	4	MCTVSRTH	"V(HASPVOSR)" HASP VECTOR table
540	(21C)	ADDRESS	4	MCTVSTTP (0)	OUTDISP OPERAND VECTOR
540	(21C)	ADDRESS	4	MCTVSTTH	"V(HASPVOST)" HASP VECTOR table
544	(220)	ADDRESS	4	MCTVSFTP (0)	RDRnn SYSAFF=OPERAND VECTOR
544	(220)	ADDRESS	4	MCTVSFTH	"V(HASPRSFT)" HASP VECTOR table
548	(224)	ADDRESS	4	MCTVOWTP (0)	RDRnn SYSAFF=OPERAND VECTOR
548	(224)	ADDRESS	4	MCTVOWTH	"V(HASPROWT)" HASP VECTOR table
552	(228)	ADDRESS	4	MCTVSSTP (0)	SPOOL SYSAFF=OPERAND VECTOR
552	(228)	ADDRESS	4	MCTVSSTH	"V(HASPRSST)" HASP VECTOR table
556	(22C)	ADDRESS	4	MCTVJCTP (0)	JOBnn CMDAUTH= VECTOR
556	(22C)	ADDRESS	4	MCTVJCTH	"V(HASPJCMT)" HASP VECTOR table
560	(230)	ADDRESS	4	MCTVJSTP (0)	JOBnn SYSAFF=OPERAND VECTOR
560	(230)	ADDRESS	4	MCTVJSTH	"V(HASPJSFT)" HASP VECTOR table
564	(234)	ADDRESS	4	MCTVJOFP (0)	JOBnn OFFS= OPERAND VECTOR
564	(234)	ADDRESS	4	MCTVJOFH	"V(HASPJOFT)" HASP VECTOR table
568	(238)	ADDRESS	4	MCTVSOFP (0)	OUTPUT OFFS= OPERAND VECTOR
568	(238)	ADDRESS	4	MCTVSOFH	"V(HASPSOFT)" HASP VECTOR table
572	(23C)	ADDRESS	4	MCTVVUDP (0)	SPOOL UNITDATA TRKRANGE
572	(23C)	ADDRESS	4	MCTVVUDH	"V(HASPVUDT)" HASP VECTOR table
576	(240)	ADDRESS	4	MCTVJVLP (0)	JOBnnn VOLUMES= vector
576	(240)	ADDRESS	4	MCTVJVLH	"V(HASPVJVT)" HASP VECTOR table
580	(244)	ADDRESS	4	MCTVJABP (0)	JOBnnn ABEND= vector
580	(244)	ADDRESS	4	MCTVJABH	"V(HASPVABT)" HASP VECTOR table
584	(248)	ADDRESS	4	MCTVOJLP (0)	JESLOG OPERAND
584	(248)	ADDRESS	4	MCTVOJLH	"V(HASPVJL)" HASP VECTOR table
588	(24C)	ADDRESS	4		Reserved for future use
592	(250)	ADDRESS	4		Reserved for future use
596	(254)	ADDRESS	4		Reserved for future use
600	(258)	ADDRESS	4		Reserved for future use

Comment

$SCAN FACILITY HASP/USER TABLE PAIRS FOR SUBSCANNING OF
MISCELLANEOUS PARAMETER STATEMENTS.

End of Comment

604	(25C)	ADDRESS	4	MCTACTTP (0)	ACTRMT statement table pair

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
604	(25C)	ADDRESS	4	MCTACTTU	"V(USERACTT)" User table
608	(260)	ADDRESS	4	MCTACTTH	"V(HASPACTT)" HASP table
612	(264)	ADDRESS	4	MCTACTTD	Dynamic table array
616	(268)	ADDRESS	4	MCTAPLTP (0)	APPL PARM-STMT SUBSCAN
616	(268)	ADDRESS	4	MCTAPLTU	"V(USERAPLT)" User table
620	(26C)	ADDRESS	4	MCTAPLTH	"V(HASPAPLT)" HASP table
624	(270)	ADDRESS	4	MCTAPLTD	Dynamic table array
628	(274)	ADDRESS	4	MCTBADTP (0)	BADTRACK PARM-STMT SUBSCAN
628	(274)	ADDRESS	4	MCTBADTU	"V(USERBADT)" User table
632	(278)	ADDRESS	4	MCTBADTH	"V(HASPBADT)" HASP table
636	(27C)	ADDRESS	4	MCTBADTD	Dynamic table array
640	(280)	ADDRESS	4	MCTBUFTP (0)	BUFDEF PARM-STMT SUBSCAN PAIR
640	(280)	ADDRESS	4	MCTBUFTU	"V(USERBUFT)" User table
644	(284)	ADDRESS	4	MCTBUFTH	"V(HASPBUFT)" HASP table
648	(288)	ADDRESS	4	MCTBUFTD	Dynamic table array
652	(28C)	ADDRESS	4	MCTBFHTP (0)	BUFDEF BELOWBUF SUBSCAN PR
652	(28C)	ADDRESS	4	MCTBFHTU	"V(USERBFHT)" User table
656	(290)	ADDRESS	4	MCTBFHTH	"V(HASPBFHT)" HASP table
660	(294)	ADDRESS	4	MCTBFHTD	Dynamic table array
664	(298)	ADDRESS	4	MCTBFXTP (0)	BUFDEF ABOVEBUF SUBSCAN PR
664	(298)	ADDRESS	4	MCTBFXTU	"V(USERBFXT)" User table
668	(29C)	ADDRESS	4	MCTBFXTH	"V(HASPBFXT)" HASP table
672	(2A0)	ADDRESS	4	MCTBFXTD	Dynamic table array
676	(2A4)	ADDRESS	4	MCTBSCTP (0)	TPDEF BSC SUBSCAN PAIR
676	(2A4)	ADDRESS	4	MCTBSCTU	"V(USERBSCT)" User table
680	(2A8)	ADDRESS	4	MCTBSCTH	"V(HASPBSCT)" HASP table
684	(2AC)	ADDRESS	4	MCTBSCTD	Dynamic table array
688	(2B0)	ADDRESS	4	MCTSNATP (0)	TPDEF SNA SUBSCAN PAIR
688	(2B0)	ADDRESS	4	MCTSNATU	"V(USERSNAT)" User table
692	(2B4)	ADDRESS	4	MCTSNATH	"V(HASPSNAT)" HASP table
696	(2B8)	ADDRESS	4	MCTSNATD	Dynamic table array
700	(2BC)	ADDRESS	4	MCTSESTP (0)	TPDEF SESSIONS= subscan
700	(2BC)	ADDRESS	4	MCTSESTU	"V(USERSEST)" User table
704	(2C0)	ADDRESS	4	MCTSESTH	"V(HASPSEST)" HASP table
708	(2C4)	ADDRESS	4	MCTSESTD	Dynamic table array
712	(2C8)	ADDRESS	4	MCTJCXTP (0)	JOBCLASS XEQCOUNT= subscan
712	(2C8)	ADDRESS	4	MCTJCXTU	"V(USERJCXT)" User table
716	(2CC)	ADDRESS	4	MCTJCXTH	"V(HASPJCXT)" HASP table
720	(2D0)	ADDRESS	4	MCTJCXTD	Dynamic table array
724	(2D4)	ADDRESS	4	MCTJCCTP (0)	JOB CC (completion code)
724	(2D4)	ADDRESS	4	MCTJCCTU	"V(USERJCCT)" User table
728	(2D8)	ADDRESS	4	MCTJCCTH	"V(HASPJCCT)" HASP table
732	(2DC)	ADDRESS	4	MCTJCCTD	Dynamic table array
736	(2E0)	ADDRESS	4	MCTCATTP (0)	JOB CLASS PARM-STMTS SUBSCAN
736	(2E0)	ADDRESS	4	MCTCATTU	"V(USERCATT)" User table
740	(2E4)	ADDRESS	4	MCTCATTH	"V(HASPCATT)" HASP table
744	(2E8)	ADDRESS	4	MCTCATTD	Dynamic table array
748	(2EC)	ADDRESS	4	MCTCKTTP (0)	CKPTDEF PARM-STMT SUBSCAN PAIR
748	(2EC)	ADDRESS	4	MCTCKTTU	"V(USERCKTT)" User table
752	(2F0)	ADDRESS	4	MCTCKTTH	"V(HASPCKTT)" HASP table
756	(2F4)	ADDRESS	4	MCTCKTTD	Dynamic table array
760	(2F8)	ADDRESS	4	MCTCKLTP (0)	CKPTLOCK PARM-STMT TABLE PR
760	(2F8)	ADDRESS	4	MCTCKLTU	"V(USERCKLT)" User table
764	(2FC)	ADDRESS	4	MCTCKLTH	"V(HASPCKLT)" HASP table
768	(300)	ADDRESS	4	MCTCKLTD	Dynamic table array
772	(304)	ADDRESS	4	MCTSPCTP (0)	CKPTSPACE Parm-stmt tbl pr
772	(304)	ADDRESS	4	MCTSPCTU	"V(USERSPCT)" User table
776	(308)	ADDRESS	4	MCTSPCTH	"V(HASPSPCT)" HASP table
780	(30C)	ADDRESS	4	MCTSPCTD	Dynamic table array
784	(310)	ADDRESS	4	MCTKPNTP (0)	CKPTDEF CKPTN= SUBSCAN PAIR
784	(310)	ADDRESS	4	MCTKPNTU	"V(USERKPNT)" User table
788	(314)	ADDRESS	4	MCTKPNTH	"V(HASPKPNT)" HASP table
792	(318)	ADDRESS	4	MCTKPNTD	Dynamic table array
796	(31C)	ADDRESS	4	MCTEKNTP (0)	CKPTDEF NEWCKPTN= SUBSCAN

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
796	(31C)	ADDRESS	4	MCTEKNTU	"V(USEREKNT)" User table
800	(320)	ADDRESS	4	MCTEKNTH	"V(HASPEKNT)" HASP table
804	(324)	ADDRESS	4	MCTEKNTD	Dynamic table array
808	(328)	ADDRESS	4	MCTVLTTP (0)	CKPTDEF VOLATILE= subscan
808	(328)	ADDRESS	4	MCTVLTTU	"V(USERVLTT)" User table
812	(32C)	ADDRESS	4	MCTVLTTH	"V(HASPVLTT)" HASP table
816	(330)	ADDRESS	4	MCTVLTTD	Dynamic table array
820	(334)	ADDRESS	4	MCTVKPTP (0)	CKPTDEF VERSIONS= SUBSCAN
820	(334)	ADDRESS	4	MCTVKPTU	"V(USERVKPT)" User table
824	(338)	ADDRESS	4	MCTVKPTH	"V(HASPVKPT)" HASP table
828	(33C)	ADDRESS	4	MCTVKPTD	Dynamic table array
832	(340)	ADDRESS	4	MCTCNDTP (0)	CONDEF PARM-STMT SUBSCAN PAIR
832	(340)	ADDRESS	4	MCTCNDTU	"V(USERCNDT)" User table
836	(344)	ADDRESS	4	MCTCNDTH	"V(HASPCNDT)" HASP table
840	(348)	ADDRESS	4	MCTCNDTD	Dynamic table array
844	(34C)	ADDRESS	4	MCTCOMTP (0)	COMPACT PARM-STMT SUBSCAN
844	(34C)	ADDRESS	4	MCTCOMTU	"V(USERCOMT)" User table
848	(350)	ADDRESS	4	MCTCOMTH	"V(HASPCOMT)" HASP table
852	(354)	ADDRESS	4	MCTCOMTD	Dynamic table array
856	(358)	ADDRESS	4	MCTCONTP (0)	CONNECT PARM-STMT SUBSCAN
856	(358)	ADDRESS	4	MCTCONTU	"V(USERCONT)" User table
860	(35C)	ADDRESS	4	MCTCONTH	"V(HASPCONT)" HASP table
864	(360)	ADDRESS	4	MCTCONTD	Dynamic table array
868	(364)	ADDRESS	4	MCTDBGTP (0)	DEBUG stmt table pair
868	(364)	ADDRESS	4	MCTDBGTU	"V(USERDBGT)" User table
872	(368)	ADDRESS	4	MCTDBGTH	"V(HASPDBGT)" HASP table
876	(36C)	ADDRESS	4	MCTDBGTD	Dynamic table array
880	(370)	ADDRESS	4	MCTDESTP (0)	DESTID PARM-STMT SUBSCAN
880	(370)	ADDRESS	4	MCTDESTU	"V(USERDEST)" User table
884	(374)	ADDRESS	4	MCTDESTH	"V(HASPDEST)" HASP table
888	(378)	ADDRESS	4	MCTDESTD	Dynamic table array
892	(37C)	ADDRESS	4	MCTDSTTP (0)	DESTDEF stmt table pair
892	(37C)	ADDRESS	4	MCTDSTTU	"V(USERDSTT)" User table
896	(380)	ADDRESS	4	MCTDSTTH	"V(HASPDSTT)" HASP table
900	(384)	ADDRESS	4	MCTDSTTD	Dynamic table array
904	(388)	ADDRESS	4	MCTELCTP (0)	ESTLNCT PARM-STMT SUBSCAN
904	(388)	ADDRESS	4	MCTELCTU	"V(USERELCT)" User table
908	(38C)	ADDRESS	4	MCTELCTH	"V(HASPELCT)" HASP table
912	(390)	ADDRESS	4	MCTELCTD	Dynamic table array
916	(394)	ADDRESS	4	MCTEBYTP (0)	ESTBYTE SUBSCAN PAIR
916	(394)	ADDRESS	4	MCTEBYTU	"V(USEREBYT)" User table
920	(398)	ADDRESS	4	MCTEBYTH	"V(HASPEBYT)" HASP table
924	(39C)	ADDRESS	4	MCTEBYTD	Dynamic table array
928	(3A0)	ADDRESS	4	MCTEPGTP (0)	ESTPAGE PARM-STMT SUBSCAN
928	(3A0)	ADDRESS	4	MCTEPGTU	"V(USEREPGT)" User table
932	(3A4)	ADDRESS	4	MCTEPGTH	"V(HASPEPGT)" HASP table
936	(3A8)	ADDRESS	4	MCTEPGTD	Dynamic table array
940	(3AC)	ADDRESS	4	MCTEPNTP (0)	ESTPUN PARM-STMT SUBSCAN
940	(3AC)	ADDRESS	4	MCTEPNTU	"V(USEREPNT)" User table
944	(3B0)	ADDRESS	4	MCTEPNTH	"V(HASPEPNT)" HASP table
948	(3B4)	ADDRESS	4	MCTEPNTD	Dynamic table array
952	(3B8)	ADDRESS	4	MCTETMTP (0)	ESTIME PARM-STMT SUBSCAN
952	(3B8)	ADDRESS	4	MCTETMTU	"V(USERETMT)" User table
956	(3BC)	ADDRESS	4	MCTETMTH	"V(HASPETMT)" HASP table
960	(3C0)	ADDRESS	4	MCTETMTD	Dynamic table array
964	(3C4)	ADDRESS	4	MCTXITTP (0)	EXITNNN PARM-STMT SUBSCAN
964	(3C4)	ADDRESS	4	MCTXITTU	"V(USERXITT)" User table
968	(3C8)	ADDRESS	4	MCTXITTH	"V(HASPXITT)" HASP table
972	(3CC)	ADDRESS	4	MCTXITTD	Dynamic table array
976	(3D0)	ADDRESS	4	MCTFSSTP (0)	FSS parm-stmt subscan pair
976	(3D0)	ADDRESS	4	MCTFSSTU	"V(USERFSST)" User table
980	(3D4)	ADDRESS	4	MCTFSSTH	"V(HASPFSST)" HASP table
984	(3D8)	ADDRESS	4	MCTFSSTD	Dynamic table array
988	(3DC)	ADDRESS	4	MCTINCTP (0)	INCLUDE init-stmt subscan pair

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
988	(3DC)	ADDRESS	4	MCTINCTU	"V(USERINCT)" User table
992	(3E0)	ADDRESS	4	MCTINCTH	"V(HASPINCT)" HASP table
996	(3E4)	ADDRESS	4	MCTINCTD	Dynamic table array
1000	(3E8)	ADDRESS	4	MCTHDRTP (0)	NJEDEF HDRBUF subscan pair
1000	(3E8)	ADDRESS	4	MCTHDRTU	"V(USERHDRT)" User table
1004	(3EC)	ADDRESS	4	MCTHDRTH	"V(HASPHDRT)" HASP table
1008	(3F0)	ADDRESS	4	MCTHDRTD	Dynamic table array
1012	(3F4)	ADDRESS	4	MCTPARTP (0)	INITDEF PARM-STMT SUBSCAN PAIR
1012	(3F4)	ADDRESS	4	MCTPARTU	"V(USERPART)" User table
1016	(3F8)	ADDRESS	4	MCTPARTH	"V(HASPPART)" HASP table
1020	(3FC)	ADDRESS	4	MCTPARTD	Dynamic table array
1024	(400)	ADDRESS	4	MCTPITTP (0)	INNNN PARM-STMT SUBSCAN
1024	(400)	ADDRESS	4	MCTPITTU	"V(USERPITT)" User table
1028	(404)	ADDRESS	4	MCTPITTH	"V(HASPPITT)" HASP table
1032	(408)	ADDRESS	4	MCTPITTD	Dynamic table array
1036	(40C)	ADDRESS	4	MCTJOBTP (0)	JOBDEF PARM-STMT SUBSCAN PAIR
1036	(40C)	ADDRESS	4	MCTJOBTU	"V(USERJOBT)" User table
1040	(410)	ADDRESS	4	MCTJOBTH	"V(HASPJOBT)" HASP table
1044	(414)	ADDRESS	4	MCTJOBTD	Dynamic table array
1048	(418)	ADDRESS	4	MCTJQETP (0)	JOBnnn PARM-STMT SUBSCAN PAIR
1048	(418)	ADDRESS	4	MCTJQETU	"V(USERJQET)" User table
1052	(41C)	ADDRESS	4	MCTJQETH	"V(HASPJQET)" HASP table
1056	(420)	ADDRESS	4	MCTJQETD	Dynamic table array
1060	(424)	ADDRESS	4	MCTJSPTP (0)	JOBnnn SPOOL= SUBSCAN PAIR
1060	(424)	ADDRESS	4	MCTJSPTU	"V(USERJSPT)" User table
1064	(428)	ADDRESS	4	MCTJSPTH	"V(HASPJSPT)" HASP table
1068	(42C)	ADDRESS	4	MCTJSPTD	Dynamic table array
1072	(430)	ADDRESS	4	MCTJPYTP (0)	JOBPRTY PARM-STMT SUBSCAN PAIR
1072	(430)	ADDRESS	4	MCTJPYTU	"V(USERJPYT)" User table
1076	(434)	ADDRESS	4	MCTJPYTH	"V(HASPJPYT)" HASP table
1080	(438)	ADDRESS	4	MCTJPYTD	Dynamic table array
1084	(43C)	ADDRESS	4	MCTLODTP (0)	LOADMOD PARM-STMT SUBSCAN PAIR
1084	(43C)	ADDRESS	4	MCTLODTU	"V(USERLODT)" User table
1088	(440)	ADDRESS	4	MCTLODTH	"V(HASPLODT)" HASP table
1092	(444)	ADDRESS	4	MCTLODTD	Dynamic table array
1096	(448)	ADDRESS	4	MCTMASTP (0)	MASDEF PARM-STMT SUBSCAN PAIR
1096	(448)	ADDRESS	4	MCTMASTU	"V(USERMAST)" User table
1100	(44C)	ADDRESS	4	MCTMASTH	"V(HASPMAST)" HASP table
1104	(450)	ADDRESS	4	MCTMASTD	Dynamic table array
1108	(454)	ADDRESS	4	MCTMEMTP (0)	MEMBER parm-stmt subscan
1108	(454)	ADDRESS	4	MCTMEMTU	"V(USERMEMT)" User table
1112	(458)	ADDRESS	4	MCTMEMTH	"V(HASPMEMT)" HASP table
1116	(45C)	ADDRESS	4	MCTMEMTD	Dynamic table array
1120	(460)	ADDRESS	4	MCTSTYTP (0)	MEMBER LASTART= subscan
1120	(460)	ADDRESS	4	MCTSTYTU	"V(USERSTYT)" User table
1124	(464)	ADDRESS	4	MCTSTYTH	"V(HASPSTYT)" HASP table
1128	(468)	ADDRESS	4	MCTSTYTD	Dynamic table array
1132	(46C)	ADDRESS	4	MCTMODTP (0)	MODULE PARM-STMT SUBSCAN
1132	(46C)	ADDRESS	4		User table
1136	(470)	ADDRESS	4	MCTMODTH	"V(HASPMODT)" HASP table
1140	(474)	ADDRESS	4		Dynamic table array
1144	(478)	ADDRESS	4	MCTNJETP (0)	NJEDEF PARM-STMT SUBSCAN PAIR
1144	(478)	ADDRESS	4	MCTNJETU	"V(USERNJET)" User table
1148	(47C)	ADDRESS	4	MCTNJETH	"V(HASPNJET)" HASP table
1152	(480)	ADDRESS	4	MCTNJETD	Dynamic table array
1156	(484)	ADDRESS	4	MCTNODTP (0)	NNNNN PARM-STMT SUBSCAN
1156	(484)	ADDRESS	4	MCTNODTU	"V(USERNODT)" User table
1160	(488)	ADDRESS	4	MCTNODTH	"V(HASPNODT)" HASP table
1164	(48C)	ADDRESS	4	MCTNODTD	Dynamic table array
1168	(490)	ADDRESS	4	MCTNDPTP (0)	NODEnnnn PASSWORD subscan
1168	(490)	ADDRESS	4	MCTNDPTU	"V(USERNDPT)" User table
1172	(494)	ADDRESS	4	MCTNDPTH	"V(HASPNDPT)" HASP table
1176	(498)	ADDRESS	4	MCTNDPTD	Dynamic table array
1180	(49C)	ADDRESS	4	MCTNAUTP (0)	NODENNNN AUTH SUBSCAN PAIR

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
1180	(49C)	ADDRESS	4	MCTNAUTU	"V(USERNAUT)" User table
1184	(4A0)	ADDRESS	4	MCTNAUTH	"V(HASPNAUT)" HASP table
1188	(4A4)	ADDRESS	4	MCTNAUTD	Dynamic table array
1192	(4A8)	ADDRESS	4	MCTNETTP (0)	NETACCT PARM-STMT SUBSCAN
1192	(4A8)	ADDRESS	4	MCTNETTU	"V(USERNETT)" User table
1196	(4AC)	ADDRESS	4	MCTNETTH	"V(HASPNETT)" HASP table
1200	(4B0)	ADDRESS	4	MCTNETTD	Dynamic table array
1204	(4B4)	ADDRESS	4	MCTOJMTP (0)	OFFN.JR MOD= PARM SUBSCAN PAIR
1204	(4B4)	ADDRESS	4	MCTOJMTU	"V(USEROJMT)" User table
1208	(4B8)	ADDRESS	4	MCTOJMTH	"V(HASPOJMT)" HASP table
1212	(4BC)	ADDRESS	4	MCTOJMTD	Dynamic table array
1216	(4C0)	ADDRESS	4	MCTOSMTP (0)	OFFN.SR MOD= PARM SUBSCAN PAIR
1216	(4C0)	ADDRESS	4	MCTOSMTU	"V(USEROSMT)" User table
1220	(4C4)	ADDRESS	4	MCTOSMTH	"V(HASPOSMT)" HASP table
1224	(4C8)	ADDRESS	4	MCTOSMTD	Dynamic table array
1228	(4CC)	ADDRESS	4	MCTOPDTP (0)	OPTSDEF PARM-STMT SUBSCAN PAIR
1228	(4CC)	ADDRESS	4	MCTOPDTU	"V(USEROPDT)" User table
1232	(4D0)	ADDRESS	4	MCTOPDTH	"V(HASPOPDT)" HASP table
1236	(4D4)	ADDRESS	4	MCTOPDTD	Dynamic table array
1240	(4D8)	ADDRESS	4	MCTOUTTP (0)	OUTDEF PARM-STMT SUBSCAN PAIR
1240	(4D8)	ADDRESS	4	MCTOUTTU	"V(USEROUTT)" User table
1244	(4DC)	ADDRESS	4	MCTOUTTH	"V(HASPOUTT)" HASP table
1248	(4E0)	ADDRESS	4	MCTOUTTD	Dynamic table array
1252	(4E4)	ADDRESS	4	MCTOPYTP (0)	OUTPRTY PARM-STMT SUBSCAN PAIR
1252	(4E4)	ADDRESS	4	MCTOPYTU	"V(USEROPYT)" User table
1256	(4E8)	ADDRESS	4	MCTOPYTH	"V(HASPOPYT)" HASP table
1260	(4EC)	ADDRESS	4	MCTOPYTD	Dynamic table array
1264	(4F0)	ADDRESS	4	MCTOTPTP (0)	OUTPUT display subscan pair
1264	(4F0)	ADDRESS	4	MCTOTPTU	"V(USEROTPT)" User table
1268	(4F4)	ADDRESS	4	MCTOTPTH	"V(HASPOTPT)" HASP table
1272	(4F8)	ADDRESS	4	MCTOTPTD	Dynamic table array
1276	(4FC)	ADDRESS	4	MCTLOTTP (0)	OUTPUT PARM-STMT PAIR ($LJ)
1276	(4FC)	ADDRESS	4	MCTLOTTU	"V(USERLOTT)" User table
1280	(500)	ADDRESS	4	MCTLOTTH	"V(HASPLOTT)" HASP table
1284	(504)	ADDRESS	4	MCTLOTTD	Dynamic table array
1288	(508)	ADDRESS	4	MCTPTHTP (0)	Path parm-stmt subscan pair
1288	(508)	ADDRESS	4	MCTPTHTU	"V(USERPTHT)" User table
1292	(50C)	ADDRESS	4	MCTPTHTH	"V(HASPPTHT)" HASP table
1296	(510)	ADDRESS	4	MCTPTHTD	Dynamic table array
1300	(514)	ADDRESS	4	MCTPCCTP (0)	PCE parm-stmt subscan pair
1300	(514)	ADDRESS	4	MCTPCCTU	"V(USERPCCT)" User table
1304	(518)	ADDRESS	4	MCTPCCTH	"V(HASPPCCT)" HASP table
1308	(51C)	ADDRESS	4	MCTPCCTD	Dynamic table array
1312	(520)	ADDRESS	4	MCTPCNTP (0)	PCE COUNT parm subscan pair
1312	(520)	ADDRESS	4	MCTPCNTU	"V(USERPCNT)" User table
1316	(524)	ADDRESS	4	MCTPCNTH	"V(HASPPCNT)" HASP table
1320	(528)	ADDRESS	4	MCTPCNTD	Dynamic table array
1324	(52C)	ADDRESS	4	MCTPDTTP (0)	PCE DETAILS parm subscan pair
1324	(52C)	ADDRESS	4	MCTPDTTU	"V(USERPDTT)" User table
1328	(530)	ADDRESS	4	MCTPDTTH	"V(HASPPDTT)" HASP table
1332	(534)	ADDRESS	4	MCTPDTTD	Dynamic table array
1336	(538)	ADDRESS	4	MCTPCDTP (0)	PCEDEF PARM-STMT SUBSCAN PAIR
1336	(538)	ADDRESS	4	MCTPCDTU	"V(USERPCDT)" User table
1340	(53C)	ADDRESS	4	MCTPCDTH	"V(HASPPCDT)" HASP table
1344	(540)	ADDRESS	4	MCTPCDTD	Dynamic table array
1348	(544)	ADDRESS	4	MCTPTDTP (0)	PRINTDEF PARM-STMT SUBSCAN PAIR
1348	(544)	ADDRESS	4	MCTPTDTU	"V(USERPTDT)" User table
1352	(548)	ADDRESS	4	MCTPTDTH	"V(HASPPTDT)" HASP table
1356	(54C)	ADDRESS	4	MCTPTDTD	Dynamic table array
1360	(550)	ADDRESS	4	MCTPDDTP (0)	PROCLIB DD Parm-stmt subscan pair
1360	(550)	ADDRESS	4	MCTPDDTU	"V(USERPDDT)" User table
1364	(554)	ADDRESS	4	MCTPDDTH	"V(HASPPDDT)" HASP table
1368	(558)	ADDRESS	4	MCTPDDTD	Dynamic table array
1372	(55C)	ADDRESS	4	MCTPUDTP (0)	PUNCHDEF PARM-STMT SUBSCAN PAIR

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
1372	(55C)	ADDRESS	4	MCTPUDTU	"V(USERPUDT)" User table
1376	(560)	ADDRESS	4	MCTPUDTH	"V(HASPPUDT)" HASP table
1380	(564)	ADDRESS	4	MCTPUDTD	Dynamic table array
1384	(568)	ADDRESS	4	MCTRAUTP (0)	RDRnn AUTH SUBSCAN PAIR
1384	(568)	ADDRESS	4	MCTRAUTU	"V(USERRAUT)" User table
1388	(56C)	ADDRESS	4	MCTRAUTH	"V(HASPRAUT)" HASP table
1392	(570)	ADDRESS	4	MCTRAUTD	Dynamic table array
1396	(574)	ADDRESS	4	MCTREDTP (0)	REDIR PARM-STMT SUBSCAN PR
1396	(574)	ADDRESS	4	MCTREDTU	"V(USERREDT)" User table
1400	(578)	ADDRESS	4	MCTREDTH	"V(HASPREDT)" HASP table
1404	(57C)	ADDRESS	4	MCTREDTD	Dynamic table array
1408	(580)	ADDRESS	4	MCTRCVTP (0)	RECVOPTS PARM-STMT SUBSCAN
1408	(580)	ADDRESS	4	MCTRCVTU	"V(USERRCVT)" User table
1412	(584)	ADDRESS	4	MCTRCVTH	"V(HASPRCVT)" HASP table
1416	(588)	ADDRESS	4	MCTRCVTD	Dynamic table array
1420	(58C)	ADDRESS	4	MCTRMTTP (0)	RMTNNNN PARM-STMT SUBSCAN
1420	(58C)	ADDRESS	4	MCTRMTTU	"V(USERRMTT)" User table
1424	(590)	ADDRESS	4	MCTRMTTH	"V(HASPRMTT)" HASP table
1428	(594)	ADDRESS	4	MCTRMTTD	Dynamic table array
1432	(598)	ADDRESS	4	MCTSCTTP (0)	OUTCLASS PARM-STMT SUBSCAN PAIR
1432	(598)	ADDRESS	4	MCTSCTTU	"V(USERSCTT)" User table
1436	(59C)	ADDRESS	4	MCTSCTTH	"V(HASPSCTT)" HASP table
1440	(5A0)	ADDRESS	4	MCTSCTTD	Dynamic table array
1444	(5A4)	ADDRESS	4	MCTSMFTP (0)	SMFDEF PARM-STMT SUBSCAN PAIR
1444	(5A4)	ADDRESS	4	MCTSMFTU	"V(USERSMFT)" User table
1448	(5A8)	ADDRESS	4	MCTSMFTH	"V(HASPSMFT)" HASP table
1452	(5AC)	ADDRESS	4	MCTSMFTD	Dynamic table array
1456	(5B0)	ADDRESS	4	MCTSPLTP (0)	SPOOL PARM-STMT PAIR
1456	(5B0)	ADDRESS	4	MCTSPLTU	"V(USERSPLT)" User table
1460	(5B4)	ADDRESS	4	MCTSPLTH	"V(HASPSPLT)" HASP table
1464	(5B8)	ADDRESS	4	MCTSPLTD	Dynamic table array
1468	(5BC)	ADDRESS	4	MCTSPDTP (0)	SPOOLDEF PARM-STMT SUBSCAN PAIR
1468	(5BC)	ADDRESS	4	MCTSPDTU	"V(USERSPDT)" User table
1472	(5C0)	ADDRESS	4	MCTSPDTH	"V(HASPSPDT)" HASP table
1476	(5C4)	ADDRESS	4	MCTSPDTD	Dynamic table array
1480	(5C8)	ADDRESS	4	MCTFENTP (0)	SPOOLDEF FENCE=subscan
1480	(5C8)	ADDRESS	4	MCTFENTU	"V(USERFENT)" User table
1484	(5CC)	ADDRESS	4	MCTFENTH	"V(HASPFENT)" HASP table
1488	(5D0)	ADDRESS	4	MCTFENTD	Dynamic table array
1492	(5D4)	ADDRESS	4	MCTTGSTP (0)	SPOOLDEF TGSPACE=subscan
1492	(5D4)	ADDRESS	4	MCTTGSTU	"V(USERTGST)" User table
1496	(5D8)	ADDRESS	4	MCTTGSTH	"V(HASPTGST)" HASP table
1500	(5DC)	ADDRESS	4	MCTTGSTD	Dynamic table array
1504	(5E0)	ADDRESS	4	MCTSBDTP (0)	SUBTDEF STMT SUBSCAN PAIR
1504	(5E0)	ADDRESS	4	MCTSBDTU	"V(USERSBDT)" User table
1508	(5E4)	ADDRESS	4	MCTSBDTH	"V(HASPSBDT)" HASP table
1512	(5E8)	ADDRESS	4	MCTSBDTD	Dynamic table array
1516	(5EC)	ADDRESS	4	MCTTPDTP (0)	TPDEF PARM-STMT SUBSCAN PAIR
1516	(5EC)	ADDRESS	4	MCTTPDTU	"V(USERTPDT)" User table
1520	(5F0)	ADDRESS	4	MCTTPDTH	"V(HASPTPDT)" HASP table
1524	(5F4)	ADDRESS	4	MCTTPDTD	Dynamic table array
1528	(5F8)	ADDRESS	4	MCTTRCTP (0)	TRACEDEF PARM-STMT SUBSCAN PAIR
1528	(5F8)	ADDRESS	4	MCTTRCTU	"V(USERTRCT)" User table
1532	(5FC)	ADDRESS	4	MCTTRCTH	"V(HASPTRCT)" HASP table
1536	(600)	ADDRESS	4	MCTTRCTD	Dynamic table array
1540	(604)	ADDRESS	4	MCTTRITP (0)	TRACE(N) PARM-STMT SUBSCAN PR
1540	(604)	ADDRESS	4	MCTTRITU	"V(USERTRIT)" User table
1544	(608)	ADDRESS	4	MCTTRITH	"V(HASPTRIT)" HASP table
1548	(60C)	ADDRESS	4	MCTTRITD	Dynamic table array
1552	(610)	ADDRESS	4	MCTSTATP (0)	TRACE STAT PARM-STMT SUBSCAN PR
1552	(610)	ADDRESS	4	MCTSTATU	"V(USERSTAT)" User table
1556	(614)	ADDRESS	4	MCTSTATH	"V(HASPSTAT)" HASP table
1560	(618)	ADDRESS	4	MCTSTATD	Dynamic table array
1564	(61C)	ADDRESS	4	MCTTLGTP (0)	TRC LOG PARM-STMT SUBSCAN PAIR

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
1564	(61C)	ADDRESS	4	MCTTLGTU	"V(USERTLGT)" User table
1568	(620)	ADDRESS	4	MCTTLGTH	"V(HASPTLGT)" HASP table
1572	(624)	ADDRESS	4	MCTTLGTD	Dynamic table array
1576	(628)	ADDRESS	4	MCTSSITP (0)	SSI PARM-STMT SUBSCAN PAIR
1576	(628)	ADDRESS	4	MCTSSITU	"V(USERSSIT)" User table
1580	(62C)	ADDRESS	4	MCTSSITH	"V(HASPSSIT)" HASP table
1584	(630)	ADDRESS	4	MCTSSITD	Dynamic table array
1588	(634)	ADDRESS	4	MCTSEPTP (0)	SEPPAGE PARM-STMT SUBSCN PR
1588	(634)	ADDRESS	4	MCTSEPTU	"V(USERSEPT)" User table
1592	(638)	ADDRESS	4	MCTSEPTH	"V(HASPSEPT)" HASP table
1596	(63C)	ADDRESS	4	MCTSEPTD	Dynamic table array
1600	(640)	ADDRESS	4	MCTVIATP (0)	Path parm-stmt VIA subparm
1600	(640)	ADDRESS	4	MCTVIATU	"V(USERVIAT)" User table
1604	(644)	ADDRESS	4	MCTVIATH	"V(HASPVIAT)" HASP table
1608	(648)	ADDRESS	4	MCTVIATD	Dynamic table array
1612	(64C)	ADDRESS	4	MCTVUNTP (0)	SPOOL UNITDATA= subparm
1612	(64C)	ADDRESS	4	MCTVUNTU	"V(USERVUNT)" User table
1616	(650)	ADDRESS	4	MCTVUNTH	"V(HASPVUNT)" HASP table
1620	(654)	ADDRESS	4	MCTVUNTD	Dynamic table array
1624	(658)	ADDRESS	4	MCTZJBTP (0)	ZAPJOB SUBSCAN pair
1624	(658)	ADDRESS	4	MCTZJBTU	"V(USERZJBT)" User table
1628	(65C)	ADDRESS	4	MCTZJBTH	"V(HASPZJBT)" HASP table
1632	(660)	ADDRESS	4	MCTZJBTD	Dynamic table array
1636	(664)	ADDRESS	4	MCT4KPTP (0)	CKPTSPACE 4K_RECS subparm
1636	(664)	ADDRESS	4	MCT4KPTU	"V(USER4KPT)" User table
1640	(668)	ADDRESS	4	MCT4KPTH	"V(HASP4KPT)" HASP table
1644	(66C)	ADDRESS	4	MCT4KPTD	Dynamic table array
1648	(670)	ADDRESS	4	MCTPRFTP (0)	PRTnn FSSINFO subparm
1648	(670)	ADDRESS	4	MCTPRFTU	"V(USERPRFT)" User table
1652	(674)	ADDRESS	4	MCTPRFTH	"V(HASPPRFT)" HASP table
1656	(678)	ADDRESS	4	MCTPRFTD	Dynamic table array
1660	(67C)	ADDRESS	4	(3)	Reserved for future use
1672	(688)	ADDRESS	4	(3)	Reserved for future use
1684	(694)	ADDRESS	4	(3)	Reserved for future use

Comment

WORK SELECTION USER AND HASP TABLES

End of Comment

1696	(6A0)	ADDRESS	4	MCTPRWTP (0)	PRINTER WS TABLE ADDR PAIR
1696	(6A0)	ADDRESS	4	MCTPRWTU	"V(USERPRWT)" User table
1700	(6A4)	ADDRESS	4	MCTPRWTH	"V(HASPPRWT)" HASP table
1704	(6A8)	ADDRESS	4	MCTPRWTD	Dynamic table array
1708	(6AC)	ADDRESS	4	MCTPUWTP (0)	PUNCH WS TABLE ADDR PAIR
1708	(6AC)	ADDRESS	4	MCTPUWTU	"V(USERPUWT)" User table
1712	(6B0)	ADDRESS	4	MCTPUWTH	"V(HASPPUWT)" HASP table
1716	(6B4)	ADDRESS	4	MCTPUWTD	Dynamic table array
1720	(6B8)	ADDRESS	4	MCTJTWTP (0)	OFFJT WS TABLE ADDR PAIR
1720	(6B8)	ADDRESS	4	MCTJTWTU	"V(USERJTWT)" User table
1724	(6BC)	ADDRESS	4	MCTJTWTH	"V(HASPJTWT)" HASP table
1728	(6C0)	ADDRESS	4	MCTJTWTD	Dynamic table array
1732	(6C4)	ADDRESS	4	MCTJRWTP (0)	OFFJR WS TABLE ADDR PAIR
1732	(6C4)	ADDRESS	4	MCTJRWTU	"V(USERJRWT)" User table
1736	(6C8)	ADDRESS	4	MCTJRWTH	"V(HASPJRWT)" HASP table
1740	(6CC)	ADDRESS	4	MCTJRWTD	Dynamic table array
1744	(6D0)	ADDRESS	4	MCTSTWTP (0)	OFFST WS TABLE ADDR PAIR
1744	(6D0)	ADDRESS	4	MCTSTWTU	"V(USERSTWT)" User table
1748	(6D4)	ADDRESS	4	MCTSTWTH	"V(HASPSTWT)" HASP table
1752	(6D8)	ADDRESS	4	MCTSTWTD	Dynamic table array
1756	(6DC)	ADDRESS	4	MCTSRWTP (0)	OFFSR WS TABLE ADDR PAIR
1756	(6DC)	ADDRESS	4	MCTSRWTU	"V(USERSRWT)" User table
1760	(6E0)	ADDRESS	4	MCTSRWTH	"V(HASPSRWT)" HASP table
1764	(6E4)	ADDRESS	4	MCTSRWTD	Dynamic table array

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
1768	(6E8)	ADDRESS	4	MCTLJWTP (0)	Lx.JT WS table ADDR PAIR
1768	(6E8)	ADDRESS	4	MCTLJWTU	"V(USERLJWT)" User table
1772	(6EC)	ADDRESS	4	MCTLJWTH	"V(HASPLJWT)" HASP table
1776	(6F0)	ADDRESS	4	MCTLJWTD	Dynamic table array
1780	(6F4)	ADDRESS	4	MCTLSWTP (0)	Lx.ST WS table ADDR PAIR
1780	(6F4)	ADDRESS	4	MCTLSWTU	"V(USERLSWT)" User table
1784	(6F8)	ADDRESS	4	MCTLSWTH	"V(HASPLSWT)" HASP table
1788	(6FC)	ADDRESS	4	MCTLSWTD	Dynamic table array
1792	(700)	ADDRESS	4	MCTSAWTP (0)	Sysout API table Addr Pair
1792	(700)	ADDRESS	4	MCTSAWTU	"V(USERSAWT)" User table
1796	(704)	ADDRESS	4	MCTSAWTH	"V(HASPSAWT)" HASP table
1800	(708)	ADDRESS	4	MCTSAWTD	Dynamic table array
1804	(70C)	ADDRESS	4	(3)	Reserved for future use

Comment

MISCELLANEOUS SECTION FOR USER TABLE POINTERS

End of Comment

1816	(718)	ADDRESS	4	MCTERRTP (0)	USER ERROR TEXT TABLE
1816	(718)	ADDRESS	4	MCTERRTU	"V(USERERRT)" User table
1820	(71C)	ADDRESS	4		HASP table
1824	(720)	ADDRESS	4	MCTERRTD	Dynamic table array
1824	(720)	X'724'	0	MCTLEN	"*-MCT" LENGTH OF THE MCT

$MCT Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
MCT	0		MCTBUFTP	280	
MCTACTTD	264		MCTBUFTU	280	
MCTACTTH	260		MCTCATTD	2E8	
MCTACTTP	25C		MCTCATTH	2E4	
MCTACTTU	25C		MCTCATTP	2E0	
MCTADRTH	1BC		MCTCATTU	2E0	
MCTADRTP	1BC		MCTCHRTH	1CC	
MCTAPLTD	270		MCTCHRTP	1CC	
MCTAPLTH	26C		MCTCKLTD	300	
MCTAPLTP	268		MCTCKLTH	2FC	
MCTAPLTU	268		MCTCKLTP	2F8	
MCTAUTTH	1C4		MCTCKLTU	2F8	
MCTAUTTP	1C4		MCTCKTTD	2F4	
MCTBADTD	27C		MCTCKTTH	2F0	
MCTBADTH	278		MCTCKTTP	2EC	
MCTBADTP	274		MCTCKTTU	2EC	
MCTBADTU	274		MCTCNDTD	348	
MCTBFHTD	294		MCTCNDTH	344	
MCTBFHTH	290		MCTCNDTP	340	
MCTBFHTP	28C		MCTCNDTU	340	
MCTBFHTU	28C		MCTCOMTD	354	
MCTBFXTD	2A0		MCTCOMTH	350	
MCTBFXTH	29C		MCTCOMTP	34C	
MCTBFXTP	298		MCTCOMTU	34C	
MCTBFXTU	298		MCTCONTD	360	
MCTBRTTD	50		MCTCONTH	35C	
MCTBRTTH	4C		MCTCONTP	358	
MCTBRTTP	48		MCTCONTU	358	
MCTBRTTU	48		MCTDBGTD	36C	
MCTBSCTD	2AC		MCTDBGTH	368	
MCTBSCTH	2A8		MCTDBGTP	364	
MCTBSCTP	2A4		MCTDBGTU	364	
MCTBSCTU	2A4		MCTDCTTD	14	
MCTBUFTD	288		MCTDCTTH	10	
MCTBUFTH	284		MCTDCTTP	C	

Name	Hex Offset	Hex Value
MCTDCTTU	C	
MCTDESTD	378	
MCTDESTH	374	
MCTDESTP	370	
MCTDESTU	370	
MCTDRMTH	1DC	
MCTDRMTP	1DC	
MCTDSTTD	384	
MCTDSTTH	380	
MCTDSTTP	37C	
MCTDSTTU	37C	
MCTDTETD	20	
MCTDTETH	1C	
MCTDTETP	18	
MCTDTETU	18	
MCTEBYTD	39C	
MCTEBYTH	398	
MCTEBYTP	394	
MCTEBYTU	394	
MCTEKNTD	324	
MCTEKNTH	320	
MCTEKNTP	31C	
MCTEKNTU	31C	
MCTELCTD	390	
MCTELCTH	38C	
MCTELCTP	388	
MCTELCTU	388	
MCTEPGTD	3A8	
MCTEPGTH	3A4	
MCTEPGTP	3A0	
MCTEPGTU	3A0	
MCTEPNTD	3B4	
MCTEPNTH	3B0	
MCTEPNTP	3AC	
MCTEPNTU	3AC	
MCTERRTD	720	
MCTERRTP	718	
MCTERRTU	718	
MCTETMTD	3C0	
MCTETMTH	3BC	
MCTETMTP	3B8	
MCTETMTU	3B8	
MCTFENTD	5D0	
MCTFENTH	5CC	
MCTFENTP	5C8	
MCTFENTU	5C8	
MCTFRMTH	1F4	
MCTFRMTP	1F4	
MCTFSSTD	3D8	
MCTFSSTH	3D4	
MCTFSSTP	3D0	
MCTFSSTU	3D0	
MCTHDRTD	3F0	
MCTHDRTH	3EC	
MCTHDRTP	3E8	
MCTHDRTU	3E8	
MCTINCTD	3E4	
MCTINCTH	3E0	
MCTINCTP	3DC	
MCTINCTU	3DC	
MCTINRTD	80	
MCTINRTH	7C	
MCTINRTP	78	
MCTINRTU	78	
MCTJCCTD	2DC	
MCTJCCTH	2D8	
MCTJCCTP	2D4	
MCTJCCTU	2D4	
MCTJCXTD	2D0	
MCTJCXTH	2CC	
MCTJCXTP	2C8	
MCTJCXTU	2C8	
MCTJOBTD	414	
MCTJOBTH	410	
MCTJOBTP	40C	
MCTJOBTU	40C	
MCTJPYTD	438	
MCTJPYTH	434	
MCTJPYTP	430	
MCTJPYTU	430	
MCTJQETD	420	
MCTJQETH	41C	
MCTJQETP	418	
MCTJQETU	418	
MCTJRNTH	1D4	
MCTJRNTP	1D4	
MCTJRWTD	6CC	
MCTJRWTH	6C8	
MCTJRWTP	6C4	
MCTJRWTU	6C4	
MCTJSPTD	42C	
MCTJSPTH	428	
MCTJSPTP	424	
MCTJSPTU	424	
MCTJTWTD	6C0	
MCTJTWTH	6BC	
MCTJTWTP	6B8	
MCTJTWTU	6B8	
MCTKPNTD	318	
MCTKPNTH	314	
MCTKPNTP	310	
MCTKPNTU	310	
MCTLEN	720	724
MCTLIMTH	1FC	
MCTLIMTP	1FC	
MCTLINTD	98	
MCTLINTH	94	
MCTLINTP	90	
MCTLINTU	90	
MCTLJRTD	A4	
MCTLJRTH	A0	
MCTLJRTP	9C	
MCTLJRTU	9C	
MCTLJTTD	B0	
MCTLJTTH	AC	
MCTLJTTP	A8	
MCTLJTTU	A8	
MCTLJWTD	6F0	
MCTLJWTH	6EC	
MCTLJWTP	6E8	
MCTLJWTU	6E8	
MCTLNETD	8C	
MCTLNETH	88	
MCTLNETP	84	
MCTLNETU	84	
MCTLODTD	444	
MCTLODTH	440	
MCTLODTP	43C	
MCTLODTU	43C	
MCTLOGTD	D4	

Name	Hex Offset	Hex Value
MCTLOGTH	D0	
MCTLOGTP	CC	
MCTLOGTU	CC	
MCTLOTTD	504	
MCTLOTTH	500	
MCTLOTTP	4FC	
MCTLOTTU	4FC	
MCTLSRTD	BC	
MCTLSRTH	B8	
MCTLSRTP	B4	
MCTLSRTU	B4	
MCTLSTTD	C8	
MCTLSTTH	C4	
MCTLSTTP	C0	
MCTLSTTU	C0	
MCTLSWTD	6FC	
MCTLSWTH	6F8	
MCTLSWTP	6F4	
MCTLSWTU	6F4	
MCTMASTD	450	
MCTMASTH	44C	
MCTMASTP	448	
MCTMASTU	448	
MCTMEMTD	45C	
MCTMEMTH	458	
MCTMEMTP	454	
MCTMEMTU	454	
MCTMGTD	74	
MCTMGTH	70	
MCTMGTP	6C	
MCTMGTU	6C	
MCTMODTH	470	
MCTMODTP	46C	
MCTMPSTD	68	
MCTMPSTH	64	
MCTMPSTP	60	
MCTMPSTU	60	
MCTMSGTH	1C8	
MCTMSGTP	1C8	
MCTMSMTH	200	
MCTMSMTP	200	
MCTNAUTD	4A4	
MCTNAUTH	4A0	
MCTNAUTP	49C	
MCTNAUTU	49C	
MCTNDPTD	498	
MCTNDPTH	494	
MCTNDPTP	490	
MCTNDPTU	490	
MCTNETTD	4B0	
MCTNETTH	4AC	
MCTNETTP	4A8	
MCTNETTU	4A8	
MCTNJETD	480	
MCTNJETH	47C	
MCTNJETP	478	
MCTNJETU	478	
MCTNODTD	48C	
MCTNODTH	488	
MCTNODTP	484	
MCTNODTU	484	
MCTOFFTD	EC	
MCTOFFTH	E8	
MCTOFFTP	E4	
MCTOFFTU	E4	

Name	Hex Offset	Hex Value
MCTOFLTD	E0	
MCTOFLTH	DC	
MCTOFLTP	D8	
MCTOFLTU	D8	
MCTOJMTD	4BC	
MCTOJMTH	4B8	
MCTOJMTP	4B4	
MCTOJMTU	4B4	
MCTOJRTD	F8	
MCTOJRTH	F4	
MCTOJRTP	F0	
MCTOJRTU	F0	
MCTOJTTD	104	
MCTOJTTH	100	
MCTOJTTP	FC	
MCTOJTTU	FC	
MCTOPDTD	4D4	
MCTOPDTH	4D0	
MCTOPDTP	4CC	
MCTOPDTU	4CC	
MCTOPTTD	5C	
MCTOPTTH	58	
MCTOPTTP	54	
MCTOPTTU	54	
MCTOPYTD	4EC	
MCTOPYTH	4E8	
MCTOPYTP	4E4	
MCTOPYTU	4E4	
MCTOSMTD	4C8	
MCTOSMTH	4C4	
MCTOSMTP	4C0	
MCTOSMTU	4C0	
MCTOSRTD	110	
MCTOSRTH	10C	
MCTOSRTP	108	
MCTOSRTU	108	
MCTOSTTD	11C	
MCTOSTTH	118	
MCTOSTTP	114	
MCTOSTTU	114	
MCTOTPTD	4F8	
MCTOTPTH	4F4	
MCTOTPTP	4F0	
MCTOTPTU	4F0	
MCTOUNTH	208	
MCTOUNTP	208	
MCTOUTTD	4E0	
MCTOUTTH	4DC	
MCTOUTTP	4D8	
MCTOUTTU	4D8	
MCTPARTD	3FC	
MCTPARTH	3F8	
MCTPARTP	3F4	
MCTPARTU	3F4	
MCTPCCTD	51C	
MCTPCCTH	518	
MCTPCCTP	514	
MCTPCCTU	514	
MCTPCDTD	540	
MCTPCDTH	53C	
MCTPCDTP	538	
MCTPCDTU	538	
MCTPCETD	8	
MCTPCETH	4	
MCTPCETP	0	

Name	Hex Offset	Hex Value
MCTPCETU	0	
MCTPCNTD	528	
MCTPCNTH	524	
MCTPCNTP	520	
MCTPCNTU	520	
MCTPCRTD	44	
MCTPCRTH	40	
MCTPCRTP	3C	
MCTPCRTU	3C	
MCTPDDTD	558	
MCTPDDTH	554	
MCTPDDTP	550	
MCTPDDTU	550	
MCTPDTTD	534	
MCTPDTTH	530	
MCTPDTTP	52C	
MCTPDTTU	52C	
MCTPITTD	408	
MCTPITTH	404	
MCTPITTP	400	
MCTPITTU	400	
MCTPLMTH	204	
MCTPLMTP	204	
MCTPPRTH	1F8	
MCTPPRTP	1F8	
MCTPRCTH	1E8	
MCTPRCTP	1E8	
MCTPRFTD	678	
MCTPRFTH	674	
MCTPRFTP	670	
MCTPRFTU	670	
MCTPRLTD	134	
MCTPRLTH	130	
MCTPRLTP	12C	
MCTPRLTU	12C	
MCTPRTTD	128	
MCTPRTTH	124	
MCTPRTTP	120	
MCTPRTTU	120	
MCTPRWTD	6A8	
MCTPRWTH	6A4	
MCTPRWTP	6A0	
MCTPRWTU	6A0	
MCTPTDTD	54C	
MCTPTDTH	548	
MCTPTDTP	544	
MCTPTDTU	544	
MCTPTHTD	510	
MCTPTHTH	50C	
MCTPTHTP	508	
MCTPTHTU	508	
MCTPUDTD	564	
MCTPUDTH	560	
MCTPUDTP	55C	
MCTPUDTU	55C	
MCTPUNTD	140	
MCTPUNTH	13C	
MCTPUNTP	138	
MCTPUNTU	138	
MCTPUWTD	6B4	
MCTPUWTH	6B0	
MCTPUWTP	6AC	
MCTPUWTU	6AC	
MCTRANTH	1D8	
MCTRANTP	1D8	

Name	Hex Offset	Hex Value
MCTRAUTD	570	
MCTRAUTH	56C	
MCTRAUTP	568	
MCTRAUTU	568	
MCTRCNTD	1A0	
MCTRCNTH	19C	
MCTRCNTP	198	
MCTRCNTU	198	
MCTRCVTD	588	
MCTRCVTH	584	
MCTRCVTP	580	
MCTRCVTU	580	
MCTRDITD	14C	
MCTRDITH	148	
MCTRDITP	144	
MCTRDITU	144	
MCTRDRTD	158	
MCTRDRTH	154	
MCTRDRTP	150	
MCTRDRTU	150	
MCTRDTTD	2C	
MCTRDTTH	28	
MCTRDTTP	24	
MCTRDTTU	24	
MCTRDVTD	170	
MCTRDVTH	16C	
MCTRDVTP	168	
MCTRDVTU	168	
MCTREDTD	57C	
MCTREDTH	578	
MCTREDTP	574	
MCTREDTU	574	
MCTRMTTD	594	
MCTRMTTH	590	
MCTRMTTP	58C	
MCTRMTTU	58C	
MCTRNGTH	1E0	
MCTRNGTP	1E0	
MCTRN2TH	1E4	
MCTRN2TP	1E4	
MCTRPRTD	17C	
MCTRPRTH	178	
MCTRPRTP	174	
MCTRPRTU	174	
MCTRPUTD	188	
MCTRPUTH	184	
MCTRPUTP	180	
MCTRPUTU	180	
MCTRQJTD	164	
MCTRQJTH	160	
MCTRQJTP	15C	
MCTRQJTU	15C	
MCTRRDTD	194	
MCTRRDTH	190	
MCTRRDTP	18C	
MCTRRDTU	18C	
MCTSAFTH	1EC	
MCTSAFTP	1EC	
MCTSAWTD	708	
MCTSAWTH	704	
MCTSAWTP	700	
MCTSAWTU	700	
MCTSBDTD	5E8	
MCTSBDTH	5E4	
MCTSBDTP	5E0	

Name	Hex Offset	Hex Value
MCTSBDTU	5E0	
MCTSCTTD	5A0	
MCTSCTTH	59C	
MCTSCTTP	598	
MCTSCTTU	598	
MCTSEPTD	63C	
MCTSEPTH	638	
MCTSEPTP	634	
MCTSEPTU	634	
MCTSESTD	2C4	
MCTSESTH	2C0	
MCTSESTP	2BC	
MCTSESTU	2BC	
MCTSMFTD	5AC	
MCTSMFTH	5A8	
MCTSMFTP	5A4	
MCTSMFTU	5A4	
MCTSNATD	2B8	
MCTSNATH	2B4	
MCTSNATP	2B0	
MCTSNATU	2B0	
MCTSPCTD	30C	
MCTSPCTH	308	
MCTSPCTP	304	
MCTSPCTU	304	
MCTSPDTD	5C4	
MCTSPDTH	5C0	
MCTSPDTP	5BC	
MCTSPDTU	5BC	
MCTSPLTD	5B8	
MCTSPLTH	5B4	
MCTSPLTP	5B0	
MCTSPLTU	5B0	
MCTSRWTD	6E4	
MCTSRWTH	6E0	
MCTSRWTP	6DC	
MCTSRWTU	6DC	
MCTSSITD	630	
MCTSSITH	62C	
MCTSSITP	628	
MCTSSITU	628	
MCTSTATD	618	
MCTSTATH	614	
MCTSTATP	610	
MCTSTATU	610	
MCTSTWTD	6D8	
MCTSTWTH	6D4	
MCTSTWTP	6D0	
MCTSTWTU	6D0	
MCTSTYTD	468	
MCTSTYTH	464	
MCTSTYTP	460	
MCTSTYTU	460	
MCTSUBTD	1AC	
MCTSUBTH	1A8	
MCTSUBTP	1A4	
MCTSUBTU	1A4	
MCTTGSTD	5DC	
MCTTGSTH	5D8	
MCTTGSTP	5D4	
MCTTGSTU	5D4	
MCTTIDTD	38	
MCTTIDTH	34	
MCTTIDTP	30	
MCTTIDTU	30	

Name	Hex Offset	Hex Value
MCTTLGTD	624	
MCTTLGTH	620	
MCTTLGTP	61C	
MCTTLGTU	61C	
MCTTPDTD	5F4	
MCTTPDTH	5F0	
MCTTPDTP	5EC	
MCTTPDTU	5EC	
MCTTRCTD	600	
MCTTRCTH	5FC	
MCTTRCTP	5F8	
MCTTRCTU	5F8	
MCTTRITD	60C	
MCTTRITH	608	
MCTTRITP	604	
MCTTRITU	604	
MCTVIATD	648	
MCTVIATH	644	
MCTVIATP	640	
MCTVIATU	640	
MCTVJABH	244	
MCTVJABP	244	
MCTVJCTH	22C	
MCTVJCTP	22C	
MCTVJOFH	234	
MCTVJOFP	234	
MCTVJSTH	230	
MCTVJSTP	230	
MCTVJVLH	240	
MCTVJVLP	240	
MCTVKPTD	33C	
MCTVKPTH	338	
MCTVKPTP	334	
MCTVKPTU	334	
MCTVLTTD	330	
MCTVLTTH	32C	
MCTVLTTP	328	
MCTVLTTU	328	
MCTVOJLH	248	
MCTVOJLP	248	
MCTVOJTH	214	
MCTVOJTP	214	
MCTVOLTH	1F0	
MCTVOLTP	1F0	
MCTVOSTH	210	
MCTVOSTP	210	
MCTVOWTH	224	
MCTVOWTP	224	
MCTVSFTH	220	
MCTVSFTP	220	
MCTVSOFH	238	
MCTVSOFP	238	
MCTVSRTH	218	
MCTVSRTP	218	
MCTVSSTH	228	
MCTVSSTP	228	
MCTVSTTH	21C	
MCTVSTTP	21C	
MCTVTMTH	1C0	
MCTVTMTP	1C0	
MCTVUNTD	654	
MCTVUNTH	650	
MCTVUNTP	64C	
MCTVUNTU	64C	
MCTVVUDH	23C	

Name	Hex Offset	Hex Value
MCTVVUDP	23C	
MCTVWSTH	20C	
MCTVWSTP	20C	
MCTXITTD	3CC	
MCTXITTH	3C8	
MCTXITTP	3C4	
MCTXITTU	3C4	
MCTXRTTH	1D0	
MCTXRTTP	1D0	
MCTZJBTD	660	
MCTZJBTH	65C	
MCTZJBTP	658	
MCTZJBTU	658	
MCT4KPTD	66C	
MCT4KPTH	668	
MCT4KPTP	664	
MCT4KPTU	664	

$MIT Heading Information

Common Name: Module Information Table
Macro ID: $MIT
DSECT Name: MIT
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: 'MIT '
Offset: MITID-MIT
Length: 4
Storage Attributes: Subpool: The subpool of the load module involved
Key: The key of the load module involved
Residency: In the JES2 address space, common storage, or the address space of a JES2 FSS, above or below the 16M line, dependent on the environment and RMODE of the load module involved.
Size: See the MITLNGTH equate and the MITLEN field.
Created by: A MIT is created by the assembly of a JES2 base, sample, or installation exit module, using the $MODULE macro to define the module setup.
Pointed to by: The MIT for a module is at the start of its CSECT. MITs for modules in JES2 multi-csect load modules are pointed to by the $MODMAP entries. MITs for modules in single-csect load modules, such as exits, are pointed to by the load module's $LMT control block.
Serialization: MITs should be considered read-only control blocks.
Function: The MITs are used to define and validate code modules used in the JES2 component, whether an IBM module or an installation exit module. They are also used to collect and display exit point and exit routine information, module offsets for various addresses, and other data for problem determination.

All JES2 modules must have a MIT at their front, and MTEs at the end.

$MIT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	MIT	HASP MODULE INFO TABLE DSECT
0	(0)	CHARACTER	4	MITID	MIT IDENTIFIER FIELD
4	(4)	CHARACTER	8	MITNAME	NAME OF MODULE
12	(C)	CHARACTER	8	MITVRSN	VERSION OF THIS JES2 RELEASE
20	(14)	CHARACTER	8	MITUVRSN	USER VERSION OF THIS JES2 REL
28	(1C)	CHARACTER	8	MITUSER	RESERVED FOR USER
36	(24)	ADDRESS	1	MITCBV	Control block version
36	(24)	X'1'	0	MITCBVE	"1" Control block version equ
37	(25)	CHARACTER	1	MITENVIR	Module assembly environment
37	(25)	X'D1'	0	MITENVJ	"C'J'" JES2 main task environment
37	(25)	X'E2'	0	MITENVS	"C'S'" JES2 subtask environment
37	(25)	X'E4'	0	MITENVU	"C'U'" all-addrspc USER environ
37	(25)	X'C6'	0	MITENVF	"C'F'" FSS addrspc environment
37	(25)	X'C9'	0	MITENVI	"C'I'" IPCS environment
37	(25)	X'D4'	0	MITENVM	"C'M'" JES2 monitor environment
37	(25)	X'E5'	0	MITENVV	"C'V'" Various environs in module
37	(25)	X'C4'	0	MITENVD	"C'D'" Documentation
38	(26)	ADDRESS	2	MITLEN	Length of this MIT

$MIT Cross Reference

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
40	(28)	CHARACTER	1	MITMVRSN	VERSION OF THE MACLIBS USED TO ASSEMBLE THIS MODULE, FROM THE SPLEVEL MACRO
41	(29)	ADDRESS	1	MITFLAG1	MIT FLAG 1
		1...		MIT1OCO	"B'10000000'" O C O module
		.1..		MIT1BSPL	"B'01000000'" Bypass MVS SPLEVEL check during module load
		..1.		MIT1IBMB	"B'00100000'" Base module in the IBM JES2 product
		...1		MIT1IBMS	"B'00010000'" Sample module (e.g. exit) in the IBM JES2 product
		.... 1...		MIT1PTF	"B'00001000'" PTFNUM field exists
42	(2A)	ADDRESS	2		Reserved for future use
44	(2C)	CHARACTER	8	MITFMID	JES2 SMP product FMID
52	(34)	CHARACTER	8	MITDATE	DATE OF ASSEMBLY
60	(3C)	CHARACTER	5	MITTIME	TIME OF ASSEMBLY
65	(41)	ADDRESS	3	MITMODSZ	Length of assembly module (up through $MODEND)
68	(44)	ADDRESS	4	MITENTAD	ADDRESS OF MIT ENTRY TABLE
72	(48)	ADDRESS	4	MITXMAPA	Addr of 32 byte (256 bit) bit mask for exit points in this module
76	(4C)	ADDRESS	4	MITAPARN	Pointer to 8 byte APARNUM if it exists, else to this MIT's MITUVRSN field
80	(50)	DBL WORD	8	(0)	ENSURE MIT ENDS ON DOUBLEWORD
80	(50)	X'50'	0	MITLNGTH	"*-MIT" Length of a MIT

$MIT Cross Reference

Name	Hex Offset	Hex Value
MIT	0	
MITAPARN	4C	
MITCBV	24	
MITCBVE	24	1
MITDATE	34	
MITENTAD	44	
MITENVD	25	C4
MITENVF	25	C6
MITENVI	25	C9
MITENVIR	25	
MITENVJ	25	D1
MITENVM	25	D4
MITENVS	25	E2
MITENVU	25	E4
MITENVV	25	E5
MITFLAG1	29	
MITFMID	2C	
MITID	0	
MITLEN	26	
MITLNGTH	50	50
MITMODSZ	41	
MITMVRSN	28	
MITNAME	4	
MITTIME	3C	
MITUSER	1C	
MITUVRSN	14	
MITVRSN	C	
MITXMAPA	48	
MIT1BSPL	29	40
MIT1IBMB	29	20
MIT1IBMS	29	10
MIT1OCO	29	80
MIT1PTF	29	8

$MITETBL Heading Information

Common Name: Module Information Table Entries
Macro ID: $MITETBL
DSECT Name: MTE
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: '$$$$MTES' (as the first MTE's MTENAME)
Offset: MTENAME of the first MTE - MTE
Length: 8
Storage Attributes: Subpool: The subpool of the load module involved
Key: The key of the load module involved
Residency: In the JES2 address space, common storage, or the address space of a JES2 FSS, above or below the 16M line, dependent on the environment and RMODE of the load module involved.
Size: See the MTELEN equate.
Created by: The MTEs for a module are created by the assembly of a JES2 base, sample, or installation exit module, using the $MODULE macro to define the module setup, the $ENTRY macro to define the entry points (MTEs), and $MODEND to perform the module epilog.
Pointed to by: The MTEs for a module are at the end of its CSECT. The MITENDAD field in the module's MIT at the front of module points to the first MTE.
Serialization: MTEs should be considered read-only control blocks.
Function: The MTEs are used to define and validate code modules used in the JES2 component, whether an IBM module or an installation exit module. They are also used to collect and display exit point and exit routine information, module offsets for various addresses, and other data for problem determination.

All JES2 modules must have a MIT at their front, and MTEs at the end.

$MITETBL Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	MTE	HASP MIT ENTRY TABLE DSECT
0	(0)	CHARACTER	8	MTENAME	NAME FROM $ENTRY
8	(8)	ADDRESS	4	MTEADDR	Address of the entry point
12	(C)	BITSTRING	1	MTEFLAG1	Type of entry pt, multiple flags may be set, or none
		1...		MTEF1CAD	"B'10000000'" MTEADLOF is CADDR offset
		.1..		MTEF1COF	"B'01000000'" MTEADLOF is an OCOOFFST offset, and that field contains a CADDR offset
		..1.		MTEF1PAD	"B'00100000'" MTEADLOF is PADDR offset
		...1		MTEF1POF	"B'00010000'" MTEADLOF is an OCOOFFST offset, and that field contains a PADDR offset
		.... 1...		MTEF1SSI	"B'00001000'" SSI entry point
		.... .1..		MTEF1$EX	"B'00000100'" $EXIT pt #, not callable
		.... ..1.		MTEF1MCT	"B'00000010'" MTEADLOF is MCT table pair offset
		1		MTEF1UCT	"B'00000001'" MTEADLOF is UCT table pair offset
13	(D)	CHARACTER	1	MTEENVIR	Assembly environment (see the MITENVIR equates)
14	(E)	BITSTRING	1	MTEFLAG2	More flags
		1...		MTEF2TAB	"B'10000000'" MTE represents a table
		.1..		MTEF2DUP	"B'01000000'" MTE is a duplicate entry
15	(F)	BITSTRING	1		Reserved for future use

$MITETBL Cross Reference

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
16	(10)	BITSTRING	2	MTEADLOF	Offset in CADDR, PADDR, or OCOOFFST, if any
18	(12)	BITSTRING	1	MTESSI$E	SSI # minus 1 if MTEF1SSI, or $EXIT pt # if MTEF1$EX
19	(13)	BITSTRING	1	MTETBTYP	Table type if MTEF1TAB is set - the type is also used by the $GETABLE and $PUTABLE services
19	(13)	X'0'	0	MTETPCE	"0" Table is $PCETAB
19	(13)	X'1'	0	MTETDCT	"1" Table is $DCTTAB
19	(13)	X'2'	0	MTETDTE	"2" Table is $DTETAB
19	(13)	X'3'	0	MTETTID	"3" Table is $TIDTAB
19	(13)	X'4'	0	MTETPCR	"4" Table is $PCTAB
19	(13)	X'5'	0	MTETBERT	"5" Table is $BERTTAB
19	(13)	X'6'	0	MTETWST	"6" Table is $WSTAB
19	(13)	X'7'	0	MTETSCAN	"7" Table is $SCANTAB
19	(13)	X'14'	0	MTELEN	"*-MTE" LENGTH OF ENTRY

$MITETBL Cross Reference

Name	Hex Offset	Hex Value
MTE	0	
MTEADDR	8	
MTEADLOF	10	
MTEENVIR	D	
MTEFLAG1	C	
MTEFLAG2	E	
MTEF1$EX	C	4
MTEF1CAD	C	80
MTEF1COF	C	40
MTEF1MCT	C	2
MTEF1PAD	C	20
MTEF1POF	C	10
MTEF1SSI	C	8
MTEF1UCT	C	1
MTEF2DUP	E	40
MTEF2TAB	E	80
MTELEN	13	14
MTENAME	0	
MTESSI$E	12	
MTETBERT	13	5
MTETBTYP	13	
MTETDCT	13	1
MTETDTE	13	2
MTETPCE	13	0
MTETPCR	13	4
MTETSCAN	13	7
MTETTID	13	3
MTETWST	13	6

$MLMWORK Heading Information

Common Name: HASP LINE MANAGER PCE WORK AREA DSECT
Macro ID: $MLMWORK
DSECT Name: PCE
Owning Component: JES2 (SC1BH)
Function: THE MULTI-LEAVING LINE MANAGER PCE WORK AREA (MLMWORK) DSECT DESCRIBES THE PCE WORK AREA FOR THE JES2 MULTI-LEAVING LINE MANAGER PROCESSOR.

$MLMWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	PCE	HASP MULTI-LEAVING LINE MANAGER
240	(F0)	DBL WORD	8	MLMCLOCK	LINE MANAGER LAST DISPATCH TIME
248	(F8)	BITSTRING	12	MLMTQE	LINE MANAGER TIMER QUE ELEMENT
260	(104)	ADDRESS	4	MLMDTIME	LINE MANAGER NEXT DISC LOOK TIME
264	(108)	ADDRESS	4	MLMATIME	LINE MANAGER NEXT AUTOLOGON SCAN TIME
268	(10C)	ADDRESS	4	MLMBSCAL	LINE MANAGER ACTIVE BSC LINES PTR
272	(110)	ADDRESS	4	MLMSNALG	LINE MANAGER ACTIVE LOGON DCT PTR
276	(114)	ADDRESS	4	MLMSNAAL	LINE MANAGER ACTIVE LINE DCT PTR
280	(118)	ADDRESS	4	MLMSNAIL	LINE MANAGER IDLE SNA LINES PTR
284	(11C)	ADDRESS	4	MLMLOGQ	LINE MANAGER LOGON DCT QUEUE
288	(120)	ADDRESS	4	MLMICEQ	LINE MANAGER SCHED ICE QUEUE
292	(124)	ADDRESS	4	MLMRPLQ	Line mgr SNA/RPL buffer q
296	(128)	ADDRESS	4	MLMBSCQ	Line mgr BSC buffer queue
300	(12C)	ADDRESS	4	MLMWORKQ	LINE MANAGER ACTIVE WORK QUEUE
304	(130)	ADDRESS	4	MLMASWLQ	Line mgr active SWEL queue

Comment

```
-----------------------------------------------------------------
      Posted SWEL queues. These queues must be kept together.
-----------------------------------------------------------------
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End of Comment

308	(134)	ADDRESS	4	MLMPSWLQ (0)	Line mgr Posted SWEL Queues
308	(134)	ADDRESS	4	MLMPSWLB	Line mgr BSC Posted SWEL Q
312	(138)	ADDRESS	4	MLMPSWLS	Line mgr SNA Posted SWEL Q
316	(13C)	BITSTRING	1	MLMSCANI	LINE MANAGER DCT SCAN INDICATOR
317	(13D)	BITSTRING	1	MLMEVNTI	LINE MANAGER GEN EVENT INDICATOR
318	(13E)	BITSTRING	1	MLMSCANR	LINE MANAGER REQ SCAN INDICATOR
319	(13F)	BITSTRING	1	MLMEVNTR	LINE MANAGER REQ EVENT INDICATOR
320	(140)	ADDRESS	4	MLMSCANA	LINE MANAGER SCAN TABLE ADDRESS
324	(144)	ADDRESS	4	MLMICEQ2	LINE MANAGER RE-SCHED ICE Q
328	(148)	ADDRESS	2	MLMSEQWK	BSC CPU SEQUENCE CHECK WORK AREA
330	(14A)	ADDRESS	2	MLMFCSWL	FUNCTION CNTL SEQUENCE WORK AREA
332	(14C)	ADDRESS	1	MLMCMDTP	BSC RJE CCW COMMAND TYPE
333	(14D)	ADDRESS	1	MLMFLAG1	LINE MANAGER FLAGS
334	(14E)	SIGNED	2	MLMICESQ	Current ICE trace seq numb
336	(150)	SIGNED	4	MLMXPARM (0)	EXIT POINT PARAMETER LIST
336	(150)	SIGNED	4	MLMXRAT	ADDRESS OF RAT TABLE OR ENTRY
340	(154)	SIGNED	4	MLMXLDCT	ADDRESS OF LINE DCT
344	(158)	SIGNED	4	MLMXICE	ADDRESS OF ICE FOR SNA
348	(15C)	SIGNED	4	MLMXCRDA	ADDRESS OF CARD IMAGE
352	(160)	SIGNED	4	MLMXCRDL	LENGTH OF CARD IMAGE
356	(164)	CHARACTER	80	MLMSONCD	SIGN-ON CARD INPUT AREA
436	(1B4)	CHARACTER	1	MLMLGWRK	Logon/Signon work space
436	(1B4)	X'1C0'	0	MLMLGNAM	"CAPENAM-CAPE+MLMLGWRK" Remote terminal name
436	(1B4)	X'1C8'	0	MLMLGLPW	"CAPELPW-CAPE+MLMLGWRK" Line group password

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
436	(1B4)	X'1D0'	0	MLMLGRPW	"CAPERPW-CAPE+MLMLGWRK" Terminal Remote Pswd
436	(1B4)	X'1D8'	0	MLMLGNPW	"CAPENPW-CAPE+MLMLGWRK" Terminal New Password
436	(1B4)	X'1E0'	0	MLMLGRMT	"CAPEUID-CAPE+MLMLGWRK" Short form rmt name
500	(1F4)	SIGNED	4	(0)	ALIGN TO FULLWORD
500	(1F4)	CHARACTER	112	MLMSODCT	BASIC DUMMY RMT DCT
612	(264)	ADDRESS	4	MLMWRKIQ	Line Mgr SNA/ICE work queue
616	(268)	SIGNED	4	MLMQTTIM	Time of buffer q truncation
620	(26C)	BITSTRING	1	MLMTWORK	Work area for ICE trace
620	(26C)	X'1B2'	0	MLMLEN	"*-PCEWORK" LENGTH OF PCE WORK SPACE

Comment

MLMSCANI/MLMSCANR

End of Comment

1...	MLMSBUNT	"B'10000000'" SCAN INACTIVE BSC LINE DCT
.1..	MLMSBACT	"B'01000000'" SCAN ACTIVE BSC LINE DCTS
..1.	MLMSSIDL	"B'00100000'" SCAN IDLE SNA LINE DCTS
...1	MLMSSLOG	"B'00010000'" SCAN ACTIVE SNA LOGON DCTS
.... 1...	MLMSSLNE	"B'00001000'" SCAN ACTIVE SNA LINE DCTS
...1 1...	MLMSSALL	"B'00011000'" SCAN ACTIVE SNA LOGON/LINE
.... .1..	MLMSRAT	"B'00000100'" SCAN RAT
.... ..1.	MLMSSUNT	"B'00000010'" SCAN INACTIVE SNA LINE/LOGON DCTS

Comment

MLMEVNTI/MLMEVNTR

End of Comment

1...	MLMEPJOB	"B'10000000'" EVENT $JOT POST OCCURED
.1..	MLMETIME	"B'01000000'" EVENT TIMER INTERRUPT OCCURED
..1.	MLMEDISC	"B'00100000'" EVENT DISCON INTERVAL OCCURED
...1	MLMEALM	"B'00010000'" A REMOTE IS IN AUTOLOGON MODE
.... 1...	MLMEMXSS	"B'00001000'" MAXSESS HAS BEEN EXCEEDED
.... .1..	MLMECKPT	"B'00000100'" CHECKPOINT POST OCCURED

Comment

MLMFLAG1

End of Comment

1...	MLM1LOGI	"B'10000000'" RPL DIAGNOSTIC LOGGING INDICATOR
.1..	MLM1WRK1	"B'01000000'" MULTI-PURPOSE WORK FLAG
..1.	MLM1TIST	"B'00100000'" ONE SECOND INTERVAL TIMER SET
...1	MLM1TIRQ	"B'00010000'" ONE SECOND TIMER REQUESTED
.... 1...	MLM1PWIG	"B'00001000'" New password ignored msg
.... .1..	MLM1LOJS	"B'00000100'" Logon decision by JES2
.... ..1.	MLM1PNPM	"B'00000010'" MLLM should post NPM
....1	MLM1DERR	"B'00000001'" MLLM has checked for double-queued buffer

$MLMWORK Cross Reference

Name	Hex Offset	Hex Value
MLMASWLQ	130	
MLMATIME	108	
MLMBSCAL	10C	
MLMBSCQ	128	
MLMCLOCK	F0	
MLMCMDTP	14C	
MLMDTIME	104	
MLMEALM	26C	10
MLMECKPT	26C	4
MLMEDISC	26C	20
MLMEMXSS	26C	8
MLMEPJOB	26C	80
MLMETIME	26C	40
MLMEVNTI	13D	
MLMEVNTR	13F	
MLMFCSWL	14A	
MLMFLAG1	14D	
MLMICEQ	120	
MLMICEQ2	144	
MLMICESQ	14E	
MLMLEN	26C	1B2
MLMLGLPW	1B4	1C8
MLMLGNAM	1B4	1C0
MLMLGNPW	1B4	1D8
MLMLGRMT	1B4	1E0
MLMLGRPW	1B4	1D0
MLMLGWRK	1B4	
MLMLOGQ	11C	
MLMPSWLB	134	
MLMPSWLQ	134	
MLMPSWLS	138	
MLMQTTIM	268	
MLMRPLQ	124	
MLMSBACT	26C	40
MLMSBUNT	26C	80
MLMSCANA	140	
MLMSCANI	13C	
MLMSCANR	13E	
MLMSEQWK	148	
MLMSNAAL	114	
MLMSNAIL	118	
MLMSNALG	110	
MLMSODCT	1F4	
MLMSONCD	164	
MLMSRAT	26C	4
MLMSSALL	26C	18
MLMSSIDL	26C	20
MLMSSLNE	26C	8
MLMSSLOG	26C	10
MLMSSUNT	26C	2
MLMTQE	F8	
MLMTWORK	26C	
MLMWORKQ	12C	
MLMWRKIQ	264	
MLMXCRDA	15C	
MLMXCRDL	160	
MLMXICE	158	
MLMXLDCT	154	
MLMXPARM	150	
MLMXRAT	150	
MLM1DERR	26C	1
MLM1LOGI	26C	80
MLM1LOJS	26C	4
MLM1PNPM	26C	2
MLM1PWIG	26C	8
MLM1TIRQ	26C	10
MLM1TIST	26C	20
MLM1WRK1	26C	40
PCE	0	

$MODMAP Heading Information

Common Name: Module map for HASJES20 and HASPINIT
Macro ID: $MODMAP
DSECT Name: MAP
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: None
Storage Attributes: Subpool: The subpool of the HASJES20 load module
Key: 1
Residency: Virtual and real storage are below 16M, in the private storage of the JES2 address space.
Size: See the MAPLEN equate.
Created by: The MODMAP is created by assembly of the HASPTABS module in the HASJES20 load module.
Pointed to by: The $HASPMAP field in the $HCT data area points to the MODMAP.
Serialization: The MODMAP should usually be considered as read-only. Exceptions to this are the times when the HASPINIT load module is loaded and deleted, and when the REP facility establishes a REP BASE.
Function: The MODMAP is used to provide a csect-granular map of the JES2 multi-csect load modules. The multi-csect load modules are HASJES20 and HASPINIT. All other JES2 modules, both for the IBM base JES2 product and for installation exits, are represented by LMT control blocks instead.

The MODMAP also contains entry point addresses for main-task processors and subtasks in the JES2 address space.

$MODMAP Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	MAP	HASP MODULE DIRECTORY DSECT
0	(0)	X'0'	0	MAPMOD1	"*" START OF MODMAP ENTRIES
0	(0)	CHARACTER	8	MAPABS	(not code, for REPs only)
16	(10)	CHARACTER	8	MAPARM	
32	(20)	CHARACTER	8	MAPARMO	
48	(30)	CHARACTER	8	MAPBSC	
64	(40)	CHARACTER	8	MAPCFAL	
80	(50)	CHARACTER	8	MAPCFBF	
96	(60)	CHARACTER	8	MAPCFDE	
112	(70)	CHARACTER	8	MAPCFE	
128	(80)	CHARACTER	8	MAPCFFC	
144	(90)	CHARACTER	8	MAPCFLE	
160	(A0)	CHARACTER	8	MAPCFMT	
176	(B0)	CHARACTER	8	MAPCFQL	
192	(C0)	CHARACTER	8	MAPCFQU	
208	(D0)	CHARACTER	8	MAPCFRD	
224	(E0)	CHARACTER	8	MAPCFRE	
240	(F0)	CHARACTER	8	MAPCFRL	
256	(100)	CHARACTER	8	MAPCFRS	
272	(110)	CHARACTER	8	MAPCFR2	
288	(120)	CHARACTER	8	MAPCFSI	
304	(130)	CHARACTER	8	MAPCFT1	
320	(140)	CHARACTER	8	MAPCFUN	

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
336	(150)	CHARACTER	8	MAPCFWP	
352	(160)	CHARACTER	8	MAPCFWR	
368	(170)	CHARACTER	8	MAPCKCF	
384	(180)	CHARACTER	8	MAPCKDS	
400	(190)	CHARACTER	8	MAPCKPT	
416	(1A0)	CHARACTER	8	MAPCKRR	
432	(1B0)	CHARACTER	8	MAPCKVR	
448	(1C0)	CHARACTER	8	MAPCNVS	
464	(1D0)	CHARACTER	8	MAPCNVT	
480	(1E0)	CHARACTER	8	MAPCOMM	
496	(1F0)	CHARACTER	8	MAPCON	
512	(200)	CHARACTER	8	MAPCSV	
528	(210)	CHARACTER	8	MAPDYN	
544	(220)	CHARACTER	8	MAPEVTL	
560	(230)	CHARACTER	8	MAPFSSP	
576	(240)	CHARACTER	8	MAPHCCT	(not code, for REPs only)
592	(250)	CHARACTER	8	MAPHOPE	
608	(260)	CHARACTER	8	MAPIRA	
608	(260)	X'260'	0	MAPINIT	"MAPIRA,8,C'C'"
624	(270)	CHARACTER	8	MAPIRDA	
640	(280)	CHARACTER	8	MAPIRMA	
656	(290)	CHARACTER	8	MAPIRPL	
672	(2A0)	CHARACTER	8	MAPIRRE	
688	(2B0)	CHARACTER	8	MAPIRSI	
704	(2C0)	CHARACTER	8	MAPJOS	
720	(2D0)	CHARACTER	8	MAPJQS	
736	(2E0)	CHARACTER	8	MAPMISC	
752	(2F0)	CHARACTER	8	MAPMSG	
768	(300)	CHARACTER	8	MAPNATS	
784	(310)	CHARACTER	8	MAPNET	
800	(320)	CHARACTER	8	MAPNJT	
816	(330)	CHARACTER	8	MAPNPM	
832	(340)	CHARACTER	8	MAPNSR	
848	(350)	CHARACTER	8	MAPNST	
864	(360)	CHARACTER	8	MAPNUC	
880	(370)	CHARACTER	8	MAPODSM	
896	(380)	CHARACTER	8	MAPPRPU	
912	(390)	CHARACTER	8	MAPPSO	
928	(3A0)	CHARACTER	8	MAPRAS	
944	(3B0)	CHARACTER	8	MAPRDR	
960	(3C0)	CHARACTER	8	MAPRTAM	
976	(3D0)	CHARACTER	8	MAPSASR	
992	(3E0)	CHARACTER	8	MAPSCAN	
1008	(3F0)	CHARACTER	8	MAPSERV	
1024	(400)	CHARACTER	8	MAPSIR	
1040	(410)	CHARACTER	8	MAPSJFR	
1056	(420)	CHARACTER	8	MAPSNA	
1072	(430)	CHARACTER	8	MAPSPIN	
1088	(440)	CHARACTER	8	MAPSPOL	
1104	(450)	CHARACTER	8	MAPSSRV	
1120	(460)	CHARACTER	8	MAPSTAB	
1136	(470)	CHARACTER	8	MAPSTAC	
1152	(480)	CHARACTER	8	MAPSTAM	
1168	(490)	CHARACTER	8	MAPSTUB	
1184	(4A0)	CHARACTER	8	MAPSUBS	
1200	(4B0)	CHARACTER	8	MAPSXDV	
1216	(4C0)	CHARACTER	8	MAPSXIT	
1232	(4D0)	CHARACTER	8	MAPSXJB	
1248	(4E0)	CHARACTER	8	MAPSXNJ	
1264	(4F0)	CHARACTER	8	MAPSXOT	
1280	(500)	CHARACTER	8	MAPTABS	
1296	(510)	CHARACTER	8	MAPTERM	
1312	(520)	CHARACTER	8	MAPTRAK	
1328	(530)	CHARACTER	8	MAPWARM	

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
1344	(540)	CHARACTER	8	MAPXCF	
1360	(550)	CHARACTER	8	MAPXEQ	
1360	(550)	X'56'	0	MAP#J2M	"(*-MAPMOD1)/MAPENTL" NUMBER OF JES2 MODULES

Comment

TABLE OF USER EXIT MODULES LINKED WITH HASJES20.
THESE ARE DEFINED AS WEAK EXTERNAL SYMBOLS BELOW.
THE TABLE INCLUDES THE SPECIAL ENTRY FOR HASPXIT0, WHICH
MAY BE LINKEDITED IN THE HASPINIT LOAD MODULE INSTEAD - IF
SO, HASPINIT UPDATES THIS MODMAP ENTRY AND THE REP FACILITY
WILL FUNCTION FOR THAT MODULE. THE HASPXIT0 STORAGE WILL
BE DELETED WITH HASPINIT IF LINKEDITED WITH HASPINIT, AND
WILL REMAIN IN STORAGE IF LINKEDITED WITH HASJES20 OR IF
LOADED IN ITS OWN LOAD MODULE BY HASPINIT.

End of Comment

1376	(560)	CHARACTER	8	MAPJXMOD	
1392	(570)	CHARACTER	8		
1408	(580)	CHARACTER	8		
1424	(590)	CHARACTER	8		
1440	(5A0)	CHARACTER	8		
1456	(5B0)	CHARACTER	8		
1472	(5C0)	CHARACTER	8		
1488	(5D0)	CHARACTER	8		
1504	(5E0)	CHARACTER	8		
1520	(5F0)	CHARACTER	8		
1536	(600)	CHARACTER	8		
1552	(610)	CHARACTER	8		
1568	(620)	CHARACTER	8		
1584	(630)	CHARACTER	8		
1600	(640)	CHARACTER	8		
1616	(650)	CHARACTER	8		
1632	(660)	CHARACTER	8		
1648	(670)	CHARACTER	8		
1664	(680)	CHARACTER	8		
1680	(690)	CHARACTER	8		
1696	(6A0)	CHARACTER	8		
1712	(6B0)	CHARACTER	8		
1728	(6C0)	CHARACTER	8		
1744	(6D0)	CHARACTER	8		
1760	(6E0)	CHARACTER	8		
1776	(6F0)	CHARACTER	8		
1792	(700)	CHARACTER	8		
1808	(710)	CHARACTER	8		
1824	(720)	CHARACTER	8		
1840	(730)	CHARACTER	8		
1856	(740)	CHARACTER	8		
1872	(750)	CHARACTER	8		
1888	(760)	CHARACTER	8	MAPEXIT0	
1888	(760)	X'210'	0	MAPJXLEN	"*-MAPJXMOD" LENGTH OF LINKED MODULE TABLE
1888	(760)	X'21'	0	MAPJXCNT	"MAPJXLEN/MAPENTL" NUMBER OF INSTALLATION ENTRIES
1888	(760)	X'77'	0	MAPMODS	"(*-MAPMOD1)/MAPENTL" NUMBER OF REP TABLE ENTRIES
1904	(770)	BITSTRING	8		ZERO ENTRY FOR $SCANTAB

Comment

MISCELLANEOUS ENTRY POINT ADDRESSES
FOR SUBTASKS, IOS ROUTINES, ETC.

End of Comment

1920	(780)	ADDRESS	4	MAPACCTA	"V(HASPACCT)" ADDR OF HASPACCT SUBTASK

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
1924	(784)	ADDRESS	4	MAPSPLA	"V(HOSPOOL)" ADDR OF SPOOL ALLOCATION SUBTASK
1928	(788)	ADDRESS	4	MAPWTOA	"V($HASPWTO)" ADDR OF HASP WTO SUBTASK
1932	(78C)	ADDRESS	4	MAPIMAGA	"V(HASPIMAG)" ADDR OF IMAGE LOADER SUBTASK
1936	(790)	ADDRESS	4	MAPVTAMA	"V(HASPVTAM)" ADDR OF HASP VTAM INTERFACE
1940	(794)	ADDRESS	4	MAPALOCA	"V(HOSALLOC)" ADDR OF ALLOCATION TASK
1944	(798)	ADDRESS	4	MAPCNVA	"V(HOSCNVT)" ADDR OF CONVERT SUBTASK
1948	(79C)	ADDRESS	4	MAPOFFA	"V(HASPOFF)" ADDR OF OFFLOAD SUBTASK
1952	(7A0)	BITSTRING	1	MAPCKCFA	Addr of CKPT on CF subtsk
1956	(7A4)	BITSTRING	1	MAPCKVRA	ADDR OF CKPT VERSN SUBTSK
1960	(7A8)	ADDRESS	4	MAPSUBSA	"V(HA$PSUBS)" ADDR OF GENL SUBTASK
1964	(7AC)	ADDRESS	4	MAPODSMX	"V(ODSMEXC)" ADDR OF SWBMOD PC ROUTINE
1968	(7B0)	ADDRESS	4	MAPODSMR	"V(ODSMEST)" ADDR OF SWBMOD PC ARR
1972	(7B4)	ADDRESS	4	MAPATTNA	"V(HASPATTN)" ADDR OF HASP ATTENTION ROUTINE
1976	(7B8)	ADDRESS	4	MAPPXITA	"V(HASPPXIT)" ADDR OF HASP POST EXIT ROUTINE
1980	(7BC)	ADDRESS	4	MAPIOAPG	"V($IOAPPEN)" ADDR OF I/O APPENDAGE TABLE
1984	(7C0)	ADDRESS	4	MAPEMS	"V(HASPEOM)" Addr of EOM subtask

Comment

TABLE OF HASP PROCESSOR ENTRY POINT ADDRESSES. THESE FIELDS ARE POINTED TO BY $PCETAB ENTRIES IN HASPTABS.

End of Comment

1988	(7C4)	ADDRESS	4	MAPRDRA	"V(HA$PRDR)" READERNN PROCESSOR
1992	(7C8)	ADDRESS	4	MAPASYNA	"V($ASYNC)" ASYNCH I/O PROCESSOR
1996	(7CC)	ADDRESS	4	MAPCNVTA	"V(HA$PCNVT)" JCL CONVERSION PROCESSOR
2000	(7D0)	ADDRESS	4	MAPEXECA	"V(HASPEXEC)" EXECUTION PROCESSOR
2004	(7D4)	ADDRESS	4	MAPSTACA	"V(HA$PSTAC)" STATUS/CANCEL PROCESSOR
2008	(7D8)	ADDRESS	4	MAPPSOA	"V(HA$PPSO)" PSO PROCESSOR
2012	(7DC)	ADDRESS	4	MAPHOPEA	"V(HA$PHOPE)" OUTPUT PROCESSOR
2016	(7E0)	ADDRESS	4	MAPPRPUA	"V(HASPPPI1)" PRINT/PUNCH PROCESSOR
2020	(7E4)	ADDRESS	4	MAPPURGA	"V(HASPVPRG)" PURGE PROCESSOR
2024	(7E8)	ADDRESS	4	MAPCOMMA	"V(HA$PCOMM)" COMMAND PROCESSOR
2028	(7EC)	ADDRESS	4	MAPMLLMA	"V(HASPMLLM)" LINE MANAGER PROCESSOR
2032	(7F0)	ADDRESS	4	MAPTIMEA	"V($TIMER)" STIMER PROCESSOR
2036	(7F4)	ADDRESS	4	MAPCKPTA	"V(HA$PCKPT)" CHECKPOINT PROCESSOR
2040	(7F8)	ADDRESS	4	MAPSPINA	"V(HA$PSPIN)" SPIN PROCESSOR
2044	(7FC)	ADDRESS	4	MAPPRTYA	"V(HASPGPRC)" PRIORITY AGING PROCESSOR
2048	(800)	ADDRESS	4	MAPPRIOA	"V(HASPGOPR)" OUTPUT PRIO AGING PROCESSOR
2052	(804)	ADDRESS	4	MAPWARMA	"V(HA$PWARM)" WARM START PROCESSOR
2056	(808)	ADDRESS	4	MAPNJTA	"V(HA$PNJT)" JOB TRANSMITTER PROCESSOR
2060	(80C)	ADDRESS	4	MAPNJRA	"V(HA$PRDR)" JOB RECEIVER PROCESSOR
2064	(810)	ADDRESS	4	MAPNSTA	"V(HA$PNST)" SYSOUT TRANSMITTR PROCESSOR
2068	(814)	ADDRESS	4	MAPNSRA	"V(HA$PNSR)" SYSOUT RECEIVER PROCESSOR
2072	(818)	ADDRESS	4	MAPNPMA	"V(HASPNPMP)" NETWORK PATH MGR PROCESSOR
2076	(81C)	ADDRESS	4	MAPMCONA	"V(HASPMCON)" REMOTE CONSOLE PROCESSOR
2080	(820)	ADDRESS	4	MAPXTIMA	"V(HASPTIME)" TIME EXCESSION PROCESSOR
2084	(824)	ADDRESS	4	MAPEVTLA	"V(HA$PEVTL)" EVENT TRACE LOG PROCESSOR
2088	(828)	ADDRESS	4	MAPXFRMA	"V(HASPXFRM)" XFR I/O MANAGER PROCESSOR
2092	(82C)	ADDRESS	4	MAPSPOLA	"V(HA$PSPOL)" SPOOL MANAGER PROCESSOR
2096	(830)	ADDRESS	4	MAPNRRA	"V(HA$PRDR)" ROUTE RECEIVER PROCESSOR
2100	(834)	ADDRESS	4	MAPNRTA	"V(HA$PNJT)" ROUTE TRANSMITTER PROCESSOR
2104	(838)	ADDRESS	4	MAPRESMA	"V(HASPRESM)" RESOURCE MANAGER PROCESSOR
2108	(83C)	ADDRESS	4	MAPSFSRA	"V(HA$PSJFR)" SCHEDULER SERVICES PROCSR
2112	(840)	ADDRESS	4	MAPFSSPA	"V(HA$PFSSP)" FSS SERVICE PROCESSOR
2116	(844)	ADDRESS	4	MAPFCL	"V(FCLEANUP)" FSS CLEANUP ON EOM
2120	(848)	ADDRESS	4	MAPJCMD	"V(COMJCMD)" Job command processor
2124	(84C)	ADDRESS	4	MAPXCFA	"V(HA$PXCF)" XCF COUPLING PROCESSOR
2128	(850)	ADDRESS	4	MAPXCMA	"V(XCMMAIN)" XCF Command Processor
2132	(854)	ADDRESS	4	MAPARMSA	"V(HA$PARM)" ARM SUPPORT PROCESSOR
2136	(858)	ADDRESS	4	MAPSNF	"V(HA$PSNF)" SPOOL Management Processor
2140	(85C)	ADDRESS	4	MAPSPI	"V(HA$PSASR)" Sysout API Processor
2144	(860)	ADDRESS	4	MAPDILSA	"V(HA$PDILB)" BERT lock POST Processor
2148	(864)	ADDRESS	4	MAPENFA	"V(HA$PENF)" ENF LISTEN Processor

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
2152	(868)	ADDRESS	4	MAPMISCA	"V(HA$PMISC)" Miscellaneous processor
2156	(86C)	ADDRESS	4	MAPALIA	"V(HA$PALI)" Acquire Lock & Initiate Cleanup Executor
2160	(870)	ADDRESS	4	MAPEOM	"V(HA$PEOM)" EOM processor
2160	(870)	X'874'	0	MAPLEN	"*-MAP" MODMAP LENGTH

$MODMAP Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
MAP	0		MAPEXIT0	760	C8C1E2D7
MAP#J2M	550	56	MAPFCL	844	
MAPABS	0	C8C1E25B	MAPFSSP	230	C8C1E2D7
MAPACCTA	780		MAPFSSPA	840	
MAPALIA	86C		MAPHCCT	240	C8C1E25B
MAPALOCA	794		MAPHOPE	250	C8C1E2D7
MAPARM	10	C8C1E2D7	MAPHOPEA	7DC	
MAPARMO	20	C8C1E2D7	MAPIMAGA	78C	
MAPARMSA	854		MAPINIT	260	260
MAPASYNA	7C8		MAPIOAPG	7BC	
MAPATTNA	7B4		MAPIRA	260	C8C1E2D7
MAPBSC	30	C8C1E2D7	MAPIRDA	270	C8C1E2D7
MAPCFAL	40	C8C1E2D7	MAPIRMA	280	C8C1E2D7
MAPCFBF	50	C8C1E2D7	MAPIRPL	290	C8C1E2D7
MAPCFDE	60	C8C1E2D7	MAPIRRE	2A0	C8C1E2D7
MAPCFE	70	C8C1E2D7	MAPIRSI	2B0	C8C1E2D7
MAPCFFC	80	C8C1E2D7	MAPJCMD	848	
MAPCFLE	90	C8C1E2D7	MAPJOS	2C0	C8C1E2D7
MAPCFMT	A0	C8C1E2D7	MAPJQS	2D0	C8C1E2D7
MAPCFQL	B0	C8C1E2D7	MAPJXCNT	760	21
MAPCFQU	C0	C8C1E2D7	MAPJXLEN	760	210
MAPCFRD	D0	C8C1E2D7	MAPJXMOD	560	C8C1E2D7
MAPCFRE	E0	C8C1E2D7	MAPLEN	870	874
MAPCFRL	F0	C8C1E2D7	MAPMCONA	81C	
MAPCFRS	100	C8C1E2D7	MAPMISC	2E0	C8C1E2D7
MAPCFR2	110	C8C1E2D7	MAPMISCA	868	
MAPCFSI	120	C8C1E2D7	MAPMLLMA	7EC	
MAPCFT1	130	C8C1E2D7	MAPMODS	760	77
MAPCFUN	140	C8C1E2D7	MAPMOD1	0	0
MAPCFWP	150	C8C1E2D7	MAPMSG	2F0	C8C1E2D7
MAPCFWR	160	C8C1E2D7	MAPNATS	300	C8C1E2D7
MAPCKCF	170	C8C1E2D7	MAPNET	310	C8C1E2D7
MAPCKCFA	7A0	80000000	MAPNJRA	80C	
MAPCKDS	180	C8C1E2D7	MAPNJT	320	C8C1E2D7
MAPCKPT	190	C8C1E2D7	MAPNJTA	808	
MAPCKPTA	7F4		MAPNPM	330	C8C1E2D7
MAPCKRR	1A0	C8C1E2D7	MAPNPMA	818	
MAPCKVR	1B0	C8C1E2D7	MAPNRRA	830	
MAPCKVRA	7A4	80000000	MAPNRTA	834	
MAPCNVA	798		MAPNSR	340	C8C1E2D7
MAPCNVS	1C0	C8C1E2D7	MAPNSRA	814	
MAPCNVT	1D0	C8C1E2D7	MAPNST	350	C8C1E2D7
MAPCNVTA	7CC		MAPNSTA	810	
MAPCOMM	1E0	C8C1E2D7	MAPNUC	360	C8C1E2D7
MAPCOMMA	7E8		MAPODSM	370	C8C1E2D7
MAPCON	1F0	C8C1E2D7	MAPODSMR	7B0	
MAPCSV	200	C8C1E2D7	MAPODSMX	7AC	
MAPDILSA	860		MAPOFFA	79C	
MAPDYN	210	C8C1E2D7	MAPPRIOA	800	
MAPEMS	7C0		MAPPRPU	380	C8C1E2D7
MAPENFA	864		MAPPRPUA	7E0	
MAPEOM	870		MAPPRTYA	7FC	
MAPEVTL	220	C8C1E2D7	MAPPSO	390	C8C1E2D7
MAPEVTLA	824		MAPPSOA	7D8	
MAPEXECA	7D0		MAPPURGA	7E4	

Name	Hex Offset	Hex Value
MAPPXITA	7B8	
MAPRAS	3A0	C8C1E2D7
MAPRDR	3B0	C8C1E2D7
MAPRDRA	7C4	
MAPRESMA	838	
MAPRTAM	3C0	C8C1E2D7
MAPSASR	3D0	C8C1E2D7
MAPSCAN	3E0	C8C1E2D7
MAPSERV	3F0	C8C1E2D7
MAPSFSRA	83C	
MAPSIR	400	C8C1E2D7
MAPSJFR	410	C8C1E2D7
MAPSNA	420	C8C1E2D7
MAPSNF	858	
MAPSPI	85C	
MAPSPIN	430	C8C1E2D7
MAPSPINA	7F8	
MAPSPLA	784	
MAPSPOL	440	C8C1E2D7
MAPSPOLA	82C	
MAPSSRV	450	C8C1E2D7
MAPSTAB	460	C8C1E2D7
MAPSTAC	470	C8C1E2D7
MAPSTACA	7D4	
MAPSTAM	480	C8C1E2D7
MAPSTUB	490	C8C1E2D7
MAPSUBS	4A0	C8C1E2D7
MAPSUBSA	7A8	
MAPSXDV	4B0	C8C1E2D7
MAPSXIT	4C0	C8C1E2D7
MAPSXJB	4D0	C8C1E2D7
MAPSXNJ	4E0	C8C1E2D7
MAPSXOT	4F0	C8C1E2D7
MAPTABS	500	C8C1E2D7
MAPTERM	510	C8C1E2D7
MAPTIMEA	7F0	
MAPTRAK	520	C8C1E2D7
MAPVTAMA	790	
MAPWARM	530	C8C1E2D7
MAPWARMA	804	
MAPWTOA	788	
MAPXCF	540	C8C1E2D7
MAPXCFA	84C	
MAPXCMA	850	
MAPXEQ	550	C8C1E2D7
MAPXFRMA	828	
MAPXTIMA	820	

$MONCB Heading Information

Common Name: Monitor address space control block
Macro ID: $MONCB
DSECT Name: MONCB
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: MONB
Offset: MNBID
Length: L'MNBID
Storage Attributes: Subpool: 241
Key: 1
Residency: Virtual is in 31 bit storage and real can in in 64 bit storage. The $MONCB resides in common storage.
Size: See MNBLEN
Created by: HASCSRJM
Pointed to by: CCTMONCB field of the HCCT data area
JMTMONCB field of the HJCT data area
Serialization: Only updated by HASCSRJM while running under the JES2 main task.
Function: This DSECT maps the CSA data associated with the JES2 monitor address address space. It is used during JES2 initialization and termination processing to create and later delete the monitor address space.

$MONCB Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	MONCB	, Define DSECT
0	(0)	CHARACTER	4	MNBID	Eyecatcher
4	(4)	ADDRESS	1	MNBVER	Version
4	(4)	X'1'	0	MNBVERN	"1" Current version
5	(5)	BITSTRING	2		Reserved for future use
7	(7)	CHARACTER	1	MNBCOMCH	CONCHAR for termination messages
8	(8)	CHARACTER	8	MNBNAME	Address space name
16	(10)	CHARACTER	8	MNBPROG	PROG= to run the address space
24	(18)	BITSTRING	8	MNBPRTKN	Token for CSVDYLPA DELETE request
32	(20)	BITSTRING	24	MNBODA	ASCRE output area (IHAASEO)
56	(38)	SIGNED	4	MNBECB	Main task wait ECB
60	(3C)	SIGNED	4	MNBWECB	Monitor work ECB
60	(3C)	X'4'	0	MNBWTERM	"4" Monitor TERM post code
60	(3C)	X'8'	0	MNBWJDWN	"8" JES2 address space went down
60	(3C)	X'C'	0	MNBWJUP	"12" JES2 address space came up

Comment

MACDATE 07/02/90

End of Comment

64	(40)	ADDRESS	4	MNBPOST	. 1ST WORD - ECB ADDRESS
68	(44)	ADDRESS	4		. 2ND WORD - ASCB ADDRESS
72	(48)	ADDRESS	4		. 3RD WORD - ERRET ADDRESS
76	(4C)	SIGNED	4	MNBJES2A	Alet for JES2 address space
80	(50)	ADDRESS	4	MNBMLMAD	Address of monitor load module
84	(54)	SIGNED	4	MNBMLMLN	Length of monitor load module
88	(58)	ADDRESS	4	MNBMONEP	Entry addr for the monitor code
92	(5C)	ADDRESS	4	MNBHJCT	Address of HJCT in monitor A.S.
96	(60)	ADDRESS	4	MNBCMBQ	Queue of commands from SSI

$MONCB Cross Reference

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
100	(64)	SIGNED	4	MNBCECB	Command ECB address
104	(68)	ADDRESS	4	MNBMITS	MIT information for monitor
112	(70)	DBL WORD	8	(0)	
112	(70)	X'70'	0	MNBLEN	"*-MONCB" Length of MONCB

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	MNMT	, Monitor MIT DSECT
0	(0)	CHARACTER	8	MNMTNAME	Module name
8	(8)	ADDRESS	4	MNMTADDR	Module address
12	(C)	ADDRESS	4	MNMTSIZE	Module length
16	(10)	CHARACTER	8	MNMTDATE	Date of assembly
24	(18)	CHARACTER	5	MNMTTIME	Time of assembly
29	(1D)	BITSTRING	3		Reserved
32	(20)	CHARACTER	8	MNMTAPAR	APAR number from module
40	(28)	CHARACTER	8	MNMTPTF	PTF number from module
40	(28)	X'30'	0	MNMTLEN	"*-MNMT" Length of area
40	(28)	X'A'	0	MNMTCNT	"10" Number of MNMTs to get

$MONCB Cross Reference

Name	Hex Offset	Hex Value
MNBCECB	64	
MNBCMBQ	60	
MNBCOMCH	7	
MNBECB	38	
MNBHJCT	5C	
MNBID	0	D4D6D5C2
MNBJES2A	4C	
MNBLEN	70	70
MNBMITS	68	
MNBMLMAD	50	
MNBMLMLN	54	
MNBMONEP	58	
MNBNAME	8	D1C5E2F2
MNBODA	20	
MNBPOST	40	
MNBPROG	10	C8C1E291
MNBPRTKN	18	
MNBVER	4	
MNBVERN	4	1
MNBWECB	3C	
MNBWJDWN	3C	8
MNBWJUP	3C	C
MNBWTERM	3C	4
MNMT	0	
MNMTADDR	8	
MNMTAPAR	20	
MNMTCNT	28	A
MNMTDATE	10	
MNMTLEN	28	30
MNMTNAME	0	
MNMTPTF	28	
MNMTSIZE	C	
MNMTTIME	18	
MONCB	0	

$MSCWORK Heading Information

Common Name: JES2 Miscellaneous PCE Work Area
Macro ID: $MSCWORK
DSECT Name: PCE ($MSCWORK is part of the PCE DSECT)
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: 'PCE '
Offset: PCEEYE-PCE
Length: 4
Storage Attributes: Subpool: See $PCE
Key: See $PCE
Residency: See $PCE
Size: See symbol MSCPCEWL for the length of this work area. The overall length of the PCE is stored in field PCELENG.
Created by: See $PCE
Pointed to by: The $MISCPCE field of the $HCT data area
See $PCE for other pointer fields that apply to all PCE types.
Serialization: Normal PCE dispatch serialization
Function: The fields in this work area are used by the JES2 miscellaneous Processor. $MSCWORK maps the variable PCE work area that begins at label PCEWORK. The fields defined in $MSCWORK are actually part of the PCE DSECT, but only map PCEs with the value PCEMSCID in the second byte of field PCEID.

This PCE is not device related. Field PCEDCT is zero.

$MSCWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	PCE	, Continue PCE DSECT
240	(F0)	BITSTRING	12	MSCTQE	Timer queue element
252	(FC)	BITSTRING	1	MSCFLAG	Misc PCE work flags
		1...		MSCWANTQ	"B'10000000'" PCE needs access to the CKPT
253	(FD)	BITSTRING	3		Reserved for future use
256	(100)	DBL WORD	8	MSCPADTM	Time stamp for PAD processing
264	(108)	DBL WORD	8	MSCMONTM	Time stamp monitor restart
272	(110)	DBL WORD	8	(0)	Alignment
272	(110)	X'20'	0	MSCPCEWL	"*-PCEWORK" Length of misc PCE work area

$MSD Heading Information

Common Name: Monitor Sampling data
Macro ID: $MSD
DSECT Name: MSD
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: MSD
Offset: MSDID-MSD
Length: L'MSDID
Storage Attributes: Subpool: 0
Key: 1
Residency: Virtual is in 31 bit storage, real can be in 64 bit storage.
Size: See MSDLEN
Created by: HASJSPLR
Pointed to by: JMTMSD field of the HJCT data area
Serialization: None
Function: The MSD maps the sampling data collected by the JES2 monitor subtask.

$MSD Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	MSD	, Monitor Sampling Data DSECT
0	(0)	CHARACTER	4	MSDID	Eyecatcher
4	(4)	ADDRESS	1	MSDVRSN	Version of data area
4	(4)	X'1'	0	MSDVERSN	"1" Current version number
5	(5)	BITSTRING	3		Reserved

Comment

Limit monitoring data

End of Comment

8	(8)	DBL WORD	8	MSDLTIME	Time of next sample
16	(10)	DBL WORD	8	MSDLINT	Interval to sample
24	(18)	ADDRESS	4	MSDLMDA	Address of most recent LMD
28	(1C)	SIGNED	4		Reserved

Comment

Main task sampling data

End of Comment

32	(20)	DBL WORD	8	MSDCTIME	Time of last sample
40	(28)	DBL WORD	8	MSDCINT	Interval to sample
40	(28)	X'14'	0	MSDCSPSC	"20" 20 samples per second
40	(28)	X'C350'	0	MSDCSPMC	"1000000/MSDCSPSC" Micro seconds per sample

Comment

"Sampling time" is the time relative to the sampling process. This is maintained using 2 fields. MSDCSCNT is incremented every sample. When MSDCSCNT reaches the number of samples per second, MSDCSTIM is incremented.

End of Comment

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
48	(30)	SIGNED	4	MSDCSTIM	"Sampling" time - seconds
52	(34)	SIGNED	4	MSDCSCNT	"Sampling" time - samples
56	(38)	ADDRESS	4	MSDCBUFS	Address of CPU sample buffer start
60	(3C)	ADDRESS	4	MSDCBUFE	Address of CPU sample buffer end(+1)
64	(40)	ADDRESS	4	MSDCBUFC	Current (last used) CPU sample rec
68	(44)	ADDRESS	4	MSDCBUFA	Alternate sampling buffer

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	MSDCSD	, Limit monitoring data
0	(0)	DBL WORD	8	MSDCSD_TIME	Time sample taken
8	(8)	SIGNED	4	MSDCSD_ADDR	PSW addr (Main task PRB)
12	(C)	SIGNED	4	MSDCSD_CRB_ADR	
					PSW addr (Current RB)
16	(10)	CHARACTER	8	MSDCSD_MOD	Module name and offset
24	(18)	SIGNED	4	MSDCSD_OFFSET	
					(calculated at report time)
28	(1C)	ADDRESS	4	MSDCSD_PCE	Current PCE address
32	(20)	CHARACTER	8	MSDCSD_JOB	JOBID or JQE index
40	(28)	BITSTRING	1	MSDCSD_EXIT	Current exit number
41	(29)	BITSTRING	1	MSDCSD_TYPE	Sample type
41	(29)	X'1'	0	MSDCSD_TY_WAIT	
					"1" At main task WAIT
41	(29)	X'2'	0	MSDCSD_TY_WTOT	
					"2" Other MVS WAIT
41	(29)	X'3'	0	MSDCSD_TY_WLOK	
					"3" Waiting for local lock
41	(29)	X'4'	0	MSDCSD_TY_WNDS	
					"4" Not dispatchable
41	(29)	X'5'	0	MSDCSD_TY_WPGE	
					"5" Paging wait
42	(2A)	BITSTRING	2	MSDCSD_SVC	JES2 PRB interrupt code
44	(2C)	ADDRESS	4	MSDCSD_TRAN	RBRTRAN of current RB
48	(30)	DBL WORD	8	(0)	Align
48	(30)	X'30'	0	MSDCSD_LEN	"*-MSDCSD" Length of entry
48	(30)	BITSTRING	0	MSDCSD_COUNT	"X'5000'" Number of CPU samples to collect

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	MSD	, Return to MSD

Comment

```
------------------------------------------------------------
      Loop detection fields. The longer we are in a
      potential loop, the higher MSDCLCNT will get.
------------------------------------------------------------
```

End of Comment

72	(48)	DBL WORD	8	MSDCLTOT	Average sum
80	(50)	SIGNED	4	MSDCLCNT	Address count
84	(54)	ADDRESS	4	MSDCLAVG	Average CPU address
88	(58)	DBL WORD	8	MSDCLTIM	Loop start time
88	(58)	X'48'	0	MSDCLOPD	"MSDCLTOT,*-MSDCLTOT" Aggregate loop det fields

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
				Comment	
				---------- Wait timing fields. The longer we are at a wait the higher MSDWSMPL will get. The type of wait is in MSDETYPE. ----------	
				End of Comment	
96	(60)	DBL WORD	8	MSDWSTCK	Time event started
104	(68)	ADDRESS	4	MSDWADDR	Address of wait (from RB)
108	(6C)	SIGNED	4	MSDWSMPL	Samples at current wait
108	(6C)	X'60'	0	MSDWDETD	"MSDWSTCK,*-MSDWSTCK" Aggregate wait det fields
112	(70)	DBL WORD	8	MSDLPCED	Last PCE dispatch time
120	(78)	BITSTRING	8	MSDLPNAM	Last PCE dispatch name
128	(80)	BITSTRING	1	MSDLPCID	Last PCE dispatch ID
				Comment	
				---------- Most recent sample type. See MSDCSD_TYPE for values ----------	
				End of Comment	
129	(81)	BITSTRING	1	MSDETYPE	Sample type
130	(82)	BITSTRING	6		Reserved
136	(88)	DBL WORD	8	(0)	
136	(88)	X'88'	0	MSDLEN	"*-MSD" Length of MSD

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	LMD	, Limit control block
0	(0)	CHARACTER	4	LMDID	Eyecatcher
4	(4)	ADDRESS	4	LMDNEXT	Address of next LMD
8	(8)	DBL WORD	8	LMDSTCK	Time LMD was created
16	(10)	SIGNED	4	LMDCNT	Count of samples included
20	(14)	SIGNED	4		Reserved
24	(18)	DBL WORD	8	LMD_1ST (0)	Start of limit data
24	(18)	BITSTRING	40	LMD_BERT	Limit data for BERT
64	(40)	BITSTRING	40	LMD_BSCB	Limit data for BSCB
104	(68)	BITSTRING	40	LMD_BUFX	Limit data for BUFX
144	(90)	BITSTRING	40	LMD_CKVR	Limit data for CKVR
184	(B8)	BITSTRING	40	LMD_CMBS	Limit data for CMBS
224	(E0)	BITSTRING	40	LMD_CMDS	Limit data for CMDS
264	(108)	BITSTRING	40	LMD_ICES	Limit data for ICES
304	(130)	BITSTRING	40	LMD_JNUM	Limit data for JNUM
344	(158)	BITSTRING	40	LMD_JOES	Limit data for JOES
384	(180)	BITSTRING	40	LMD_JQES	Limit data for JQES
424	(1A8)	BITSTRING	40	LMD_LBUF	Limit data for LBUF
464	(1D0)	BITSTRING	40	LMD_NHBS	Limit data for NHBS
504	(1F8)	BITSTRING	40	LMD_SMFB	Limit data for SMFB
544	(220)	BITSTRING	40	LMD_TGS	Limit data for TGS
584	(248)	BITSTRING	40	LMD_TTAB	Limit data for TTAB
624	(270)	BITSTRING	1	LMD_VTMB	Limit data for VTMB
624	(270)	X'10'	0	LMD_NUM	"(*-LMD_1ST)/LMDELE_LEN" Number of elements

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
					Comment

					CPU sampling information

					End of Comment
664	(298)	SIGNED	4	LMDCSAMP	Count of CPU samples
668	(29C)	SIGNED	4	LMDCS_ACT	Active sample count
672	(2A0)	SIGNED	4	LMDCS_IDLE	Idle sample count
676	(2A4)	SIGNED	4	LMDCS_WAIT	Wait sample count
680	(2A8)	SIGNED	4	LMDCS_LLOK	Local lock sample count
684	(2AC)	SIGNED	4	LMDCS_NDSP	Non-dispatchable count
688	(2B0)	SIGNED	4	LMDCS_PAGE	Page wait sample count
688	(2B0)	X'2B4'	0	LMD_SIZE	"*-LMD" Length of LMD

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	LMDELE	, Limit monitoring data
0	(0)	CHARACTER	8	LMDELE_NAME	Resource name
8	(8)	SIGNED	4	LMDELE_LIMIT	Current upper limit
12	(C)	SIGNED	4	LMDELE_INUSE	Current number in use
16	(10)	SIGNED	4	LMDELE_LOW	Low usage value
20	(14)	SIGNED	4	LMDELE_HIGH	High usage value
24	(18)	SIGNED	4		Reserved
28	(1C)	SIGNED	4	LMDELE_AVERAGE	Average in use value
32	(20)	DBL WORD	8	LMDELE_TOTAL	Total count (for average)
40	(28)	DBL WORD	8	(0)	Align
40	(28)	X'28'	0	LMDELE_LEN	"*-LMDELE" Length of monitor data

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	MWT	, MVS wait records
0	(0)	DBL WORD	8	MWTSTCK	Time of most recent sample
8	(8)	ADDRESS	4	MWTADDR	Address of wait (from RB)
12	(C)	SIGNED	4	MWTWCNT	Count of waits detected
16	(10)	CHARACTER	8	MWTNAME	Module name from wait
24	(18)	SIGNED	4	MWTOFFS	Offset of wait in module
28	(1C)	SIGNED	4	MWTSCNT	Count of matching samples
					Comment

					MWTEXIT is exit number in control at the time of
					the wait if MWTFXITC is set. If multiple exits,
					then MWTEXIT is zero. MWTPCEID is PCE ID that
					was in control. MWTPCEID is zero if multiple.

					End of Comment
32	(20)	BITSTRING	1	MWTEXIT	Exit for wait (if MWTFXITC on)
33	(21)	BITSTRING	1	MWTPCEID	PCE ID for wait
34	(22)	BITSTRING	1	MWTFLAGS	General flag byte
		1...		MWTFXITC	"B'10000000'" Wait while exit in control
		.1..		MWTFJESC	"B'01000000'" Wait while JES2 in control
35	(23)	BITSTRING	1		Reserved
36	(24)	SIGNED	4	(3)	Reserved
36	(24)	X'30'	0	MWTLEN	"*-MWT" Length of wait mapping
36	(24)	BITSTRING	0	MWTSIZE	"X'2000'" Size of wait mapping area

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	MWTHDR	, MVS wait record header
0	(0)	CHARACTER	4	MWTHID	Eyecatcher
4	(4)	ADDRESS	4	MWTHCUR	Current MWT
8	(8)	DBL WORD	8	MWTHLTIM	Candidate reuse time
16	(10)	ADDRESS	4	MWTHLADR	and address
20	(14)	SIGNED	4	(3)	Reserved
20	(14)	X'20'	0	MWTHLEN	"*-MWTHDR" Header length

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	PRBM	, Probe message work area
0	(0)	CHARACTER	4	PRBMID	Eyecatcher
4	(4)	ADDRESS	4	PRBMNEXT	Next PRBM for this type
8	(8)	DBL WORD	8	PRBMSTRT	Time condition started
16	(10)	DBL WORD	8	PRBMSTCK	Last time message issued
24	(18)	SIGNED	4	PRBMSPLC	Sampler "time" of track
28	(1C)	SIGNED	4	PRBMDATA	Probe related data
32	(20)	BITSTRING	1	PRBMFLAG	Flags used by Probes
		1...		PRBMFVAL	"B'10000000'" PRBM has been validated
		.1..		PRBMUDUR	"B'01000000'" Update duration in line 2
		..1.		PRBMUSTA	"B'00100000'" Update PCE/EXIT/JOB
		...1		PRBMUCMD	"B'00010000'" Update current command
		.... 1...		PRBMNAGR	"B'00001000'" Normal interval for alert
		.... .1..		PRBMNAGO	"B'00000100'" Slow interval for alerts
36	(24)	SIGNED	4	PRBMDOM	DOM id for message (0 if pending)
40	(28)	ADDRESS	2	PRBMTXL1	Line 1 message length
42	(2A)	CHARACTER	71	PRBMTXT1	and message text
42	(2A)	X'2F'	0	PRBMMID	"PRBMTXT1+5,4,C'C'" Message id from text
114	(72)	ADDRESS	2	PRBMTXL2	Line 2 message length
116	(74)	CHARACTER	71	PRBMTXT2	and message text
188	(BC)	ADDRESS	2	PRBMTXL3	Line 3 message length
190	(BE)	CHARACTER	71	PRBMTXT3	and message text
264	(108)	DBL WORD	8	(0)	Alignment
264	(108)	X'108'	0	PRBMLEN	"*-PRBM" Length of message area

$MSD Cross Reference

Name	Hex Offset	Hex Value
LMD	0	
LMD_BERT	18	
LMD_BSCB	40	
LMD_BUFX	68	
LMD_CKVR	90	
LMD_CMBS	B8	
LMD_CMDS	E0	
LMD_ICES	108	
LMD_JNUM	130	
LMD_JOES	158	
LMD_JQES	180	
LMD_LBUF	1A8	
LMD_NHBS	1D0	
LMD_NUM	270	10
LMD_SIZE	2B0	2B4
LMD_SMFB	1F8	
LMD_TGS	220	
LMD_TTAB	248	
LMD_VTMB	270	
LMD_1ST	18	
LMDCNT	10	
LMDCS_ACT	29C	
LMDCS_IDLE	2A0	

Name	Hex Offset	Hex Value
LMDCS_LLOK	2A8	
LMDCS_NDSP	2AC	
LMDCS_PAGE	2B0	
LMDCS_WAIT	2A4	
LMDCSAMP	298	
LMDELE	0	
LMDELE_AVERAGE		
	1C	
LMDELE_HIGH	14	
LMDELE_INUSE	C	
LMDELE_LEN	28	28
LMDELE_LIMIT	8	
LMDELE_LOW	10	
LMDELE_NAME	0	
LMDELE_TOTAL	20	
LMDID	0	D3D4C440
LMDNEXT	4	
LMDSTCK	8	
MSD	0	
MSD	0	
MSDCBUFA	44	
MSDCBUFC	40	
MSDCBUFE	3C	

Name	Hex Offset	Hex Value
MSDCBUFS	38	
MSDCINT	28	
MSDCLAVG	54	
MSDCLCNT	50	
MSDCLOPD	58	48
MSDCLTIM	58	
MSDCLTOT	48	
MSDCSCNT	34	
MSDCSD	0	
MSDCSD_ADDR	8	
MSDCSD_COUNT	30	5000
MSDCSD_CRB_ADR	C	
MSDCSD_EXIT	28	
MSDCSD_JOB	20	
MSDCSD_LEN	30	30
MSDCSD_MOD	10	
MSDCSD_OFFSET	18	
MSDCSD_PCE	1C	
MSDCSD_SVC	2A	
MSDCSD_TIME	0	
MSDCSD_TRAN	2C	
MSDCSD_TY_WAIT	29	1
MSDCSD_TY_WLOK	29	3
MSDCSD_TY_WNDS	29	4
MSDCSD_TY_WPGE	29	5
MSDCSD_TY_WTOT	29	2
MSDCSD_TYPE	29	
MSDCSPMC	28	C350
MSDCSPSC	28	14
MSDCSTIM	30	
MSDCTIME	20	
MSDETYPE	81	
MSDID	0	D4E2C440
MSDLEN	88	88
MSDLINT	10	
MSDLMDA	18	
MSDLPCED	70	
MSDLPCID	80	
MSDLPNAM	78	
MSDLTIME	8	
MSDVERSN	4	1
MSDVRSN	4	
MSDWADDR	68	
MSDWDETD	6C	60
MSDWSMPL	6C	
MSDWSTCK	60	
MWT	0	
MWTADDR	8	
MWTEXIT	20	
MWTFJESC	22	40
MWTFLAGS	22	
MWTFXITC	22	80
MWTHCUR	4	
MWTHDR	0	
MWTHID	0	D4E6E340
MWTHLADR	10	
MWTHLEN	14	20
MWTHLTIM	8	

Name	Hex Offset	Hex Value
MWTLEN	24	30
MWTNAME	10	
MWTOFFS	18	
MWTPCEID	21	
MWTSCNT	1C	
MWTSIZE	24	2000
MWTSTCK	0	
MWTWCNT	C	
PRBM	0	
PRBMDATA	1C	
PRBMDOM	24	
PRBMFLAG	20	
PRBMFVAL	20	80
PRBMID	0	
PRBMLEN	108	108
PRBMMID	2A	2F
PRBMNAGO	20	4
PRBMNAGR	20	8
PRBMNEXT	4	
PRBMSPLC	18	
PRBMSTCK	10	
PRBMSTRT	8	
PRBMTXL1	28	
PRBMTXL2	72	
PRBMTXL3	BC	
PRBMTXT1	2A	
PRBMTXT2	74	
PRBMTXT3	BE	
PRBMUCMD	20	10
PRBMUDUR	20	40
PRBMUSTA	20	20

$MTQH Heading Information

Common Name: Main Task Queue Header
Macro ID: $MTQH
DSECT Name: MTQH
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: MTQH
Offset: MTQHID-MTQH
Length: L'MTQHID
Storage Attributes: Subpool: 241 (CSA, not fetch protected)
Key: 1
Residency: anywhere
Size: See MTQHSIZE
Created by: Users of $RQUE services
Pointed to by: CCTPJCLQ field of the $HCCT data area
CCTSAPIQ field of the $HCCT data area
CCTPSOQ field of the $HCCT data area
Serialization: Serialization is controlled through the $RQUE service. Refer to the line comments for details about specific fields.
Function: Represents a queue of requests for a main task service. Used in conjunction with the $RQUE services.

$MTQH Map

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	MTQH	,
					Comment
					---------- The following fields are set by the creator of the MTQH. They cannot be altered after the MTQH is created. ----------
					End of Comment
0	(0)	CHARACTER	4	MTQHID	Data area identifier
4	(4)	SIGNED	2	MTQHLEN	Length of MTQH
6	(6)	BITSTRING	1	MTQHVER	Version number
6	(6)	X'1'	0	MTQHCVER	"1" Current version number
7	(7)	BITSTRING	1	MTQHRSC	JES2 resource to post to have a request processed ($DRxxxx value)
					Comment
					---------- The following fields are internal to the $RQUE services. ----------
					End of Comment
8	(8)	BITSTRING	8	MTQHPEND (0)	Pending work queues
8	(8)	ADDRESS	4	MTQHLIFO	Address of first LIFO MTRB SERIALIZATION: compare and swap

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
12	(C)	ADDRESS	4	MTQHFIFO	Address of first FIFO MTRB SERIALIZATION: none, changed by main task only
16	(10)	ADDRESS	4	MTQHACT	Address of first active MTRB SERIALIZATION: none, changed by main task only
16	(10)	X'14'	0	MTQHSIZE	"*-MTQH" Length of MTQH

$MTQH Cross Reference

Name	Hex Offset	Hex Value
MTQH	0	
MTQHACT	10	
MTQHCVER	6	1
MTQHFIFO	C	
MTQHID	0	D4E3D8C8
MTQHLEN	4	
MTQHLIFO	8	
MTQHPEND	8	
MTQHRSC	7	
MTQHSIZE	10	14
MTQHVER	6	

$MTRB Heading Information

Common Name: Main Task Request Block
Macro ID: $MTRB
DSECT Name: MTRB
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: MTRB
Offset: MTRBID-MTRB
Length: L'MTRBID
Storage Attributes: Subpool: 231 (subpool used by $GETCEL)
Key: 1
Residency: anywhere
Size: See MTRBSIZE
Created by: Users of $RQUE services
Pointed to by: the MTRBNEXT field of the MTRB data area
the MTQHLIFO, MTQHFIFO, and MTQHACT fields of the MTQH data area
the SAPMTRB field of the $SAPID data area
the PSOMTRB field of the $PSO data area
Serialization: Serialization is controlled through the $RQUE service. SSI and main task callers have the following access to an MTRB:
SSI caller: The caller has exclusive control of the MTRB before and after the call to the EXE function. If the caller is abended while within the EXE function, the caller's recovery routine is obligated to call the CMP function to wait for the request to complete before using or freeing the MTRB.
Main task caller: The caller has exclusive control of the MTRB that is returned by the GET function. The caller gives up control of the MTRB when invoking the RET function.
Function: Represents a request for a main task service. Used in conjunction with the $RQUE services.

$MTRB Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	MTRB	,

Comment

```
-----------------------------------------------------------
    The following fields can be used by callers
    of the $RQUE services.
-----------------------------------------------------------
```

End of Comment

0	(0)	SIGNED	4	MTRBCCE	Address of cell control element if storage for MTRB was obtained using $GETCEL service, else 0
4	(4)	CHARACTER	4	MTRBID	Data area identifier
8	(8)	SIGNED	2	MTRBLEN	Length of MTRB
10	(A)	BITSTRING	1	MTRBVER	Version number

$MTRB Cross Reference

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
10	(A)	X'1'	0	MTRBCVER	"1" Current version number
11	(B)	BITSTRING	1	MTRBRSV1	Reserved for future use
12	(C)	ADDRESS	4	MTRBPARM	Address of request-specific control block
16	(10)	CHARACTER	4	MTRBPID	Identifier of request-specific control block
20	(14)	SIGNED	4	MTRBRC	Return code
24	(18)	CHARACTER	4	MTRBRSV2	Reserved for future use

Comment

The following fields are internal to the $RQUE services.

End of Comment

28	(1C)	ADDRESS	4	MTRBQUE	Address of queue header (helps locating queue in a dump)
32	(20)	ADDRESS	4	MTRBNEXT	Address of next MTRB on queue
36	(24)	CHARACTER	12	MTRBXMPL (0)	XMPOST parameter list
36	(24)	ADDRESS	4	MTRBERRT	Pointer to an error rtn
40	(28)	ADDRESS	4	MTRBECBP	Pointer to the ECB
44	(2C)	ADDRESS	4	MTRBASCB	Pointer to the ASCB
48	(30)	SIGNED	4	MTRBECB	ECB for $XMPOST
52	(34)	BITSTRING	1	MTRBFLG1	Flags SERIALIZATION: None.
52	(34)	X'1'	0	MTRB1WFC	"1" SSI must wait for completion
53	(35)	BITSTRING	3	MTRBRSV3	Reserved for future use
53	(35)	X'38'	0	MTRBSIZE	"*-MTRB" Length of MTRB

$MTRB Cross Reference

Name	Hex Offset	Hex Value
MTRB	0	
MTRBASCB	2C	
MTRBCCE	0	
MTRBCVER	A	1
MTRBECB	30	
MTRBECBP	28	
MTRBERRT	24	
MTRBFLG1	34	
MTRBID	4	D4E3D9C2
MTRBLEN	8	
MTRBNEXT	20	
MTRBPARM	C	
MTRBPID	10	
MTRBQUE	1C	
MTRBRC	14	
MTRBRSV1	B	
MTRBRSV2	18	
MTRBRSV3	35	
MTRBSIZE	35	38
MTRBVER	A	
MTRBXMPL	24	
MTRB1WFC	34	1

$MWE Heading Information

Common Name: HASP Monitor Work Element
Macro ID: $MWE
DSECT Name: MWE
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: 'MWE '
Offset: MWEID-MWE
Length: 4
Storage Attributes: Subpool: 129
Key: 1
Residency: Virtual is in 31 bit storage and real can be in 64 bit storage. The $MWEs reside in the JES2 monitor address space.
Size: Each MWE is 4096 bytes long.
Created by: Monitor initialization processing.
Pointed to by: - The TCBBDT field of the MVS TCB control block for the associated monitor address space subtask.
- The MWENEXT pointer in the MWE data area
- The JMTMWE pointer in the HJCT data area
- General register 13 when executing code in the 'MONITOR' execution environment.
Serialization: None required
Function: The MWE contains data specific to a JES2 monitor subtask. It is also used to communicate data between the monitor main task and the subtasks.

$MWE Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	MWE	, Monitor Work Element DSECT
0	(0)	CHARACTER	4	MWEID (0)	MWE control block identifier
0	(0)	BITSTRING	1	(0)	Available save area
104	(68)	ADDRESS	4	MWENEXT	Address of next MWE on chain
108	(6C)	CHARACTER	8	MWENAME	Name of the monitor task
116	(74)	CHARACTER	8	MWEEPNM	Entry point name
124	(7C)	ADDRESS	4	MWECODE	Address of the support code

Comment

Status information for this elements

End of Comment

128	(80)	CHARACTER	12	MWESTAT	Current status of task
140	(8C)	CHARACTER	24	MWEALERT	Any error alerts for this task

Comment

```
-------------------------------------------------------------
      MWETECB is the ECB passed to ATTACHX that is posted
            when the task terminates
      MWEECB is the ECB the task waits on when it is not
            processing work
-------------------------------------------------------------
```

End of Comment

164	(A4)	SIGNED	4	MWETECB	Termination ECB address
168	(A8)	SIGNED	4	MWEWECB	Communication ECB address

$MWE Cross Reference

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
172	(AC)	ADDRESS	4	MWETCB	TCB address
176	(B0)	ADDRESS	4	MWEHJCT	HCJT address
184	(B8)	DBL WORD	8	MWEDWORK	Work area (used by subroutines)
192	(C0)	DBL WORD	8	MWEDWRK2	Work area (used by subroutines)
200	(C8)	BITSTRING	16	MWEWRK16	Work area (used by subroutines)
216	(D8)	CHARACTER	128	MWEWTOW	WTO work area (used by subroutines)
344	(158)	DBL WORD	8	MWEMFLS (0)	MF=L work areas

Comment

MACDATE 05/30/98

End of Comment

344	(158)	SIGNED	4	(0)	
344	(158)	BITSTRING	28		
344	(158)	SIGNED	4	(0)	
344	(158)	ADDRESS	1		FLAGS FOR ESTAEX
345	(159)	ADDRESS	1		SECOND FLAG BYTE
346	(15A)	ADDRESS	1		THIRD FLAG BYTE
347	(15B)	ADDRESS	1		VERSION NUMBER
348	(15C)	ADDRESS	4		TOKEN VALUE AREA
352	(160)	ADDRESS	4		PARM. LIST ADDR. NOT SPECIFIED
356	(164)	ADDRESS	4		ALET FOR PARM LIST
360	(168)	ADDRESS	4		FOUR BYTE EXIT ADDR

Comment

MACDATE 09/08/99

End of Comment

344	(158)	SIGNED	4	(0)	
344	(158)	BITSTRING	28		
372	(174)	SIGNED	4	(20)	Reserved
456	(1C8)	DBL WORD	8	MWEDATA (0)	Local data area origin
456	(1C8)	X'1000'	0	MWESIZE	"4096" Length of an MWE

$MWE Cross Reference

Name	Hex Offset	Hex Value
MWE	0	
MWEALERT	8C	
MWECODE	7C	
MWEDATA	1C8	
MWEDWORK	B8	
MWEDWRK2	C0	
MWEEPNM	74	
MWEHJCT	B0	
MWEID	0	
MWEMFLS	158	
MWENAME	6C	
MWENEXT	68	
MWESIZE	1C8	1000
MWESTAT	80	
MWETCB	AC	
MWETECB	A4	
MWEWECB	A8	
MWEWRK16	C8	
MWEWTOW	D8	

$NAT Programming Interface information

Programming Interface information

$NAT

The following field is **NOT** programming interface information:

- NATNTQ

End of Programming Interface information

$NAT Heading Information

Common Name: Nodes Attached Table Element
Macro ID: $NAT
DSECT Name: NAT
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: None
Storage Attributes: Subpool: 9
Key: 1
Residency: Virtual and real storage are anywhere (above or below 16M), in the private storage of the JES2 address space.
Size: See NATNATL for NAT
NATNTQL for NTQ
NATNATPL for NATP
Created by: $NATADD (NATs)
HASPCOMM (NTQs)
HASPNPM (NATPs)
Pointed to by: MDCTNATP field of the DCT data area
MDCTNPCH field of the DCT data area
NATNEXT field of the NAT data area
NATPREV field of the NAT data area
NATPCHAN field of the NAT data area
NATPNEXT field of the NAT data area
NATPDNXT field of the NAT data area
NATSCHAN field of the NAT data area
NATNATP field of the NAT data area
NATNTQ field of the NAT data area
NITNAT field of the NIT data area
NTKNAT field of the NTK data area
PCTNATAT field of the PCT data area
PCTNATAH field of the PCT data area
PCTNATUT field of the PCT data area
PCTNATUH field of the PCT data area
PCTNATHT field of the PCT data area
PCTNATHH field of the PCT data area
PCTNATNH field of the PCT data area
PCTNATNH field of the PCT data area
Serialization: NTQs and NATPs are serialized by normal JES2 PCE serialization. When a NAT that was created by $NATADD is updated, then PCT1NTUP must be set.
Function: The NAT describes the connections that currently exist or have once existed between nodes in a network. It also maps the NTQ and the NATP which are special purpose NATs.

$NAT Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	NAT	
0	(0)	X'1'	0	NATVERN	"1" Version number of the NAT
0	(0)	BITSTRING	8	NATID (0)	UNIQUE NAT IDENTIFICATION
0	(0)	ADDRESS	3	NATPRI (0)	PRIMARY NODE ID
0	(0)	SIGNED	2	NATPRIN	PRIMARY NODE NUMBER

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
2	(2)	BITSTRING	1	NATPRIQ	PRIMARY NODE QUALIFIER
3	(3)	BITSTRING	1		RESERVED FOR FUTURE USE
4	(4)	ADDRESS	3	NATSEC (0)	SECONDARY NODE ID
4	(4)	SIGNED	2	NATSECN	SECONDARY NODE NUMBER
6	(6)	BITSTRING	1	NATSECQ	SECONDARY NODE QUALIFIER
7	(7)	BITSTRING	1		RESERVED FOR FUTURE USE
8	(8)	BITSTRING	1	NATNTYPE	TYPE OF NAT
		1...		NATNTNAT	"B'10000000'" REAL NAT ELEMENT
		.1..		NATNTNTQ	"B'01000000'" TEMPORARY NAT (NTQ)
		..1.		NATNTNPT	"B'00100000'" Temporary MAS connection NATP (used during signon validation)
		...1		NATNTNTP	"B'00010000'" Permanent MAS connection NATP(used after signon)
9	(9)	BITSTRING	1	NATTYPE	Type of NAT element
		1...		NATTSTAT	"B'10000000'" NAT is a static connect
		.1..		NATTPM	"B'01000000'" NAT is specifically defined as a PATHMGR=YES connect
		..1.		NATTPMNO	"B'00100000'" NAT is specifically defined as a PATHMGR=NO connect
		...1		NATTPMDE	"B'00010000'" NTQ is specifically defined as a PATHMGR=RESET connect
		.... 1...		NATTPRIV	"B'00001000'" NAT is a private connect
		.... .1..		NATTUNRE	"B'00000100'" NAT is a unreachable
		.... ..1.		NATTADJ	"B'00000010'" NAT is adjacent to this node and member
10	(A)	ADDRESS	2	NATREST	RESISTANCE OF CONNECTION
12	(C)	ADDRESS	4	NATEVNT	EVENT SEQUENCE
16	(10)	SIGNED	4		Reserved for future use
20	(14)	SIGNED	4	NATECOM (0)	End of common section

Comment

Node Attached Table unique Fields

End of Comment

20	(14)	BITSTRING	1	NATSTATE	Current state of active NAT
		1...		NATSUMAX	"B'10000000'" NAT is unreachable due to $MAXREST
		.1..		NATSINUS	"B'01000000'" NAT is currently in use in some path
		..1.		NATSURCH	"B'00100000'" Static NAT with both nodes not connected
		...1		NATSPEND	"B'00010000'" Adjacent static NAT has no active line
		.... 1...		NATSXTRA	"B'00001000'" NAT is not currently used in any path
21	(15)	BITSTRING	1	NATNSTAT	New state of the NAT (set by full path processing)
22	(16)	BITSTRING	2		Reserved for future use
24	(18)	ADDRESS	4	NATNEXT	Addr of next NAT on cur que
28	(1C)	ADDRESS	4	NATPREV	Addr of prev NAT on cur que
32	(20)	ADDRESS	4	NATPCHAN	Prim chain of NATs from NIT
36	(24)	ADDRESS	4	NATSCHAN	Sec chain of NATs from NIT
40	(28)	ADDRESS	4	NATPNIT	Addr of NIT for primary
44	(2C)	ADDRESS	4	NATSNIT	Addr of NIT for secondary
48	(30)	ADDRESS	4	NATANATP	Chain field for temp active queue (Used by NPMFPATH)
52	(34)	ADDRESS	4	NATNMPTR	Pointer to notify bit map

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
					Comment
					The field NATALINE contains a DCT address that is considered to own this NAT. If neither NATPRI nor NATSEC is the local node, then NATALINE is DCT over which this status was first received. If either NATPRI or NATSEC is the local node, then NATALINE contains the LINE DCT address that has the least resistance to the other node on this member. It is not necessarily the primary trunk. NATNATP is a chain of NATPs (at most one per MAS member) which represent the best line from each member of a MAS. NATALINE will be zero if there is no line to the other node on this member.

					The fields defined by NATAUXCP must be copied between real NATs and AUX NATs whenever a AUX NAT is created.

					End of Comment
56	(38)	SIGNED	4	NATAUXCS (0)	Start of fields copied to/from AUX NATs
56	(38)	ADDRESS	4	NATALINE	Address of owning DCT or zero.
60	(3C)	ADDRESS	4	NATNATP	Chain of NATPs representing connections from other MAS members
64	(40)	BITSTRING	1	NATMEMBP	For adjacent NATs, member with primary line
64	(40)	X'38'	0	NATAUXCP	"NATAUXCS,*-NATAUXCS" End of fields to copy
65	(41)	BITSTRING	1	NATCSTAT	Current status of NAT
		1...		NATCACT	"B'10000000'" NAT on active queue
		.1..		NATCUNC	"B'01000000'" NAT unconnected
		..1.		NATCHLD	"B'00100000'" NAT on held queue
66	(42)	BITSTRING	1	NATNRANK	Order on NIT to NAT queue
66	(42)	X'0'	0	NATNRNUL	"0" NAT has yet to be ranked
66	(42)	X'4'	0	NATNRNMS	"4" ACTIVE, non-MAS connect
66	(42)	X'8'	0	NATNRMAS	"8" ACTIVE, MAS connection
66	(42)	X'C'	0	NATNRSTA	"12" Static/Private connect
66	(42)	X'10'	0	NATNRHLD	"16" HELD connection
66	(42)	X'14'	0	NATNRINA	"20" INACTIVE connection
67	(43)	BITSTRING	1	NATVFYQ	Flags used by NPMVFY to verify the NAT is on all queues
		1...		NATVFSTA	"B'10000000'" NAT is on a status queue
		.1..		NATVFPRI	"B'01000000'" NAT is on the queue from the primary node's NIT
		..1.		NATVFSEC	"B'00100000'" NAT is on the queue from the secondary node's NIT
68	(44)	ADDRESS	4	NATNTIME	Time record was recieved or status last modified
72	(48)	ADDRESS	4	NATAUX	Address of auxiliary NAT (PM defined NAT chained off identical static NAT)
76	(4C)	ADDRESS	4	NATRTKN	TOKEN used during NAT verification
76	(4C)	X'50'	0	NATNATL	"*-NAT" Length of NAT DSECT
					Comment
					Prototype NAT used for FULLPATH determination The following fields are ony used during full path processing.
					End of Comment
20	(14)	BITSTRING	1	NATNPMF	Flag byte work area
21	(15)	BITSTRING	1		Reserved for future use
22	(16)	SIGNED	2	NATNPLEN	Path length work area
22	(16)	X'18'	0	NATFPTL	"*-NAT" Length of full path NAT

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
		Comment			
		Nodes attached table queue element for use during initialization for the CONNECT statement. Also used for the $ADD, $DEL, $D, and $T connect commands.			
		End of Comment			
20	(14)	ADDRESS	4	NATNTQ	NTQ Chain field
24	(18)	CHARACTER	8	NATNTQNA	Primary node name (EBCDIC)
32	(20)	CHARACTER	8	NATNTQNB	2ndary node name (EBCDIC)
40	(28)	CHARACTER	8	NATNTQCN	Console id of console issuing command
48	(30)	BITSTRING	1	NATNTQF1	NTQ type field
		1...		NATNTQ1A	"B'10000000'" Add CONNECT
		.1..		NATNTQ1T	"B'01000000'" Change ($T) CONNECT
		..1.		NATNTQ1R	"B'00100000'" Delete CONNECT
		...1		NATNTQ1P	"B'00010000'" PATHMGR= value was explicitly specified
49	(31)	BITSTRING	1	NATNTQF2	General NTQ flags
		1...		NATNTQ2P	"B'10000000'" Processed NTQ
50	(32)	BITSTRING	2		Reserved for future use
50	(32)	X'34'	0	NATNTQL	"*-NAT" Length of NTQ control block
		Comment			
		Nodes attached table element for NJE connections out of other MAS members (NATP).			
		End of Comment			
20	(14)	ADDRESS	4	NATPNEXT	Next chained NATP (NAT chn)
24	(18)	ADDRESS	4	NATPDNXT	Next chained NATP (DCT chn)
28	(1C)	ADDRESS	4	NATPNAT	NAT associated with NATP
32	(20)	ADDRESS	4	NATPDCT	DCT associated with NATP
36	(24)	ADDRESS	3	NATPAFTK	Owning memb affinity token
39	(27)	BITSTRING	1	NATPMEMB	Owning member's ID
40	(28)	BITSTRING	1	NATPFLG1	NATP flag byte
		1...		NATP1WAT	"B'10000000'" Don't send it yet
		.1..		NATP1CMP	"B'01000000'" Signon done (got M recrd)
41	(29)	BITSTRING	3		Reserved
44	(2C)	CHARACTER	8	NATPNNAM	Node name from I record
52	(34)	SIGNED	4	(0)	Ensure fullword boundry
52	(34)	X'34'	0	NATNATPL	"*-NAT" Length of NATP control

$NAT Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
NAT	0		NATNEXT	18	
NATALINE	38		NATNMPTR	34	
NATANATP	30		NATNPLEN	16	
NATAUX	48		NATNPMF	14	
NATAUXCP	40	38	NATNRANK	42	
NATAUXCS	38		NATNRHLD	42	10
NATCACT	41	80	NATNRINA	42	14
NATCHLD	41	20	NATNRMAS	42	8
NATCSTAT	41		NATNRNMS	42	4
NATCUNC	41	40	NATNRNUL	42	0
NATECOM	14		NATNRSTA	42	C
NATEVNT	C		NATNSTAT	15	
NATFPTL	16	18	NATNTIME	44	
NATID	0		NATNTNAT	8	80
NATMEMBP	40		NATNTNPT	8	20
NATNATL	4C	50	NATNTNTP	8	10
NATNATP	3C		NATNTNTQ	8	40
NATNATPL	34	34	NATNTQ	14	

Name	Hex Offset	Hex Value
NATNTQCN	28	
NATNTQF1	30	
NATNTQF2	31	
NATNTQL	32	34
NATNTQNA	18	
NATNTQNB	20	
NATNTQ1A	30	80
NATNTQ1P	30	10
NATNTQ1R	30	20
NATNTQ1T	30	40
NATNTQ2P	31	80
NATNTYPE	8	
NATPAFTK	24	
NATPCHAN	20	
NATPDCT	20	
NATPDNXT	18	
NATPFLG1	28	
NATPMEMB	27	
NATPNAT	1C	
NATPNEXT	14	
NATPNIT	28	
NATPNNAM	2C	
NATPREV	1C	
NATPRI	0	
NATPRIN	0	0
NATPRIQ	2	0
NATP1CMP	28	40
NATP1WAT	28	80
NATREST	A	0
NATRTKN	4C	
NATSCHAN	24	
NATSEC	4	
NATSECN	4	0
NATSECQ	6	0
NATSINUS	14	40
NATSNIT	2C	
NATSPEND	14	10
NATSTATE	14	
NATSUMAX	14	80
NATSURCH	14	20
NATSXTRA	14	8
NATTADJ	9	2
NATTPM	9	40
NATTPMDE	9	10
NATTPMNO	9	20
NATTPRIV	9	8
NATTSTAT	9	80
NATTUNRE	9	4
NATTYPE	9	
NATVERN	0	1
NATVFPRI	43	40
NATVFSEC	43	20
NATVFSTA	43	80
NATVFYQ	43	

$NHD Programming Interface information

Programming Interface information

$NHD

End of Programming Interface information

$NHD Heading Information

Common Name: Network Job Header, Dataset Header, and Job Trailer DSECTs.
Macro ID: $NHD
DSECT Name: NJH NJH2 NJHE NJHT NJHU NJHO NJHA NJHOX NJT NJTS NJTU NJTO NDH NDHA NDHS NDHC NDHT NDHU NDHO NDHOX
Owning Component: JES2 (SCB1H)
Eye-Catcher ID: None
Storage Attributes: Subpool: 10
Key: 1
Residency: JES2 spool resident control block. Virtual and real storage may be anywhere when resident in memory.
Size: Variable, with a maximum size of NJHMAXLN for job headers, NDHMAXLN for dataset headers, or NJTMAXLN for job trailers. These control blocks will always reside in a 32K block of storage.
Created by: Network job receiver for jobs received from network;
Offload job receiver for reloaded jobs;
Route receiver for network jobs rerouted locally;
Network, offload, or route job/SYSOUT transmitters for locally submitted jobs (at transmission time).
In-storage versions of the control block are created by $NHDREAD or $NHDRCV.
Pointed to by: JCTNJHTR field of the $JCT data area (spool pointer)
JCTNJTTR field of the $JCT data area (spool pointer)
PDBNDHTR field of the $JCT data area (spool pointer)
Storage pointers in various PCE work areas and $NHDxxx service parameter lists.
Serialization: Serialized under the JES2 TCB
Function: This DSECT represents the JES2 mappings of Job and Data set Headers/Trailers described in "Network Job Entry Formats and Protocols" (SC23-0070). These control blocks are part of the networking protocol used to communicate between nodes in a network.

$NHD Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	NJH	NETWORK JOB HEADER RECORD

Comment

BLOCK CONTROL INFORMATION

End of Comment

0	(0)	ADDRESS	2	NJHLEN	LENGTH OF ENTIRE BLOCK
2	(2)	BITSTRING	1	NJHFLAGS	FLAGS
3	(3)	BITSTRING	0	NJHSEQ	TRANSMISSION SEQUENCE INDICATOR
3	(3)	X'4'	0	NJHLBCI	"*-NJH" LENGTH OF BLOCK CONTROL INFORMATION

Comment

GENERAL SECTION

End of Comment

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
4	(4)	SIGNED	4	NJHG (0)	START OF GENERAL SECTION
4	(4)	ADDRESS	2	NJHGLEN	LENGTH OF GENERAL SECTION
6	(6)	BITSTRING	2	NJHGFLGS (0)	SECTION TYPE FLAGS
6	(6)	ADDRESS	1	NJHGTYPE	ID FOR GENERAL SECTION
7	(7)	ADDRESS	1	NJHGMOD	MODIFIER
		....		NJHG$MOD	"B'00000000'" VALUE OF MODIFIER
8	(8)	ADDRESS	2	NJHGJID	JOB IDENTIFIER
10	(A)	CHARACTER	1	NJHGJCLS	JOB CLASS
11	(B)	CHARACTER	1	NJHGMCLS	MESSAGE CLASS
12	(C)	BITSTRING	1	NJHGFLG1	FLAGS
		1...		NJHGF1PR	"B'10000000'" DO NOT RECOMPUTE PRIORITY
		.1..		NJHGF1JN	"B'01000000'" Extended job number exists
		.... 1...		NJHGF1CF	"B'00001000'" Store-and-forward msg flag
		.... .1..		NJHGF1CA	"B'00000100'" Destination node msg flag
		.... ..1.		NJHGF1PE	"B'00000010'" NJHGPASS is encrypted
		1		NJHGF1NE	"B'00000001'" NJHGNPAS is encrypted
13	(D)	ADDRESS	1	NJHGPRIO	SELECTION PRIORITY
14	(E)	ADDRESS	1	NJHGORGQ	ORIGIN NODE SYSTEM QUALIFIER
15	(F)	ADDRESS	1	NJHGJCPY	JOB COPY COUNT
16	(10)	ADDRESS	1	NJHGLNCT	JOB LINE COUNT
17	(11)	BITSTRING	1		RESERVED
18	(12)	SIGNED	2	NJHGHOPS	NJE HOP COUNT
20	(14)	CHARACTER	8	NJHGACCT	NETWORKING ACCOUNT NUMBER
28	(1C)	CHARACTER	8	NJHGJNAM	JOB NAME
36	(24)	CHARACTER	8	NJHGUSID	USERID (TSO, VM) to NOTIFY
44	(2C)	CHARACTER	8	NJHGPASS	PASSWORD
52	(34)	CHARACTER	8	NJHGNPAS	NEW PASSWORD
60	(3C)	SIGNED	8	NJHGETS	ENTRY TIME/DATE STAMP
68	(44)	CHARACTER	8	NJHGORGN	ORIGIN NODE NAME
76	(4C)	CHARACTER	8	NJHGORGR	ORIGIN REMOTE NAME
84	(54)	CHARACTER	8	NJHGXEQN	EXECUTION NODE NAME
92	(5C)	CHARACTER	8	NJHGXEQU	EXECUTION USER ID(VM/370)
100	(64)	CHARACTER	8	NJHGPRTN	DEFAULT PRINT NODE NAME
108	(6C)	CHARACTER	8	NJHGPRTR	DEFAULT PRINT REMOTE NAME
116	(74)	CHARACTER	8	NJHGPUNN	DEFAULT PUNCH NODE NAME
124	(7C)	CHARACTER	8	NJHGPUNR	DEFAULT PUNCH REMOTE NAME
132	(84)	CHARACTER	8	NJHGFORM	JOB FORMS
140	(8C)	SIGNED	4	NJHGICRD	INPUT CARD COUNT
144	(90)	SIGNED	4	NJHGETIM	ESTIMATED EXECUTION TIME
148	(94)	SIGNED	4	NJHGELIN	ESTIMATED OUTPUT LINES
152	(98)	SIGNED	4	NJHGECRD	ESTIMATED OUTPUT CARDS
156	(9C)	CHARACTER	20	NJHGPRGN	PROGRAMMER'S NAME
176	(B0)	CHARACTER	8	NJHGROOM	PROGRAMMER'S ROOM NUMBER
184	(B8)	CHARACTER	8	NJHGDEPT	PROGRAMMER'S DEPARTMENT
192	(C0)	CHARACTER	8	NJHGBLDG	PROGRAMMER'S BUILDING NUMBER
200	(C8)	SIGNED	4	NJHGNREC	RECORD COUNT ON OUTPUT XMISSION
204	(CC)	SIGNED	4	NJHGJNO	Extended job number
208	(D0)	CHARACTER	8	NJHGNTYN	Node to send NOTIFY message
216	(D8)	SIGNED	4	NJHGEND (0)	END OF GENERAL SECTION
216	(D8)	X'24'	0	NJHGORGU	"NJHGUSID" ORGIN USER ID
216	(D8)	X'D4'	0	NJHGLLEN	"*-NJHG" LENGTH OF GENERAL SECTION

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NJH2	START OF JES2 SECTION
0	(0)	ADDRESS	2	NJH2LEN	LENGTH OF JES2 SECTION
2	(2)	BITSTRING	2	NJH2FLGS (0)	SECTION TYPE FLAGS
2	(2)	ADDRESS	1	NJH2TYPE	ID FOR JES2 SECTION
3	(3)	ADDRESS	1	NJH2MOD	MODIFIER
		....		NJH2$MOD	"B'00000000'" VALUE OF MODIFIER

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
					Comment
					The following modifier is reserved and may not be used in conjunction with NTYPJES2 in the job header as it is used internally in JES2 SP4.3.0.
					End of Comment
		1		NJH2$RSV	"B'00000001'" **RESERVED Modifier** Was NJHA$J2M previously
4	(4)	BITSTRING	1	NJH2FLG1	FLAGS
5	(5)	BITSTRING	3		RESERVED
8	(8)	CHARACTER	4	NJH2ACCT	ORIGINATOR'S JES2 ACCOUNT NUMBER
12	(C)	CHARACTER	8	NJH2USID	JMR installation data field
20	(14)	CHARACTER	8	NJH2USR (0)	JCL USER ID (BEFORE SAF CALL) VERIFIED USER ID (AFTER)
28	(1C)	CHARACTER	8	NJH2GRP (0)	JCL GROUP ID (BEFORE SAF CALL) VERIFIED GROUP ID (AFTER)
36	(24)	CHARACTER	8	NJH2SUSR (0)	SUBMITTER'S USER ID
44	(2C)	CHARACTER	8	NJH2SGRP (0)	SUBMITTER'S GROUP ID
44	(2C)	X'34'	0	NJH2ACML	"*-NJH2" MINIMUM LENGTH FOR FIELDS REQUIRED FOR AUTH CHECKS IN JES2
52	(34)	SIGNED	4	NJH2END (0)	END OF JES2 SECTION
52	(34)	X'34'	0	NJH2LLEN	"*-NJH2" LENGTH OF JES2 SECTION
					Comment
					NJH2FLG1 BIT DEFINITIONS
					End of Comment
		11		NJH2FJOB	"B'00000011'" JOB IS A BATCH JOB WHEN ZERO
		1		NJH2FSTC	"B'00000001'" JOB IS A STARTED TASK
		.... ..1.		NJH2FTSU	"B'00000010'" JOB IS TIME-SHARING USER
		.... .1..		NJH2USE	"B'00000100'" JCTUSEID PRESENT IN HEADER
		.... 1...		NJH2TPO	"B'00001000'" Output originated from a transaction program

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NJHE	START OF JOB SCHED SECTION
0	(0)	ADDRESS	2	NJHELEN	LEN OF JOB SCHEDULING SECTION
2	(2)	BITSTRING	2	NJHEFLGS (0)	JOB SCHEDULING FLAGS
2	(2)	ADDRESS	1	NJHETYPE	ID FOR JOB SCHEDULING SECTION
3	(3)	ADDRESS	1	NJHEMOD	MODIFIER FOR JOB SCHEDULING
		....		NJHE$JS	"B'00000000'" VALUE OF MODIFIER
4	(4)	BITSTRING	4	NJHEPAGE	ESTIMATED BEGIN PAGE COUNT
8	(8)	BITSTRING	4	NJHEBYTE	ESTIMATED BYTE COUNT
12	(C)	SIGNED	4	NJHEEND (0)	END OF JOB SCHEDULING SECTION
12	(C)	X'C'	0	NJHELLEN	"*-NJHE" LEN OF JOB SCHEDULING SECTION

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NJHT	Start of Security Section
0	(0)	ADDRESS	2	NJHTLEN	Length of Security Section
2	(2)	BITSTRING	2	NJHTFLGS (0)	Section type flags
2	(2)	ADDRESS	1	NJHTTYPE	ID for Security Section
3	(3)	ADDRESS	1	NJHTMOD	Modifier
		....		NJHT$MOD	"B'00000000'" Value of Modifier
4	(4)	ADDRESS	2	NJHTLENP	Length of prefix sectn
6	(6)	BITSTRING	1	NJHTFLG0	Security section flags
		1...		NJHTF0JB	"B'10000000'" Token represents job
7	(7)	ADDRESS	1		Reserved

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
8	(8)	CHARACTER	80	NJHTTOKN	Mapped SAF token
88	(58)	SIGNED	4	NJHTEND (0)	End of Security Section
88	(58)	X'58'	0	NJHTLLEN	"*-NJHT" Length of Security Section

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NJHA	START of Accounting Section
0	(0)	SIGNED	2	NJHALEN	Length of Acctg Section
2	(2)	BITSTRING	2	NJHAFLGS (0)	Section type flags
2	(2)	ADDRESS	1	NJHATYPE	ID for Accounting Section
3	(3)	ADDRESS	1	NJHAMOD	Modifier
		....		NJHA$MOD	"B'00000000'" Value of Modifier
4	(4)	BITSTRING	1	NJHAFLG1	Flags
		1...		NJHAF1OV	"B'10000000'" Accounting string can be overlaid by other than originating node
5	(5)	BITSTRING	1		Reserved for future use
6	(6)	ADDRESS	2	NJHAOFFS	Offset to beginning of accounting information
6	(6)	X'8'	0	NJHAFLEN	"*-NJHA" Length of fixed portion

Comment

Accounting strings from the JOB statement
The string is in the form:
AL1(number-of-substrings)
AL1(length-1st-string),C'1st-string'
AL1(length-2nd-string),C'2nd-string'
etc.
Note: The maximum length supported by JES2/JES3
is 143 bytes.

End of Comment

8	(8)	SIGNED	2	NJHAJLEN	Length of job accounting string (does not include the length of this half word)
10	(A)	SIGNED	1	NJHAJNR	Number of sub-strings
11	(B)	SIGNED	1	NJHAJAC1 (0)	First sub-string

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NJHU	START OF USER SECTION
0	(0)	ADDRESS	2	NJHULEN	LENGTH OF USER SECTION
2	(2)	BITSTRING	2	NJHUFLGS (0)	SECTION TYPE FLAGS
2	(2)	ADDRESS	1	NJHUTYPE	ID FOR USER SECTION -- BITS 0-1 MUST BE B'11' BITS 2-7 CAN BE ANYTHING
3	(3)	ADDRESS	1	NJHUMOD	MODIFIER --
		....		NJHU$MOD	"B'00000000'" MOD VALUE CAN BE ANYTHING
4	(4)	CHARACTER	4	NJHUCODE	SHARE/GUIDE INSTALLATION CODE PLACE USER INFORMATION FIELDS BETWEEN 'NJHUCODE' & 'NJHUEND'
8	(8)	SIGNED	4	NJHUEND (0)	END OF USER SECTION
8	(8)	X'8'	0	NJHULLEN	"*-NJHU" LENGTH OF USER SECTION

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NJHOX	Start of JES2 SYSAFF sect.
0	(0)	ADDRESS	2	NJHOXLN	Length of JES2 SYSAFF sect.
2	(2)	BITSTRING	2	NJHOXFGS (0)	Section type flags
2	(2)	ADDRESS	1	NJHOXTYP	ID for JES2 section
3	(3)	ADDRESS	1	NJHOXMOD	MODIFIER for SYSAFF sect.
		11..		NJHO$AFF	"B'11000000'" VALUE OF MODIFIER
4	(4)	BITSTRING	1	NJHOXFG1	FLAGS

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
		1...		NJHOX1IM	"B'10000000'" Job is independent mode
		.1..		NJHOX1NY	"B'01000000'" SYSAFF=ANYependent mode
5	(5)	BITSTRING	1		RESERVED
6	(6)	ADDRESS	2	NJHOXOFF	Offset to extended affinity

Comment

```
-------------------------------------------------------------
      Extended system affinity... pointed to by
      NJHOXOFF.
      The bits in NJHOXSAF reflect affinity for the
      system numbers from left to right: 12345678....
-------------------------------------------------------------
```

End of Comment

Dec	Hex	Type/Value	Len	Name (Dim)	Description
8	(8)	ADDRESS	2	NJHOXSAL	Length of extended sys aff
10	(A)	BITSTRING	1	NJHOXSAF	Extended system affinity
10	(A)	X'E'	0	NJHOXLLN	"*-NJHOX" Length of affinity sect.

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NJHO	START OF JES2 OFFLOAD SECT
0	(0)	ADDRESS	2	NJHOLEN	LENGTH OF JES2 OFFLOAD SECTION
2	(2)	BITSTRING	2	NJHOFLGS (0)	SECTION TYPE FLAGS
2	(2)	ADDRESS	1	NJHOTYPE	ID FOR JES2 SECTION
3	(3)	ADDRESS	1	NJHOMOD	MODIFIER
		1...		NJHO$MOD	"B'10000000'" VALUE OF MODIFIER
4	(4)	BITSTRING	1	NJHOFLG1	FLAGS
5	(5)	BITSTRING	1	NJHOFLG2	MORE FLAGS
6	(6)	BITSTRING	1	NJHOPRIO	CURRENT EXECUTING PRIORITY
7	(7)	BITSTRING	1	NJHOCLAS	CURRENT EXECUTING CLASS
8	(8)	SIGNED	4	NJHOTIME	OFFLOAD VERIFICATION TIME
12	(C)	SIGNED	4	NJHODATE	OFFLOAD VERIFICATION DATE
16	(10)	CHARACTER	8	NJHOPRTU	PRINT SPECIAL LOCAL ROUTING
24	(18)	CHARACTER	8	NJHOPUNU	PUNCH SPECIAL LOCAL ROUTING
32	(20)	SIGNED	2	NJHOOJNO	OFFLOADED JOB NUMBER

Comment

```
-------------------------------------------------------------
      The bits in NJHOSAF reflect affinity for the
      system numbers from right to left, with the topmost
      bit indicating independent mode: I7654321
-------------------------------------------------------------
```

End of Comment

Dec	Hex	Type/Value	Len	Name (Dim)	Description
34	(22)	BITSTRING	1	NJHOSAF	System affinity; used by systems SP430 and below
35	(23)	BITSTRING	1		Reserved
36	(24)	CHARACTER	8	NJHOPRTN	Job print command authority node name, will be blanks for special local
44	(2C)	BITSTRING	2	NJHOPRRM	Job print command authority remote number
46	(2E)	CHARACTER	8	NJHOPUNN	Job punch command authority node name, will be blanks for special local
54	(36)	BITSTRING	2	NJHOPURM	Job punch command authority remote number
56	(38)	SIGNED	4	NJHOOJBN	Offloaded job number
60	(3C)	CHARACTER	8	NJHOSRVC	$T'ed Service Class
68	(44)	CHARACTER	16	NJHOSCHE	$T'ed SCHENV
84	(54)	SIGNED	4	NJHOEND (0)	END OF JES2 OFFLOAD SECTION
84	(54)	X'54'	0	NJHOLLEN	"*-NJHO" LENGTH OF JES2 OFFLOAD SECTION
84	(54)	X'16C'	0	NJHLLEN	"NJHLBCI+NJHGLLEN+NJH2LLEN+NJHELLEN+NJHOLLEN" LENGTH OF DEFAULT JOB HEADER RECORD

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
					Comment
					ADD NJHULLEN TO THE ABOVE EQUATION TO INCLUDE USER SECTION NJHOFLG1 BIT DEFINITIONS
					End of Comment
		1...		NJHOF1HD	"B'10000000'" JOB HELD PRIOR TO TRANSMIT
		.1..		NJHOF1HO	"B'01000000'" ALL JOBS HELD BY OPERATOR PRIOR TO TRANSMIT
		..1.		NJHOF1MC	"B'00100000'" JOB CLASS MODIFIED
		...1		NJHOF1MS	"B'00010000'" JOB AFFINITY MODIFIED
		.... 1...		NJHOF1MH	"B'00001000'" JOB HOLD STATUS MODIFIED
		.... .1..		NJHOF1CV	"B'00000100'" JOB HOLD FOR CONVERSION BEFORE SPOOL OFFLOAD
					Comment
					NJHOFLG2 BIT DEFINITIONS
					End of Comment
		1...		NJHOF2PR	"B'10000000'" 'PROTECTED' attribute
		.1..		NJHOF2SD	"B'01000000'" Service class $T'ed
		..1.		NJHOF2ED	"B'00100000'" SCHENV $T'ed
					Comment
					SECTION TYPE FLAGS
					End of Comment
		....		NTYPGEN	"B'00000000'" GENERAL SECTION
		1...		NTYPSUB	"B'10000000'" SUBSYSTEM SECTION
		1... 1..1		NTYPGDS	"B'10001001'" DATA STREAM/ACCOUNTING SECTION
		1... 1.1.		NTYPGJS	"B'10001010'" JOB SCHEDULING SECTION
		1... 11..		NTYPSAF	"B'10001100'" Security Token Section
		1... 11.1		NTYPACCT	"B'10001101'" Job Accounting Section
		1... ...1		NTYPASP	"B'10000001'" ASP SUBSYSTEM SECTION
		1... ..1.		NTYPHASP	"B'10000010'" HASP SUBSYSTEM SECTION
		1... ..11		NTYPJES1	"B'10000011'" JES/RES SUBSYSTEM SECTION
		1... .1..		NTYPJES2	"B'10000100'" JES2 SUBSYSTEM SECTION
		1... .1.1		NTYPJES3	"B'10000101'" JES3 SUBSYSTEM SECTION
		1... .11.		NTYPPOWR	"B'10000110'" POWER/VS SUBSYSTEM SECTION
		1... .111		NTYPVNET	"B'10000111'" VM/370 SUBSYSTEM SECTION
		11..		NTYPUSER	"B'11000000'" USER SECTION
84	(54)	X'7B8B'	0	NJHMAXLN	"(253-4)*127+4" Maximum size of job header: 127 records allowed by sequencing field * maximum size of each record (253) less the size of the sequencing fields (4) + general header prefix.

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NJT	
					Comment
					BLOCK CONTROL INFORMATION
					End of Comment
0	(0)	ADDRESS	2	NJTLEN	LENGTH OF ENTIRE BLOCK
2	(2)	BITSTRING	1	NJTFLAGS	FLAGS
3	(3)	BITSTRING	0	NJTSEQ	TRANSMISSION SEQUENCE INDICATOR
3	(3)	X'4'	0	NJTLBCI	"*-NJT" LENGTH OF BLOCK CONTROL INFORMATION

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
				Comment	
GENERAL SECTION					
				End of Comment	
4	(4)	SIGNED	4	NJTG (0)	START OF GENERAL SECTION
4	(4)	ADDRESS	2	NJTGLEN	LENGTH OF GENERAL SECTION
6	(6)	BITSTRING	2	NJTGFLGS (0)	SECTION TYPE FLAGS
6	(6)	ADDRESS	1	NJTGTYPE	ID FOR GENERAL SECTION
7	(7)	ADDRESS	1	NJTGMOD	MODIFIER
		....		NJTG$MOD	"B'00000000'" VALUE OF MODIFIER
8	(8)	BITSTRING	1	NJTGFLG1	FLAGS
9	(9)	CHARACTER	1	NJTGXCLS	ACTUAL EXECUTION CLASS
10	(A)	BITSTRING	2		RESERVED
12	(C)	SIGNED	8	NJTGSTRT	EXECUTION START TIME/DATE
20	(14)	SIGNED	8	NJTGSTOP	EXECUTION STOP TIME/DATE
28	(1C)	SIGNED	4	NJTGACPU	ACTUAL CPU TIME
32	(20)	SIGNED	4	NJTGALIN	ACTUAL OUTPUT LINES
36	(24)	SIGNED	4	NJTGACRD	ACTUAL OUTPUT CARDS
40	(28)	SIGNED	4	NJTGEXCP	EXCP COUNT
44	(2C)	ADDRESS	1	NJTGIXPR	INITIAL XEQ SELECTION PRIORITY
45	(2D)	ADDRESS	1	NJTGAXPR	ACTUAL XEQ SELECTION PRIORITY
46	(2E)	ADDRESS	1	NJTGIOPR	INITIAL OUTPUT SELECTION PRIORITY
47	(2F)	ADDRESS	1	NJTGAOPR	ACTUAL OUTPUT SELECTION PRIORITY
48	(30)	BITSTRING	4	NJTGCC (0)	Job completion codes
48	(30)	BITSTRING	1	NJTGCOMP	Job completion indicator
		1...		NJTGCAB	"X'80'" ABEND CODE
		.1..		NJTGCCC	"X'40'" Completion code
48	(30)	X'0'	0	NJTGCUNK	"0" No completion info
48	(30)	X'1'	0	NJTGCNRM	"1" Job ended normally
48	(30)	X'2'	0	NJTGCECC	"2" Job ended by cc
48	(30)	X'3'	0	NJTGCJCL	"3" Job had a JCL error
48	(30)	X'4'	0	NJTGCCAN	"4" Job was canceled
48	(30)	X'5'	0	NJTGCABN	"5" Job ABENDed
48	(30)	X'6'	0	NJTGCCAB	"6" Converter ABENDed
48	(30)	X'7'	0	NJTGCSEC	"7" Security error
48	(30)	X'8'	0	NJTGCEOM	"8" Job ABENDed in end of memory processing
49	(31)	BITSTRING	3	NJTGCODE	Completion code (if applicable), or ABEND codes (system code in first 12 bits, user code in last 12 bits).
52	(34)	SIGNED	4	NJTGEND (0)	END OF GENERAL SECTION
52	(34)	X'30'	0	NJTGLLEN	"*-NJTG" LENGTH OF GENERAL SECTION

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NJTS	START OF ACCOUNTING SECTION
0	(0)	ADDRESS	2	NJTSLEN	LENGTH OF ACCOUNTING SECTION
2	(2)	BITSTRING	2	NJTSFLGS (0)	ACCOUNTING SECTION FLAGS
2	(2)	ADDRESS	1	NJTSTYPE	ID FOR GENERAL SECTION
3	(3)	ADDRESS	1	NJTSMOD	MODIFIER
		....		NJT$ACCT	"B'00000000'" VALUE OF MODIFIER
4	(4)	BITSTRING	4	NJTSAPAG	NUMBER OF 'BEGIN PAGE' FIELDS
8	(8)	BITSTRING	4	NJTSABYT	NUMBER OF DATA BYTES
12	(C)	SIGNED	4	NJTSEND (0)	END OF ACCOUNTING SECTION
12	(C)	X'C'	0	NJTSLLEN	"*-NJTS" LENGTH OF ACCOUNTING SECTION

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NJTU	START OF USER SECTION
0	(0)	ADDRESS	2	NJTULEN	LENGTH OF USER SECTION
2	(2)	BITSTRING	2	NJTUFLGS (0)	SECTION TYPE FLAGS

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
2	(2)	ADDRESS	1	NJTUTYPE	ID FOR USER SECTION -- BITS 0-1 MUST BE B'11' BITS 2-7 CAN BE ANYTHING
3	(3)	ADDRESS	1	NJTUMOD	MODIFIER --
		....		NJTU$MOD	"B'00000000'" MOD VALUE CAN BE ANYTHING
4	(4)	CHARACTER	4	NJTUCODE	SHARE/GUIDE INSTALLATION CODE PLACE USER INFORMATION FIELDS BETWEEN 'NJTUCODE' & 'NJTUEND'
8	(8)	SIGNED	4	NJTUEND (0)	END OF USER SECTION
8	(8)	X'8'	0	NJTULLEN	"*-NJTU" LENGTH OF USER SECTION

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NJTO	START OF JES2 OFFLOAD SECT
0	(0)	ADDRESS	2	NJTOLEN	LENGTH OF JES2 OFFLOAD SECTION
2	(2)	BITSTRING	2	NJTOFLGS (0)	SECTION TYPE FLAGS
2	(2)	ADDRESS	1	NJTOTYPE	ID FOR JES2 SECTION
3	(3)	ADDRESS	1	NJTOMOD	MODIFIER
		1...		NJTO$MOD	"B'10000000'" VALUE OF MODIFIER
4	(4)	SIGNED	4	NJTOTIME	OFFLOAD VERIFICATION TIME
8	(8)	SIGNED	4	NJTODATE	OFFLOAD VERIFICATION DATE
12	(C)	SIGNED	4	NJTOEND (0)	END OF JES2 OFFLOAD SECTION
12	(C)	X'C'	0	NJTOLLEN	"*-NJTO" LENGTH OF JES2 OFFLOAD SECTION
12	(C)	X'4C'	0	NJTLLEN	"NJTLBCI+NJTGLLEN+NJTSLLEN+NJTOLLEN" LENGTH OF DEFAULT JOB TRAILER RECORD

Comment

ADD NJTULLEN TO THE ABOVE EQUATION TO INCLUDE USER SECTION

End of Comment

12	(C)	X'7B8B'	0	NJTMAXLN	"(253-4)*127+4" Maximum size of job trailer: 127 records allowed by sequencing field * maximum size of each record (253) less the size of the sequencing fields (4) + general header prefix.

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NDH	NETWORK DATA SET HEADER RECORD

Comment

BLOCK CONTROL INFORMATION

End of Comment

0	(0)	ADDRESS	2	NDHLEN	LENGTH OF ENTIRE BLOCK
2	(2)	BITSTRING	1	NDHFLAGS	FLAGS
3	(3)	BITSTRING	0	NDHSEQ	TRANSMISSION SEQUENCE INDICATOR
3	(3)	X'4'	0	NDHLBCI	"*-NDH" LENGTH OF BLOCK CONTROL INFORMATION

Comment

GENERAL SECTION

End of Comment

4	(4)	SIGNED	4	NDHG (0)	START OF GENERAL SECTION
4	(4)	ADDRESS	2	NDHGLEN	LENGTH OF GENERAL SECTION
6	(6)	BITSTRING	2	NDHGFLGS (0)	SECTION TYPE FLAGS
6	(6)	ADDRESS	1	NDHGTYPE	ID FOR GENERAL SECTION
7	(7)	ADDRESS	1	NDHGMOD	MODIFIER
		....		NDHG$MOD	"B'00000000'" VALUE OF MODIFIER
8	(8)	CHARACTER	8	NDHGNODE	DESTINATION NODE NAME
16	(10)	CHARACTER	8	NDHGRMT	DESTINATION REMOTE NAME

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
24	(18)	CHARACTER	8	NDHGPROC	PROC INVOCATION NAME
32	(20)	CHARACTER	8	NDHGSTEP	STEP NAME
40	(28)	CHARACTER	8	NDHGDD	DD NAME
48	(30)	SIGNED	2	NDHGDSNO	DATA SET NUMBER
50	(32)	ADDRESS	1	NDHGSEC	SECURITY LEVEL
51	(33)	CHARACTER	1	NDHGCLAS	OUTPUT CLASS
52	(34)	SIGNED	4	NDHGNREC	RECORD COUNT
56	(38)	BITSTRING	1	NDHGFLG1	FLAGS
57	(39)	BITSTRING	1	NDHGRCFM	RECFM
58	(3A)	SIGNED	2	NDHGLREC	MAX LOGICAL RECORD LENGTH
60	(3C)	ADDRESS	1	NDHGDSCT	DATA SET COPY COUNT
61	(3D)	ADDRESS	1	NDHGFCBI	3211 FCB INDEX
62	(3E)	BITSTRING	1	NDHGLNCT	DATA SET LINCT (PAGE SIZE)
63	(3F)	BITSTRING	1		RESERVED FOR FUTURE USE
64	(40)	CHARACTER	8	NDHGFORM	FORMS ID
72	(48)	CHARACTER	8	NDHGFCB	FCB ID
80	(50)	CHARACTER	8	NDHGUCS	UCS ID
88	(58)	CHARACTER	8	NDHGXWTR	EXTERNAL WRITER ID
96	(60)	CHARACTER	8	NDHGNAME	Sysout DS name (DSNAME=)
104	(68)	BITSTRING	1	NDHGFLG2	SECOND FLAG BYTE
105	(69)	BITSTRING	1	NDHGUCSO	UCS OPTION BYTE
106	(6A)	BITSTRING	2		RESERVED FOR FUTURE USE
108	(6C)	CHARACTER	8	NDHGPMDE	PROCESS MODE
116	(74)	SIGNED	4	NDHGSEGN	Segment ID
120	(78)	SIGNED	4	NDHGEND (0)	END OF GENERAL SECTION
120	(78)	X'74'	0	NDHGLLEN	"*-NDHG" LENGTH OF GENERAL SECTION
120	(78)	X'78'	0	NDHLLEN	"*-NDH" LENGTH OF ENTIRE BLOCK

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NDHA	START OF 3800 CHAR SECTION
0	(0)	ADDRESS	2	NDHALEN	LENGTH OF 3800 CHAR SECTION
2	(2)	BITSTRING	2	NDHAFLGS (0)	FLAGS AND MODIFIER
2	(2)	ADDRESS	1	NDHATYPE	ID FOR GENERAL SECTION
3	(3)	ADDRESS	1	NDHAMOD	MODIFIER
		1...		NDHA$MOD	"B'10000000'" VALUE OF MODIFIER (3800 CHAR)
4	(4)	BITSTRING	1	NDHAFLG1	FLAGS
5	(5)	ADDRESS	1	NDHAFLCT	FLASH COUNT
6	(6)	BITSTRING	1	NDHATREF	TABLE REFERENCE CHARACTER
7	(7)	BITSTRING	1		RESERVED
8	(8)	CHARACTER	8	NDHATAB1	TRANSLATE TABLE 1
16	(10)	CHARACTER	8	NDHATAB2	TRANSLATE TABLE 2
24	(18)	CHARACTER	8	NDHATAB3	TRANSLATE TABLE 3
32	(20)	CHARACTER	8	NDHATAB4	TRANSLATE TABLE 4
40	(28)	CHARACTER	8	NDHAFLSH	FLASH CARTRIDGE ID
48	(30)	CHARACTER	8	NDHAMODF	COPY MODIFICATION ID
56	(38)	BITSTRING	8	NDHACPYG	COPY GROUPS
64	(40)	SIGNED	4	NDHAEND (0)	END OF 3800 CHAR SECTION
64	(40)	X'40'	0	NDHALLEN	"*-NDHA" LENGTH OF 3800 CHAR SECTION

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NDHS	START OF DATASTREAM SECT
0	(0)	ADDRESS	2	NDHSLEN	LEN OF DATA STREAM SECTION
2	(2)	BITSTRING	2	NDHSFLGS (0)	FLAGS AND MODIFIERS
2	(2)	ADDRESS	1	NDHSTYPE	ID FOR GENERAL SECTION
3	(3)	ADDRESS	1	NDHSMOD	MODIFIER
		....		NDHS$OUT	"B'00000000'" VALUE OF MODIFIER (OUTPUT)
4	(4)	ADDRESS	2	NDHSFLEN	SUBSECTION FIXED LENGTH
6	(6)	BITSTRING	1	NDHSFLG1	DATA STREAM FLAG
		1...		NDHS1CPD	"B'10000000'" DATA SET HAS CPDS CHARA.

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
7	(7)	BITSTRING	1		RESERVED
8	(8)	BITSTRING	8	NDHSJDVT	JDVT NAME
16	(10)	BITSTRING	4	NDHSNSTR	PAGE DATA PAGE COUNT
20	(14)	BITSTRING	8	NDHSGPID	OUTPUT NAME FOR DATA SET
20	(14)	X'1C'	0	NDHSLEN2	"*-NDHS" LENGTH OF DATA STREAM SECTION
28	(1C)	SIGNED	2	NDHSSDAT (0)	START OF VARIABLE DATA FOR SWBS

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NDHC	START OF CHAR CHANGE SECT
0	(0)	ADDRESS	2	NDHCLEN	LENGTH OF CHAR CHANGE GENERAL SECT
2	(2)	BITSTRING	2	NDHCFLGS (0)	SECTION TYPE FLAGS
2	(2)	ADDRESS	1	NDHCTYPE	ID FOR GENERAL SECTION
3	(3)	ADDRESS	1	NDHCMOD	MODIFIER
		.1..		NDHC$MOD	"B'01000000'" VALUE OF MODIFIER (CHAR CHANGE)
4	(4)	BITSTRING	1	NDHCFLG1	FLAGS
5	(5)	BITSTRING	1	NDHCRCFM	RECFM
6	(6)	ADDRESS	2	NDHCLREC	MAXIMUM LRECL
8	(8)	SIGNED	4	NDHCEND (0)	END OF CHAR CHANGE GENERAL SECTION
8	(8)	X'8'	0	NDHCLLEN	"*-NDHC" LENGTH OF CHAR CHANGE GENERAL SECT

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NDHT	Start of Security Section
0	(0)	ADDRESS	2	NDHTLEN	Length of Security Section
2	(2)	BITSTRING	2	NDHTFLGS (0)	Section type flags
2	(2)	ADDRESS	1	NDHTTYPE	ID for Security Section
3	(3)	ADDRESS	1	NDHTMOD	Modifier
		....		NDHT$MOD	"B'00000000'" Value of Modifier
4	(4)	ADDRESS	2	NDHTLENP	Length of prefix sectn
6	(6)	ADDRESS	2		Reserved
8	(8)	CHARACTER	80	NDHTTOKN	Mapped SAF token
88	(58)	SIGNED	4	NDHTEND (0)	End of Security Section
88	(58)	X'58'	0	NDHTLLEN	"*-NDHT" Length of Security Section

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NDHU	START OF USER SECTION
0	(0)	ADDRESS	2	NDHULEN	LENGTH OF USER SECTION
2	(2)	BITSTRING	2	NDHUFLGS (0)	SECTION TYPE FLAGS
2	(2)	ADDRESS	1	NDHUTYPE	ID FOR USER SECTION -- BITS 0-1 MUST BE B'11' BITS 2-7 CAN BE ANYTHING
3	(3)	ADDRESS	1	NDHUMOD	MODIFIER --
		....		NDHU$MOD	"B'00000000'" MOD VALUE CAN BE ANYTHING
4	(4)	CHARACTER	4	NDHUCODE	SHARE/GUIDE INSTALLATION CODE PLACE USER INFORMATION FIELDS BETWEEN 'NDHUCODE' & 'NDHUEND'
8	(8)	SIGNED	4	NDHUEND (0)	END OF USER SECTION
8	(8)	X'8'	0	NDHULLEN	"*-NDHU" LENGTH OF USER SECTION

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NDHO	START OF SPOOL OFFLOAD SECT
0	(0)	ADDRESS	2	NDHOLEN	LENGTH OF SPOF SECTION
2	(2)	BITSTRING	2	NDHOFLGS (0)	SECTION TYPE FLAGS
2	(2)	ADDRESS	1	NDHOTYPE	ID FOR JES2 SECTION
3	(3)	ADDRESS	1	NDHOMOD	MODIFIER

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
		1...		NDHO$MOD	"B'10000000'" VALUE OF MODIFIER
4	(4)	CHARACTER	8	NDHOUSER	OWNING USERID
12	(C)	SIGNED	4	NDHOTIME	JOE CREATION TIME
16	(10)	SIGNED	4	NDHODSNO	FULLWORD DATA SET NUMBER
20	(14)	SIGNED	2	NDHOPRIO	PRIORITY OF DATA SET
22	(16)	BITSTRING	1	NDHOFLG1	Flags
		1...		NDHOF1SF	"B'10000000'" DS had store-and-forward token at time of offload
		.1..		NDHOF1NF	"B'01000000'" DS had local token at time of offload
23	(17)	BITSTRING	1		RESERVED FOR FUTURE USE
24	(18)	SIGNED	4	NDHOEND (0)	END OF JES2 SPOF SECTION
24	(18)	X'18'	0	NDHOLLEN	"*-NDHO" LENGTH OF SPOF SECTION

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NDHOX	Start of TP offload section
0	(0)	ADDRESS	2	NDHOXLEN	Length of TP section
2	(2)	BITSTRING	2	NDHOXFGX (0)	Section type flags
2	(2)	ADDRESS	1	NDHOXTYP	Id for JES2 section
3	(3)	ADDRESS	1	NDHOXMOD	Modifier
		11..		NDHO$MTP	"B'11000000'" Value of modifier
4	(4)	BITSTRING	1	NDHOXFG1	DSCT flag byte 1
		1...		NDHOX1UN	"B'10000000'" Userid is undefined
5	(5)	BITSTRING	3		Reserved for future use
8	(8)	CHARACTER	8	NDHOXJBN	Job name
16	(10)	CHARACTER	8	NDHOXWKD	Work unit identifier
24	(18)	BITSTRING	8	NDHOXEST	Entry start clock time
32	(20)	BITSTRING	8	NDHOXXST	Execution start clock time
40	(28)	SIGNED	4	NDHOXETS	Entry time in 1/100's sec
44	(2C)	SIGNED	4	NDHOXEDT	Entry date 00yydddf
48	(30)	CHARACTER	8	NDHOXUID	User identification field
56	(38)	CHARACTER	8	NDHOXTUD	Transaction Program Userid
64	(40)	CHARACTER	4	NDHOXACT	Account number
68	(44)	SIGNED	4	NDHOXEND (0)	END OF JES2 TP SPOF SECTION
68	(44)	X'44'	0	NDHOXLLN	"*-NDHOX" LENGTH OF TP SPOF SECTION

Comment

GENERAL SECTION, NDHGFLG1

End of Comment

	1...	NDHGF1SP	"B'10000000'" SPIN DATA SET
	.1..	NDHGF1HD	"B'01000000'" HOLD DATA SET AT DESTINATION
	..1.	NDHGF1LG	"B'00100000'" JOB LOG INDICATOR
	...1	NDHGF1OV	"B'00010000'" PAGE OVERFLOW INDICATOR
	.... 1...	NDHGF1IN	"B'00001000'" PUNCH INTERPRET INDICATOR
	.... .1..	NDHGF1LC	"B'00000100'" NDHLINCT SET INDICATOR
	.... ..1.	NDHGF1ST	"B'00000010'" JOB STATISTICS IN JOB LOG

Comment

GENERAL SECTION,NDHGFLG2

End of Comment

	1...	NDHGF2PR	"B'10000000'" DATASET IS BEING PRINTED
	.1..	NDHGF2PU	"B'01000000'" DATASET IS BEING PUNCHED
	..1.	NDHGF2RM	"B'00100000'" FIELD NDHGRMT CONTAINS TRUE REMOTE (NOT USERID)
	...1	NDHGF2HB	"B'00010000'" HOLD DATASET BEFORE PRINT OR PUNCH OPERATION
	.... 1...	NDHGF2HA	"B'00001000'" HOLD DATASET AFTER PRINT OR PUNCH OPERATION

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
					Comment
					---------+----------+----------+----------+----------
					| NDHGFLG1 | NDHGFLG2 | NDHGFLG2 | NOTE #1 -
					OUTDISP | NDHGF1HD | NDHGF2HB | NDHGF2HA | These bit
					---------+----------+----------+----------| combinations only
					WRITE | 0 | 0 | 0 | occur when SYSOUT
					---------+----------+----------+----------| created by a
					KEEP | #1 0 | 0 | 1 | version 4 system
					---------+----------+----------+----------| is released by a
					WRITE | #1 0 | 1 | 0 | down level (pre
					---------+----------+----------+----------| SP410) system.
					KEEP | #1 0 | 1 | 1 |
					---------+----------+----------+----------|
					HOLD | #2 1 | 0 | 0 |
					---------+----------+----------+----------| NOTE #2 -
					KEEP | 1 | 0 | 1 | This combination will
					---------+----------+----------+----------| be considered as
					HOLD | 1 | 1 | 0 | OUTDISP = HOLD when
					---------|----------+----------+----------| received from a down
					LEAVE | 1 | 1 | 1 | level node.
					---------+----------+----------+----------+----------
					GENERAL SECTION,NDHGUCSO
					End of Comment
		1...		NDHGUCSD	"B'10000000'" BLOCK DATA CHECK OPTION
		.1..		NDHGUCSF	"B'01000000'" FOLD OPTION
					Comment
					3800 CHARACTERISTICS GENERAL SECTION, NDHAFLG1
					End of Comment
		1...		NDHAF1J	"B'10000000'" 'OPTCD=J' SPECIFIED
		.1..		NDHAF1BR	"B'01000000'" 'BURST=YES' SPECIFIED
		..1.		NDHAF1BN	"B'00100000'" 'BURST=NO' SPECIFIED
		.11.		NDHAF1BD	"B'01100000'" TEST 'BURST DEFAULT' BYTE REAL DEFAULT IS '.00.....'
68	(44)	X'7B8B'	0	NDHMAXLN	"(253-4)*127+4" Maximum size of dataset header: 127 records allowed by sequencing field * maximum size of each record (253) less the size of the sequencing fields (4) + general header prefix.

$NHD Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
NDH	0		NDHAMODF	30	40404040
NDHA	0		NDHATAB1	8	40404040
NDHA$MOD	3	80	NDHATAB2	10	40404040
NDHACPYG	38	0	NDHATAB3	18	40404040
NDHAEND	40		NDHATAB4	20	40404040
NDHAFLCT	5		NDHATREF	6	0
NDHAFLGS	2		NDHATYPE	2	
NDHAFLG1	4	0	NDHC	0	
NDHAFLSH	28	40404040	NDHC$MOD	3	40
NDHAF1BD	44	60	NDHCEND	8	
NDHAF1BN	44	20	NDHCFLGS	2	
NDHAF1BR	44	40	NDHCFLG1	4	0
NDHAF1J	44	80	NDHCLEN	0	
NDHALEN	0	40	NDHCLLEN	8	8
NDHALLEN	40	40	NDHCLREC	6	
NDHAMOD	3		NDHCMOD	3	

Name	Hex Offset	Hex Value
NDHCRCFM	5	0
NDHCTYPE	2	
NDHFLAGS	2	0
NDHG	4	
NDHG$MOD	7	0
NDHGCLAS	33	C1
NDHGDD	28	40404040
NDHGDSCT	3C	
NDHGDSNO	30	0
NDHGEND	78	
NDHGFCB	48	40404040
NDHGFCBI	3D	
NDHGFLGS	6	
NDHGFLG1	38	0
NDHGFLG2	68	0
NDHGFORM	40	40404040
NDHGF1HD	44	40
NDHGF1IN	44	8
NDHGF1LC	44	4
NDHGF1LG	44	20
NDHGF1OV	44	10
NDHGF1SP	44	80
NDHGF1ST	44	2
NDHGF2HA	44	8
NDHGF2HB	44	10
NDHGF2PR	44	80
NDHGF2PU	44	40
NDHGF2RM	44	20
NDHGLEN	4	
NDHGLLEN	78	74
NDHGLNCT	3E	
NDHGLREC	3A	0
NDHGMOD	7	
NDHGNAME	60	40404040
NDHGNODE	8	40404040
NDHGNREC	34	0
NDHGPMDE	6C	40404040
NDHGPROC	18	40404040
NDHGRCFM	39	0
NDHGRMT	10	40404040
NDHGSEC	32	
NDHGSEGN	74	0
NDHGSTEP	20	40404040
NDHGTYPE	6	
NDHGUCS	50	40404040
NDHGUCSD	44	80
NDHGUCSF	44	40
NDHGUCSO	69	0
NDHGXWTR	58	40404040
NDHLBCI	3	4
NDHLEN	0	
NDHLLEN	78	78
NDHMAXLN	44	7B8B
NDHO	0	
NDHO$MOD	3	80
NDHO$MTP	3	C0
NDHODSNO	10	0
NDHOEND	18	
NDHOFLGS	2	
NDHOFLG1	16	
NDHOF1NF	16	40
NDHOF1SF	16	80
NDHOLEN	0	
NDHOLLEN	18	18
NDHOMOD	3	
NDHOPRIO	14	0
NDHOTIME	C	0
NDHOTYPE	2	
NDHOUSER	4	40404040
NDHOX	0	
NDHOXACT	40	
NDHOXEDT	2C	
NDHOXEND	44	
NDHOXEST	18	
NDHOXETS	28	
NDHOXFGX	2	
NDHOXFG1	4	
NDHOXJBN	8	
NDHOXLEN	0	
NDHOXLLN	44	44
NDHOXMOD	3	
NDHOXTUD	38	
NDHOXTYP	2	
NDHOXUID	30	
NDHOXWKD	10	
NDHOXXST	20	
NDHOX1UN	4	80
NDHS	0	
NDHS$OUT	3	0
NDHSEQ	3	0
NDHSFLEN	4	1C
NDHSFLGS	2	
NDHSFLG1	6	0
NDHSGPID	14	0
NDHSJDVT	8	0
NDHSLEN	0	
NDHSLEN2	14	1C
NDHSMOD	3	
NDHSNSTR	10	0
NDHSSDAT	1C	
NDHSTYPE	2	
NDHS1CPD	6	80
NDHT	0	
NDHT$MOD	3	0
NDHTEND	58	
NDHTFLGS	2	
NDHTLEN	0	
NDHTLENP	4	
NDHTLLEN	58	58
NDHTMOD	3	
NDHTTOKN	8	40404040
NDHTTYPE	2	
NDHU	0	
NDHU$MOD	3	0
NDHUCODE	4	40404040
NDHUEND	8	
NDHUFLGS	2	
NDHULEN	0	
NDHULLEN	8	8
NDHUMOD	3	
NDHUTYPE	2	
NJH	0	
NJHA	0	
NJHA$MOD	3	0
NJHAFLEN	6	8
NJHAFLGS	2	
NJHAFLG1	4	
NJHAF1OV	4	80
NJHAJAC1	B	
NJHAJLEN	8	

Name	Hex Offset	Hex Value
NJHAJNR	A	
NJHALEN	0	
NJHAMOD	3	
NJHAOFFS	6	
NJHATYPE	2	
NJHE	0	
NJHE$JS	3	0
NJHEBYTE	8	0
NJHEEND	C	
NJHEFLGS	2	
NJHELEN	0	
NJHELLEN	C	C
NJHEMOD	3	
NJHEPAGE	4	0
NJHETYPE	2	
NJHFLAGS	2	0
NJHG	4	
NJHG$MOD	7	0
NJHGACCT	14	40404040
NJHGBLDG	C0	40404040
NJHGDEPT	B8	40404040
NJHGECRD	98	0
NJHGELIN	94	0
NJHGEND	D8	
NJHGETIM	90	0
NJHGETS	3C	0
NJHGFLGS	6	
NJHGFLG1	C	0
NJHGFORM	84	40404040
NJHGF1CA	C	4
NJHGF1CF	C	8
NJHGF1JN	C	40
NJHGF1NE	C	1
NJHGF1PE	C	2
NJHGF1PR	C	80
NJHGHOPS	12	0
NJHGICRD	8C	0
NJHGJCLS	A	C1
NJHGJCPY	F	
NJHGJID	8	0
NJHGJNAM	1C	40404040
NJHGJNO	CC	0
NJHGLEN	4	
NJHGLLEN	D8	D4
NJHGLNCT	10	
NJHGMCLS	B	C1
NJHGMOD	7	
NJHGNPAS	34	
NJHGNREC	C8	0
NJHGNTYN	D0	40404040
NJHGORGN	44	40404040
NJHGORGQ	E	
NJHGORGR	4C	40404040
NJHGORGU	D8	24
NJHGPASS	2C	
NJHGPRGN	9C	40404040
NJHGPRIO	D	
NJHGPRTN	64	40404040
NJHGPRTR	6C	40404040
NJHGPUNN	74	40404040
NJHGPUNR	7C	40404040
NJHGROOM	B0	40404040
NJHGTYPE	6	
NJHGUSID	24	40404040
NJHGXEQN	54	40404040
NJHGXEQU	5C	40404040
NJHLBCI	3	4
NJHLEN	0	
NJHLLEN	54	16C
NJHMAXLN	54	7B8B
NJHO	0	
NJHO$AFF	3	C0
NJHO$MOD	3	80
NJHOCLAS	7	0
NJHODATE	C	0
NJHOEND	54	
NJHOFLGS	2	
NJHOFLG1	4	0
NJHOFLG2	5	0
NJHOF1CV	54	4
NJHOF1HD	54	80
NJHOF1HO	54	40
NJHOF1MC	54	20
NJHOF1MH	54	8
NJHOF1MS	54	10
NJHOF2ED	54	20
NJHOF2PR	54	80
NJHOF2SD	54	40
NJHOLEN	0	
NJHOLLEN	54	54
NJHOMOD	3	
NJHOOJBN	38	
NJHOOJNO	20	0
NJHOPRIO	6	0
NJHOPRRM	2C	0
NJHOPRTN	24	40404040
NJHOPRTU	10	40404040
NJHOPUNN	2E	40404040
NJHOPUNU	18	40404040
NJHOPURM	36	0
NJHOSAF	22	0
NJHOSCHE	44	
NJHOSRVC	3C	
NJHOTIME	8	0
NJHOTYPE	2	
NJHOX	0	
NJHOXFGS	2	
NJHOXFG1	4	0
NJHOXLLN	A	E
NJHOXLN	0	
NJHOXMOD	3	
NJHOXOFF	6	
NJHOXSAF	A	0
NJHOXSAL	8	
NJHOXTYP	2	
NJHOX1IM	4	80
NJHOX1NY	4	40
NJHSEQ	3	0
NJHT	0	
NJHT$MOD	3	0
NJHTEND	58	
NJHTFLGS	2	
NJHTFLG0	6	0
NJHTF0JB	6	80
NJHTLEN	0	
NJHTLENP	4	
NJHTLLEN	58	58
NJHTMOD	3	
NJHTTOKN	8	40404040
NJHTTYPE	2	

Name	Hex Offset	Hex Value
NJHU	0	
NJHU$MOD	3	0
NJHUCODE	4	40404040
NJHUEND	8	
NJHUFLGS	2	
NJHULEN	0	
NJHULLEN	8	8
NJHUMOD	3	
NJHUTYPE	2	
NJH2	0	
NJH2$MOD	3	0
NJH2$RSV	3	1
NJH2ACCT	8	40404040
NJH2ACML	2C	34
NJH2END	34	
NJH2FJOB	34	3
NJH2FLGS	2	
NJH2FLG1	4	0
NJH2FSTC	34	1
NJH2FTSU	34	2
NJH2GRP	1C	0
NJH2LEN	0	
NJH2LLEN	34	34
NJH2MOD	3	
NJH2SGRP	2C	0
NJH2SUSR	24	0
NJH2TPO	34	8
NJH2TYPE	2	
NJH2USE	34	4
NJH2USID	C	40404040
NJH2USR	14	0
NJT	0	
NJT$ACCT	3	0
NJTFLAGS	2	0
NJTG	4	
NJTG$MOD	7	0
NJTGACPU	1C	0
NJTGACRD	24	0
NJTGALIN	20	0
NJTGAOPR	2F	
NJTGAXPR	2D	
NJTGCAB	30	80
NJTGCABN	30	5
NJTGCC	30	
NJTGCCAB	30	6
NJTGCCAN	30	4
NJTGCCC	30	40
NJTGCECC	30	2
NJTGCEOM	30	8
NJTGCJCL	30	3
NJTGCNRM	30	1
NJTGCODE	31	
NJTGCOMP	30	
NJTGCSEC	30	7
NJTGCUNK	30	0
NJTGEND	34	
NJTGEXCP	28	0
NJTGFLGS	6	
NJTGFLG1	8	0
NJTGIOPR	2E	
NJTGIXPR	2C	
NJTGLEN	4	
NJTGLLEN	34	30
NJTGMOD	7	
NJTGSTOP	14	0
NJTGSTRT	C	0
NJTGTYPE	6	
NJTGXCLS	9	C1
NJTLBCI	3	4
NJTLEN	0	
NJTLLEN	C	4C
NJTMAXLN	C	7B8B
NJTO	0	
NJTO$MOD	3	80
NJTODATE	8	0
NJTOEND	C	
NJTOFLGS	2	
NJTOLEN	0	
NJTOLLEN	C	C
NJTOMOD	3	
NJTOTIME	4	0
NJTOTYPE	2	
NJTS	0	
NJTSABYT	8	0
NJTSAPAG	4	0
NJTSEND	C	
NJTSEQ	3	0
NJTSFLGS	2	
NJTSLEN	0	
NJTSLLEN	C	C
NJTSMOD	3	
NJTSTYPE	2	
NJTU	0	
NJTU$MOD	3	0
NJTUCODE	4	40404040
NJTUEND	8	
NJTUFLGS	2	
NJTULEN	0	
NJTULLEN	8	8
NJTUMOD	3	
NJTUTYPE	2	
NTYPACCT	54	8D
NTYPASP	54	81
NTYPGDS	54	89
NTYPGEN	54	0
NTYPGJS	54	8A
NTYPHASP	54	82
NTYPJES1	54	83
NTYPJES2	54	84
NTYPJES3	54	85
NTYPPOWR	54	86
NTYPSAF	54	8C
NTYPSUB	54	80
NTYPUSER	54	C0
NTYPVNET	54	87

$NIT Programming Interface information

Programming Interface information

$NIT

The following fields are **NOT** programming interface information:

- NITNSACT
- NITPASS
- NITSPASS

End of Programming Interface information

$NIT Heading Information

Common Name: Node Information Table
Macro ID: $NIT
DSECT Name: NIT NITPSECT
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: The pool of NITs is preceded by an eyecatcher '**$NIT POOL**' in the header for the pool.
Offset: HDPID-HDP
Length: 13
Storage Attributes: Subpool: 0
Key: 1
Residency: Virtual and real storage anywhere in the private storage of the JES2 address space.
Size: NITMINL during JES2 initialization
NITMINL plus NITPL*$NUMPATH (later)
Created by: JES2 initialization
Pointed to by: $NITABLE field of the $HCT data area
$OWNNIT field of the $HCT data area
NSANIT field of the $NSACT data area
NITNXTSB field of the $NIT data area
NITPLINE field of the $NIT data area
NITPPNOD field of the $NIT data area
NATPNIT field of the $NAT data area
NATSNIT field of the $NAT data area
Serialization: JES2 main task serialization for most fields.
There are some fields that can only be used under the subtask in "full path" processing.
Function: To define the nodes in the network this JES2 system is a part of, as well as the paths to those nodes. The NIT is a contiguous piece of virtual storage, with one element for each node ($MAXNODE during initialization, (NJEDEF NODENUM) after initialization). The correct length at any one time is in the $NITESIZ HCT field.

$NIT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NIT	
0	(0)	X'3'	0	NITVERS	"3" Current NIT version
0	(0)	CHARACTER	8	NITNODE	NODE IDENTIFICATION
8	(8)	SIGNED	2	NITNUM	INTERNAL NODE NUMBER (BINARY)
10	(A)	BITSTRING	1	NITPRINC	JOB RECEIVER PRIORITY INCREMENT
11	(B)	BITSTRING	1	NITPRLIM	JOB RECEIVER PRIORITY LIMIT
12	(C)	SIGNED	2	NITLOGN	LOGON DCT NUMBER
14	(E)	BITSTRING	1	NITFLAG	FLAGS

Comment

EQU B'10000000' RESERVED FOR FUTURE USE

End of Comment

	.1..	NITFLAGA	"B'01000000'" AUTO DIAL BSC LINE
	..1.	NITFLAGX	"B'00100000'" EXCLUSIVE CONNECTION

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
		.... 1...		NITFLAGR	"B'00001000'" NODE RESTRICTED FROM LOCAL COMMANDS
		.... .1..		NITFLAGJ	"B'00000100'" NODE RESTRICTED FROM JOB COMMANDS
		.... ..1.		NITFLAGD	"B'00000010'" NODE RESTRICTED FROM DEVICE COMMANDS
		1		NITFLAGS	"B'00000001'" NODE RESTRICTED FROM SYSTEM COMMANDS
15	(F)	BITSTRING	1	NITFLG2	Flag byte
		1...		NIT2NOPM	"B'10000000'" Nonpath manager indicator
		.1..		NIT2PRIV	"B'01000000'" Private node indicator
		..1.		NIT2TRAC	"B'00100000'" $TRACE this node
		...1		NIT2OWN	"B'00010000'" Local node indicator
		.... 1...		NIT2ADJ	"B'00001000'" Adjacent node indicator
		.... .1..		NIT2IRST	"B'00000100'" Ignore resistance from node if non-PM signon
		.... ..1.		NIT2ENDN	"B'00000010'" End node only indicator
16	(10)	BITSTRING	1	NITSF	SYSTEM CONDITION FLAGS
		1...		NITSFPJT	"B'10000000'" JOB TRANSMITTERS ARE DRAINED
		.1..		NITSFPJR	"B'01000000'" JOB RECEIVERS ARE DRAINED
		..1.		NITSFPST	"B'00100000'" SYSOUT TRANSMITTERS ARE DRAINED
		...1		NITSFPSR	"B'00010000'" SYSOUT RECEIVERS ARE DRAINED
		.... 1...		NITSFHJR	"B'00001000'" JOB RECEIVERS ARE TO HOLD JOBS
		.... .1..		NITSFHSR	"B'00000100'" SYSOUT RECEIVERS ARE TO HOLD JOBS
		.... ..1.		NITSFPEN	"B'00000010'" Use Password encryption
		1		NITSFREA	"B'00000001'" Node is currently reachable
17	(11)	CHARACTER	8	NITPASS	Password expected from node
25	(19)	CHARACTER	8	NITSPASS	Password sent to node
33	(21)	BITSTRING	1	NITCMPCT	COMPACTION TABLE ID
34	(22)	SIGNED	2	NITREST	DEFAULT APPL RESISTANCE
36	(24)	SIGNED	4	(0)	
36	(24)	ADDRESS	4	NITNSACT	Ptr to related NSACT entry
40	(28)	ADDRESS	4	NITNXTSB	Ptr to next NIT in subnet
44	(2C)	CHARACTER	8	NITSUBST	Subnet name
52	(34)	CHARACTER	8	NITLMODE	Default VTAM logmode
60	(3C)	SIGNED	2	NITLINE	Dedicated line number
62	(3E)	SIGNED	2		Reserved for future use
62	(3E)	X'40'	0	NITMINL	"*-NIT" Minimum (INIT) NIT elmt len
64	(40)	ADDRESS	4	NITNAT	Chain of related NATs

Comment

The following 3 fields are used by full path.

End of Comment

68	(44)	ADDRESS	4	NITNITPN	Next NIT in full path chain
72	(48)	ADDRESS	4	NITNITPP	Prev NIT in full path chain
76	(4C)	ADDRESS	4	NITBNITP	Addr of best unexplored NPMNITP
80	(50)	ADDRESS	4	NITRESV3	Reserved for future use
80	(50)	X'54'	0	NITBLEN	"*-NIT" Length of the base NIT
84	(54)	BITSTRING	1	NITPATH1	First path information

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NITPSECT	INDIVIDUAL PATH FIELDS
0	(0)	X'0'	0	NITP	"*,16" Path element
0	(0)	ADDRESS	4	NITPLINE	Associated DCT or NIT
0	(0)	X'0'	0	NITL	"NITPLINE-NITPSECT,4" Offset for line
4	(4)	ADDRESS	4	NITPREST	PATH RESISTANCE
4	(4)	X'4'	0	NITR	"NITPREST-NITPSECT,4" Offset for resistance
4	(4)	BITSTRING	0	NITPMT	"X'7FFFFFFF'" Indicate empty path
8	(8)	ADDRESS	4	NITPPNOD	Addr of prev NIT in path

$NIT Cross Reference

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
12	(C)	BITSTRING	1	NITPFLAG	Flag byte
		1...		NITPFSTA	"B'10000000'" Path is via static connect
		.1..		NITPFNIT	"B'01000000'" NITPLINE points to a NIT
		..1.		NITPFSUB	"B'00100000'" Path is through a subnet
13	(D)	BITSTRING	1	NITPMEMB	Member number if NITPFSTA is set
13	(D)	X'D'	0	NITM	"NITPMEMB-NITPSECT,1" Offset for member
14	(E)	BITSTRING	1	NITPMEMP	Member with primary line
14	(E)	X'E'	0	NITMP	"NITPMEMP-NITPSECT,1" Offset for primary member
15	(F)	BITSTRING	1		Reserved for future use
16	(10)	SIGNED	4	(0)	Ensure fullword allignment
16	(10)	X'10'	0	NITPL	"*-NITPSECT"
16	(10)	X'10'	0	NITPNEXT	"*"

$NIT Cross Reference

Name	Hex Offset	Hex Value
NIT	0	
NITBLEN	50	54
NITBNITP	4C	
NITCMPCT	21	0
NITFLAG	E	
NITFLAGA	E	40
NITFLAGD	E	2
NITFLAGJ	E	4
NITFLAGR	E	8
NITFLAGS	E	1
NITFLAGX	E	20
NITFLG2	F	
NITL	0	0
NITLINE	3C	
NITLMODE	34	
NITLOGN	C	
NITM	D	D
NITMINL	3E	40
NITMP	E	E
NITNAT	40	
NITNITPN	44	
NITNITPP	48	
NITNODE	0	40404040
NITNSACT	24	
NITNUM	8	0
NITNXTSB	28	
NITP	0	0
NITPASS	11	40404040
NITPATH1	54	
NITPFLAG	C	0
NITPFNIT	C	40
NITPFSTA	C	80
NITPFSUB	C	20
NITPL	10	10
NITPLINE	0	
NITPMEMB	D	
NITPMEMP	E	
NITPMT	4	FFFFFF
NITPNEXT	10	10
NITPPNOD	8	
NITPREST	4	
NITPRINC	A	0
NITPRLIM	B	F
NITPSECT	0	
NITR	4	4
NITREST	22	
NITRESV3	50	
NITSF	10	
NITSFHJR	10	8
NITSFHSR	10	4
NITSFPEN	10	2
NITSFPJR	10	40
NITSFPJT	10	80
NITSFPSR	10	10
NITSFPST	10	20
NITSFREA	10	1
NITSPASS	19	40404040
NITSUBST	2C	
NITVERS	0	3
NIT2ADJ	F	8
NIT2ENDN	F	2
NIT2IRST	F	4
NIT2NOPM	F	80
NIT2OWN	F	10
NIT2PRIV	F	40
NIT2TRAC	F	20

$NJTWORK Programming Interface information

Programming Interface information

$NJTWORK

End of Programming Interface information

$NJTWORK Heading Information

Common Name: JES2 Job Transmitter PCE Work Area
Macro ID: $NJTWORK
DSECT Name: PCE ($NJTWORK is part of the PCE DSECT)
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: 'PCE '
Offset: PCEEYE-PCE
Length: 4
Storage Attributes: Subpool: See $PCE
Key: See $PCE
Residency: See $PCE
Size: See symbol JTWPCEWS for the length of this work area. The overall length of the PCE is stored in field PCELENG.
Created by: See $PCE
Pointed to by: $NJTPCE field of the $HCT data area
$OJTPCE field of the $HCT data area
$NRTPCE field of the $HCT data area
DCTPCE field of the $DCT data area
See $PCE for other pointer fields that apply to all PCE types.
Serialization: Normal PCE dispatch serialization
Function: The fields in this work area are used by a JES2 Job Transmitter Processor and by its support routines and exits. $NJTWORK maps the variable PCE work area that begins at label PCEWORK. The fields defined in $NJTWORK are actually part of the PCE DSECT, but only map PCEs with the value PCENJTID or PCENRTID in the second byte of field PCEID.

This PCE is device related. This processor type has a one-to-one relationship to devices. Field PCEDCT points to a Device Control Table (DCT) and field DCTPCE in that DCT points to this PCE.

$NJTWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	PCE	, Continue PCE DSECT
240	(F0)	BITSTRING	8	JTWKEY (0)	JOB AND DATA SET KEYS
240	(F0)	BITSTRING	4	JTWJBKEY	JOB IDENTIFIER KEY
244	(F4)	BITSTRING	4	JTWDSKEY	DATA SET KEY
248	(F8)	SIGNED	4	JTWNJTON (2)	PROCESSOR SIGN-ON TIME AND DATE
256	(100)	DBL WORD	8	JTWEXTPL	$EXTP PARAMETER LIST AREA
264	(108)	BITSTRING	1	JTWRSRCB	SRCB SAVED FOR ROUTE RECEIVER
265	(109)	BITSTRING	1	JTWFLAG1	FLAG BYTE
266	(10A)	SIGNED	2	JTWHDRLN	SAVE AREA FOR JCT HEADER LENGTH
268	(10C)	SIGNED	4	JTWCOUNT	COUNT OF RECORDS TRANSMITTED
272	(110)	ADDRESS	4	JTWSBUF	SMF BUFFER POINTER
276	(114)	ADDRESS	4	JTWNJH	Address of job header
280	(118)	ADDRESS	4	JTWNJT	Address of job trailer
284	(11C)	ADDRESS	4	JTWIOT	IOT Buffer address
288	(120)	ADDRESS	4	JTWJCT	JCT Buffer address
292	(124)	ADDRESS	4	JTWDSBUF	JCL/SYSIN data buffer
296	(128)	ADDRESS	4	JTWRECCT	Total record count

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
300	(12C)	ADDRESS	4	JTWCURRC	Current record count, not including header/trailer records
304	(130)	BITSTRING	1	JTWORCFM	Previous RECFM
305	(131)	BITSTRING	1	JTWNRCFM	New RECFM
306	(132)	BITSTRING	1	JTWOLRCL	Previous LRECL
307	(133)	BITSTRING	1	JTWNLRCL	New LRECL
308	(134)	CHARACTER	10	JTWDEVN	Device name for messages
318	(13E)	BITSTRING	2		Reserved for future use
				Comment	
		THE FOLLOWING TWO FIELDS MUST BE KEPT TOGETHER			
				End of Comment	
320	(140)	DBL WORD	8		SNA WORK AREA
328	(148)	BITSTRING	256	JTWWORK	WORK AREA
584	(248)	ADDRESS	4	JTWPARM	NODE TABLE ADDRESS
588	(24C)	ADDRESS	4		CONTROL BLOCK ADDRESS
592	(250)	ADDRESS	4		CLASS LIST ADDRESS
596	(254)	ADDRESS	4		ADDRESS OF JQE
600	(258)	ADDRESS	1		CLASS LIST LENGTH
601	(259)	ADDRESS	1		QUEUE TYPE SPECIFIED
602	(25A)	ADDRESS	1		WORK SELECTION TYPE FLAG
603	(25B)	ADDRESS	1		RESERVED FOR FUTURE USE
603	(25B)	X'248'	0	JTWLST	"JTWPARM,*-JTWPARM" QGET PARAMETER LIST STORAGE
603	(25B)	X'16C'	0	JTWPCEWS	"*-PCEWORK" LENGTH OF PCE WORK AREA JTWFLAG1
		1...		JTWF1MSG	"B'10000000'" INACTIVE MESSAGE HAS BEEN ISSUED
		.1..		JTWF1DAT	"B'01000000'" INVALID DATA BLOCK MSG REQUIRED
		..1.		JTWF1HLD	"B'00100000'" HOLD JOB AFTER RESTART OF DEVICE
		...1		JTWF1PEF	"B'00010000'" PASSWORD ENCRYPTION FAILED
		.... 1...		JTWF1JDM	"B'00001000'" Write JOB deleted message
		.... .1..		JTWF1CUQ	"B'00000100'" Return job to current queue
		.... ..1.		JTWF1NDT	"B'00000010'" No data records have been transmitted yet.
		1		JTWF1SRC	"B'00000001'" Found an SCR; LRECL/RECFM may have changed

$NJTWORK Cross Reference

Name	Hex Offset	Hex Value
JTWCOUNT	10C	
JTWCURRC	12C	
JTWDEVN	134	
JTWDSBUF	124	
JTWDSKEY	F4	
JTWEXTPL	100	
JTWFLAG1	109	
JTWF1CUQ	25B	4
JTWF1DAT	25B	40
JTWF1HLD	25B	20
JTWF1JDM	25B	8
JTWF1MSG	25B	80
JTWF1NDT	25B	2
JTWF1PEF	25B	10
JTWF1SRC	25B	1
JTWHDRLN	10A	
JTWIOT	11C	
JTWJBKEY	F0	
JTWJCT	120	
JTWKEY	F0	
JTWLST	25B	248
JTWNJH	114	
JTWNJT	118	
JTWNJTON	F8	
JTWNLRCL	133	
JTWNRCFM	131	
JTWOLRCL	132	
JTWORCFM	130	
JTWPARM	248	
JTWPCEWS	25B	16C
JTWRECCT	128	
JTWRSRCB	108	
JTWSBUF	110	
JTWWORK	148	
PCE	0	

$NSACT Programming Interface Information

Programming Interface Information

$NSACT

End of Programming Interface Information

$NSACT Heading Information

Common Name: Network Subnet AnChor Table entry
Macro ID: $NSACT
DSECT Name: NSACT
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: NSA
Offset: 0
Length: 4
Storage Attributes: Subpool: 0
KEY: 1
Residency: VIRTUAL - Anywhere REAL - Anywhere
Size: See NSALEN
Created by: PSTNODE
FREED BY: Address space termination
Pointed to by: PCTNSAAQ fields of the PCT data area
NSANEXT fields of the NSACT data area
FREQUENCY: One per each defined subnet
Serialization: Normal PCE dispatch serialization
Function: The NSACT is a linked list of the subnets currently defined to the system and a pointer to a list of NITs describing the members of that subnet.

$NSACT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NSACT	
0	(0)	CHARACTER	4	NSAID	Eyecatcher
4	(4)	ADDRESS	1	NSAVER	NSA version field
4	(4)	X'1'	0	NSAVERN	"1" NSA version number
5	(5)	BITSTRING	3		Reserved for future use
8	(8)	CHARACTER	8	NSANAME	Subnet name
16	(10)	ADDRESS	4	NSANEXT	Next subnet pointer
20	(14)	ADDRESS	4	NSANIT	First NIT related to subnet
20	(14)	X'18'	0	NSALEN	"*-NSACT" Length of an NSACT

$NSRWORK Programming Interface information

Programming Interface information

$NSRWORK

End of Programming Interface information

$NSRWORK Heading Information

Common Name: JES2 SYSOUT Receiver PCE Work Area
Macro ID: $NSRWORK
DSECT Name: PCE ($NSRWORK is part of the PCE DSECT)
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: 'PCE '
Offset: PCEEYE-PCE
Length: 4
Storage Attributes: Subpool: See $PCE
Key: See $PCE
Residency: See $PCE
Size: See symbol SRWPCEWS for the length of this work area. The overall length of the PCE is stored in field PCELENG.
Created by: See $PCE
Pointed to by: The $NSRPCE field of the $HCT data area points into the $PCEORG/$PCELAST chain to the first Network SYSOUT Receiver PCE. Since this chain contains all PCEs, use the PCEID field to determine when you have chained past the last PCE of this type.
The $OSRPCE field of the $HCT data area points into the $PCEORG/$PCELAST chain to the first Offload SYSOUT Receiver PCE. Since this chain contains all PCEs, use the PCEID field to determine when you have chained past the last PCE of this type.
The DCTPCE field of the $DCT data area (see "Function" below)
Serialization: Normal PCE dispatch serialization
Function: The fields in this work area are used by a JES2 Network SYSOUT Receiver or by an Offload SYSOUT Receiver Processor and by its support routines and exits. $NSRWORK maps the variable PCE work area that begins at label PCEWORK. The fields defined in $NSRWORK are actually part of the PCE DSECT, but only map PCEs with the value PCENSRID in the second byte of field PCEID.

This PCE is device related. This processor type has a one-to-one relationship to devices. Field PCEDCT points to a Device Control Table (DCT) and field DCTPCE in that DCT points to this PCE.

$NSRWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	PCE	, Continue PCE DSECT
240	(F0)	X'F0'	0	SRWINIT	"*" START OF DATA TO BE ZEROED AT INITIALIZATION

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
					Comment
		NJE RECORD TYPE FLAGS			
					End of Comment
240	(F0)	BITSTRING	1	SRW$EXP	'EXPECTED' TYPES (FLAGS)
241	(F1)	BITSTRING	1	SRW$RCV	'RECEIVED' TYPE (FLAG)
242	(F2)	BITSTRING	1	SRW$LST	'LAST RECEIVED' TYPE (FLAG)
		1...		SRW$JH	"B'10000000'" JOB HEADER
		.1..		SRW$JT	"B'01000000'" JOB TRAILER
		..1.		SRW$DSH	"B'00100000'" DATA SET HEADER
		...1		SRW$DST	"B'00010000'" DATA SET TRAILER (NOT USED)
		.... 1...		SRW$DATA	"B'00001000'" DATA RECORD
		.... .1..		SRW$EOF	"B'00000100'" NORMAL END-OF-FILE
		.... ..1.		SRW$JES2	"B'00000010'" JES2 SECTION RECEIVED
		1		SRW$SPOF	"B'00000001'" OFFLOAD SECTION RECEIVED
243	(F3)	BITSTRING	1	SRWSRCB	SRCB OF RECIEVED RECORD
244	(F4)	BITSTRING	1	SRWFLAG1	CONTROL FLAGS
		1...		SRW$ULT	"B'10000000'" THIS NODE IS ULTIMATE DEST OF AT LEAST ONE DATA SET
		.1..		SRW$TCEL	"B'01000000'" RECEIVED DS IS TRACK-CELLED
		..1.		SRW$DS	"B'00100000'" DATA RECORD HAS BEEN RECEIVED
		...1		SRW$JTRC	"B'00010000'" JOB TRAILER HAS BEEN RECEIVED
		.... 1...		SRW$DRN	"B'00001000'" DRAIN SPOF RECEIVER AFTER JOB
		.... .1..		SRW$SIGN	"B'00000100'" $GETSMFB and sign-on msg issued, at least one DSH received for this job
		.... ..1.		SRW$DRFD	"B'00000010'" Data record received since last header processed
		1		SRW$SKDR	"B'00000001'" On - at least one DSH accepted in this hdr sequence Off - skipping data records
245	(F5)	BITSTRING	1	SRWFLAG2	CONTROL FLAGS
		1...		SRW$BLNK	"B'10000000'" DON'T TRUNC BLANKS
		.1..		SRW$PAGE	"B'01000000'" RECEIVED DS IS PAGE RECORD
		.1..		SRW2NBUF	"B'01000000'" NEW SCR BUFFER NEEDED
		..1.		SRW2MDES	"B'00100000'" JOB HAS MULTIPLE DESTS
		...1		SRW2UNSP	"B'00010000'" UNSPUN IOT'S EXIST
		.... 1...		SRW2STKN	"B'00001000'" Submitter job token found
		.... .1..		SRW2TSCR	"B'00000100'" Token SCR in buffer
		.... ..1.		SRW2TREC	"B'00000010'" Token recv for current DS
		1		SRW2GGIN	"B'00000001'" Grouping strings object is initialized
246	(F6)	BITSTRING	1	SRWFLAG3	GENERAL USE FLAG BYTE
		1...		SRW3BFER	"B'10000000'" LARGE SMF BUFFER TOO SMALL TO HOLD SWBTU
		.1..		SRW3JDVT	"B'01000000'" Job's JDVT name is set
		..1.		SRW3OAFF	"B'00100000'" Affinity section of header processed
		...1		SRW3LTOK	"B'00010000'" Get local token
247	(F7)	BITSTRING	1	SRWERROR	ERROR FLAGS (AND OTHER SRW FLAGS)
		1...		SRW$CAN	"B'10000000'" CANCEL JOB (TELL XMITTER)
		.1..		SRW$SKIP	"B'01000000'" CANCEL JOB (DON'T TELL XMITTER)
		..1.		SRW$DSU	"B'00100000'" THIS NODE IS ULTIMATE DEST FOR THIS DATA SET
		...1		SRW$DPRG	"B'00010000'" One or more data sets in job not received
		.... 1...		SRW$DIST	"B'00001000'" Severe error in selection
		.... .1..		SRW$NOJB	"B'00000100'" No data received thru EOF
		.... ..1.		SRW$HOPX	"B'00000010'" Job's hop count exceeded
248	(F8)	SIGNED	1	SRWRETRY	IDENTIFIES RETRY POINT TO SET IF AN ABEND OCCURS
248	(F8)	X'0'	0	SRWRSUSP	"0" RETRY TO SUSPEND RECEIVER
248	(F8)	X'1'	0	SRWRCANC	"1" RETRY TO CANCEL CURRENT JOB
249	(F9)	SIGNED	1	SRWRETSV	PLACE TO SAVE CURRENT RETRY POINT INDICATOR
250	(FA)	BITSTRING	7		RESERVED
264	(108)	DBL WORD	8	SRWDBL	SCRATCH DOUBLEWORD
272	(110)	ADDRESS	4	SRWJCT	JOB CONTROL TABLE POINTER
276	(114)	ADDRESS	4	SRWIOT1	1ST (ALLOCATION) IOT POINTER
280	(118)	ADDRESS	4	SRWIOTC	CURRENT IOT POINTER

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
284	(11C)	ADDRESS	4	SRWENIOT	END-OF-CURRENT-IOT POINTER
288	(120)	ADDRESS	4	SRWIOTCN	LAST NORMAL IOT ADDRESS
292	(124)	ADDRESS	4	SRWIOTSH	LAST SPIN IOT ADDRESS
296	(128)	ADDRESS	4	SRWDSBUF	Current data buffer address
300	(12C)	ADDRESS	4	SRWHMTTR	MTTR OF BUFFER 1
304	(130)	ADDRESS	4	SRWHDSAV	SAVE AREA FOR BUFFER DISPL
308	(134)	ADDRESS	4	SRWSCRPT	SCR ENTRY POINTER
312	(138)	ADDRESS	4	SRWSCRST	SCR START ADDRESS
316	(13C)	ADDRESS	4	SRWENBUF	END-OF-BUFFER POINTER
320	(140)	ADDRESS	4	SRWENREC	END-OF-INPUT-RECORD POINTER
324	(144)	ADDRESS	4	SRWNXTRC	POINTER TO NEXT REC IN BUFFER
328	(148)	ADDRESS	4	SRWPREVR	POINTER TO RECORD HEADER OF CURRENT SPANNED RECORD SEGMENT
332	(14C)	SIGNED	4	SRWRECCT	Number of records received
336	(150)	SIGNED	4	SRWHDRCT	NUMBER OF DS HEADERS IN CURRENT MULTI-DEST DS
340	(154)	SIGNED	4	SRWCURRC	NUMBER OF JOERECCT ALREADY RECEIVED
344	(158)	ADDRESS	4	SRWGGST	ADDRESS OF GROUPING STRINGS OBJECT
348	(15C)	ADDRESS	4	SRWPDDB	Address of last PDDB processed
352	(160)	ADDRESS	4	SRWNJH	Network Job Header address
356	(164)	ADDRESS	4	SRWNJT	Network Job Trailer address
360	(168)	ADDRESS	4	SRWNDH	Network Dataset Header addr
364	(16C)	SIGNED	4	SRWJBNUM	Work area for job number
368	(170)	SIGNED	4	(0)	ENSURE FULLWORD ALIGNMENT
368	(170)	CHARACTER	1	SRWRSBTL	SWBTU POINTER LIST ENTRY FOR SWBTUREQ RETRIEVE SERVICE

Comment

Fields SRWNSWB through SRWSSBTL are used in handling the SWBIT buffer(s) containing any SWBTUs from the DSH data stream section.

End of Comment

376	(178)	SIGNED	2	SRWNSWB	Number of SWBTU's for PDDB
378	(17A)	SIGNED	2	SRWSWBL	Total size of SWBTU's for PDDB
380	(17C)	SIGNED	4	SRWSEGID	Segment ID from PDDB
384	(180)	ADDRESS	4	SRWSWBTU	Address of SWBTU in data set header
388	(184)	ADDRESS	4	SRWHSWBF	SWBIT buffer chain
392	(188)	ADDRESS	4	SRWSWPTL	Address of SWBTU pointer list used by SJF SWBTU services
396	(18C)	ADDRESS	4	SRWIPSWB	Addr of IPADDR work area
400	(190)	SIGNED	2	SRWIPSWL	Length of IPADDR work area
402	(192)	SIGNED	2		Reserved
404	(194)	SIGNED	4	(0)	Alignment
404	(194)	CHARACTER	8	SRWSSBTL	Default SWBTU pointer list used when only one SWBTU exists
412	(19C)	SIGNED	4	SRWTTR	MOST RECENTLY ACQUIRED TTR

Comment

The following fields point to the various tokens associated with a job/data set being received.

End of Comment

416	(1A0)	ADDRESS	4	SRWJTKNA	Job header token address
420	(1A4)	ADDRESS	4	SRWIJTKN	Internal format Job token
424	(1A8)	ADDRESS	4	SRWTKNA	External format token which was last processed
428	(1AC)	ADDRESS	4	SRWITKN	Internal version of SRWTKNA
432	(1B0)	ADDRESS	4	SRWIVTKB	Token returned by VERIFYX using SRWTKNA (output destined local)
436	(1B4)	ADDRESS	4	SRWISFTK	Store and forward token for current job
440	(1B8)	BITSTRING	1	SRWFLAGT	Token flags
		1...		SRWTVXPS	"B'10000000'" VERIFYX RC for SRWIVTKN On-> RC=0/4 off-> RC=8

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
		.1..		SRWTSFPS	"B'01000000'" VERIFYX RC for SRWISFTK On-> RC=0/4 off-> RC=8
441	(1B9)	BITSTRING	3		Reserved for future use
444	(1BC)	BITSTRING	8	SRWTABSV	MASTER TAB SAVE AREA
452	(1C4)	SIGNED	4	SRWTSAVE (6)	TEMPORARY SAVE AREA
476	(1DC)	SIGNED	8	SRWKEY (0)	JOB AND DATA SET KEYS
476	(1DC)	SIGNED	4	SRWJBKEY	JOB KEY
480	(1E0)	SIGNED	4	SRWDSKEY	DATA SET KEY
484	(1E4)	SIGNED	4	SRWMDKEY	DATASET KEY FOR MULTIDEST PDDB
488	(1E8)	SIGNED	2	SRWSYSKY	PREVIOUSLY RECEIVED SYSTEM KEY
492	(1EC)	SIGNED	4	SRWMXKEY	DATA SET KEYS OVER 32,767
496	(1F0)	SIGNED	4	SRWLASKY	LAST DATA SET KEY PROCESSED
500	(1F4)	BITSTRING	1	SRWTXTLN	TEXT LENGTH SAVE AREA
501	(1F5)	BITSTRING	1	SRWMVCLN	EXECUTE-MOVE LENGTH FOR TEXT
502	(1F6)	SIGNED	2	SRWSRTL	CUMULATIVE SEGMENT LENGTH
504	(1F8)	SIGNED	2	SRWSTXTL	TOTAL SPAN TEXT LENGTH
508	(1FC)	SIGNED	4	SRWCOUNT	COUNT OF RECORDS RECEIVED
512	(200)	ADDRESS	4	SRWSBUF	SMF BUFFER POINTER
516	(204)	SIGNED	4	SRWROUTE	Route cd for work selection
520	(208)	CHARACTER	8	SRWUSER	User ID for work selection
528	(210)	CHARACTER	136	SRWSAFI	$SAFINFO parameter list
664	(298)	CHARACTER	72	SRWWRKA	WORK AREA FOR $WTO
664	(298)	X'1F0'	0	SRWINITL	"*-SRWINIT" LENGTH FOR INITIAL CLEAR
736	(2E0)	ADDRESS	4	SRWSQD	Subtask Q Descriptor addr
740	(2E4)	ADDRESS	4	SRWTWA	Token work area address
744	(2E8)	CHARACTER	10	SRWDEVN	Device name for messages

Comment

Dummy PDDB for $EXIT 47

End of Comment

754	(2F2)	CHARACTER	1	SRWTPDDB	PDDB slot for $EXIT 47

Comment

INPUT AREA FOR RTAM RECORDS

End of Comment

1138	(472)	SIGNED	2		ALIGNMENT + SCAN TERMINATOR
1140	(474)	BITSTRING	274	SRWINPUT	Input Data Area

Comment

NORMAL (UNSPANNED) RECORD

First mapping of SRWINPUT

End of Comment

1140	(474)	BITSTRING	1	SRWLRECL	LOGICAL RECORD LENGTH
1141	(475)	BITSTRING	1	SRWCCTL	CARRIAGE CTL (OR TEXT IF NO CC)
1141	(475)	X'476'	0	SRWTEXT	"*" TEXT
1141	(475)	X'2'	0	SRWLEN1	"*-SRWINPUT"

Comment

Second mapping of SRWINPUT
Spanned record (first part)

End of Comment

1140	(474)	BITSTRING	1	SRWSEGL	TEXT LENGTH, THIS SEGMENT

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
1141	(475)	SIGNED	2	SRWSRECL	LRECL FOR ENTIRE SPANNED RECORD
1143	(477)	BITSTRING	1	SRWSCCTL	CARRIAGE CTL (OR TEXT IF NO CC)
1143	(477)	X'478'	0	SRWSTXT1	"*" START OF TEXT
1143	(477)	X'4'	0	SRWLEN2	"*-SRWINPUT"

Comment

Third mapping of SRWINPUT
Spanned record (Second & subsequent parts)

End of Comment

1140	(474)	BITSTRING	1		TEXT LENGTH, THIS SEGMENT
1140	(474)	X'475'	0	SRWSTXT2	"*" START OF TEXT
1140	(474)	X'1'	0	SRWLEN3	"*-SRWINPUT"

Comment

Fourth mapping of SRWINPUT

End of Comment

1140	(474)	BITSTRING	1	SRWNMSID	TARGET SYS ID FOR MESSAGE
1141	(475)	CHARACTER	70	SRWNMMSG	DELETION EXIT MESSAGE TEXT
1212	(4BC)	SIGNED	4	(0)	5 WORD PARMLIST FOR EXIT
1212	(4BC)	SIGNED	4	SRWNMPL1	ADDR OF NETWORK JOB HDR
1216	(4C0)	SIGNED	4	SRWNMPL2	ADDR OF NETWORK D.S. HDR
1220	(4C4)	SIGNED	4	SRWNMPL3	ADDR OF PDDB
1224	(4C8)	SIGNED	4	SRWNMPL4	ADDR OF TARGET SYSTEM ID
1228	(4CC)	SIGNED	4	SRWNMPL5	ADDR OF SRWNMMSG TEXT AREA
1212	(4BC)	BITSTRING	1	SRWNMCMB	CMB FOR NOTIFY MESSAGE
1212	(4BC)	X'110'	0	SRWLEN4	"*-SRWINPUT"

Comment

End of SRWINPUT mappings.

End of Comment

1412	(584)	ADDRESS	2	(0)	Ensure that SRWINPUT
1412	(584)	ADDRESS	2	(0)	is larger than each
1412	(584)	ADDRESS	2	(0)	of the individual
1412	(584)	ADDRESS	2	(0)	mappings of SRWINPUT
1416	(588)	SIGNED	4	SRWRECNT	Sysout record count
1420	(58C)	SIGNED	4	SRWPGCT	Sysout page count
1424	(590)	SIGNED	4	SRWBYTCT	Sysout byte count
1424	(590)	X'4A4'	0	SRWPCEWS	"*-PCEWORK" LENGTH OF PCE WORK AREA

$NSRWORK Cross Reference

Name	Hex Offset	Hex Value
PCE	0	
SRW$BLNK	F5	80
SRW$CAN	F7	80
SRW$DATA	F2	8
SRW$DIST	F7	8
SRW$DPRG	F7	10
SRW$DRFD	F4	2
SRW$DRN	F4	8
SRW$DS	F4	20
SRW$DSH	F2	20
SRW$DST	F2	10
SRW$DSU	F7	20
SRW$EOF	F2	4
SRW$EXP	F0	
SRW$HOPX	F7	2
SRW$JES2	F2	2
SRW$JH	F2	80
SRW$JT	F2	40
SRW$JTRC	F4	10
SRW$LST	F2	
SRW$NOJB	F7	4
SRW$PAGE	F5	40
SRW$RCV	F1	
SRW$SIGN	F4	4
SRW$SKDR	F4	1
SRW$SKIP	F7	40
SRW$SPOF	F2	1
SRW$TCEL	F4	40
SRW$ULT	F4	80
SRWBYTCT	590	0
SRWCCTL	475	
SRWCOUNT	1FC	
SRWCURRC	154	
SRWDBL	108	
SRWDEVN	2E8	
SRWDSBUF	128	
SRWDSKEY	1E0	
SRWENBUF	13C	
SRWENIOT	11C	
SRWENREC	140	
SRWERROR	F7	
SRWFLAGT	1B8	
SRWFLAG1	F4	
SRWFLAG2	F5	
SRWFLAG3	F6	
SRWGGST	158	
SRWHDRCT	150	
SRWHDSAV	130	
SRWHMTTR	12C	
SRWHSWBF	184	
SRWIJTKN	1A4	
SRWINIT	F0	F0
SRWINITL	298	1F0
SRWINPUT	474	
SRWIOTC	118	
SRWIOTCN	120	
SRWIOTSH	124	
SRWIOT1	114	
SRWIPSWB	18C	
SRWIPSWL	190	
SRWISFTK	1B4	
SRWITKN	1AC	
SRWIVTKB	1B0	

Name	Hex Offset	Hex Value
SRWJBKEY	1DC	
SRWJBNUM	16C	
SRWJCT	110	
SRWJTKNA	1A0	
SRWKEY	1DC	
SRWLASKY	1F0	
SRWLEN1	475	2
SRWLEN2	477	4
SRWLEN3	474	1
SRWLEN4	4BC	110
SRWLRECL	474	
SRWMDKEY	1E4	
SRWMVCLN	1F5	
SRWMXKEY	1EC	
SRWNDH	168	
SRWNJH	160	
SRWNJT	164	
SRWNMCMB	4BC	
SRWNMMSG	475	
SRWNMPL1	4BC	
SRWNMPL2	4C0	
SRWNMPL3	4C4	
SRWNMPL4	4C8	
SRWNMPL5	4CC	
SRWNMSID	474	
SRWNSWB	178	
SRWNXTRC	144	
SRWPCEWS	590	4A4
SRWPDDB	15C	
SRWPGCT	58C	0
SRWPREVR	148	
SRWRCANC	F8	1
SRWRECCT	14C	
SRWRECNT	588	0
SRWRETRY	F8	
SRWRETSV	F9	
SRWROUTE	204	
SRWRSBTL	170	
SRWRSUSP	F8	0
SRWSAFI	210	
SRWSBUF	200	
SRWSCCTL	477	
SRWSCRPT	134	
SRWSCRST	138	
SRWSEGID	17C	
SRWSEGL	474	
SRWSQD	2E0	
SRWSRCB	F3	
SRWSRECL	475	
SRWSRTL	1F6	
SRWSSBTL	194	
SRWSTXTL	1F8	
SRWSTXT1	477	478
SRWSTXT2	474	475
SRWSWBL	17A	
SRWSWBTU	180	
SRWSWPTL	188	
SRWSYSKY	1E8	
SRWTABSV	1BC	
SRWTEXT	475	476
SRWTKNA	1A8	
SRWTPDDB	2F2	
SRWTSAVE	1C4	

$NSRWORK Cross Reference

Name	Hex Offset	Hex Value
SRWTSFPS	1B8	40
SRWTTR	19C	
SRWTVXPS	1B8	80
SRWTWA	2E4	
SRWTXTLN	1F4	
SRWUSER	208	
SRWWRKA	298	
SRW2GGIN	F5	1
SRW2MDES	F5	20
SRW2NBUF	F5	40
SRW2STKN	F5	8
SRW2TREC	F5	2
SRW2TSCR	F5	4
SRW2UNSP	F5	10
SRW3BFER	F6	80
SRW3JDVT	F6	40
SRW3LTOK	F6	10
SRW3OAFF	F6	20

$NSTWORK Programming Interface information

Programming Interface information

$NSTWORK

End of Programming Interface information

$NSTWORK Heading Information

Common Name: JES2 Sysout Transmitter PCE Work Area
Macro ID: $NSTWORK
DSECT Name: PCE ($NSTWORK is part of the PCE DSECT)
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: 'PCE '
Offset: PCEEYE-PCE
Length: 4
Storage Attributes: Subpool: See $PCE
Key: See $PCE
Residency: See $PCE
Size: See symbol STWPCEWS for the length of this work area. The overall length of the PCE is stored in field PCELENG.
Created by: See $PCE
Pointed to by: The $NSTPCE field of the $HCT data area points into the $PCEORG/$PCELAST chain to the first network sysout transmitter PCE.
Since this chain contains all PCEs, use the PCEID field to determine when you have chained past the last PCE of this type.
The $OSTPCE field of the $HCT data area points into the $PCEORG/$PCELAST chain to the first offload sysout transmitter PCE.
Since this chain contains all PCEs, use the PCEID field to determine when you have chained past the last PCE of this type.
See $PCE for other pointer fields that apply to all PCE types.
Serialization: Normal PCE dispatch serialization
Function: The fields in this work area are used by the JES2 Network Sysout Transmitter and the Offload Sysout Transmitter processor and by its support routines and exits.
$NSTWORK maps the variable PCE work area that begins at label PCEWORK. The fields defined in $NSTWORK are actually part of the PCE DSECT, but only map PCEs with the value PCENSTID in the second byte of field PCEID.

This PCE is device related. This processor type has a one-to-one relationship to devices. Field PCEDCT points to a Device Control Table (DCT) and field DCTPCE in that DCT points to this PCE.

$NSTWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	PCE	HASP NETWORK SYSOUT TRANSMITTER
240	(F0)	X'F0'	0	STWINIT	"*" START OF DATA TO BE ZEROED AT INITIALIZATION
240	(F0)	SIGNED	2	STWNODE	DESTINATION NODE FOR CURRNT JOB
242	(F2)	BITSTRING	1	STWDCTF	FLAGS TO BE MOVED TO DCT
243	(F3)	BITSTRING	1	STWJQEF	FLAGS TO BE MOVED TO JQE

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
244	(F4)	BITSTRING	1	STWFLAGS	INTERNAL FLAGS FOR TRANSMITTER
		1...		STW$NORM	"B'10000000'" NORMAL DATA SETS TO TRANSMIT
		.1..		STW$SPIN	"B'01000000'" SPIN DATA SETS TO TRANSMIT
		..1.		STW$IDLE	"B'00100000'" 'IDLE' MESSAGE ISSUED
		...1		STW$MULT	"B'00010000'" MULTI-DESTINATION SCAN MODE
		.... .1..		STW$AUTH	"B'00000100'" Authorization failure
		.... ..1.		STW$IOT	"B'00000010'" IOT SPOOL I/O ERROR
		1		STW$INV	"B'00000001'" FIRST BLOCK IS INVALID
245	(F5)	BITSTRING	1	STWFLAG2	SPOOL OFFLOAD FLAG BYTE
		1...		STW$HCQ	"B'10000000'" DS FOUND ON HARDCPY QUEUE
		.1..		STW$NODH	"B'01000000'" This dataset header not to be sent (exit from multi-dest mode)
246	(F6)	BITSTRING	1	STWFLAG3	GENERAL USE FLAG BYTE
		1...		STW3ES57	"B'10000000'" PRODUCE THE ESS SECTION OF THE SMF TYPE 57 RECORD
		.1..		STW3BFER	"B'01000000'" LARGE SMF BUFFER TOO SMALL TO HOLD SWBTU
		..1.		STW3MERG	"B'00100000'" SWBTU merge is required for this data set
		...1		STW3SWRD	"B'00010000'" 1 - The JOE SWBIT chain is to be read in 0 - The PDDB SWBIT chain is to be read in
		.... 1...		STW3OPER	"B'00001000'" A SWBIT read error occurred
		.... .1..		STW3XIST	"B'00000100'" Data stream section was found in an existing DSH
		.... ..1.		STW3ERON	"B'00000010'" The JOE SWBIT chain only contains erase lists
		1		STW3SMAB	"B'00000001'" Abend in $SWBMERG service
247	(F7)	BITSTRING	1	STWFLAG4	General use flag byte
		1...		STW4JHS	"B'10000000'" Network job header needs to be sent for this data set
		.1..		STW4SMRC	"B'01000000'" Abend in $SWBMERG cleanup call
		..1.		STW4HJOS	"B'00100000'" Hold all the JOEs on the transmitter chain
248	(F8)	ADDRESS	4	STWIOTBF	IOT BUFFER ADDRESS
252	(FC)	ADDRESS	4	STWENPDB	POINTER PAST END OF PDDB'S IN IOT
256	(100)	ADDRESS	4	STWSPINJ	CURRENT SPIN JOE ADDRESS
260	(104)	ADDRESS	4	STWDSBUF	DATA SET BUFFER ADDRESS
264	(108)	ADDRESS	4	STWENBUF	END-OF-BUFFER ADDR FOR COMPARISON
268	(10C)	ADDRESS	4	STWHDBUF	DATA SET HEADER BUFFER ADDRESS
272	(110)	ADDRESS	4	STWHDTTR	MTTR OF BLOCK IN STWHDBUF
276	(114)	ADDRESS	4	STWNJH	Job header buffer address
280	(118)	ADDRESS	4	STWNJT	Job trailer buffer address
284	(11C)	ADDRESS	4	STWNDH	DS header buffer address

Comment

Fields STWNSWB through STWIPSWL are used in handling the SWBIT buffer(s) containing any SWBTUs from the DSH data stream section.

End of Comment

288	(120)	SIGNED	2	STWNSWB	Total number of SWBTUs
290	(122)	SIGNED	2	STWSWBL	Total size of SWBTUs
292	(124)	SIGNED	2	STWPSWBL	Total size of PDDB SWBTUs
294	(126)	SIGNED	2	STWJSWBL	Total size of JOE SWBTUs
296	(128)	SIGNED	2	STWPLSIZ	Size of SWBTU merge or splice pointer list entry
298	(12A)	SIGNED	2	STWMRGLN	Length of merged SWBTU storage area
300	(12C)	SIGNED	4	STWSEGID	Segment ID from PDDB
304	(130)	ADDRESS	4	STWSWBUF	PDDB SWBIT buffer chain
308	(134)	ADDRESS	4	STWJSWBF	JOE SWBIT buffer chain
312	(138)	ADDRESS	4	STWSWMRG	Address of $SWBMERG parameter list
316	(13C)	ADDRESS	4	STWMRGTU	Address of merged SWBTU storage area
320	(140)	ADDRESS	4	STWSWPTL	Address of SWBTU pointer list used by SJF SWBTU services
324	(144)	ADDRESS	4	STWSPLIC	Addr of spliced SWBTU
328	(148)	ADDRESS	4	STWIPSWB	Address of merged SWBTU (after IPADDR processing)

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
332	(14C)	SIGNED	2	STWSPLIL	Length of the spliced SWBTU
334	(14E)	SIGNED	2	STWIPLEN	Length of the IP SWB area
336	(150)	SIGNED	2	STWIPSWL	Length of the merged SWBTU (after IPADDR processing)
338	(152)	SIGNED	2		Reserved
340	(154)	ADDRESS	4	STWJCT	JOB CONTROL TABLE BUFFER ADDRESS

Comment

THE FOLLOWING TWO FIELD MUST BE CONTIGIOUS

End of Comment

344	(158)	SIGNED	8	STWKEY (0)	JOB AND DATA SET KEYS
344	(158)	SIGNED	4	STWJBKEY	JOB KEY
348	(15C)	SIGNED	4	STWDSKEY	DATA SET KEY
352	(160)	SIGNED	4	STWSCRST	START ADDRESS OF SCR RECORD
356	(164)	SIGNED	4	STWMTTRL	MTTR FOR CURRENT BUFFER
360	(168)	SIGNED	4	STWMTTRC	MTTR OF CURRENT PDDB
364	(16C)	SIGNED	4	STWJQEO	JOB QUEUE ELEMENT OFFSET
368	(170)	SIGNED	4	STWNETCH	Head of xmitter's JOE chain This is always an offset
372	(174)	SIGNED	4	STWJOEO	CURRENT JOE OFFSET
376	(178)	BITSTRING	1	STWRECTP	SAVED SPANNED RECORD TYPE
377	(179)	BITSTRING	1	STWPFLG1	PDDBFLG1 OF LAST DS SENT
380	(17C)	SIGNED	4	STWNTTR	THIS JOBS NEWS TRACK ADDR
384	(180)	SIGNED	2	STWHDRLN	SAVE AREA FOR JCT HEADER LENGTH
386	(182)	BITSTRING	2		RESERVED
388	(184)	SIGNED	4	STWRECCT	SUM OF JOERECCT'S
392	(188)	SIGNED	4	STWHDRCT	NUMBER OF DS HEADERS IN CURRENT MULTI-DEST DS
396	(18C)	SIGNED	4	STWCURRC	NUMBER OF JOERECCT ALREADY SENT
400	(190)	SIGNED	4	STWCOUNT	COUNT OF LOGICAL TP RECORDS
404	(194)	ADDRESS	4	STWSBUF	SMF BUFFER POINTER
408	(198)	DBL WORD	8	STWEXTPL	EXTP PARAMETER LIST AREA
416	(1A0)	DBL WORD	8	STWDBL	SCRATCH DOUBLEWORD
424	(1A8)	DBL WORD	8	STWSTIME	SYSOUT TRANSMISSION START TIME
432	(1B0)	ADDRESS	4	STWPDDB	Next PDDB to transmit
436	(1B4)	SIGNED	4	STWNRECT	JESNEWS line count
440	(1B8)	SIGNED	4	STWNPGCT	JESNEWS page count
440	(1B8)	X'CC'	0	STWINITL	"*-STWINIT" LENGTH TO CLEAR AT INITIALIZATION
448	(1C0)	DBL WORD	8	(0)	
448	(1C0)	X'1C0'	0	STWVAR	"*" START OF VARIABLE (OVERLAID) PORTION OF PCE WORK AREA

Comment

STWRIDW AND STWWORK SHOULD NEVER BE SEPARATED BECAUSE THE
TWO FIELDS ARE USED IN HASPSNA AS A CONSECUTIVE FIELD

End of Comment

448	(1C0)	BITSTRING	8	STWRIDW	EXTP PUT RID AREA
456	(1C8)	CHARACTER	260	STWWORK	WORK AREA FOR MESSAGES
456	(1C8)	X'1C8'	0	STWREC	"STWWORK" START OF TEXT CONSTRUCTION AREA FOR CONTROL RECORDS
456	(1C8)	X'1DC'	0	STWPCEWS	"*-PCEWORK" LENGTH OF PCE WORK AREA

$NSTWORK Cross Reference

Name	Hex Offset	Hex Value
PCE	0	
STW$AUTH	F4	4
STW$HCQ	F5	80
STW$IDLE	F4	20
STW$INV	F4	1
STW$IOT	F4	2
STW$MULT	F4	10
STW$NODH	F5	40
STW$NORM	F4	80
STW$SPIN	F4	40
STWCOUNT	190	
STWCURRC	18C	
STWDBL	1A0	
STWDCTF	F2	
STWDSBUF	104	
STWDSKEY	15C	
STWENBUF	108	
STWENPDB	FC	
STWEXTPL	198	
STWFLAGS	F4	
STWFLAG2	F5	
STWFLAG3	F6	
STWFLAG4	F7	
STWHDBUF	10C	
STWHDRCT	188	
STWHDRLN	180	
STWHDTTR	110	
STWINIT	F0	F0
STWINITL	1B8	CC
STWIOTBF	F8	
STWIPLEN	14E	
STWIPSWB	148	
STWIPSWL	150	
STWJBKEY	158	
STWJCT	154	
STWJOEO	174	
STWJQEF	F3	
STWJQEO	16C	
STWJSWBF	134	
STWJSWBL	126	
STWKEY	158	
STWMRGLN	12A	
STWMRGTU	13C	
STWMTTRC	168	
STWMTTRL	164	
STWNDH	11C	
STWNETCH	170	
STWNJH	114	
STWNJT	118	
STWNODE	F0	
STWNPGCT	1B8	
STWNRECT	1B4	
STWNSWB	120	
STWNTTR	17C	
STWPCEWS	1C8	1DC
STWPDDB	1B0	
STWPFLG1	179	
STWPLSIZ	128	
STWPSWBL	124	
STWREC	1C8	1C8
STWRECCT	184	
STWRECTP	178	
STWRIDW	1C0	
STWSBUF	194	
STWSCRST	160	
STWSEGID	12C	
STWSPINJ	100	
STWSPLIC	144	
STWSPLIL	14C	
STWSTIME	1A8	
STWSWBL	122	
STWSWBUF	130	
STWSWMRG	138	
STWSWPTL	140	
STWVAR	1C0	1C0
STWWORK	1C8	
STW3BFER	F6	40
STW3ERON	F6	2
STW3ES57	F6	80
STW3MERG	F6	20
STW3OPER	F6	8
STW3SMAB	F6	1
STW3SWRD	F6	10
STW3XIST	F6	4
STW4HJOS	F7	20
STW4JHS	F7	80
STW4SMRC	F7	40

$NTW Programming Interface information

Programming Interface information

$NTW

End of Programming Interface information

$NTW Heading Information

Common Name: HASP Network Path Manager Trace Work Area
Macro ID: $NTW
DSECT Name: NTW
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: 'NTW '
Offset: NTWID-NTW
Length: 4
Storage Attributes: Subpool: Subpool 0 for the permanent NTW; Subpool 1 for the temporary NTW.
Key: 1
Residency: Virtual and real storage are anywhere (above or below 16M), in the private storage of the JES2 address space.
Size: See NTWLEN
Created by: JES2 Initialization
JES2 Line Manager Processor
Pointed to by: PCTNTW field of the $PCT data area (for the permanent work area created during JES2 initialization.)
Serialization: No special serialization other than that currently implied by the Network Path Manager.
Function: This DSECT maps a work area used to save information to be included in the following trace records: trace id 21, 22, 23 and 24.

There are 2 types of NTWs: permanent and temporary. The permanent one is obtained for the Network Path Manager and is used for most of the traces issued by the Network Path Manager. The temporary NTW is used by the Line Manager when sending an I-record.

The data in the NTW is used as an object of a $TRACE macro (DATA=, LEN=). The trace formatting routine uses the $TRACE macro to convert the internal representation to a printable format.

$NTW Map

Offsets					
Dec	**Hex**	**Type/Value**	**Len**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	0	NTW	
0	(0)	CHARACTER	4	NTWID	NTW identifier
4	(4)	ADDRESS	1	NTWVERS	NTW version
4	(4)	X'2'	0	NTWVERSN	"2" Version number
8	(8)	SIGNED	4	NTWSTART (0)	Start of $TRACE data
8	(8)	CHARACTER	1	NTWTYPE	Rec type: M, N, I, J, K, L,
9	(9)	BITSTRING	1	NTWFLAG1	
		1...		NTW1SEND	"B'10000000'" This is a send record
		.1..		NTW1DFUL	"B'01000000'" Rec discon. by full path
		..1.		NTW1FFUL	"B'00100000'" Rec forced full path rout.
		...1		NTW1NCC	"B'00010000'" An NCC was passed
		.... 1...		NTW1GAR	"B'00001000'" Record is garbage
		.... .1..		NTW1MAS	"B'00000100'" MAS validation NCC record
		.... ..1.		NTW1MASP	"B'00000010'" MAS validation pending
		1		NTW1MASD	"B'00000001'" MAS validation completed
10	(A)	BITSTRING	1	NTWSTAT	Status for connection
11	(B)	BITSTRING	1	NTWOSTAT	Previous status for conn
12	(C)	BITSTRING	1	NTWRRC	Reason code for why record Was rejected or sent
13	(D)	ADDRESS	1	NTWMEMB	Node qualifier
14	(E)	ADDRESS	2	NTWNODE	Node from which record rcvd

Offsets Dec	Hex	Type/Value	Len	Name (Dim)	Description
16	(10)	CHARACTER	8	NTWCONS	Where record was from: LINEnnnn, MLINEn, 'FULLPATH', 'LINEDOWN', 'CONSOLE', 'PARMLIB'
24	(18)	SIGNED	4	NTWOCES	Previous CES
24	(18)	X'4'	0	NTWCESL	"4" Length of unconverted CES
24	(18)	X'10'	0	NTWCCESL	"16" Length of converted CES
28	(1C)	SIGNED	4	NTWREC (0)	
28	(1C)	BITSTRING	20	NTWNAT	Space for NAT record
28	(1C)	BITSTRING	41	NTWNCCI	Space for NCC I/J record
28	(1C)	BITSTRING	9	NTWNCCK	Space for NCC K/L record
28	(1C)	BITSTRING	27	NTWNCCM	Space for NCC M/N record
28	(1C)	BITSTRING	3	NTWNCCB	Space for NCC B record
69	(45)	X'3D'	0	NTWSIZE	"*-NTWSTART" Size of NPM trace record
69	(45)	X'45'	0	NTWLEN	"*-NTW" Len of NPM work area

Comment

NTWRRC Reason codes

End of Comment

69	(45)	X'1'	0	NTWRINN	"1" Invalid Node Name
69	(45)	X'2'	0	NTWRMEM	"2" Invalid Member Number
69	(45)	X'3'	0	NTWRNSA	"3" No Storage Available
69	(45)	X'4'	0	NTWRICR	"4" Invalid resistance
69	(45)	X'5'	0	NTWRICS	"5" Invalid CES
69	(45)	X'6'	0	NTWRNDA	"6" No Devices Available
69	(45)	X'7'	0	NTWRTOL	"7" TOD Tolerance exceeded
69	(45)	X'8'	0	NTWRILP	"8" Invalid Line Password
69	(45)	X'9'	0	NTWRINP	"9" Invalid Node Password
69	(45)	X'A'	0	NTWRLNX	"10" Line Not Transparent
69	(45)	X'B'	0	NTWRIGN	"11" Ignored, Line Active
69	(45)	X'C'	0	NTWRGARB	"12" Ignored, Invalid record
69	(45)	X'D'	0	NTWRERR	"13" Ignored, ABEND processing
69	(45)	X'E'	0	NTWRKNOW	"14" Ignored, more recent connect exists
69	(45)	X'F'	0	NTWROWN	"15" Connection involves local node and member
69	(45)	X'10'	0	NTWRIFF	"16" Invalid NJE signon feature flags
69	(45)	X'11'	0	NTWRIPM	"17" Incorrect value for PATHMGR=
69	(45)	X'12'	0	NTWRIPT	"18" Non path manager CES received
69	(45)	X'13'	0	NTWRNOIB	"19" PREVIOUS I OR J RECORD WAS NOT ONLY IN BUFFER
69	(45)	X'14'	0	NTWROLDR	"20" IGNORED, AN OLD SUBTRACT NCC RECORD WAS RECEIVED
69	(45)	X'15'	0	NTWRLNPM	"21" IGNORED, RECORD RECEIVED ON A NON-PM LINE
69	(45)	X'16'	0	NTWRIGNA	"22" Ignored, line no longer active
69	(45)	X'17'	0	NTWRDUPM	"23" Duplicate primary and secondary node/member
69	(45)	X'18'	0	NTWRIMT	"24" Incorrect multi-trunk
69	(45)	X'19'	0	NTWRDCES	"25" Records with duplicate CES values were received

$NTW Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
NTW	0		NTWNODE	E	
NTWCCESL	18	10	NTWOCES	18	
NTWCESL	18	4	NTWOSTAT	B	
NTWCONS	10		NTWRDCES	45	19
NTWFLAG1	9		NTWRDUPM	45	17
NTWID	0	D5E3E640	NTWREC	1C	
NTWLEN	45	45	NTWRERR	45	D
NTWMEMB	D		NTWRGARB	45	C
NTWNAT	1C		NTWRICR	45	4
NTWNCCB	1C		NTWRICS	45	5
NTWNCCI	1C		NTWRIFF	45	10
NTWNCCK	1C		NTWRIGN	45	B
NTWNCCM	1C		NTWRIGNA	45	16

Name	Hex Offset	Hex Value
NTWRILP	45	8
NTWRIMT	45	18
NTWRINN	45	1
NTWRINP	45	9
NTWRIPM	45	11
NTWRIPT	45	12
NTWRKNOW	45	E
NTWRLNPM	45	15
NTWRLNX	45	A
NTWRMEM	45	2
NTWRNDA	45	6
NTWRNOIB	45	13
NTWRNSA	45	3
NTWROLDR	45	14
NTWROWN	45	F
NTWRRC	C	
NTWRTOL	45	7
NTWSIZE	45	3D
NTWSTART	8	
NTWSTAT	A	
NTWTYPE	8	
NTWVERS	4	
NTWVERSN	4	2
NTW1DFUL	9	40
NTW1FFUL	9	20
NTW1GAR	9	8
NTW1MAS	9	4
NTW1MASD	9	1
NTW1MASP	9	2
NTW1NCC	9	10
NTW1SEND	9	80

$OCR Programming Interface Information

Programming Interface Information

$OCR

End of Programming Interface Information

$OCR Heading Information

Common Name: JES2 Output Control Record
Macro ID: $OCR
DSECT Name: OCR
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: None
Offset: N/A
Subpool and Key: Subpool 1 and key 1
Size: 128 bytes
Created by: HASPRDR, one for each /*OUTPUT card in a job
Pointed to by: $OCTs are contained contiguously within a $OCT starting at field OCTOCR
Serialization: Normal JES2 dispatch serialization
Function: The $OCR contains the information supplied on a /*OUTPUT JES2 JCL statement. The OCRs are contained in the OCT.

$OCR Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	OCR	OUTPUT CONTROL RECORD DSECT
0	(0)	CHARACTER	4	OCRCODE	FORMS CODE
4	(4)	CHARACTER	5	(0)	KEEP MOD AND MODC TOGETHER
4	(4)	CHARACTER	4	OCRMODF	N/I PRINTER COPY-MOD IMAGE
8	(8)	BITSTRING	1	OCRMODFT	N/I PRINTER MODIFY TAB REF CHAR
9	(9)	BITSTRING	1	OCRFLAGS	OUTPUT FLAGS
10	(A)	BITSTRING	1	OCRINDEX	PRINT INDEX
11	(B)	BITSTRING	1	OCRCOPY	COPY COUNT (MUST PRECEDE COPYG)
12	(C)	CHARACTER	8	OCRCOPYG	N/I PRINTER COPY GROUPS
20	(14)	CHARACTER	4	OCRFORMS	FORMS SPECIFICATION
24	(18)	CHARACTER	4	OCRFCB	FCB SPECIFICATION
28	(1C)	CHARACTER	4	OCRUCS	UCS SPECIFICATION
32	(20)	SIGNED	4	OCRRECNT	RECORD COUNT LIMIT
36	(24)	CHARACTER	4	OCRCHAR1	N/I PRINTER TRANS-TABLE 1
40	(28)	CHARACTER	4	OCRCHAR2	N/I PRINTER TRANS-TABLE 2
44	(2C)	CHARACTER	4	OCRCHAR3	N/I PRINTER TRANS-TABLE 3
48	(30)	CHARACTER	4	OCRCHAR4	N/I PRINTER TRANS-TABLE 4
52	(34)	SIGNED	4	OCRDEST1	DESTINATION 1
56	(38)	CHARACTER	8	OCRUSER1	DESTINATION 1 USERID/RMTID
56	(38)	X'C'	0	OCRUSDST	"*-OCRDEST1" LNGTH OF 1 OCR USERID/DEST UNIT
64	(40)	SIGNED	4	OCRDEST2	DESTINATION 2
68	(44)	CHARACTER	8	OCRUSER2	DESTINATION 2 USERID/RMTID
76	(4C)	SIGNED	4	OCRDEST3	DESTINATION 3
80	(50)	CHARACTER	8	OCRUSER3	DESTINATION 3 USERID/RMTID
88	(58)	SIGNED	4	OCRDEST4	DESTINATION 4
92	(5C)	CHARACTER	8	OCRUSER4	DESTINATION 4 USERID/RMTID
92	(5C)	X'30'	0	OCRUDND	"*-OCRDEST1" END OF DEST/USER ID SECTION
100	(64)	CHARACTER	5	(0)	KEEP FLASH, FLASH CNT TOGETHER
100	(64)	CHARACTER	4	OCRFLASH	N/I PRINTER FLASH
104	(68)	BITSTRING	1	OCRFLSHC	N/I PRINTER # FLASH COPIES
105	(69)	BITSTRING	1	OCRCPTN	COMPACTION TABLE NUMBER
106	(6A)	SIGNED	2	OCRCKPTP	NO. OF LOGICAL PAGES/CKPT
108	(6C)	SIGNED	2	OCRCKPTL	NO. OF LINES/LOGICAL PAGE
110	(6E)	BITSTRING	1	OCRLINCT	LINECT
111	(6F)	BITSTRING	12		RESERVED
124	(7C)	SIGNED	4	OCREND (0)	END OF OUTPUT CONTROL RECORD
124	(7C)	X'7C'	0	OCRLENG	"*-OCR"

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
				Comment	
OCRFLAGS					
				End of Comment	
		1...		OCRBRSTN	"B'10000000'" N/I PRINTER BURST=NO FLAG
		.1..		OCRBRSTY	"B'01000000'" N/I PRINTER BURST=YES FLAG
		..1.		OCRLNCTF	"B'00100000'" LINECT SPECIFIED
		...1		OCRFLAG3	"B'00010000'" RESERVED
		.... 1...		OCRFLAG4	"B'00001000'" RESERVED
		.... .1..		OCRFLAG5	"B'00000100'" RESERVED
		.... ..1.		OCRFLAG6	"B'00000010'" RESERVED
		1		OCRFLAG7	"B'00000001'" RESERVED

$OCR Cross Reference

Name	Hex Offset	Hex Value
OCR	0	
OCRBRSTN	7C	80
OCRBRSTY	7C	40
OCRCHAR1	24	
OCRCHAR2	28	
OCRCHAR3	2C	
OCRCHAR4	30	
OCRCKPTL	6C	
OCRCKPTP	6A	
OCRCODE	0	
OCRCOPY	B	
OCRCOPYG	C	
OCRCPTN	69	
OCRDEST1	34	
OCRDEST2	40	
OCRDEST3	4C	
OCRDEST4	58	
OCREND	7C	
OCRFCB	18	
OCRFLAGS	9	
OCRFLAG3	7C	10
OCRFLAG4	7C	8
OCRFLAG5	7C	4
OCRFLAG6	7C	2
OCRFLAG7	7C	1
OCRFLASH	64	
OCRFLSHC	68	
OCRFORMS	14	
OCRINDEX	A	
OCRLENG	7C	7C
OCRLINCT	6E	
OCRLNCTF	7C	20
OCRMODF	4	
OCRMODFT	8	
OCRRECNT	20	
OCRUCS	1C	
OCRUDND	5C	30
OCRUSDST	38	C
OCRUSER1	38	
OCRUSER2	44	
OCRUSER3	50	
OCRUSER4	5C	

$OCT Programming Interface information

Programming Interface information

$OCT

End of Programming Interface information

$OCT Heading Information

Common Name: Output Control Table
Macro ID: $OCT
DSECT Name: OCT
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: OCT
Offset: OCTID-OCT
Length: L'OCTID
Storage Attributes: Subpool: 7 for Main Task, 230 for User Environment
Key: 1
Residency: The $OCT is a JES2 spool resident control block. Virtual and real storage can be anywhere.
Size: See OCTLENG for the length of the control block.
The OCT is contained in a buffer of size $BUFSIZE which is a field in $HCT.
Created by: Initially created by HASPRDR when a job encounters a /*OUTPUT card.
Pointed to by: OCTOCT field of the $OCT data area
SJBOCT field of the $SJB data area
OCTOCTTR field of the $OCT data area (addr on spool)
JCTOCTTR field of the $JCT data area (addr on spool)
Various fields in the processor work areas
Serialization: While a job is in execution, the OCT resides in the user address space, so that no other JES2 PCE will update the OCT. At other times, the JES2 dispatcher is used.
Function: The OCT is used to hold data from the /*OUTPUT control card until a PDDB is created into which the data is then moved.

$OCT Map

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	OCT	HASP OUTPUT CONTROL TABLE DSECT
				Comment	
				---------- The following fields are defined over the buffer prefix in order to ensure that they are never written to SPOOL. ----------	
				End of Comment	
0	(0)	X'40'	0	OCTOCT	"BUFMEMW1-BFPDSECT+OCT" Storage address of next OCT
				Comment	
				---------- End of buffer prefix fields ----------	
				End of Comment	
0	(0)	BITSTRING	1	(0)	BUFFER CONTROL INFORMATION
0	(0)	X'68'	0	OCTSTART	"*" START OF DATA WRITTEN TO SPOOL

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
Comment					
---------- The following sub-section, generated by the SPID macro, must reside immediately after the I/O control data in every spool buffer. The following fields are defined: Eyecatcher - 4 bytes Job name - 8 bytes Job number - 4 bytes Job key - 4 bytes Dataset key - 4 bytes (or reserved if not applicable) ----------					
End of Comment					
104	(68)	CHARACTER	4	OCTID	Eyecatcher
108	(6C)	CHARACTER	8	OCTJNAME	Job name
116	(74)	SIGNED	4	OCTJBNUM	Job number
120	(78)	SIGNED	4	OCTJBKEY	Job key
124	(7C)	BITSTRING	4		Reserved
124	(7C)	X'18'	0	OCTSPLNG	"*-OCTID"
128	(80)	ADDRESS	2	OCTLENG	LENGTH OF OCT INCLUDING PREFIX
130	(82)	SIGNED	2		RESERVED FOR FUTURE USE
132	(84)	BITSTRING	4	OCTTRACK	TRACK ADDRESS OF THIS OCT
136	(88)	BITSTRING	4	OCTOCTTR	TRACK ADDRESS OF NEXT OCT
140	(8C)	SIGNED	4	OCTOCROF	OFFSET BEYOND LAST OCR IN OCT
144	(90)	BITSTRING	4		RESERVED FOR FUTURE USE
148	(94)	BITSTRING	1	OCTOCR	START OF OUTPUT CONTROL RECORDS

$OCT Cross Reference

Name	Hex Offset	Hex Value
OCT	0	
OCTID	68	
OCTJBKEY	78	
OCTJBNUM	74	
OCTJNAME	6C	
OCTLENG	80	
OCTOCR	94	
OCTOCROF	8C	
OCTOCT	0	40
OCTOCTTR	88	
OCTSPLNG	7C	18
OCTSTART	0	68
OCTTRACK	84	

$ODPARM Programming Interface information

Programming Interface information

$ODPARM

End of Programming Interface information

$ODPARM Heading Information

Common Name: Output Descriptor Parameter Block
Macro ID: $ODPARM
DSECT Name: ODPARM
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: 'ODP '
Offset: ODPID-ODP
Length: 4
Storage Attributes: Subpool: 1
Key: 1
Residency: Virtual and real storage are anywhere (above or below 16M) in the private storage of the JES2 address space.
Size: See ODPSIZE
Created by: SJF Services processor for each request that is passed to the Output Descriptor Modify Subtask processor.
Pointed to by: SFRODP field of the $SFRB data area
Serialization: None required; HASPSJFR subtask assigns one ODPARM per subtask to process a request.
Function: This macro provides the mapping of the parameters needed by the Output Descriptor routine called by the generalized subtask in support of SWB Modify processing.

$ODPARM Map

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	ODPARM	
0	(0)	X'0'	0	ODPBGN	"*"
0	(0)	CHARACTER	4	ODPID	Acronym set to 'ODP '
4	(4)	BITSTRING	1	ODPVER	Version number of ODPARM
4	(4)	X'1'	0	ODPV#	"1" Current version number of ODPARM
5	(5)	BITSTRING	1	ODPRSV1	Reserved
6	(6)	SIGNED	2	ODPRSV2	Reserved
8	(8)	ADDRESS	4	ODPWAVE	Address of WAVE
12	(C)	ADDRESS	4	ODPJOEA	Address of JOE

Comment

Output descriptor subtask work area begins here
Footprints for SWB Modify Subtask

End of Comment

16	(10)	BITSTRING	1	ODPFOOT	Footprint area - current
17	(11)	BITSTRING	1	ODPFOOTP	Footprint area - previous
17	(11)	X'1'	0	ODPFSTR	"1" Footprint - Convert Dest
17	(11)	X'2'	0	ODPFCNV	"2" Footprint - Convert Dest
17	(11)	X'3'	0	ODPFSAF	"3" Footprint - SAF calls
17	(11)	X'4'	0	ODPFMGI	"4" Footprint - Merge init.
17	(11)	X'5'	0	ODPFDSP	"5" Footprint - Despool SWBITs
17	(11)	X'6'	0	ODPFMGS	"6" Footprint - $Merge setup
17	(11)	X'7'	0	ODPFSJM	"7" Footprint - SJF/$MERG
17	(11)	X'8'	0	ODPFSJS	"8" Footprint - SJF Split
17	(11)	X'9'	0	ODPFTUS	"9" Footprint - Move TUs
17	(11)	X'A'	0	ODPFWRI	"10" Footprint - Write init.
17	(11)	X'B'	0	ODPFIOT	"11" Footprint - IOT access
17	(11)	X'C'	0	ODPFMTR	"12" Footprint - Alloc MTTR

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
17	(11)	X'D'	0	ODPFSPL	"13" Footprint - Write SWBIT
17	(11)	X'E'	0	ODPFCLP	"14" Footprint - Merge cleanup
17	(11)	X'F'	0	ODPPREC	"15" Footprint - In recovery

Comment

Error Reason Codes from SWB Modify Subtask

End of Comment

17	(11)	X'4'	0	ODPRSAF	"4" SAF call failure ($SEAS)
17	(11)	X'8'	0	ODPRIOE	"8" I/O error on Spool
17	(11)	X'C'	0	ODPRSERV	"12" JES2 service rtn error
17	(11)	X'10'	0	ODPRDEST	"16" Dest processing error
17	(11)	X'14'	0	ODPRMERG	"20" Error during Merge service
17	(11)	X'18'	0	ODPRSPLT	"24" Error during Split service
17	(11)	X'1C'	0	ODPRABN	"28" Subtask abended
17	(11)	X'20'	0	ODPRIOT	"32" IOT is not valid
17	(11)	X'24'	0	ODPRBADP	"36" Bad parm. or control block
17	(11)	X'8'	0	ODPERR8	"8" Subtask return code
18	(12)	BITSTRING	1	ODPFLG1	Flag
		1		ODPNOBAS	"B'00000001'" No base SWBITs in JOE
		.... ..1.		ODPERBAS	"B'00000010'" Base Erase Tus exist
		.... .1..		ODPNOOVR	"B'00000100'" No override SWBTU present
		.... 1...		ODPNOMRG	"B'00001000'" No $SWBMERG required
		...1		ODPABND	"B'00010000'" Recovery routine entered
		..1.		ODPRCUR	"B'00100000'" Abend recursion flag
19	(13)	BITSTRING	1	ODPFLG2	Processing status flag (used by both JES2&subtsk)

Comment

The following two bits are mutually exclusive.
If neither is on, the current destination is kept
as is.

End of Comment

		1...		ODP2NOIP	"B'10000000'" Dest is NOT in IP format
		.1..		ODP2IPAD	"B'01000000'" Dest is in IP format
		..1.		ODP2ERAS	"B'00100000'" Dest is to be erased
20	(14)	SIGNED	2	ODPDATLN	Size of SWBIT Data area
22	(16)	SIGNED	2	ODPRSVW1	Reserved for subtask use
24	(18)	DBL WORD	8	(0)	Alignment
24	(18)	CHARACTER	20	ODPDSAFW	20 byte DEST/SAF work area
44	(2C)	SIGNED	4	ODPWRK1	Work area for subtask
48	(30)	SIGNED	4	ODPWRK2	Work area for subtask
52	(34)	ADDRESS	4	ODPSERVP	MERGE/SPLIT parm area
56	(38)	ADDRESS	4	ODPSERVL	MEREGE/SPLIT parm length
60	(3C)	ADDRESS	4	ODPMTUAD	$MERGE SWBTU output addr
64	(40)	ADDRESS	4	ODPFINB	First input SWBIT buffer
68	(44)	ADDRESS	4	ODPFIRB	First output SWBIT buffer
72	(48)	ADDRESS	4	ODPCURB	Current SWBIT buffer addr
76	(4C)	ADDRESS	4	ODPPREB	Previous SWBIT buffer addr
80	(50)	ADDRESS	4	ODPERAD	Cumulative erase TU addr
84	(54)	ADDRESS	4	ODPTUAD	address of merged SWBTU
88	(58)	SIGNED	2	ODPERCLN	Cumulative erase TU length
90	(5A)	SIGNED	2	ODPTUCLN	Cumulative SWBTU length
92	(5C)	SIGNED	2	ODPTUNUM	Number of base SWBTUs
94	(5E)	SIGNED	2	ODPRSVH1	Reserved for devel.
96	(60)	ADDRESS	4	ODPSJIO	Address of SJIOB
100	(64)	ADDRESS	4	ODPGETH	GETHP work area
104	(68)	ADDRESS	4	ODPIOTB	Addr IOT buffers
108	(6C)	SIGNED	4	ODPSJRC	SJF Service return code
112	(70)	SIGNED	4	ODPSJRS	SJF Service reason code

$ODPARM Cross Reference

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
116	(74)	ADDRESS	4	ODPPCE	Address of PCE
120	(78)	SIGNED	4	ODPRSVS1	Reserved for service
128	(80)	DBL WORD	8	(0)	Alignment
128	(80)	CHARACTER	104	ODPJOE	Work-JOE area
232	(E8)	CHARACTER	76	ODPCHJOE	Char-JOE area
308	(134)	CHARACTER	8	ODPJUSER	Input - JOEUSER from characteristic JOE Output - Userid included in modify SWBTU or '<IP>' if new dest is in IP-format.
316	(13C)	BITSTRING	4	ODPROUT	Route code from DEST mod TU
320	(140)	CHARACTER	80	ODPTKWRK	Security token work area
400	(190)	DBL WORD	8	(0)	Alignment
400	(190)	CHARACTER	96	ODPJQE	Work-JQE area
496	(1F0)	DBL WORD	8	(0)	End on a Dblword boundary
496	(1F0)	X'1F0'	0	ODPSIZE	"*-ODPBGN" Size of parameter area

$ODPARM Cross Reference

Name	Hex Offset	Hex Value
ODPABND	12	10
ODPARM	0	
ODPBGN	0	0
ODPCHJOE	E8	
ODPCURB	48	
ODPDATLN	14	
ODPDSAFW	18	
ODPERAD	50	
ODPERBAS	12	2
ODPERCLN	58	
ODPERR8	11	8
ODPFCLP	11	E
ODPFCNV	11	2
ODPFDSP	11	5
ODPFINB	40	
ODPFIOT	11	B
ODPFIRB	44	
ODPFLG1	12	
ODPFLG2	13	
ODPFMGI	11	4
ODPFMGS	11	6
ODPFMTR	11	C
ODPFOOT	10	
ODPFOOTP	11	
ODPFSAF	11	3
ODPFSJM	11	7
ODPFSJS	11	8
ODPFSPL	11	D
ODPFSTR	11	1
ODPFTUS	11	9
ODPFWRI	11	A
ODPGETH	64	
ODPID	0	
ODPIOTB	68	
ODPJOE	80	
ODPJOEA	C	
ODPJQE	190	
ODPJUSER	134	
ODPMTUAD	3C	
ODPNOBAS	12	1
ODPNOMRG	12	8
ODPNOOVR	12	4
ODPPCE	74	
ODPPREB	4C	
ODPPREC	11	F
ODPRABN	11	1C
ODPRBADP	11	24
ODPRCUR	12	20
ODPRDEST	11	10
ODPRIOE	11	8
ODPRIOT	11	20
ODPRMERG	11	14
ODPROUT	13C	
ODPRSAF	11	4
ODPRSERV	11	C
ODPRSPLT	11	18
ODPRSVH1	5E	
ODPRSVS1	78	
ODPRSVW1	16	
ODPRSV1	5	
ODPRSV2	6	
ODPSERVL	38	
ODPSERVP	34	
ODPSIZE	1F0	1F0
ODPSJIO	60	
ODPSJRC	6C	
ODPSJRS	70	
ODPTKWRK	140	
ODPTUAD	54	
ODPTUCLN	5A	
ODPTUNUM	5C	
ODPV#	4	1
ODPVER	4	
ODPWAVE	8	
ODPWRK1	2C	
ODPWRK2	30	
ODP2ERAS	13	20
ODP2IPAD	13	40
ODP2NOIP	13	80

$OPAWORK Heading Information

Common Name: JES2 Output Priority Aging PCE Work Area
Macro ID: $OPAWORK
DSECT Name: PCE ($OPAWORK is part of the PCE DSECT)
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: 'PCE '
Offset: PCEEYE-PCE
Length: 4
Storage Attributes: Subpool: See $PCE
Key: See $PCE
Residency: See $PCE
Size: See symbol OPAPCEWS for the length of this work area. The overall length of the PCE is stored in field PCELENG.
Created by: See $PCE
Pointed to by: The $PRYOPCE field of the $HCT data area
See $PCE for other pointer fields that apply to all PCE types.
Serialization: Normal PCE dispatch serialization
Function: The fields in this area are used by a JES2 Output Priority Aging Processor and by its support routines and exits. $OPAWORK maps the variable PCE work area that begins at label PCEWORK. The fields defined in $OPAWORK are actually part of the PCE DSECT, but only map PCEs with the value PCEOPAID in the second byte of field PCEID.

This PCE is not device related. Field PCEDCT is zero.

$OPAWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	PCE	, Continue PCE DSECT
240	(F0)	BITSTRING	12	OPATQE	HASP Timer Queue Element
252	(FC)	SIGNED	4		Reserved for future use
256	(100)	DBL WORD	8	(0)	Force double-word alignment
256	(100)	X'10'	0	OPAPCEWS	"*-PCEWORK" Length of work area

$OUTWORK Programming Interface information

Programming Interface information

$OUTWORK

End of Programming Interface information

$OUTWORK Heading Information

Common Name: JES2 Output PCE Work Area
Macro ID: $OUTWORK
DSECT Name: PCE ($OUTWORK is part of the PCE DSECT)
Owning Component: JES2 (SC1BH)
Eye-Catcher ID: 'PCE '
Offset: PCEEYE-PCE
Length: 4
Storage Attributes: Subpool: See $PCE
Key: See $PCE
Residency: See $PCE
Size: See symbol OUTWKSIZ for the length of this work area. The overall length of the PCE is stored in field PCELENG.
Created by: See $PCE
Pointed to by: The $OUTPCE field of the $HCT data area points into the $PCEORG/$PCELAST chain to the first Output PCE. Since this chain contains all PCEs, use the PCEID field to determine when you have chained past the last PCE of this type.
See $PCE for other pointer fields that apply to all PCE types.
Serialization: Normal PCE dispatch serialization
Function: The fields in this work area are used by a JES2 Output Processor and by its support routines and exits. $OUTWORK maps the variable PCE work area that begins at label PCEWORK. The fields defined in $OUTWORK are actually part of the PCE DSECT, but only map PCEs with the value PCEOUTID in the second byte of field PCEID.

This PCE is not device related. Field PCEDCT is zero.

$OUTWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	PCE	, Continue PCE DSECT
240	(F0)	BITSTRING	640		$RDRWORK LEN (FOR HASPRJCS)
880	(370)	SIGNED	4	OUTIOTBF	ADDRESS OF IOT BUFFER CHAIN
884	(374)	SIGNED	4	OUTJCTBF	ADDRESS OF JCT BUFFER
888	(378)	SIGNED	4	OUTPDDB	RESTART PDDB POINTER
892	(37C)	SIGNED	4	OUTIMEON (2)	OUTPUT PROCESSOR TIME/DATE
900	(384)	BITSTRING	1	OUTWORK (0)	PROTOTYPE WORK-JOE
1004	(3EC)	BITSTRING	1	OUTCHAR (0)	PROTOTYPE CHAR-JOE
1108	(454)	SIGNED	4	OUTDBEND	1ST FREE PDDB SLOT IN IOT
1112	(458)	SIGNED	4	OUTIOT	RESTART IOT ADDRESS
1116	(45C)	SIGNED	4	OUTJBKEY	JOB KEY FROM JCTJBKEY
1120	(460)	BITSTRING	1	OUTJCOPY	JOB LEVEL COPY COUNT FROM JCT
1121	(461)	BITSTRING	2		RESERVED
1123	(463)	BITSTRING	1	OUTFLAGS	OUTPUT PROCESSOR FLAGS
1124	(464)	SIGNED	4	OUTX40PL	Address of Exit 40 parmlist
1128	(468)	SIGNED	4	OUTGGTOK	GENERIC GROUPING TOKEN
1132	(46C)	SIGNED	4	OUTEXPRM (0)	EXIT 16 PARAMETER LIST
1132	(46C)	SIGNED	4	OUTMADD	EXIT MESSAGE ADDRESS
1136	(470)	SIGNED	4	OUTMPRM	EXIT PARM LIST ADDRESS

Offsets Dec	Offsets Hex	Type/Value	Len	Name (Dim)	Description
1140	(474)	SIGNED	4	OUTMJCT	ADDRESS OF JCT
1144	(478)	ADDRESS	4	OUTDSSCB	ADDR OF DSSCB WORK AREA
1148	(47C)	CHARACTER	32	OUTGRPPM	OUTPUT GROUPING PARM LIST
1180	(49C)	ADDRESS	4	OUTQPARM	NODE TABLE ADDRESS
1184	(4A0)	ADDRESS	4		CONTROL BLOCK ADDRESS
1188	(4A4)	ADDRESS	4		CLASS LIST ADDRESS
1192	(4A8)	ADDRESS	4		ADDRESS OF JQE
1196	(4AC)	ADDRESS	1		CLASS LIST LENGTH
1197	(4AD)	ADDRESS	1		QUEUE TYPE SPECIFIED
1198	(4AE)	ADDRESS	1		WORK SELECTION TYPE FLAG
1199	(4AF)	ADDRESS	1		RESERVED FOR FUTURE USE
1199	(4AF)	X'49C'	0	OUTPLST	"OUTQPARM,*-OUTQPARM" QGET PARAMETER LIST STORAGE
1199	(4AF)	X'3C0'	0	OUTWKSIZ	"*-PCEWORK" LENGTH OF HOPE PCE WORK AREA

Comment

OUTFLAGS

End of Comment

1...	....	OUTSTATS	"B'10000000'" JOB Statistics created
....	1...	OUTJOBER	"B'00001000'" Job finished abnormally

$OUTWORK Cross Reference

Name	Hex Offset	Hex Value
OUTCHAR	3EC	
OUTDBEND	454	
OUTDSSCB	478	
OUTEXPRM	46C	
OUTFLAGS	463	
OUTGGTOK	468	
OUTGRPPM	47C	
OUTIMEON	37C	
OUTIOT	458	
OUTIOTBF	370	
OUTJBKEY	45C	
OUTJCOPY	460	
OUTJCTBF	374	
OUTJOBER	4AF	8
OUTMADD	46C	
OUTMJCT	474	
OUTMPRM	470	
OUTPDDB	378	
OUTPLST	4AF	49C
OUTQPARM	49C	
OUTSTATS	4AF	80
OUTWKSIZ	4AF	3C0
OUTWORK	384	
OUTX40PL	464	
PCE	0	

Appendix A. 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* 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.

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This book also documents intended Programming Interfaces that allow the customer to write programs to obtain the services of OS/390.

This information is identified where it occurs, either by an introductory statement to a chapter or section or by the following marking:

Product-Sensitive Programming Interface

Data Area Name

End of Product-Sensitive Programming Interface

Unless otherwise specified, for data areas classified as programming interfaces, the **MACRO ID** in the header is part of the programming interface. **ALL** other header information is included for diagnostic purposes **ONLY**.

Since a *data area name* that is designated as part of the programming interface is one of the following:

- MACRO ID
- DSECT NAME
- commonly-used name

before including the *data area name* in a program, refer to the data area header for the applicable **MACRO ID**.

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If only certain fields in a data area are intended or not intended for use as a programming interface, the specific field name(s) are differentiated within this book.

For a field that is part of the programming interface, the only information that is part of the interface for writing programs is:

- field name
- data type
- field length
- description (purpose or allowed values)

INCLUDE ONLY data area: **ONLY** the MACRO ID is the programming interface. The data area itself is **NOT** a programming interface.

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