

z/OS



# JES2 Data Areas

## Volume 3



z/OS



# JES2 Data Areas

## Volume 3

**Note**

Before using this information and the product it supports, be sure to read the general information under "Notices" on page 259.

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This edition applies to Version 2 Release 1 of z/OS (5650-ZOS) and to all subsequent releases and modifications until otherwise indicated in new editions.

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## About this information

This information is a graphic presentation of many data areas used by the z/OS operating system and by application programs. The data areas are one or more of the following:

- Programming interfaces
- Needed for debugging or diagnosis.

This information supports z/OS (5650-ZOS).

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## Who should use this information

This information 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 information should have a working knowledge of the functions and logic of the operating system.

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## How to use this information

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

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

### The header

The header includes some or all of the following:

<b>Common Name:</b>	The descriptive name of the data area.
<b>Macro ID:</b>	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.
<b>DSECT Name:</b>	Name of the DSECT (dummy control section) created by the mapping macro.
<b>Owning Component:</b>	Component name and component identifier in parentheses.
<b>Eye-Catcher ID:</b>	Character string identifier of the eye-catcher (sometimes called the <b>control block id</b> ) within the mapping macro. The offset and length of the eye-catcher are also included.
<b>Storage Attributes:</b>	The storage attributes of the data area, including the following: <ul style="list-style-type: none"><li><b>Main Storage:</b> Central storage attributes of the data area.</li><li><b>Virtual Storage:</b> Virtual storage attributes of the data area.</li><li><b>Auxiliary Storage:</b> Spool storage attributes of the data area.</li><li><b>Subpool and Key:</b> 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.</li></ul>
<b>Size:</b>	The size of the data area in decimal bytes.
<b>Created by:</b>	Module, macro, or component whose use creates the data area.
<b>Pointed to by:</b>	Registers or data area fields that contain the address of the data area.
<b>Serialization:</b>	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: <ul style="list-style-type: none"><li>• Lock or locks</li><li>• ENQ and DEQ macros</li><li>• Compare and Swap (CS) instruction</li></ul>

- 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/Value	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
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 10 fields, the cross reference shows the following:

<b>Name</b>	The name of the field, bit, or mask.
<b>Hex Offset</b>	The hexadecimal offset of the field into the data area. For bits, the hexadecimal offset of the field containing the bit.
<b>Hex Value</b>	Values are shown only for bits, equates, and initialized character strings. For bits, the hexadecimal value shown implies the position of the bit in the field containing the bit.

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

Name	Hex Offset	Hex Value
ANYBIT	F0	80

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

240	(F0)	FIXED	4	ANYWORD	CONTROL WORD
240	(F0)	BITSTRING	1	ANYBYTE	FLAG BYTE
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.

## Programming interface information

This document contains information NOT intended to be used as programming interfaces of z/OS.

This document also contains intended programming interfaces that allow the customer to write programs to obtain the services of z/OS.

This information is identified where it occurs, either by an introductory statement to a chapter or section or by the following marking:

Programming Interface information

End of Programming Interface information

Unless otherwise specified, for data areas classified as programming interfaces, the **MACRO ID** and **DSECT NAME(S)** in the header are 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**.

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 the data area.

For data areas classified as programming interfaces, "RESERVED FOR USER" fields are part of the interface; all other "**RESERVED ...**" fields are **NOT** part of the interface.

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 DSECT NAME, constants, and data area itself are **NOT** part of the programming interface.

**TOKEN ONLY** data area: **ONLY** the address of the data area is a programming interface. The DSECT NAME, constants, and data area itself are **NOT** part of the programming interface.



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## **\$IRE Information**

### **\$IRE Programming Interface information**

Programming Interface information

**\$IRE**

End of Programming Interface information

## Heading Information • \$IRE Map

### \$IRE Heading Information

**Common Name:** IRE  
**Macro ID:** \$IRE  
**DSECT Name:** IRE  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:**

- Offset: IREEYE-IRE
- Length: L'IREEYE

**Storage Attributes:**

- Subpool: 241
- Key: 1
- Residency: Virtual storage is in 31 bit storage, real can be in 64 bit storage, in extended common storage

**Size:** See IRELEN  
**Created by:** As a part of an ECSA CPOOL, the storage is obtained at CPOOL build time (called out of JES2 initialization processing). Elements are obtained during internal reader allocation processing.

**Pointed to by:**

- CCTINTRE field of the HCCT data area
- HSBINTRE field of the HASB data area
- IRENEXT field of the IRE data area
- IREASNXT field of the IRE data area
- RIDIRE field of the IRWD data area

**Serialization:** The IRE data area is obtained and added to the chains in the user address space. However, the IRE can only be deleted from the HCCT chain in the JES2 main task because the chain can be run by \$DRDI processing.

**Function:** This area maps the data area used to track usage of internal readers. Each allocated has associated with it one tracking element in ECSA. This is used for the \$DRDI command.

### \$IRE Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	IRE	, Internal Reader Element
0	(0)	CHARACTER	4	IREEYE	Eyecatcher
4	(4)	ADDRESS	1	IREVER	Version
4	(4)	X'1'	0	IREVERN	"1" Initial version
5	(5)	BITSTRING	1		Reserved
6	(6)	CHARACTER	10	IREDEVN	Device name
16	(10)	ADDRESS	4	IRENEXT	Next IRE on HCCT chain
20	(14)	ADDRESS	4	IREASNXT	Next IRE on HASB chain
24	(18)	ADDRESS	4	IREIRWD	Associated IRWD
28	(1C)	ADDRESS	4	IRESJB	Owning SJB (or zero)
32	(20)	ADDRESS	4	IREHASB	Owning HASB
36	(24)	BITSTRING	8	IREASCBT	Owning address space token
44	(2C)	CHARACTER	8	IREOJOBN	Owning job name
52	(34)	CHARACTER	8	IREOBJID	and JOBID
60	(3C)	SIGNED	4	IREJOBCT	Total job count
64	(40)	CHARACTER	8	IRECJOBN	Job name, JOBID and
72	(48)	CHARACTER	8	IRECJBID	job key of job currently
80	(50)	SIGNED	4	IRECJKKEY	on this internal reader
84	(54)	SIGNED	4	IRECUREC	Records read for current job
88	(58)	CHARACTER	8	IRECCARD	Card currently being processed
96	(60)	BITSTRING	1	IRERAUTH	Reader command authority (see IRSRAUTH for bits)
97	(61)	BITSTRING	1	IREFLAGS	Processing flags
		1.... ....		IRESIIND	"B'10000000" Independent mode

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
		.1... ....		IREHOLDJ	"B'01000000" Hold job (\$TJ...,H)
		..1. ....		IRETRACE	"B'00100000" Tracing is active
		...1 ....		IREIRCAC	"B'00010000" IRE active in cleanup processing
98	(62)	BITSTRING	1	IRESTATS	Current RDR status
		1... ....		IREINACT	"B'10000000" IRE element logically deleted
		.1... ....		IREALLOC	"B'01000000" Internal reader allocated
		..1. ....		IREACTIV	"B'00100000" Internal reader active
99	(63)	BITSTRING	1		Reserved
100	(64)	CHARACTER	8	IREJCLAS	Default Job class
108	(6C)	CHARACTER	1	IREMCLAS	Default MSGCLASS
109	(6D)	CHARACTER	7		Reserved
116	(74)	BITSTRING	4	IRESIAFF	Default system affinity
120	(78)	SIGNED	4	IREPRINT (0)	Default print route code
120	(78)	SIGNED	2	IREPRNOD	Node number
122	(7A)	SIGNED	2	IREPRRTE	Local printer/remote number
124	(7C)	CHARACTER	8	IREPRSER	Print userid
132	(84)	SIGNED	4	IREPUNCH (0)	Default punch route code
132	(84)	SIGNED	2	IREPUNOD	Node number
134	(86)	SIGNED	2	IREPURTE	Local punch/remote number
136	(88)	CHARACTER	8	IREPUSER	Punch userid
144	(90)	SIGNED	4	(3)	Reserved
160	(A0)	DBL WORD	8	(0)	Alignment
160	(A0)	X'A0'	0	IRELEN	"*-IRE" Length of data area

## \$IRE Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
IRE	0		IRESJB	1C	
IREACTIV	62	20	IRESTATS	62	
IREALLOC	62	40	IRETRACE	61	20
IREASCBT	24		IREVER	4	
IREASNXT	14		IREVERN	4	1
IRECCARD	58				
IRECJBID	48				
IRECJKKEY	50				
IRECJOBN	40				
IRECUREC	54				
IREDEVN	6				
IREEYE	0	C9D9C540			
IREFLAGS	61				
IREHASB	20				
IREHOLDJ	61	40			
IREINACT	62	80			
IREIRCAC	61	10			
IREIRWD	18				
IREJCLAS	64				
IREJOBCT	3C				
IRELEN	A0	A0			
IREMCLAS	6C				
IRENEXT	10				
IREOBJID	34				
IREOJOBN	2C				
IREPRINT	78				
IREPRNOD	78				
IREPRRTE	7A				
IREPRSER	7C				
IREPUNCH	84				
IREPUNOD	84				
IREPURTE	86				
IREPUSER	88				
IRERAUTH	60				
IRESIAFF	74				
IRESIIND	61	80			



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## **\$IRIS Information**

### **\$IRIS Programming Interface information**

Programming Interface information

**\$IRIS**

End of Programming Interface information

## Heading Information • \$IRIS Map

### \$IRIS Heading Information

**Common Name:** IRIS  
**Macro ID:** \$IRIS  
**DSECT Name:** IRIS  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** IRIS  
     Offset: IRSEYE-IRS  
     Length: L'IRSEYE  
**Storage Attributes:** Subpool: 241  
     Key: 1  
     Residency: Virtual storage is in 31 bit storage, real can be in 64 bit storage, in common storage  
**Size:** See IRISLEN  
**Created by:** HASPIRMA during JES2 initialization processing  
**Pointed to by:** CCTBATMD field of the HCCT data area  
     CCTIRSMD field of the HCCT data area  
     CCTSTCMD field of the HCCT data area  
     CCTTSOMD field of the HCCT data area  
**Serialization:** None required  
**Function:** This area maps the data area used to store defaults for internal readers (as set from INTRDR initialization statement). One exists for each type of internal reader (in ECSA) even though the initialization statement only applies to batch internal readers.

### \$IRIS Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	IRIS	, Internal reader init statement
0	(0)	CHARACTER	4	IRISEYE	Eyecatcher
4	(4)	ADDRESS	1	IRISVER	Version
4	(4)	X'1'	0	IRISVERN	"1" Initial version
5	(5)	BITSTRING	1	IRSFLAGS	Processing flags
		1.... ....		IRSSIIND	"B'10000000" Independent mode
		.1.... ....		IRSHOLDJ	"B'01000000" Hold job (\$TJ...,H)
		...1.... ....		IRSBLLIM	"B'00010000" Honor BYTES= values
6	(6)	BITSTRING	1	IRSPRINC	Priority increment
7	(7)	BITSTRING	1	IRSPRLIM	Priority limit
8	(8)	CHARACTER	8	IRSJCLAS	Default Job class
16	(10)	CHARACTER	1	IRSMCLAS	Default MSGCLASS
17	(11)	CHARACTER	7		Reserved
24	(18)	SIGNED	4	IRSPRINT (0)	Default print route code
24	(18)	SIGNED	2	IRSPRNOD	Node number
26	(1A)	SIGNED	2	IRSPRRTE	Local printer/remote number
28	(1C)	CHARACTER	8	IRSPRSER	Print userid
36	(24)	SIGNED	4	IRSPUNCH (0)	Default punch route code
36	(24)	SIGNED	2	IRSPUNOD	Node number
38	(26)	SIGNED	2	IRSPURTE	Local punch/remote number
40	(28)	CHARACTER	8	IRSPUSER	Punch userid
48	(30)	BITSTRING	4	IRSSIAFF	Default system affinity
52	(34)	BITSTRING	1	IRSAUTH	Reader command authority
		.... 1...		IRSREJRM	"B'00001000" Remote restriction
		.... .1..		IRSREJJB	"B'00000100" Restricted from job commands
		.... ..1.		IRSREJDV	"B'00000010" Restricted from device commands
		.... ...1		IRSREJSY	"B'00000001" Restricted from system commands
53	(35)	BITSTRING	1	IRSTRFLG	Tracing flags (ONLY)
		1.... ....		IRSTRACE	"B'10000000" Tracing is active

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
		.1... ....		IRSTRFAS	"B'01000000" ASID filtering active
		..1. ....		IRSTRFJN	"B'00100000" JOBNAMe filtering active
		...1 ....		IRSTRFJ#	"B'00010000" JOB number filtering act
54	(36)	SIGNED	2	IRSTRASI	Trace ASID option
56	(38)	CHARACTER	8	IRSTRJBN	Trace job name option
64	(40)	SIGNED	4	IRSTRJNO	Trace job number option
68	(44)	SIGNED	4	(3)	Reserved
80	(50)	DBL WORD	8	(0)	Alignment
80	(50)	X'50'	0	IRISLEN	"-IRIS" Length of data area

## \$IRIS Cross Reference

Name	Hex	Hex
	Offset	Value
IRIS	0	
IRISEYE	0	C9D9C9E2
IRISLEN	50	50
IRISVER	4	
IRISVERN	4	1
IRSBLLIM	5	10
IRSFLAGS	5	
IRSHOLDJ	5	40
IRSJCLAS	8	
IRSMCLAS	10	
IRSPRINC	6	
IRSPRINT	18	
IRSPRLIM	7	
IRSPRNOD	18	
IRSPR RTE	1A	
IRSPRSER	1C	
IRSPUNCH	24	
IRSPUNOD	24	
IRSPURTE	26	
IRSPUSER	28	
IRSAUTH	34	
IRSREJDV	34	2
IRSREJJB	34	4
IRSREJRM	34	8
IRSREJSY	34	1
IRSSIAFF	30	
IRSSIIND	5	80
IRSTRACE	35	80
IRSTRASI	36	
IRSTRFAS	35	40
IRSTRFJ#	35	10
IRSTRFJN	35	20
IRSTRFLG	35	
IRSTRJBN	38	
IRSTRJNO	40	



---

## **\$IRWD Information**

### **\$IRWD Programming Interface information**

Programming Interface information

**\$IRWD**

End of Programming Interface information

## Heading Information • \$IRWD Map

### \$IRWD Heading Information

**Common Name:** IRWD  
**Macro ID:** \$IRWD  
**DSECT Name:** IRWD  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:**  
     Offset: RIDID-IRWD  
     Length: L'RIDID  
**Storage Attributes:**  
     Subpool: 249  
     Key: 1  
     Residency: Virtual storage is in 31 bit storage, real can be in 64 bit storage, in the address space that allocated the internal reader  
**Size:** See RIDSIZE  
**Created by:** HASCDSDL during allocation processing  
**Pointed to by:** IREIRWD field of the IRE data area  
                   DEBIRBB field of the DEB data area (after OPEN)  
                   contains bits 1-24 of the address  
**Serialization:** None required  
**Function:** This data area represents an internal reader allocated in an application address space.

### \$IRWD Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	IRWD	, Internal Reader work area
0	(0)	CHARACTER	4	RIDID	IRWD eyecatcher
4	(4)	SIGNED	4		Reserved
8	(8)	DBL WORD	8	RIDCWKAR (0)	Common work area
1424	(590)	ADDRESS	4	RIDHCCT	HCCT address
1428	(594)	ADDRESS	4	RIDIRE	Associated IRE address
1432	(598)	ADDRESS	4	RIDIRIS	IRIS address
1436	(59C)	ADDRESS	4	RIDTRE	TRE address (in HINTRDR)

Comment

-----  
 ASOK fields. For details, see ASOK DSECT in \$SDB

End of Comment					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
1440	(5A0)	BITSTRING	8	RIDASOK (0)	ASOK fields
1442	(5A2)	SIGNED	2	RIDASOKO	Ordinality of ASOK L1
1444	(5A4)	SIGNED	2	RIDASOK1	Offset into Level 1 ASOK
1446	(5A6)	SIGNED	2	RIDASOK2	Offset into Level 2 ASOK
1448	(5A8)	DBL WORD	8	RIDLOCK	Lock owning TCB info (or zero if not locked)

Comment

Default values for this internal reader (from allocation time)

End of Comment					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
1456	(5B0)	BITSTRING	1	RIDFLAGD	Default flag settings
	1...			RIDDLOCL	"B'10000000" Force SYSAFF to local
	.1...			RIDDHOLD	"B'01000000" Force TYPRUN=HOLD (DD HOLD=YES)
	.1. ....			RIDROUT	"B'00100000" A default print/punch routing has been passed
1457	(5B1)	BITSTRING	1	RIDRECFM	RECFM of intrdr dataset, bits defined in DCB under DCBRECFM
1458	(5B2)	SIGNED	2	RIDLRECL	LRECL of intrdr dataset

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
1460	(5B4)	CHARACTER	1	RIDMCLAS	Default MSGCLASS
1461	(5B5)	CHARACTER	7		Reserved
1468	(5BC)	SIGNED	4	RIDDPRT (0)	Default print route code
1468	(5BC)	SIGNED	2	RIDDPRND	Node number
1470	(5BE)	SIGNED	2	RIDDPRTT	Local printer/remote number
1472	(5C0)	CHARACTER	8	RIDDPRUS	Print userid
1480	(5C8)	SIGNED	4	RIDDPUN (0)	Default punch route code
1480	(5C8)	SIGNED	2	RIDDPUND	Node number
1482	(5CA)	SIGNED	2	RIDDPURT	Local punch/remote number
1484	(5CC)	CHARACTER	8	RIDDPUUS	Punch userid

Comment

Internal reader processing options

End of Comment

1492	(5D4)	BITSTRING 1... ....	1	RIDFLAG1 RID1LRDF	Miscellaneous flag byte, serialized by SJB lock "B'10000000" OPEN set default LRECL or IrcL value specified by user at open intrdr time is to be overridden.
1493	(5D5)	.1... ....		RID1BLIM	"B'01000000" Honor BYTES= values for internal readers
1496	(5D8)	ADDRESS	3		Reserved
1500	(5DC)	CHARACTER	4	RIDSJB	SJB address
1508	(5E4)	ADDRESS	8	RIDJOBID	Internal reader job id
			4	RIDSYML	Address of TU symbol list to pass in with jobs submitted on this intrdr
1512	(5E8)	SIGNED	4	(20)	Reserved
1512	(5E8)	X'680'	0	RIDSIZE	"((*-IRWD+127)/128)*128" Length of DSECT

## \$IRWD Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
IRWD	0		RID1BLIM	5D4	40
RIDASOK	5A0		RID1LRDF	5D4	80
RIDASOKO	5A2				
RIDASOK1	5A4				
RIDASOK2	5A6				
RIDCWKAR	8				
RIDDHOLD	5B0	40			
RIDDLOCL	5B0	80			
RIDDPRND	5BC				
RIDDPRTT	5BE				
RIDDPRT	5BC				
RIDDPRUS	5C0				
RIDDPUN	5C8				
RIDDPUND	5C8				
RIDDPURT	5CA				
RIDDPUUS	5CC				
RIDDROUT	5B0	20			
RIDFLAGD	5B0				
RIDFLAG1	5D4				
RIDHCCT	590				
RIDID	0	C9D9E6C4			
RIDIREE	594				
RIDIRIS	598				
RIDJOBID	5DC				
RIDLOCK	5A8				
RIDLRECL	5B2				
RIDMCLAS	5B4				
RIDRECFM	5B1				
RIDSIZE	5E8	680			
RIDSJB	5D8				
RIDSYML	5E4				
RIDTRE	59C				



## \$JCMWORK Information

### \$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 JCMPCWEWS 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
312	(138)	ADDRESS	4	JCMDSJBQ	Address of current SJB queue head
320	(140)	DBL WORD	8	(0)	Force double-word alignment
320	(140)	X'8'	0	JCMPCWEWS	"*-PCEWORK" Length of work area

## \$JCMWORK Map

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## **\$JCT Information**

### **\$JCT Programming Interface information**

Programming Interface information

**\$JCT**

End of Programming Interface information

## Heading Information • \$JCT Map

### \$JCT Heading Information

**Common Name:** JES2 Job Control Table  
**Macro ID:** \$JCT  
**DSECT Name:** JCT  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'JCT'  
Offset: JCTIDENT-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)  
SBJJCT 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
		.... . . . 1		JCT5EXTA	"B'00000001" Local JCT extension allowed
0	(0)	X'5C'	0	JCTLEXTA	"BUFMEMW7-BFPDSECT+JCT,4,C'A'" Local JCT extension address

				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	JCTIDENT	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	"*-JCTIDENT"
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_Z11	Track address (MTTR) of this JCT ( only valid up to version \$J2PZ111 )
144	(90)	BITSTRING	4	JCTSPIOT_Z11	Track address (MTTR) of 1st spin IOT ( only valid up to version \$J2PZ111 )

## \$JCT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
148	(94)	BITSTRING	4	JCTIOT_Z11	Track address (MTTR) of 1st regular IOT ( only valid up to version \$J2PZ111 )
152	(98)	BITSTRING	4	JCTOCTTR_Z11	Track address (MTTR) of OCR table ( only valid up to version \$J2PZ111 )
156	(9C)	BITSTRING	4	JCTXTRK_Z11	Track address (MTTR) of 1st XMIT track ( only valid up to version \$J2PZ111 )
160	(A0)	BITSTRING	4	JCTXBUFO	BUFFER OFFSET IN 1ST XMIT TRACK
164	(A4)	BITSTRING	32	JCTSAMSK	SPOOLS ALLOWED MASK
196	(C4)	SIGNED	4	JCTPDBBK	PERIPHERAL DATA SET KEY
200	(C8)	SIGNED	4	JCTPDBBO	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" I/O error using RPLs
204	(CC)	X'26'	0	JCTCIOER	"38" I/O error on PROCLIB
204	(CC)	X'28'	0	JCTJDVT	"40" Input JDVT not found
204	(CC)	X'36'	0	JCTCSYSE	"54" System error
204	(CC)	X'38'	0	JCTGMFAL	"56" Converter GETMAIN failed
204	(CC)	X'3C'	0	JCTCFOPN	"60" Fake open failure
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	JCTSSSTP	JOB SELECT RESTART STEP (SSRQSTEP)
276	(114)	SIGNED	2	JCTASID	ASID OF JOB
278	(116)	SIGNED	1	JCTVER	JCT version - contains the JES2 product level where the JCT was created. See \$J2Pxxx in \$HASPEQU.
278	(116)	X'2B'	0	JCTCVER	"43" 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... ....			JCT3TP1	"X'80" Transaction initiator
	.1.. ....			JCT3BATI	"X'40" Batch initiator

## Offsets

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

Comment

KEEP THE FIELDS JCTJOBFL AND JCTJBOP 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	JCTJBOP	HASP Job options (same as CATJBOP)
		1... ....		JCTPRICD	"B'10000000'" PRIORITY card or JOB card 'PRTY=' present (not used in CATJBOP field)
		.1... ....		JCTSETUP	"B'01000000'" SETUP card(S) present (not used in CATJBOP 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 CATJBOP field)
		.... .1..		JCTRERUN	"B'00000010'" Job was re-run (not used in CATJBOP field)
		.... ...1		JCTQHELD	"B'00000001'" Not used in JCTJBOP, indicates class queue is held in CATJBOP
286	(11E)	BITSTRING	2	JCTMXLRC	Max LRECL of JCL stream
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

## \$JCT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
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
		.1.. ....		JCT4NPSE	"B'01000000" New password is encrypted
		..1. ....		JCT4UJNM	"B'00100000" Exit 2/52 updated job name
		...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	JCTRXLN	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

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
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
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	JCTOUTOFT	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	JCTNJTTON	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

## \$JCT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
<hr/>					
		Start of the JMR area. Note that starting with release 2.1, the JMR is split into two areas. The original area exists here. The new area is constructed on the fly from fields in the JCTX			
End of Comment					
888	(378)	X'3C8'	0	JCTJMRST	"** START OF JMR AREA
Comment					
<hr/>					
KEEP THE FIELDS JCTJMRJN, JCTRDRON, AND JCTRDRTON 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	JCTRDRTON	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
1000	(3E8)	SIGNED	4	JCTUCOM	JMR USER COMMUNICATION AREA
1004	(3EC)	SIGNED	4	JCTUJVP	JMR ADDRESS OF USER EXIT ROUTINE
Comment					
<hr/>					
KEEP THE FIELDS JCTRDROF AND JCTRDRTOF TOGETHER FOR SMF					
End of Comment					
1008	(3F0)	SIGNED	4	JCTRDROF	TIME OFF INPUT PROCESSOR
1012	(3F4)	SIGNED	4	JCTRDRTOF	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	JCTJMOP	JMR SMF OPTIONS
	...1. ....			JCTJMRUX	"B'00100000" Take user exits for SMF
1023	(3FF)	BITSTRING	1	JCTJMVR	JMR version
	.... ....			JCTVER0	"X'00" Version 0
	.... ...1			JCTVER1	"X'01" Version 1
1024	(400)	SIGNED	4	JCTJMRND (0)	END OF JMR
1024	(400)	X'3C8'	0	JCTJMR	"JCTJMRST,*-JCTJMRST" Reference for entire JMR
1024	(400)	X'38'	0	JCTJMRL	"*-JCTJMRST" Length of JMR in JCT and job correlator
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_Z11	MTTR OF JOB HEADER ( only valid up to version \$J2PZ111 )
1084	(43C)	ADDRESS	4	JCTNJTTR_Z11	MTTR OF JOB TRAILER ( only valid up to version \$J2PZ111 )
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

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
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
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	1	JCTNFLG1	Networking flags
		1... ....		JCTN1EOT	"B'10000000" EOT received for NJE job
1379	(563)	BITSTRING	1	JCTFLAG7	Flag byte 7
		1... ....		JCT7NQAU	"B'10000000" - Automatically downgrade SYSDSN ENQs to SHR control when no longer needed EXCLUSIVE
		.1... ....		JCT7NQAL	"B'01000000" - Allow the job to downgrade SYSDSN ENQs to SHR control when no longer needed EXCL when requested via JCL DSENQSHR keyword on JOB statement - Both bits off disables the function (disallow)
		..1. ....		JCT7PCNV	"B'00100000" - preconversion JCT. MQTR of new JCT is in JCTPCVTK
		...1 ....		JCT7FAIC	"B'00010000" - Fail job after conversion

## \$JCT Map

### Offsets

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

In preconversion JCT, JCTPCTRK points to a postconversion JCT.

In a postconversion JCT, JCTPCTRK points to a preconversion JCT under the following conditions:

1. Job has been validated (JCT2AVDP is on), AND
2. Either of the password fields is not already encrypted(JCT4PASE or JCT4NPSE is off), AND
3. Password fields, JCTPASS and JCTNUPAS, are not null (zero or blank).

Note that this field will remain non-zero if a job is re-converted.

End of Comment					
1380	(564)	ADDRESS	4	JCTPCTRK_Z11	Track addr of pre-conv JCT ( only valid up to version \$J2PZ111 )
1384	(568)	BITSTRING	1	JCTFLAG6	Flag byte
		1.... ....		JCT6LSRC	"B'10000000" JOBRC=LASTRC is default
		.1.... ....		JCT6RQST	"B'01000000" JCTREQRC has been set
		..1.... ....		JCT6RQAB	"B'00100000" JCTREQRC has ABEND code
		...1.... ....		JCT6RSPC	"B'00010000" JOBRC=STEP found
		....1.... ....		JCT6JBC	"B'00001000" JOBRC present on job card
1385	(569)	BITSTRING	3	JCTREQRC	RC of requested step
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_Z11 (0)	End of fixed portion of JCT ( only valid up to version \$J2PZ111 )

Comment

The following eight MQTR fields are only valid at version \$J2PZ112 and greater.

End of Comment					
1400	(578)	BITSTRING	6	JCTCURTK	Track address (MQTR) of this JCT
1406	(57E)	BITSTRING	6	JCTSPNTK	Track address (MQTR) of 1st spin IOT
1412	(584)	BITSTRING	6	JCTIOTTK	Track address (MQTR) of 1st regular IOT
1418	(58A)	BITSTRING	6	JCTOCTTK	Track address (MQTR) of OCR table
1424	(590)	BITSTRING	6	JCTXMTTK	Track address (MQTR) of 1st XMIT track
1430	(596)	BITSTRING	6	JCTNJHTK	Track address (MQTR) of job header.
1436	(59C)	BITSTRING	6	JCTNJTTK	Track address (MQTR) of job trailer.
1442	(5A2)	BITSTRING	6	JCTPCVTK	Track address (MQTR) of pre-conv JCT. See the description of field JCTPCTRK_Z11 for more info.
1448	(5A8)	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					
1448	(5A8)	ADDRESS	2	JCTLEFT (0)	

## Offsets

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

The following fields define the local extension  
to the JCT pointed to by JCTLEXTA. This extension  
is a local data area managed by the \$JCTXnnn  
services.

End of Comment

1448	(5A8)	X'0'	0	JCTLXID	"0,4,C'C" Eyecatcher ('JCLX')
1448	(5A8)	X'4'	0	JCTLXLEN	"4,2,C'H" Remaining free space
1448	(5A8)	X'6'	0	JCTLXPRE	"L'JCTLXID+L'JCTLXLEN" Length of prefix
1448	(5A8)	X'2000'	0	JCTLXSIZ	"8192" Size of local extension

## \$JCT Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
JCT	0		JCTFAMILY	1CC	
JCTACCTL	480		JCTFEND	5A8	
JCTACCTN	150		JCTFEND_Z11	578	
JCTACTLG	480		JCTFLAG1	82	
JCTASID	114		JCTFLAG2	118	
JCTAXCLS	440		JCTFLAG3	119	
JCTAXPR	441		JCTFLAG4	16C	
JCTBATCH	11C	80	JCTFLAG5	0	50
JCTBLDG	468		JCTFLAG6	568	
JCTBURST	82	40	JCTFLAG7	563	
JCTBYTES	270		JCTFORMS	164	
JCTCABND	CC	24	JCTGMFAL	CC	38
JCTCARDS	250		JCTGRPID	1A8	
JCTCDTOF	22C		JCTIDENT	68	
JCTCDTON	224		JCTIDLEN	1B9	
JCTCDUPL	CC	4	JCTINDC	3E5	
JCTCFOPN	CC	3C	JCTINDEV	148	
JCTCHDRT	42E		JCTINRDR	11D	4
JCTCHNDX	42C		JCTIOPRI	140	
JCTCIO	CC	8	JCTIOT_Z11	94	
JCTCIOER	CC	26	JCTIOTTK	584	
JCTCJCL	CC	4	JCTIPRIO	13E	
JCTCJDVT	CC	28	JCTJBKEY	78	
JCTCLASS	3E7		JCTJBNUM	74	
JCTCNVOF	228		JCTJBOPT	11D	
JCTCNVON	220		JCTJCLAS	13D	
JCTCNVRC	CC		JCTJDVT	84	
JCTCNWT	CC	10	JCTJLOGD	16E	
JCTCOK	CC	0	JCTJMOPT	3FE	
JCTCPUID	3D8		JCTJMRL	400	3C8
JCTCPYCT	16D		JCTJMRLN	3C8	
JCTCSECF	CC	C	JCTJMRLD	400	38
JCTCSYSE	CC	36	JCTJMRRND	400	
JCTCURTK	578		JCTJMRRST	378	3C8
JCTCVER	116	2B	JCTJMRRUX	3FE	20
JCTCVSID	260		JCTJMRRVR	3FF	
JCTDEPT	460		JCTJNAME	6C	
JCTENCKY	1C2		JCTJOBAC	482	
JCTESOUT	2D0		JCTJOBFL	11C	
JCTESTBY	174		JCTJOBID	120	
JCTESTLN	15C		JCTJOBIN	3F8	
JCTESTPG	170		JCTJPERD	51C	
JCTESTPU	160		JCTJPEST	520	
JCTETIME	158		JCTJQE	420	
JCTETS	458		JCTJSFLG	11A	
JCTEXSID	264		JCTJSSTP	112	

## \$JCT Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
JCTJTCC	3E6		JCTPROCN	190	
JCTJTFGLG	83		JCTPROUT	178	
JCTJUSID	1BA		JCTPRRID	17C	
JCTLEFT	5A8		JCTPRRMT	17A	
JCTLENG	80		JCTPRTY	110	
JCTLEXTA	0	5C	JCTPSN1	2D8	
JCTLINCT	16F		JCTPSN2	2E0	
JCTLINES	254		JCTPUNCH	258	
JCTLSTAB	53B		JCTPUNOD	184	
JCTLXID	5A8	0	JCTPUOUT	184	
JCTLXLEN	5A8	4	JCTPURID	188	
JCTLXPRE	5A8	6	JCTPURMT	186	
JCTLXSIZ	5A8	2000	JCTQHELD	11D	1
JCTMAXRC	538		JCTRDR	3FC	
JCTMCLAS	13C		JCTRDROF	3F0	
JCTMVSNM	530		JCTRDRON	3D0	
JCTMXLRC	11E		JCTRDSID	25C	
JCTNACCT	290		JCTRDTOF	3F4	
JCTNDTOF	28C		JCTRDTON	3D4	
JCTNDTON	284		JCTREQRC	569	
JCTNFLG1	562		JCTRERUN	11D	2
JCTNJHTK	596		JCTRNODE	144	
JCTNJHTR_Z11	438		JCTROOM	470	
JCTNJSID	27C		JCTROOMN	154	
JCTNJTOF	288		JCTROUTE	144	
JCTNJTON	280		JCTRMRMT	146	
JCTNJTTK	59C		JCTRSTRT	11C	1
JCTNJTTR_Z11	43C		JCTRXLLEN	1CA	
JCTNLNDE	2C8		JCTSAMSK	A4	
JCTNNDEV	2A0		JCTSCHEN	552	
JCTNNNDE	2C0		JCTSECLB	514	
JCTNNODE	424		JCTSETUP	11D	40
JCTNOJID	298		JCTSGRP	478	
JCTNOJNL	11C	10	JCTSMFLG	11B	
JCTNOLOG	11D	10	JCTSMFL0	11B	D8
JCTNONDE	2A8		JCTSPIOT_Z11	90	
JCTNOTUS	1B0		JCTSPLNG	7C	18
JCTNOTY6	11B	4	JCTSPNTK	57E	
JCTNOT26	11B	1	JCTSPUNB	274	
JCTNOUJP	11B	2	JCTSTART	0	68
JCTNOUPT	11C	8	JCTSTCJB	11C	20
JCTNOUSO	11B	20	JCTSTEP	3E4	
JCTNOUSR	2B0		JCTTCOPY	11C	2
JCTNUPAS	1A0		JCTTHOLD	11D	20
JCTNXNDE	2B8		JCTTOKEN	1D0	
JCTNXUID	528		JCTTRAK_Z11	8C	
JCTN1EOT	562	80	JCTTSCAN	11C	4
JCTOCTTK	58A		JCTTSUAF	1B8	
JCTOCTTR_Z11	98		JCTTSUID	1B0	1B0
JCTODTOF	24C		JCTTSUJB	11C	40
JCTODTON	244		JCTUCOM	3E8	
JCTOPRIO	141		JCTUIDL	1B9	
JCTOTSID	268		JCTUJVP	3EC	
JCTOUTOF	248		JCTUSEID	3DC	
JCTOUTON	240		JCTUSERA	F8	
JCTPAGES	26C		JCTUSERB	FC	
JCTPASS	198		JCTUSERC	100	
JCTPCTRK_Z11	564		JCTUSERD	104	
JCTPCVTK	5A2		JCTUSERE	108	
JCTPDDBK	C4		JCTUSERF	10C	
JCTPDDBO	C8		JCTUSER0	D0	
JCTPNAME	128		JCTUSER1	D4	
JCTPRICD	11D	80	JCTUSER2	D8	
JCTPRIOR	13F		JCTUSER3	DC	
JCTPRNOD	178		JCTUSER4	E0	

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
JCTUSER5	E4		JCT6RSPC	568	10
JCTUSER6	E8		JCT7FAIC	563	10
JCTUSER7	EC		JCT7NQAL	563	40
JCTUSER8	F0		JCT7NQAU	563	80
JCTUSER9	F4		JCT7PCNV	563	20
JCTVALJB	11C	E0			
JCTVER	116				
JCTVER0	3FF	0			
JCTVER1	3FF	1			
JCTWEARR	54E				
JCTWORK	2E8				
JCTWOSCN	546				
JCTWSCN	53E				
JCTXBMII	11D	8			
JCTXBUFO	A0				
JCTXDTOF	23C				
JCTXTDTN	234				
JCTXEQND	278				
JCTXEQOF	238				
JCTXEQON	230				
JCTXMASK	400				
JCTXMTTK	590				
JCTXNODE	27A				
JCTXOUT	2D4				
JCTXSTOP	450				
JCTXSTRT	448				
JCTXTRK_Z11	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			
JCT4UJNM	16C	20			
JCT4WINI	16C	8			
JCT5CKPT	0	80			
JCT5EXTA	0	1			
JCT6JBRC	568	8			
JCT6LSRC	568	80			
JCT6RQAB	568	20			
JCT6RQST	568	40			



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## **\$JCTX Information**

### **\$JCTX Programming Interface information**

Programming Interface information

#### **\$JCTX**

End of Programming Interface information

## Heading Information • \$JCTX Map

### \$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

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.

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
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
12	(C)	BITSTRING	6	JCXJLOG	JES log control
12	(C)	X'12'	0	JCXJLEN	"*-JCTX" Extension length

Comment

IBM supplied extension for advanced features

The JCXTYPE is "IBM"

The JCXMOD is JCXADVM

End of Comment

12	(C)	X'2'	0	JCXADVM	"2" Modifier
12	(C)	CHARACTER	8	JCXJCLA8	Extended execution job class name
20	(14)	CHARACTER	8	JCXAXCL8	Extended actual execution job class name
28	(1C)	CHARACTER	8	JCXMVSSB	Submitting MVS system name
36	(24)	BITSTRING	6	JCXJSMTK	MQTR of JSMT (Job symbol table)
36	(24)	X'2A'	0	JCXADVSZ	"*-JCTX" Extension length

## \$JCTX Cross Reference

Name	Hex Offset	Hex Value
JCTX	0	
JCXADVM	C	2
JCXADVSZ	24	2A
JCXAXCL8	14	
JCXBASLN	C	C
JCXEYE	0	D1C3E3E7
JCXJCLA8	C	
JCXJLEN	C	12
JCXJLGM	C	1
JCXJLOG	C	
JCXJSMTK	24	
JCXLEN	A	
JCXMOD	8	
JCXMVSSB	1C	
JCXORG	C	
JCXTYPE	4	



## **\$JESLOG Information**

### **\$JESLOG Programming Interface information**

Programming Interface information

**\$JESLOG**

End of Programming Interface information

## Heading Information • \$JESLOG Map

### \$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 (JESYSMSG and JESJOBLG) is to be supported.

### \$JESLOG Map

Offsets					
Dec	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.		JLG1NOCM	"B'00000100" Not spinnable via command
1	(1)	SIGNED	1	JLGSOUC	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 6

**\$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
JLG1NOCM	0	4
JLG1NOSP	0	4
JLG1SUP	0	8
JLG1TIMD	0	20
JLG1TIMI	0	40



## **\$JIB Information**

### **\$JIB Programming Interface information**

Programming Interface information

#### **\$JIB**

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

- JIBGCB
- JIBJSPA

End of Programming Interface information

## Heading Information • \$JIB Map

### \$JIB Heading Information

**Common Name:** JES2 JOE Information Block  
**Macro ID:** \$JIB  
**DSECT Name:** JIB  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:**  
     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. The storage resides in the FSS address space.  
**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  
     JIBNEXT field of the JIB    data area  
     QCTSTKHD field of the QCT    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 (HASPFSMM). In addition, HASPFSSM uses the JIB to store JOE level information.

### \$JIB Map

Offsets					
Dec	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	JIB2RAB (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'1000000" JIB IS A REQUEST FOR A JOE
		.1.. ....		JIBFACT	"B'0100000" JIB IS ACTIVE ON DEVICE
		..1. ....		JIBFRET	"B'0010000" JIB IS BEING RETURNED TO JES
		...1 ....		JIBFINIT	"B'0001000" 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	Hex	Type/Value	Len	Name (Dim)	Description
19	(13)	BITSTRING	1	JIBFUNPR	"B'000001000" UNPRINTABLE JOE IN JIB
				JIBFONDV	"B'000000100" ON DEVICE MSG NEEDED FOR JOE
				JIBFOPIC	"B'000000010" JIB CANCELLED DURING SETUP
				JIB3AUTH	"B'000000001" JESNEWS AUTHORIZATION FAILURE
				JIBFLG4	FOURTH FLAG BYTE
				JIB4RSV1	"B'100000000" Reserved for future use
				JIB4DUMD	"B'010000000" Dummy data set being processed
				JIB4FSSR	"B'001000000" HASP704 for FSS reason
				JIBSWBER	"B'000100000" SWB error
				JIB4RDIP	"B'000010000" FSA posted for GETDS as dataset RELDSed incomplete & FSA was waiting for work
20	(14)	BITSTRING	1	JIB4OPIN	"B'000000100" Operator intervention requested for dataset within JIB
				JIB4REPO	"B'000000010" JIB's dataset going thru reposition
21	(15)	BITSTRING	3	JIB4NENF	"B'000000001" Data set select ENF was sent when JOE header page was printed
				JIBUNPRR	REASON PRT DS UNPRINTABLE
24	(18)	SIGNED	4	JIBJ2GAB (0)	Reserved for future use
24	(18)	BITSTRING	1	JIBFLG5	BEGIN JES2 GETDS CMS COPY AREA
		1... ....		JIB5JCOR	Fifth Flag Byte
25	(19)	BITSTRING	3		"B'100000000" Job correlator in GETDS data
28	(1C)	SIGNED	4	JIBJOEI	RESERVED FOR FUTURE USE
32	(20)	SIGNED	4	JIBJ2RAE (0)	Index of JOE in the JOT
32	(20)	BITSTRING	4	JIBJCTA	END OF JES2 RELDS CMS COPY AREA
36	(24)	SIGNED	4	JIBJBNUM	JCT TRACK ADDRESS (JQEJCT)
40	(28)	CHARACTER	8	JIBJOBID	Job number
48	(30)	ADDRESS	4	JIBJKEY	HASP JOB IDENTIFIER
52	(34)	BITSTRING	184	JIBNEWS	HDBDSKEY FOR CB VERIFICATION
236	(EC)	SIGNED	4	JIBJ2GAC (0)	Copy of current JNEW CB (used for JESNEWS)
236	(EC)	CHARACTER	64	JIBJCOR	Begin JES2 GETDS CMS copy area for Job Correlator
300	(12C)	SIGNED	4	JIBJ2GAE (0)	Job Correlator
300	(12C)	SIGNED	4	JIBWORK (4)	END OF JES2 GETDS CMS COPY AREA
316	(13C)	CHARACTER	8	JIBDEVN	WORK AREA FOR \$VERIFY IN FSSM
324	(144)	ADDRESS	4	JIBSJIOP	EBCDIC device name
328	(148)	ADDRESS	4	JIBCSJIO	Normal SJIOP pointer
332	(14C)	ADDRESS	4	JIBJCT	CHK record SJIOP pointer
336	(150)	ADDRESS	4	JIBIOT	POINTER TO JCT
340	(154)	BITSTRING	6	JIBIOTTK	POINTER TO IOT
346	(15A)	BITSTRING	2		IOT MQTR (CURRENT OR RESET)
348	(15C)	ADDRESS	4		Reserved
352	(160)	ADDRESS	4	JIBPDBB	POINTER TO NEXT ASSIGNABLE PDDB
356	(164)	ADDRESS	4	JIBFPDB	FIRST PDBB OFFSET IN JIB
360	(168)	ADDRESS	4	JIBFIOTR	IOT MTTR OF FIRST PDBB
364	(16C)	ADDRESS	4	JIBCPBUF	CHECKPOINT I/O BUFFER ADDRESS
368	(170)	SIGNED	4	JIBGCB	POINTER TO GCB CHAIN
372	(174)	SIGNED	4	JIBDSACT	DATA SETS ASSIGNED COUNT
376	(178)	CHARACTER	8	JIBDSEQN	DATA SET SEQUENCE NUMBER
384	(180)	BITSTRING	224	JIBSECLB	Security label of the job
608	(260)	BITSTRING	4	JIBSPA (2)	JSPA AREA
608	(260)	X'268'	0	JIBSIZE	Reserved
616	(268)	SIGNED	2	JIBJOAPR (0)	"*-JIB" Length of JIB base. Note that the length of a JIB is JIBSIZE, plus the size of the prototype JOA, which is appended to the end of the JIB.
					Prototype (copy) JOA. The size of a JIB is calculated dynamically at runtime by the FSMQCT routine in HASPFSSM

## \$JIB Cross Reference

### \$JIB Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
JIB	0		JIBUNPRR	14	
JIBCPBUF	168		JIBWORK	12C	
JIBCSJIO	148		JIB3AUTH	12	1
JIBDEVN	13C		JIB4DUMD	13	40
JIBDSACT	170		JIB4FSSR	13	20
JIBDSEQN	174		JIB4NENF	13	1
JIBFACT	10	40	JIB4OPIN	13	4
JIBFBKSP	11	8	JIB4RDIP	13	8
JIBFCOMP	10	8	JIB4REPO	13	2
JIBFCPB	10	2	JIB4RSV1	13	80
JIBFCPER	12	10	JIB5JCOR	18	80
JIBFCPVL	12	20			
JIBFDEL	11	40			
JIBFFSTP	12	80			
JIBFINCP	10	4			
JIBFINIT	10	10			
JIBFINT	11	10			
JIBFIOTR	164				
JIBFJHPG	11	4			
JIBFJTPG	11	2			
JIBFLAGS	10				
JIBFLG1	10				
JIBFLG2	11				
JIBFLG3	12				
JIBFLG4	13				
JIBFLG5	18				
JIBFLSTP	12	40			
JIBFNEWS	11	1			
JIBFONDV	12	4			
JIBFOPIC	12	2			
JIBFPDB	160				
JIBFREQ	10	80			
JIBFRET	10	20			
JIBFRST	11	20			
JIBFSTOP	11	80			
JIBFUNPR	12	8			
JIBGCB	16C				
JIBID	0				
JIBIOERR	10	1			
JIBIOT	150				
JIBIOTTK	154				
JIBJBNUM	24				
JIBJCOR	EC				
JIBJCT	14C				
JIBJCTA	20				
JIBJKEY	30				
JIBJOAPR	268				
JIBJOBID	28				
JIBJOEI	1C				
JIBJSPA	180				
JIBJ2GAB	18				
JIBJ2GAC	EC				
JIBJ2GAE	12C				
JIBJ2RAB	8				
JIBJ2RAE	20				
JIBMIDSE	8				
JIBNEWS	34				
JIBNEXT	4				
JIBPDDB	15C				
JIBSECLB	178				
JIBSIZE	260	268			
JIBSJOB	144				
JIBSWBER	13	10			

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## **\$JNEW Information**

### **\$JNEW Programming Interface information**

Programming Interface information

#### **\$JNEW**

End of Programming Interface information

## Heading Information • \$JNEW Map

### \$JNEW Heading Information

**Common Name:** JNEW Control Block  
**Macro ID:** \$JNEW  
**DSECT Name:** JNEW  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:**  
     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  
     PPANEWS 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	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 length
176	(B0)	BITSTRING	4		Reserved
184	(B8)	DBL WORD	8	(0)	Ensure boundary
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



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## **\$JNT Information**

### **\$JNT Programming Interface information**

Programming Interface information

**\$JNT**

End of Programming Interface information

## Heading Information • \$JNT Map

### \$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. 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 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'4'	0	JNTVERS	"4" JNT VERSION NUMBER
5	(5)	ADDRESS	1	JNTRSV1	RESERVED
6	(6)	SIGNED	2	JNTCATCT	Counter that is incremented every time an execution class (CAT) or execution class group (GRPOBJ) is changed. Used to trigger a REFRESH of the in- memory CAT/GRPOBJ cache.
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
36	(24)	X'24'	0	JNTBLEN	"*-JNT" Length of the base JNT

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
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

## \$JNT Cross Reference

Name	Hex Offset	Hex Value
JNT	0	
JNTBLEN	24	24
JNTBSEND	24	
JNTCATCT	6	
JNTFRCNT	14	
JNTID	0	D1D5E340
JNTJBMAX	18	
JNTJIXZ2	F68	
JNTJXENT	F68	10000
JNTJXMAP	24	
JNTJXMLN	24	F43
JNTLCMAX	C	
JNTLCMIN	8	
JNTLENZ2	F68	F68
JNTLSTAL	10	
JNTRSV1	5	
JNTVERS	4	4
JNTVRSN	4	



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## **\$JOE Information**

### **\$JOE Programming Interface information**

Programming Interface information

**\$JOE**

End of Programming Interface information

## Heading Information

### \$JOE Heading Information

<b>Common Name:</b>	Job Output Element
<b>Macro ID:</b>	\$JOE
<b>DSECT Name:</b>	JOE
<b>Owning Component:</b>	JES2 (SC1BH)
<b>Eye-Catcher ID:</b>	The pool of JOEs is preceded by an eyecatcher "JOE POOL" in the header for the pool.
	Offset: HDPID-HDP
	Length: 13
<b>Storage Attributes:</b>	Subpool: 0 for the JES2 main 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.
<b>Size:</b>	See JOESIZE.
<b>Created by:</b>	JES2 Initialization allocates memory for the pool of JOEs. The checkpoint versions subtask creates the dataspace copies. The #\$ADD service routine creates elements within the pool.
<b>Pointed to by:</b>	<p>The following fields contain indexes 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 multiplying by JOESIZE and then adding the value in \$JOTABLE to the calculated offset.</p> <p>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</p> <hr/> <p>The following fields contain offsets to \$JOEs:</p> <p>PSOWKOFF field of the \$PSO data area PSOCHOFF field of the \$PSO data area JOENETCH field of the \$JOE data area</p> <hr/> <p>The following fields contain addresses of \$JOEs:</p> <p>PQEJWJOE field of the \$PQE data area PQEDWJOE field of the \$PQE data area PQHXJOE field of the \$PQH data area</p> <hr/> <p>Various fields in the processor work areas and parameter lists contain offsets or addresses of JOEs.</p>

**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.

WORK JOEs are managed by the \$DOGJOE service. This provides encapsulation services that can be used to isolate code from future changes. In addition, a lock (the BERT lock) is used to serialize updates to work JOEs (CHAR JOEs should never be updated except by the appropriate \$# service). With the exception of a few bits, you must obtain an update mode JOA before making any updates to a work JOE.

**Function:** The JOE control block represents group of sysout data sets (PDDBs) with compatible output grouping characteristics. It is a checkpointer 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.

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
0	(0)	X'0'	0	JOA	"JOE,0,C'J" JOE is sometimes a JOA
0	(0)	X'8'	0	JOEVRSN	"8" JOE control block version
Comment					
Work JOE starts here					
End of Comment					
0	(0)	X'0'	0	JOEWSTRT	"*,0,C'J" Start of work JOE area
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

## \$JOE Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	.... .1..	0	JOEINDEX	"B'00100000" This is an index JOE
1	(1)	X'0'	3	JOEWB1	"JOE,*-JOE,C'X" 1st work JOE block
		ADDRESS		JOENEXTI	Next WORK-JOE in class q or next CHAR-JOE (index) or next index JOE (index)
4	(4)	BITSTRING	1	JOECURCL	JOE CURRENT SYSOUT CLASS (reserved in the CHAR JOE)
4	(4)	X'4'	0	JOEWB2	"JOECURCL,*-JOECURCL,C'X" 2nd work JOE block
Comment					

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.

### End of Comment

5	(5)	ADDRESS	3	JOEPREVI	Previous WORK-JOE in class queue or previous CHAR-JOE (index)
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
8	(8)	X'8'	0	JOEWB3	"JOEFLAG5,*-JOEFLAG5,C'X" 3rd work JOE block
9	(9)	BITSTRING	3		Reserved for future use
12	(C)	BITSTRING	1	JOEFLAG1	WORK-JOE FLAGS
		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

13	(D)	.... .1..	JOE1CTKN	"B'00000010" A PDDB within this JOE has a client token associated with it (i.e. PDB9CTKN on)	
16	(10)	.... .1..	JOE1ART	"B'00000001" This is an artifical JOE	
		ADDRESS	3	JOEQEI	JQE for this JOE (index)
		BITSTRING	1	JOEFLAG2	MORE WORK JOE FLAGS
		1.... ....		JOE2TCEL	"B'10000000" TRACK-CELL JOE FLAG

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
		.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
16	(10)	X'C'	0	JOEWB4	"JOEFLAG1,*-JOEFLAG1,C'X" 4th work JOE block
17	(11)	ADDRESS	3	JOENXJQI	Next WORK-JOE with same job (index)
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

Comment

The 4 following bits must match definitions in STATSSL3/ESWPSSL3.

End of Comment

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
20	(14)	X'14'	0	JOEWB5	"JOEFLAG3,*-JOEFLAG3,C'X" 5th work JOE block
21	(15)	ADDRESS	3	JOECHARI	Characteristic JOE for this WORK-JOE (index)
24	(18)	BITSTRING	1	JOEOFSL	OFFLOAD SELECT BYTE
24	(18)	X'18'	0	JOEWB6	"JOEOFSL,*-JOEOFSL,C'X" 6th work JOE block
25	(19)	ADDRESS	3	JOECHNXI	Next WORK-JOE, same CHAR (index)
28	(1C)	BITSTRING	1	JOEFLAG4	FOURTH WORK JOE FLAG
		1... ....		JOE4JNEW	"B'10000000" JESNEWS JOE FLAG
		.1.. ....		JOE4CRTM	"B'01000000" JOECRTME update pending
		..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	JOE hold type (also called JOE blocked type)

## \$JOE Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
OHLDOPER B'10000000' Operator HOLD/blocked					
OHLDSYS B'00100000' System HOLD/blocked					
OHLDALL B'11111111' ALL HOLD/blocked					
End of Comment					
31	(1F)	BITSTRING	1	JOEHSRSN	System HOLD/blocked 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	JOEPRIOR	JOE PRIORITY X'0000' - X'OFF0'
38	(26)	SIGNED	2	JOEJNEWL	JESNEWS number for JESNEWS
40	(28)	SIGNED	4	JOECPADR_Z2	CKPT SPOOL record addr (MTTR) z2 mode only (reserved in z11 mode)
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)	SIGNED	4	JOEIOTTR_Z2	JOE IOT track addr (MTTR) z2 mode only (reserved in z11 mode)
64	(40)	BITSTRING	3	JOEDEVID	USER DEVICE IDENTIFICATION

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
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.		JOEFTPBM	"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	JOEBERTT	Token representing the BERTS for this JOE (In z11 mode)
96	(60)	X'60'	0	JOESWBOT_Z2	"JOEBERTT,4,C'X" Track address of JOE SWBIT chain for SWBTU overrides (MTTR) z2 mode only
100	(64)	BITSTRING	1	JOEBUSY	JOE busy system id
101	(65)	SIGNED	3	JOEFAMLY	Mother/Daughter Family ID
101	(65)	X'1C'	0	JOEWB7	"JOEFLAG4,*-JOEFLAG4,C'X" 7th work JOE block
104	(68)	SIGNED	4	JOE1END (0)	END OF WORK-JOE
104	(68)	X'68'	0	JOEWSIZE	"*-JOEWSTRT" Size of Work JOE

Comment					
CHAR JOE starts here					

End of Comment					
104	(68)	X'68'	0	JOECSTRT	"*,0,C'J" Start of CHAR JOE area
104	(68)	BITSTRING	1	JCTYPE	JOETYPE JOE Type
104	(68)	X'68'	0	JOECB1	"JOECSTRT,*-JOECSTRT,C'X" 1st CHAR JOE block
105	(69)	ADDRESS	3	JCENEXTI	JOENEXTI Next CHAR-JOE
108	(6C)	BITSTRING	1	JOECCR2	Reserved
108	(6C)	X'6C'	0	JOECB2	"JOECCR2,*-JOECCR2,C'X" 2nd CHAR JOE block

## \$JOE Map

### Offsets

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

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.

				End of Comment	
109	(6D)	ADDRESS	3	JCEPREVI	JOEPREVI Previous CHAR-JOE
112	(70)	BITSTRING	1	JCEFLAG5	JOEFLAG5 Common area JOE flag byte
112	(70)	X'70'	0	JOECB3	"JCEFLAG5,*-JCEFLAG5,C'X'" 3rd CHAR JOE block
113	(71)	BITSTRING	3		Reserved for future use
116	(74)	BITSTRING	1	JOECCR4	Reserved - Do not use. This allows us to use JOE1ART directly for an art JOE check instead of having to check JOETYPE first.
116	(74)	X'74'	0	JOECB4	"JOECCR4,*-JOECCR4,C'X'" 4th CHAR JOE block
117	(75)	ADDRESS	3	JOEWKPTI	WORK-JOE with like CHAR-JOE (index)

Comment

IF YOU ADD OR DELETE SETUP FIELDS, YOU MUST UPDATE THE EQUATES FOR THE \$D F COMMAND IN HASPCOMM

				End of Comment	
120	(78)	CHARACTER	8	JOEFORM	FORMS NAME
128	(80)	CHARACTER	4	JOEFCB	FCB NUMBER
132	(84)	CHARACTER	4	JOEUCS	UCS NUMBER
136	(88)	CHARACTER	8	JOEWTRID	DATA SET EXTERNAL WRITER NAME
144	(90)	CHARACTER	8	JOEUSER	USER ID
152	(98)	CHARACTER	4	JOEFLASH	OVERLAY-FRAME
156	(9C)	CHARACTER	8	JOEPRMD	PROCESS MODE OF THIS JOE
164	(A4)	CHARACTER	8	JOESECLB	Security label for Dataset
172	(AC)	BITSTRING	1	JOEFLAGC	CHARACTERISTICS FLAGS
		1... ....		JOEFCBRT	"B'10000000" BURST=YES FLAG
173	(AD)	BITSTRING	1	JOEFLAGD	DEMAND CHARACTERISTIC FLAGS
		1... ....		JOEFDMS	"B'10000000" FORMS DEMAND '0' NO '1' YES
		.1... ....		JOEFDLH	"B'01000000" FLASH DEMAND '0' NO '1' YES
		..1. ....		JOEFDFCB	"B'00100000" FCB DEMAND '0' NO '1' YES
		...1....		JOEFUDCS	"B'00010000" UCS DEMAND '0' NO '1' YES
		.... 1...		JOEFDVRT	"B'00001000" BURST DEMAND '0' NO '1' YES
173	(AD)	X'78'	0	JOESETUP	"JOEFORM,*-JOEFORM" DEVICE SETUP CHARACTERISTICS
174	(AE)	BITSTRING	2		RESERVED FOR FUTURE USE
174	(AE)	X'78'	0	JOECB5	"JOEFORM,*-JOEFORM,C'X'" 5th CHAR JOE block
176	(B0)	SIGNED	4	JOEUSE	# OF JOES USING THIS ELEMENT
180	(B4)	SIGNED	4	JOE2END (0)	END OF CHAR-JOE
180	(B4)	X'4C'	0	JOECSIZE	"*-JOECSTRT" Size of Char JOE

Comment

Set length to be 2 times the longer of the WORK or CHAR JOE.

				End of Comment	
0	(0)	BITSTRING	208		Define 2 WORK JOEs length
0	(0)	BITSTRING	152		Define 2 CHAR JOEs length
208	(D0)	X'68'	0	JOESIZE	"(*-JOE)/2" Size of CKPTed JOE area

## Offsets

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

## JOE extension (JOX)

The following fields appear only within an artificial JOE. Artificial JOEs are constructed using the \$DOGJOE service.

End of Comment					
208	(D0)	SIGNED	4	JOX (0)	Start of JOE extension
208	(D0)	BITSTRING	6	JOXSWBOT	Track address of JOE SWBIT chain for SWBTU overrides (MQTR)
214	(D6)	BITSTRING	6	JOXCPADR	CKPT SPOOL record addr
220	(DC)	BITSTRING	6	JOXIOTTR	JOE IOT track addr
226	(E2)	BITSTRING	1	JOXFLAG1	JOX Flags
		1... ....		JOXTRNCK	"B'10000000" This JOE has been checked for transaction data since last z2 to z11 activation.
226	(E2)	X'D0'	0	JOXSB1	"JOX,*-JOX,C'X" 1st work JOX block
227	(E3)	BITSTRING	1		Reserved
228	(E4)	ADDRESS	3	JOXPRVWR	Index of prev JOE in primary node JOE-chain
231	(E7)	ADDRESS	3	JOXNXTWR	Index of next JOE in primary node JOE-chain
234	(EA)	BITSTRING	2		Reserved
236	(EC)	SIGNED	4		Reserved
240	(F0)	SIGNED	4	JOE3END (0)	End of JOX area
240	(F0)	X'20'	0	JOXSIZE	"*-JOX" Size of the JOX

Comment

## Local JOE fields (never written to the checkpoint)

End of Comment					
240	(F0)	ADDRESS	4	JOELCHAN	JOA chain pointer
244	(F4)	SIGNED	2	JOEDLEN	Length of JOA
246	(F6)	SIGNED	2		Reserved

Comment

## JOE fields backed by BERTs (only valid in z11 mode)

Fields in this section are associated with work JOEs and are filled in by the \$DOGJOE/\$DOGBERT services.

End of Comment					
248	(F8)	SIGNED	4	JOEBERTS (0)	Start of BERT JOE area
248	(F8)	CHARACTER	8	JBETRJBN	Transaction job name
256	(100)	CHARACTER	8	JBETRWKI	Transaction work unit id
256	(100)	X'F8'	0	JBETRANS	"JBETRJBN,*-JBETRJBN" Section definition field

Comment

JBESAPI is supplied by SAPI support when a JOE is selected by a SAPI application.

End of Comment					
264	(108)	CHARACTER	8	JBEANAME	SAPI application job name
272	(110)	CHARACTER	8	JBEAPPL	SAPI application name
272	(110)	X'108'	0	JBESAPI	"JBEANAME,*-JBEANAME" SAPI section
272	(110)	X'20'	0	JBEMAINL	"*-JOEBERTS" Length of BERT section
272	(110)	X'118'	0	JOASIZE	"*-JOA" Length of artificial JOE

## \$JOE Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	JOEIDX	Index JOE
0	(0)	BITSTRING	1	JIETYPE	See JOE type
1	(1)	ADDRESS	3	JIENEXTI	Next Index-JOE (JOE index)
4	(4)	SIGNED	4	JIEPRSTR (0)	Primary node start
4	(4)	X'4'	0	JIEHDRSZ	"*-JOEIDX" Index JOE header size
4	(4)	BITSTRING	1	JIVIEWS	Index JOE area housing indexing mechanisms.

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	PRIMARYN	Primary node definition
0	(0)	SIGNED	4	PRILEFT	Offset left subtree node
4	(4)	SIGNED	4	PRIRIGHT	Offset right subtree node
8	(8)	BITSTRING	1	PRIBALF	Balance factor
9	(9)	BITSTRING	1	PRIFLAG	Flag
10	(A)	BITSTRING	3		Alignment/reserved
13	(D)	ADDRESS	3	PRICHAIN	JOE Chain - Index of first work JOE

Comment

Following is the JOE-chain time stamp field. This field has three different possible value:

- If JOE-chain not empty then this is time of last work\_JOE add.
- If JOE-chain empty and time not zero then this is time of last work JOE remove and alternate elements were NOT pruned.
- If JOE-chain empty and time is zero then crawler or RMVFRNOD has pruned all alternate elements and need not again.

End of Comment

16	(10)	SIGNED	4	PRITSTMP	JOE-chain time stamp field
16	(10)	X'14'	0	PRIMFIX	"*-PRILEFT" Length of primary node fixed portion

Comment

Primary key - testing doc - fields should not be referenced directly - but only through JAX configuration.

End of Comment

20	(14)	BITSTRING	1	PRIMKEY (0)	Primary key
20	(14)	BITSTRING	1	PRICLASS	JOE sysout class
21	(15)	BITSTRING	12	PRIDEST	JOE destination
33	(21)	BITSTRING	1	PRIDISP	JOE disposition

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	ALTNODE	Alternate node definition
0	(0)	SIGNED	4	ALTLEFT	Offset left subtree node
4	(4)	SIGNED	4	ALTRIGHT	Offset right subtree node
8	(8)	BITSTRING	1	ALTBALF	Balance factor

## Offsets

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

Chain of index JOEs with some portion of primary key satisfying this alternate node. This is not a circular chain - the master alternate node is the head and its previous JOE index is always zeroes.

## End of Comment

9	(9)	ADDRESS	3	ALTPRVIN	Previous index JOE - index
12	(C)	ADDRESS	3	ALTNXTIN	Next index JOE - index
15	(F)	BITSTRING	1	ALTFLAG	Implementation specific flags
		1... ....		ALTMAST	"B'10000000" This is master alternate node - denotes THIS node is in actual AVL tree and will not be deleted unless entire tree is rebuilt. This node's - JOE index chain is the head.
		.1... ....		ALTOVERF	"B'01000000" Number index JOEs chained to master currently will overflow JOE priority array located within the JOX.
15	(F)	X'10'	0	ALNODESZ	"*-ALTNODE" Alternate node size
16	(10)	BITSTRING	1	ALTDISP	DISP key field - may or may not pertain to this alternate node - see ALTFLAG

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	JOECNT	, JOE count array
0	(0)	CHARACTER	8	JOECNM1	JOE type 1 (work)
8	(8)	SIGNED	4	JOECNR1	Number of JOEs of this type
8	(8)	X'C'	0	JOECLEN	"~-JOECNT" Size of one entry
12	(C)	CHARACTER	8	JOECNM2	JOE type 2 (char)
20	(14)	SIGNED	4	JOECNR2	Number of JOEs of this type
24	(18)	CHARACTER	8	JOECNM3	JOE type 3 (index)
32	(20)	SIGNED	4	JOECNR3	Number of JOEs of this type
36	(24)	CHARACTER	8	JOECNM4	JOE type 4 (free)
44	(2C)	SIGNED	4	JOECNR4	Number of JOEs of this type
48	(30)	CHARACTER	8	JOECNM5	JOE type 5 (invalid)
56	(38)	SIGNED	4	JOECNR5	Number of JOEs of this type
56	(38)	X'3C'	0	JOECARSZ	"*-JOECNT" Size of a full array

## \$JOE Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
ALNODESZ	F	10	JCENEXTI	69	
ALTBALF	8		JCEPREVI	6D	
ALTDISP	10		JCETYPE	68	
ALTFLAG	F		JIEHDRSZ	4	4
ALTLEFT	0		JIENEXTI	1	
ALTMAST	F	80	JIEPRSTR	4	
ALTNODE	0		JIETYPE	0	
ALTNXTIN	C		JIVIEWS	4	
ALTOVERF	F	40	JOA	0	0
ALTPRVIN	9		JOASIZE	110	118
ALTRIGHT	4		JOE	0	
JBEANAME	108		JOEBERTS	F8	
JBEAPPL	110		JOEBERTT	60	
JBEMAINL	110	20	JOEBUSY	64	
JBESAPI	110	108	JOECARSZ	38	3C
JBETRANS	100	F8	JOECB1	68	68
JBETRJBN	F8		JOECB2	6C	6C
JBETRWKI	100		JOECB3	70	70
JCEFLAG5	70		JOECB4	74	74

## \$JOE Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
JOECB5			JOEJNEWL		26
JOECHARI	15		JOEJQEI		D
JOECHARJ	0	40	JOELCHAN		F0
JOECHNXI	19		JOENAME		48
JOECLEN	8	C	JOENETCH	20	20
JOECNM1	0		JOENEXTI		1
JOECNM2		C	JOENXJQI		11
JOECNM3	18		JOEOFSSL		18
JOECNM4	24		JOEPGCT		30
JOECNM5	30		JOEPREVI		5
JOECNR1	8		JOEPRIO		24
JOECNR2	14		JOEPRMD		9C
JOECNR3	20		JOERECC		2C
JOECNR4	2C		JOEREMOT		46
JOECNR5	38		JOERNODE		44
JOECNT	0		JOEROUT		44
JOECPADR_Z2	28		JOERUNIT	46	46
JOECRTME	54		JOESECLB		A4
JOECRUID	58		JOESETUP	AD	78
JOECCR2	6C		JOESGNB1	48	4F
JOECCR4	74		JOESIZE	D0	68
JOECSIZE	B4	4C	JOESWBOT_Z2	60	60
JOECSTRT	68	68	JOETPSOA	1D	10
JOECURCL	4		JOETPSOC	1D	20
JOEDEVID	40		JOETPSOD	1D	8
JOEDLEN	F4		JOETYPE		0
JOEFAMILY	65		JOEUCS		84
JOEFCB	80		JOEUSE		B0
JOEFCBRT	AC	80	JOEUSER		90
JOEFDVRT	AD	8	JOEVRSN	0	8
JOEFDVFB	AD	20	JOEWB1	0	0
JOEFDFLH	AD	40	JOEWB2	4	4
JOEFDFMS	AD	80	JOEWB3	8	8
JOEFDUCS	AD	10	JOEWB4	10	C
JOEFLAGC	AC		JOEWB5	14	14
JOEFLAGD	AD		JOEWB6	18	18
JOEFLAGT	43		JOEWB7	65	1C
JOEFLAG1	C		JOEWKPTI		75
JOEFLAG2	10		JOEWORK	0	80
JOEFLAG3	14		JOEWPAGN		38
JOEFLAG4	1C		JOEWRECN		34
JOEFLAG5	8		JOEWSIZE	68	68
JOEFLASH	98		JOEWSTRT	0	0
JOEFLGT2	1D		JOEWTRID		88
JOEFORM	78		JOE1ART	C	1
JOEFREE	0	C0	JOE1CJES	C	8
JOEFSAID	20	22	JOE1CKV	C	80
JOEFSID	20		JOE1CPDS	C	4
JOEFSSID	20	20	JOE1CTKN	C	2
JOEFTBRT	43	2	JOE1END		68
JOEFTFCB	43	20	JOE1PRT	C	20
JOEFTFLH	43	4	JOE1PUN	C	10
JOEFTFMS	43	40	JOE1SPIN	C	40
JOEFTMOD	43	80	JOE2CLNE	10	10
JOEFTPROM	43	1	JOE2DMND	10	40
JOEFTUICS	43	10	JOE2END	B4	
JOEFTWRT	43	8	JOE2IPAD	10	4
JOEHOLD	1E		JOE2NUNK	10	2
JOEHSRSN	1F		JOE2SYSN	10	20
JOEID	48		JOE2TCEL	10	80
JOEID1	50		JOE2TUSE	1D	40
JOEID2	52		JOE2UNSP	10	1
JOEINDEX	0	20	JOE2UPI	10	8
JOEINDX	0		JOE3CPER	14	80
JOEIOTTR_Z2	3C		JOE3END		F0

Name	Hex Offset	Hex Value
JOE3IOTV	14	40
JOE3NWTG	14	20
JOE3TODA	14	1F
JOE3TODH	14	4
JOE3TODK	14	2
JOE3TODL	14	1
JOE3TODP	14	10
JOE3TODW	14	8
JOE4CRTM	1C	40
JOE4DAUG	1C	20
JOE4DSCT	1C	10
JOE4DSID	1C	4
JOE4JNEW	1C	80
JOE4NPSO	1C	2
JOE4PRIO	1C	8
JOE4PRST	1C	1
JOE5RBLD	8	1
JOE5ZAP	8	2
JOX	D0	
JOXCPADR	D6	
JOXFLAG1	E2	
JOXIOTTTR	DC	
JOXNXTWR	E7	
JOXPRVWR	E4	
JOXSB1	E2	D0
JOXSIZEx	F0	20
JOXSWBOT	D0	
JOXTRNCK	E2	80
PRIBALF	8	
PRICHAIN	D	
PRICLASS	14	
PRIDEST	15	
PRIDISP	21	
PRIFLAG	9	
PRILEFT	0	
PRIMARYN	0	
PRIMFIX	10	14
PRIMKEY	14	
PRIRIGHT	4	
PRITSTMP	10	



## \$JOEIWRK Information

### \$JOEIWRK Heading Information

<b>Common Name:</b>	JES2 JOEI (JOEINDEX Service) Processor
<b>Macro ID:</b>	\$JOEIWRK
<b>DSECT Name:</b>	PCE (\$JOEIWRK is part of the PCE DSECT)
<b>Owning Component:</b>	JES2 (SC1BH)
<b>Eye-Catcher ID:</b>	'PCE ' Offset: PCEEYE-PCE Length: 4
<b>Storage Attributes:</b>	Subpool: See \$PCE Key: See \$PCE Residency: See \$PCE
<b>Size:</b>	See symbol JOIPCEWL for the length of this work area. The overall length of the PCE is stored in field PCELENG.
<b>Created by:</b>	See \$PCE
<b>Pointed to by:</b>	The \$JOEIPCE field of the \$HCT data area points into the \$PCEORG/\$PCELAST chain to the JOEI 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.
<b>Serialization:</b>	Normal PCE dispatch serialization
<b>Function:</b>	The fields in this work area are used by a JES2 JOEINDEX processor and by its support routine/exits. \$JOEIWRK maps the variable PCE work area that begins at label PCEWORK. The fields defined in \$JOEIWRK are actually part of PCE DSECT, but only map PCEs with the value PCEJOIID in the second byte of field PCEID.

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

### \$JOEIWRK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	PCE	, Continue PCE DSECT
312	(138)	BITSTRING	12	JOEICTQE	HASP Timer Queue Element
324	(144)	BITSTRING	1	JOEIFLAG	JOEIWRK flag
		1... ....		JOEIACTV	"B'10000000" Timer Active
325	(145)	BITSTRING	3		Alignment
328	(148)	SIGNED	4		Reserved for future use
336	(150)	DBL WORD	8	(0)	Alignment
336	(150)	X'18'	0	JOIPCEWL	"*-PCEWORK" Length of JOEI PCE

## \$JOEIWRK Map

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## **\$JOT Information**

### **\$JOT Programming Interface information**

Programming Interface information

#### **\$JOT**

End of Programming Interface information

## Heading Information • \$JOT Map

### \$JOT Heading Information

<b>Common Name:</b>	Job Output Table
<b>Macro ID:</b>	\$JOT
<b>DSECT Name:</b>	JOT
<b>Owning Component:</b>	JES2 (SC1BH)
<b>Eye-Catcher ID:</b>	'JOT '
	Offset: JOTID-JOT
	Length: 4
<b>Storage Attributes:</b>	Subpool: 0 for the JES2 main 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.
<b>Size:</b>	See JOESIZE.
<b>Created by:</b>	JES2 Initialization allocates memory for the JOT. The checkpoint versions subtask creates the dataspace copies.
<b>Pointed to by:</b>	\$JOTABLE field of the \$HCT data area KACJOTP field of the \$KAC data area
<b>Serialization:</b>	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
<b>Function:</b>	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

Queue head fields contain index of the first JOE in a respective queue.

End of Comment

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

## Offsets

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

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

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

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

48	(30)	BITSTRING	0	JOTRDWQI (0)	End of Comment Ready work JOE queues
48	(30)	ADDRESS	4	JOTNTWQI	Queue of network JOEs
52	(34)	ADDRESS	4	JOTCLSQLI (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	"(~JOTCLSQLI)" 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)	ADDRESS	4	JOTINEXQ	Queue of index JOEs. A JOE index
492	(1EC)	SIGNED	4		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.

496	(1F0)	BITSTRING	1	(0)	End of Comment
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'F4240'	0	JOTMXJOE	"1000000" Maximum number of JOEs for Z11 mode
520	(208)	X'1E84'	0	JOTFRJIX	((JOTMXJOE+JOTJOESI)/x'200')*4" Local free JOE array size (see FREEJOE in HASPJOS for info)

## \$JOT Cross Reference

### \$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	
JOTFRJIX	208	1E84
JOTHEADL	34	4
JOTHLDQI	2C	
JOTID	0	
JOTINEXQ	1E8	
JOTJOES	208	
JOTJOESI	208	5
JOTJOESO	208	208
JOTLQOFF	34	0
JOTMXJOE	208	F4240
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 Information

### \$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
312	(138)	BITSTRING	12	JPATQE	HASP Timer Queue Element
324	(144)	SIGNED	4		Reserved for future use
328	(148)	DBL WORD	8	(0)	Force double-word alignment
328	(148)	X'10'	0	JPAPCEWS	"*-PCEWORK" Length of work area

## \$JPAWORK Map

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## **\$JQE Information**

### **\$JQE Programming Interface information**

Programming Interface information

**\$JQE**

End of Programming Interface information

## **Heading 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. Real storage is anywhere.  
**Size:** JQELEN (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 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 and later levels 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  
SBJJQOFF 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.

JQEs are managed by the \$DOGJQE service. This provides encapsulation services that can be used to isolate code from future changes. In addition, a lock (the BERT lock) is used to serialize updates to a JQE. With the exception of a few bits, you must obtain an update mode JQA before making any updates to a JQE.

**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.

## \$JQE Map

### \$JQE Map

Offsets					
Dec	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  
If the job is executing in an 8 character job class (\$XEQ8CHR), \$QINDEX is never used or updated and JQXJCLAS must be used as the actual class value.

End of Comment

		.111 1111		\$XEQCLAS	"X'7F" CLASS OF JOB QUEUED FOR EXECUTION
		1... ....		\$SPIN	"X'80" SPIN QUEUE
		.1.. ....		\$XEQ	"X'40" EXECUTION/CONVERSION QUEUE: - If low order six bits are zero, job is on the conversion queue. - If NOT \$XEQ8CHR, the low order six bits define the job class and can be indexed into \$QINDEX. - If \$XEQ8CHR, JQXJCLAS must be used for the job class value and \$QINDEX cannot be used.
		...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, CATTUID)
		.11. 1.1..		\$XEQ8CHR	"X'EA'-(FF-\$XEQCLAS)" The job is running in an 8 char execution class. NOTES:- 8 Char job classes do NOT interact with \$QINDEX! - Must use JQXJCLAS as the class value
1	(1)	X'79'	0	\$XEQJOBL	"C'9'-(FF-\$XEQCLAS)" Offset to Last \$QINDEX entry for job XEQ class queues (JQETYPE)
2	(2)	BITSTRING	1	JQENENF	Id of member doing ENF78 processing (if JQENENF is not 0, job cannot be purged)
3	(3)	BITSTRING	1	JQEFLAG1	Reserved
4	(4)	BITSTRING	1	JQE1HLDA	JOB QUEUE FLAGS
		1... ....		JQE1HLD1	"B'10000000" HOLD ALL JOBS
		.1.. ....		JQE1HLDT	"B'01000000" HOLD SINGLE JOB
		..1. ....			"B'00100000" Transient flag indicating a job whose JQXDUP field is non-zero (not in CKPT)
		...1 ....		JQE1PURG	"B'00010000" JOB IS TO BE PURGED
		.... 1...		JQE1OCAN	"B'00001000" OPERATOR ISSUED \$C OR \$P JOB

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
		.... .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
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 index
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 (index)
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 ....		JQE3SYS	"B'00010000" JQE REPRESENTS SYSTEM DATA SET, IMPLIES JQETRAK POINTS TO IOT
13	(D)	CHARACTER	1	JQEJCLAS	JOB CLASS
14	(E)	SIGNED	2		Reserved (was JQEINJNO_R4)
16	(10)	BITSTRING	4	JQEJBKEY	JOB IDENTIFER KEY
20	(14)	BITSTRING	4	JQETRAK	TRACK ADDRESS OF JCT OR IOT TRACK ADDRESS IF JQE3SYS
24	(18)	SIGNED	2	JQEINPND	INPUT NODE (BINARY)
26	(1A)	SIGNED	2	JQESEQND	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)
32	(20)	BITSTRING	1	JQEARMMI	Member ID on which a job is registered by ARM
33	(21)	BITSTRING	1	JQERESVD	Formerly JQEWSLCK
34	(22)	BITSTRING	1	JQEBSY	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

## \$JQE Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
<hr/>					
		JQEJOEID is the current JOE identifier used when building JOEs for this job unless this is JESNEWS. For an active JESNEWS job this is the count of active users of this instance of JESNEWS			
End of Comment					
60	(3C)	SIGNED	4	JQENWUSE (0)	News use count
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 unkwn user
		.1. ....		JQE5NOTF	"B'00010000" NOTIFY PROCESSING COMPLETE
		.... 1...		JQE5EOM	"B'00001000" Job terminated at end of memory
		.... .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)
		.... ...1		JQE5INPL	"B'00000001" Job went through input processing on local node
65	(41)	BITSTRING	1	JQEFLAGS	OFFLOAD SELECT BYTE
Comment					
<hr/>					
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.					
End of Comment					
66	(42)	SIGNED	2	JQETGNBR	See above
68	(44)	BITSTRING	1	JQEFLAG6	FLAG BYTE
Comment					
<hr/>					
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					
<hr/>					
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

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
70	(46)	BITSTRING	1	JQE7INIT	"B'00100000" Batch initiator
				JQE7IOTE	"B'00010000" IOT error
				JQE7SPIN	"B'00001000" Spin IOTs outstanding
				JQE7SPOT	"B'00000100" Spin output produced
				JQE7RJI	"B'00000010" Request job id indicator
				JQE7SYSL	"B'00000001" SYSLOG indicator
				JQEFLAG8	FLAG BYTE
				JQE8HLDS	"B'10000000" JOB HAS HELD 3540 DATA SET
				JQE8DUPL	"B'01000000" Job has been held at least once for duplicate job name
				JQE8CNWT	"B'00100000" Job must convert on a PCE that can wait for OS CNVT
				JQE8BOUT	"B'00010000" Use abnormal outdisp
				JQE8OPCD	"B'00001000" Job cancelled by oper with dump
				JQE8NJIX	"B'00000100" Job is not in JIX
				JQE8RBLD	"B'00000010" Job is on Rebuild Queue
				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
		....		JQE9\$SPN	"B'00001000" Spin JESLOG files
		....		JQE9\$TSC	"B'00000100" Reset the service class
		....		JQE9\$FRC	"B'00000010" Cancel JQE with FORCE
		....		JQE9\$EVC	"B'00000001" Evict this job
		..1.		JQE9\$EVH	"B'00100001" Evict job with HOLD
72	(48)	SIGNED	4	JQEJBNUM	HASP job number

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 userids 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
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	JQEALIGN	"** End of base JQE
96	(60)	X'60'	0	JQELEN	"*-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

## \$JQE Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
<p>The following fields appear only within an artificial JQE. Artificial JQEs are constructed using the \$DOGJQE service.</p>					
End of Comment					
128	(80)	SIGNED	4	JQX (0)	Beginning of JQX
128	(80)	X'8'	0	JQXVRZ2	"8" JQX control block version for z/OS version 1.2 checkpoint mode.
128	(80)	X'9'	0	JQXVRZ11	"9" JQX control block version for z/OS version 1.11 checkpoint mode.
128	(80)	X'80'	0	JQXBB1	*** Begin of 1st move block
128	(80)	SIGNED	4	JQXRECCT	Pre-execution record count
Comment					
<p>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.</p>					
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
	..1. ....			JQXMXJRC	"X'20"   Code from JOBRC request
132	(84)	X'E0'	0	JQXMXCDS	"JQXMXAB+JQXMXCDE+JQXMXJRC" List of all codes
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 +
132	(84)	X'9'	0	JQXMXCNV	"9"   Converter error
132	(84)	X'A'	0	JQXMXSYS	"10"   System failure
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	JQXEBC1	*** End of 1st move block
140	(8C)	X'80'	0	JQXSB1	"JQXBB1,JQXEBC1-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
Comment					
<p>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.</p>					
End of Comment					
160	(A0)	BITSTRING	1	JQXFLAG1	Flags
	1.... ....			JQX1TSRV	"B'10000000" SRVCLASS has been \$Ted to a non-null value

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
		.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
		.... ..1.		JQX1BSPL	"B'00000010" CBIMPL4 dump processing has occurred
		.... ...1		JQX1AWFL	"B'00000001" Job ended badly (EOM or busy @ system crash)
161	(A1)	SIGNED	1	JQXTGWRP	Number of times JQETGNBR wrapped over 7FFF
162	(A2)	BITSTRING	1	JQXFLAG2	More flags
		1... ....		JQX2JOQE	"B'10000000" Anomalously queued JOE
		.1... ....		JQX2TPAR	"B'01000000" Invalid hold time, one paranoia check was hit
		..1. ....		JQX2UCOR	"B'00100000" User portion of Job Correlator set
		...1 ....		JQX2JNOT	"B'00010000" Job notification data set (SYS_JOB_NOTIFY symbol)
		.... 1...		JQX2NENF	"B'00001000" Job notification ENF initiated
		.... .1..		JQX2MAXR	"B'00000100" JQXMAXRC has been set
		.... ..1.		JQX2ASYM	"B'00000010" Job req alternate system symbol table
		.... ...1		JQX2SYMT	"B'00000001" Job symbol table CB exist
163	(A3)	BITSTRING	1	JQXFLAG3	More flags
		1... ....		JQX3CVSY	"B'10000000" Job has symbols to be passed to converter
		.1... ....		JQX3INST	"B'01000000" Job has datasets with symbol substitution
164	(A4)	SIGNED	4	JQXNWSID (0)	JESNEWS id
164	(A4)	SIGNED	4	JQXIJNUM	Initial job number
164	(A4)	X'A8'	0	JQXEB2	*** End of 2nd move block
164	(A4)	X'98'	0	JQXSB2	"JQXBB2,JQXEB2-JQXBB2,C'X" Size of 2nd block

Comment

JQXDUP is managed without JQAs. This field will be modified only by the DUPJOB service routine and by queue rebuild.

End of Comment

168	(A8)	SIGNED	4	JQXDUP	Index of next duplicate job zero ==> not duplicate -1 ==> last JQE in dup chn
168	(A8)	X'AC'	0	JQXBB3	*** Begin of 3rd move block
172	(AC)	BITSTRING	4	JQXCAFF	Composite member affinity
176	(B0)	BITSTRING	4	JQXIT141	Reserved for Exit 14
180	(B4)	BITSTRING	4	JQXIT142	Reserved for Exit 14
180	(B4)	X'B8'	0	JQXEB3	*** End of 3rd move block
180	(B4)	X'AC'	0	JQXSB3	"JQXBB3,JQXEB3-JQXBB3,C'X" Size of 3rd 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 and later levels of the checkpoint)
188	(BC)	SIGNED	4	JQXBSEND (0)	End of base section

## \$JQE Map

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

The INTERNAL format of the JQX is different depending on the mode of the JES2 checkpoint:

- If the JES2 checkpoint is in z/OS 1.2 mode, each checkpointed JQX entry DOES NOT include the expanded area.
- If the JES2 checkpoint is in z/OS 1.11 mode, each checkpointed JQX entry DOES include the expanded area.

The EXTERNAL JQA will always include the expanded area. However, it is only meaningful in z/OS 1.11 mode.

NOTE: JQXJQEBI is not included in the JQA since it is only useful for chaining.

End of Comment					
188	(BC)	X'3C'	0	JQXLEN_Z2	"*-JQX" Length of checkpointed z/OS 1.2 mode JQX.
188	(BC)	BITSTRING	1		Reserved for future use.
189	(BD)	ADDRESS	3	JQXJQEBI	JQE back chain index (only valid in z/OS 1.11 mode)
189	(BD)	X'C0'	0	JQXBB4	*** Begin of 4th move block
192	(C0)	SIGNED	4	JQRDRON	Time on input processor
196	(C4)	SIGNED	4	JQRDTDN	Date on input processor
196	(C4)	X'C8'	0	JQXEBA	*** End of 4th move block
196	(C4)	X'C0'	0	JQXSB4	"JQXBB4,JQXEBA-JQXBB4,C'X'" Size of 4th block
200	(C8)	SIGNED	4	(5)	Reserved for future use
200	(C8)	X'DC'	0	JQXEXEND	*** End of z/OS 1.11 mode JQX and JQX section of the external JQA.
200	(C8)	X'5C'	0	JQXSIZEx	"*-JQX" Size of JQX
200	(C8)	X'5C'	0	JQXZ11LN	"*-JQX" Length of checkpointed z/OS 1.11 mode JQX and JQX section of the external JQA.

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					
220	(DC)	SIGNED	4	JQPTGNBR	Track groups
224	(E0)	BITSTRING	1	JQPFLAG1	Parameter flag byte
		1... ....		JQP1REQ	"B'10000000" Job is being re-queued
		.1... ....		JQP1EVIC	"B'01000000" EJOB,STEP requeued job
225	(E1)	BITSTRING	3		Reserved

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
End of Pseudo fields					
BERT resident data sections					
End of Comment					
228	(E4)	SIGNED	4	JQABERT (0)	Begin BERT resident data
228	(E4)	BITSTRING	148	JQAACCT	Job accounting information
376	(178)	SIGNED	4	JQAXEQ (0)	Start of XEQ section of JQE
376	(178)	CHARACTER	3	JQAPERF	Performance group
379	(17B)	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.		JQA1TBAD	"B'00000010" Hold/SCHENV timers should not be maintained
		.... .1...		JQA1SPIN	"B'00000001" JESLOG is spinable
380	(17C)	BITSTRING	4	JQASTOK	Service class token
384	(180)	CHARACTER	8	JQAWSCN	Service Class Queue Name
392	(188)	SIGNED	4	JQARRIV	Time job arrived in XEQ Q
396	(18C)	SIGNED	4	JQAQTIME	Time job entered current execution queue
400	(190)	BITSTRING	2	JQASID	ASID where executing
402	(192)	BITSTRING	4	JQASCHAF	Affinity mask of systems where scheduling environ is available
406	(196)	BITSTRING	1	JQASTARM	Member on which \$S J is to occur.
407	(197)	BITSTRING	1		Reserved (alignment)
408	(198)	SIGNED	4	JQARHLD	Duration when job held
412	(19C)	SIGNED	4	JQARRSC	Duration when SCHENV not available
416	(1A0)	SIGNED	4	JQARTOC	Conversion time
420	(1A4)	SIGNED	4	JQATIMER	STCK value when hold or SCHENV timer last started
424	(1A8)	SIGNED	4	JQAUTIME	STCK value when JQARHLD last updated
428	(1AC)	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
		...1 ....		JQA2DUPJ	"B'00010000" JQADUPTM has been primed
		.... 1...		JQA21212	"B'00001000" JQA2WIN setting is valid (remove when z9 is no longer supported)
		.... .1...		JQA2WIN	"B'00000100" WINIT selected job
429	(1AD)	BITSTRING	3		Reserved for future use
429	(1AD)	X'38'	0	JQAXEQL	"*-JQAXEQ" Length of XEQ section
Comment					

This BERT resident data defines the batch execution section.

End of Comment					
432	(1B0)	SIGNED	4	JQAXBAT (0)	Start of batch execution section
432	(1B0)	SIGNED	4	JQAXSRMT	SRM Token from classify
436	(1B4)	SIGNED	4	JQAMINLV	Min BCP level for CNVT/XEQ
436	(1B4)	X'8'	0	JQAXBATL	"*-JQAXBAT" Length of section
440	(1B8)	CHARACTER	16	JQASCHE	Scheduling environment
456	(1C8)	BITSTRING	4	JQASCLAF	Affinity mask of systems where SECLABEL is active
460	(1CC)	BITSTRING	4	JQAUNSPN	MTTR of UNSPUN IOT (0 if multiple or unknown)
464	(1D0)	SIGNED	4	JQADUPTM	Accumulated TOD units when job held for duplicate jobname

## \$JQE Cross Reference

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

This section is only defined for MVS SYSLOG jobs

End of Comment					
468	(1D4)	CHARACTER	8	JQASYSLN	MVS system name for SYSLOG job
476	(1DC)	SIGNED	4	JQASYSLC	Index of next SYSLOG JQE
476	(1DC)	X'1D4'	0	JQASYSLG	"JQASYSLN,*-JQASYSLN" Section definition field
				Comment	

This BERT resident data section is only available  
when the job has JES2 symbol SYS\_CORR\_USRDATA  
defined.

End of Comment					
480	(1E0)	CHARACTER	32	JQAUCOR	User data portion of Job Correlator
480	(1E0)	X'11C'	0	JQABERTL	"*-JQABERT" Length of BERT data defined in this DSECT
480	(1E0)	X'200'	0	JQABLEN	"*-JQE" Length of JQE + extensions defined in this DSECT
				Comment	

## \$JQE Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
\$FREE	1	FF	JQASTARM	196	
\$HARDCPY	1	1	JQASTOK	17C	
\$INPUT	1	20	JQASUMSK	60	
\$OUTPUT	1	2	JQASYSLC	1DC	
\$PURGE	1	0	JQASYSLG	1DC	1D4
\$RECEIVE	1	4	JQASYSLN	1D4	
\$SETUP	1	8	JQATIMER	1A4	
\$SPIN	1	80	JQAUCOR	1E0	
\$XEQ	1	40	JQAUNSPN	1CC	
\$XEQCLAS	1	7F	JQAUTIME	1A8	
\$XEQJOBL	1	79	JQAWSCN	180	
\$XEQJOB1	1	41	JQAXBAT	1B0	
\$XEQSTC	1	50	JQAXBATL	1B4	8
\$XEQTSU	1	60	JQAXEQ	178	
\$XEQ8CHR	1	6A	JQAXEQL	1AD	38
\$XMIT	1	10	JQAXSRMT	1B0	
JQA	0	0	JQA1DUPJ	17B	8
JQAACCT	E4		JQA1EHLD	17B	80
JQABERT	E4		JQA1JCLH	17B	40
JQABERTL	1E0	11C	JQA1SPIN	17B	1
JQABLEN	1E0	200	JQA1TBAD	17B	2
JQADUPTM	1D0		JQA1THLD	17B	20
JQAFLAG1	17B		JQA1TSCH	17B	10
JQAFLAG2	1AC		JQA2DUPJ	1AC	10
JQAMINLV	1B4		JQA2SCHE	1AC	80
JQAPERF	178		JQA2SINV	1AC	40
JQAQTIME	18C		JQA2TSCH	1AC	20
JQARHLD	198		JQA2WIN	1AC	4
JQARRIV	188		JQA21212	1AC	8
JQARRSC	19C		JQE	0	
JQARTOC	1A0		JQEARMMI	20	
JQASCHAF	192		JQEBB1	0	0
JQASCHE	1B8		JQEBB2	5	8
JQASCLAF	1C8		JQEBB3	9	C
JQASID	190		JQEEND	60	60

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
JQEBLEN	60	60	JQE3TMOD	C	8
JQE_BUSY	22		JQE3TSU	C	2
JQEDEVID	1D		JQE3UNSP	C	40
JQEDRNO	58	0	JQE3XMIT	C	4
JQEDRPRT	4C		JQE4CAN	1C	80
JQEDRPRU	50		JQE4JCLH	1C	1
JQEDRPUN	58		JQE4MNEW	1C	4
JQEDRRO	58	2	JQE4MOLD	1C	8
JQEEB1	4	4	JQE4NEWS	1C	40
JQEEB2	8	8	JQE4SPHA	1C	20
JQEEB3	60	60	JQE4SPOF	1C	10
JQEFLAG1	4		JQE4TWOJ	1C	2
JQEFLAG2	8		JQE5EOM	40	8
JQEFLAG3	C		JQE5INPL	40	1
JQEFLAG4	1C		JQE5NOTF	40	10
JQEFLAG5	40		JQE5NSL	40	40
JQEFLAG6	44		JQE5NUNK	40	20
JQEFLAG7	45		JQE5PUPS	40	2
JQEFLAG8	46		JQE5RUNS	40	4
JQEFLAG9	47		JQE5XUSD	40	80
JQEINPND	18		JQE6HOPR	0	8
JQEJBKEY	10		JQE6NCSA	0	1
JQEJBNUM	48		JQE6PRAG	0	2
JQEJCLAS	D		JQE6PRG	0	40
JQEJLOK	23		JQE6PRT	0	4
JQEJNAME	24		JQE6TGAE	0	20
JQEJOEI	9		JQE7INIT	45	20
JQEJOEID	3C		JQE7IOTE	45	10
JQENENF	2		JQE7PROT	45	80
JQENEXTI	5		JQE7RJI	45	2
JQENWUSE	3C		JQE7SPIN	45	8
JQEOFFSL	41		JQE7SPOT	45	4
JQEPRIOR	0		JQE7SYSL	45	1
JQERESVD	21		JQE7TP	45	40
JQESAF	5C		JQE8BOUT	46	10
JQESB1	4	0	JQE8CNWT	46	20
JQESB2	8	8	JQE8DUPL	46	40
JQESB3	60	C	JQE8HLDs	46	80
JQESECLB	34		JQE8NJIX	46	4
JQESUMSK	60		JQE8NOQ	46	1
JQETGNBR	42		JQE8OPCD	46	8
JQETRAK	14		JQE8RBLD	46	2
JQETYPE	1		JQE9\$C	47	40
JQEUSRID	2C		JQE9\$CAR	47	50
JQEVRSN	0	8	JQE9\$CD	47	60
JQEXEQND	1A		JQE9\$E	47	80
JQE1ARME	4	1	JQE9\$EVC	47	1
JQE1ARMH	4	2	JQE9\$EVH	47	21
JQE1ARMR	4	4	JQE9\$FRC	47	2
JQE1HLDA	4	80	JQE9\$SPN	47	8
JQE1HLDT	4	20	JQE9\$TSC	47	4
JQE1HLD1	4	40	JQPFLAG1	E0	
JQE1OCAN	4	8	JQPTGNBR	DC	
JQE1PURG	4	10	JQP1EVIC	E0	40
JQE2ART	8	1	JQP1REQ	E0	80
JQE2IND	8	80	JQX	80	
JQE2PEOM	8	10	JQXBB1	80	80
JQE2REST	8	40	JQXBB2	94	98
JQE2STAR	8	20	JQXBB3	A8	AC
JQE2ZAP	8	2	JQXBB4	BD	C0
JQE3JOB	C	3	JQXBERTT	88	
JQE3MVRQ	C	80	JQXBSEND	BC	
JQE3NDMP	C	20	JQXCAFF	AC	
JQE3STC	C	1	JQXCRTME	8C	
JQE3SYSD	C	10	JQXDUP	A8	

## \$JQE Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
JQXEB1	8C	90	JQX3CVSY	A3	80
JQXEB2	A4	A8	JQX3INST	A3	40
JQXEB3	B4	B8			
JQXEB4	C4	C8			
JQXEXEND	C8	DC			
JQXFLAG1	A0				
JQXFLAG2	A2				
JQXFLAG3	A3				
JQXIJNUM	A4				
JQXIT141	B0				
JQXIT142	B4				
JQXJCLAS	98				
JQXJNUMQ	B8				
JQXJQEBI	BD				
JQXLEN_Z2	BC	3C			
JQXMAXCC	85				
JQXMAXRC	84				
JQXMXAB	84	80			
JQXMXABN	84	5			
JQXMXCAB	84	6			
JQXMXCAN	84	4			
JQXMXCC	84	2			
JQXMXCDE	84	40			
JQXMXCDS	84	E0			
JQXMXCNV	84	9			
JQXMXEOM	84	8			
JQXMXIND	84				
JQXMXJCL	84	3			
JQXMXJRC	84	20			
JQXMXNRM	84	1			
JQXMXSEC	84	7			
JQXMXSYS	84	A			
JQXMXUNK	84	0			
JQXNJIXI	B9				
JQXNWSID	A4				
JQXRDRON	C0				
JQXRDTON	C4				
JQXRECCT	80				
JQXSB1	8C	80			
JQXSB2	A4	98			
JQXSB3	B4	AC			
JQXSB4	C4	C0			
JQXSIZEx	C8	5C			
JQXTGWRP	A1				
JQXVRZ11	80	9			
JQXVRZ2	80	8			
JQXWSNXT	90				
JQXWSPRV	94				
JQXZ11LN	C8	5C			
JQX1AWFL	A0	1			
JQX1BSPL	A0	2			
JQX1CTKN	A0	20			
JQX1DFQ	A0	10			
JQX1LSPN	A0	8			
JQX1TSRV	A0	80			
JQX1WLM	A0	40			
JQX1XWTR	A0	4			
JQX2ASYM	A2	2			
JQX2JNOT	A2	10			
JQX2JOQE	A2	80			
JQX2MAXR	A2	4			
JQX2NENF	A2	8			
JQX2SYMT	A2	1			
JQX2TPAR	A2	40			
JQX2UCOR	A2	20			

## \$JQRWORK Information

### \$JQRWORK Heading Information

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

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

### \$JQRWORK Map

#### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	PCE	, Continue PCE DSECT
312	(138)	SIGNED	4	JQRPALET	JQRB data space ALET
316	(13C)	ADDRESS	4	JQRJQA	Address of current JQA
320	(140)	ADDRESS	4	JQRJCT	Address of current JCT
324	(144)	ADDRESS	4	JQRIOT	Address of current IOT
328	(148)	BITSTRING	1	JQRFLAG1	General flag byte
		1... ....		JQR1BRTL	"B'10000000" BERT lock held
		.1... ....		JQR1QSUS	"B'01000000" Wait for the queues
		..1. ....		JQR1CKPW	"B'00100000" Wait for CKPT write
		...1 ....		JQR1BUFR	"B'00010000" Wait for free buffers
329	(149)	BITSTRING	1	JQRQUE	New queue from JQRB
330	(14A)	BITSTRING	2	JQRRSV1	Reserved
332	(14C)	SIGNED	4	JQRRQJRA (0)	Request Job ID Request Area
332	(14C)	CHARACTER	4	JQRJQRID	ID for JQR requestor
336	(150)	SIGNED	2	JQRRQJAS	Request Job ID ASID
338	(152)	BITSTRING	2	JQRRQJRE	Req Job ID Request Area End
340	(154)	SIGNED	4	JQRASDSA	ASDS data space ALET
344	(158)	CHARACTER	8	JQRWJOBC	Job class work area
352	(160)	CHARACTER	8	JQRWSRVC	Service class work area
360	(168)	ADDRESS	4	JQRWSJBQ	Address of current SJB queue head
364	(16C)	ADDRESS	4	JQRSQD	Address of SQD or zero
368	(170)	SIGNED	4	JQRNRTCD	New route code for \$R XEQ job modify request
376	(178)	DBL WORD	8	(0)	Alignment

## \$JQRWORK Cross Reference

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
376	(178)	X'40'	0	JRPCEWL	"*-PCEWORK" Length of misc PCE work area

## \$JQRWORK Cross Reference

Name	Hex Offset	Hex Value
JQRASDSA	154	
JQRFLAG1	148	
JQRIOT	144	
JQRJCT	140	
JQRJQA	13C	
JQRJQRID	14C	
JQRNRTCD	170	
JQRPALET	138	
JRPCEWL	178	40
JQRQUE	149	
JQRRQJAS	150	
JQRRQJRA	14C	
JQRRQJRE	152	
JQRRSV1	14A	
JQRSQD	16C	
JQRWJOBC	158	
JQRWSJBQ	168	
JQRWSRVC	160	
JQR1BRTL	148	80
JQR1BUFR	148	10
JQR1CKPW	148	20
JQR1QSUS	148	40
PCE	0	

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## **\$JRW Information**

### **\$JRW Programming Interface information**

Programming Interface information

**\$JRW**

End of Programming Interface information

## Heading Information • \$JRW Map

### \$JRW Heading Information

**Common Name:** JES2 Job Receiver Work Area  
**Macro ID:** \$JRW  
**DSECT Name:** JRW  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** none  
**Storage Attributes:** Subpool: See \$PCE (JES2 address space) 0 (NETSRV address space)  
Key: See \$PCE (JES2 address space) 0 (NETSRV address space)  
Residency: See \$PCE (JES2 address space) Virtual and real storage are anywhere (above or below 16M) in private storage (NETSRV address space)  
**Size:** See JRWLEN  
**Created by:** See \$PCE (JES2 address space)  
Subtask initialization exit (NETSRV address space)  
**Pointed to by:** NSSTJRWA field of the \$NSST data area  
RDRCWKAR label of the \$RDRWORK data area  
X002AREA field of the \$XPL data area  
X003AREA field of the \$XPL data area  
X004AREA field of the \$XPL data area  
X020AREA field of the \$XPL data area  
X050AREA field of the \$XPL data area  
X052AREA field of the \$XPL data area  
X053AREA field of the \$XPL data area  
X054AREA field of the \$XPL data area  
Imbedded in the PCE in the JES2 address space.  
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 input processing PCEs, including NJE job receivers, card readers, internal readers, RJE card readers, and internal job creation. This includes support routines and exits. \$JRW maps the fields that are used by common service routines in both the JES2 address space and the NETSRV address spaces.

### \$JRW Map

#### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	JRW	, JRW mapped as \$NJEWORK
0	(0)	CHARACTER	4	JRWEYE	Eyecatcher
4	(4)	CHARACTER	10	JRWDEVN	Device name
14	(E)	BITSTRING	1	JRWDEVTP	Device type
15	(F)	BITSTRING	3	JRWDEVID	Device id
18	(12)	BITSTRING	2	JRWCRSV1	Reserved
20	(14)	ADDRESS	4	JRWWAVE	WAVE address
24	(18)	ADDRESS	4	JRWSQD	SQD address
28	(1C)	ADDRESS	4	JRPAREA	Address of PCL area for this subdevice
32	(20)	ADDRESS	4	JRWAREA	Address of TSCT area for this subdevice (NETSRV address space only)
36	(24)	ADDRESS	4	JRWNSST	Address of NSST (NETSRV address space only)
40	(28)	ADDRESS	4	JRWTBUF	Address of associated TBUF
44	(2C)	ADDRESS	4	JRWTAREA	Address of rolling trace area (NETSRV addrspc only)
48	(30)	SIGNED	4	JRWEBCCC	Contents of POSTed ECB
52	(34)	ADDRESS	4	JRWNITAD	Address of adjacent NIT
56	(38)	ADDRESS	4	JRWNITAL	ALET of adjacent NIT
60	(3C)	ADDRESS	4	JRWNITBL	Address of NIT table

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
THE FOLLOWING TWO FIELDS MUST BE KEPT TOGETHER					
				End of Comment	
64	(40)	SIGNED	4	JRWXTIME	Time offload DS allocated
68	(44)	SIGNED	4	JRWXDATE	Date offload DS allocated
72	(48)	SIGNED	4	JRWCLRST (0)	Start of area to clear
72	(48)	ADDRESS	4	JRWJQA	Address of JQA
72	(48)	X'48'	0	JRWJQE	"JRWJQA" Address of JQE
76	(4C)	ADDRESS	4	JRWJCT	Address of JCT
80	(50)	ADDRESS	4	JRWIOT	Address of IOT
80	(50)	X'50'	0	JRWIOTBF	"JRWIOT" Address of IOT
84	(54)	ADDRESS	4	JRWNJH	Network job header address
88	(58)	ADDRESS	4	JRWNJT	Network job trailer address
92	(5C)	SIGNED	4	JRWRCOUN	Number of records sent/received
96	(60)	ADDRESS	4	JRWREC	Current record count, not including header/trailer records
100	(64)	CHARACTER	8	JRWJOBID	Job id of active job
108	(6C)	BITSTRING	1	JRWERRC	Error code
108	(6C)	X'1'	0	JRWNEJOB	"1" JQE/JOE Mismatch
108	(6C)	X'2'	0	JRWNEJOE	"2" Invalid mix of spin/nonspin
108	(6C)	X'3'	0	JRWNESUB	"3" Subtask failure
108	(6C)	X'4'	0	JRWNEOPE	"4" OPEN failure
108	(6C)	X'5'	0	JRWNECLO	"5" CLOSE failure
108	(6C)	X'6'	0	JRWNEIOE	"6" I/O error
108	(6C)	X'7'	0	JRWNECBI	"7" CBIO failure
108	(6C)	X'8'	0	JRWNENJH	"8" NJE Header/Trailer build
108	(6C)	X'9'	0	JRWNESEQ	"9" Record sequencing error
108	(6C)	X'A'	0	JRWNEGG	"10" Grouping error
108	(6C)	X'B'	0	JRWNESJF	"11" SJF error
108	(6C)	X'C'	0	JRWNESAF	"12" SAF check failure
109	(6D)	BITSTRING	7	JRWCRS2	Reserved
120	(78)	DBL WORD	8	JRWDBL	Doubleword work area
128	(80)	DBL WORD	8	JRWDBLE	Doubleword work area 2
136	(88)	DBL WORD	8	JRWDBLE1	Doubleword work area 3
136	(88)	X'80'	0	JRWWRK16	"JRWDBLE,16,C'X'" 16-byte work area
136	(88)	X'78'	0	JRWWRK24	"JRWDBL,24,C'X'" 24-byte work area
144	(90)	DBL WORD	8	(0)	Force alignment
144	(90)	X'48'	0	JRWCLEAR	"JRWCLRST,*-JRWCLRST,C'X'" Area to clear
144	(90)	BITSTRING	1	JRW\$EXP	'EXPECTED' TYPES (FLAGS)
145	(91)	BITSTRING	1	JRW\$LST	'LAST RECEIVED' TYPE (FLAG)
		1... ....		JRW\$JH	"B'10000000" JOB HEADER
		.1... ....		JRW\$JT	"B'01000000" JOB TRAILER
		..1. ....		JRW\$DSH	"B'00100000" DATA SET HEADER
		....1 ....		JRW\$DST	"B'00010000" DATA SET TRAILER (NOT USED)
		.... 1...		JRW\$DATA	"B'00001000" DATA RECORD
		.... .1..		JRW\$EOF	"B'00000100" NORMAL END-OF-FILE
		.... ..1.		JRW\$JES2	"B'00000010" JES2 SECTION RECEIVED
		.... ...1		JRW\$SPOF	"B'00000001" OFFLOAD SECTION RECEIVED
146	(92)	BITSTRING	1	JRWFLAG2	Control flags
Comment					

-----  
 JRW2SYSN indicates sysin data being processed and  
 any JCL/JECL will end data. JRW2DATA is any data  
 that must be terminated by a DLM card.  
 -----

1... ....	JRW2SYSN	"B'10000000" Processing SYSIN
.1... ....	JRW2DATA	"B'01000000" Processing data cards
..1. ....	JRW2JCL	"B'00100000" Processing JCL card

## \$JRW Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
		...1 ....		JRW2JECL	"B'00010000" Processing JECL card
Comment					
EQU B'00001000' Reserved					
End of Comment					
146	(92)	X'7'	0	JRW2CNTS	"B'00000100" Processing continuation
147	(93)	BITSTRING	1	JRWFLAG3	"B'00000010" Processing unended quote
		.... .1..		JRW2QUOT	"B'00000001" Processing comment cont
		.... ..1.		JRW2CMNT	"JRW2CONT+JRW2QUOT+JRW2CMNT" All continuations
		.... ...1		JRW2CNT	Control flags
		1... ....		JRW3SKIP	"B'10000000" Skipping for job card message issued
		.1.. ....		JRW3FLSH	"B'01000000" Flushing input stream (look for delimiter)
		.1. ....		JRW3FEOF	"B'00100000" Flushing until EOF
		...1 ....		JRW3FAIL	"B'00010000" Fail job at end of input
		.... 1...		JRW3SKGT	"B'00001000" Reprocess current record
		.... .1..		JRW3STNF	"B'00000100" Store and forward steam
		.... ..1.		JRW3XMIT	"B'00000010" XMIT stream
		.... ...1		JRW3PURG	"B'00000001" Job is to be purged
148	(94)	BITSTRING	1	JRWFLAG4	Control flags
		1... ....		JRW4ILLC	"B'10000000" Illegal continuation
		.1.. ....		JRW4ILCD	"B'01000000" Deferred continuation err
		.1. ....		JRW4JQSA	"B'00100000" \$JQESERV ADD in progress
		...1 ....		JRW4ILCB	"B'00010000" Illegal continuation before exit
		.... 1...		JRW4FJCE	"B'00001000" Fatal job card error
		.... .1..		JRW4FBCL	"B'00000100" CLASS= on job card bad
		.... ..1.		JRW4NOCL	"B'00000010" Bypass JOB class verification
		.... ...1		JRW4M21	"B'00000001" Convert on >= 2.1
149	(95)	BITSTRING	1	JRWCPSWK	Caller PSW byte 1 (key)
150	(96)	BITSTRING	1	JRWFLAG5	Control flags
		1... ....		JRW5JPPR	"B'10000000" JOBPARM PROCLIB seen
		.1.. ....		JRW5JCPR	"B'01000000" JCLLIB PROCLIB seen
151	(97)	BITSTRING	1		Reserved
152	(98)	DBL WORD	8	JRWTMP8	8 byte work area
160	(A0)	BITSTRING	32	JRWTMP32	32 byte work area
Comment					
MACDATE = 08/19/88					
End of Comment					
160	(A0)	BITSTRING	24	JRWSTIML	REMOTE STIMERM SET PARM LIST
Comment					
Job reader card buffer (RJCB) queues					
The queus are used as follows:					
JRWRJCB - Cards that represent the current JCL					
card being processed. These cards are					
represented in JRWSTMT					
JRWRJCBN - These are cards that are queued for					
processing after the current cards in					
JRWRJCB are processed. There were					
either generated internally or were					
added by an exit					
JRWRJCBF - Free RJCBs that are ready for re-use					
JRWRJCBX - These are the job cards that have					
already been written to the JCLIN data					
set and are waiting to be written to					
the SYSIN data set for XBM processing.					
JRWRJCBBS - SCRs that are to be written after the					
cards in JRWRJCB (if any) are					
processed.					

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
		JRWRJCBP - One pending SCR that is to be written when the next data or JCL card is encountered.			
		JRWRJCBM - Messages that need to be processed after the current cards (JRWRJCB) are written.			
		JRWRJCBC - CMBs that need to be processed after the current cards (JRWRJCB) are written.			
		JRWRJCBI - RJCBI that represents a SYSIN or delimiter card added by an exit			

End of Comment

192	(C0)	SIGNED	4	JRWRJCBI (0)	First queue of RJCBI
192	(C0)	ADDRESS	4	JRWRJCB	Current card buffer head
196	(C4)	ADDRESS	4	JRWRJCBN	Next card buffer head
200	(C8)	ADDRESS	4	JRWRJCBF	Free card buffer head
204	(CC)	ADDRESS	4	JRWRJCBX	XBM card queue
208	(D0)	ADDRESS	4	JRWRJCBS	SCR queue
212	(D4)	ADDRESS	4	JRWRJCBP	Pending SCR queue
216	(D8)	ADDRESS	4	JRWRJCBM	Message queue
220	(DC)	ADDRESS	4	JRWRJCBC	CMB queue
224	(E0)	ADDRESS	4	JRWRJCBI	SYSIN/delimiter RJCBI
224	(E0)	X'9'	0	JRWRJCNM	"(*-JRWRJCBI)/4" Number of RJCBI queues
228	(E4)	ADDRESS	4	(2)	Reserved for future use

Comment

## Current logical statement work areas

End of Comment

236	(EC)	ADDRESS	4	JRWSTMT	Pointer to statement buffer
240	(F0)	ADDRESS	4	JRWSTMTE	1st free byte in buffer
244	(F4)	SIGNED	2	JRWSTMTS	Size of JRWSTMT area
246	(F6)	SIGNED	2		Reserved
248	(F8)	CHARACTER	8	JRWSTMTV	JCL/JECL verb for statement in 4K buffer
256	(100)	CHARACTER	8	JRWSTMTL	JCL label for verb in 4K buffer
264	(108)	SIGNED	4	JRWSTMTC	Count of cards in current statement

Comment

## RCARDSCN work areas

End of Comment

268	(10C)	CHARACTER	8	JRWRSCNK	Scanned keyword
276	(114)	SIGNED	2	JRWRSCNL	Value length (-1 implies missing required keyword)
278	(116)	SIGNED	2	JRWRSCNP	Number of positionals found
280	(118)	SIGNED	2	JRWRSCNM	# of list elements found
282	(11A)	BITSTRING	1	JRWRSCER	RCARDSCN error code
282	(11A)	X'1'	0	JRWRSCOP	"1" Operand error code
282	(11A)	X'2'	0	JRWRSCKY	"2" Keyword error code
283	(11B)	BITSTRING	1		Reserved
284	(11C)	CHARACTER	256	JRWRSCNV	Keyword value

Comment

## Routing information areas

End of Comment

540	(21C)	SIGNED	2	JRWXEQND	Default execution node
542	(21E)	SIGNED	2	JRWJRMNO	Device modify node number
544	(220)	SIGNED	4	JRWRDRT (0)	Source (origin) route code
544	(220)	SIGNED	2	JRWRDNOD	Node number
546	(222)	SIGNED	2	JRWRDRTE	Remote number

## \$JRW Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
548	(224)	SIGNED	4	JRWPRINT (0)	Default print route code
548	(224)	SIGNED	2	JRWPRNOD	Node number
550	(226)	SIGNED	2	JRWPRRTE	Local printer/remote number
552	(228)	CHARACTER	8	JRWPRSER	Print userid
560	(230)	SIGNED	4	JRWPUUNCH (0)	Default punch route code
560	(230)	SIGNED	2	JRWPUUNOD	Node number
562	(232)	SIGNED	2	JRWPUURTE	Local punch/remote number
564	(234)	CHARACTER	8	JRWPUUSER	Punch userid

Comment

### General work/data areas

End of Comment					
572	(23C)	BITSTRING	200	JRWMSG	Input processing msg area
772	(304)	BITSTRING	152	JRWSAFI	SAFINFO parameter list
924	(39C)	ADDRESS	4	JRWTWA	Address of token work area
928	(3A0)	ADDRESS	4	JRWTOKA	Input token for JOBVALM
932	(3A4)	ADDRESS	4	JRWJECLT	Addr of JECL table
936	(3A8)	ADDRESS	4	JRWJCTSV	JCT address obtained at NJE JOB header time
940	(3AC)	ADDRESS	4	JRWIOTL	Address of last IOT
944	(3B0)	SIGNED	2	JRWIOTCT	Count of IOT's used
946	(3B2)	SIGNED	2		Reserved
948	(3B4)	ADDRESS	4	JRWOCT	Output control table addr
952	(3B8)	ADDRESS	4	JRWPOCT	Pending OCT buffer address
956	(3BC)	ADDRESS	4	JRPDPDB	Current SYSIN PDDB address
960	(3C0)	CHARACTER	2	JRWJPPIO	Priority from PRIO or PRTY=
962	(3C2)	CHARACTER	1	JRWMCCLAS	Default msgclass
963	(3C3)	BITSTRING	1	JRWPRINC	Priority increment
964	(3C4)	BITSTRING	1	JRWPRILIM	Priority limit
965	(3C5)	BITSTRING	3		Reserved
968	(3C8)	CHARACTER	8	JRWJCLAS	Default job class
976	(3D0)	CHARACTER	8	JRWSVCLS	Original job class (Saved)
984	(3D8)	CHARACTER	8	JRWOJCLS	Override JOBCCLASS value
992	(3E0)	CHARACTER	8	JRWXBMPR	Procname for XBM/2 job
1000	(3E8)	CHARACTER	32	JRWJRUCR	User portion of a Job Correlator from network receiver
1032	(408)	SIGNED	4	JRWINJNO	Initial job number
1036	(40C)	ADDRESS	4	JRWNJOFF	Address of offload section
1040	(410)	BITSTRING	4	JRWSAF	System affinity
1044	(414)	BITSTRING	1	JRWPSWD	PASSWORD processing field
		.... .1.		\$RPASFND	"B'00000001" PASSWORD processed
		.... ..1.		\$RJOBERR	"B'00000010" Error on JOB card
		.... .1..		\$RPSWPRC	"B'00000010" PASSWORD processing
		.... 1...		\$RJOBFND	"B'00001000" JOB card being processed
		...1 ....		\$RPSWCNT	"B'00010000" PASSWORD continuation found in RPUTSCAN routine
		...1. ....		\$RNTPASER	"B'00100000" Encrypted password network protocol error detected
1045	(415)	BITSTRING	1	JRWSW1	Input switches
		1... ....		JRW1XBCH	"B'10000000" Xeq batch monitor class job
		.1.. ....		JRW1JVFY	"B'01000000" Job has been verified
		.1. ....		JRW1SREQ	"B'00100000" Submitter token required
		.1		JRW1IXEQ	"B'00010000" Invalid XEQ card detected
		.... 1...		JRW1JKIL	"B'00001000" Job killed via RJOBKILL
		.... .1..		JRW1XBN	"B'00000100" XBM generated cards added
		.... ..1..		JRW1SAFF	"B'00000010" JOB stmt SYSAFF processed
		.... ...1..		JRW1SYS	"B'00000001" JOB stmt SYSTEM processed
1046	(416)	BITSTRING	1	JRWSW2	Input switches
		1... ....		JRW2JSRD	"B'10000000" At least one JOB stmt read since the last physical EOF
		.1.. ....		JRW2IND	"B'01000000" Independent mode
		.1. ....		JRW2XMIT	"B'00100000" Off - XMIT allowed after job or comment cards On - XMIT not allowed
		...1 ....		JRW2JCLH	"B'00010000" TYPRUN=JCLHOLD

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
		.... 1...		JRW2JBON	"B'00001000" \$HASP100 msg issued
		.... .1..		JRW2COPY	"B'00000100" TYPRUN=COPY flag
		.... ..1.		JRW2ASAF	"B'00000010" System affinity from MVS
		.... ...1		JRW2JCAN	"B'00000001" NJE job cancel switch
1047	(417)	BITSTRING	1	JRWSW3	Input switches
		1... ....		JRW3MAIN	"B'10000000" SRIP caller main task
		.1.. ....		JRW3SUBT	"B'01000000" SRIP caller sub task
		.1. ....		JRW3USER	"B'00100000" SRIP caller user space
		...1 ....		JRW3MULT	"B'00010000" Multiple job cards found
		.... 1...		JRW3SHLD	"B'00001000" Hold job for spof smf
		.... .1..		JRW3JHLD	"B'00000100" Device TYPRUN=HOLD
		.... ...1.		JRW3DHDR	"B'00000010" An NJE header has had its processing deferred
1048	(418)	BITSTRING	1	JRWSW4	Input switches
		1... ....		JRW4JCLE	"B'10000000" Job contains a JECL error
1049	(419)	BITSTRING	1	JRWSW5	Input switches
		...1 ....		JRW5E20T	"B'00010000" Job terminated by exit 20
1050	(41A)	BITSTRING	1	JRWMXIND	Reason for terminating input - see JQXMXIND for possible values
1051	(41B)	SIGNED	1	JRWNEXTQ	Next phase of processing
1052	(41C)	BITSTRING	1	JRWDELRS	"JOB DELETED" reason code
1052	(41C)	X'1'	0	JRWDJOBC	"1" Illegal JOB card
1052	(41C)	X'2'	0	JRWDXIT4	"2" EXIT 4 illegal cntrl card
1052	(41C)	X'3'	0	JRWDCONT	"3" Error on continuation
1052	(41C)	X'4'	0	JRWDDELP	"4" DEL or PURGE JECL
1052	(41C)	X'5'	0	JRWDOOPER	"5" Operator command
1052	(41C)	X'6'	0	JRWDERR	"6" Processing error
1052	(41C)	X'7'	0	JRWDOER	"7" I/O error
1052	(41C)	X'8'	0	JRWDXECL	"8" Illegal JECL card
1052	(41C)	X'9'	0	JRWDXEQN	"9" Illegal execution node
1052	(41C)	X'A'	0	JRWDSYSN	"10" Excessive SYSIN stmts
1052	(41C)	X'B'	0	JRWDXSTOP	"11" Device canceled or stoped
1052	(41C)	X'C'	0	JRWDACCT	"12" Illegal acct field JOB card
1052	(41C)	X'D'	0	JRWDSAFT	"13" Unsupported SAF return code
1052	(41C)	X'E'	0	JRWDPROT	"14" NJE protocol error
1052	(41C)	X'F'	0	JRWDXMIT	"15" JCL XMIT card error
1052	(41C)	X'10'	0	JRWDDATA	"16" JCL DD DATA card error
1052	(41C)	X'11'	0	JRWDJSMT	"17" Job symbols not spooled
1053	(41D)	BITSTRING	1	JRWACCTL	Length of accounting string
1054	(41E)	BITSTRING	1	JRWRAUTH	Reader command authority
1055	(41F)	BITSTRING	1		Reserved
1056	(420)	SIGNED	2	JRWDLM (0)	Input data set delimiter
1058	(422)	BITSTRING	1	JRWFLAGX	Reader exits flag byte
		.... ...1		JRWXJCL	"B'00000001" JCL card detected
1058	(422)	X'1'	0	RDWXJCL	"JRWXJCL" Compatibility
		.... ...1.		JRWXJECL	"B'00000010" JECL card detected
1058	(422)	X'2'	0	RDWXJECL	"JRWXJECL" Compatibility
		.... .1..		JRWXJOBC	"B'00000100" JOB card detected
1058	(422)	X'4'	0	RDWXJOBC	"JRWXJOBC" Compatibility
		.... 1...		JRWXCONT	"B'00001000" Continuation card detected
1058	(422)	X'8'	0	RDWXCONT	"JRWXCONT" Compatibility
		...1 ....		JRWXXSNC	"B'00010000" Exit supplied next card
1058	(422)	X'10'	0	RDWXXSNC	"JRWXXSNC" Compatibility
		..1. ....		JRWXXSEM	"B'00100000" Exit supplied error message
1058	(422)	X'20'	0	RDWXXSEM	"JRWXXSEM" Compatibility
		.1.. ....		JRWXJOBP	"B'01000000" JOBPARM card detected
1058	(422)	X'40'	0	RDWXJOBP	"JRWXJOBP" Compatibility
1059	(423)	BITSTRING	1		Reserved
1060	(424)	ADDRESS	4	JRWENTRY	Addr of entry point vector

Comment

For internal readers, information on the submitter

End of Comment

## \$JRW Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
1064	(428)	CHARACTER	8	JRW\$JBID	Id of current owner
1072	(430)	CHARACTER	8	JRW\$JNAM	Name of current owner
1080	(438)	CHARACTER	8	JRW\$USR	'USER' from owner's ACEE
1088	(440)	CHARACTER	8	JRW\$GRP	'GROUP' from owner's ACEE

Comment

Information on last record read (RGET or passed to reader processing)

End of Comment

1096	(448)	BITSTRING	1	JRW\$INFLG	Input record flags
1097	(449)	BITSTRING	1	JRW\$CCTL	Carriage control
1098	(44A)	SIGNED	2	JRW\$CDLRL	Card logical record length
1098	(44A)	X'44B'	0	JRW\$CDLR1	"JRW\$CDLRL+1,C'X'" One byte LRECL for HASPRDR
1100	(44C)	ADDRESS	4	JRW\$RECRD	Record address

Comment

LRECL and RECFM information

End of Comment

1104	(450)	BITSTRING	1	JRW\$CDLEN	Card length
1105	(451)	BITSTRING	1	JRW\$CDLRC	Card logical record control byte
1106	(452)	SIGNED	2	JRW\$DEFRL	Default LRECL for SYSIN DS
1108	(454)	BITSTRING	1	JRW\$DEFRF	Default RECFM for SYSIN DS, bits defined in DCB under DCBRECFM
1109	(455)	BITSTRING	1	JRW\$UDFRF	Ultimate default RECFM for SYSIN datasets for the job
1110	(456)	SIGNED	2	JRW\$MAXRL	Longest sysin record scanned so far
1112	(458)	SIGNED	2	JRW\$UDFLR	Ultimate default LRECL for SYSIN datasets for the job
1116	(45C)	SIGNED	4	JRW\$DSKEY	Data set key

Comment

Estimates for LINES/BYTES/CARDS/PAGES scanned from the job statement.

End of Comment

1120	(460)	SIGNED	4	JRW\$ESTLN	Line estimate
1124	(464)	SIGNED	4	JRW\$ESTPU	Punch estimate
1128	(468)	SIGNED	4	JRW\$ESTPG	Page estimate
1132	(46C)	SIGNED	4	JRW\$ESTBY	Byte estimate
1132	(46C)	X'460'	0	JRW\$ESTXX	"JRW\$ESTLN,-JRW\$ESTLN" Length of all estimate flds
1136	(470)	ADDRESS	4	JRW\$TCB	Owning TCB
1144	(478)	DBL WORD	8	JRW\$TEMP	Double word work area

Comment

The following list represents entry points to routines that are environment peculiar. Users of routines in SRIP must fill in the addresses with entry point values that support the function. If the function is not supported in a particular environment, then the address is left as zero.

End of Comment

1152	(480)	ADDRESS	4	JRW\$_BASE (0)	First routine address
1152	(480)	ADDRESS	4	JRW\$_RQEUPD	JQE update routine
1156	(484)	ADDRESS	4	JRW\$_RCLSSYSI	Close open SYSIN data set
1160	(488)	ADDRESS	4	JRW\$_WRBUFRS	Write out buffers to SPOOL
1164	(48C)	ADDRESS	4	JRW\$_WRJCTIOT	Finish write of JCT/IOTs
1168	(490)	ADDRESS	4	JRW\$_RWRTJOB	Ensure tracks obtained
1172	(494)	ADDRESS	4	JRW\$_RQMODJOB	\$QMOD JQE to proper queue
1176	(498)	ADDRESS	4	JRW\$_RJOBWTO	Job Receiver Notification

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
1180	(49C)	ADDRESS	4	JRW_RJCBCPROC	Process Q'ed Msgs/CMB JRCBs
1184	(4A0)	ADDRESS	4	JRW_RJCTTERM	JCT cleanup
1184	(4A0)	X'480'	0	JRW_LIST	"JRW_BASE,*-JRW_BASE" Environment list
1188	(4A4)	SIGNED	4	(4)	Reserved
1208	(4B8)	DBL WORD	8	(0)	
1208	(4B8)	DBL WORD	8	(0)	
1208	(4B8)	BITSTRING	48	JRWCRTSY	Force Dword alignment
1256	(4E8)	CHARACTER	1	JRWOPNSP	Parm block for HASPRDDS.
1256	(4E8)	X'508'	0	JRWLEN	Open spool parm list
					"*-JRW" Length of area

Comment

The following fields exist only in a JRW that is  
not in the JES2 address space (NETSERV, INTRDR,  
Request JOBID, etc)

End of Comment

1288	(508)	ADDRESS	4	JRWSAVEA	JRW save area stack
1292	(50C)	SIGNED	4	JRWHRGSV (4)	High half R14-R1 save area
1308	(51C)	SIGNED	4	JRWARGSV (4)	AR14-AR1 save area
1324	(52C)	BITSTRING	28	JRWPJCL	JCLIN data set parm list
1352	(548)	BITSTRING	28	JRWPSYSN	SYSIN data set parm list
1380	(564)	ADDRESS	4	JRWPCUR	Last JRWPUTPL used in I/O
1384	(568)	ADDRESS	4	JRWSJB	SJB address
1388	(56C)	ADDRESS	4	(3)	Reserved
1400	(578)	BITSTRING	1	JRWNFLG1	Status flags
	1... ....			JRWN1ERR	"B'10000000" Processing detected error
1401	(579)	BITSTRING	1	JRWNFLG2	Status flags
1402	(57A)	BITSTRING	2		Reserved
1404	(57C)	ADDRESS	4	JRWRJQE	Real JQE address in live
1408	(580)	SIGNED	4	JRWRJQEA	version and ALET
1416	(588)	DBL WORD	8	(0)	Align
1416	(588)	X'588'	0	JRWCLEN	"*-JRW" Length of JRW in NETSRV address space

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	RCSL	, Reader card scan DSECT
0	(0)	CHARACTER	8	RCSLKEY	Keyword
8	(8)	ADDRESS	4	RCSLRTN	Processing routine
12	(C)	BITSTRING	1	RCSLPOSN	Positional parm number (0 implies all positional)
13	(D)	BITSTRING	1	RCSLFLG1	Flag byte
	1... ....			RCSL1ASI	"B'10000000" Leave apostrophes as is
	.1... ....			RCSL1NSP	"B'01000000" Leave enclosing parens
	..1. ....			RCSL1REQ	"B'00100000" Required operand
	...1 ....			RCSL1BLK	"B'00010000" Skip blanks after keyword
	.... 1...			RCSL1LST	"B'00001000" Value is a list
14	(E)	BITSTRING	1	RCSLLSIZ	List element size
15	(F)	BITSTRING	1		Reserved
15	(F)	X'10'	0	RCSLELEN	"*-RCSL" Length of table entry

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	JRWPUTPL	, CPUT parameter list DSECT
0	(0)	ADDRESS	4	JRWPLACB	ACB address
4	(4)	ADDRESS	4	JRWPLRPL	RPL address
8	(8)	ADDRESS	4	JRWPLDEB	DEB address
12	(C)	ADDRESS	4	JRWPLSDB	SDB address
16	(10)	ADDRESS	4	JRWPLREC	IAZYTDBC or record to put
20	(14)	BITSTRING	1	JRWPLCC	Carriage control
21	(15)	BITSTRING	1	JRWPLLRC	LRC to be used
22	(16)	SIGNED	2	JRWPLRCL	Record LRECL

## \$JRW Cross Reference

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
24	(18)	BITSTRING	1	JRWPLFG1	Control flags
		1... ....		JRWPL1DB	"B'10000000" JRWPLREC points to a IAZYTDBC with record
		.1.. ....		JRWPL1AS	"B'01000000" Use ASYNC put (ie NETSRV)
		.1. ....		JRWPL1TR	"B'00100000" Truncate current buffer
		..1 ...		JRWPL1JL	"B'00010000" JCL data set (will be read by converter)

Comment

-----  
Work areas used by CPUT and close processing  
-----

End of Comment

25	(19)	BITSTRING	1	JRWPLFG2	Data flag byte
		1... ....		JRWPL2FR	"B'10000000" At least one record proc
		.1.. ....		JRWPL2VA	"B'01000000" Record sized vary
		.1. ....		JRWPL2CA	"B'00100000" ASA control character found
		..1 ...		JRWPL2CM	"B'00010000" Machine control chars found
26	(1A)	SIGNED	2	JRWPLMLR	Max LRECL seen by RPUT
28	(1C)	SIGNED	4	(0)	Align
28	(1C)	X'1C'	0	JRWPLSIZ	"*-JRWPPUTPL" Parameter list size

## \$JRW Cross Reference

Name	Hex	Hex	Name	Hex	Hex
	Offset	Value		Offset	Value
\$RJOBERR	414	2	JRWCLRST	48	
\$RJOBFND	414	8	JRWCPWK	95	
\$RNPA\$ER	414	20	JRWCRSV1	12	
\$RPASFND	414	1	JRWCRSV2	6D	
\$RPSWCNT	414	10	JRWCRTSY	4B8	0
\$RPSWPRC	414	4	JRWCU\$REC	60	
JRW	0		JRWDA\$CT	41C	C
JRW\$DATA	91	8	JRWDBL	78	
JRW\$DSH	91	20	JRWDBLE	80	
JRW\$DST	91	10	JRWDBLE1	88	
JRW\$EOF	91	4	JRWDCONT	41C	3
JRW\$EXP	90		JRWDDATA	41C	10
JRW\$JES2	91	2	JRWDE\$LP	41C	4
JRW\$JH	91	80	JRWDEF\$RL	452	
JRW\$JT	91	40	JRWDEF\$RF	454	
JRW\$LST	91		JRWDELRS	41C	
JRW\$SPOF	91	1	JRWDE\$RR	41C	6
JRW_BASE	480		JRWDEVID	F	
JRW_LIST	4A0	480	JRWDEVN	4	
JRW_RCLSSYSI	484		JRWDEVTP	E	
JRW_RJCBPROC	49C		JRWDIOER	41C	7
JRW_RJCTTERM	4A0		JRWDJECL	41C	8
JRW_RJOBWTO	498		JRWDJOB\$C	41C	1
JRW_RJQEUPD	480		JRWDJSM\$T	41C	11
JRW_RQMODJOB	494		JRWDL\$M	420	
JRW_RWRTJOB	490		JRWDO\$PER	41C	5
JRW_W\$RJCTIOT	48C		JRWDPROT	41C	E
JRW_WRTBUFRS	488		JRWDSA\$F	41C	D
JRWACCTL	41D		JRWDSKEY	45C	
JRWAREA	20		JRWDSSTOP	41C	B
JRWARG\$V	51C		JRWDSYSN	41C	A
JRWCCCTL	449		JRWDXEQN	41C	9
JRWCDLEN	450		JRWDXIT\$4	41C	2
JRWCDLRC	451		JRWDXMIT	41C	F
JRWCDLRL	44A		JRWECBCC	30	
JRWCDLR1	44A	44B	JRWENTRY	424	
JRWCLEAR	90	48	JRWESTBY	46C	
JRWCLEN	588	588	JRWESTLN	460	

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
JRWESTPG	468		JRWPLFG1	18	
JRWESTPU	464		JRWPLFG2	19	
JRWESTXX	46C	460	JRWPLLRC	15	
JRWEYE	0	D1D9E640	JRWPLMLR	1A	
JRWFLAGX	422		JRWPLRCL	16	
JRWFLAG2	92		JRWPLREC	10	
JRWFLAG3	93		JRWPLRPL	4	
JRWFLAG4	94		JRWPLSDB	C	
JRWFLAG5	96		JRWPLSIZ	1C	1C
JRWHRGSV	50C		JRWPL1AS	18	40
JRWINFLG	448		JRWPL1DB	18	80
JRWINJNO	408		JRWPL1JL	18	10
JRWIOT	50		JRWPL1TR	18	20
JRWIOTBF	50	50	JRWPL2CA	19	20
JRWIOTCT	3B0		JRWPL2CM	19	10
JRWIOTL	3AC		JRWPL2FR	19	80
JRWJCLAS	3C8		JRWPL2VA	19	40
JRWJCT	4C		JRWPOCT	3B8	
JRWJCTSV	3A8		JRWPRINC	3C3	
JRWJECLT	3A4		JRWPRINT	224	
JRWJOBID	64		JRWPRILIM	3C4	
JRWJPRI0	3C0		JRWPRNOD	224	
JRWJQA	48		JRWPRRTE	226	
JRWJQE	48	48	JRWPRSER	228	
JRWJRMNO	21E		JRWPSWD	414	
JRWJRUCR	3E8		JRWPSYSN	548	
JRWLEN	4E8	508	JRWPUNCH	230	
JRWMAXRL	456		JRWPNOD	230	
JRWMCLAS	3C2		JRWPURTE	232	
JRWMSG	23C		JRWUSER	234	
JRWMXIND	41A		JRWPUTPL	0	
JRWNECBI	6C	7	JRWRAUTH	41E	
JRWNECLO	6C	5	JRWRCOUN	5C	
JRWNEGG	6C	A	JRWRDNOD	220	
JRWNEIOE	6C	6	JRWDRDRT	220	
JRWNEJOB	6C	1	JRWDR RTE	222	
JRWNEJOE	6C	2	JRWRECRD	44C	
JRWNENJH	6C	8	JWRJCBC	C0	
JRWNEOPE	6C	4	JWRJCBC	DC	
JRWNERRC	6C		JWRJCBB	C8	
JRWNESAF	6C	C	JWRJCBI	E0	
JRWNESEQ	6C	9	JWRJCBM	D8	
JRWNESJF	6C	B	JWRJCBN	C4	
JRWNESUB	6C	3	JWRJCBP	D4	
JRWNEXTQ	41B		JWRJCBSS	D0	
JRWNFLG1	578		JWRJCBX	CC	
JRWNFLG2	579		JWRJCB1	C0	
JRWNTAD	34		JWRJCNM	E0	9
JRWNTAL	38		JWRJQE	57C	
JRWNTBL	3C		JWRJQEA	580	
JRWNJH	54		JWRSCER	11A	
JRWNJOFF	40C		JWRSCKY	11A	2
JRWNTJ	58		JWRSCNK	10C	
JRWNSST	24		JWRSCNL	114	
JRWN1ERR	578	80	JWRSCNM	118	
JRWOC	3B4		JWRSCNP	116	
JRWOCCLS	3D8		JWRSCNV	11C	
JRWOPNSP	4E8		JWRSCOP	11A	1
JRWPAREA	1C		JRWSAF	410	
JRWPCUR	564		JRWSAFI	304	
JRPDDB	3BC		JRWSAVEA	508	
JRWPJCL	52C		JRWSGRP	440	
JRWPLACB	0		JRWSJB	568	
JRWPLCC	14		JRWSJBID	428	
JRWPLDEB	8		JRWSJNAM	430	

## \$JRW Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
JRWSQD	18		JRW3FEOF	93	20
JRWSTIML	A0	0	JRW3FLSH	93	40
JRWSTMTC	EC		JRW3JHLD	417	4
JRWSTMTE	108		JRW3MAIN	417	80
JRWSTMTE	F0		JRW3MULT	417	10
JRWSTMTL	100		JRW3PURG	93	1
JRWSTMTS	F4		JRW3SHLD	417	8
JRWSTMTV	F8		JRW3SKGT	93	8
JRWSUSR	438		JRW3SKIP	93	80
JRWSVCLS	3D0		JRW3STNF	93	4
JRWSW1	415		JRW3SUBT	417	40
JRWSW2	416		JRW3USER	417	20
JRWSW3	417		JRW3XMIT	93	2
JRWSW4	418		JRW4FBCL	94	4
JRWSW5	419		JRW4FJCE	94	8
JRWTAREA	2C		JRW4ILCB	94	10
JRWTBUF	28		JRW4ILCD	94	40
JRWTCB	470		JRW4ILLC	94	80
JRWTEMP	478		JRW4JCLE	418	80
JRWTMP32	A0		JRW4JQSA	94	20
JRWTMP8	98		JRW4M21	94	1
JRWTOKA	3A0		JRW4NOCL	94	2
JRWTWA	39C		JRW5E20T	419	10
JRWUDFLR	458		JRW5JCPR	96	40
JRWUDFRF	455		JRW5JPPR	96	80
JRWWAVE	14		RCSL	0	
JRWWRK16	88	80	RCSLELEN	F	10
JRWWRK24	88	78	RCSLFLG1	D	
JRWXBMPR	3E0		RCSLKEY	0	
JRWXCONT	422	8	RCSLLSIZ	E	
JRWXDATE	44		RCSLPOSN	C	
JRWXEQND	21C		RCSLRTN	8	
JRWXJCL	422	1	RCSL1ASI	D	80
JRWXJECL	422	2	RCSL1BLK	D	10
JRWXJOBC	422	4	RCSL1LST	D	8
JRWXJOBP	422	40	RCSL1NSP	D	40
JRWXTIME	40		RCSL1REQ	D	20
JRWXXSEM	422	20	RDWXCONT	422	8
JRWXXSNC	422	10	RDWXJCL	422	1
JRW1IXEQ	415	10	RDWXJECL	422	2
JRW1JKIL	415	8	RDWXJOBC	422	4
JRW1JVFY	415	40	RDWXJOBP	422	40
JRW1SAFF	415	2	RDWXXSEM	422	20
JRW1SREQ	415	20	RDWXXSNC	422	10
JRW1SYS	415	1			
JRW1XBCH	415	80			
JRW1XBN	415	4			
JRW2ASAF	416	2			
JRW2CMNT	92	1			
JRW2CNTS	92	7			
JRW2CONT	92	4			
JRW2COPY	416	4			
JRW2DATA	92	40			
JRW2IND	416	40			
JRW2JBON	416	8			
JRW2JCAN	416	1			
JRW2JCL	92	20			
JRW2JCLH	416	10			
JRW2JECL	92	10			
JRW2JSRD	416	80			
JRW2QUOT	92	2			
JRW2SYSN	92	80			
JRW2XMIT	416	20			
JRW3DHDR	417	2			
JRW3FAIL	93	10			

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## **\$JTW Information**

### **\$JTW Programming Interface information**

Programming Interface information

**\$JTW**

End of Programming Interface information

## Heading Information • \$JTW Map

### \$JTW Heading Information

<b>Common Name:</b>	JES2 Job Transmitter Work Area
<b>Macro ID:</b>	\$JTW
<b>DSECT Name:</b>	JTW
<b>Owning Component:</b>	JES2 (SC1BH)
<b>Eye-Catcher ID:</b>	none
<b>Storage Attributes:</b>	<p>Subpool: See \$PCE (JES2 address space) 0 (NETSRV address space)</p> <p>Key: See \$PCE (JES2 address space) 0 (NETSRV address space)</p> <p>Residency: See \$PCE (JES2 address space) Virtual and real storage are anywhere (above or below 16M) in private storage (NETSRV address space)</p>
<b>Size:</b>	See JTWLLEN
<b>Created by:</b>	<p>See \$PCE (JES2 address space)</p> <p>Subtask initialization exit (NETSRV address space)</p>
<b>Pointed to by:</b>	<p>NSSTJW field of the \$NSST data area</p> <p>X046AREA field of the \$XPL data area</p> <p>X056AREA field of the \$XPL data area</p> <p>Imbedded in the PCE in the JES2 address space.</p> <p>See \$PCE for other pointer fields that apply to all PCE types.</p>
<b>Serialization:</b>	Normal PCE dispatch serialization
<b>Function:</b>	<p>The fields in this work area are used by a JES2 Job Transmitter Processor and by its support routines and exits. \$JTW maps the fields that are used by common service routines in both the JES2 address space and the NETSRV address spaces.</p>

### \$JTW Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	JTW	, JTW mapped as \$NJEWWORK
0	(0)	CHARACTER	4	JTWEYE	Eyecatcher
4	(4)	CHARACTER	10	JTWDEVN	Device name
14	(E)	BITSTRING	1	JTWDEVTP	Device type
15	(F)	BITSTRING	3	JTWDEVID	Device id
18	(12)	BITSTRING	2	JTWCRSV1	Reserved
20	(14)	ADDRESS	4	JTWWAVE	WAVE address
24	(18)	ADDRESS	4	JTWSQD	SQD address
28	(1C)	ADDRESS	4	JTWPAREA	Address of PCL area for this subdevice
32	(20)	ADDRESS	4	JTWAREA	Address of TSCT area for this subdevice (NETSRV address space only)
36	(24)	ADDRESS	4	JTWNSSST	Address of NSST (NETSRV address space only)
40	(28)	ADDRESS	4	JTWTBUF	Address of associated TBUF
44	(2C)	ADDRESS	4	JTWTAREA	Address of rolling trace area (NETSRV addrspc only)
48	(30)	SIGNED	4	JTWEBCCC	Contents of POSTed ECB
52	(34)	ADDRESS	4	JTWNITAD	Address of adjacent NIT
56	(38)	ADDRESS	4	JTWNITAL	ALET of adjacent NIT
60	(3C)	ADDRESS	4	JTWNITBL	Address of NIT table

Comment

THE FOLLOWING TWO FIELDS MUST BE KEPT TOGETHER

End of Comment

64	(40)	SIGNED	4	JTWXTIME	Time offload DS allocated
68	(44)	SIGNED	4	JTWXDATE	Date offload DS allocated
72	(48)	SIGNED	4	JTWCLRST (0)	Start of area to clear
72	(48)	ADDRESS	4	JTWJQA	Address of JQA
72	(48)	X'48'	0	JTWJQE	"JTWJQA" Address of JQE

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
76	(4C)	ADDRESS	4	JTWJCT	Address of JCT
80	(50)	ADDRESS	4	JTWIOT	Address of IOT
80	(50)	X'50'	0	JTWIOTBF	"JTWIOT" Address of IOT
84	(54)	ADDRESS	4	JTWNJH	Network job header address
88	(58)	ADDRESS	4	JTWNJT	Network job trailer address
92	(5C)	SIGNED	4	JTWRCOUN	Number of records sent/received
96	(60)	ADDRESS	4	JTWCUREC	Current record count, not including header/trailer records
100	(64)	CHARACTER	8	JTWJOBID	Job id of active job
108	(6C)	BITSTRING	1	JTNERRC	Error code
108	(6C)	X'1'	0	JTNEJOB	"1" JQE/JOE Mismatch
108	(6C)	X'2'	0	JTNEJOE	"2" Invalid mix of spin/nonspin
108	(6C)	X'3'	0	JTNESUB	"3" Subtask failure
108	(6C)	X'4'	0	JTNNEOPE	"4" OPEN failure
108	(6C)	X'5'	0	JTNNECLO	"5" CLOSE failure
108	(6C)	X'6'	0	JTNNEIOE	"6" I/O error
108	(6C)	X'7'	0	JTNNECBI	"7" CBIO failure
108	(6C)	X'8'	0	JTNENJH	"8" NJE Header/Trailer build
108	(6C)	X'9'	0	JTNNESEQ	"9" Record sequencing error
108	(6C)	X'A'	0	JTNNEGG	"10" Grouping error
108	(6C)	X'B'	0	JTNESJF	"11" SJF error
108	(6C)	X'C'	0	JTNESAF	"12" SAF check failure
109	(6D)	BITSTRING	7	JTWCRSV2	Reserved
120	(78)	DBL WORD	8	JTWDLB	Doubleword work area
128	(80)	DBL WORD	8	JTWDBLE	Doubleword work area 2
136	(88)	DBL WORD	8	JTWDBLE1	Doubleword work area 3
136	(88)	X'80'	0	JTWWRK16	"JTWDBLE,16,C'X'" 16-byte work area
136	(88)	X'78'	0	JTWWRK24	"JTWDLB,24,C'X'" 24-byte work area
144	(90)	DBL WORD	8	(0)	Force alignment
144	(90)	X'48'	0	JTWCLEAR	"JTWCLEAR,*-JTWCLEAR,C'X'" Area to clear
144	(90)	ADDRESS	4	JTWLOGST	Address of LOGSTR used in NJJTAUTH

Comment

THE FOLLOWING TWO FIELDS MUST BE KEPT TOGETHER

End of Comment

152	(98)	DBL WORD	8	JTWWORK	SNA WORK AREA
160	(A0)	BITSTRING	256	JTNJTON (2)	WORK AREA
416	(1A0)	SIGNED	4	JTWNRCFM	PROCESSOR SIGN-ON TIME AND DATE
424	(1A8)	BITSTRING	1	JTWNRCFM	Previous RECFM
425	(1A9)	BITSTRING	1	JTWOLRCL	New RECFM
426	(1AA)	SIGNED	2	JTNLRCL	Previous LRECL
428	(1AC)	SIGNED	2	JTWFAG1	New LRECL
430	(1AE)	BITSTRING	1	JTWF1MSG	FLAG BYTE
		1... ....		JTWF1DAT	"B'10000000"" INACTIVE MESSAGE HAS BEEN ISSUED
		.1... ....		JTWF1HLD	"B'01000000"" INVALID DATA BLOCK MSG REQUIRED
		..1. ....		JTWF1PEF	"B'00100000"" HOLD JOB AFTER RESTART OF DEVICE
		...1 ....		JTWF1JDM	"B'00010000"" PASSWORD ENCRYPTION FAILED
		.... 1...		JTWF1CUQ	"B'00001000"" Write JOB deleted message
		.... .1..		JTWF1NDT	"B'00000100"" Return job to current queue
		.... ..1.		JTWF1SRC	"B'00000010"" No data records have been transmitted yet.
		.... ...1			"B'00000001"" Found an SCR; LRECL/RECFM may have changed
431	(1AF)	BITSTRING	1		Reserved for future use
432	(1B0)	BITSTRING	1	JTWFAG2	More flags
		1... ....		JTWF2AUT	"B'10000000"" Authorization failed
		.1... ....		JTWF2TRC	"B'01000000"" Truncate long SYSIN records
434	(1B2)	SIGNED	2	JTPCEID	Processor Type
434	(1B2)	X'1B4'	0	JTWLEN	"*-JTW" Length of work DSECT

## \$JTW Cross Reference

### Offsets

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

The following fields exist only in the JTW in the NETSRV address space

End of Comment					
436	(1B4)	ADDRESS	4	JTWACB	ACB address
440	(1B8)	ADDRESS	4	JTWRPL	RPL address
444	(1BC)	ADDRESS	4	JTWSJB	SJB address
448	(1C0)	ADDRESS	4	JTWSDB	SDB address
452	(1C4)	ADDRESS	4	JTWB32K	32K buffer containing record during RCCS send
456	(1C8)	BITSTRING	1	JTNFLG1	Progress flags
		1... ....		JTN1JHI	"B'1000000" NJH creation in progress
		.1.. ....		JTN1JHC	"B'0100000" NJH creation complete
		..1. ....		JTN1JHS	"B'0010000" NJH has been sent
		...1 ....		JTN1GTI	"B'0001000" Get is in progress
		.... 1...		JTN1JTI	"B'00001000" NJT creation in progress
		.... .1..		JTN1JTC	"B'00000100" NJT creation complete
		.... ..1.		JTN1JTS	"B'00000010" NJT has been sent
		.... .1.1		JTN1EOT	"B'00000001" EOT has been sent
457	(1C9)	BITSTRING	1	JTNFLG2	Status flags
		1... ....		JTN2ERR	"B'1000000" Error, abort transmission
		.1.. ....		JTN2WJ2	"B'0100000" Wait while JES2 down
		..1. ....		JTN2XMS	"B'0010000" Found 1st card to XMIT
464	(1D0)	DBL WORD	8	(0)	End of JTW area
464	(1D0)	X'1D0'	0	JTWCLEN	"-JTW" Length of JTW in NETSRV address space

## \$JTW Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
JTW	0		JTWJCT	4C	
JTWACB	1B4		JTWJOBID	64	
JTWAREA	20		JTWJQA	48	
JTWB32K	1C4		JTWJQE	48	48
JTWCLEAR	90	48	JTWLEN	1B2	1B4
JTWCLEN	1D0	1D0	JTWLOGST	90	
JTWCRLRST	48		JTNNECBI	6C	7
JTWCRSV1	12		JTNNECLO	6C	5
JTWCRSV2	6D		JTNNEGG	6C	A
JTWCUREC	60		JTNNEIOE	6C	6
JTWDLB	78		JTNNEJOB	6C	1
JTWDBLE	80		JTNNEJOE	6C	2
JTWDBLE1	88		JTNENJH	6C	8
JTWDEVID	F		JTNNEOPE	6C	4
JTWDEVN	4		JTNNERRC	6C	
JTWDEVTP	E		JTNNESAF	6C	C
JTWEBCBC	30		JTNNESEQ	6C	9
JTWEYE	0	D1E3E640	JTNESJF	6C	B
JTWFLAG1	1AE		JTNESUB	6C	3
JTWFAG2	1B0		JTNFLG1	1C8	
JTWF1CUQ	1AE	4	JTNFLG2	1C9	
JTWF1DAT	1AE	40	JTNITAD	34	
JTWF1HLD	1AE	20	JTNITAL	38	
JTWF1JDM	1AE	8	JTNITBL	3C	
JTWF1MSG	1AE	80	JTNJH	54	
JTWF1NDT	1AE	2	JTNJT	58	
JTWF1PEF	1AE	10	JTNJTON	1A0	
JTWF1SRC	1AE	1	JTNLRCL	1AC	
JTWF2AUT	1B0	80	JTNRCFM	1A9	
JTWF2TRC	1B0	40	JTNSST	24	
JTWIOT	50		JTN1EOT	1C8	1
JTWIOTBF	50	50	JTN1GTI	1C8	10

Name	Hex Offset	Hex Value
JTWN1JHC	1C8	40
JTWN1JHI	1C8	80
JTWN1JHS	1C8	20
JTWN1JTC	1C8	4
JTWN1JTI	1C8	8
JTWN1JTS	1C8	2
JTWN2ERR	1C9	80
JTWN2WJ2	1C9	40
JTWN2XMS	1C9	20
JTWOLRCL	1AA	
JTWCRCFM	1A8	
JTPAREA	1C	
JTPCEID	1B2	
JTWRCOUN	5C	
JTWRPL	1B8	
JTWSDB	1C0	
JTWSJB	1BC	
JTWSQD	18	
JTWTAREA	2C	
JTWTBUF	28	
JTWWAVE	14	
JTWWORK	A0	
JTWWRK16	88	80
JTWWRK24	88	78
JTDXDATE	44	
JTDXTIME	40	



## \$KAWA Information

### \$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/DCBE
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	KAWTXTPT1	ADDRESS OF TEXT UNIT 1
80	(50)	ADDRESS	4	KAWTXTPT2	ADDRESS OF TEXT UNIT 2
84	(54)	ADDRESS	4	KAWTXTPT3	ADDRESS OF TEXT UNIT 3
88	(58)	ADDRESS	4	KAWTXTPT4	ADDRESS OF TEXT UNIT 4
92	(5C)	ADDRESS	4	KAWTXTPT5	ADDRESS OF TEXT UNIT 5
96	(60)	ADDRESS	4	KAWTXTPT6	ADDRESS OF TEXT UNIT 6
100	(64)	ADDRESS	4	KAWTXTPT7	ADDRESS OF TEXT UNIT 7
104	(68)	ADDRESS	4	KAWTXTPT8	ADDRESS OF TEXT UNIT 8 -EAS
108	(6C)	ADDRESS	4	KAWTXTPT9	ADDRESS OF TEXT UNIT 9

## \$KAWA Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
112	(70)	ADDRESS	4	KAWTYP10	ADDRESS OF TEXT UNIT 10
116	(74)	SIGNED	4	KAWTXT (0)	TEXT UNITS
116	(74)	BITSTRING	6	KAWTXT1	TEXT UNIT 1
122	(7A)	BITSTRING	8	KAWTXT1D	TEXT UNIT 1 PARM
130	(82)	BITSTRING	6	KAWTXT2	TEXT UNIT 2
136	(88)	BITSTRING	8	KAWTXT2D	TEXT UNIT 2 PARM
144	(90)	BITSTRING	6	KAWTXT3	TEXT UNIT 3
150	(96)	BITSTRING	8	KAWTXT3D	TEXT UNIT 3 PARM
158	(9E)	BITSTRING	6	KAWTXT4	TEXT UNIT 4
164	(A4)	BITSTRING	8	KAWTXT4D	TEXT UNIT 4 PARM
172	(AC)	BITSTRING	6	KAWTXT5	TEXT UNIT 5
178	(B2)	BITSTRING	8	KAWTXT5D	TEXT UNIT 5 PARM
186	(BA)	BITSTRING	6	KAWTXT6	TEXT UNIT 6
192	(C0)	CHARACTER	44	KAWDSN (0)	DATASET NAME
192	(C0)	BITSTRING	44	KAWTXT6D	TEXT UNIT 6 PARM
236	(EC)	BITSTRING	6	KAWTXT7	TEXT UNIT 7
242	(F2)	BITSTRING	8	KAWTXT7D	TEXT UNIT 7 PARM
250	(FA)	BITSTRING	7	KAWTXT8	TEXT UNIT 8 - EAS
257	(101)	BITSTRING	6	KAWTXT9	TEXT UNIT 9
263	(107)	BITSTRING	8	KAWTXT9D	TEXT UNIT 9 PARM
271	(10F)	BITSTRING	6	KAWTXT10	TEXT UNIT 10
277	(115)	BITSTRING	8	KAWTXT10D	TEXT UNIT 10 PARM
288	(120)	SIGNED	4	KAWCMLST (4)	CAMLIST FOR OBTAIN
304	(130)	SIGNED	4	(0)	Alignment
304	(130)	CHARACTER	8	KAWEXTNT (0)	Extent start/end absolute addresses
304	(130)	BITSTRING	4	KAWLOLIM	Lower CCccch of extent
308	(134)	BITSTRING	4	KAUPLIM	Upper CCccch of extent
312	(138)	DBL WORD	8	(0)	DOUBLE WORD FOR DSCB
312	(138)	BITSTRING	148	KAWDSCB	DSCB FROM OBTAIN
312	(138)	X'138'	0	KAWTRKCL	"KAWDSCB,12" TRKCALC WORK AREA
312	(138)	X'138'	0	KAWPURGE	"KAWDSCB,PPLLEN" PURGE PARAMETER LIST
460	(1CC)	SIGNED	4	KAWDEVT (0)	LENGTH OF PARAMETER LIST
461	(1CD)	ADDRESS	1		VERSION OF PARAMETER LIST
462	(1CE)	BITSTRING	2		Flags & reserved
464	(1D0)	ADDRESS	4		ADDRESS OF UCB LIST OR DD NAME
468	(1D4)	ADDRESS	4		NUMBER OF UCBS IN LIST
472	(1D8)	ADDRESS	4		ADDRESS OF RESULT AREA
476	(1DC)	ADDRESS	4		SIZE OF RESULT AREA
480	(1E0)	ADDRESS	4		ADDRESS OF INFO LIST (DEVTYPE INFO=)
480	(1E0)	X'18'	0	KAWDEVTL	"*-KAWDEVT" Length of list form
484	(1E4)	SIGNED	4	(0)	Ensure alignment
484	(1E4)	BITSTRING	1	KAWDEVO	DEVTYPE output area

Comment

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

End of Comment					
0	(0)	X'1F8'	0	M00M1219	"KAWCAPU" ++ IOSCAPU NAME
504	(1F8)	DBL WORD	8	KAWCAPU (0)	++ IOSCAPU PARM LIST
504	(1F8)	BITSTRING	1	KAWCAPU_XVERSION	++ INPUT XVERSION
505	(1F9)	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	

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
		.... .1..		KAWCAPU_KEYUSED_CAPTPTR	"B'00001000" ++ KEYUSED._UCBPTR KEYWORD
					"B'00000100" ++ KEYUSED.CAPTPTR KEYWORD
506	(1FA)	CHARACTER	2	KAWCAPU_XRESERVED1	++ FIELD_LABEL XRESERVED1
508	(1FC)	ADDRESS	4	KAWCAPU_XUCBPTR	++ XUCBPTR
512	(200)	ADDRESS	4	KAWCAPU_XCAPTPTR	++ XCAPTPTR
516	(204)	CHARACTER	1	KAWCAPU_XRESERVED2	++ FIELD_LABEL XRESERVED2
517	(205)	BITSTRING	1	KAWCAPU_XMASK	++ FIELD_LABEL
		1... ....		KAWCAPU_XMSIFREE_YES	"B'10000000" ++ XMSIFREE.YES KEYWORD
		.1.. ....		KAWCAPU_XLASTING_YES	"B'01000000" ++ XLASTING.YES KEYWORD
		..1. ....		KAWCAPU_XCAPTCOM_YES	"B'00100000" ++ XCAPTCOM.YES KEYWORD
		...1 ....		KAWCAPU_XCAPTCOM_NEVER	"B'00010000" ++ XCAPTCOM.NEVER KEYWORD
518	(206)	BITSTRING	2	KAWCAPU_XASID	++ XASID
520	(208)	CHARACTER	16	KAWCAPU_XRESERVED3	++ FIELD_LABEL XRESERVED3
520	(208)	X'20'	0	KAWCAPUL	"*-KAWCAPU" ++ LENGTH OF PLIST
Comment					

## IOSCAPU-1

End of Comment

0	(0)	X'218'	0	KAWALEN	"*-KAW" LENGTH OF THE KAWA
---	-----	--------	---	---------	----------------------------

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	OBTM414	, HASP414 parms - obtain error
0	(0)	CHARACTER	8	OBTNFNAM	Checkpoint file name exists if OBTNCK is FF
8	(8)	CHARACTER	44	OBTNDNAM	Dataset name
52	(34)	CHARACTER	6	OBTNVSER	VOLSER NAME
58	(3A)	CHARACTER	4	OBTNCC	Condition code returned from obtain
62	(3E)	BITSTRING	1	OBTNCK	FF denotes checkpoint name has been supplied
62	(3E)	X'3F'	0	OBTMLEN	"*-OBTM414" Length of a HASP414 parms

## \$KAWA Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
KAW	0			1F9	80
KAWALEN	0	218	KAWCAPU_KEYUSED_UCAPTUCB	1F9	40
KAWALORT	C		KAWCAPU_KEYUSED_UCBPTR	1F9	8
KAWAVER	4		KAWCAPU_XASID	206	
KAWAVERN	4	2	KAWCAPU_XCAPTCOM_NEVER	205	10
KAWBYTRK	2C		KAWCAPU_XCAPTCOM_YES	205	20
KAWCAPU	1F8		KAWCAPU_XCAPTPTR	200	
KAWCAPU_KEYUSED_ASID	1F9	10	KAWCAPU_XFLAGS1		
KAWCAPU_KEYUSED_CAPTOACT	1F9	20			
KAWCAPU_KEYUSED_CAPTPTR	1F9	4			
KAWCAPU_KEYUSED_CAPTUCB					

## \$KAWA Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
	1F9		KAWTXT9	101	
KAWCAPU_XLASTING_YES	205	40	KAWTXT9D	107	
KAWCAPU_XMASK	205		KAWTX10D	115	
KAWCAPU_XMSIFREE_YES	205	80	KAWUCB	24	
KAWCAPU_XRESERVED1	1FA		KAWUCBPX	28	
KAWCAPU_XRESERVED2	204		KAWUPLIM	134	
KAWCAPU_XRESERVED3	208		KAW1ALOC	5	80
KAWCAPU_XUCBPTR	1FC		KAW1NEW	5	40
KAWCAPU_XVERSION	1F8		KAW1OPEN	5	20
KAWCAPUL	208	20	M00M1219	0	1F8
KAWCKG	20		OBTMLEN	3E	3F
KAWCMLST	120		OBTM414	0	
KAWDCBA	10		OBTNCC	3A	
KAWDDNAM	14		OBTNCK	3E	
KAWDEVO	1E4		OBTNDNAM	8	
KAWDEVT	1CC	18	OBTNFNAM	0	
KAWDEVTL	1E0	18	OBTNVSER	34	
KAWDSCB	138				
KAWDSN	C0				
KAWEXTNT	130				
KAWFLAG1	5				
KAWLOLIM	130				
KAWOBFCC	30				
KAWPARM	6				
KAWPURGE	138	138			
KAWRB	38				
KAWRBPTR	34				
KAWTOTA	1C				
KAWTRKCL	138	138			
KAWTXP10	70				
KAWTXT	74				
KAWXTPT	4C				
KAWXTPT1	4C				
KAWXTPT2	50				
KAWXTPT3	54				
KAWXTPT4	58				
KAWXTPT5	5C				
KAWXTPT6	60				
KAWXTPT7	64				
KAWXTPT8	68				
KAWXTPT9	6C				
KAWXT1	74				
KAWXT1D	7A				
KAWXT10	10F				
KAWXT2	82				
KAWXT2D	88				
KAWXT3	90				
KAWXT3D	96				
KAWXT4	9E				
KAWXT4D	A4				
KAWXT5	AC				
KAWXT5D	B2				
KAWXT6	BA				
KAWXT6D	C0				
KAWXT7	EC				
KAWXT7D	F2				
KAWXT8	FA				

## \$LMT Information

### \$LMT Heading Information

<b>Common Name:</b>	Load Module Table
<b>Macro ID:</b>	\$LMT
<b>DSECT Name:</b>	LMT
<b>Owning Component:</b>	JES2 (SC1BH)
<b>Eye-Catcher ID:</b>	'LMT '
	Offset: LMT-\$CSBPRFX+\$CSBID
	Length: 4
<b>Storage Attributes:</b>	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.
<b>Size:</b>	LMTLEN plus standard CSA prefix (CSBPRFX equate in the \$HASPEQU data area) per entry, whether PVT or CSA
<b>Created by:</b>	\$MODLOAD
<b>Pointed to by:</b>	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.
<b>Serialization:</b>	----- LMTCHAIN field of the \$LMT data area Entries cannot be removed from the chains once added, and should be added in a way that allows multi-tasking references.
<b>Function:</b>	The LMT contains an entry for each JES2 module loaded via \$MODLOAD. \$MODLOAD adds the entries. \$MODELET invalidates an entry. Invalidation is a 2 step process. First the module is logically deleted (bit LMT2DELT is set). Once it is determined the module can be physically deleted (see MCKDELET for details), then the module is deleted and the LMT invalidated (bit LMT1INVD is set).

## \$LMT Map

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	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 Id
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 or operator command
		.... .1..		LMT1IBM	"B'00000100" THIS IS AN IBM LOAD MODULE
		.... ..1.		LMT1BSPL	"B'00000010" Bypass SPLEVEL check
		.... ...1		LMT1OS	"B'00000001" Module is an OS module
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
		.... .1..		LMT2REFR	"B'00000100" Request from LOADMOD to refresh this module
		.... ..1.		LMT2DELT	"B'00000010" Module logically deleted (may still be in storage)
		.... ...1		LMT2NDYN	"B'00000001" Module does not support DYNAMIC commands
22	(16)	BITSTRING	1	LMTFLG3	Flag 3 for LMT entry
		1.... ....		LMT3DTBL	"B'10000000" Module has dynamic tables
		.1.. ....		LMT3NXRT	"B'01000000" No XRTs for this LMT
		..1. ....		LMT3FDEL	"B'00100000" Force delete the LMT
		....1 ....		LMT3FREE	"B'00010000" Module has been freed
		.... 1...		LMT3MCKD	"B'00001000" \$MODCHK delete succeeded
		.... .1..		LMT3DRNN	"B'00000100" \$\$\$DEL returned RC=4 (do not delete now)
		.... ...1.		LMT3DRND	"B'00000010" \$\$\$DEL returned RC=8 (never delete)

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
		.... ...1		LMT3RFIP	"B'00000001" Module was refreshed in place (refreshed LPA module with same copy)
23	(17)	BITSTRING 1... ....	1	LMTFLG4 LMT4LWPC	Flag 4 for LMT entry "B'10000000" \$\$\$LOAD was called
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)	ADDRESS	4	LMTADELR	Additional \$\$\$DEL routine
36	(24)	SIGNED	4		Reserved
40	(28)	DBL WORD	8	LMTTIME	Time LMT was created
48	(30)	DBL WORD	8	LMTTIMDL	Time LMT logically deleted
56	(38)	DBL WORD	8	LMTDRTIM	Time for next \$\$\$DEL call
64	(40)	DBL WORD	8	(0)	Assure LMTLEN DWORD align
64	(40)	X'40'	0	LMTLEN	"*-LMT" LENGTH
64	(40)	X'1'	0	LMTVERSN	"1" VERSION NUMBER OF LMT

## \$LMT Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
LMT	0		LMT3DTBL	16	80
LMTADELR	20		LMT3FDEL	16	20
LMTBASEA	10		LMT3FREE	16	10
LMTCHAIN	18		LMT3MCKD	16	8
LMTDRTIM	38		LMT3NXRT	16	40
LMTENTRY	1C		LMT3RFIP	16	1
LMTESIZE	C		LMT4LWPC	17	80
LMTFLG1	14				
LMTFLG2	15				
LMTFLG3	16				
LMTFLG4	17				
LMTLEN	40	40			
LMTMITAD	8				
LMTMODLN	D				
LMTMODNM	0				
LMTSUBPL	C				
LMTTIMDL	30				
LMTTIME	28				
LMTVERSN	40	1			
LMT1BSPL	14	2			
LMT1CMN	14	40			
LMT1DIRL	14	80			
LMT1IBM	14	4			
LMT1INV	14	10			
LMT1LOAD	14	8			
LMT1OS	14	1			
LMT1PVT	14	20			
LMT2CMNR	15	80			
LMT2DELT	15	2			
LMT2LPAR	15	20			
LMT2NDYN	15	1			
LMT2PVTR	15	40			
LMT2REFR	15	4			
LMT2RM24	15	10			
LMT2RM31	15	8			
LMT3DRND	16	2			
LMT3DRNN	16	4			



## \$MCT Information

### \$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
- MTCATTU
- MCTCKLTU
- MCTCKTTU
- MCTCNDTU
- MCTCOMTU
- MCTCONTU
- MCTDCTTU
- MCTDESTU
- MCTDSTTU
- MCTDTETU
- MCTEBYTU
- MCTEKNTU
- MCTELCTU
- MCTEPGTU
- MCTEPNTU
- MCTERRTU
- MCTETMTU
- MCTFENTU
- MCTFSSTU
- MCHDRTU
- MCTIAUTU
- MCTINCTU
- MCTINRTU
- MCTJOBTU
- MCTJPY TU
- 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
- MCTPI TTU
- MCTPRLTU
- MCTPRRTU
- MCTPRW TU
- MCTPTDTU
- MCTPTHTU
- MCTPU D TU
- MCTPUN TU
- MCTPUW TU
- MCTRAUTU
- MCTR CNTU
- MCTR C V TU
- MCTR DITU
- MCTR DRTU
- MCTR DTTU
- MCTR DVTU
- MCTR EDTU
- MCTR MTTU
- MCTR PRTU
- MCTR PUTU
- MCTR QJIU
- MCTR RDTU
- MCTS AW TU
- MCTS BDTU
- MCTS CTTU
- MCTS EPTU
- MCTS MFTU
- MCTS NATU
- MCTS PDTU
- MCTS PLTU
- MCTS RW TU
- MCTS SITU
- MCTS TATU
- MCTS TCTU
- MCTS TW TU
- MCTS YTU
- MCTS SUBTU
- MCTT GLTU
- MCTT GSTU
- MCTT IDTU
- MCTT LGTU
- MCTT PDTU
- MCTT RCTU
- MCTT RITU
- MCTT SUTU
- MCTV IATU
- MCTV KPTU
- MCTV LTTU
- MCTV UNTU
- MCTX ITTU

End of Programming Interface information

## Heading Information • \$MCT Map

### \$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 called 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

Comment

\$GETABLE TABLE-PAIRS, AND ASSOCIATED TABLE ACCESS ROUTINES.

End of Comment

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
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(USERDDET)" User table
28	(1C)	ADDRESS	4	MCTDTETH	"V(HASPDDET)" 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	MCTPCR TU	"V(USERPCRT)" User table
64	(40)	ADDRESS	4	MCTPCR TH	"V(HASPPCRT)" HASP table
68	(44)	ADDRESS	4	MCTPCR TD	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 STM TS.

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(HASPM PST)" 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	MCTMG TU	"V(USERMGST)" User table
112	(70)	ADDRESS	4	MCTMG TH	"V(HASPMGST)" HASP table
116	(74)	ADDRESS	4	MCTMG TD	Dynamic table array

Comment

\$SCAN FACILITY HASP/USER TABLE PAIRS FOR SUBSCANNING OF  
DEVICE RELATED PARAMETER STATEMENTS.

End of Comment

120	(78)	ADDRESS	4	MCTIN RTP (0)	INTRDR PARM-STMT SUBSCAN
120	(78)	ADDRESS	4	MCTIN RTU	"V(USERINRT)" User table
124	(7C)	ADDRESS	4	MCTIN RTH	"V(HASPINRT)" HASP table
128	(80)	ADDRESS	4	MCTIN RTD	Dynamic table array
132	(84)	ADDRESS	4	MCTLNETP (0)	LINENNNN PARM-STMT SUBSCAN
132	(84)	ADDRESS	4	MCTLNETU	"V(USERLN ET)" User table
136	(88)	ADDRESS	4	MCTLNETH	"V(HASPLNET)" HASP table
140	(8C)	ADDRESS	4	MCTLNETD	Dynamic table array
144	(90)	ADDRESS	4	MCTLTRTP (0)	LINEnnnn TRACE KEYWORD SUBSCAN
144	(90)	ADDRESS	4	MCTLTR TU	"V(USERLRTT)" User table

## \$MCT Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
148	(94)	ADDRESS	4	MCTLTRTH	"V(HASPLTRT)" HASP table
152	(98)	ADDRESS	4	MCTLTRTD	Dynamic table array
156	(9C)	ADDRESS	4	MCTLINTP (0)	Ln.DVn PARM-STMT SUBSCAN
156	(9C)	ADDRESS	4	MCTLINTU	"V(USERLINT)" User table
160	(A0)	ADDRESS	4	MCTLINTH	"V(HASPLINT)" HASP table
164	(A4)	ADDRESS	4	MCTLINTD	Dynamic table array
168	(A8)	ADDRESS	4	MCTLJRTP (0)	Ln.JR PARM-STMT SUBSCAN
168	(A8)	ADDRESS	4	MCTLJRTU	"V(USERLJRT)" User table
172	(AC)	ADDRESS	4	MCTLJRTH	"V(HASPLJRT)" HASP table
176	(B0)	ADDRESS	4	MCTLJRTD	Dynamic table array
180	(B4)	ADDRESS	4	MCTLJTTP (0)	Ln.JT PARM-STMT SUBSCAN
180	(B4)	ADDRESS	4	MCTLJTTU	"V(USERLJTT)" User table
184	(B8)	ADDRESS	4	MCTLJTTH	"V(HASPLJTT)" HASP table
188	(BC)	ADDRESS	4	MCTLJTTD	Dynamic table array
192	(C0)	ADDRESS	4	MCTLSRTP (0)	Ln.SR PARM-STMT SUBSCAN
192	(C0)	ADDRESS	4	MCTLSRTU	"V(USERLSRT)" User table
196	(C4)	ADDRESS	4	MCTLSRTH	"V(HASPLSRT)" HASP table
200	(C8)	ADDRESS	4	MCTLSRTD	Dynamic table array
204	(CC)	ADDRESS	4	MCTLSTTP (0)	Ln.ST PARM-STMT SUBSCAN
204	(CC)	ADDRESS	4	MCTLSTTU	"V(USERLSTT)" User table
208	(D0)	ADDRESS	4	MCTLSTTH	"V(HASPLSTT)" HASP table
212	(D4)	ADDRESS	4	MCTLSTTD	Dynamic table array
216	(D8)	ADDRESS	4	MCTLOGTP (0)	LOGONN PARM-STMT SUBSCAN
216	(D8)	ADDRESS	4	MCTLOGTU	"V(USERLOGT)" User table
220	(DC)	ADDRESS	4	MCTLOGTH	"V(HASPLOGT)" HASP table
224	(E0)	ADDRESS	4	MCTLOGTD	Dynamic table array
228	(E4)	ADDRESS	4	MCTOFLTP (0)	OFFLOADN PARM-STMT SUBSCAN PAIR
228	(E4)	ADDRESS	4	MCTOFLTU	"V(USEROFLT)" User table
232	(E8)	ADDRESS	4	MCTOFLTH	"V(HASPOFLT)" HASP table
236	(EC)	ADDRESS	4	MCTOFLTD	Dynamic table array
240	(F0)	ADDRESS	4	MCTOFFTP (0)	OFFN.DV PARM-STMT SUBSCAN PAIR
240	(F0)	ADDRESS	4	MCTOFFTU	"V(USEROFFT)" User table
244	(F4)	ADDRESS	4	MCTOFFTH	"V(HASPOFFT)" HASP table
248	(F8)	ADDRESS	4	MCTOFFTD	Dynamic table array
252	(FC)	ADDRESS	4	MCTOJRTP (0)	OFFN.JR PARM-STMT SUBSCAN PAIR
252	(FC)	ADDRESS	4	MCTOJRTU	"V(USEROJRT)" User table
256	(100)	ADDRESS	4	MCTOJRTH	"V(HASPOJRT)" HASP table
260	(104)	ADDRESS	4	MCTOJRTD	Dynamic table array
264	(108)	ADDRESS	4	MCTOJTTP (0)	OFFN.JT PARM-STMT SUBSCAN PAIR
264	(108)	ADDRESS	4	MCTOJTTU	"V(USEROJTT)" User table
268	(10C)	ADDRESS	4	MCTOJTTH	"V(HASPOJTT)" HASP table
272	(110)	ADDRESS	4	MCTOJTTD	Dynamic table array
276	(114)	ADDRESS	4	MCTOSRTP (0)	OFFN.SR PARM-STMT SUBSCAN PAIR
276	(114)	ADDRESS	4	MCTOSRTU	"V(USEROSRT)" User table
280	(118)	ADDRESS	4	MCTOSRTH	"V(HASPOSRT)" HASP table
284	(11C)	ADDRESS	4	MCTOSRTD	Dynamic table array
288	(120)	ADDRESS	4	MCTOSTTP (0)	OFFN.ST PARM-STMT SUBSCAN PAIR
288	(120)	ADDRESS	4	MCTOSTTU	"V(USEROSTT)" User table
292	(124)	ADDRESS	4	MCTOSTTH	"V(HASPOSTT)" HASP table
296	(128)	ADDRESS	4	MCTOSTTD	Dynamic table array
300	(12C)	ADDRESS	4	MCTPRRTP (0)	PRINTERNN PARM-STMT SUBSCAN
300	(12C)	ADDRESS	4	MCTPRRTU	"V(USERPRRT)" User table
304	(130)	ADDRESS	4	MCTPRRTH	"V(HASPPRRT)" HASP table
308	(134)	ADDRESS	4	MCTPRRTD	Dynamic table array
312	(138)	ADDRESS	4	MCTPRLTP (0)	PROCLIB(nnnnnnnn) PARM-STMT SUBSCAN
312	(138)	ADDRESS	4	MCTPRLTU	"V(USERPRLT)" User table
316	(13C)	ADDRESS	4	MCTPRLTH	"V(HASPPRLT)" HASP table
320	(140)	ADDRESS	4	MCTPRLTD	Dynamic table array
324	(144)	ADDRESS	4	MCTPUNTP (0)	PUNCHNN PARM-STMT SUBSCAN
324	(144)	ADDRESS	4	MCTPUNTU	"V(USERPUNT)" User table
328	(148)	ADDRESS	4	MCTPUNTH	"V(HASPPPUNT)" HASP table
332	(14C)	ADDRESS	4	MCTPUNTD	Dynamic table array
336	(150)	ADDRESS	4	MCTRDTIP (0)	RDI PARM-STMT SUBSCAN PAIR
336	(150)	ADDRESS	4	MCTRDTIU	"V(USERRDIT)" User table

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
340	(154)	ADDRESS	4	MCTRDIRH	"V(HASPRDIT)" HASP table
344	(158)	ADDRESS	4	MCTRDIRD	Dynamic table array
348	(15C)	ADDRESS	4	MCTRDIRT (0)	READERNN PARM-STMT SUBSCAN
348	(15C)	ADDRESS	4	MCTRDIRTU	"V(USERIRDRT)" User table
352	(160)	ADDRESS	4	MCTRDIRTH	"V(HASPRDRT)" HASP table
356	(164)	ADDRESS	4	MCTRDIRTD	Dynamic table array
360	(168)	ADDRESS	4	MCTRQJTP (0)	REQJOBID PARM-STMT SUBSCAN
360	(168)	ADDRESS	4	MCTRQJTU	"V(USERRQJT)" User table
364	(16C)	ADDRESS	4	MCTRQJTH	"V(HASPRQJT)" HASP table
368	(170)	ADDRESS	4	MCTRQJTD	Dynamic table array
372	(174)	ADDRESS	4	MCTRDRVTP (0)	RNNNNDVX PARM-STMT SUBSCAN PAIR
372	(174)	ADDRESS	4	MCTRDRV TU	"V(USERRDVT)" User table
376	(178)	ADDRESS	4	MCTRDRV TH	"V(HASPRDVT)" HASP table
380	(17C)	ADDRESS	4	MCTRDRV TD	Dynamic table array
384	(180)	ADDRESS	4	MCTRPRTP (0)	RNNNNPRX PARM-STMT SUBSCAN
384	(180)	ADDRESS	4	MCTRPR TU	"V(USERRPRT)" User table
388	(184)	ADDRESS	4	MCTRPR TH	"V(HASPRPRT)" HASP table
392	(188)	ADDRESS	4	MCTRPR TD	Dynamic table array
396	(18C)	ADDRESS	4	MCTRPUTP (0)	RNNNNPUX PARM-STMT SUBSCAN
396	(18C)	ADDRESS	4	MCTRPUTU	"V(USERRPUT)" User table
400	(190)	ADDRESS	4	MCTRPUTH	"V(HASPRPUT)" HASP table
404	(194)	ADDRESS	4	MCTRPUTD	Dynamic table array
408	(198)	ADDRESS	4	MCTR RDTP (0)	RNNNNRDX PARM-STMT SUBSCAN
408	(198)	ADDRESS	4	MCTR RD TU	"V(USERRRDT)" User table
412	(19C)	ADDRESS	4	MCTR RD TH	"V(HASPRRDT)" HASP table
416	(1A0)	ADDRESS	4	MCTR RDTD	Dynamic table array
420	(1A4)	ADDRESS	4	MCTR CNTP (0)	RNNNNCN PARM-STMT SUBSCAN
420	(1A4)	ADDRESS	4	MCTR CNTU	"V(USERRCNT)" User table
424	(1A8)	ADDRESS	4	MCTR CNT H	"V(HASPRCNT)" HASP table
428	(1AC)	ADDRESS	4	MCTR CNTD	Dynamic table array
432	(1B0)	ADDRESS	4	MCTS UBT P (0)	SUBNET PARM-STMT SUBSCAN
432	(1B0)	ADDRESS	4	MCTS UBT U	"V(USERSUBT)" User table
436	(1B4)	ADDRESS	4	MCTS UBT H	"V(HASPSUBT)" HASP table
440	(1B8)	ADDRESS	4	MCTS UBT D	Dynamic table array
444	(1BC)	ADDRESS	4	MCT NS VTP (0)	NETSRV PARM-STMT SUBSCAN
444	(1BC)	ADDRESS	4	MCT NS VTU	"V(USERNSVT)" User table
448	(1C0)	ADDRESS	4	MCT NS VTH	"V(HASPNSVT)" HASP table
452	(1C4)	ADDRESS	4	MCT NS VTD	Dynamic table array
456	(1C8)	ADDRESS	4	MCT NTR TP (0)	NETSRVnnn TRACE KEYWORD SUBSCAN
456	(1C8)	ADDRESS	4	MCT NTR TU	"V(USERNTRT)" User table
460	(1CC)	ADDRESS	4	MCT NTR TH	"V(HASP NTRT)" HASP table
464	(1D0)	ADDRESS	4	MCT NTR TD	Dynamic table array
468	(1D4)	ADDRESS	4	MCTS OKTP (0)	SOCKET PARM-STMT SUBSCAN
468	(1D4)	ADDRESS	4	MCTS OKTU	"V(USERSOKT)" User table
472	(1D8)	ADDRESS	4	MCTS OKTH	"V(HASPSOKT)" HASP table
476	(1DC)	ADDRESS	4	MCTS OKTD	Dynamic table array
480	(1E0)	ADDRESS	4	(3)	Reserved for future use

Comment

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

End of Comment

492	(1EC)	ADDRESS	4	MCTADRTP (0)	BAD TRACK ADDRESS OPERAND VECTR
492	(1EC)	ADDRESS	4	MCTADRTH	"V(HASPVADR)" HASP VECTOR table
496	(1F0)	ADDRESS	4	MCTVTMTP (0)	TIME OPERAND VECTOR
496	(1F0)	ADDRESS	4	MCTVTMTH	"V(HASPVTIM)" HASP VECTOR table
500	(1F4)	ADDRESS	4	MCTAUTTP (0)	AUTHORITY OPERAND VECTOR
500	(1F4)	ADDRESS	4	MCTAUTTH	"V(HASPVAUT)" HASP VECTOR table
504	(1F8)	ADDRESS	4	MCTMSGTP (0)	MESSAGE OPERAND VECTOR
504	(1F8)	ADDRESS	4	MCTMSGTH	"V(HASPVMSG)" HASP VECTOR table
508	(1FC)	ADDRESS	4	MCTCHRTP (0)	CHARACTER OPERAND VECTOR
508	(1FC)	ADDRESS	4	MCTCHRTH	"V(HASPVCHR)" HASP VECTOR table

## \$MCT Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
512	(200)	ADDRESS	4	MCTXRTTP (0)	ROUTINE OPERAND VECTOR
512	(200)	ADDRESS	4	MCTXRTTH	"V(HASPVXRT)" HASP VECTOR table
516	(204)	ADDRESS	4	MCTRJNTP (0)	JOB RANGE OPERAND VECTOR (INIT)
516	(204)	ADDRESS	4	MCTRJRNTH	"V(HASPVJRN)" HASP VECTOR table
520	(208)	ADDRESS	4	MCTRANTP (0)	JOB RANGE OPERAND VECTOR(\$T/\$D)
520	(208)	ADDRESS	4	MCTRANTH	"V(HASPVJBR)" HASP VECTOR table
524	(20C)	ADDRESS	4	MCTDRMTP (0)	DORMANCY OPERAND VECTOR
524	(20C)	ADDRESS	4	MCTDRMTH	"V(HASPVDRM)" HASP VECTOR table
528	(210)	ADDRESS	4	MCTRNGTP (0)	RANGE OPERAND VECTOR
528	(210)	ADDRESS	4	MCTRNGTH	"V(HASPVNRG)" HASP VECTOR table
532	(214)	ADDRESS	4	MCTR2TP (0)	RANGE OPERAND VECTOR 2
532	(214)	ADDRESS	4	MCTR2TH	"V(HASPVRN2)" HASP VECTOR table
536	(218)	ADDRESS	4	MCTRCPCTP (0)	ROUTE CODE OPERAND VECTOR
536	(218)	ADDRESS	4	MCTRCPCTH	"V(HASPVPRC)" HASP VECTOR table
540	(21C)	ADDRESS	4	MCTSFTP (0)	SYSTEM AFFINITY OPERAND VECTOR
540	(21C)	ADDRESS	4	MCTSFTH	"V(HASPVSAF)" HASP VECTOR table
544	(220)	ADDRESS	4	MCTVOLTP (0)	VOLUME OPERAND VECTOR
544	(220)	ADDRESS	4	MCTVOLTH	"V(HASPVVOL)" HASP VECTOR table
548	(224)	ADDRESS	4	MCTFRMTP (0)	FORMS OPERAND VECTOR
548	(224)	ADDRESS	4	MCTFRMTH	"V(HASPVFRM)" HASP VECTOR table
552	(228)	ADDRESS	4	MCTPPRTP (0)	PRMODE OPERAND VECTOR
552	(228)	ADDRESS	4	MCTPPRTH	"V(HASPVPPR)" HASP VECTOR table
556	(22C)	ADDRESS	4	MCTLIMTP (0)	LIMIT OPERAND VECTOR
556	(22C)	ADDRESS	4	MCTLIMTH	"V(HASPVLIM)" HASP VECTOR table
560	(230)	ADDRESS	4	MCTMSMTP (0)	MODULE ASSEMBLE= VECTOR
560	(230)	ADDRESS	4	MCTMSMTH	"V(HASPMMSMT)" HASP VECTOR table
564	(234)	ADDRESS	4	MCTPLMTP (0)	PLIM OPERAND VECTOR
564	(234)	ADDRESS	4	MCTPLMTH	"V(HASPVPLM)" HASP VECTOR table
568	(238)	ADDRESS	4	MCTOUNTP (0)	OFFLOAD UNIT= OPERAND
568	(238)	ADDRESS	4	MCTOUNTH	"V(HASPOUNT)" HASP VECTOR table
572	(23C)	ADDRESS	4	MCTVWSTP (0)	WS OPERAND VECTOR
572	(23C)	ADDRESS	4	MCTVWSTH	"V(HASPVWST)" HASP VECTOR table
576	(240)	ADDRESS	4	MCTVOSTP (0)	OUTDISP OPERAND VECTOR
576	(240)	ADDRESS	4	MCTVOSTH	"V(HASPVODS)" HASP VECTOR table
580	(244)	ADDRESS	4	MCTVOJTP (0)	OUTDISP OPERAND
580	(244)	ADDRESS	4	MCTVOJTH	"V(HASPVODJ)" HASP VECTOR table
584	(248)	ADDRESS	4	MCTVSRTP (0)	OUTDISP OPERAND VECTOR
584	(248)	ADDRESS	4	MCTVSRTH	"V(HASPVOSR)" HASP VECTOR table
588	(24C)	ADDRESS	4	MCTVSTTP (0)	OUTDISP OPERAND VECTOR
588	(24C)	ADDRESS	4	MCTVSTTH	"V(HASPVOST)" HASP VECTOR table
592	(250)	ADDRESS	4	MCTVSFTP (0)	RDRnn SYSAFF=OPERAND VECTOR
592	(250)	ADDRESS	4	MCTVSFTH	"V(HASPRSFT)" HASP VECTOR table
596	(254)	ADDRESS	4	MCTVWSAP (0)	SRVCLASS ACTIVE= OPERAND VECTOR
596	(254)	ADDRESS	4	MCTVWSAH	"V(HASPWSP)" HASP VECTOR table
600	(258)	ADDRESS	4	MCTVCATP (0)	JOBCCLASS ACTIVE= operand vector
600	(258)	ADDRESS	4	MCTVCATH	"V(HASPCATP)" HASP VECTOR table
604	(25C)	ADDRESS	4	MCTVSSTP (0)	SPOOL SYSAFF=OPERAND VECTOR
604	(25C)	ADDRESS	4	MCTVSSTH	"V(HASPRSST)" HASP VECTOR table
608	(260)	ADDRESS	4	MCTVISTP (0)	SPOOL INIT SYSAFF=operand Vector
608	(260)	ADDRESS	4	MCTVISTH	"V(HASPIASF)" HASP VECTOR table
612	(264)	ADDRESS	4	MCTVJCTP (0)	JOBnn CMDAUTH= VECTOR
612	(264)	ADDRESS	4	MCTVJCTH	"V(HASPJCMT)" HASP VECTOR table
616	(268)	ADDRESS	4	MCTVJSTP (0)	JOBnn SYSAFF=OPERAND VECTOR
616	(268)	ADDRESS	4	MCTVJSTH	"V(HASPJST)" HASP VECTOR table
620	(26C)	ADDRESS	4	MCTVJOFP (0)	JOBnn OFFS= OPERAND VECTOR
620	(26C)	ADDRESS	4	MCTVJOFH	"V(HASPJOF)" HASP VECTOR table
624	(270)	ADDRESS	4	MCTVSOFP (0)	OUTPUT OFFS= OPERAND VECTOR
624	(270)	ADDRESS	4	MCTVSOFH	"V(HASPSOFT)" HASP VECTOR table
628	(274)	ADDRESS	4	MCTVVUDP (0)	SPOOL UNITDATA TRKRANGE
628	(274)	ADDRESS	4	MCTVVUDH	"V(HASPVUDT)" HASP VECTOR table
632	(278)	ADDRESS	4	MCTJVLP (0)	JOBnnn VOLUMES= vector
632	(278)	ADDRESS	4	MCTJVVLH	"V(HASPVJVT)" HASP VECTOR table
636	(27C)	ADDRESS	4	MCTVJABP (0)	JOBnnn ABEND= vector
636	(27C)	ADDRESS	4	MCTVJABH	"V(HASPVABT)" HASP VECTOR table

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
640	(280)	ADDRESS	4	MCTVOJLP (0)	JESLOG OPERAND
640	(280)	ADDRESS	4	MCTVOJLH	"V(HASPVJL)" HASP VECTOR table
644	(284)	ADDRESS	4	MCTDVRTP (0)	LINEn/LOGONn/NETSRVn RESTART KEYWORD SUBSCAN
644	(284)	ADDRESS	4	MCTDVRTH	"V(HASPVDVR)" HASP VECTOR table
648	(288)	ADDRESS	4	MCTLNCTP (0)	LINEnnnn CONNECT KEYWORD SUBSCAN
648	(288)	ADDRESS	4	MCTLNCTH	"V(HASPVLCN)" HASP VECTOR table
652	(28C)	ADDRESS	4	MCTSKCTP (0)	SOCKET CONNECT KEYWORD SUBSCAN
652	(28C)	ADDRESS	4	MCTSKCTH	"V(HASPVSKC)" HASP VECTOR table
656	(290)	ADDRESS	4	MCTSPSTP (0)	SPOOL SPACE= subparm
656	(290)	ADDRESS	4	MCTSPSTH	"V(HASPVSPS)" HASP VECTOR table
660	(294)	ADDRESS	4	MCTAPCTP (0)	APPL CONNECT KEYWORD SUBSCAN
660	(294)	ADDRESS	4	MCTAPCTH	"V(HASPVAPC)" HASP VECTOR table
664	(298)	ADDRESS	4	MCTNJCTP (0)	NJEDEF CONNECT KEYWORD SUBSCAN
664	(298)	ADDRESS	4	MCTNJCTH	"V(HASPVNJC)" HASP VECTOR table
668	(29C)	ADDRESS	4	MCTNOCTP (0)	NODEnnnn CONNECT KEYWORD SUBSCAN
668	(29C)	ADDRESS	4	MCTNOCTH	"V(HASPVNOC)" HASP VECTOR table
672	(2A0)	ADDRESS	4	MCTPTCTP (0)	INIT(xxx) CLASS KEYWORD SUBSCAN
672	(2A0)	ADDRESS	4	MCTPTCTH	"V(HASPVPTC)" HASP VECTOR table
676	(2A4)	ADDRESS	4	MCTOFCPT (0)	OFFx.Jx CLASS KEYWORD SUBSCAN
676	(2A4)	ADDRESS	4	MCTOFCTH	"V(HASPVFOC)" HASP VECTOR table
680	(2A8)	ADDRESS	4		Reserved for future use
684	(2AC)	ADDRESS	4		Reserved for future use
688	(2B0)	ADDRESS	4		Reserved for future use
692	(2B4)	ADDRESS	4		Reserved for future use

Comment

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

End of Comment

696	(2B8)	ADDRESS	4	MCTACTTP (0)	ACTRMT statement table pair
696	(2B8)	ADDRESS	4	MCTACTTU	"V(USERACTT)" User table
700	(2BC)	ADDRESS	4	MCTACTTH	"V(HASPACTT)" HASP table
704	(2C0)	ADDRESS	4	MCTACTTD	Dynamic table array
708	(2C4)	ADDRESS	4	MCTAPLTP (0)	APPL PARM-STMT SUBSCAN
708	(2C4)	ADDRESS	4	MCTAPLTU	"V(USERAPLT)" User table
712	(2C8)	ADDRESS	4	MCTAPLTH	"V(HASPAPLT)" HASP table
716	(2CC)	ADDRESS	4	MCTAPLTD	Dynamic table array
720	(2D0)	ADDRESS	4	MCTBADTP (0)	BADTRACK PARM-STMT SUBSCAN
720	(2D0)	ADDRESS	4	MCTBADTU	"V(USERBADT)" User table
724	(2D4)	ADDRESS	4	MCTBADTH	"V(HASPBADT)" HASP table
728	(2D8)	ADDRESS	4	MCTBADTD	Dynamic table array
732	(2DC)	ADDRESS	4	MCTBUFTP (0)	BUFDEF PARM-STMT SUBSCAN PAIR
732	(2DC)	ADDRESS	4	MCTBUFTU	"V(USERBUFT)" User table
736	(2E0)	ADDRESS	4	MCTBUFTH	"V(HASPBUFT)" HASP table
740	(2E4)	ADDRESS	4	MCTBUFTD	Dynamic table array
744	(2E8)	ADDRESS	4	MCTBFHTP (0)	BUFDEF BELOWBUF SUBSCAN PR
744	(2E8)	ADDRESS	4	MCTBFHTU	"V(USERBFHT)" User table
748	(2EC)	ADDRESS	4	MCTBFHTH	"V(HASPBFHHT)" HASP table
752	(2F0)	ADDRESS	4	MCTBFHTD	Dynamic table array
756	(2F4)	ADDRESS	4	MCTBFXTP (0)	BUFDEF ABOVEBUF SUBSCAN PR
756	(2F4)	ADDRESS	4	MCTBFXTU	"V(USERBFXT)" User table
760	(2F8)	ADDRESS	4	MCTBFXTH	"V(HASPBFXTH)" HASP table
764	(2FC)	ADDRESS	4	MCTBFXTD	Dynamic table array
768	(300)	ADDRESS	4	MCTBSCTP (0)	TPDEF BSC SUBSCAN PAIR
768	(300)	ADDRESS	4	MCTBSCTU	"V(USERBSCT)" User table
772	(304)	ADDRESS	4	MCTBSCTH	"V(HASPBSCHT)" HASP table
776	(308)	ADDRESS	4	MCTBSCTD	Dynamic table array
780	(30C)	ADDRESS	4	MCTSNAFP (0)	TPDEF SNA SUBSCAN PAIR
780	(30C)	ADDRESS	4	MCTSNAFU	"V(USERSNAT)" User table
784	(310)	ADDRESS	4	MCTSNAFH	"V(HASPSNAT)" HASP table
788	(314)	ADDRESS	4	MCTSNAFD	Dynamic table array
792	(318)	ADDRESS	4	MCTSESTP (0)	TPDEF SESSIONS= subscan

## \$MCT Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
792	(318)	ADDRESS	4	MCTSESTU	"V(USERSEST)" User table
796	(31C)	ADDRESS	4	MCTSESTH	"V(HASPSEST)" HASP table
800	(320)	ADDRESS	4	MCTSESTD	Dynamic table array
804	(324)	ADDRESS	4	MCTJCXTP (0)	JOBCLASS XEQCOUNT= subscan
804	(324)	ADDRESS	4	MCTJCXTU	"V(USERJCXT)" User table
808	(328)	ADDRESS	4	MCTJCXTH	"V(HASPJCXT)" HASP table
812	(32C)	ADDRESS	4	MCTJCXTD	Dynamic table array
816	(330)	ADDRESS	4	MCTJCCTP (0)	JOB CC (completion code)
816	(330)	ADDRESS	4	MCTJCCTU	"V(USERJCCT)" User table
820	(334)	ADDRESS	4	MCTJCCTH	"V(HASPCCT)" HASP table
824	(338)	ADDRESS	4	MCTJCCTD	Dynamic table array
828	(33C)	ADDRESS	4	MCTCATTP (0)	JOB CLASS PARM-STMTS SUBSCAN
828	(33C)	ADDRESS	4	MCTCATTU	"V(USERCATT)" User table
832	(340)	ADDRESS	4	MCTCATTH	"V(HASPCATT)" HASP table
836	(344)	ADDRESS	4	MCTCATTD	Dynamic table array
840	(348)	ADDRESS	4	MCTVXMTP (0)	JOBCLASS XEQMEMBER= SUBSCAN
840	(348)	ADDRESS	4	MCTVXMTU	"V(USERVXMT)" User table
844	(34C)	ADDRESS	4	MCTVXMTH	"V(HASPVXMT)" HASP table
848	(350)	ADDRESS	4	MCTVXMTD	Dynamic table array
852	(354)	ADDRESS	4	MCTCKTTP (0)	CKPTDEF PARM-STMT SUBSCAN PAIR
852	(354)	ADDRESS	4	MCTCKTTU	"V(USERCKTT)" User table
856	(358)	ADDRESS	4	MCTCKTTH	"V(HASPKCKT)" HASP table
860	(35C)	ADDRESS	4	MCTCKTTD	Dynamic table array
864	(360)	ADDRESS	4	MCTCKLTP (0)	CKPTLOCK PARM-STMT TABLE PR
864	(360)	ADDRESS	4	MCTCKL TU	"V(USERCKLT)" User table
868	(364)	ADDRESS	4	MCTCKL TH	"V(HASPKLT)" HASP table
872	(368)	ADDRESS	4	MCTCKL TD	Dynamic table array
876	(36C)	ADDRESS	4	MCTSPCTP (0)	CKPTSPACE Parm-stmt tbl pr
876	(36C)	ADDRESS	4	MCTSPCTU	"V(USERSPCT)" User table
880	(370)	ADDRESS	4	MCTSPCTH	"V(HASPSPCT)" HASP table
884	(374)	ADDRESS	4	MCTSPCTD	Dynamic table array
888	(378)	ADDRESS	4	MCTKPNTP (0)	CKPTDEF CKPTN= SUBSCAN PAIR
888	(378)	ADDRESS	4	MCTKPNTU	"V(USERKPNT)" User table
892	(37C)	ADDRESS	4	MCTKPNTH	"V(HASPKPNT)" HASP table
896	(380)	ADDRESS	4	MCTKPNTD	Dynamic table array
900	(384)	ADDRESS	4	MCTEKNTP (0)	CKPTDEF NEWCKPTN= SUBSCAN
900	(384)	ADDRESS	4	MCTEKNTU	"V(USEREKNT)" User table
904	(388)	ADDRESS	4	MCTEKNTH	"V(HASPEKNT)" HASP table
908	(38C)	ADDRESS	4	MCTEKNTD	Dynamic table array
912	(390)	ADDRESS	4	MCTVLTP (0)	CKPTDEF VOLATILE= subscan
912	(390)	ADDRESS	4	MCTVLTTU	"V(USERVLTT)" User table
916	(394)	ADDRESS	4	MCTVLTTH	"V(HASPVLT)" HASP table
920	(398)	ADDRESS	4	MCTVLTTD	Dynamic table array
924	(39C)	ADDRESS	4	MCTVKPTP (0)	CKPTDEF VERSIONS= SUBSCAN
924	(39C)	ADDRESS	4	MCTVKPTU	"V(USERVKPT)" User table
928	(3A0)	ADDRESS	4	MCTVKPTH	"V(HASPVKPT)" HASP table
932	(3A4)	ADDRESS	4	MCTVKPTD	Dynamic table array
936	(3A8)	ADDRESS	4	MCTCLGTP (0)	CLASSGRP PARM-STMT SUBSCAN
936	(3A8)	ADDRESS	4	MCTCLGTU	"V(USERCLGT)" User table
940	(3AC)	ADDRESS	4	MCTCLGTH	"V(HASPCCLGT)" HASP table
944	(3B0)	ADDRESS	4	MCTCLGTD	Dynamic table array
948	(3B4)	ADDRESS	4	MCTCN DTP (0)	CONDEF PARM-STMT SUBSCAN PAIR
948	(3B4)	ADDRESS	4	MCTCN DTU	"V(USERCN DT)" User table
952	(3B8)	ADDRESS	4	MCTCN DTH	"V(HASPCNDT)" HASP table
956	(3BC)	ADDRESS	4	MCTCN DTD	Dynamic table array
960	(3C0)	ADDRESS	4	MCTCOMTP (0)	COMPACT PARM-STMT SUBSCAN
960	(3C0)	ADDRESS	4	MCTCOMTU	"V(USERCOMT)" User table
964	(3C4)	ADDRESS	4	MCTCOMTH	"V(HASPCOMT)" HASP table
968	(3C8)	ADDRESS	4	MCTCOMTD	Dynamic table array
972	(3CC)	ADDRESS	4	MCTCONT P (0)	CONNECT PARM-STMT SUBSCAN
972	(3CC)	ADDRESS	4	MCTCONTU	"V(USERCONT)" User table
976	(3D0)	ADDRESS	4	MCTCONT H	"V(HASPCONT)" HASP table
980	(3D4)	ADDRESS	4	MCTCONTD	Dynamic table array
984	(3D8)	ADDRESS	4	MCTDBGTP (0)	DEBUG stmt table pair

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
984	(3D8)	ADDRESS	4	MCTDBGTU	"V(USERDBGT)" User table
988	(3DC)	ADDRESS	4	MCTDBGTH	"V(HASPDBGT)" HASP table
992	(3E0)	ADDRESS	4	MCTDBGTD	Dynamic table array
996	(3E4)	ADDRESS	4	MCTDESTP (0)	DESTID PARM-STMT SUBSCAN
996	(3E4)	ADDRESS	4	MCTDESTU	"V(USERDEST)" User table
1000	(3E8)	ADDRESS	4	MCTDESTH	"V(HASPDEST)" HASP table
1004	(3EC)	ADDRESS	4	MCTDESTD	Dynamic table array
1008	(3F0)	ADDRESS	4	MCTDSTTP (0)	DESTDEF stmt table pair
1008	(3F0)	ADDRESS	4	MCTDSTTU	"V(USERDSTT)" User table
1012	(3F4)	ADDRESS	4	MCTDSTTH	"V(HASPDSTT)" HASP table
1016	(3F8)	ADDRESS	4	MCTDSTTD	Dynamic table array
1020	(3FC)	ADDRESS	4	MCTELCPT (0)	ESTLNCT PARM-STMT SUBSCAN
1020	(3FC)	ADDRESS	4	MCTELCTU	"V(USERELCT)" User table
1024	(400)	ADDRESS	4	MCTELCTH	"V(HASPELCT)" HASP table
1028	(404)	ADDRESS	4	MCTELCTD	Dynamic table array
1032	(408)	ADDRESS	4	MCTEBYTP (0)	ESTBYTE SUBSCAN PAIR
1032	(408)	ADDRESS	4	MCTEBYTU	"V(USEREBYT)" User table
1036	(40C)	ADDRESS	4	MCTEBYTH	"V(HASPEBYT)" HASP table
1040	(410)	ADDRESS	4	MCTEBYTD	Dynamic table array
1044	(414)	ADDRESS	4	MCTEPGTP (0)	ESTPAGE PARM-STMT SUBSCAN
1044	(414)	ADDRESS	4	MCTEPGTU	"V(USEREPGT)" User table
1048	(418)	ADDRESS	4	MCTEPGTH	"V(HASPEPGT)" HASP table
1052	(41C)	ADDRESS	4	MCTEPGTD	Dynamic table array
1056	(420)	ADDRESS	4	MCTEPNTP (0)	ESTPUN PARM-STMT SUBSCAN
1056	(420)	ADDRESS	4	MCTEPNTU	"V(USEREPNT)" User table
1060	(424)	ADDRESS	4	MCTEPNTH	"V(HASPEPNT)" HASP table
1064	(428)	ADDRESS	4	MCTEPNTD	Dynamic table array
1068	(42C)	ADDRESS	4	MCTETMTP (0)	ESTIME PARM-STMT SUBSCAN
1068	(42C)	ADDRESS	4	MCTETMTU	"V(USERETMT)" User table
1072	(430)	ADDRESS	4	MCTETMTH	"V(HASPETMT)" HASP table
1076	(434)	ADDRESS	4	MCTETMTD	Dynamic table array
1080	(438)	ADDRESS	4	MCTXITTP (0)	EXITNNN PARM-STMT SUBSCAN
1080	(438)	ADDRESS	4	MCTXITTU	"V(USERXITT)" User table
1084	(43C)	ADDRESS	4	MCTXITTH	"V(HASPXITT)" HASP table
1088	(440)	ADDRESS	4	MCTXITTD	Dynamic table array
1092	(444)	ADDRESS	4	MCTXRLTP (0)	EXITnnn ROUTINE= parm subscan
1092	(444)	ADDRESS	4	MCTXRLTU	"V(USERXRLT)" User table
1096	(448)	ADDRESS	4	MCTXRLTH	"V(HASPXRLT)" HASP table
1100	(44C)	ADDRESS	4	MCTXRLTD	Dynamic table array
1104	(450)	ADDRESS	4	MCTSSTP (0)	FSS_parm-stmt subscan pair
1104	(450)	ADDRESS	4	MCTSSTU	"V(USERFSST)" User table
1108	(454)	ADDRESS	4	MCTSSTH	"V(HASPFSS)" HASP table
1112	(458)	ADDRESS	4	MCTSSTD	Dynamic table array
1116	(45C)	ADDRESS	4	MCTINCP (0)	INCLUDE init-stmt subscan pair
1116	(45C)	ADDRESS	4	MCTINCTU	"V(USERINCT)" User table
1120	(460)	ADDRESS	4	MCTINCTH	"V(HASPINCT)" HASP table
1124	(464)	ADDRESS	4	MCTINCTD	Dynamic table array
1128	(468)	ADDRESS	4	MCTHDRTP (0)	NJEDEF HDRBUF subscan pair
1128	(468)	ADDRESS	4	MCTHDRTU	"V(USERHDRT)" User table
1132	(46C)	ADDRESS	4	MCTHDRTH	"V(HASPHDRT)" HASP table
1136	(470)	ADDRESS	4	MCTHDRTD	Dynamic table array
1140	(474)	ADDRESS	4	MCTPARTP (0)	INITDEF PARM-STMT SUBSCAN PAIR
1140	(474)	ADDRESS	4	MCTPARTU	"V(USERPART)" User table
1144	(478)	ADDRESS	4	MCTPARTH	"V(HASPPART)" HASP table
1148	(47C)	ADDRESS	4	MCTPARTD	Dynamic table array
1152	(480)	ADDRESS	4	MCTIINTP (0)	INITINFO PARM-STMT SUBSCAN PAIR
1152	(480)	ADDRESS	4	MCTIINTU	"V(USERIINT)" User table
1156	(484)	ADDRESS	4	MCTIINTH	"V(HASPIINT)" HASP table
1160	(488)	ADDRESS	4	MCTIINTD	Dynamic table array
1164	(48C)	ADDRESS	4	MCTPITTP (0)	INNNN PARM-STMT SUBSCAN
1164	(48C)	ADDRESS	4	MCTPITTU	"V(USERPITT)" User table
1168	(490)	ADDRESS	4	MCTPITH	"V(HASPPITT)" HASP table
1172	(494)	ADDRESS	4	MCTPITTD	Dynamic table array
1176	(498)	ADDRESS	4	MCTJOBTP (0)	JOBDEF PARM-STMT SUBSCAN PAIR

## \$MCT Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
1176	(498)	ADDRESS	4	MCTJOBTU	"V(USERJOBT)" User table
1180	(49C)	ADDRESS	4	MCTJOBTH	"V(HASPJOBT)" HASP table
1184	(4A0)	ADDRESS	4	MCTJOBTD	Dynamic table array
1188	(4A4)	ADDRESS	4	MCTJQETP (0)	JOBnnn PARM-STMT SUBSCAN PAIR
1188	(4A4)	ADDRESS	4	MCTJQETU	"V(USERJQET)" User table
1192	(4A8)	ADDRESS	4	MCTJQETH	"V(HASPJQET)" HASP table
1196	(4AC)	ADDRESS	4	MCTJQETD	Dynamic table array
1200	(4B0)	ADDRESS	4	MCTJSPTP (0)	JOBnnn SPOOL= SUBSCAN PAIR
1200	(4B0)	ADDRESS	4	MCTJSPTU	"V(USERJSPT)" User table
1204	(4B4)	ADDRESS	4	MCTJSPTH	"V(HASPJSPT)" HASP table
1208	(4B8)	ADDRESS	4	MCTJSPTD	Dynamic table array
1212	(4BC)	ADDRESS	4	MCTJPYTP (0)	JOBPRTY PARM-STMT SUBSCAN PAIR
1212	(4BC)	ADDRESS	4	MCTJPYTU	"V(USERJPYT)" User table
1216	(4C0)	ADDRESS	4	MCTJPYTH	"V(HASPJPYT)" HASP table
1220	(4C4)	ADDRESS	4	MCTJPYTD	Dynamic table array
1224	(4C8)	ADDRESS	4	MCTLQDTP (0)	LOADMOD PARM-STMT SUBSCAN PAIR
1224	(4C8)	ADDRESS	4	MCTLQDTU	"V(USERLQDT)" User table
1228	(4CC)	ADDRESS	4	MCTLQDTH	"V(HASPLQDT)" HASP table
1232	(4D0)	ADDRESS	4	MCTLQDTD	Dynamic table array
1236	(4D4)	ADDRESS	4	MCTMASTP (0)	MASDEF PARM-STMT SUBSCAN PAIR
1236	(4D4)	ADDRESS	4	MCTMASTU	"V(USERMAST)" User table
1240	(4D8)	ADDRESS	4	MCTMASTH	"V(HASPMAST)" HASP table
1244	(4DC)	ADDRESS	4	MCTMASTD	Dynamic table array
1248	(4E0)	ADDRESS	4	MCTMEMTP (0)	MEMBER parm-stmt subscan
1248	(4E0)	ADDRESS	4	MCTMEMTU	"V(USERMEMT)" User table
1252	(4E4)	ADDRESS	4	MCTMEMTH	"V(HASPMEMT)" HASP table
1256	(4E8)	ADDRESS	4	MCTMEMTD	Dynamic table array
1260	(4EC)	ADDRESS	4	MCTSTYTP (0)	MEMBER LASTART= subscan
1260	(4EC)	ADDRESS	4	MCTSTY TU	"V(USERSTYT)" User table
1264	(4F0)	ADDRESS	4	MCTSTYTH	"V(HASPMSTYT)" HASP table
1268	(4F4)	ADDRESS	4	MCTSTYTD	Dynamic table array
1272	(4F8)	ADDRESS	4	MCTMIGTP (0)	SPOOL MIGDATA= subparm
1272	(4F8)	ADDRESS	4	MCTMIGTU	"V(USERMIGT)" User table
1276	(4FC)	ADDRESS	4	MCTMIGTH	"V(HASPMIGT)" HASP table
1280	(500)	ADDRESS	4	MCTMIGTD	Dynamic table array
1284	(504)	ADDRESS	4	MCTMODTP (0)	MODULE PARM-STMT SUBSCAN
1284	(504)	ADDRESS	4		User table
1288	(508)	ADDRESS	4	MCTMODTH	"V(HASPMODT)" HASP table
1292	(50C)	ADDRESS	4		Dynamic table array
1296	(510)	ADDRESS	4	MCTNJETP (0)	NJEDEF PARM-STMT SUBSCAN PAIR
1296	(510)	ADDRESS	4	MCTNJETU	"V(USERNJET)" User table
1300	(514)	ADDRESS	4	MCTNJETH	"V(HASPNJET)" HASP table
1304	(518)	ADDRESS	4	MCTNJETD	Dynamic table array
1308	(51C)	ADDRESS	4	MCTNWKTP (0)	NETWORK PARM-STMT SUBSCAN PAIR
1308	(51C)	ADDRESS	4	MCTNWKTU	"V(USERNWKT)" User table
1312	(520)	ADDRESS	4	MCTNWKTH	"V(HASPNWKT)" HASP table
1316	(524)	ADDRESS	4	MCTNWKTD	Dynamic table array
1320	(528)	ADDRESS	4	MCTNODTP (0)	NNNNN PARM-STMT SUBSCAN
1320	(528)	ADDRESS	4	MCTNODTU	"V(USERNODT)" User table
1324	(52C)	ADDRESS	4	MCTNODTH	"V(HASPNODT)" HASP table
1328	(530)	ADDRESS	4	MCTNODTD	Dynamic table array
1332	(534)	ADDRESS	4	MCTNDPTP (0)	NODEnnnn PASSWORD subscan
1332	(534)	ADDRESS	4	MCTNDPTU	"V(USERNDPT)" User table
1336	(538)	ADDRESS	4	MCTNDPTH	"V(HASPNDPT)" HASP table
1340	(53C)	ADDRESS	4	MCTNDPTD	Dynamic table array
1344	(540)	ADDRESS	4	MCTNAUTP (0)	NODENNNN AUTH SUBSCAN PAIR
1344	(540)	ADDRESS	4	MCTNAUTU	"V(USERNAUT)" User table
1348	(544)	ADDRESS	4	MCTNAUTH	"V(HASPNAUT)" HASP table
1352	(548)	ADDRESS	4	MCTNAUTD	Dynamic table array
1356	(54C)	ADDRESS	4	MCTNETTP (0)	NETACCT PARM-STMT SUBSCAN
1356	(54C)	ADDRESS	4	MCTNETTU	"V(USERNETT)" User table
1360	(550)	ADDRESS	4	MCTNETTH	"V(HASPNETT)" HASP table
1364	(554)	ADDRESS	4	MCTNETTD	Dynamic table array
1368	(558)	ADDRESS	4	MCTOJMTP (0)	OFFN.JR MOD= PARM SUBSCAN PAIR

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
1368	(558)	ADDRESS	4	MCTOJMTU	"V(USEROJMT)" User table
1372	(55C)	ADDRESS	4	MCTOJMTH	"V(HASPOJMT)" HASP table
1376	(560)	ADDRESS	4	MCTOJMTD	Dynamic table array
1380	(564)	ADDRESS	4	MCTOSMTP (0)	OFFN.SR MOD- PARM SUBSCAN PAIR
1380	(564)	ADDRESS	4	MCTOSMTU	"V(USEROSMT)" User table
1384	(568)	ADDRESS	4	MCTOSMTH	"V(HASPOSMT)" HASP table
1388	(56C)	ADDRESS	4	MCTOSMTD	Dynamic table array
1392	(570)	ADDRESS	4	MCTOPDTP (0)	OPTSDEF PARM-STMT SUBSCAN PAIR
1392	(570)	ADDRESS	4	MCTOPDTU	"V(USEROPDT)" User table
1396	(574)	ADDRESS	4	MCTOPDTH	"V(HASPOPDT)" HASP table
1400	(578)	ADDRESS	4	MCTOPDTD	Dynamic table array
1404	(57C)	ADDRESS	4	MCTOUTTP (0)	OUTDEF PARM-STMT SUBSCAN PAIR
1404	(57C)	ADDRESS	4	MCTOUTTU	"V(USEROUTT)" User table
1408	(580)	ADDRESS	4	MCTOUTTH	"V(HASPOUTT)" HASP table
1412	(584)	ADDRESS	4	MCTOUTTD	Dynamic table array
1416	(588)	ADDRESS	4	MCTOPYTP (0)	OUTPRTY PARM-STMT SUBSCAN PAIR
1416	(588)	ADDRESS	4	MCTOPYTU	"V(USEROPYT)" User table
1420	(58C)	ADDRESS	4	MCTOPYTH	"V(HASPOPYT)" HASP table
1424	(590)	ADDRESS	4	MCTOPYTD	Dynamic table array
1428	(594)	ADDRESS	4	MCTOTPTP (0)	OUTPUT display subscan pair
1428	(594)	ADDRESS	4	MCTOTPTU	"V(USEROTPT)" User table
1432	(598)	ADDRESS	4	MCTOTPTH	"V(HASBOTPT)" HASP table
1436	(59C)	ADDRESS	4	MCTOTPTD	Dynamic table array
1440	(5A0)	ADDRESS	4	MCTLOTTP (0)	OUTPUT PARM-STMT PAIR (\$LJ)
1440	(5A0)	ADDRESS	4	MCTLOTTU	"V(USERLOTT)" User table
1444	(5A4)	ADDRESS	4	MCTLOTHH	"V(HASPLOTT)" HASP table
1448	(5A8)	ADDRESS	4	MCTLOTTD	Dynamic table array
1452	(5AC)	ADDRESS	4	MCTPTHTP (0)	Path parm-stmt subscan pair
1452	(5AC)	ADDRESS	4	MCTPTHTU	"V(USERPTHT)" User table
1456	(5B0)	ADDRESS	4	MCTPTHTH	"V(HASPPHTH)" HASP table
1460	(5B4)	ADDRESS	4	MCTPTHTD	Dynamic table array
1464	(5B8)	ADDRESS	4	MCTPCCTP (0)	PCE parm-stmt subscan pair
1464	(5B8)	ADDRESS	4	MCTPCCTU	"V(USERPCCT)" User table
1468	(5BC)	ADDRESS	4	MCTPCCTH	"V(HASPPCCT)" HASP table
1472	(5C0)	ADDRESS	4	MCTPCCTD	Dynamic table array
1476	(5C4)	ADDRESS	4	MCTPCNTP (0)	PCE COUNT parm subscan pair
1476	(5C4)	ADDRESS	4	MCTPCNTU	"V(USERPCNT)" User table
1480	(5C8)	ADDRESS	4	MCTPCNTH	"V(HASPPCNT)" HASP table
1484	(5CC)	ADDRESS	4	MCTPCNTD	Dynamic table array
1488	(5D0)	ADDRESS	4	MCTPDTPP (0)	PCE DETAILS parm subscan pair
1488	(5D0)	ADDRESS	4	MCTPDTTU	"V(USERPDTT)" User table
1492	(5D4)	ADDRESS	4	MCTPDTTH	"V(HASPPDTT)" HASP table
1496	(5D8)	ADDRESS	4	MCTPDTTD	Dynamic table array
1500	(5DC)	ADDRESS	4	MCTPCDTP (0)	PCEDEF PARM-STMT SUBSCAN PAIR
1500	(5DC)	ADDRESS	4	MCTPCDTU	"V(USERPCDT)" User table
1504	(5E0)	ADDRESS	4	MCTPCDTH	"V(HASPPCDT)" HASP table
1508	(5E4)	ADDRESS	4	MCTPCDTD	Dynamic table array
1512	(5E8)	ADDRESS	4	MCTPTDTP (0)	PRINTDEF PARM-STMT SUBSCAN PAIR
1512	(5E8)	ADDRESS	4	MCTPTDTU	"V(USERPTDT)" User table
1516	(5EC)	ADDRESS	4	MCTPTDTH	"V(HASPPPTDT)" HASP table
1520	(5F0)	ADDRESS	4	MCTPTDDT	Dynamic table array
1524	(5F4)	ADDRESS	4	MCTPDDTP (0)	PROCLIB DD Parm-stmt subscan pair
1524	(5F4)	ADDRESS	4	MCTPDDTU	"V(USERPDDT)" User table
1528	(5F8)	ADDRESS	4	MCTPDDTH	"V(HASPPDDT)" HASP table
1532	(5FC)	ADDRESS	4	MCTPDDTD	Dynamic table array
1536	(600)	ADDRESS	4	MCTPUDTP (0)	PUNCHDEF PARM-STMT SUBSCAN PAIR
1536	(600)	ADDRESS	4	MCTPUDTU	"V(USERPUDT)" User table
1540	(604)	ADDRESS	4	MCTPUDTH	"V(HASPPUDT)" HASP table
1544	(608)	ADDRESS	4	MCTPUDTD	Dynamic table array
1548	(60C)	ADDRESS	4	MCTIAUTP (0)	RDInn AUTH SUBSCAN PAIR
1548	(60C)	ADDRESS	4	MCTIAUTU	"V(USERIAUT)" User table
1552	(610)	ADDRESS	4	MCTIAUTH	"V(HASPIAUT)" HASP table
1556	(614)	ADDRESS	4	MCTIAUTD	Dynamic table array
1560	(618)	ADDRESS	4	MCTIJBTP (0)	RDInn JOB SCANTAB PAIR

## \$MCT Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
1560	(618)	ADDRESS	4	MCTIJBTU	"V(USERIJB)" User table
1564	(61C)	ADDRESS	4	MCTIBTH	"V(HASPIJBT)" HASP table
1568	(620)	ADDRESS	4	MCTIBTD	Dynamic table array
1572	(624)	ADDRESS	4	MCTIJSTP (0)	RDI <sub>n</sub> JOBSTAT SUBSCAN PAIR
1572	(624)	ADDRESS	4	MCTIJSTU	"V(USERIJST)" User table
1576	(628)	ADDRESS	4	MCTIJSTH	"V(HASPIJST)" HASP table
1580	(62C)	ADDRESS	4	MCTIJSTD	Dynamic table array
1584	(630)	ADDRESS	4	MCTIOWTP (0)	RDI <sub>n</sub> OWNER SCANTAB PAIR
1584	(630)	ADDRESS	4	MCTIOWTU	"V(USERIOWT)" User table
1588	(634)	ADDRESS	4	MCTIOWTH	"V(HASPIOWT)" HASP table
1592	(638)	ADDRESS	4	MCTIOWTD	Dynamic table array
1596	(63C)	ADDRESS	4	MCTRAUTP (0)	RDR <sub>n</sub> AUTH SUBSCAN PAIR
1596	(63C)	ADDRESS	4	MCTRAUTU	"V(USERRAUT)" User table
1600	(640)	ADDRESS	4	MCTRAUTH	"V(HASPRAUT)" HASP table
1604	(644)	ADDRESS	4	MCTRAUTD	Dynamic table array
1608	(648)	ADDRESS	4	MCTREDTP (0)	REDIR PARM-STMT SUBSCAN PR
1608	(648)	ADDRESS	4	MCTREDTU	"V(USERREDT)" User table
1612	(64C)	ADDRESS	4	MCTREDTH	"V(HASPREDT)" HASP table
1616	(650)	ADDRESS	4	MCTREDTD	Dynamic table array
1620	(654)	ADDRESS	4	MCTRVCVP (0)	RECOPTS PARM-STMT SUBSCAN
1620	(654)	ADDRESS	4	MCTRVCVTU	"V(USERRCVT)" User table
1624	(658)	ADDRESS	4	MCTRVCVTH	"V(HASPRCVT)" HASP table
1628	(65C)	ADDRESS	4	MCTRVCVTD	Dynamic table array
1632	(660)	ADDRESS	4	MCTRMTTP (0)	RMNNNN PARM-STMT SUBSCAN
1632	(660)	ADDRESS	4	MCTRMTTU	"V(USERRMTT)" User table
1636	(664)	ADDRESS	4	MCTRMTTH	"V(HASPRMTT)" HASP table
1640	(668)	ADDRESS	4	MCTRMTTD	Dynamic table array
1644	(66C)	ADDRESS	4	MCTSCTTP (0)	OUTCLASS PARM-STMT SUBSCAN PAIR
1644	(66C)	ADDRESS	4	MCTSCTTU	"V(USERSCTT)" User table
1648	(670)	ADDRESS	4	MCTSCTTH	"V(HASPSCTT)" HASP table
1652	(674)	ADDRESS	4	MCTSCTTD	Dynamic table array
1656	(678)	ADDRESS	4	MCTSMFTP (0)	SMFDEF PARM-STMT SUBSCAN PAIR
1656	(678)	ADDRESS	4	MCTSMFTU	"V(USERSMFT)" User table
1660	(67C)	ADDRESS	4	MCTSMFTH	"V(HASPSMFT)" HASP table
1664	(680)	ADDRESS	4	MCTSMFTD	Dynamic table array
1668	(684)	ADDRESS	4	MCTSPLTP (0)	SPOOL PARM-STMT PAIR
1668	(684)	ADDRESS	4	MCTSPLTU	"V(USERSPLT)" User table
1672	(688)	ADDRESS	4	MCTSPLTH	"V(HASPSPLT)" HASP table
1676	(68C)	ADDRESS	4	MCTSPLTD	Dynamic table array
1680	(690)	ADDRESS	4	MCTSPDTP (0)	SPOOLDEF PARM-STMT SUBSCAN PAIR
1680	(690)	ADDRESS	4	MCTSPDTU	"V(USERSPDT)" User table
1684	(694)	ADDRESS	4	MCTSPDTH	"V(HASPSPD)" HASP table
1688	(698)	ADDRESS	4	MCTSPDTD	Dynamic table array
1692	(69C)	ADDRESS	4	MCTFENTP (0)	SPOOLDEF FENCE=subscan
1692	(69C)	ADDRESS	4	MCTFENTU	"V(USERFENT)" User table
1696	(6A0)	ADDRESS	4	MCTFENTH	"V(HASPFENT)" HASP table
1700	(6A4)	ADDRESS	4	MCTFENTD	Dynamic table array
1704	(6A8)	ADDRESS	4	MCTTGSTP (0)	SPOOLDEF TGSPACE=subscan
1704	(6A8)	ADDRESS	4	MCTTGSTU	"V(USERTGST)" User table
1708	(6AC)	ADDRESS	4	MCTTGSTH	"V(HASPTGST)" HASP table
1712	(6B0)	ADDRESS	4	MCTTGSTD	Dynamic table array
1716	(6B4)	ADDRESS	4	MCTWSCTP (0)	SERVICE Class parms-statements subscan
1716	(6B4)	ADDRESS	4	MCTWSCTU	"V(USERWSCT)" User table
1720	(6B8)	ADDRESS	4	MCTWSCTH	"V(HASPWSC)" HASP table
1724	(6BC)	ADDRESS	4	MCTWSCTD	Dynamic table array
1728	(6C0)	ADDRESS	4	MCTWCCTP (0)	SERVICE class COUNT= SUBSCAN
1728	(6C0)	ADDRESS	4	MCTWCCTU	"V(USERWCCT)" User table
1732	(6C4)	ADDRESS	4	MCTWCCTH	"V(HASPWCT)" HASP table
1736	(6C8)	ADDRESS	4	MCTWCCTD	Dynamic table array
1740	(6CC)	ADDRESS	4	MCTWMCTP (0)	SERVICE class MASCOUNT= SUBSCAN
1740	(6CC)	ADDRESS	4	MCTWMCTU	"V(USERWMCT)" User table
1744	(6D0)	ADDRESS	4	MCTWMCTH	"V(HASPWMCT)" HASP table
1748	(6D4)	ADDRESS	4	MCTWMCTD	Dynamic table array
1752	(6D8)	ADDRESS	4	MCTSBDTP (0)	SUBTDEF STMT SUBSCAN PAIR

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
1752	(6D8)	ADDRESS	4	MCTSBDTU	"V(USERSBDT)" User table
1756	(6DC)	ADDRESS	4	MCTSBDTH	"V(HASPSBDT)" HASP table
1760	(6E0)	ADDRESS	4	MCTSBDTD	Dynamic table array
1764	(6E4)	ADDRESS	4	MCTTPDTP (0)	TPDEF PARM-STMT SUBSCAN PAIR
1764	(6E4)	ADDRESS	4	MCTTPD TU	"V(USERTPDT)" User table
1768	(6E8)	ADDRESS	4	MCTTPD TH	"V(HASPTPDT)" HASP table
1772	(6EC)	ADDRESS	4	MCTTPD TD	Dynamic table array
1776	(6F0)	ADDRESS	4	MCTTRCTP (0)	TRACEDEF PARM-STMT SUBSCAN PAIR
1776	(6F0)	ADDRESS	4	MCTTRCTU	"V(USERTRCT)" User table
1780	(6F4)	ADDRESS	4	MCTTRCTH	"V(HASPTRCT)" HASP table
1784	(6F8)	ADDRESS	4	MCTTRCTD	Dynamic table array
1788	(6FC)	ADDRESS	4	MCTTRITP (0)	TRACE(N) PARM-STMT SUBSCAN PR
1788	(6FC)	ADDRESS	4	MCTTRITU	"V(USERTRIT)" User table
1792	(700)	ADDRESS	4	MCTTRITH	"V(HASPTRIT)" HASP table
1796	(704)	ADDRESS	4	MCTTRITD	Dynamic table array
1800	(708)	ADDRESS	4	MCTSTATP (0)	TRACE STAT PARM-STMT SUBSCAN PR
1800	(708)	ADDRESS	4	MCTSTATU	"V(USERSTAT)" User table
1804	(70C)	ADDRESS	4	MCTSTATH	"V(HASPSTAT)" HASP table
1808	(710)	ADDRESS	4	MCTSTATD	Dynamic table array
1812	(714)	ADDRESS	4	MCTTLGTP (0)	TRC LOG PARM-STMT SUBSCAN PAIR
1812	(714)	ADDRESS	4	MCTTLG TU	"V(USERTLGT)" User table
1816	(718)	ADDRESS	4	MCTTLG TH	"V(HASPTLGT)" HASP table
1820	(71C)	ADDRESS	4	MCTTLG TD	Dynamic table array
1824	(720)	ADDRESS	4	MCTSSITP (0)	SSI PARM-STMT SUBSCAN PAIR
1824	(720)	ADDRESS	4	MCTSSITU	"V(USERSSIT)" User table
1828	(724)	ADDRESS	4	MCTSSITH	"V(HASPSSIT)" HASP table
1832	(728)	ADDRESS	4	MCTSSITD	Dynamic table array
1836	(72C)	ADDRESS	4	MCTSEPTP (0)	SEPPAGE PARM-STMT SUBSCN PR
1836	(72C)	ADDRESS	4	MCTSEPTU	"V(USERSEPT)" User table
1840	(730)	ADDRESS	4	MCTSEPTH	"V(HASPSEPT)" HASP table
1844	(734)	ADDRESS	4	MCTSEPTD	Dynamic table array
1848	(738)	ADDRESS	4	MCTVIATP (0)	Path parm-stmt VIA subparm
1848	(738)	ADDRESS	4	MCTVIATU	"V(USERVIAT)" User table
1852	(73C)	ADDRESS	4	MCTVIATH	"V(HASPVIAT)" HASP table
1856	(740)	ADDRESS	4	MCTVIATD	Dynamic table array
1860	(744)	ADDRESS	4	MCTVUNTP (0)	SPOOL UNITDATA= subparm
1860	(744)	ADDRESS	4	MCTVUNTU	"V(USERVUNT)" User table
1864	(748)	ADDRESS	4	MCTVUNTH	"V(HASPVUNT)" HASP table
1868	(74C)	ADDRESS	4	MCTVUNTD	Dynamic table array
1872	(750)	ADDRESS	4	MCTZJBTP (0)	ZAPJOB SUBSCAN pair
1872	(750)	ADDRESS	4	MCTZJB TU	"V(USERZJBT)" User table
1876	(754)	ADDRESS	4	MCTZJB TH	"V(HASPVZJBT)" HASP table
1880	(758)	ADDRESS	4	MCTZJB TD	Dynamic table array
1884	(75C)	ADDRESS	4	MCT4KPTP (0)	CKPTSPACE 4K_RECS subparm
1884	(75C)	ADDRESS	4	MCT4KPTU	"V(USER4KPT)" User table
1888	(760)	ADDRESS	4	MCT4KPTH	"V(HASP4KPT)" HASP table
1892	(764)	ADDRESS	4	MCT4KPTD	Dynamic table array
1896	(768)	ADDRESS	4	MCTPRFTP (0)	PRTnn FSSINFO subparm
1896	(768)	ADDRESS	4	MCTPRFTU	"V(USERPRFT)" User table
1900	(76C)	ADDRESS	4	MCTPRFTH	"V(HASPPRFT)" HASP table
1904	(770)	ADDRESS	4	MCTPRFTD	Dynamic table array
1908	(774)	ADDRESS	4	MCTLRPTP (0)	\$L JOBQ RECORDS/PAGES subparms
1908	(774)	ADDRESS	4	MCTLRPTU	"V(USERLRPT)" User table
1912	(778)	ADDRESS	4	MCTLRPTH	"V(HASPLRPT)" HASP table
1916	(77C)	ADDRESS	4	MCTLRPTD	Dynamic table array
1920	(780)	ADDRESS	4	(3)	Reserved for future use
1932	(78C)	ADDRESS	4	(3)	Reserved for future use
1944	(798)	ADDRESS	4	(3)	Reserved for future use

Comment

WORK SELECTION USER AND HASP TABLES

End of Comment

## \$MCT Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
1956	(7A4)	ADDRESS	4	MCTPRWTP (0)	PRINTER WS TABLE ADDR PAIR
1956	(7A4)	ADDRESS	4	MCTPRWTU	"V(USERPRWT)" User table
1960	(7A8)	ADDRESS	4	MCTPRWTH	"V(HASPPRWT)" HASP table
1964	(7AC)	ADDRESS	4	MCTPRWTD	Dynamic table array
1968	(7B0)	ADDRESS	4	MCTPUWTP (0)	PUNCH WS TABLE ADDR PAIR
1968	(7B0)	ADDRESS	4	MCTPUWTU	"V(USERPUWT)" User table
1972	(7B4)	ADDRESS	4	MCTPUWTH	"V(HASPPUWT)" HASP table
1976	(7B8)	ADDRESS	4	MCTPUWTD	Dynamic table array
1980	(7BC)	ADDRESS	4	MCTJTWTP (0)	OFFJT WS TABLE ADDR PAIR
1980	(7BC)	ADDRESS	4	MCTJTWTU	"V(USERJTWT)" User table
1984	(7C0)	ADDRESS	4	MCTJTWTH	"V(HASPJTWT)" HASP table
1988	(7C4)	ADDRESS	4	MCTJTWTD	Dynamic table array
1992	(7C8)	ADDRESS	4	MCTJRWTWTP (0)	OFFJR WS TABLE ADDR PAIR
1992	(7C8)	ADDRESS	4	MCTJRWTU	"V(USERJRWT)" User table
1996	(7CC)	ADDRESS	4	MCTJRWTWTH	"V(HASPJRWT)" HASP table
2000	(7D0)	ADDRESS	4	MCTJRWTD	Dynamic table array
2004	(7D4)	ADDRESS	4	MCTSTWTP (0)	OFFST WS TABLE ADDR PAIR
2004	(7D4)	ADDRESS	4	MCTSTWTU	"V(USERSTWT)" User table
2008	(7D8)	ADDRESS	4	MCTSTWTH	"V(HASPSTWT)" HASP table
2012	(7DC)	ADDRESS	4	MCTSTWTD	Dynamic table array
2016	(7E0)	ADDRESS	4	MCTSRTWTP (0)	OFFSR WS TABLE ADDR PAIR
2016	(7E0)	ADDRESS	4	MCTSRTWTU	"V(USERSRWT)" User table
2020	(7E4)	ADDRESS	4	MCTSRTWTH	"V(HASPSRWT)" HASP table
2024	(7E8)	ADDRESS	4	MCTSRTWTD	Dynamic table array
2028	(7EC)	ADDRESS	4	MCTLJWTP (0)	Lx.JT WS table ADDR PAIR
2028	(7EC)	ADDRESS	4	MCTLJWTU	"V(USERLJWT)" User table
2032	(7F0)	ADDRESS	4	MCTLJWTH	"V(HASPLJWT)" HASP table
2036	(7F4)	ADDRESS	4	MCTLJWTD	Dynamic table array
2040	(7F8)	ADDRESS	4	MCTLSWTP (0)	Lx.ST WS table ADDR PAIR
2040	(7F8)	ADDRESS	4	MCTLSWTU	"V(USERLSWT)" User table
2044	(7FC)	ADDRESS	4	MCTLSWTH	"V(HASPLSWT)" HASP table
2048	(800)	ADDRESS	4	MCTLSWTD	Dynamic table array
2052	(804)	ADDRESS	4	MCTSAWTP (0)	Sysout API table Addr Pair
2052	(804)	ADDRESS	4	MCTSAWTU	"V(USERSAWT)" User table
2056	(808)	ADDRESS	4	MCTSAWTH	"V(HASPSAWT)" HASP table
2060	(80C)	ADDRESS	4	MCTSAWTD	Dynamic table array
2064	(810)	ADDRESS	4	(3)	Reserved for future use
2076	(81C)	ADDRESS	4	MCTSWCTP (0)	SAPI cache attributes table
2076	(81C)	ADDRESS	4	MCTSWCTU	"V(USERSWCT)" User table
2080	(820)	ADDRESS	4	MCTSWCTH	"V(HASPSWCT)" HASP table
2084	(824)	ADDRESS	4	MCTSWCTD	Dynamic table array
2088	(828)	ADDRESS	4	MCTJFATP (0)	JOE field access table
2088	(828)	ADDRESS	4	MCTJFATU	"V(USERJFAT)" User table
2092	(82C)	ADDRESS	4	MCTJFATH	"V(HASPJFAT)" HASP table
2096	(830)	ADDRESS	4	MCTJFATD	Dynamic table array
2100	(834)	ADDRESS	4	MCTJVDTP (0)	JOE view definition table
2100	(834)	ADDRESS	4	MCTJVDTU	"V(USERJVDT)" User table
2104	(838)	ADDRESS	4	MCTJVDTH	"V(HASPJVDTH)" HASP table
2108	(83C)	ADDRESS	4	MCTJVDTD	Dynamic table array

Comment

### MISCELLANEOUS SECTION FOR USER TABLE POINTERS

End of Comment					
2112	(840)	ADDRESS	4	MCTERRTP (0)	USER ERROR TEXT TABLE
2112	(840)	ADDRESS	4	MCTERRTU	"V(USERERRT)" User table
2116	(844)	ADDRESS	4		HASP table
2120	(848)	ADDRESS	4	MCTERRTD	Dynamic table array
2120	(848)	X'84C'	0	MCTLEN	"*-MCT" LENGTH OF THE MCT

## \$MCT Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
MCT	0		MCTCOMTP	3C0	
MCTACTTD	2C0		MCTCOMTU	3C0	
MCTACTTH	2BC		MCTCONTD	3D4	
MCTACTTP	2B8		MCTCONTH	3D0	
MCTACTTU	2B8		MCTCONTP	3CC	
MCTADRTH	1EC		MCTCONTU	3CC	
MCTADRTP	1EC		MCTDBGTD	3E0	
MCTAPCTH	294		MCTDBGTH	3DC	
MCTAPCTP	294		MCTDBGTP	3D8	
MCTAPLTD	2CC		MCTDBGTU	3D8	
MCTAPLTH	2C8		MCTDCCTD	14	
MCTAPLTP	2C4		MCTDCCTH	10	
MCTAPLTU	2C4		MCTDCCTP	C	
MCTAUTTH	1F4		MCTDCTTU	C	
MCTAUTTP	1F4		MCTDESTD	3EC	
MCTBADTD	2D8		MCTDESTH	3E8	
MCTBADTH	2D4		MCTDESTR	3E4	
MCTBADTP	2D0		MCTDESTU	3E4	
MCTBADTU	2D0		MCTDRMTH	20C	
MCTBFHTD	2F0		MCTDRMTP	20C	
MCTBFHTH	2EC		MCTDSTTD	3F8	
MCTBFHTP	2E8		MCTDSTTH	3F4	
MCTBFHTU	2E8		MCTDSTTP	3F0	
MCTBFXTD	2FC		MCTDSTTU	3F0	
MCTBFXTH	2F8		MCTDTETD	20	
MCTBFXTP	2F4		MCTDTETH	1C	
MCTBFXTU	2F4		MCTDTETP	18	
MCTBRTTD	50		MCTDTETU	18	
MCTBRTTH	4C		MCTDVRTH	284	
MCTBRTTP	48		MCTDVRTP	284	
MCTBRTTU	48		MCTEBYTD	410	
MCTBSCTD	308		MCTEBYTH	40C	
MCTBSCTH	304		MCTEBYTP	408	
MCTBSCTP	300		MCTEBYTU	408	
MCTBSCTU	300		MCTEKND	38C	
MCTBUFTD	2E4		MCTEKNT	388	
MCTBUFTH	2E0		MCTEKNTP	384	
MCTBUFTP	2DC		MCTEKNTU	384	
MCTBUFTU	2DC		MCTELCTD	404	
MCTCATTB	344		MCTELCTH	400	
MCTCATTH	340		MCTELCTP	3FC	
MCTCATTP	33C		MCTELCTU	3FC	
MCTCATTU	33C		MCTEPGTD	41C	
MCTCHRTH	1FC		MCTEPGTH	418	
MCTCHRTP	1FC		MCTEPGTP	414	
MCTCKLTD	368		MCTEPGTU	414	
MCTCKLTH	364		MCTEPNTD	428	
MCTCKLTP	360		MCTEPNTH	424	
MCTCKLTU	360		MCTEPNTP	420	
MCTCKTTD	35C		MCTEPNTU	420	
MCTCKTTH	358		MCTERRTD	848	
MCTCKTTP	354		MCTERRTP	840	
MCTCKTTU	354		MCTERRTU	840	
MCTCLGTD	3B0		MCTETMTD	434	
MCTCLGTH	3AC		MCTETMTH	430	
MCTCLGTP	3A8		MCTETMTP	42C	
MCTCLGTU	3A8		MCTETMTU	42C	
MCTCNDTD	3BC		MCTFENTD	6A4	
MCTCNDTH	3B8		MCTFENTH	6A0	
MCTCNDTP	3B4		MCTFENTP	69C	
MCTCNDTU	3B4		MCTFENTU	69C	
MCTCOMTD	3C8		MCTFRMTH	224	
MCTCOMTH	3C4		MCTFRMTP	224	

## \$MCT Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
MCTFSSTD	458		MCTJRW TU	7C8	
MCTFSSTH	454		MCTJSPTD	4B8	
MCTFSSTP	450		MCTJSPTH	4B4	
MCTFSSTU	450		MCTJSPTP	4B0	
MCTHDRTD	470		MCTJSPTU	4B0	
MCTHDRTH	46C		MCTJTW TD	7C4	
MCTHDRTP	468		MCTJTW TH	7C0	
MCTHDRTU	468		MCTJTW TP	7BC	
MCTIAUTD	614		MCTJTW TU	7BC	
MCTIAUTH	610		MCTJVDTD	83C	
MCTIAUTP	60C		MCTJVDT H	838	
MCTIAUTU	60C		MCTJVDT P	834	
MCTIINTD	488		MCTJVDTU	834	
MCTIINTH	484		MCTKPNTD	380	
MCTIINTP	480		MCTKPNT H	37C	
MCTIINTU	480		MCTKPNT P	378	
MCTIJBD	620		MCTKPNTU	378	
MCTIJBTH	61C		MCTLEN	848	84C
MCTIJBTP	618		MCTLIMTH	22C	
MCTIJBTU	618		MCTLIMTP	22C	
MCTIJSTD	62C		MCTLINTD	A4	
MCTIJSTH	628		MCTLINTH	A0	
MCTIJSTP	624		MCTLINTP	9C	
MCTIJSTU	624		MCTLINTU	9C	
MCTINCTD	464		MCTLJRTD	B0	
MCTINCTH	460		MCTLJRT H	AC	
MCTINCTP	45C		MCTLJRT P	A8	
MCTINCTU	45C		MCTLJRTU	A8	
MCTINRTD	80		MCTLJTTD	BC	
MCTINRTH	7C		MCTLJTT H	B8	
MCTINRTP	78		MCTLJTT P	B4	
MCTINRTU	78		MCTLJTTU	B4	
MCTIOWTD	638		MCTLJWTD	7F4	
MCTIOWTH	634		MCTLJWTH	7F0	
MCTIOWTP	630		MCTLJWTP	7EC	
MCTIOWTU	630		MCTLJWTU	7EC	
MCTJCCTD	338		MCTLNCTH	288	
MCTJCCTH	334		MCTLNCTP	288	
MCTJCCTP	330		MCTLNETD	8C	
MCTJCCTU	330		MCTLNE TH	88	
MCTJCXTD	32C		MCTLNETP	84	
MCTJCXTH	328		MCTLNETU	84	
MCTJCXTP	324		MCTLQD TD	4D0	
MCTJCXTU	324		MCTLQD TH	4CC	
MCTJFATD	830		MCTLQD TP	4C8	
MCTJFATH	82C		MCTLQD TU	4C8	
MCTJFATP	828		MCTLQG TD	E0	
MCTJFATU	828		MCTLQG TH	DC	
MCTJOBTD	4A0		MCTLQG TP	D8	
MCTJOBTH	49C		MCTLQG TU	D8	
MCTJOBTP	498		MCTLQTT D	5A8	
MCTJOBTU	498		MCTLQTT H	5A4	
MCTJPYTD	4C4		MCTLQTT P	5A0	
MCTJPYTH	4C0		MCTLQTT U	5A0	
MCTJPYTP	4BC		MCTLRPTD	77C	
MCTJPYTU	4BC		MCTLRPTH	778	
MCTJQETD	4AC		MCTLRPTP	774	
MCTJQETH	4A8		MCTLRPTU	774	
MCTJQETP	4A4		MCTLSR TD	C8	
MCTJQETU	4A4		MCTLSR TH	C4	
MCTJRNTH	204		MCTLSR TP	C0	
MCTJRNTP	204		MCTLSR TU	C0	
MCTJRWTD	7D0		MCTLST TD	D4	
MCTJRWTH	7CC		MCTLST TH	D0	
MCTJRWTP	7C8		MCTLST TP	CC	

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
MCTLSTTU	CC		MCTNTRTP	1C8	
MCTLSTWD	800		MCTNRTU	1C8	
MCTLSTWH	7FC		MCTNWKTD	524	
MCTLSTWP	7F8		MCTNWKTH	520	
MCTLSTTU	7F8		MCTNWKTP	51C	
MCTLTRTD	98		MCTNWKTU	51C	
MCTLTRTH	94		MCTOFCTH	2A4	
MCTLTRTP	90		MCTOFCTP	2A4	
MCTLTRTU	90		MCTOFFTD	F8	
MCTMASTD	4DC		MCTOFFTH	F4	
MCTMASTH	4D8		MCTOFFTP	F0	
MCTMASTP	4D4		MCTOFFTU	F0	
MCTMASTU	4D4		MCTOFLTD	EC	
MCTMEMTD	4E8		MCTOFLTH	E8	
MCTMEMTH	4E4		MCTOFLTP	E4	
MCTMEMTP	4E0		MCTOFLTU	E4	
MCTMEMTU	4E0		MCTOJMTD	560	
MCTMGTD	74		MCTOJMTH	55C	
MCTMGTH	70		MCTOJMTP	558	
MCTMGTP	6C		MCTOJMTU	558	
MCTMGTU	6C		MCTOJRTD	104	
MCTMIGTD	500		MCTOJRTH	100	
MCTMIGTH	4FC		MCTOJRTP	FC	
MCTMIGTP	4F8		MCTOJRTU	FC	
MCTMIGTU	4F8		MCTOJTTD	110	
MCTMODTH	508		MCTOJTTH	10C	
MCTMODTP	504		MCTOJTTP	108	
MCTMPSTD	68		MCTOJTTU	108	
MCTMPSTH	64		MCTOPDTD	578	
MCTMPSTP	60		MCTOPDTH	574	
MCTMPSTU	60		MCTOPDTP	570	
MCTMSGTH	1F8		MCTOPTDU	570	
MCTMSGTP	1F8		MCTOPTTD	5C	
MCTMSMTH	230		MCTOPTTH	58	
MCTMSMTP	230		MCTOPTTP	54	
MCTNAUTD	548		MCTOPTTU	54	
MCTNAUTH	544		MCTOPYTD	590	
MCTNAUTP	540		MCTOPYTH	58C	
MCTNAUTU	540		MCTOPYTP	588	
MCTNDPTD	53C		MCTOPYTU	588	
MCTNDPTH	538		MCTOSMTD	56C	
MCTNDPTP	534		MCTOSMTH	568	
MCTNDPTU	534		MCTOSMTP	564	
MCTNETTD	554		MCTOSMTU	564	
MCTNETTH	550		MCTOSRTD	11C	
MCTNETTP	54C		MCTOSRTH	118	
MCTNETTU	54C		MCTOSRTP	114	
MCTNJCTH	298		MCTOSRTU	114	
MCTNJCTP	298		MCTOSTTD	128	
MCTNJETD	518		MCTOSTTH	124	
MCTNJETH	514		MCTOSTTP	120	
MCTNJETP	510		MCTOSTTU	120	
MCTNJETU	510		MCTOPTD	59C	
MCTNOCTH	29C		MCTOPTH	598	
MCTNOCTP	29C		MCTOPTP	594	
MCTNODTD	530		MCTOPTU	594	
MCTNODTH	52C		MCTOUNTH	238	
MCTNODTP	528		MCTOUNTP	238	
MCTNODTU	528		MCTOUTTD	584	
MCTNSVTD	1C4		MCTOUTTH	580	
MCTNSVTH	1C0		MCTOUTTP	57C	
MCTNSVTP	1BC		MCTOUTTU	57C	
MCTNSVTU	1BC		MCTPARTD	47C	
MCTNTRTD	1D0		MCTPARTH	478	
MCTNTRTH	1CC		MCTPARTP	474	

## \$MCT Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
MCTPARTU	474		MCTPUDTD	608	
MCTPCCTD	5C0		MCTPUDTH	604	
MCTPCCTH	5BC		MCTPUDTP	600	
MCTPCCTP	5B8		MCTPUDTU	600	
MCTPCCTU	5B8		MCTPUNTD	14C	
MCTPCDTD	5E4		MCTPUNTH	148	
MCTPCDTH	5E0		MCTPUNTP	144	
MCTPCDTP	5DC		MCTPUNTU	144	
MCTPCDTU	5DC		MCTPUWTD	7B8	
MCTPCETD	8		MCTPUWTH	7B4	
MCTPCETH	4		MCTPUWTP	7B0	
MCTPCETP	0		MCTPUWTU	7B0	
MCTPCETU	0		MCTRANTH	208	
MCTPCNTD	5CC		MCTRANTP	208	
MCTPCNTH	5C8		MCTRAUTD	644	
MCTPCNTP	5C4		MCTRAUTH	640	
MCTPCNTU	5C4		MCTRAUTP	63C	
MCTPCRTD	44		MCTRAUTU	63C	
MCTPCRTH	40		MCTRCNTD	1AC	
MCTPCRTP	3C		MCTRCNTH	1A8	
MCTPCRTU	3C		MCTRCNTP	1A4	
MCTPDDTD	5FC		MCTRCNTU	1A4	
MCTPDDTH	5F8		MCTRCVTD	65C	
MCTPDDTP	5F4		MCTRCVTH	658	
MCTPDDTU	5F4		MCTRCVTP	654	
MCTPDTTD	5D8		MCTRCVTU	654	
MCTPDTHH	5D4		MCTRDIID	158	
MCTPDTP	5D0		MCTRDIITH	154	
MCTPDTTU	5D0		MCTRDIITP	150	
MCTPITTD	494		MCTRDIITU	150	
MCTPITTH	490		MCTRDRTD	164	
MCTPITTP	48C		MCTRDRTH	160	
MCTPITTU	48C		MCTRDRTP	15C	
MCTPLMTH	234		MCTRDRTU	15C	
MCTPLMTP	234		MCTRDTTD	2C	
MCTPPRTH	228		MCTRDTTH	28	
MCTPPRTP	228		MCTRDTTP	24	
MCTPRCTH	218		MCTRDTTU	24	
MCTPRCTP	218		MCTRDVTD	17C	
MCTPRFTD	770		MCTRDVTH	178	
MCTPRFTH	76C		MCTRDVTP	174	
MCTPRFTP	768		MCTRDVTU	174	
MCTPRFTU	768		MCTREDDTD	650	
MCTPRLTD	140		MCTREDDTH	64C	
MCTPRLTH	13C		MCTREDDTP	648	
MCTPRLTP	138		MCTREDTU	648	
MCTPRLTU	138		MCTRMTTD	668	
MCTPRTTD	134		MCTRMTTH	664	
MCTPRTTH	130		MCTRMTTP	660	
MCTPRTTP	12C		MCTRMTTU	660	
MCTPRTTU	12C		MCTRNGTH	210	
MCTPRWTD	7AC		MCTRNGTP	210	
MCTPRWTH	7A8		MCTRN2TH	214	
MCTPRWTP	7A4		MCTRN2TP	214	
MCTPRWTU	7A4		MCTRPTD	188	
MCTPTCTH	2A0		MCTRPTH	184	
MCTPTCTP	2A0		MCTRPTP	180	
MCTPTDTD	5F0		MCTRPTU	180	
MCTPTDTH	5EC		MCTRPUTD	194	
MCTPTDTP	5E8		MCTRPUTH	190	
MCTPTDTU	5E8		MCTRPUTP	18C	
MCTPTHTD	5B4		MCTRPUTU	18C	
MCTPTHTH	5B0		MCTRQJTD	170	
MCTPTHTP	5AC		MCTRQJTH	16C	
MCTPTHTU	5AC		MCTRQJTP	168	

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
MCTRQJTU	168		MCTSTATP	708	
MCTRRTD	1A0		MCTSTATU	708	
MCTRRTDTH	19C		MCTSTWTD	7DC	
MCTRRTDTP	198		MCTSTWTH	7D8	
MCTRRTDU	198		MCTSTWTP	7D4	
MCTSATH	21C		MCTSTWTU	7D4	
MCTSFTP	21C		MCTSTYTD	4F4	
MCTSAWTD	80C		MCTSTYTH	4F0	
MCTSAWTH	808		MCTSTYTP	4EC	
MCTSAWTP	804		MCTSTYTU	4EC	
MCTSAWTU	804		MCTSBDT	1B8	
MCTSBDTD	6E0		MCTSBDTH	1B4	
MCTSBDTH	6DC		MCTSBDTP	1B0	
MCTSBDTP	6D8		MCTSBDTU	1B0	
MCTSBDTU	6D8		MCTSWCTD	824	
MCTSCTTD	674		MCTSWCTH	820	
MCTSCTTH	670		MCTSWCTP	81C	
MCTSCTTP	66C		MCTSWCTU	81C	
MCTSCTTU	66C		MCTTGSTD	6B0	
MCTSEPTD	734		MCTTGSTH	6AC	
MCTSEPTH	730		MCTTGSTP	6A8	
MCTSEPTP	72C		MCTTGSTU	6A8	
MCTSEPTU	72C		MCTTIDTD	38	
MCTSESTD	320		MCTTIDTH	34	
MCTSESTH	31C		MCTTIDTP	30	
MCTSESTP	318		MCTTIDTU	30	
MCTSESTU	318		MCTTLGTD	71C	
MCTSKCTH	28C		MCTTLGTH	718	
MCTSKCTP	28C		MCTTLGTP	714	
MCTSMTD	680		MCTTLGTU	714	
MCTSMTFTH	67C		MCTTPDTD	6EC	
MCTSMTFP	678		MCTTPDTH	6E8	
MCTSMTFU	678		MCTTPDTP	6E4	
MCTSNTAD	314		MCTTPDTU	6E4	
MCTSNTAH	310		MCTTRCTD	6F8	
MCTSNTAP	30C		MCTTRCTH	6F4	
MCTSNTAU	30C		MCTTRCTP	6F0	
MCTSOKTD	1DC		MCTTRCTU	6F0	
MCTSOKTH	1D8		MCTTRITD	704	
MCTSOKTP	1D4		MCTTRITH	700	
MCTSOKTU	1D4		MCTTRITP	6FC	
MCTSPCTD	374		MCTTRITU	6FC	
MCTSPCTH	370		MCTVCATH	258	
MCTSPCTP	36C		MCTVCATP	258	
MCTSPCTU	36C		MCTVIATD	740	
MCTSPDTD	698		MCTVIATH	73C	
MCTSPDTH	694		MCTVIATP	738	
MCTSPDTP	690		MCTVIATU	738	
MCTSPDTU	690		MCTVISTH	260	
MCTSPLTD	68C		MCTVISTP	260	
MCTSPLTH	688		MCTVJABH	27C	
MCTSPLTP	684		MCTVJABP	27C	
MCTSPLTU	684		MCTVJCTH	264	
MCTSPSTH	290		MCTVJCTP	264	
MCTSPSTP	290		MCTVJOFH	26C	
MCTSRWTD	7E8		MCTVJOFP	26C	
MCTSRWTH	7E4		MCTVJSTH	268	
MCTSRWTP	7E0		MCTVJSTP	268	
MCTSRWTU	7E0		MCTVJVLH	278	
MCTSSITD	728		MCTVJVLP	278	
MCTSSITH	724		MCTVKPTD	3A4	
MCTSSITP	720		MCTVKPTH	3A0	
MCTSSITU	720		MCTVKPTP	39C	
MCTSTATD	710		MCTVKPTU	39C	
MCTSTATH	70C		MCTVLTTD	398	

## \$MCT Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
MCTVLTH	394		MCT4KPTP	75C	
MCTVLTP	390		MCT4KPTU	75C	
MCTVLTU	390				
MCTVOJLH	280				
MCTVOJLP	280				
MCTVOJTH	244				
MCTVOJTP	244				
MCTVOLTH	220				
MCTVOLTP	220				
MCTVOSTH	240				
MCTVOSTP	240				
MCTVSFTH	250				
MCTVSFTP	250				
MCTVSOFH	270				
MCTVSOFP	270				
MCTVSRTH	248				
MCTVSRTP	248				
MCTVSSTH	25C				
MCTVSSTP	25C				
MCTVSTTH	24C				
MCTVSTTP	24C				
MCTVTMTH	1F0				
MCTVTMTP	1F0				
MCTVUNTD	74C				
MCTVUNTH	748				
MCTVUNTP	744				
MCTVUNTU	744				
MCTVVUDH	274				
MCTVVUDP	274				
MCTVWSAH	254				
MCTVWSAP	254				
MCTVWSTH	23C				
MCTVWSTP	23C				
MCTVXMTD	350				
MCTVXMTH	34C				
MCTVXMTP	348				
MCTVXMTU	348				
MCTWCTTD	6C8				
MCTWCTTH	6C4				
MCTWCTTP	6C0				
MCTWCTTU	6C0				
MCTWMCTD	6D4				
MCTWMCTH	6D0				
MCTWMCTP	6CC				
MCTWMCTU	6CC				
MCTWSSTD	6BC				
MCTWSCTH	6B8				
MCTWSCTP	6B4				
MCTWSCTU	6B4				
MCTXITTD	440				
MCTXITTH	43C				
MCTXITTP	438				
MCTXITTU	438				
MCTXRLTD	44C				
MCTXRLTH	448				
MCTXRLTP	444				
MCTXRLTU	444				
MCTXRTTH	200				
MCTXRTTP	200				
MCTZJBTD	758				
MCTZJBTH	754				
MCTZJBTP	750				
MCTZJBTU	750				
MCT4KPTD	764				
MCT4KPTH	760				

## \$MIGROBJ Information

### \$MIGROBJ Heading Information

**Common Name:** Migration object  
**Macro ID:** \$MIGROBJ  
**DSECT Name:** MIGROBJ  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** Volume serial  
     Offset: MIGKEY-MIGROBJ  
     Length: L'MIGKEY  
**Storage Attributes:** Subpool: 0  
     Key: 1  
     Residency: Virtual and real storage are in 31 bit storage in the private storage of the JES2 address space.  
**Size:** See MIGSIZ  
**Created by:** \$DOGDAS - create migration recovery object  
**Pointed to by:** Pointer returned by \$DOGMIG service  
**Serialization:** Update access is serialized by the BERT lock  
**Function:** The \$MIGROBJ is stored in BERTs in the JES2 checkpoint structure. The object is accessed via the source volume serial of the migrating SPOOL volume.  
 This macro maps a migration object. The scope of a recovery object is one migration being either a move or merge. Each and every migration has one. A migration recovery object serves two purposes. First it will house a target DAS for a move migration. Secondly it contains recovery fields to restart or cancel a migration should the migrator -- member go away. The layout is as follows:

---

| BERT backed target DAS - support of MOVE

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---

| Source VOLID

---



---

| Recovery data (For move and merge)

---

This object is BERT backed. Keyed BERT - keyed on source VOLID.

### \$MIGROBJ Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	MIGROBJ	
0	(0)	BITSTRING	212	MIGDAS	BERT backed DAS in support of move migration
212	(D4)	CHARACTER	6	MIGKEY	Migration source DAS VOLID - key BERT access for merge and move.

Comment

Information used to drive migration recovery  
 These fields are memory only (not in BERTs)

End of Comment

## \$MIGROBJ Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
220	(DC)	SIGNED	4	(0)	Alignment
220	(DC)	BITSTRING	1	RCGENINF	General recovery info
Comment					

Following 3 fields define migration recovery types which DADMSET1 will perform. Routine MIGRRECV (migration recovery) sets the recovery type and are interpreted by DADMSET1 (Recovery setup).

End of Comment					
		1.... ....		RCFULL	"B'10000000" FULL-RECOVERY. Given source DAS our member becomes migrator and our migration assistant is also initialized.
		.1.. ....		RCMIGRAT	"B'01000000" MIGRATOR-TAKEOVER. Given source DAS our member becomes migrator. Our migration assistant is OK.
		..1. ....		RCASSIST	"B'00100000" ASSISTANT-RECOVERY. Given source DAS just recover our migration assistant
221	(DD)	BITSTRING	3		Reserved
224	(E0)	ADDRESS	4	RCMIGDTE	MIGR DTE address
Comment					

Source DAS recovery information (BERT backed)

End of Comment					
232	(E8)	DBL WORD	8	RCSRCSTR (0)	Start of source info
232	(E8)	BITSTRING	1	RCRSRINF	Source dataset info
233	(E9)	BITSTRING	1	RCRSRSTS	Source migration status
		1.... ....		RCRGMDN	"B'10000000" DADMCLU1 - TARGTGM - This migration has run TARGTGM once either in normal or recovery mode and must never run again. If we crash during TARGTGM the sniffer will recover target TGM in time.
234	(EA)	BITSTRING	2		Reserved
236	(EC)	SIGNED	4	RCRSRCST	Relative track at which source dataset starts. Set by SPOL PCE in DAS7SET2 OR DAS7SET3. Only valid if source DAS is using relative addressing
240	(F0)	SIGNED	4	RCRHITG	SRC DAS TG associated with highwater mark.
244	(F4)	SIGNED	4	RCRSRTRK	Number of tracks required to house source dataset - up to highwater mark. Set by SPOL PCE in DAS7SET2 or DAS7SET3.
248	(F8)	SIGNED	4	RCRSBITR	Number of records needed to store the TLBM (track levelbitmap)
252	(FC)	SIGNED	4	RCRNUMRQ	Total number of tracks which must be migrated for this migration.
256	(100)	SIGNED	4	RCRSRECT	Number of records per track
260	(104)	SIGNED	4	RCRSRTRC	Tracks per cylinder
264	(108)	BITSTRING	1	RCRSRFIX	One to ensure max BERT
272	(110)	DBL WORD	8	(0)	Align section
272	(110)	X'E8'	0	RCSRCINF	"RCSRCSTR,*-RCSRCSTR" Source info segment in BERTs
Comment					

End source DAS

Target DAS recovery information (BERT backed)

End of Comment					
272	(110)	DBL WORD	8	RCTRGSTR (0)	Start of target info
272	(110)	CHARACTER	6	RCVOLID	EBCDIC VOLSER ID of target.
278	(116)	BITSTRING	2		Reserved
280	(118)	SIGNED	4	RCRMIGRC	Number of tracks required on target dataset to house TLBM.
284	(11C)	SIGNED	4	RCRTGTG	Number of TGs in target

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
288	(120)	SIGNED	4	RCRTGSTT	Start TG reserved in target DAS TGM for pending migration - is one based. Valid for merge only.
292	(124)	SIGNED	4	RCRTGENT	End TG reserved in target DAS TGM for pending migration. This is one one based. Valid for merge only.
296	(128)	SIGNED	4	RCRTGWRT	Relative track at which to write data. Set by SPOL PCE in DAS7SET2 or DAS7SET3.
300	(12C)	SIGNED	4	RCATGWRT	Absolute track at which to write data. Set by SPOL PCE in DAS7SET2 OR DAS7SET3.
304	(130)	SIGNED	4	RCRSBTAS	Relative track at which the track level bitmap starts on target volume
308	(134)	SIGNED	4	RCRTDAST	Target DASSTRK value
312	(138)	BITSTRING	1	RCRTGINF	Target dataset info
313	(139)	BITSTRING	2		Reserved
316	(13C)	SIGNED	4	RCRTGTRC	Tracks per cylinder
320	(140)	SIGNED	4	RCRTRECT	Records per track for target
324	(144)	BITSTRING	1	RCRTGFIX	One to ensure max BERT
328	(148)	DBL WORD	8	(0)	Align section
328	(148)	X'110'	0	RCTRGINF	"RCTRGSTR,*-RCTRGSTR" Target info segment in BERTs

Comment

End target DAS

End of Comment

328 (148) X'148' 0 MIGSIZ      "-MIGROBJ" Size of migration object

## \$MIGROBJ Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
MIGDAS	0		RCTRGINF	148	110
MIGKEY	D4		RCTRGSTR	110	
MIGROBJ	0		RCVOLID	110	40404040
MIGSIZ	148	148			
RCASSIST	DC	20			
RCATGWRT	12C				
RCFULL	DC	80			
RCGENINF	DC				
RCMIGDTE	E0				
RCMIGRAT	DC	40			
RCRGMDN	E9	80			
RCRHITG	F0				
RCRMIGRC	118				
RCRNUMRQ	FC				
RCRSBITR	F8				
RCRSBTAS	130				
RCRSRCST	EC				
RCRSRECT	100				
RCRSRFIX	108				
RCRSRINF	E8				
RCRSRSTS	E9				
RCRSRTRC	104				
RCRSRTRK	F4				
RCRTDAST	134				
RCRTGENT	124				
RCRTGFIX	144				
RCRTGINF	138				
RCRTGSTT	120				
RCRTGTG	11C				
RCRTGTRC	13C				
RCRTGWRT	128				
RCRTRECT	140				
RCSRINF	110	E8			
RCSRSTR	E8				



## \$MIT Information

### \$MIT Heading Information

<b>Common Name:</b>	Module Information Table
<b>Macro ID:</b>	\$MIT
<b>DSECT Name:</b>	MIT
<b>Owning Component:</b>	JES2 (SC1BH)
<b>Eye-Catcher ID:</b>	'MIT '
	Offset: MITID-MIT
	Length: 4
<b>Storage Attributes:</b>	<p>Subpool: The subpool of the load module involved</p> <p>Key: The key of the load module involved</p> <p>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.</p>
<b>Size:</b>	See the MITLNGTH equate and the MITLEN field.
<b>Created by:</b>	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.
<b>Pointed to by:</b>	<p>The MIT for a module is at the start of its CSECT.</p> <p>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.</p>
<b>Serialization:</b>	MITs should be considered read-only control blocks.
<b>Function:</b>	<p>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.</p>

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	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
				MIT1IBMB	"B'00100000" Base module in the IBM JES2 product
				MIT1IBMS	"B'00010000" Sample module (e.g. exit) in the IBM JES2 product
				MIT1PTF	"B'00001000" PTFNUM field exists
				MIT1NDYN	"B'00000100" Module does not support dynamic operations
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
MIT1NDYN	29	4
MIT1OCO	29	80
MIT1PTF	29	8

## \$MITETBL Information

### \$MITETBL Heading Information

<b>Common Name:</b>	Module Information Table Entries
<b>Macro ID:</b>	\$MITETBL
<b>DSECT Name:</b>	MTE
<b>Owning Component:</b>	JES2 (SC1BH)
<b>Eye-Catcher ID:</b>	'\$\$\$\$MTES' (as the first MTE's MTENAME) Offset: MTENAME of the first MTE - MTE Length: 8
<b>Storage Attributes:</b>	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.
<b>Size:</b>	See the MTELEN equate.
<b>Created by:</b>	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.
<b>Pointed to by:</b>	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.
<b>Serialization:</b>	MTEs should be considered read-only control blocks.
<b>Function:</b>	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 OCOFFST offset, and that field contains a CADDR offset
		..1. ....		MTEF1PAD	"B'00100000" MTEADLOF is PADDR offset
		...1 ....		MTEF1POF	"B'00010000" MTEADLOF is an OCOFFST offset, and that field contains a PADDR offset
		.... .1..		MTEF1CCT	"B'000000100" MTEADLOF is CCT table pair offset
		.... ..1.		MTEF1MCT	"B'000000010" 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
		..1. ....		MTEF2SSI	"B'00100000" SSI entry point

## \$MITETBL Cross Reference

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
		...1 ....		MTEF2\$EX	"B'00010000" \$EXIT pt #, not callable
15	(F)	BITSTRING	1		Reserved for future use
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'8'	0	MTETXCA	"8" Table is \$XCATAB
19	(13)	X'9'	0	MTETJFA	"9" Table is \$JFATAB
19	(13)	X'A'	0	MTETJVD	"10" Table is \$JVDTAB
19	(13)	X'A'	0	MTETMAX	"10" Highest defined tbl type
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	
MTEF1CAD	C	80
MTEF1CCT	C	4
MTEF1COF	C	40
MTEF1MCT	C	2
MTEF1PAD	C	20
MTEF1POF	C	10
MTEF1UCT	C	1
MTEF2\$EX	E	10
MTEF2DUP	E	40
MTEF2SSI	E	20
MTEF2TAB	E	80
MTELEN	13	14
MTENAME	0	
MTESSI\$E	12	
MTETBERT	13	5
MTETBTYP	13	
MTETDCT	13	1
MTETDTE	13	2
MTETJFA	13	9
MTETJVD	13	A
MTETMAX	13	A
MTETPCE	13	0
MTETPCR	13	4
MTETSCAN	13	7
MTETTID	13	3
MTETWST	13	6
MTETXCA	13	8

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## **\$MLMWORK Information**

### **\$MLMWORK Programming Interface information**

Programming Interface information

#### **\$MLMWORK**

End of Programming Interface information

## Heading Information • \$MLMWORK Map

### \$MLMWORK Heading Information

**Common Name:** Line manager PCE work area  
**Macro ID:** \$MLMWORK  
**DSECT Name:** PCE  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** PCE  
  Offset: PCEEYE  
  Length: L'PCEEYE  
**Storage Attributes:** Subpool: 25  
  Key: 1  
  Residency: Virtual and real storage are anywhere, above or below 16M, in private storage of the JES2 address space.  
**Size:** See MLMLEN  
**Created by:** \$PCEDYN service during JES2 initialization  
**Pointed to by:** \$MLLMPCE field of the \$HCT data area  
**Serialization:** JES2 main task  
**Function:** The fields in this work area are used by the JES2 line manager processor. \$MLMWORK maps the variable PCE work area that begins at label PCEWORK. The fields defined in \$MLMWORK are actually part of the PCE DSECT, but only map PCEs with the value PCEMLID in the second byte of field PCEID.

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

### \$MLMWORK Map

#### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	PCE	HASP MULTI-LEAVING LINE MANAGER
312	(138)	DBL WORD	8	MLMCLOCK	LINE MANAGER LAST DISPATCH TIME
320	(140)	BITSTRING	12	MLMTQE	LINE MANAGER TIMER QUE ELEMENT
332	(14C)	ADDRESS	4	MLMDTIME	LINE MANAGER NEXT DISC LOOK TIME
336	(150)	ADDRESS	4	MLMATIME	LINE MANAGER NEXT AUTOLOGON SCAN TIME
340	(154)	ADDRESS	4	MLMQUES (0)	Start of MLM queues
340	(154)	ADDRESS	4	MLMBSCAL	LINE MANAGER ACTIVE BSC LINES PTR
344	(158)	ADDRESS	4	MLMSNALG	LINE MANAGER ACTIVE LOGON DCT PTR
348	(15C)	ADDRESS	4	MLMSNAAL	LINE MANAGER ACTIVE LINE DCT PTR
352	(160)	ADDRESS	4	MLMSNAIL	LINE MANAGER IDLE SNA LINES PTR
356	(164)	ADDRESS	4	MLMTCPAL	LINE MANAGER ACTIVE TCP LINES PTR
360	(168)	ADDRESS	4	MLMTCPIL	LINE MANAGER IDLE TCP LINES PTR
364	(16C)	ADDRESS	4	MLMTCPSV	LINE MANAGER ACTIVE SERVER DCT
368	(170)	ADDRESS	4	MLMTCPST	LINE MANAGER STARTING SERVER
372	(174)	ADDRESS	4	MLMLOGQ	LINE MANAGER LOGON DCT QUEUE
376	(178)	ADDRESS	4	MLMICEQ	LINE MANAGER SCHED ICE QUEUE
380	(17C)	ADDRESS	4	MLMRPLQ	Line mgr SNA/RPL buffer q
384	(180)	ADDRESS	4	MLMBSCQ	Line mgr BSC buffer queue
388	(184)	ADDRESS	4	MLMWORKQ	LINE MANAGER ACTIVE WORK QUEUE
392	(188)	ADDRESS	4	MLMASWLQ	Line mgr active SWEL queue

Comment

Posted SWEL queues. These queues must be kept together.

End of Comment

396	(18C)	ADDRESS	4	MLMPSWLQ (0)	Line mgr Posted SWEL Queues
396	(18C)	ADDRESS	4	MLMPSWLQ	Line mgr BSC Posted SWEL Q

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
400	(190)	ADDRESS	4	MLMPSWLS	Line mgr SNA Posted SWEL Q
Comment					

MLMSCNI1, MLMSCNI2, and MLMEVNTI represent actions to be performed on the NEXT scan of the line manager and must be kept together.

End of Comment

404	(194)	BITSTRING	1	MLMSCNI1	LINE MANAGER DCT SCAN INDICATOR
		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
		.... ...1		MLMSSVFY	"B'00000001" DO QUEUE VALIDATION
405	(195)	BITSTRING	1	MLMSCNI2	LINE MANAGER DCT SCAN INDICATOR
		1... ....		MLMSTUNT	"B'10000000" SCAN INACTIVE TCP LINE DCTS
		.1.. ....		MLMSTIDL	"B'01000000" SCAN IDLE TCP LINE DCTS
		..1. ....		MLMSTACT	"B'00100000" SCAN ACTIVE TCP LINE DCTS
		...1 ....		MLMSTSRRV	"B'00010000" SCAN ACTIVE TCP SERVER DCTS
406	(196)	BITSTRING	1	MLMEVNTI	LINE MANAGER GEN EVENT INDICATOR
		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

MLMSCNR1, MLMSCNR2, and MLMEVNTR represent actions to be performed on the CURRENT scan of the line manager and must be kept together. The flag definitions are the same as for MLMSCNI1, MLMSCNI2, and MLMEVNTI.

End of Comment

407	(197)	BITSTRING	1	MLMSCNR1	LINE MANAGER REQ SCAN INDICATOR
408	(198)	BITSTRING	1	MLMSCNR2	LINE MANAGER REQ SCAN INDICATOR
409	(199)	BITSTRING	1	MLMEVNTR	LINE MANAGER REQ EVENT INDICATOR
412	(19C)	ADDRESS	4	MLMSCANA	LINE MANAGER SCAN TABLE ADDRESS
416	(1A0)	ADDRESS	4	MLMICEQ2	LINE MANAGER RE-SCHED ICE Q
420	(1A4)	ADDRESS	2	MLMSEQWK	BSC CPU SEQUENCE CHECK WORK AREA
422	(1A6)	ADDRESS	2	MLMFCSWL	FUNCTION CNTL SEQUENCE WORK AREA
424	(1A8)	ADDRESS	1	MLMCMDTP	BSC RJE CCW COMMAND TYPE
425	(1A9)	ADDRESS	1	MLMFLAG1	LINE MANAGER FLAGS
		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
426	(1AA)	SIGNED	2	MLMICESQ	Current ICE trace seq numb
428	(1AC)	SIGNED	4	MLMW_CNT1	MLM scan rtn work counter 1

## \$MLMWORK Cross Reference

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
432	(1B0)	SIGNED	4	MLMWCNT2	MLM scan rtn work counter 2
436	(1B4)	SIGNED	4	MLMXPARM (0)	EXIT POINT PARAMETER LIST
436	(1B4)	SIGNED	4	MLMXRAT	ADDRESS OF RAT TABLE OR ENTRY
440	(1B8)	SIGNED	4	MLMXLDCT	ADDRESS OF LINE DCT
444	(1BC)	SIGNED	4	MLMXICE	ADDRESS OF ICE FOR SNA
448	(1C0)	SIGNED	4	MLMXCRDA	ADDRESS OF CARD IMAGE
452	(1C4)	SIGNED	4	MLMXCRDL	LENGTH OF CARD IMAGE
456	(1C8)	CHARACTER	80	MLMSONCD	SIGN-ON CARD INPUT AREA
536	(218)	CHARACTER	1	MLMLGWRK	Logon/Signon work space
536	(218)	X'224'	0	MLMLGNAM	"CAPENAM-CAPE+MLMLGWRK" Remote terminal name
536	(218)	X'22C'	0	MLMLGLPW	"CAEPLPW-CAPE+MLMLGWRK" Line group password
536	(218)	X'234'	0	MLMLGRPW	"CAPERPW-CAPE+MLMLGWRK" Terminal Remote Pswd
536	(218)	X'23C'	0	MLMLGNPW	"CAPENPW-CAPE+MLMLGWRK" Terminal New Password
536	(218)	X'244'	0	MLMLGRMT	"CAPEUID-CAPE+MLMLGWRK" Short form rmt name
600	(258)	SIGNED	4	(0)	ALIGN TO FULLWORD
600	(258)	CHARACTER	136	MLMSODCT	BASIC DUMMY RMT DCT
736	(2E0)	ADDRESS	4	MLMWRIQ	Line Mgr SNA/ICE work queue
740	(2E4)	SIGNED	4	MLMQTTIM	Time of buffer q truncation
744	(2E8)	BITSTRING	54	MLMTWORK	Work area for ICE trace
798	(31E)	BITSTRING	1	MLMRFP	Recovery footprint
799	(31F)	BITSTRING	1	MLMRFPX	Prior recovery footprint
800	(320)	BITSTRING	1	MLMRFPCT	Recovery retry count
801	(321)	BITSTRING	1	MLMRFFG1	Flag for MLM scan rtn with its own recovery
		1.... ....		MLMRF1AB	"B'10000000" Recursion flag
801	(321)	X'1EA'	0	MLMLEN	"*-PCEWORK" LENGTH OF PCE WORK SPACE

## \$MLMWORK Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
MLMASWLQ	188		MLMRFP	31E	
MLMATIME	150		MLMRFPCT	320	
MLMBSCAL	154		MLMRFPX	31F	
MLMBSCQ	180		MLMRF1AB	321	80
MLMCLOCK	138		MLMRPLQ	17C	
MLMCMDTP	1A8		MLMSBACT	194	40
MLMDTIME	14C		MLMSBUNT	194	80
MLMEALM	196	10	MLMSCANA	19C	
MLMECKPT	196	4	MLMSCNI1	194	
MLMEDISC	196	20	MLMSCNI2	195	
MLMEMXSS	196	8	MLMSCNR1	197	
MLMEPJOB	196	80	MLMSCNR2	198	
MLMETIME	196	40	MLMSEQWK	1A4	
MLMEVNTI	196		MLMSNAAL	15C	
MLMEVNTR	199		MLMSNAIL	160	
MLMFCSWL	1A6		MLMSNALG	158	
MLMFLAG1	1A9		MLMSODCT	258	
MLMICEQ	178		MLMSONCD	1C8	
MLMICEQ2	1A0		MLMSRAT	194	4
MLMICESQ	1AA		MLMSSALL	194	18
MLMLEN	321	1EA	MLMSSIDL	194	20
MLMLGLPW	218	22C	MLMSSLNE	194	8
MLMLGNAM	218	224	MLMSSLOG	194	10
MLMLGNPW	218	23C	MLMSSUNT	194	2
MLMLGRMT	218	244	MLMSSVFY	194	1
MLMLGRPW	218	234	MLMSTACT	195	20
MLMLGWRK	218		MLMSTIDL	195	40
MLMLOGQ	174		MLMSTSRRV	195	10
MLMPSWLB	18C		MLMSTUNT	195	80
MLMPSWLQ	18C		MLMTCPAL	164	
MLMPSWLS	190		MLMTCPIL	168	
MLMQTTIM	2E4		MLMTCPST	170	
MLMQUES	154		MLMTCPVS	16C	
MLMRFFG1	321		MLMTQE	140	

Name	Hex Offset	Hex Value
MLMTWORK	2E8	
MLMWCNT1	1AC	
MLMWCNT2	1B0	
MLMWORKQ	184	
MLMWRKIQ	2E0	
MLMXCRDA	1C0	
MLMXCRDL	1C4	
MLMXICE	1BC	
MLMXLDCT	1B8	
MLMXPARM	1B4	
MLMXRAT	1B4	
MLM1DERR	1A9	1
MLM1LOGI	1A9	80
MLM1LOJS	1A9	4
MLM1PNPM	1A9	2
MLM1PWIG	1A9	8
MLM1TIRQ	1A9	10
MLM1TIST	1A9	20
MLM1WRK1	1A9	40
PCE		0



## \$MODMAP Information

### \$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	MAPCDYN	
80	(50)	CHARACTER	8	MAPCFAL	
96	(60)	CHARACTER	8	MAPCFBF	
112	(70)	CHARACTER	8	MAPCFDE	
128	(80)	CHARACTER	8	MAPCFE	
144	(90)	CHARACTER	8	MAPCFFC	
160	(A0)	CHARACTER	8	MAPCFLE	
176	(B0)	CHARACTER	8	MAPCFMT	
192	(C0)	CHARACTER	8	MAPCFQL	
208	(D0)	CHARACTER	8	MAPCFQU	
224	(E0)	CHARACTER	8	MAPCFRD	
240	(F0)	CHARACTER	8	MAPCFRE	
256	(100)	CHARACTER	8	MAPCFRL	
272	(110)	CHARACTER	8	MAPCFRS	
288	(120)	CHARACTER	8	MAPCFR2	
304	(130)	CHARACTER	8	MAPCFSI	

## \$MODMAP Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
320	(140)	CHARACTER	8	MAPCFT1	
336	(150)	CHARACTER	8	MAPCFUN	
352	(160)	CHARACTER	8	MAPCFWP	
368	(170)	CHARACTER	8	MAPCFWR	
384	(180)	CHARACTER	8	MAPCKCF	
400	(190)	CHARACTER	8	MAPCKDS	
416	(1A0)	CHARACTER	8	MAPCKPT	
432	(1B0)	CHARACTER	8	MAPCKRR	
448	(1C0)	CHARACTER	8	MAPCKVR	
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	MAPEXTA	
576	(240)	CHARACTER	8	MAPFSSP	
592	(250)	CHARACTER	8	MAPHCCT	(not code, for REPs only)
608	(260)	CHARACTER	8	MAPHOPE	
624	(270)	CHARACTER	8	MAPIRA	
624	(270)	X'270'	0	MAPINIT	"MAPIRA,8,C'C"
640	(280)	CHARACTER	8	MAPIRDA	
656	(290)	CHARACTER	8	MAPIRMA	
672	(2A0)	CHARACTER	8	MAPIRPL	
688	(2B0)	CHARACTER	8	MAPIRRE	
704	(2C0)	CHARACTER	8	MAPIRSI	
720	(2D0)	CHARACTER	8	MAPJOS	
736	(2E0)	CHARACTER	8	MAPJQS	
752	(2F0)	CHARACTER	8	MAPMISC	
768	(300)	CHARACTER	8	MAPMSG	
784	(310)	CHARACTER	8	MAPNATS	
800	(320)	CHARACTER	8	MAPNET	
816	(330)	CHARACTER	8	MAPNJT	
832	(340)	CHARACTER	8	MAPNPM	
848	(350)	CHARACTER	8	MAPNRM	
864	(360)	CHARACTER	8	MAPNSR	
880	(370)	CHARACTER	8	MAPNST	
896	(380)	CHARACTER	8	MAPNUC	
912	(390)	CHARACTER	8	MAPODSM	
928	(3A0)	CHARACTER	8	MAPPRLU	
944	(3B0)	CHARACTER	8	MAPPSO	
960	(3C0)	CHARACTER	8	MAPRAS	
976	(3D0)	CHARACTER	8	MAPRDR	
992	(3E0)	CHARACTER	8	MAPRTAM	
1008	(3F0)	CHARACTER	8	MAPSASR	
1024	(400)	CHARACTER	8	MAPSERV	
1040	(410)	CHARACTER	8	MAPSIR	
1056	(420)	CHARACTER	8	MAPSJFR	
1072	(430)	CHARACTER	8	MAPSNA	
1088	(440)	CHARACTER	8	MAPSPIN	
1104	(450)	CHARACTER	8	MAPSPOL	
1120	(460)	CHARACTER	8	MAPSSRV	
1136	(470)	CHARACTER	8	MAPSTAB	
1152	(480)	CHARACTER	8	MAPSTAC	
1168	(490)	CHARACTER	8	MAPSTAM	
1184	(4A0)	CHARACTER	8	MAPSTUB	
1200	(4B0)	CHARACTER	8	MAPSUBS	
1216	(4C0)	CHARACTER	8	MAPSXDV	
1232	(4D0)	CHARACTER	8	MAPSXIT	
1248	(4E0)	CHARACTER	8	MAPSXJB	
1264	(4F0)	CHARACTER	8	MAPSXNJ	
1280	(500)	CHARACTER	8	MAPSXOT	
1296	(510)	CHARACTER	8	MAPTABS	
1312	(520)	CHARACTER	8	MAPTCP	

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
1328	(530)	CHARACTER	8	MAPTERM	
1344	(540)	CHARACTER	8	MAPTRAK	
1360	(550)	CHARACTER	8	MAPWARM	
1376	(560)	CHARACTER	8	MAPXCF	
1392	(570)	CHARACTER	8	MAPXEQ	
1392	(570)	X'58'	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

1408	(580)	CHARACTER	8	MAPJXMOD	
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		
1904	(770)	CHARACTER	8		
1920	(780)	CHARACTER	8	MAPEXITO	
1920	(780)	X'210'	0	MAPJXLEN	"*-MAPJXMOD" LENGTH OF LINKED MODULE TABLE
1920	(780)	X'21'	0	MAPJXCNT	"MAPJXLEN/MAPENTL" NUMBER OF INSTALLATION ENTRIES
1920	(780)	X'79'	0	MAPMODS	"*-MAPMOD1)/MAPENTL" NUMBER OF REP TABLE ENTRIES
1936	(790)	BITSTRING	8		ZERO ENTRY FOR \$SCANTAB

## \$MODMAP Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
MISCELLANEOUS ENTRY POINT ADDRESSES FOR SUBTASKS, IOS ROUTINES, ETC.					
1952	(7A0)	ADDRESS	4	MAPACCTA	"V(HASPACE)" ADDR OF HASPACE SUBTASK
1956	(7A4)	ADDRESS	4	MAPSPLA	"V(HOSPOOL)" ADDR OF SPOOL ALLOCATION SUBTASK
1960	(7A8)	ADDRESS	4	MAPSPMG	"V(HOSPMIGR)" Addr of spool migration subtask rtn
1964	(7AC)	ADDRESS	4	MAPSPAST	"V(HOSPASST)" Addr of spool migration assist rtn
1968	(7B0)	ADDRESS	4	MAPWTOA	"V(\$HASPWTO)" ADDR OF HASP WTO SUBTASK
1972	(7B4)	ADDRESS	4	MAPIMAGA	"V(HASPIMAG)" ADDR OF IMAGE LOADER SUBTASK
1976	(7B8)	ADDRESS	4	MAPVTAMA	"V(HASPVATM)" ADDR OF HASP VTAM INTERFACE
1980	(7BC)	ADDRESS	4	MAPALOCA	"V(HOSALLOC)" ADDR OF ALLOCATION TASK
1984	(7C0)	ADDRESS	4	MAPCNVA	"V(HOSCNVT)" ADDR OF CONVERT SUBTASK
1988	(7C4)	ADDRESS	4	MAPOFFA	"V(HASPOFF)" ADDR OF OFFLOAD SUBTASK
1992	(7C8)	ADDRESS	4	MAPCKCFA	"V(HA\$PCKCF)" Addr of CKPT on CF subtsk
1996	(7CC)	ADDRESS	4	MAPCKVRA	"V(HA\$PCKVR)" ADDR OF CKPT VERSN SUBTSK
2000	(7D0)	ADDRESS	4	MAPSUBSA	"V(HA\$PSUBS)" ADDR OF GENL SUBTASK
2004	(7D4)	ADDRESS	4	MAPODSMX	"V(ODSMEXC)" ADDR OF SWBMOD PC ROUTINE
2008	(7D8)	ADDRESS	4	MAPODSMR	"V(ODSMEST)" ADDR OF SWBMOD PC ARR
2012	(7DC)	ADDRESS	4	MAPATTNA	"V(HASPATTN)" ADDR OF HASP ATTENTION ROUTINE
2016	(7E0)	ADDRESS	4	MAPPXITA	"V(HASPPXIT)" ADDR OF HASP POST EXIT ROUTINE
2020	(7E4)	ADDRESS	4	MAPIOAPG	"V(\$IOAPPEN)" ADDR OF I/O APPENDAGE TABLE
2024	(7E8)	ADDRESS	4	MAPEMS	"V(HASPEOM)" Addr of EOM subtask
Comment					
End of Comment					

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

Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
End of Comment					
2028	(7EC)	ADDRESS	4	MAPRDRA	"V(HA\$PRDR)" READERNN PROCESSOR
2032	(7F0)	ADDRESS	4	MAPASYNA	"V(\$ASYNC)" ASYNCH I/O PROCESSOR
2036	(7F4)	ADDRESS	4	MAPCNVTA	"V(HA\$PCNVT)" JCL CONVERSION PROCESSOR
2040	(7F8)	ADDRESS	4	MAPEXeca	"V(HASPEXC)" EXECUTION PROCESSOR
2044	(7FC)	ADDRESS	4	MAPSTACA	"V(HA\$PSTAC)" STATUS/CANCEL PROCESSOR
2048	(800)	ADDRESS	4	MAPPSOA	"V(HA\$PPSO)" PSO PROCESSOR
2052	(804)	ADDRESS	4	MAPHOPEA	"V(HA\$PHOPE)" OUTPUT PROCESSOR
2056	(808)	ADDRESS	4	MAPPRPUA	"V(HASPPPI1)" PRINT/PUNCH PROCESSOR
2060	(80C)	ADDRESS	4	MAPPURGA	"V(HASPVPRG)" PURGE PROCESSOR
2064	(810)	ADDRESS	4	MAPCOMMA	"V(HA\$PCOMM)" COMMAND PROCESSOR
2068	(814)	ADDRESS	4	MAPMLLMA	"V(HASPMLLM)" LINE MANAGER PROCESSOR
2072	(818)	ADDRESS	4	MAPTIMEA	"V(\$TIMER)" STIMER PROCESSOR
2076	(81C)	ADDRESS	4	MAPCKPTA	"V(HA\$PCKPT)" CHECKPOINT PROCESSOR
2080	(820)	ADDRESS	4	MAPSPINA	"V(HA\$PSPIN)" SPIN PROCESSOR
2084	(824)	ADDRESS	4	MAPPRTYA	"V(HASPGPRC)" PRIORITY AGING PROCESSOR
2088	(828)	ADDRESS	4	MAPPRIOA	"V(HASPGOPR)" OUTPUT PRIO AGING PROCESSOR
2092	(82C)	ADDRESS	4	MAPWARMA	"V(HA\$PWARM)" WARM START PROCESSOR
2096	(830)	ADDRESS	4	MAPPNJTA	"V(HA\$PNJT)" JOB TRANSMITTER PROCESSOR
2100	(834)	ADDRESS	4	MAPPNJRA	"V(HA\$PRDR)" JOB RECEIVER PROCESSOR
2104	(838)	ADDRESS	4	MAPNSTA	"V(HA\$PNST)" SYSOUT TRANSMITTR PROCESSOR
2108	(83C)	ADDRESS	4	MAPNSRA	"V(HA\$PNSR)" SYSOUT RECEIVER PROCESSOR
2112	(840)	ADDRESS	4	MAPNPMPA	"V(HASPNPMP)" NETWORK PATH MGR PROCESSOR
2116	(844)	ADDRESS	4	MAPNRMA	"V(HA\$PNRM)" Network Resource Monitor
2120	(848)	ADDRESS	4	MAPMCONA	"V(HASPMCON)" REMOTE CONSOLE PROCESSOR
2124	(84C)	ADDRESS	4	MAPXTIMA	"V(HASPTIME)" TIME EXCESSION PROCESSOR
2128	(850)	ADDRESS	4	MAPEVTLA	"V(HA\$PEVTL)" EVENT TRACE LOG PROCESSOR
2132	(854)	ADDRESS	4	MAPXFRMA	"V(HASPXFRM)" XFR I/O MANAGER PROCESSOR
2136	(858)	ADDRESS	4	MAPSPOLA	"V(HA\$PSPOL)" SPOOL MANAGER PROCESSOR
2140	(85C)	ADDRESS	4	MAPNRRA	"V(HA\$PRDR)" ROUTE RECEIVER PROCESSOR
2144	(860)	ADDRESS	4	MAPNRTA	"V(HA\$PNJT)" ROUTE TRANSMITTER PROCESSOR
2148	(864)	ADDRESS	4	MAPRESMA	"V(HASPRESM)" RESOURCE MANAGER PROCESSOR

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
2152	(868)	ADDRESS	4	MAPSFSRA	"V(HA\$PSJFR)" SCHEDULER SERVICES PROCSR
2156	(86C)	ADDRESS	4	MAPFSSPA	"V(HA\$PFSSP)" FSS SERVICE PROCESSOR
2160	(870)	ADDRESS	4	MAPFCL	"V(FCLEANUP)" FSS CLEANUP ON EOM
2164	(874)	ADDRESS	4	MAPJCMD	"V(COMJCMD)" Job command processor
2168	(878)	ADDRESS	4	MAPXCFA	"V(HA\$PXCF)" XCF COUPLING PROCESSOR
2172	(87C)	ADDRESS	4	MAPXCMA	"V(XCMMAIN)" XCF Command Processor
2176	(880)	ADDRESS	4	MAPARMSA	"V(HA\$PARM)" ARM SUPPORT PROCESSOR
2180	(884)	ADDRESS	4	MAPSNF	"V(HA\$PSNF)" SPOOL Management Processor
2184	(888)	ADDRESS	4	MAPSPI	"V(HA\$PSASR)" Sysout API Processor
2188	(88C)	ADDRESS	4	MAPDILSA	"V(HA\$PDILB)" BERT lock POST Processor
2192	(890)	ADDRESS	4	MAPENFA	"V(HA\$PENF)" ENF LISTEN Processor
2196	(894)	ADDRESS	4	MAPMISCA	"V(HA\$PMISC)" Miscellaneous processor
2200	(898)	ADDRESS	4	MAPALIA	"V(HA\$PALI)" Acquire Lock & Initiate Cleanup Executor
2204	(89C)	ADDRESS	4	MAPEOM	"V(HA\$PEOM)" EOM processor
2208	(8A0)	ADDRESS	4	MAPJQR	"V(HA\$PJQR)" JQE request processor
2212	(8A4)	ADDRESS	4	MAPIRC	"V(HA\$PIRC)" INTRDR cleanup processor
2216	(8A8)	ADDRESS	4	MAPDAWN	"V(HA\$PDAWN)" DAWN processor
2220	(8AC)	ADDRESS	4	MAPCDCA	"V(HA\$PCDC)" Cross-sys Device Communication
2224	(8B0)	ADDRESS	4	MAPTIPS	"V(HA\$PTIPS)" TIPS processor
2228	(8B4)	ADDRESS	4	MAPJOEI	"V(HA\$PJOEI)" JOEINDEX processor
2228	(8B4)	X'8B8'	0	MAPLEN	"*-MAP" MODMAP LENGTH

## \$MODMAP Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
MAP	0		MAPCKRR	1B0	C8C1E2D7
MAP#J2M	570	58	MAPCKVR	1C0	C8C1E2D7
MAPABS	0	C8C1E25B	MAPCKVRA	7CC	
MAPACCTA	7A0		MAPCNVA	7C0	
MAPALIA	898		MAPCNVT	1D0	C8C1E2D7
MAPALOCA	7BC		MAPCNVTA	7F4	
MAPARM	10	C8C1E2D7	MAPCOMM	1E0	C8C1E2D7
MAPARMO	20	C8C1E2D7	MAPCOMMA	810	
MAPARMSA	880		MAPCON	1F0	C8C1E2D7
MAPASYNA	7F0		MAPCSV	200	C8C1E2D7
MAPATTNA	7DC		MAPDAWN	8A8	
MAPBSC	30	C8C1E2D7	MAPDILSA	88C	
MAPCDCA	8AC		MAPDYN	210	C8C1E2D7
MAPCDYN	40	C8C1E2D7	MAPEMS	7E8	
MAPCFAL	50	C8C1E2D7	MAPENFA	890	
MAPCFBF	60	C8C1E2D7	MAPEOM	89C	
MAPCFDE	70	C8C1E2D7	MAPEVTL	220	C8C1E2D7
MAPCFE	80	C8C1E2D7	MAPEVTLA	850	
MAPCFFC	90	C8C1E2D7	MAPEXeca	7F8	
MAPCFLE	A0	C8C1E2D7	MAPEXIT0	780	C8C1E2D7
MAPCFMT	B0	C8C1E2D7	MAPEXTA	230	C8C1E2D7
MAPCFQL	C0	C8C1E2D7	MAPFCL	870	
MAPCFQU	D0	C8C1E2D7	MAPFSSP	240	C8C1E2D7
MAPCFRD	E0	C8C1E2D7	MAPFSSPA	86C	
MAPCFRE	F0	C8C1E2D7	MAPHCCT	250	C8C1E25B
MAPCFRL	100	C8C1E2D7	MAPHOPE	260	C8C1E2D7
MAPCFRS	110	C8C1E2D7	MAPHOPEA	804	
MAPCFR2	120	C8C1E2D7	MAPIMAGA	7B4	
MAPCFSI	130	C8C1E2D7	MAPINIT	270	270
MAPCFT1	140	C8C1E2D7	MAPIOAPG	7E4	
MAPCFUN	150	C8C1E2D7	MAPIRA	270	C8C1E2D7
MAPCFWP	160	C8C1E2D7	MAPIRC	8A4	
MAPCFWR	170	C8C1E2D7	MAPIRDA	280	C8C1E2D7
MAPCKCF	180	C8C1E2D7	MAPIRMA	290	C8C1E2D7
MAPCKCFA	7C8		MAPIRPL	2A0	C8C1E2D7
MAPCKDS	190	C8C1E2D7	MAPIRRE	2B0	C8C1E2D7
MAPCKPT	1A0	C8C1E2D7	MAPIRSI	2C0	C8C1E2D7
MAPCKPTA	81C		MAPJCMD	874	

## \$MODMAP Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
MAPJOEI	8B4		MAPSTAC	480	C8C1E2D7
MAPJOS	2D0	C8C1E2D7	MAPSTACA	7FC	
MAPJQR	8A0		MAPSTAM	490	C8C1E2D7
MAPJQS	2E0	C8C1E2D7	MAPSTUB	4A0	C8C1E2D7
MAPJXCNT	780	21	MAPSUBS	4B0	C8C1E2D7
MAPJXLEN	780	210	MAPSUBSA	7D0	
MAPJXMOD	580	C8C1E2D7	MAPSXDV	4C0	C8C1E2D7
MAPLEN	8B4	8B8	MAPSXIT	4D0	C8C1E2D7
MAPMCONA	848		MAPSXJB	4E0	C8C1E2D7
MAPMISC	2F0	C8C1E2D7	MAPSXNJ	4F0	C8C1E2D7
MAPMISCA	894		MAPSXOT	500	C8C1E2D7
MAPMLLMA	814		MAPTABS	510	C8C1E2D7
MAPMODS	780	79	MAPTCP	520	C8C1E2D7
MAPMOD1	0	0	MAPTERM	530	C8C1E2D7
MAPMSG	300	C8C1E2D7	MAPTIMEA	818	
MAPNATS	310	C8C1E2D7	MAPTIPS	8B0	
MAPNET	320	C8C1E2D7	MAPTRAK	540	C8C1E2D7
MAPNJRA	834		MAPVTAMA	7B8	
MAPNJT	330	C8C1E2D7	MAPWARM	550	C8C1E2D7
MAPNJTA	830		MAPWARMA	82C	
MAPNPBM	340	C8C1E2D7	MAPWTOA	7B0	
MAPNPMA	840		MAPXCF	560	C8C1E2D7
MAPNRM	350	C8C1E2D7	MAPXCFA	878	
MAPNRMA	844		MAPXCMA	87C	
MAPNRRA	85C		MAPXEQ	570	C8C1E2D7
MAPNRTA	860		MAPXFAMA	854	
MAPNSR	360	C8C1E2D7	MAPXTIMA	84C	
MAPNSRA	83C				
MAPNST	370	C8C1E2D7			
MAPNSTA	838				
MAPNUC	380	C8C1E2D7			
MAPODSM	390	C8C1E2D7			
MAPODSMR	7D8				
MAPODSMX	7D4				
MAPOFFA	7C4				
MAPPRIA	828				
MAPPRTU	3A0	C8C1E2D7			
MAPPRTUA	808				
MAPPRTYA	824				
MAPPSO	3B0	C8C1E2D7			
MAPPSOA	800				
MAPPURGA	80C				
MAPPXITA	7E0				
MAPRAS	3C0	C8C1E2D7			
MAPRDR	3D0	C8C1E2D7			
MAPRDRA	7EC				
MAPRESMA	864				
MAPRTAM	3E0	C8C1E2D7			
MAPSASR	3F0	C8C1E2D7			
MAPSERV	400	C8C1E2D7			
MAPSFSA	868				
MAPSIR	410	C8C1E2D7			
MAPSJFR	420	C8C1E2D7			
MAPSNA	430	C8C1E2D7			
MAPSNF	884				
MAPSPAST	7AC				
MAPSPI	888				
MAPSPIN	440	C8C1E2D7			
MAPSPINA	820				
MAPSPLA	7A4				
MAPSPMG	7A8				
MAPSPOL	450	C8C1E2D7			
MAPSPOLA	858				
MAPSSRV	460	C8C1E2D7			
MAPSTAB	470	C8C1E2D7			

## \$MONCB Information

### \$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: MNBD  
Length: L'MNBD  
**Storage Attributes:** Subpool: 241  
Key: 1  
Residency: Virtual is in 31 bit storage and real can be in 64 bit storage. The \$MONCB resides in common storage.  
**Size:** See MNBLLEN  
**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 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	MNBD	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	MNBRTKN	Token for CSVYLP DELETE request
32	(20)	BITSTRING	24	MNBODA	ASCRE output area (IHAASEO)
56	(38)	SIGNED	4	MNBECB	Main task wait ECB
60	(3C)	SIGNED	4	MNBWEBC	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

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				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.

## \$MONCB Cross Reference

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
96	(60)	ADDRESS	4	MNBMBQ	Queue of commands from SSI
100	(64)	SIGNED	4	MNBCECB	Command ECB address
104	(68)	ADDRESS	4	MNBIMITS	MIT information for monitor
112	(70)	DBL WORD	8	(0)	
112	(70)	X'70'	0	MNBLLEN	"*-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	
MNBMBQ	60	
MNBCOMCH	7	
MNBECB	38	
MNBHJCT	5C	
MNBID	0	D4D6D5C2
MNBJES2A	4C	
MNBLLEN	70	70
MNBIMITS	68	
MNBMLMAD	50	
MNBMLMLN	54	
MNBMONEP	58	
MNBNAME	8	D1C5E2F2
MNBODA	20	
MNBPOST	40	
MNBPROG	10	C8C1E291
MNPRTKN	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 Information

### \$MSCWORK Heading Information

<b>Common Name:</b>	JES2 Miscellaneous PCE Work Area
<b>Macro ID:</b>	\$MSCWORK
<b>DSECT Name:</b>	PCE (\$MSCWORK is part of the PCE DSECT)
<b>Owning Component:</b>	JES2 (SC1BH)
<b>Eye-Catcher ID:</b>	'PCE '
	Offset: PCEEYE-PCE
	Length: 4
<b>Storage Attributes:</b>	Subpool: See \$PCE
	Key: See \$PCE
	Residency: See \$PCE
<b>Size:</b>	See symbol MSCPCEWL for the length of this work area. The overall length of the PCE is stored in field PCELENG.
<b>Created by:</b>	See \$PCE
<b>Pointed to by:</b>	The \$MISCPCE field of the \$HCT data area See \$PCE for other pointer fields that apply to all PCE types.
<b>Serialization:</b>	Normal PCE dispatch serialization
<b>Function:</b>	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
312	(138)	BITSTRING	12	MSCTQE	Timer queue element
324	(144)	BITSTRING	1	MSCFLAG	Misc PCE work flags
		1... ....		MSCWANTQ	"B'10000000" PCE needs access to the CKPT
		.1... ....		MSCNBERT	"B'01000000" Stop trying to recover PREBERTs
325	(145)	SIGNED	1	MSCJOATY	BERT type for JOAs
326	(146)	BITSTRING	2		Reserved for future use
328	(148)	DBL WORD	8	MSCPADTM	Time stamp for PAD processing
336	(150)	DBL WORD	8	MSCMONTM	Time stamp monitor restart
344	(158)	DBL WORD	8	MSCCPLTM	Time stamp \$CPOOL contract
Comment					

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End of Comment

352	(160)	SIGNED	4	(0)	ESTABLISH A FULLWORD BOUNDARY
352	(160)	X'160'	0	MSCENQ	*** X02113
352	(160)	ADDRESS	1		PELLAST flag byte. X02113
353	(161)	ADDRESS	1		PELMILEN - RNAME length.
354	(162)	BITSTRING	1		

## \$MSCWORK Cross Reference

### Offsets

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

PELFLAG - flag byte 2.

End of Comment

355	(163)	ADDRESS	1		PELRET - return code byte.
356	(164)	ADDRESS	4		QNAME ADDRESS
360	(168)	ADDRESS	4		RNAME ADDRESS
360	(168)	X'160'	0	MSCENQL	"MSCENQ,*-MSCENQ" Field to reference ENQ MF=L

Comment

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End of Comment

364	(16C)	ADDRESS	4	MSCPOST	. 1ST WORD - ECB ADDRESS
368	(170)	ADDRESS	4		. 2ND WORD - ASCB ADDRESS
372	(174)	ADDRESS	4		. 3RD WORD - ERRET ADDRESS
376	(178)	ADDRESS	4		. 4TH WORD - BYTE0,ECBKEY
384	(180)	DBL WORD	8	(0)	Alignment
384	(180)	X'48'	0	MSCPCEWL	"*-PCEWORK" Length of misc PCE work area

## \$MSCWORK Cross Reference

Name	Hex Offset	Hex Value
MSCCPLTM		158
MSCENQ	160	160
MSCENQL	168	160
MSCFLAG	144	
MSCJOATY	145	
MSCMONTM	150	
MSCNBERT	144	40
MSCPADTM	148	
MSCPCEWL	180	48
MSCPOST	16C	
MSCTQE	138	
MSCWANTQ	144	80
PCE	0	

## \$MSD Information

### \$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:** HASJSPRL  
**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)		16	MSDLTIME	Time of next sample (STCKE)
24	(18)	DBL WORD	8	MSDLINT	Interval to sample (STCK)
32	(20)	ADDRESS	4	MSDLMDA	Address of most recent LMD
36	(24)	SIGNED	4	MSDLMDCT	Count of LMDs

Comment

Main task sampling data

End of Comment

40	(28)		16	MSDCTIME	Time of last sample (STCKE)
56	(38)	DBL WORD	8	MSDCINT	Interval to sample (STCKE)
56	(38)	X'14'	0	MSDCSPSC	"20" 20 samples per second
56	(38)	X'C350'	0	MSDCSPMC	"1000000/MSDCSPSC" Micro seconds per sample

## \$MSD Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
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

64	(40)	SIGNED	4	MSDCSTIM	"Sampling" time - seconds
68	(44)	SIGNED	4	MSDCSCNT	"Sampling" time - samples
72	(48)	ADDRESS	4	MSDCBUFS	Address of CPU sample buffer start
76	(4C)	ADDRESS	4	MSDCBUFE	Address of CPU sample buffer end(+1)
80	(50)	ADDRESS	4	MSDCBUFC	Current (last used) CPU sample rec
84	(54)	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)	BITSTRING	16	MSDCSD_TIME	Time sample taken
16	(10)	SIGNED	4	MSDCSD_ADDR	PSW addr (Main task PRB)
20	(14)	SIGNED	4	MSDCSD_CRB_ADR	PSW addr (Current RB)
24	(18)	CHARACTER	8	MSDCSD_MOD	Module name and offset
32	(20)	SIGNED	4	MSDCSD_OFFSET	(calculated at report time)
36	(24)	ADDRESS	4	MSDCSD_PCE	Current PCE address
40	(28)	CHARACTER	8	MSDCSD_JOB	JOBID or JQE index
48	(30)	BITSTRING	1	MSDCSD_EXIT	Current exit number
49	(31)	BITSTRING	1	MSDCSD_TYPE	Sample type
49	(31)	X'1'	0	MSDCSD_TY_WAIT	"1" At main task WAIT
49	(31)	X'2'	0	MSDCSD_TY_WTOT	"2" Other MVS WAIT
49	(31)	X'3'	0	MSDCSD_TY_WLOK	"3" Waiting for local lock
49	(31)	X'4'	0	MSDCSD_TY_WNDS	"4" Not dispatchable
49	(31)	X'5'	0	MSDCSD_TY_WPGE	"5" Paging wait
49	(31)	X'6'	0	MSDCSD_TY_DMVS	"6" MVS dispatch
50	(32)	BITSTRING	2	MSDCSD_SVC	JES2 PRB interrupt code
52	(34)	ADDRESS	4	MSDCSD_TRAN	RBRTRAN of current RB
56	(38)	DBL WORD	8	(0)	Align
56	(38)	X'38'	0	MSDCSD_LEN	"*-MSDCSD" Length of entry
56	(38)	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

## Offsets

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

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

----- End of Comment -----

88	(58)	DBL WORD	8	MSDCLTOT	Average sum
96	(60)	SIGNED	4	MSDCLCNT	Address count
100	(64)	ADDRESS	4	MSDCLAVG	Average CPU address
104	(68)		16	MSDCLTIM	Loop start time (STCKE)
104	(68)	X'58'	0	MSDCLOPD	"MSDCLTOT,*-MSDCLTOT" Aggregate loop det fields

----- Comment -----

Pointer to copy of JES2 error counts. Copied from JES2 each time a new LMD is obtained.

----- End of Comment -----

120	(78)	ADDRESS	4	MSDECOPA	Address of error counts
124	(7C)	BITSTRING	4		Reserved

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	MSDERELE	, Mapping of an error element
0	(0)	SIGNED	4	MSDERCNT	Count of errors
0	(0)	X'4'	0	MSDER_LN	"*-MSDERELE" Length of entry

## Offsets

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

128	(80)		16	MSDWSTCK	Time event started (STCKE)
144	(90)	ADDRESS	4	MSDWADDR	Address of wait (from RB)
148	(94)	SIGNED	4	MSDWSMPL	Samples at current wait
148	(94)	X'80'	0	MSDWDETD	"MSDWSTCK,*-MSDWSTCK" Aggregate wait det fields
152	(98)		16	MSDLPCED	Last PCE dispatch time
168	(A8)	BITSTRING	8	MSDLPNAM	Last PCE dispatch name
176	(B0)	BITSTRING	1	MSDLPCID	Last PCE dispatch ID

----- Comment -----

Most recent sample type. See MSDCSD\_TYPE for values

----- End of Comment -----

## \$MSD Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
177	(B1)	BITSTRING	1	MSDETYP	Sample type
178	(B2)	BITSTRING	6		Reserved
Comment					

CPU starvation fields. If the main task is not being dispatched, these fields will indicate it.

End of Comment

184	(B8)	DBL WORD	8	MSDCSTTM	Last updated TCBTTIME
192	(C0)	BITSTRING	16	MSDCSCLK	STCK time when MSDCSTTM set
208	(D0)	DBL WORD	8	(0)	
208	(D0)	X'D0'	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)	BITSTRING	16	LMDSTCK	Time LMD was created
24	(18)	SIGNED	4	LMDCNT	Count of samples included
28	(1C)	SIGNED	4		Reserved
32	(20)	DBL WORD	8	LMD_1ST (0)	Start of limit data
32	(20)	BITSTRING	48	LMD_BERT	Limit data for BERT
80	(50)	BITSTRING	48	LMD_BSCB	Limit data for BSCB
128	(80)	BITSTRING	48	LMD_BUFX	Limit data for BUFX
176	(B0)	BITSTRING	48	LMD_CKVR	Limit data for CKVR
224	(E0)	BITSTRING	48	LMD_CMBS	Limit data for CMBS
272	(110)	BITSTRING	48	LMD_CMDS	Limit data for CMDS
320	(140)	BITSTRING	48	LMD_ICES	Limit data for ICES
368	(170)	BITSTRING	48	LMD_JNUM	Limit data for JNUM
416	(1A0)	BITSTRING	48	LMD_JOES	Limit data for JOES
464	(1D0)	BITSTRING	48	LMD_JQES	Limit data for JQES
512	(200)	BITSTRING	48	LMD_LBUF	Limit data for LBUF
560	(230)	BITSTRING	48	LMD_NHBS	Limit data for NHBS
608	(260)	BITSTRING	48	LMD_SMFB	Limit data for SMFB
656	(290)	BITSTRING	48	LMD_TBUF	Limit data for TBUF
704	(2C0)	BITSTRING	48	LMD_TGS	Limit data for TGS
752	(2F0)	BITSTRING	48	LMD_TTAB	Limit data for TTAB
800	(320)	BITSTRING	1	LMD_VTMB	Limit data for VTMB
800	(320)	X'11'	0	LMD_NUM	"(*-LMD_1ST)/LMDELE_LEN" Number of elements

Comment

CPU sampling information

End of Comment

848	(350)	SIGNED	4	LMDCSAMP	Count of CPU samples
852	(354)	SIGNED	4	LMDCS_ACT	Active sample count
856	(358)	SIGNED	4	LMDCS_DMVS	Waiting to be dispatched
860	(35C)	SIGNED	4	LMDCS_IDLE	Idle sample count
864	(360)	SIGNED	4	LMDCS_WAIT	Wait sample count
868	(364)	SIGNED	4	LMDCS_LLOK	Local lock sample count
872	(368)	SIGNED	4	LMDCS_NDSP	Non-dispatchable count
876	(36C)	SIGNED	4	LMDCS_PAGE	Page wait sample count

## Offsets

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

Storage monitoring information

				End of Comment	
880	(370)	SIGNED	4	LMDSSAMP	Count of storage samples
884	(374)	SIGNED	4	LMDSRGN	<16M region size
888	(378)	SIGNED	4	LMDSERGN	>16M region size
892	(37C)	BITSTRING	40	LMDSS_URGN	<16M user region info
932	(3A4)	BITSTRING	40	LMDSS_SRGN	<16M system region info
972	(3CC)	BITSTRING	40	LMDSS_EURGN	>16M user region info
1012	(3F4)	BITSTRING	1	LMDSS_ESRGN	>16M system region info
1012	(3F4)	X'4'	0	LMDSSNUM	"*-LMDSS_URGN)/LMDSS_LEN" Number of entries

Comment

Error count information

				End of Comment	
1052	(41C)	SIGNED	4	LMDES_ENT	Number of entries
1056	(420)	SIGNED	4	LMDES_FST (0)	Start of error data
1056	(420)	X'420'	0	LMD_SIZE	"*-LMD" Size of fixed portion LMD

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	LMDESELE	, Error information element
0	(0)	CHARACTER	8	LMDESELE_NAME	Error name
8	(8)	SIGNED	4	LMDESELE_COUNT	Current error count
12	(C)	ADDRESS	1	LMDESELE_CATGR	Error category
13	(D)	BITSTRING	3		Reserved for future use
16	(10)	SIGNED	4	(0)	Align
16	(10)	X'10'	0	LMDESELE_LEN	"*-LMDESELE" Length of one entry

## 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	2	LMDELE_WARN	WARN= value for resource (zero if none)
26	(1A)	BITSTRING	1	LMDELE_FLG1	Flag bytes
		1... ....		LMDELE_F1OVER	"B'10000000" Usage over warn level
27	(1B)	SIGNED	1		Reserved
28	(1C)	SIGNED	4	LMDELE_OVER	Count of samples over warn level (HASP050 needed)
32	(20)	SIGNED	4	LMDELE_AVERAGE	Average in use value
40	(28)	DBL WORD	8	LMDELE_TOTAL	Total count (for average)
48	(30)	DBL WORD	8	(0)	Align
48	(30)	X'30'	0	LMDELE_LEN	"*-LMDELE" Length of monitor data

## \$MSD Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	LMDSSE	, Limit monitoring data
0	(0)	CHARACTER	12	LMDSSE_NAME	Area name
12	(C)	SIGNED	4	LMDSSE_REGION	Region size
16	(10)	SIGNED	4	LMDSSE_USE	Current area usage
20	(14)	SIGNED	4	LMDSSE_LOW	Low usage value
24	(18)	SIGNED	4	LMDSSE_HIGH	High usage value
28	(1C)	SIGNED	4	LMDSSE_AVERAGE	Average in use value
32	(20)	DBL WORD	8	LMDSSE_TOTAL	Total count (for average)
40	(28)	DBL WORD	8	(0)	Align
40	(28)	X'28'	0	LMDSSE_LEN	"*-LMDSSE" Length of monitor data

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	MWT	, MVS wait records
0	(0)	BITSTRING	16	MWTSTCK	Time of most recent sample
16	(10)	ADDRESS	4	MWTADDR	Address of wait (from RB)
20	(14)	SIGNED	4	MWTWCNT	Count of waits detected
24	(18)	CHARACTER	8	MWTNAME	Module name from wait
32	(20)	SIGNED	4	MWTOFFS	Offset of wait in module
36	(24)	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

40	(28)	BITSTRING	1	MWTEXIT	Exit for wait (if MWTFXITC on)
41	(29)	BITSTRING	1	MWTPCEID	PCE ID for wait
42	(2A)	BITSTRING	1	MWTFFLAGS	General flag byte
		1.... ....		MWTFXITC	"B'10000000" Wait while exit in control
		.1.... ....		MWTFJESC	"B'01000000" Wait while JES2 in control
		.1.... ....		MWTFINIT	"B'00100000" Wait during initialization
		.1.... ....		MWTFTERM	"B'00010000" Wait during ABEND/TERM
43	(2B)	BITSTRING	1		Reserved
44	(2C)	CHARACTER	8	MWTPCENM	Name of PCE (or MULTIPLE)
52	(34)	SIGNED	4	(3)	Reserved
52	(34)	X'40'	0	MWTLEN	"*-MWT" Length of wait mapping
52	(34)	BITSTRING	0	MWTSIZE	"X'3000" 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)	BITSTRING	16	MWTHLTIM	Candidate reuse time
24	(18)	ADDRESS	4	MWTHLADR	and address
28	(1C)	SIGNED	4	(3)	Reserved
28	(1C)	X'28'	0	MWTHLEN	"*-MWTHDR" Header length

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	PRBM	, Probe message work area

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	CHARACTER	4	PRBMID	Eyecatcher
4	(4)	ADDRESS	4	PRBMNEXT	Next PRBM for this type
8	(8)	BITSTRING	16	PRBMSTRT	Time condition started
24	(18)	BITSTRING	16	PRBMSTCK	Last time message issued
40	(28)	SIGNED	4	PRBMSPLC	Sampler "time" of track
44	(2C)	SIGNED	4	PRBMDATA	Probe related data
48	(30)	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
		.... ..1.		PRBMFPCE	"B'00000010" Fixed PCE address
52	(34)	SIGNED	4	PRBMDOM	DOM id for message (0 if pending)
56	(38)	ADDRESS	2	PRBMTXL1	Line 1 message length
58	(3A)	CHARACTER	71	PRBMTXT1	and message text
58	(3A)	X'3F'	0	PRBMMID	"PRBMTXT1+5,4,C'C" Message id from text
130	(82)	ADDRESS	2	PRBMTXL2	Line 2 message length
132	(84)	CHARACTER	71	PRBMTXT2	and message text
204	(CC)	ADDRESS	2	PRBMTXL3	Line 3 message length
206	(CE)	CHARACTER	71	PRBMTXT3	and message text
278	(116)	ADDRESS	2	PRBMTXL4	Line 4 message length
280	(118)	CHARACTER	71	PRBMTXT4	and message text
352	(160)	DBL WORD	8	(0)	Alignment
352	(160)	X'160'	0	PRBMLEN	"*-PRBM" Length of message area

## \$MSD Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
LMD	0		LMDELE_FLG1	1A	
LMD_BERT	20		LMDELE_F1OVER		
LMD_BSCB	50		LMDELE_HIGH	1A	80
LMD_BUFX	80		LMDELE_INUSE	C	
LMD_CKVR	B0		LMDELE_LEN	30	30
LMD_CMBS	E0		LMDELE_LIMIT	8	
LMD_CMDS	110		LMDELE_LOW	10	
LMD_ICES	140		LMDELE_NAME	0	
LMD_JNUM	170		LMDELE_OVER	1C	
LMD_JOES	1A0		LMDELE_TOTAL	28	
LMD_JQES	1D0		LMDELE_WARN	18	
LMD_LBUF	200		LMDES_ENT	41C	
LMD_NHBS	230		LMDES_FST	420	
LMD_NUM	320	11	LMDESELE	0	
LMD_SIZE	420	420	LMDESELE_CATGR		
LMD_SMFB	260		C		
LMD_TBUF	290		LMDESELE_COUNT		
LMD_TGS	2C0		8		
LMD_TTAB	2F0		LMDESELE_LEN	10	10
LMD_VTMB	320		LMDESELE_NAME		
LMD_1ST	20		0		
LMDCNT	18		LMDID	0	D3D4C440
LMDCS_ACT	354		LMDNEXT	4	
LMDCS_DMVS	358		LMDSERGN	378	
LMDCS_IDLE	35C		LMDSRGN	374	
LMDCS_LLOK	364		LMDSS_ESRGN	3F4	
LMDCS_NDSP	368		LMDSS_EURGN	3CC	
LMDCS_PAGE	36C		LMDSS_SRGN	3A4	
LMDCS_WAIT	360		LMDSS_URGN	37C	
LMDCSAMP	350		LMDSAMP	370	
LMDELE	0		LMDSSE	0	
LMDELE_AVERAGE	20		LMDSS_AVERAGE		

## \$MSD Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
LMDSSSE_HIGH	18		MSDLEN	D0	D0
LMDSSSE_LEN	28	28	MSDLINT	18	
LMDSSSE_LOW	14		MSDLMDA	20	
LMDSSSE_NAME	0		MSDLMDCT	24	
LMDSSSE_REGION	C		MSDLPCED	98	
LMDSSSE_TOTAL	20		MSDLPCID	B0	
LMDSSSE_USE	10		MSDLPNAM	A8	
LMDSSNUM	3F4	4	MSDLTIME	8	
LMDSTCK	8		MSDVERSN	4	1
MSD	0		MSDVRSN	4	
MSD	0		MSDWADDR	90	
MSD	0		MSDWDETD	94	80
MSDCBUFA	54		MSDWSMPL	94	
MSDCBUFC	50		MSDWSTCK	80	
MSDCBUFE	4C		MWT	0	
MSDCBUFS	48		MWTADDR	10	
MSDCINT	38		MWTEXIT	28	
MSDCLAVG	64		MWTFINIT	2A	20
MSDCLCNT	60		MWTFJESC	2A	40
MSDCLOPD	68	58	MWTFFLAGS	2A	
MSDCLTIM	68		MWTFTERM	2A	10
MSDCLTOT	58		MWTFXITC	2A	80
MSDCSCLK	C0		MWTHCUR	4	
MSDCSCNT	44		MWTHDR	0	
MSDCSD	0		MWTHID	0	D4E6E340
MSDCSD_ADDR	10		MWTHLADR	18	
MSDCSD_COUNT	38	5000	MWTHLEN	1C	28
MSDCSD_CRB_ADR	14		MWTHLTIM	8	
MSDCSD_EXIT	30		MWTLEN	34	40
MSDCSD_JOB	28		MWTNAME	18	
MSDCSD_LEN	38	38	MWTOFFS	20	
MSDCSD_MOD	18		MWTPCEID	29	
MSDCSD_OFFSET	20		MWTPCENM	2C	
MSDCSD_PCE	24		MWTSCNT	24	
MSDCSD_SVC	32		MWTSIZE	34	3000
MSDCSD_TIME	0		MWTSTCK	0	
MSDCSD_TRAN	34		MWTWCNT	14	
MSDCSD_TY_DMVS	31	6	PRBM	0	
MSDCSD_TY_WAIT	31	1	PRBMDATA	2C	
MSDCSD_TY_WLOK	31	3	PRBMDOM	34	
MSDCSD_TY_WNDS	31	4	PRBMFLAG	30	
MSDCSD_TY_WPGE	31	5	PRBMPFCE	30	2
MSDCSD_TY_WTOT	31	2	PRBMPFVAL	30	80
MSDCSD_TYPE	31		PRBMPID	0	
MSDCSPMC	38	C350	PRBMLEN	160	160
MSDCSPSC	38	14	PRBMMID	3A	3F
MSDCSTIM	40		PRBMMAGO	30	4
MSDCSTTM	B8		PRBMMAGR	30	8
MSDCTIME	28		PRBMNEXT	4	
MSDECOPA	78		PRBMSPLC	28	
MSDER_LN	0	4	PRBMSTCK	18	
MSDERCNT	0		PRBMSTRT	8	
MSDERELE	0		PRBMTXL1	38	
MSDETTYPE	B1		PRBMTXL2	82	
MSDID	0	D4E2C440	PRBMTXL3	CC	
			PRBMTXL4	116	
			PRBMTXT1	3A	
			PRBMTXT2	84	
			PRBMTXT3	CE	
			PRBMTXT4	118	
			PRBMUCMD	30	10
			PRBMUDUR	30	40
			PRBUMUSTA	30	20

## \$MTQH Information

### \$MTQH Heading Information

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

## \$MTQH Cross Reference

### 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 Information

### \$MTRB Heading Information

<b>Common Name:</b>	Main Task Request Block
<b>Macro ID:</b>	\$MTRB
<b>DSECT Name:</b>	MTRB
<b>Owning Component:</b>	JES2 (SC1BH)
<b>Eye-Catcher ID:</b>	MTRB
	Offset: MTRBID-MTRB
	Length: L'MTRBID
<b>Storage Attributes:</b>	Subpool: 231 (subpool used by \$GETCEL) Key: 1 Residency: anywhere
<b>Size:</b>	See MTRBSIZE
<b>Created by:</b>	Users of \$RQUE services
<b>Pointed to by:</b>	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
<b>Serialization:</b>	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.
<b>Function:</b>	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.

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

## \$MTRB Cross Reference

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
10	(A)	BITSTRING	1	MTRBVER	Version number
10	(A)	X'2'	0	MTRBCVER	"2" 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)	SIGNED	4	MTRBECB	ECB for \$XMPOST
40	(28)	BITSTRING	1	MTRBFLG1	Flags SERIALIZATION: None.
40	(28)	X'1'	0	MTRB1WFC	"1" SSI must wait for completion
41	(29)	BITSTRING	3	MTRBRSV3	Reserved for future use
44	(2C)	BITSTRING	8	MTRBASCT	Address space token
44	(2C)	X'34'	0	MTRBSIZE	"*-MTRB" Length of MTRB

## \$MTRB Cross Reference

Name	Hex Offset	Hex Value
MTRB	0	
MTRBASCT	2C	
MTRBCCE	0	
MTRBCVER	A	2
MTRBECB	24	
MTRBFLG1	28	
MTRBID	4	D4E3D9C2
MTRBLEN	8	
MTRBNEXT	20	
MTRBPARM	C	
MTRBPID	10	
MTRBQUE	1C	
MTRBRC	14	
MTRBRSV1	B	
MTRBRSV2	18	
MTRBRSV3	29	
MTRBSIZE	2C	34
MTRBVER	A	
MTRB1WFC	28	1

## \$MWE Information

### \$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 16K 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
168	(A8)	ADDRESS	4	MWENEXT	Address of next MWE on chain
172	(AC)	CHARACTER	8	MWENAME	Name of the monitor task
180	(B4)	CHARACTER	8	MWEEPNM	Entry point name
188	(BC)	ADDRESS	4	MWECODE	Address of the support code

Comment

Status information for this elements

End of Comment

192	(C0)	CHARACTER	12	MWESTAT	Current status of task
204	(CC)	CHARACTER	24	MWEALERT	Any error alerts for this task
228	(E4)	BITSTRING	1	MWECFLAG	Common status flags
		1... ....		MWECFJ2D	"B'10000000" Task knows JES2 is down
229	(E5)	BITSTRING	3		Reserved

## \$MWE Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
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

232	(E8)	SIGNED	4	MWETECB	Termination ECB address
236	(EC)	SIGNED	4	MWEWEBCB	Communication ECB address
240	(F0)	ADDRESS	4	MWETCB	TCB address
244	(F4)	ADDRESS	4	MWEHJCT	HCJT address
248	(F8)	DBL WORD	8	MWEDWORK	Work area (used by subroutines)
256	(100)	DBL WORD	8	MWEDWRK2	Work area (used by subroutines)
264	(108)	BITSTRING	16	MWEWRK16	Work area (used by subroutines)
280	(118)	BITSTRING	16	MWEQWORD	Quad word work area
296	(128)	CHARACTER	128	MWEWTOW	WTO work area (used by subroutines)
424	(1A8)	DBL WORD	8	MWEMFLS (0)	MF=L work areas

Comment

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End of Comment

424	(1A8)	SIGNED	4	(0)	
424	(1A8)	BITSTRING	28		
424	(1A8)	SIGNED	4	(0)	
424	(1A8)	ADDRESS	1		FLAGS FOR ESTAEX
425	(1A9)	ADDRESS	1		SECOND FLAG BYTE
426	(1AA)	ADDRESS	1		THIRD FLAG BYTE
427	(1AB)	ADDRESS	1		VERSION NUMBER
428	(1AC)	ADDRESS	4		TOKEN VALUE AREA
432	(1B0)	ADDRESS	4		PARM. LIST ADDR. NOT SPECIFIED
436	(1B4)	ADDRESS	4		ALET FOR PARM LIST
440	(1B8)	ADDRESS	4		FOUR BYTE EXIT ADDR

Comment

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End of Comment

424	(1A8)	SIGNED	4	(0)	
424	(1A8)	BITSTRING	28		
452	(1C4)	SIGNED	4	(20)	Reserved
536	(218)	DBL WORD	8	MWEDATA (0)	Local data area origin
536	(218)	X'4000'	0	MWESIZE	"16384" Length of an MWE

**\$MWE Cross Reference**

Name	Hex Offset	Hex Value
MWE	0	
MWEALERT	CC	
MWECFJ2D	E4	80
MWECFLAG	E4	
MWECODE	BC	
MWEDATA	218	
MWEDWORK	F8	
MWEDWRK2	100	
MWEEPNM	B4	
MWEHJCT	F4	
MWEID	0	
MWEMFLS	1A8	
MWENAME	AC	
MWENEXT	A8	
MWEQWORD	118	
MWESIZE	218	4000
MWESTAT	C0	
MWETCB	F0	
MWETECB	E8	
MWEWECB	EC	
MWEWRK16	108	
MWEWTOW	128	



## **\$NAT Information**

### **\$NAT Programming Interface information**

Programming Interface information

#### **\$NAT**

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

- NATNTQ

End of Programming Interface information

## Heading Information • \$NAT Map

### \$NAT Heading Information

<b>Common Name:</b>	Nodes Attached Table Element
<b>Macro ID:</b>	\$NAT
<b>DSECT Name:</b>	NAT
<b>Owning Component:</b>	JES2 (SC1BH)
<b>Eye-Catcher ID:</b>	None
<b>Storage Attributes:</b>	Subpool: n/a Key: 1 Residency: In the jesxNAT data space in cpool SAPID
<b>Size:</b>	See NATNATL for NAT NATNTQL for NTQ NATNATPL for NATP
<b>Created by:</b>	\$NATADD (NATs) HASPCOMM (NTQs) HASPNPM (NATPs)
<b>Pointed to by:</b>	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
<b>Serialization:</b>	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.
<b>Function:</b>	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
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

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
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... ....		NATNTNQ	"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	NATTTYPE	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	NATSCCHAN	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

## \$NAT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
<p>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.</p> <hr/> <p>The fields defined by NATAUXCP must be copied between real NATs and AUX NATs whenever a AUX NAT is created.</p>					
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)	SIGNED	2	NATALNUM	Line number associated with NATALINE
62	(3E)	BITSTRING	2		Reserved
64	(40)	ADDRESS	4	NATNATP	Chain of NATPs representing connections from other MAS members
68	(44)	BITSTRING	1	NATMEMBP	For adjacent NATs, member with primary line
68	(44)	X'38'	0	NATAUXCP	"NATAUXCS,-NATAUXCS" End of fields to copy
69	(45)	BITSTRING	1	NATCSTAT	Current status of NAT
		1.... ....		NATCACT	"B'1000000" NAT on active queue
		.1.. ....		NATCUNC	"B'0100000" NAT unconnected
		.1. ....		NATCHLD	"B'0010000" NAT on held queue
70	(46)	BITSTRING	1	NATNRANK	Order on NIT to NAT queue
70	(46)	X'0'	0	NATNRNUL	"0" NAT has yet to be ranked
70	(46)	X'4'	0	NATNRNMS	"4" ACTIVE, non-MAS connect
70	(46)	X'8'	0	NATNRMAS	"8" ACTIVE, MAS connection
70	(46)	X'C'	0	NATNRSTA	"12" Static/Private connect
70	(46)	X'10'	0	NATNRHLD	"16" HELD connection
70	(46)	X'14'	0	NATNRINA	"20" INACTIVE connection
71	(47)	BITSTRING	1	NATVFYQ	Flags used by NPMVFY to verify the NAT is on all queues
		1.... ....		NATVFSTA	"B'1000000" NAT is on a status queue
		.1.. ....		NATVFPRI	"B'0100000" NAT is on the queue from the primary node's NIT
		.1. ....		NATVFSEC	"B'0010000" NAT is on the queue from the secondary node's NIT
72	(48)	ADDRESS	4	NATNTIME	Time record was received or status last modified
76	(4C)	ADDRESS	4	NATAUX	Address of auxiliary NAT (PM defined NAT chained off identical static NAT)
80	(50)	ADDRESS	4	NATRTKN	TOKEN used during NAT verification
80	(50)	X'54'	0	NATNATL	"*-NAT" Length of NAT DSECT
Comment					

Prototype NAT used for FULLPATH determination  
The following fields are only used during full path processing.

End of Comment					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
20	(14)	BITSTRING	1	NATNPBMF	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	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
		.... .1		NATNTQ2C	"B'00000001" NPMSIM Flag
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)
		..1. ....		NATP1PRS	"B'00100000" Persistent connection
41	(29)	BITSTRING	3		Reserved
44	(2C)	CHARACTER	8	NATPNAM	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		NATNATL	50	54
NATALINE	38		NATNATP	40	
NATALNUM	3C		NATNATPL	34	34
NATANATP	30		NATNEXT	18	
NATAUX	4C		NATNMPTR	34	
NATAUXCP	44	38	NATNPLEN	16	
NATAUXCS	38		NATNPMF	14	
NATCACT	45	80	NATNRANK	46	
NATCHLD	45	20	NATNRHLD	46	10
NATCSTAT	45		NATNRINA	46	14
NATCUNC	45	40	NATNRMAS	46	8
NATECOM	14		NATNRNMS	46	4
NATEVNT	C		NATNRNUL	46	0
NATFFPTL	16	18	NATNRSTA	46	C
NATID	0		NATNSTAT	15	
NATMEMBP	44		NATNTIME	48	

## \$NAT Cross Reference

Name	Hex Offset	Hex Value
NATNTNAT	8	80
NATNTNPT	8	20
NATNTNTP	8	10
NATNTNTQ	8	40
NATNTQ	14	
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
NATNTQ2C	31	1
NATNTQ2P	31	80
NATNTYPE	8	
NATPAFTK	24	
NATPCCHAN	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
NATP1PRS	28	20
NATP1WAT	28	80
NATREST	A	0
NATRTKN	50	
NATSCHAN	24	
NATSEC	4	
NATSECN	4	0
NATSECQ	6	0
NATSIUS	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
NATTTYPE	9	
NATVERN	0	1
NATVFPRI	47	40
NATVFSEC	47	20
NATVFSTA	47	80
NATVFYQ	47	

## \$NCPE Information

### \$NCPE Heading Information

**Common Name:** NJE Server Subtask Table  
**Macro ID:** \$NCPE  
**DSECT Name:** NCPE  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'NCPE'  
     Offset: -8 (in the JES2 CSA storage prefix)  
     Length: 4  
**Storage Attributes:** Subpool: 230  
     Key: 1  
     Residency: Common storage, Virtual storage below 2GB, real storage anywhere  
**Size:** See NCPELEN  
**Created by:** HASCNJAS during NETSRV address space initialization  
**Pointed to by:** NSCNCPE field of the \$NSCT data area  
     PCLNCPE field of the \$PCL data area  
**Serialization:**  
**Function:** Used to cross-memory post the request manager subtask in an NJE server address space

### \$NCPE Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NCPE	NCPE DSECT mapping
Comment					

-----  
\$XMPOST parameter list for server request subtask  
-----

				End of Comment	
0	(0)	SIGNED	4	NCPEXMPE (0)	XMPOST parameter list
0	(0)	ADDRESS	4	NCPERRET	WORD 1 = ERRET address (CCTBR14)
4	(4)	ADDRESS	4	NCPECBAD	WORD 2 = ECB address (NCPEECB)
8	(8)	ADDRESS	4	NCPEASCB	WORD 3 = ASCB address
12	(C)	SIGNED	4	NCPEECB	Request manager ECB
12	(C)	X'10'	0	NCPELEN	"*-NCPE" Length of NCPE



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## **\$NHD Information**

### **\$NHD Programming Interface information**

Programming Interface information

**\$NHD**

End of Programming Interface information

## Heading Information • \$NHD Map

### \$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)  
JCTNJTR 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					
4	(4)	SIGNED	4	NJHG (0)	START OF GENERAL SECTION

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
4	(4)	ADDRESS	2	NJHGLEN	LENGTH OF GENERAL SECTION
6	(6)	BITSTRING	2	NJHGFLGS (0)	SECTION TYPE FLAGS
6	(6)	ADDRESS	1	NJHGTYP	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	NJHGHOOPS	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	NJHGGORGR	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	NJHGPURN	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

## \$NHD Map

### 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)	CHARACTER	8	NJHECLS8	Eight Character Job class
20	(14)	CHARACTER	64	NJHEOCOR	Original job correlator
84	(54)	CHARACTER	8	NJHEXSYS	Name of system where job executed
92	(5C)	SIGNED	4	NJHEEND (0)	END OF JOB SCHEDULING SECTION
92	(5C)	X'5C'	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

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
6	(6)	BITSTRING 1... ....	1	NJHTFLG0 NJHTF0JB	Security section flags "B'10000000" Token represents job
7	(7)	ADDRESS	1		Reserved
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... ....	1	NJHAFLG1 NJHAF1OV	Flags "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

## \$NHD Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
3	(3)	ADDRESS 11... ....	1	NJHOXMOD	MODIFIER for SYSAFF sect. "B'11000000" VALUE OF MODIFIER
4	(4)	BITSTRING 1... .... .1... ....	1	NJHOXFG1 NJHOX1IM NJHOX1NY	FLAGS "B'10000000" Job is independent mode "B'01000000" SYSAFF=ANYdependent 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

8	(8)	ADDRESS	2	NJHOXSAL	Length of extended sys aff
10	(A)	BITSTRING	1	NJHOXSAF	Extended system affinity
10	(A)	X'E'	0	NJHOXLLN	"*-NJHO" 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

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	NJHOOBJN	Offloaded job number
60	(3C)	CHARACTER	8	NJHOSRVC	\$T'ed Service Class
68	(44)	CHARACTER	16	NJHOSCHE	\$T'ed SCHENV
84	(54)	SIGNED	4	NJHOCRTM	JQE creation time
88	(58)	CHARACTER	8	HJHOSLGS	For SYSLOG job, MVS system name that created log

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
96	(60)	CHARACTER	4	NJHORDSD	Input processor JES name
100	(64)	CHARACTER	4	NJHOCSVSD	Conversion processor JES nm
104	(68)	CHARACTER	4	NJHOEXSD	Execution processor JES nm
108	(6C)	CHARACTER	4	HJHOOTSD	Output processor JES name
112	(70)	CHARACTER	8	NJHOCL88	Current executing job class 8 char version of NJHOCLAS
120	(78)	SIGNED	4	NJHOEND (0)	END OF JES2 OFFLOAD SECTION
120	(78)	X'78'	0	NJHOLLEN	"*-NJHO" LENGTH OF JES2 OFFLOAD SECTION
120	(78)	X'1E0'	0	NJHLLEN	"NJHLBCI+NJHGLLEN+NJH2LLEN+NJHELLEN+NJHOLLEN" LENGTH OF DEFAULT JOB HEADER RECORD

Comment

ADD NJHULLEN TO THE ABOVE EQUATION TO INCLUDE USER SECTION  
NJHOFLG1 BIT DEFINITIONS

End of Comment		
1...	....	NJHOF1HD
.1..	....	NJHOF1HO
..1.	....	NJHOF1MC
...1	....	NJHOF1MS
....	1...	NJHOF1MH
....	.1..	NJHOF1CV

Comment

NJHOFLG2 BIT DEFINITIONS

End of Comment		
1...	....	NJHOF2PR
.1..	....	NJHOF2SD
..1.	....	NJHOF2ED

Comment

SECTION TYPE FLAGS

End of Comment		
....	....	NTYPGEN
1...	....	NTYPSUB
1...	1..1	NTYPGDS
1...	1..1	NTYPGJS
1...	11..	NTYPSAF
1...	11.1	NTYPACCT
1...	...1	NTYPASP
1...	..1.	NTYPHASP
1...	..11	NTYPJES1
1...	.1..	NTYPJES2
1...	.1.1	NTYPJES3
1...	.11.	NTYPPOWER
1...	.111	NTYPVNET
11..	....	NTYPUSER
120	(78)	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	

## \$NHD Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
BLOCK CONTROL INFORMATION					
End of Comment					
0	(0)	ADDRESS	2	NJTLLEN	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
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	NJTGLGS (0)	SECTION TYPE FLAGS
6	(6)	ADDRESS	1	NJTGTYP	ID FOR GENERAL SECTION
7	(7)	ADDRESS	1	NJTGMOD	MODIFIER
	....			NJTGSMOD	"B'00000000" VALUE OF MODIFIER
8	(8)	BITSTRING	1	NJTGLG1	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	NJTGECP	EXCP COUNT
44	(2C)	ADDRESS	1	NJTGIXP	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..			NJTGCC	"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	NJTGCCEC	"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	NJTGEOM	"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	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
ACCOUNTING SECTION					
End of Comment					
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	NJTSTYP	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

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
8	(8)	BITSTRING	4	NJTSABYT	NUMBER OF DATA BYTES
12	(C)	SIGNED	4	NJTSEND (0)	END OF ACCOUNTING SECTION
12	(C)	X'C'	0	NJTSLEN	"*-NJTS" LENGTH OF ACCOUNTING SECTION

## Offsets

Dec	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
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	"NJLBCI+NJTGLLEN+NJTSLEN+NJTOLLEN" LENGTH OF DEFAULT JOB TRAILER RECORD

Comment

ADD NJTULLEN TO THE ABOVE EQUATION TO INCLUDE USER SECTION

12	(C)	X'7B8B'	0	NJTMAXLN	End of Comment _____ "(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.
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## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NDH	NETWORK DATA SET HEADER RECORD

Comment

BLOCK CONTROL INFORMATION

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

## \$NHD Map

### Offsets

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

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
64	(40)	X'40'	0	NDHALLEN	"*-NDHA" LENGTH OF 3800 CHAR SECTION

## Offsets

Dec	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.
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

## \$NHD Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
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
		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... ....		NDHO1SF	"B'10000000" DS had store-and-forward token at time of offload
		.1... ....		NDHO1NF	"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	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	"*-NDHO" LENGTH OF TP SPOF SECTION

Comment

GENERAL SECTION, NDHGFLG1

End of Comment

1... ....	NDHGFLG1SP	"B'10000000" SPIN DATA SET
.1... ....	NDHGFLG1HD	"B'01000000" HOLD DATA SET AT DESTINATION
.1. ....	NDHGFLG1LG	"B'00100000" JOB LOG INDICATOR
.1. ....	NDHGFLG1OV	"B'00010000" PAGE OVERFLOW INDICATOR
.... 1...	NDHGFLG1IN	"B'00001000" PUNCH INTERPRET INDICATOR
.... .1..	NDHGFLG1LC	"B'00000100" NDHLINCT SET INDICATOR
.... ..1.	NDHGFLG1ST	"B'00000010" JOB STATISTICS IN JOB LOG

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
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
Comment					
<hr/> +-----+   NDHGFLG1   NDHGFLG2   NDHGFLG2   NOTE #1 - OUTDISP   NDHGF1HD   NDHGF2HB   NDHGF2HA   These bit -----+-----+-----+-----+ combinations only WRITE   0   0   0   0   occur when SYSOUT -----+-----+-----+-----+ created by a KEEP   #1   0   0   1   version 4 system -----+-----+-----+-----+ released by a WRITE   #1   0   1   1   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

### \$NHD Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
HJHOOTSD	6C	40404040	NDHGLLEN	78	74
HJHOSLGS	58	40404040	NDHGLNCT	3E	
NDH	0		NDHGLREC	3A	0
NDHA	0		NDHGMOD	7	
NDHA\$MOD	3	80	NDHGNAME	60	40404040
NDHACPYG	38	0	NDHGNODE	8	40404040
NDHAEND	40		NDHGNREC	34	0
NDHAFLCT	5		NDHGPMD	6C	40404040
NDHAFLGS	2		NDHGPROC	18	40404040
NDHAFLG1	4	0	NDHGRCFM	39	0
NDHAFLSH	28	40404040	NDHGRTM	10	40404040
NDHAF1BD	44	60	NDHGSEC	32	
NDHAF1BN	44	20	NDHGSEGN	74	0
NDHAF1BR	44	40	NDHGSTEP	20	40404040
NDHAF1J	44	80	NDHGTYPE	6	
NDHALEN	0	40	NDHGUCS	50	40404040
NDHALLEN	40	40	NDHGUCSD	44	80
NDHAMOD	3		NDHGUCSF	44	40
NDHAMODF	30	40404040	NDHGUCSO	69	0
NDHATAB1	8	40404040	NDHGXYTR	58	40404040
NDHATAB2	10	40404040	NDHLBCI	3	4
NDHATAB3	18	40404040	NDHLEN	0	
NDHATAB4	20	40404040	NDHLLEN	78	78
NDHATREF	6	0	NDHMAXLN	44	7B8B
NDHATYPE	2		NDHO	0	
NDHC	0		NDHO\$MOD	3	80
NDHC\$MOD	3	40	NDHO\$MTP	3	C0
NDHCEND	8		NDHODSNO	10	0
NDHCFLGS	2		NDHOEND	18	
NDHCFLG1	4	0	NDHOFLGS	2	
NDHCLEN	0		NDHOFLG1	16	
NDHCLLEN	8	8	NDHOF1NF	16	40
NDHCLREC	6		NDHOF1SF	16	80
NDHCMOD	3		NDHOLEN	0	
NDHCRCFM	5	0	NDHOLLEN	18	18
NDHCTYPE	2		NDHOMOD	3	
NDHFLAGS	2	0	NDHOPRIO	14	0
NDHG	4		NDHOTIME	C	0
NDHG\$MOD	7	0	NDHOTYPE	2	
NDHGCLAS	33	C1	NDHouser	4	40404040
NDHGDD	28	40404040	NDHOX	0	
NDHGDSC	3C		NDHOXACT	40	
NDHGDNSO	30	0	NDHOXEDT	2C	
NDHGEND	78		NDHOXEND	44	
NDHGFCB	48	40404040	NDHOXEST	18	
NDHGFCBI	3D		NDHOXETS	28	
NDHGFLGS	6		NDHOXFGX	2	
NDHGFLG1	38	0	NDHOXFG1	4	
NDHGFLG2	68	0	NDHOXJBN	8	
NDHGFORM	40	40404040	NDHOXLEN	0	
NDHGF1HD	44	40	NDHOXLLN	44	44
NDHGF1IN	44	8	NDHOXMOD	3	
NDHGF1LC	44	4	NDHOXTUD	38	
NDHGF1LG	44	20	NDHOXTYP	2	
NDHGF1OV	44	10	NDHOXUID	30	
NDHGF1SP	44	80	NDHOXWKD	10	
NDHGF1ST	44	2	NDHOXXST	20	
NDHGF2HA	44	8	NDHOX1UN	4	80
NDHGF2HB	44	10	NDHS	0	
NDHGF2PR	44	80	NDHS\$OUT	3	0
NDHGF2PU	44	40	NDHSEQ	3	0
NDHGF2RM	44	20	NDHSFLEN	4	1C
NDHGLEN	4		NDHSFLGS	2	

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
NDHSFLG1	6	0	NJHGETIM	90	0
NDHSGPID	14	0	NJHGSETS	3C	0
NDHSJDVT	8	0	NJHGFLGS	6	
NDHSLEN	0		NJHGFLG1	C	0
NDHSLEN2	14	1C	NJHGFORM	84	40404040
NDHSMOD	3		NJHGF1CA	C	4
NDHSNSTR	10	0	NJHGF1CF	C	8
NDHSSDAT	1C		NJHGF1JN	C	40
NDHSTYPE	2		NJHGF1NE	C	1
NDHS1CPD	6	80	NJHGF1PE	C	2
NDHT	0		NJHGF1PR	C	80
NDHT\$MOD	3	0	NJHGHOOPS	12	0
NDHTEND	58		NJHGICRD	8C	0
NDHTFLGS	2		NJHGJCLS	A	C1
NDHTLEN	0		NJHGJCPY	F	
NDHTLENP	4		NJHGJID	8	0
NDHTLLEN	58	58	NJHGJNAM	1C	40404040
NDHTMOD	3		NJHGJNO	CC	0
NDHTTOKN	8	40404040	NJHGLEN	4	
NDHTTYPE	2		NJHGLLEN	D8	D4
NDHU	0		NJHGLNCT	10	
NDHU\$MOD	3	0	NJHGMCLS	B	C1
NDHUCODE	4	40404040	NJHGMOD	7	
NDHUEND	8		NJHGNPAS	34	
NDHUFLGS	2		NJHGNREC	C8	0
NDHULEN	0		NJHGNTYN	D0	40404040
NDHULLEN	8	8	NJHGORGN	44	40404040
NDHUMOD	3		NJHGORGQ	E	
NDHUTYPE	2		NJHGGORGR	4C	40404040
NJH	0		NJHGGORGU	D8	24
NJHA	0		NJHGPASS	2C	
NJHA\$MOD	3	0	NJHGPRGN	9C	40404040
NJHAFLEN	6	8	NJHGPRIO	D	
NJHAFLGS	2		NJHGPRTN	64	40404040
NJHAFLG1	4		NJHGPRTR	6C	40404040
NJHAF1OV	4	80	NJHGPNUNN	74	40404040
NJHAJAC1	B		NJHGPNUR	7C	40404040
NJHAJLEN	8		NJHGROOM	B0	40404040
NJHAJNR	A		NJHGTYPE	6	
NJHALEN	0		NJHGUSID	24	40404040
NJHAMOD	3		NJHGXEQN	54	40404040
NJHAOFFS	6		NJHGXEQU	5C	40404040
NJHATYPE	2		NJHLBCI	3	4
NJHE	0		NJHLEN	0	
NJHE\$JS	3	0	NJHLLEN	78	1E0
NJHEBYTE	8	0	NJHMAXLN	78	7B8B
NJHECLS8	C	40404040	NJHO	0	
NJHEEND	5C		NJHO\$AFF	3	C0
NJHEFLGS	2		NJHO\$MOD	3	80
NJHELEN	0		NJHOCLAS	7	0
NJHELLEN	5C	5C	NJHOCLS8	70	40404040
NJHEMOD	3		NJHOCRTM	54	0
NJHEOCOR	14	40404040	NJHOCVSD	64	40404040
NJHEPAGE	4	0	NJHODATE	C	0
NJHETYPE	2		NJHOEND	78	
NJHEXSYS	54		NJHOEXSD	68	40404040
NJHFLAGS	2	0	NJHOFLGS	2	
NJHG	4		NJHOFLG1	4	0
NJHG\$MOD	7	0	NJHOFLG2	5	0
NJHGACCT	14	40404040	NJHOFLCV	78	4
NJHGBLDG	C0	40404040	NJHOFLCHD	78	80
NJHGDEPT	B8	40404040	NJHOFLCHO	78	40
NJHGECRD	98	0	NJHOFLCMC	78	20
NJHGELIN	94	0	NJHOFLCMH	78	8
NJHGEND	D8		NJHOFLCMS	78	10

## \$NHD Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
NJHOF2ED	78	20	NJH2FTSU	34	2
NJHOF2PR	78	80	NJH2GRP	1C	0
NJHOF2SD	78	40	NJH2LEN	0	
NJHOLEN	0		NJH2LLEN	34	34
NJHOLLEN	78	78	NJH2MOD	3	
NJHOMOD	3		NJH2SGRP	2C	0
NJHOOJBN	38		NJH2SUSR	24	0
NJHOOJNO	20	0	NJH2TPO	34	8
NJHOPRIO	6	0	NJH2TYPE	2	
NJHOPRRM	2C	0	NJH2USE	34	4
NJHOPRTN	24	40404040	NJH2USID	C	40404040
NJHOPRTU	10	40404040	NJH2USR	14	0
NJHOPUNN	2E	40404040	NJT	0	
NJHOPUNU	18	40404040	NJT\$ACCT	3	0
NJHOPURM	36	0	NJTFLAGS	2	0
NJHORDSD	60	40404040	NJTG	4	
NJHOSAF	22	0	NJTG\$MOD	7	0
NJHOSCHE	44		NJTGACPU	1C	0
NJHOSRVC	3C		NJTGACRD	24	0
NJHOTIME	8	0	NJTGALIN	20	0
NJHOTYPE	2		NJTGopr	2F	
NJHOX	0		NJTGAXPR	2D	
NJHOXFGS	2		NJTCAB	30	80
NJHOXFG1	4	0	NJTCABN	30	5
NJHOXLLN	A	E	NJTGCC	30	
NJHOXLN	0		NJTGCCAB	30	6
NJHOXMOD	3		NJTGCCAN	30	4
NJHOXOFF	6		NJTGCCC	30	40
NJHOXSAF	A	0	NJTGCECC	30	2
NJHOXSAL	8		NJTGCEOM	30	8
NJHOXTYP	2		NJTGJCJL	30	3
NJHOX1IM	4	80	NJTGCRNM	30	1
NJHOX1NY	4	40	NJTGCODE	31	
NJHSEQ	3	0	NJTGCOMP	30	
NJHT	0		NJTGSEC	30	7
NJHT\$MOD	3	0	NJTGUNK	30	0
NJHTEND	58		NJTGEND	34	
NJHTFLGS	2		NJTGEXCP	28	0
NJHTFLG0	6	0	NJTGFLGS	6	
NJHTF0JB	6	80	NJTGFLG1	8	0
NJHTLEN	0		NJTGIOPR	2E	
NJHTLENP	4		NJTGIXPR	2C	
NJHTLLEN	58	58	NJTGLEN	4	
NJHTMOD	3		NJTGLEN	34	30
NJHTTOKN	8	40404040	NJTGMOD	7	
NJHTTYPE	2		NJTGSTOP	14	0
NJHU	0		NJTGSTRT	C	0
NJHU\$MOD	3	0	NJTGTYPE	6	
NJHUCODE	4	40404040	NJTGXCLS	9	C1
NJHUEND	8		NJTLBCI	3	4
NJHUFLGS	2		NJTLEN	0	
NJHULEN	0		NJTLLEN	C	4C
NJHULLEN	8	8	NJTMAXLN	C	7B8B
NJHUMOD	3		NJTO	0	
NJHUTYPE	2		NJTO\$MOD	3	80
NJH2	0		NJTODATE	8	0
NJH2\$MOD	3	0	NJTOEND	C	
NJH2\$RSV	3	1	NJTOFLGS	2	
NJH2ACCT	8	40404040	NJTOLEN	0	
NJH2ACML	2C	34	NJTOLLEN	C	C
NJH2END	34		NJTOMOD	3	
NJH2FJOB	34	3	NJTOTIME	4	0
NJH2FLGS	2		NJTOTYPE	2	
NJH2FLG1	4	0	NJTS	0	
NJH2FSTC	34	1	NJTSABYT	8	0

Name	Hex Offset	Hex Value
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	
NJTUFGLS	2	
NJTULEN	0	
NJTULLEN	8	8
NJTUMOD	3	
NJTUTYPE	2	
NTYPACCT	78	8D
NTYPASP	78	81
NTYPGDS	78	89
NTYPGEN	78	0
NTYPGJS	78	8A
NTYPHASP	78	82
NTYPJES1	78	83
NTYPJES2	78	84
NTYPJES3	78	85
NTYPPWR	78	86
NTYPSAF	78	8C
NTYPSUB	78	80
NTYPUSEN	78	C0
NTYPVNET	78	87



## **\$NIT Information**

### **\$NIT Programming Interface information**

Programming Interface information

#### **\$NIT**

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

- NITNSACT
- NITPASS
- NITSPASS

End of Programming Interface information

## Heading Information • \$NIT Map

### \$NIT Heading Information

<b>Common Name:</b>	Node Information Table
<b>Macro ID:</b>	\$NIT
<b>DSECT Name:</b>	NIT NITPSECT NITC NITC0
<b>Owning Component:</b>	JES2 (SC1BH)
<b>Eye-Catcher ID:</b>	The pool of NITs is preceded by an eyecatcher **\$NIT POOL** in the header for the pool.
	Offset: HDPID-HDP
	Length: 13
<b>Storage Attributes:</b>	Subpool: 0 Key: 1 Residency: Virtual and real storage anywhere in the private storage of the JES2 address space.
<b>Size:</b>	NITMINL during JES2 initialization NITMINL plus NITPL*\$NUMPATH (later) NITCSIZ for checkpointed NITs (NITCs)
<b>Created by:</b>	JES2 initialization
<b>Pointed to by:</b>	\$NITABLE field of the \$HCT data area \$NITCPTR 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
<b>Serialization:</b>	JES2 main task serialization for most fields. There are some fields that can only be used under the subtask in "full path" processing. \$QSUSE is required to access the NITCs.
<b>Function:</b>	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'5'	0	NITVERS	"5" 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
		1.... ....		NITFLAGE	"B'10000000" SECURE signon required
		.1.. ....		NITFLAGA	"B'01000000" AUTO DIAL BSC LINE
		..1. ....		NITFLAGX	"B'00100000" EXCLUSIVE CONNECTION
		.... 1...		NITFLAGR	"B'00001000" NODE RESTRICTED FROM LOCAL COMMANDS
		.... .1..		NITFLAGJ	"B'00000100" NODE RESTRICTED FROM JOB COMMANDS

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
		.... ...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
		.... ...1		NIT2DIR	"B'00000001" Only allow direct connection to node
16	(10)	BITSTRING	1	NITFLG3	Flag byte 3
		1... ....		NIT3HRDT	"B'10000000" Node has STATUS=NODE RDT
		.1... ....		NIT3ANJE	"B'01000000" Automatically start NJE
17	(11)	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
18	(12)	SIGNED	2	NITANINT	Restart interval (minutes)
20	(14)	SIGNED	4	NITANTIM	Disconnect time (STCK)
24	(18)	CHARACTER	8	NITPASS	Password expected from node
32	(20)	CHARACTER	8	NITSPASS	Password sent to node
40	(28)	BITSTRING	1	NITCMPCT	COMPACTION TABLE ID
41	(29)	BITSTRING	1		Reserved
42	(2A)	SIGNED	2	NITREST	DEFAULT APPL RESISTANCE
44	(2C)	SIGNED	4	(0)	
44	(2C)	ADDRESS	4	NITNSACT	Ptr to related NSACT entry
48	(30)	ADDRESS	4	NITNXTSB	Ptr to next NIT in subnet
52	(34)	CHARACTER	8	NITSUBST	Subnet name
60	(3C)	CHARACTER	8	NITLMODE	Default VTAM logmode
68	(44)	SIGNED	2	NITLINE	Dedicated line number
70	(46)	SIGNED	2	NITNSRV	NJE Server number
70	(46)	X'48'	0	NITMINL	"*-NIT" Minimum (INIT) NIT elmt len
72	(48)	ADDRESS	4	NITNAT	Chain of related NATs
76	(4C)	CHARACTER	8	NITSECLB	SECLABEL of node (SDSF use)

Comment

-----  
The following 3 fields are used by full path.  
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End of Comment

84	(54)	ADDRESS	4	NITNITPN	Next NIT in full path chain
88	(58)	ADDRESS	4	NITNITPP	Prev NIT in full path chain
92	(5C)	ADDRESS	4	NITBNITP	Addr of best unexplored NPMNITP
96	(60)	ADDRESS	4	NITRESV3	Reserved for future use
96	(60)	X'64'	0	NITBLEN	"*-NIT" Length of the base NIT
100	(64)	BITSTRING	1	NITPATH1	First path information

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NITPSECT	INDIVIDUAL PATH FIELDS
0	(0)	ADDRESS	4	NITPLINE	Associated DCT or NIT
0	(0)	X'0'	0	NITL	"NITPLINE-NITPSECT,4" Offset for line

## \$NIT Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
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
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

Comment

Line and node IDs (indexes) shadowed from DCT or  
NIT pointed to by NITPLINE.

End of Comment

16	(10)	SIGNED	2	NITPLNID	DCT or NIT id
18	(12)	SIGNED	2	NITPNID	Intermediate node id (MDCTNODE from DCT)
20	(14)	SIGNED	4	(0)	Ensure fullword alignment
20	(14)	X'14'	0	NITPL	"*-NITPSECT"
20	(14)	X'0'	0	NITP	"NITPSECT,NITPL" Path element
20	(14)	X'14'	0	NITPNEXT	***

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NITC	Checkpointed NIT
0	(0)	X'1'	0	NITCVRSN	"1" Current NITC version
0	(0)	CHARACTER	8	NITCNAME	Node name
8	(8)	CHARACTER	8	NITCSUB	SUBNET name
16	(10)	BITSTRING	4	NITCACAF	Mask of systems that have a path to this node
20	(14)	BITSTRING	1	NITCFLG1	Flags
		1... ....		NITCF1NP	"B'10000000" PATHMGR=NO
		.1.. ....		NITCF1EN	"B'01000000" ENDNODE=YES
		.1. ....		NITCF1PV	"B'00100000" PRIVATE=YES
		...1 ....		NITCF1DI	"B'00010000" DIRECT=YES
21	(15)	BITSTRING	3		Reserved
24	(18)	ADDRESS	4	(2)	Reserved
32	(20)	DBL WORD	8	(0)	Doubleword align
32	(20)	X'20'	0	NITCSIZ	"*-NITC" Length of a NITC

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NITC0	Checkpointed NIT 0
0	(0)	SIGNED	4	NITC0SEQ	Changes sequence

## \$NIT Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
NIT	0		NITPSECT	0	
NITANINT	12		NITR	4	4
NITANTIM	14		NITREST	2A	
NITBLEN	60	64	NITRESV3	60	
NITBNITP	5C		NITSECLB	4C	
NITC	0		NITSF	11	
NITCACAF	10		NITSFHJR	11	8
NITCFLG1	14		NITSFHSR	11	4
NITCF1DI	14	10	NITSFPEN	11	2
NITCF1EN	14	40	NITSFPJR	11	40
NITCF1NP	14	80	NITSFPJT	11	80
NITCF1PV	14	20	NITSFPSR	11	10
NITCMPCT	28	0	NITSFPST	11	20
NITCNAME	0		NITSFREA	11	1
NITCSIZ	20	20	NITSPASS	20	40404040
NITCSUB	8		NITSUBST	34	
NITCVRSN	0	1	NITVERS	0	5
NITC0	0		NIT2ADJ	F	8
NITC0SEQ	0		NIT2DIR	F	1
NITFLAG	E		NIT2ENDN	F	2
NITFLAGA	E	40	NIT2IRST	F	4
NITFLAGD	E	2	NIT2NOPM	F	80
NITFLAGE	E	80	NIT2OWN	F	10
NITFLAGJ	E	4	NIT2PRIV	F	40
NITFLAGR	E	8	NIT2TRAC	F	20
NITFLAGS	E	1	NIT3ANJE	10	40
NITFLAGX	E	20	NIT3HRDT	10	80
NITFLG2	F				
NITFLG3	10				
NITL	0	0			
NITLINE	44				
NITLMODE	3C				
NITLOGN	C				
NITM	D	D			
NITMINL	46	48			
NITMP	E	E			
NITNAT	48				
NITNITPN	54				
NITNITPP	58				
NITNODE	0	40404040			
NITNSACT	2C				
NITNSRV	46				
NITNUM	8	0			
NITNXTSB	30				
NITP	14	0			
NITPASS	18	40404040			
NITPATH1	64				
NITPFLAG	C	0			
NITPFNIT	C	40			
NITPFSTA	C	80			
NITPFSUB	C	20			
NITPL	14	14			
NITPLINE	0				
NITPLNID	10				
NITPMEMB	D				
NITPMEMP	E				
NITPMT	4	FFFFFF			
NITPNID	12				
NITPNEXT	14	14			
NITPPNOD	8				
NITPREST	4				
NITPRINC	A	0			
NITPRILIM	B	F			



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## **\$NJWORK Information**

### **\$NJWORK Programming Interface information**

Programming Interface information

#### **\$NJWORK**

End of Programming Interface information

## Heading Information • \$NJTWORK Map

### \$NJTWORK Heading Information

<b>Common Name:</b>	JES2 Job Transmitter PCE Work Area
<b>Macro ID:</b>	\$NJTWORK
<b>DSECT Name:</b>	PCE (\$NJTWORK is part of the PCE DSECT)
<b>Owning Component:</b>	JES2 (SC1BH)
<b>Eye-Catcher ID:</b>	'PCE' Offset: PCEEYE-PCE Length: 4
<b>Storage Attributes:</b>	Subpool: See \$PCE Key: See \$PCE Residency: See \$PCE
<b>Size:</b>	See symbol JTWPCIEWS for the length of this work area. The overall length of the PCE is stored in field PCELENG.
<b>Created by:</b>	See \$PCE
<b>Pointed to by:</b>	\$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.
<b>Serialization:</b>	Normal PCE dispatch serialization
<b>Function:</b>	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
312	(138)	BITSTRING	8	JTWKEY (0)	JOB AND DATA SET KEYS
312	(138)	BITSTRING	4	JTWJBKEY	JOB IDENTIFIER KEY
316	(13C)	BITSTRING	4	JTWDKEY	DATA SET KEY
320	(140)	DBL WORD	8	JTWEXTPL	\$EXTP PARAMETER LIST AREA
328	(148)	BITSTRING	1	JTWRSRCB	SRCB SAVED FOR ROUTE RECEIVER
329	(149)	BITSTRING	1	JTWRECTP	Saved spanned record type
330	(14A)	SIGNED	2	JTWHDRLN	SAVE AREA FOR JCT HEADER LENGTH
332	(14C)	SIGNED	4	JTWCOUNT	COUNT OF RECORDS TRANSMITTED
336	(150)	ADDRESS	4	JTWSBUF	SMF BUFFER POINTER
340	(154)	ADDRESS	4	JTWD,buf	JCL/SYSIN data buffer
344	(158)	DBL WORD	8	JTWCWKAR (0)	Common Work area

Comment

JTWRECCT and JTWCURRC are for SDSF's use

End of Comment

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
344	(158)	X'1B4'	0	JTWRECCT	"(JTWRCOUN-JTW)+JTCWKAR" Total record count
344	(158)	X'1B8'	0	JTWCURRC	"(JTWCUREC-JTW)+JTCWKAR" Current record count
808	(328)	DBL WORD	8		Reserved
816	(330)	ADDRESS	4	JTWPARM	NODE TABLE ADDRESS
820	(334)	ADDRESS	4		CONTROL BLOCK ADDRESS
824	(338)	ADDRESS	4		ADDRESS OF JQE
828	(33C)	ADDRESS	1		QUEUE TYPE SPECIFIED
829	(33D)	ADDRESS	1		WORK SELECTION TYPE FLAG
830	(33E)	ADDRESS	1		RESERVED FOR FUTURE USE
830	(33E)	X'330'	0	JTWLST	"JTWPARM,*-JTWPARM" QGET PARAMETER LIST
					STORAGE
830	(33E)	X'207'	0	JTWPCEWS	"*-PCEWORK" LENGTH OF PCE WORK AREA

## \$NJNETWORK Cross Reference

Name	Hex Offset	Hex Value
JTWCOUNT		14C
JTWCURRC		158
JTCWKAR		1B8
JTWDSCBUF		158
JTWDKEY		154
JTWEXTPL		13C
JTWHDRNLN		140
JTWJBKEY		14A
JTWKEY		138
JTWLST	33E	330
JTWPARM		330
JTWPCEWS	33E	207
JTWRECCT	158	1B4
JTWRCTP		149
JTWSRCB		148
JTWSBUF		150
PCE		0



## \$NPIPARM Information

### \$NPIPARM Heading Information

**Common Name:** HASPNSNR Parameter list  
**Macro ID:** \$NPIPARM  
**DSECT Name:** NPISPARM  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** none  
**Storage Attributes:**  
 Subpool: any  
 Key: 1  
 Residency: Private storage, Virtual storage below 2GB, real storage anywhere  
**Size:** See NPIPARML  
**Created by:** Callers of HASPNDCN service  
**Pointed to by:**  
**Serialization:** JES2 Main Task  
**Function:** Parameter list for HASPNDCN service in HASPNPM

### \$NPIPARM Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NPISPARM	
0	(0)	CHARACTER	8	NPIPLPAS	LINE PASSWORD
8	(8)	CHARACTER	8	NPIPNPAS	NODE PASSWORD
16	(10)	ADDRESS	4	NPINITA	Other node's NIT address
16	(10)	X'14'	0	NPIPARML	"*-NPISPARM"

## \$NPIPARM Map

## \$NRMWORK Information

### \$NRMWORK Heading Information

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

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

### \$NRMWORK Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	PCE	
312	(138)	DBL WORD	8	NRMCTIME	Current time
320	(140)	DBL WORD	8	NRMWTIME	Next wakeup time
328	(148)	BITSTRING	1	NRMFLAG1	Flags
		1... ....		NRM1CONN	"B'10000000" Attempting auto-connect
		.1... ....		NRM1PAWS	"B'01000000" Pause to let current request complete
		.1... ....		NRM1DBYP	"B'00100000" Device start scan bypassed
329	(149)	BITSTRING	1	NRMBMDSP	\$BLDMMSG DISPER value
330	(14A)	SIGNED	2	NRMANINT	Temporary interval value
332	(14C)	BITSTRING	12	NRMTQE	NRM TQE
344	(158)	DBL WORD	8	NRMDWORK	Work area

Comment

Current control blocks

End of Comment

352	(160)	ADDRESS	4	NRMNIT	Current NIT address
356	(164)	ADDRESS	4	NRMSCK	Current SCK address
360	(168)	ADDRESS	4	NRMAPT	Current APT address

## \$NRMWORK Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
364	(16C)	ADDRESS	4	NRMLNDCT	Current Line DCT address
368	(170)	ADDRESS	4	NRMLGDCT	Current Logon DCT address
372	(174)	ADDRESS	4	NRMNSDCT	Current NETSRV DCT address
372	(174)	X'160'	0	NRMCBS	"NRMNIT,*-NRMNIT" All control blocks
Comment					
SNASNET parms					
End of Comment					
376	(178)	SIGNED	4	NRMSSNET (0)	
376	(178)	SIGNED	4	NRMSSNLN	Line address
380	(17C)	SIGNED	4	NRMSSNNM	APPL id address
384	(180)	SIGNED	4	NRMSSNMG	Returned message address
Comment					
TCPSNET parms					
End of Comment					
388	(184)	SIGNED	4	NRMTSNET (0)	
388	(184)	SIGNED	4	NRMTSNLN	Line address
392	(188)	SIGNED	4	NRMTSNNM	SOCKET name address
396	(18C)	SIGNED	4	NRMTSNMG	Returned message address
Comment					
HASPNSR parms					
End of Comment					
400	(190)	BITSTRING	20	NRMNSNRP	HASPNSR pams
420	(1A4)	SIGNED	4	NRMBLDM (0)	Control block ID
424	(1A8)	BITSTRING	4		Console ID
428	(1AC)	ADDRESS	4		Address of the CART
432	(1B0)	ADDRESS	4		Pointer for JOBID
436	(1B4)	ADDRESS	4		Control block address
440	(1B8)	ADDRESS	4		Display routine address
444	(1BC)	ADDRESS	4	(6)	6 word work area
468	(1D4)	ADDRESS	4		Caller's R11 value
472	(1D8)	BITSTRING	2		ROUT code for Message
474	(1DA)	BITSTRING	2		Not used
476	(1DC)	CHARACTER	4		Message ID
480	(1E0)	CHARACTER	1		Separator character
481	(1E1)	ADDRESS	1		Flag byte 1
482	(1E2)	ADDRESS	1		'DISPER'
483	(1E3)	ADDRESS	1		Flag byte 2
484	(1E4)	ADDRESS	1		Flag byte 3
485	(1E5)	CHARACTER	8		Symbolic name of dest.
493	(1ED)	BITSTRING	15		Not used
508	(1FC)	ADDRESS	4	(0)	Ensure multiple of 4
508	(1FC)	ADDRESS	2		
508	(1FC)	CHARACTER	132	NRMMSG	Returned message area
640	(280)	DBL WORD	8	(0)	Ensure alignment
640	(280)	X'148'	0		"*-PCEWORK"

**\$NRMWORK Cross Reference**

Name	Hex Offset	Hex Value
NRMANINT	14A	
NRMAPT	168	
NRMBLDM	1A4	C2D3C440
NRMBMDSP	149	
NRMCBS	174	160
NRMCTIME	138	
NRMDWORK	158	
NRMFLAG1	148	
NRMLGDCT	170	
NRMLNDCT	16C	
NRMMSG	1FC	
NRMNIT	160	
NRMNSDCT	174	
NRMNSNRP	190	
NRMPCEWS	280	148
NRMSCK	164	
NRMSSNET	178	
NRMSSNLN	178	
NRMSSNMG	180	
NRMSSNNM	17C	
NRMTQE	14C	
NRMTSNET	184	
NRMTSNLN	184	
NRMTSNMG	18C	
NRMTSNNM	188	
NRMWTIME	140	
NRM1CONN	148	80
NRM1DBYP	148	20
NRM1PAWS	148	40
PCE	0	



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## **\$NSACT Information**

### **\$NSACT Programming Interface information**

Programming Interface information

#### **\$NSACT**

End of Programming Interface information

## Heading Information • \$NSACT Map

### \$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: NSAID-NSACT  
    Length: L'NSAID  
**Storage Attributes:** Subpool: 0  
    Key: 1  
    Residency: Virtual storage can be anywhere in 31 bit storage. Real storage can be anywhere in 64 bit storage.  
**Size:** See NSALEN  
**Created by:** NSETSUBS routine in HASPNPM  
**Pointed to by:** PCTNSAAQ fields of the PCT data area  
    NSANEXT fields of the NSACT data area  
**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

## \$NSCT Information

### \$NSCT Heading Information

**Common Name:** NJE Server Control Table  
**Macro ID:** \$NSCT  
**DSECT Name:** NSCT  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'NSCT'  
     Offset: NSCID-NSC  
     Length: 4  
**Storage Attributes:** Subpool: n/a  
     Key: 1  
     Residency: In a JES2 NJE Server address space  
**Size:** See NSCTLEN  
**Created by:** HASCNJAS  
**Pointed to by:** NSSNSCT field of the \$NSST data area  
                   NSWNNSCT field of the \$NSWE data area  
                   TCTJSRDA field of the IAZYTCT data area  
**Serialization:**  
**Function:** Anchors the main parameters in a JES2 NJE Server address space

### \$NSCT Map

#### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NSCT	
0	(0)	CHARACTER	4	NSCID	NSCT eyecatcher
4	(4)	ADDRESS	1	NSCVER	NSCT version number
4	(4)	X'1'	0	NSCVERN	"1" NSCT version
5	(5)	BITSTRING	3		Reserved
8	(8)	ADDRESS	4	NSCSPCL	PCL address of server PCL
12	(C)	ADDRESS	4	NSCHCCT	HCCT address
16	(10)	ADDRESS	4	NSCTCT	IAZYTCT address
20	(14)	ADDRESS	4	NSCPALET	ALET for PCL data space
24	(18)	ADDRESS	4	NSCTALET	ALET for TBUF data space
28	(1C)	ADDRESS	4	NSCNALET	ALET for NIT data space
32	(20)	SIGNED	4	NSCTECB	ECB
36	(24)	BITSTRING	3	NSCDEVID	Device id of server
39	(27)	BITSTRING	1		Reserved
40	(28)	BITSTRING	4		Reserved
44	(2C)	ADDRESS	4	NSCNSSTH	Head of NSST chain
48	(30)	ADDRESS	4	NSCNSSTT	Tail of NSST chain
52	(34)	ADDRESS	4	NSCNSWEH	Head of subtask chain
56	(38)	ADDRESS	4	NSCNSWET	Tail of subtask chain
60	(3C)	ADDRESS	4	NSCGPWEH	Head of GP subtask chain
64	(40)	ADDRESS	4	NSCGPWET	Tail of GP subtask chain
68	(44)	ADDRESS	4	NSCGPQEH	Head of GP subtask work q
72	(48)	ADDRESS	4	NSCGPQET	Tail of GP subtask work q
76	(4C)	ADDRESS	4	NSCNCPE	Address of POST element
80	(50)	ADDRESS	2	NSCGPCNT (2)	Initial/current subtask counts for GP subtasks
84	(54)	ADDRESS	2	NSCRQCNT (2)	Initial/current subtask counts for request subtask
88	(58)	ADDRESS	4	NSCBUFQ	Buffers queued for garbage collection
92	(5C)	SIGNED	4	NSCGPECB	GP subtask restart ECB
96	(60)	ADDRESS	4	(6)	Reserved
120	(78)	DBL WORD	8	NSCDWORK	Doubleword work area
128	(80)	SIGNED	4	NSCTSAVE (18)	Save area for init routine and server main task
200	(C8)	BITSTRING	600	NSCTTRCA	TRCA
800	(320)	DBL WORD	8	NSCTWORK (0)	Working storage

## \$NSCT Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
<hr/>					
Parameter list for ESTAEX macro					
End of Comment					
800	(320)	SIGNED	4	(0)	
800	(320)	ADDRESS	1	NSCESTAE	FLAGS FOR ESTAEX
801	(321)	ADDRESS	1		SECOND FLAG BYTE
802	(322)	ADDRESS	1		THIRD FLAG BYTE
803	(323)	ADDRESS	1		VERSION NUMBER
804	(324)	ADDRESS	4		TOKEN VALUE AREA
808	(328)	ADDRESS	4		PARM. LIST ADDR. NOT SPECIFIED
812	(32C)	ADDRESS	4		ALET FOR PARM LIST
816	(330)	ADDRESS	4		EXIT ADDR NOT SPEC'D
816	(330)	X'14'	0	NSCESTLN	"*-NSCESTAE" Length of list form
Comment					
<hr/>					
Parameter list for IDENTIFY macro					
End of Comment					
800	(320)	SIGNED	4	NSCIDENT (0)	IDENTIFY parm list (see IEAVID00 for details)
800	(320)	ADDRESS	4	NSCID_ADDR	Entry address
804	(324)	CHARACTER	8	NSCID_NAME	Entry name
812	(32C)	BITSTRING	1	NSCID_AMODE	AMODE indicator (X'02' --> 31 bit)
813	(32D)	BITSTRING	3		Reserved
816	(330)	SIGNED	4	NSCID_XTLNG	Length of the extent list
820	(334)	SIGNED	4	NSCID_XTCNT	Number of extents
824	(338)	SIGNED	4	NSCID_XTLEN	Length of extent
828	(33C)	ADDRESS	4	NSCID_XTADR	Start of 1st extent
828	(33C)	X'10'	0	NSCID_XTSIZ	"*-NSCID_XTLNG" Length of extent list area
Comment					
<hr/>					
Parameter list for STIMERM macro					
End of Comment					
800	(320)	ADDRESS	4	NSCDECB(2)	ECB list
808	(328)	SIGNED	4	NSCDSTID	STIMERM ID=id-area
812	(32C)	SIGNED	4	NSCDTECB	STIMER ECB
Comment					
<hr/>					
MACDATE = 08/19/88					
End of Comment					
816	(330)	BITSTRING	24	NSCDSTMS	REMOTE STIMERM SET PARM LIST
Comment					
<hr/>					
MACDATE = 08/19/88					
End of Comment					
840	(348)	BITSTRING	16	NSCDSTMC	REMOTE STIMERM TEST/CANCEL PARM LIST

## Offsets

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

----- Parameter list for ENFREQ macro -----

				End of Comment	
800	(320)	ADDRESS	4	NSCEECBL (2)	ECB list
808	(328)	SIGNED	4	NSCETOKN	Token for ENFREQ DELETE
812	(32C)	SIGNED	4	NSCENFPT	ENFPTR equated to this
816	(330)	SIGNED	4	NSCENFRQ (0)	START OF ENF PARAMETER LIST
816	(330)	ADDRESS	2		LENGTH OF ENF PARAMETER LIST
818	(332)	ADDRESS	2		REQUESTED ENF ACTION
820	(334)	ADDRESS	4		EVENT CODE
824	(338)	ADDRESS	1		FLAG FIELD
825	(339)	ADDRESS	1		MASK FOR COMPARING QUALIFIERS
826	(33A)	ADDRESS	1		KEY FOR FREEPRM
827	(33B)	ADDRESS	1		SUBPOOL FOR FREEPRM
828	(33C)	ADDRESS	4		QUALIFIER
832	(340)	ADDRESS	4		EXIT ROUTINE ADDRESS
836	(344)	ADDRESS	4		Address of caller's parameters
840	(348)	ADDRESS	4		TOKEN
844	(34C)	ADDRESS	4		Length of caller's parameters
848	(350)	ADDRESS	2		VERSION OF PARM LIST
850	(352)	ADDRESS	2		RESERVED FIELD
852	(354)	ADDRESS	4		RETURN ADDRESS
856	(358)	CHARACTER	8		ESTABLISHER NAME
864	(360)	CHARACTER	8		LISTEN EXIT NAME
872	(368)	ADDRESS	4		LISTENER NUMBER (RETURNED)
876	(36C)	CHARACTER	4		SPECIAL EXIT RETURN CODE
880	(370)	BITSTRING	32		Bit-mapped qualifier
912	(390)	ADDRESS	1		Flag byte
913	(391)	BITSTRING	3		Reserved
916	(394)	ADDRESS	4		Reserved
916	(394)	X'68'	0	NSCENFLN	"*-NSCENFRQ"

----- Comment -----

----- WTO parameter list -----

				End of Comment	
1056	(420)	SIGNED	4	NSCWTOPL (0)	
1056	(420)	ADDRESS	2		TEXT LENGTH
1058	(422)	BITSTRING	2		MCSFLAGS
1060	(424)	CHARACTER	53		
1185	(4A1)	ADDRESS	1		VERSION LEVEL
1186	(4A2)	BITSTRING	1		MISCELLANEOUS FLAGS
1187	(4A3)	ADDRESS	1		REPLY LENGTH
1188	(4A4)	ADDRESS	1		LENGTH OF WPX
1189	(4A5)	BITSTRING	2		EXTENDED MCS FLAGS
1191	(4A7)	ADDRESS	2		RESERVED
1193	(4A9)	ADDRESS	4		REPLY BUFFER ADDRESS
1197	(4AD)	ADDRESS	4		REPLY ECB ADDRESS
1201	(4B1)	ADDRESS	4		CONNECT ID
1205	(4B5)	BITSTRING	2		DESCRIPTOR CODES
1207	(4B7)	ADDRESS	2		RESERVED
1209	(4B9)	BITSTRING	16		
1225	(4C9)	BITSTRING	2		MESSAGE TYPE
1227	(4CB)	ADDRESS	2		MESSAGE'S PRIORITY
1229	(4CD)	CHARACTER	8		JOB ID
1237	(4D5)	CHARACTER	8		JOB NAME

## \$NSCT Cross Reference

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
1245	(4DD)	CHARACTER	8		RETRIEVAL KEY
1253	(4E5)	ADDRESS	4		TOKEN FOR DOM
1257	(4E9)	ADDRESS	4		CONSOLE ID
1261	(4ED)	CHARACTER	8		SYSTEM NAME
1269	(4F5)	CHARACTER	8		CONSOLE NAME
1277	(4FD)	ADDRESS	4		REPLY CONSOLE NAME/ID ADDR
1281	(501)	ADDRESS	4		CART ADDRESS
1285	(505)	ADDRESS	4		WSPARM ADDRESS
1285	(505)	X'509'	0	NSCTLEN	"*-NSCT" Length of NSCT

## \$NSCT Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
NSCBUFQ	58		NSCVERN	4	1
NSCDECBL	320		NSCWTOPL	420	
NSCDEVID	24				
NSCDSTID	328				
NSCDSTMC	348	0			
NSCDSTMS	330	0			
NSCDTECB	32C				
NSCDWORK	78				
NSCEECBL	320				
NSCENFLN	394	68			
NSCENFPT	32C				
NSCENFRQ	330				
NSCESTAE	320				
NSCESTLN	330	14			
NSCETOKN	328				
NSCGPCNT	50	0			
NSCGPECB	5C				
NSCGPQEHB	44				
NSCGPQET	48				
NSCGPWEH	3C				
NSCGPWET	40				
NSCHCCT	C				
NSCID	0	D5E2C3E3			
NSCID_ADDR	320				
NSCID_AMODE	32C				
NSCID_NAME	324				
NSCID_XTADR	33C				
NSCID_XTCNT	334				
NSCID_XTLEN	338				
NSCID_XTLNG	330				
NSCID_XTSIZ	33C	10			
NSCIDENT	320				
NSCNALET	1C				
NSCNCP	4C				
NSCNSSTH	2C				
NSCNSSTT	30				
NSCNSWEH	34				
NSCNSWET	38				
NSCPALET	14				
NSCRQCNT	54	0			
NSCSPCL	8				
NSCT	0				
NSCTALET	18				
NSCTCT	10				
NSCTTECB	20				
NSCTLEN	505	509			
NSCTSAVE	80				
NSCTTRCA	C8				
NSCTWORK	320				
NSCVER	4				

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## **\$NSRWORK Information**

### **\$NSRWORK Programming Interface information**

Programming Interface information

#### **\$NSRWORK**

End of Programming Interface information

## Heading Information • \$NSRWORK Map

### \$NSRWORK Heading Information

<b>Common Name:</b>	JES2 SYSOUT Receiver PCE Work Area
<b>Macro ID:</b>	\$NSRWORK
<b>DSECT Name:</b>	PCE (\$NSRWORK is part of the PCE DSECT)
<b>Owning Component:</b>	JES2 (SC1BH)
<b>Eye-Catcher ID:</b>	'PCE' Offset: PCEEYE-PCE Length: 4
<b>Storage Attributes:</b>	Subpool: See \$PCE Key: See \$PCE Residency: See \$PCE
<b>Size:</b>	See symbol SRWPCEWS for the length of this work area. The overall length of the PCE is stored in field PCELENG.
<b>Created by:</b>	See \$PCE
<b>Pointed to by:</b>	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)
<b>Serialization:</b>	Normal PCE dispatch serialization
<b>Function:</b>	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
312	(138)	X'138'	0	SRWINIT	*** START OF DATA TO BE ZEROED AT INITIALIZATION
312	(138)	BITSTRING	1	SRWSRCB	SRCB OF RECEIVED RECORD
313	(139)	SIGNED	1	SRWRTRY	IDENTIFIES RETRY POINT TO SET IF AN ABEND OCCURS
313	(139)	X'0'	0	SRWRSUSP	"0" RETRY TO SUSPEND RECEIVER
313	(139)	X'1'	0	SRWRANC	"1" RETRY TO CANCEL CURRENT JOB
314	(13A)	SIGNED	1	SRWRETSV	PLACE TO SAVE CURRENT RETRY POINT INDICATOR
315	(13B)	BITSTRING	10		RESERVED

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
328	(148)	ADDRESS	4	SRWIOT1	1ST (ALLOCATION) IOT POINTER
332	(14C)	ADDRESS	4	SRWIOTC	CURRENT IOT POINTER
336	(150)	ADDRESS	4	SRWENIOT	END-OF-CURRENT-IOT POINTER
340	(154)	ADDRESS	4	SRWIOTCN	LAST NORMAL IOT ADDRESS
344	(158)	ADDRESS	4	SRWIOTSH	LAST SPIN IOT ADDRESS
348	(15C)	ADDRESS	4	SRWHMTTR	MTTR OF BUFFER 1
352	(160)	ADDRESS	4	SRWHDSAV	SAVE AREA FOR BUFFER DISPL
356	(164)	ADDRESS	4	SRWSCRPT	SCR ENTRY POINTER
360	(168)	ADDRESS	4	SRWSCRST	SCR START ADDRESS
364	(16C)	ADDRESS	4	SRWENBUF	END-OF-BUFFER POINTER
368	(170)	ADDRESS	4	SRWENREC	END-OF-INPUT-RECORD POINTER
372	(174)	ADDRESS	4	SRWNXTRC	POINTER TO NEXT REC IN BUFFER
376	(178)	ADDRESS	4	SRWPREVR	POINTER TO RECORD HEADER OF CURRENT SPANNED RECORD SEGMENT
380	(17C)	ADDRESS	4	SRWGGST	ADDRESS OF GROUPING STRINGS OBJECT
384	(180)	SIGNED	4	(0)	ENSURE FULLWORD ALIGNMENT
384	(180)	CHARACTER	8	SRWRSBTL	SWBTU POINTER LIST ENTRY FOR SWBTUREQ RETRIEVE SERVICE
392	(188)	BITSTRING	8	SRWTABSV	MASTER TAB SAVE AREA
400	(190)	SIGNED	4	SRWTSAVE (6)	TEMPORARY SAVE AREA
424	(1A8)	BITSTRING	1	SRWTXTLN	TEXT LENGTH SAVE AREA
425	(1A9)	BITSTRING	1	SRWMVCLN	EXECUTE-MOVE LENGTH FOR TEXT
426	(1AA)	SIGNED	2	SRWSRTL	CUMULATIVE SEGMENT LENGTH
428	(1AC)	SIGNED	2	SRWSTXTL	TOTAL SPAN TEXT LENGTH
430	(1AE)	BITSTRING	2		Reserved for future use
432	(1B0)	SIGNED	8	SRWRECN	Basic data set record count
440	(1B8)	SIGNED	4	SRWCOUNT	COUNT OF RECORDS RECEIVED
444	(1BC)	ADDRESS	4	SRWSBUF	SMF BUFFER POINTER
448	(1C0)	SIGNED	4	SRWRROUTE	Route cd for work selection
452	(1C4)	CHARACTER	8	SRWUSER	User ID for work selection
460	(1CC)	BITSTRING	1		Reserved for future use
460	(1CC)	X'95'	0	SRWINITL	"*-SRWINIT" LENGTH FOR INITIAL CLEAR
464	(1D0)	DBL WORD	8	SRWCWKAR (0)	Common work area

Comment

SRWRECCT and SRWCURRC are for SDSF's use

End of Comment

464	(1D0)	X'22C'	0	SRWRECCT	"(SRWRCOUN-SRW)+SRWCWKAR" Total record count
464	(1D0)	X'230'	0	SRWCURRC	"(SRWCUREC-SRW)+SRWCWKAR" Current record count

Comment

INPUT AREA FOR RTAM RECORDS

End of Comment

1016	(3F8)	SIGNED	2	SRWINPUT	ALIGNMENT + SCAN TERMINATOR
1018	(3FA)	BITSTRING	274		Input Data Area

Comment

NORMAL (UNSPANNED) RECORD

First mapping of SRWINPUT

End of Comment

1018	(3FA)	BITSTRING	1	SRWLRECL	LOGICAL RECORD LENGTH
1019	(3FB)	BITSTRING	1	SRWCCTL	CARRIAGE CTL (OR TEXT IF NO CC)
1019	(3FB)	X'3FC'	0	SRWTEXT	"" TEXT
1019	(3FB)	X'2'	0	SRWLEN1	"*-SRWINPUT"

## \$NSRWORK Cross Reference

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
Comment					
<hr/>					
Second mapping of SRWINPUT Spanned record (first part)					
End of Comment					
1018	(3FA)	BITSTRING	1	SRWSEGL	TEXT LENGTH, THIS SEGMENT
1019	(3FB)	SIGNED	2	SRWSRECL	LRECL FOR ENTIRE SPANNED RECORD
1021	(3FD)	BITSTRING	1	SRWSCCTL	CARRIAGE CTL (OR TEXT IF NO CC)
1021	(3FD)	X'3FE'	0	SRWSTXT1	"" START OF TEXT
1021	(3FD)	X'4'	0	SRWLEN2	"-SRWINPUT"
Comment					
<hr/>					
Third mapping of SRWINPUT Spanned record (Second & subsequent parts)					
End of Comment					
1018	(3FA)	BITSTRING	1		TEXT LENGTH, THIS SEGMENT
1018	(3FA)	X'3FB'	0	SRWSTXT2	"" START OF TEXT
1018	(3FA)	X'1'	0	SRWLEN3	"-SRWINPUT"
Comment					
<hr/>					
End of SRWINPUT mappings.					
End of Comment					
1020	(3FC)	ADDRESS	2	(0)	Ensure that SRWINPUT
1020	(3FC)	ADDRESS	2	(0)	is larger than each
1020	(3FC)	ADDRESS	2	(0)	of the individual
1292	(50C)	SIGNED	4	SRWRECNT	Sysout record count
1296	(510)	SIGNED	4	SRWPGCT	Sysout page count
1300	(514)	SIGNED	4	SRWBYTCT	Sysout byte count
1300	(514)	X'3E0'	0	SRWPCEWS	"-PCEWORK" LENGTH OF PCE WORK AREA

## \$NSRWORK Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
PCE	0		SRWIOT1	148	
SRWBYTCT	514	0	SRWLEN1	3FB	2
SRWCCTL	3FB		SRWLEN2	3FD	4
SRWCOUNT	1B8		SRWLEN3	3FA	1
SRWCURRC	1D0	230	SRWLRECL	3FA	
SRWCWKAR	1D0		SRWMVCLN	1A9	
SRWENBUF	16C		SRWNXTRC	174	
SRWENIOT	150		SRWPCEWS	514	3E0
SRWENREC	170		SRWPGCT	510	0
SRWGGST	17C		SRWPREVR	178	
SRWHDSAVER	160		SRWRCANC	139	1
SRWHMTTR	15C		SRWRECCT	1D0	22C
SRWINIT	138	138	SRWRECN	1B0	
SRWINITL	1CC	95	SRWRECNT	50C	0
SRWINPUT	3FA		SRWRETRY	139	
SRWIOTC	14C		SRWRETSV	13A	
SRWIOTCN	154		SRWROUTE	1C0	
SRWIOTSH	158		SRWRSBTL	180	

Name	Hex Offset	Hex Value
SRWRSUSP	139	0
SRWSBUF	1BC	
SRWSCCTL	3FD	
SRWSCRPT	164	
SRWSCRST	168	
SRWSEGL	3FA	
SRWSRCB	138	
SRWSRECL	3FB	
SRWSRTL	1AA	
SRWSTXTL	1AC	
SRWSTXT1	3FD	3FE
SRWSTXT2	3FA	3FB
SRWTABSV	188	
SRWTEXT	3FB	3FC
SRWTSAVE	190	
SRWTXTLN	1A8	
SRWUSER	1C4	



## \$NSST Information

### \$NSST Heading Information

**Common Name:** NJE Server Subtask Table  
**Macro ID:** \$NSST  
**DSECT Name:** NSST  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'NSST'  
**Storage Attributes:**  
**Size:**  
**Created by:** HASCNJEX (Subtask initialization routine from IAZNJTCP)  
**Pointed to by:**  
**Serialization:**  
**Function:** Contains the relevant data for a single NJE connection in the NETSRV data space.

### \$NSST Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NSST	
0	(0)	CHARACTER	4	NSSID	NSST eyecatcher
4	(4)	ADDRESS	1	NSSVER	NSST version number
4	(4)	X'1'	0	NSSVERN	"1" NSST version
5	(5)	BITSTRING	3		Reserved
8	(8)	ADDRESS	4	NNLPCL	PCL address of line PCL
12	(C)	ADDRESS	4	NSSTSCT	IAZTSCT address
16	(10)	ADDRESS	4	NNNSCT	NSCT address
20	(14)	ADDRESS	4	NSSNEXT	Next NSS chain pointer
24	(18)	ADDRESS	4	NSSPREV	Prev NSS chain pointer
28	(1C)	BITSTRING	3	NSSDEVID	Device id of line
31	(1F)	BITSTRING	1	NSSFLAG1	Flags
		1.... ....		NSS1DEL	"B'10000000" NSST should be freed
		.1.... ....		NSS1WJ2	"B'01000000" Subdevices waiting for JES2 to come back
		..1.... ....		NSS1NRTY	"B'00100000" Non-retryable error
		...1.... ....		NSS1ACTV	"B'00010000" NSST is active
32	(20)	ADDRESS	4	NNLTQH	Line request TBUF q head
36	(24)	ADDRESS	4	NNLTQT	Line request TBUF q tail
40	(28)	SIGNED	4	NNLTCB	ECB for line request response
44	(2C)	BITSTRING	16	NSSTTOK	Subtask TCB token
60	(3C)	SIGNED	4	NSSTSAVE (18)	Save area for init routine and server main task
Comment					

Pointers to work areas, by stream

End of Comment					
132	(84)	ADDRESS	4	NSSTJRWA (7)	Pointers to up to 7 JRWs
160	(A0)	ADDRESS	4	NSSTJTWA (7)	Pointers to up to 7 JTWs

## \$NSST Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
188	(BC)	ADDRESS	4	NSSTSRWA (7)	Pointers to up to 7 SRWs
216	(D8)	ADDRESS	4	NSSTSTWA (7)	Pointers to up to 7 STWs
244	(F4)	ADDRESS	4	NSSTDVWA	Pointer to all work areas
248	(F8)	SIGNED	4	NSSTDVWL	Length of all work areas
252	(FC)	ADDRESS	4	NSSTACWA	Addr of current NJEWORK
256	(100)	SIGNED	2	NSSTTRSQ	\$NJETRC sequence
258	(102)	SIGNED	2		Reserved
260	(104)	ADDRESS	4	NSSTAREA	Address of rolling trace area for (non-subdevice related)
264	(108)	SIGNED	4	NSSTLOCK	NSST Lock word
268	(10C)	BITSTRING	600	NSSTTRCA	TRCA
868	(364)	ADDRESS	4	NSSTLREQ	Address of LREQ TBUF (when Line REQuest "in progress")
872	(368)	DBL WORD	8	NSSTWORK (0)	Working storage

Comment

### Parameter list for ESTAEX macro

End of Comment					
872	(368)	SIGNED	4	(0)	
872	(368)	ADDRESS	1	NSSESTAE	FLAGS FOR ESTAEX
873	(369)	ADDRESS	1		SECOND FLAG BYTE
874	(36A)	ADDRESS	1		THIRD FLAG BYTE
875	(36B)	ADDRESS	1		VERSION NUMBER
876	(36C)	ADDRESS	4		TOKEN VALUE AREA
880	(370)	ADDRESS	4		PARM. LIST ADDR. NOT SPECIFIED
884	(374)	ADDRESS	4		ALET FOR PARM LIST
888	(378)	ADDRESS	4		EXIT ADDR NOT SPEC'D
888	(378)	X'14'	0	NSSESTLN	"*-NSSESTAE" Length of list form

Comment

### Parameter list for STIMERM macro

End of Comment					
872	(368)	ADDRESS	4	NSSDECBL (2)	ECB list
880	(370)	SIGNED	4	NSSDSTID	STIMERM ID=id-area
884	(374)	SIGNED	4	NSSDTECB	STIMER ECB

Comment

MACDATE = 08/19/88

End of Comment					
888	(378)	BITSTRING	24	NSSDSTMS	REMOTE STIMERM SET PARM LIST

Comment

MACDATE = 08/19/88

End of Comment					
912	(390)	BITSTRING	16	NSSDSTMC	REMOTE STIMERM TEST/CANCEL PARM LIST

Comment

### Parameter list for TCBTOKEN macro

End of Comment

## Offsets

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

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End of Comment

872	(368)	SIGNED	4	NSSTCBTK (0)	
872	(368)	CHARACTER	16	(0)	TCB TOKEN (INPUT/OUTPUT)
872	(368)	BITSTRING	8		
880	(370)	SIGNED	4		
884	(374)	ADDRESS	4		
888	(378)	ADDRESS	4		ASCB ADDRESS (INPUT)
892	(37C)	SIGNED	4	(0)	FLAGS (INPUT)
892	(37C)	SIGNED	1		TYPE OF TCBTOKEN REQUEST
893	(37D)	SIGNED	3		RESERVED
1128	(468)	X'468'	0	NSSTLEN	"*-NSST" Length of NSST

## \$NSST Cross Reference

Name	Offset	Hex	Hex Value
NSSDECBL		368	
NSSDEVID		1C	
NSSDSTID		370	
NSSDSTM C	390	0	
NSSDSTMS	378	0	
NSSDTECB		374	
NSSESTAE		368	
NSSESTLN	378	14	
NSSFLAG1		1F	
NSSID	0	D5E2E2E3	
NSSLPCL		8	
NSSLTECB		28	
NSSLTQH		20	
NSSLTQT		24	
NSSNEXT		14	
NSSNSCT		10	
NSSPREV		18	
NSST		0	
NSSTACWA		FC	
NSSTAREA		104	
NSSTCBTK		368	
NSSTDVWA		F4	
NSSTDVWL		F8	
NSSTJRWA		84	
NSSTJTWA		A0	
NSSTLEN	468	468	
NSSTLOCK		108	
NSSTLREQ		364	
NSSTS AVE		3C	
NSSTS CT		C	
NSSTS RWA		BC	
NSSTSTWA		D8	
NSSTTRCA		10C	
NSSTTRS Q		100	
NSSTTTOK		2C	
NSSTWORK		368	
NSSVER		4	
NSSVERN	4	1	
NSS1ACTV	1F	10	
NSS1DEL	1F	80	
NSS1NRTY	1F	20	
NSS1WJ2	1F	40	



---

## **\$NSTWORK Information**

### **\$NSTWORK Programming Interface information**

Programming Interface information

#### **\$NSTWORK**

End of Programming Interface information

## Heading Information • \$NSTWORK Map

### \$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
312	(138)	X'138'	0	STWINIT	*** START OF DATA TO BE ZEROED AT INITIALIZATION
312	(138)	SIGNED	2	STWNODE	DESTINATION NODE FOR CURRNT JOB
314	(13A)	BITSTRING	1	STWDCTF	FLAGS TO BE MOVED TO DCT
315	(13B)	BITSTRING	1	STWJQEF	FLAGS TO BE MOVED TO JQE
316	(13C)	BITSTRING	1	STWFLAG2	SPOOL OFFLOAD FLAG BYTE
		1.... ....		STW\$HCQ	"B'10000000" DS FOUND ON HARDCPY QUEUE

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
		.1... ....		STW\$NODH	"B'01000000" This dataset header not to be sent (exit from multi-dest mode)
317	(13D)	BITSTRING 1... ....	1	STWFLAG4 STW4JHS	General use flag byte "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
318	(13E)	BITSTRING	1	STWJQEF3	Flags t/b moved to JQEFLAG3
319	(13F)	BITSTRING	1		Reserved for future use
320	(140)	ADDRESS	4	STWSPINJ	CURRENT SPIN JOE ADDRESS
324	(144)	ADDRESS	4	STWDDBUF	DATA SET BUFFER ADDRESS
328	(148)	ADDRESS	4	STWENBUF	END-OF-BUFFER ADDR FOR COMPARISON
332	(14C)	ADDRESS	4	STWHDBUF	DATA SET HEADER BUFFER ADDRESS
336	(150)	ADDRESS	4	STWHDTTR	MTTR OF BLOCK IN STWHDBUF

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

340	(154)	SIGNED	2	STWPSWBL	Total size of PDDB SWBTUs
342	(156)	SIGNED	2	STWJSWBL	Total size of JOE SWBTUs
344	(158)	SIGNED	2	STWPLSIZ	Size of SWBTU merge or splice pointer list entry
346	(15A)	SIGNED	2	STWMRGLN	Length of merged SWBTU storage area
348	(15C)	ADDRESS	4	STWSWBUF	PDDB SWBIT buffer chain
352	(160)	ADDRESS	4	STWJSWBF	JOE SWBIT buffer chain
356	(164)	ADDRESS	4	STWSWMRG	Address of \$SWBMERG parameter list
360	(168)	ADDRESS	4	STWMRGTU	Address of merged SWBTU storage area
364	(16C)	ADDRESS	4	STWSPLIC	Addr of spliced SWBTU
368	(170)	ADDRESS	4	STWIPSWB	Address of merged SWBTU (after IPADDR processing)
372	(174)	SIGNED	2	STWSPLIL	Length of the spliced SWBTU
374	(176)	SIGNED	2	STWIPLLEN	Length of the IP SWB area
376	(178)	SIGNED	2	STWIPSWL	Length of the merged SWBTU (after IPADDR processing)
378	(17A)	SIGNED	2		Reserved
380	(17C)	SIGNED	4	STWSCRST	START ADDRESS OF SCR RECORD
384	(180)	SIGNED	4	STWMTTRL	MTTR FOR CURRENT BUFFER
388	(184)	SIGNED	4	STWMTTRC	MTTR OF CURRENT PDDB
392	(188)	SIGNED	4	STWJQEO	JOB QUEUE ELEMENT OFFSET
396	(18C)	BITSTRING	1	STWRECTP	SAVED SPANNED RECORD TYPE
397	(18D)	BITSTRING	1	STWPFLG1	PDDBFLG1 OF LAST DS SENT
398	(18E)	BITSTRING	2		RESERVED
400	(190)	SIGNED	4	STWNNTTR	THIS JOBS NEWS TRACK ADDR
404	(194)	SIGNED	2	STWHDRLN	SAVE AREA FOR JCT HEADER LENGTH
406	(196)	BITSTRING	2		RESERVED
408	(198)	SIGNED	4	STWCOUNT	COUNT OF LOGICAL TP RECORDS
412	(19C)	ADDRESS	4	STWSBUF	SMF BUFFER POINTER
416	(1A0)	DBL WORD	8	STWEXTPL	EXTP PARAMETER LIST AREA
424	(1A8)	DBL WORD	8	STWSTIME	SYSOUT TRANSMISSION START TIME
424	(1A8)	X'78'	0	STWINITL	"*-STWINITL" LENGTH TO CLEAR AT INITIALIZATION
432	(1B0)	DBL WORD	8	STWCWKAR (0)	Transmitter common wrk area

Comment

STWRECCT and STWCURRC are for SDSF's use

End of Comment

432	(1B0)	X'20C'	0	STWRECCT	"(STWRCCOUN-STW)+STWCWKAR" Total record count
432	(1B0)	X'210'	0	STWCURRC	"(STWCUREC-STW)+STWCWKAR" Current record count
952	(3B8)	DBL WORD	8	(0)	

## \$NSTWORK Cross Reference

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
952	(3B8)	X'3B8'	0	STWVAR	"** START OF VARIABLE (OVERLAIDED) 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

952	(3B8)	BITSTRING	8	STWRIDW	EXTP PUT RID AREA
960	(3C0)	CHARACTER	260	STWWORK	WORK AREA FOR MESSAGES
960	(3C0)	X'3C0'	0	STWREC	"STWWORK" START OF TEXT CONSTRUCTION AREA FOR CONTROL RECORDS
960	(3C0)	X'38C'	0	STWPCEWS	"*-PCEWORK" LENGTH OF PCE WORK AREA

## \$NSTWORK Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
PCE	0		STWSWBUF	15C	
STW\$HCQ	13C	80	STWSWMRG	164	
STW\$NODH	13C	40	STWVAR	3B8	3B8
STWCOUNT	198		STWWORK	3C0	
STWCURRC	1B0	210	STW4HJOS	13D	20
STWCWKAR	1B0		STW4JHS	13D	80
STWDCTF	13A		STW4SMRC	13D	40
STWDSBUF	144				
STWENBUF	148				
STWEXTPL	1A0				
STWFLAG2	13C				
STWFLAG4	13D				
STWHDBUF	14C				
STWHDRLN	194				
STWHDTTR	150				
STWINIT	138	138			
STWINITL	1A8	78			
STWIPLLEN	176				
STWIPSWB	170				
STWIPSWL	178				
STWJQEF	13B				
STWJQEF3	13E				
STWJQEO	188				
STWJSWBF	160				
STWJSWBL	156				
STWMRGLN	15A				
STWMRGTU	168				
STWMTTRC	184				
STWMTTRL	180				
STWNODE	138				
STWNTR	190				
STWPCEWS	3C0	38C			
STWPFLG1	18D				
STWPLSIZ	158				
STWPSWBL	154				
STWREC	3C0	3C0			
STWRECCCT	1B0	20C			
STWRECTP	18C				
STWRIDW	3B8				
STWSBUF	19C				
STWSCRST	17C				
STWSPINJ	140				
STWSPLIC	16C				
STWSPLIL	174				
STWSTIME	1A8				

## \$NSWE Information

### \$NSWE Heading Information

**Common Name:** NJE Server Subtask Work Element  
**Macro ID:** \$NSWE  
**DSECT Name:** NSWE  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** 'NSWE'  
     Offset: 0  
     Length: 4  
**Storage Attributes:** Subpool: 0  
     Key: 0  
     Residency: Private storage, Virtual storage below 2GB, real storage anywhere  
**Size:** See NSWLEN  
**Created by:** HASCNJAS  
**Pointed to by:** NSCNSWEH field of the \$NSCT    data area  
                   NSCNSWET field of the \$NSCT    data area  
                   NSCGPWEH field of the \$NSCT    data area  
                   NSCGPWET field of the \$NSCT    data area  
                   NSWNEXT field of the \$NSWE    data area  
                   NSWPREV field of the \$NSWE    data area  
                   NSWGPNXT field of the \$NSWE    data area  
                   NSWGPPRV field of the \$NSWE    data area  
**Serialization:** Used only by the subtask represented by the NSWE.  
**Function:** Represents a JES2-attached subtask in the server address space

### \$NSWE Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NSWE	
0	(0)	CHARACTER	4	NSWEYE (0)	
0	(0)	BITSTRING	1	(0)	\$SAVE area (see \$PSV)
168	(A8)	CHARACTER	8	NSWNAME	Subtask name
176	(B0)	SIGNED	1	NSWNUM	Subtask number
177	(B1)	BITSTRING	3		Reserved
180	(B4)	ADDRESS	4	NSWNEXT	Previous element on chain
184	(B8)	ADDRESS	4	NSWPREV	Next element on chain
188	(BC)	ADDRESS	4	NSWETCB	TCB address
192	(C0)	ADDRESS	4	NSWRECA	Address of recovery routine
196	(C4)	CHARACTER	8	NSWEPNAM	Entry point name (ATTACHX)
204	(CC)	SIGNED	4	NSWDTECB	DETACH ECB
208	(D0)	SIGNED	4	NSWQUECB	QUIESCE ECB
212	(D4)	ADDRESS	4	NSWNSCT	NSCT address
216	(D8)	ADDRESS	4	NSWCNTAD	Addr of subtask count fields in NSCT
220	(DC)	ADDRESS	4	NSWNSSLK	NSST address if a NSST lock is held SHARED by task
224	(E0)		16	NSWTOK	Associated TCB token
240	(F0)	DBL WORD	8	NSWDWORK	DOUBLEWORD WORK AREA
248	(F8)	DBL WORD	8	NSWDWRK2	DOUBLEWORD WORK AREA 2
248	(F8)	X'F0'	0	NSWWRK16	"NSWDWORK,16,C'L' 16-byte work area @Z07LTCP"
256	(100)	SIGNED	4	(0)	
256	(100)	ADDRESS	1	NSWESTAE	FLAGS FOR ESTAEX
257	(101)	ADDRESS	1		SECOND FLAG BYTE
258	(102)	ADDRESS	1		THIRD FLAG BYTE
259	(103)	ADDRESS	1		VERSION NUMBER
260	(104)	ADDRESS	4		TOKEN VALUE AREA
264	(108)	ADDRESS	4		PARM. LIST ADDR. NOT SPECIFIED

## \$NSWE Map

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
268	(10C)	ADDRESS	4		ALET FOR PARM LIST
272	(110)	ADDRESS	4		EXIT ADDR NOT SPEC'D
272	(110)	X'14'	0	NSWESTAL	"*-NSWESTAE" Length of ESTAEX list form
276	(114)	SIGNED	2	NSWERRCT	Error count
278	(116)	SIGNED	2	NSWATTCT	Attach count
280	(118)	SIGNED	4	NSWERRTM	Time of last error

Comment

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End of Comment

284	(11C)	SIGNED	4	NSWTCBTK (0)	
284	(11C)	CHARACTER	16	(0)	TCB TOKEN (INPUT/OUTPUT)
284	(11C)	BITSTRING	8		
292	(124)	SIGNED	4		
296	(128)	ADDRESS	4		
300	(12C)	ADDRESS	4		ASCB ADDRESS (INPUT)
304	(130)	SIGNED	4	(0)	FLAGS (INPUT)
304	(130)	SIGNED	1		TYPE OF TCBTOKEN REQUEST
305	(131)	SIGNED	3		RESERVED
305	(131)	X'18'	0	NSWTCBTL	"*-NSWTCBTK" Length of TCBTOKEN list frm
312	(138)	DBL WORD	8	NSWTRCA (0)	TRCA

Comment

Map ATTACHX work area over TRCA SDUMP area

End of Comment

Comment

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End of Comment

352	(160)	SIGNED	4	NSWATSSL (0)	
352	(160)	ADDRESS	4		DE OR EPLOC ADDRESS
356	(164)	ADDRESS	4		DCB ADDRESS
360	(168)	ADDRESS	4		NEW FORMAT + ECB ADDR
364	(16C)	ADDRESS	4		GSPL OR GSPV
368	(170)	ADDRESS	4		SHSPV OR SHSPL
372	(174)	ADDRESS	4		EXIT ROUTINE ADDRESS
376	(178)	ADDRESS	2		DPMOD VALUE
378	(17A)	ADDRESS	1		LPMOD VALUE
379	(17B)	ADDRESS	1		STATUS BYTE
380	(17C)	ADDRESS	4	(2)	EP NAME SPACE
388	(184)	ADDRESS	4		ADDRESS OF JSCB
392	(188)	ADDRESS	4		(E)STAI PARM LIST
396	(18C)	ADDRESS	4		EXIT ADDRESS
400	(190)	ADDRESS	4		TASKLIB
404	(194)	ADDRESS	1		FLAG BYTE
405	(195)	ADDRESS	1		TASK ID
406	(196)	ADDRESS	2		PARM LIST LENGTH
408	(198)	ADDRESS	4		SUBPOOL LIST ADDRESS/VALUE
412	(19C)	ADDRESS	1		SET FLAGS
413	(19D)	ADDRESS	1		SET UP FORMAT NUMBER
414	(19E)	ADDRESS	1		SET FLAGS
415	(19F)	ADDRESS	1		RESERVED BYTE
416	(1A0)	ADDRESS	4		EPLOC/DE/EP ALET
420	(1A4)	ADDRESS	4		DCB ALET
424	(1A8)	ADDRESS	4		ECB ALET
428	(1AC)	ADDRESS	4		GSPL ALET
432	(1B0)	ADDRESS	4		SHSPL ALET
436	(1B4)	ADDRESS	4		JSCB ALET

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
440	(1B8)	ADDRESS	4		(E)STAI PARAMETER ALET
444	(1BC)	ADDRESS	4		TASKLIB ALET
448	(1C0)	ADDRESS	4		NSHSPL ALET
448	(1C0)	X'64'	0	NSWATTLN	"*-NSWATSSL" Length of list form
912	(390)	DBL WORD	8	NSWORG (0)	
Comment					

-----  
Work area for general purpose subtasks  
-----

----- End of Comment -----

912	(390)	ADDRESS	4	NSWGPNXT	Next available GP subtask
916	(394)	ADDRESS	4	NSWGPPRV	Previous subtask
920	(398)	ADDRESS	4	NSWSQD	SQD address
924	(39C)	ADDRESS	4	NSWGPQ	Current work queue element
928	(3A0)	SIGNED	4	NSWGPECB	ECB for GP subtask
932	(3A4)	ADDRESS	4	NSWGECLB (2)	ECB list
940	(3AC)	BITSTRING	1	NSWGFLG1	Flags
		1... ....		NSWGF1CR	"B'10000000" Subtask was CALLRTM'ed
		.1... ....		NSWGF1RE	"B'01000000" Subtask in recovery

----- Comment -----

-----  
Work area for request manager subtask  
-----

----- End of Comment -----

912	(390)	ADDRESS	4	NSWTSC	TSCT address
916	(394)	ADDRESS	4	NSWTCT	TCT address
920	(398)	ADDRESS	4	NSWNSST	NSST address
924	(39C)	ADDRESS	4	NSWTBUF	TBUF address
928	(3A0)	SIGNED	4	NSWSTECB	STIMERM ECB
932	(3A4)	SIGNED	4	NSWDSTID	STIMERM ID=id-area
936	(3A8)	ADDRESS	4	NSWRRECBL (3)	ECB list
948	(3B4)	SIGNED	4	NSWENQPM (3)	Parameter list for NMS/NRQ queuing service

----- Comment -----

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----- End of Comment -----

960	(3C0)	BITSTRING	24	NSWSTMST	REMOTE STIMERM SET PARM LIST
960	(3C0)	X'18'	0	NSWSTMSL	"*-NSWSTMST" List form length

----- Comment -----

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----- End of Comment -----

984	(3D8)	BITSTRING	16	NSWSTMCN	REMOTE STIMERM TEST/CANCEL PARM LIST
984	(3D8)	X'10'	0	NSWSTMCL	"*-NSWSTMCN" List form length
1000	(3E8)	DBL WORD	8	(0)	
1000	(3E8)	X'3E8'	0	NSWELEN	"*-NSWE" Length of NSWE

## \$NSWE Cross Reference

### \$NSWE Cross Reference

Name	Hex Offset	Hex Value
NSWATTCT		116
NSWATTLN		1C0 64
NSWATSSL		160
NSWCNTAD		D8
NSWDSTID		3A4
NSWDTECB		CC
NSWDWORK		F0
NSWDWRK2		F8
NSWE		0
NSWELEN	3E8	3E8
NSWENQPM	3B4	
NSWEPNAM		C4
NSWERRCT		114
NSWERRTM		118
NSWESTAE		100
NSWESTAL	110	14
NSWETCB		BC
NSWEYE		0
NSWGECBL		3A4
NSWGFLG1		3AC
NSWGF1CR	3AC	80
NSWGF1RE	3AC	40
NSWGPECB		3A0
NSWGPNXT		390
NSWGPPRV		394
NSWGPQ		39C
NSWNAME		A8
NSWNEXT		B4
NSWNSCT		D4
NSWNSSLK		DC
NSWNSST		398
NSWNUM		B0
NSWORG		390
NSWPREV		B8
NSWQUECB		D0
NSWRECA		C0
NSWRECBL		3A8
NSWSQD		398
NSWSTECB		3A0
NSWSTMCL	3D8	10
NSWSTMCN	3D8	0
NSWSTMSL	3C0	18
NSWSTMST	3C0	0
NSWTBUF		39C
NSWTCBTK		11C
NSWTCBTL	131	18
NSWTCT		394
NSWTRCA		138
NSWTSCT		390
NSWTOK		E0
NSWWRK16	F8	F0

## \$NTRDATA Information

### \$NTRDATA Heading Information

**Common Name:** NJE Server Trace data area  
**Macro ID:** \$NTRDATA  
**DSECT Name:** NTR  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** none  
**Storage Attributes:** Subpool: 0  
Key: 0  
Residency: Private storage, Virtual storage below 2GB, real storage anywhere  
**Size:** See NTRBLEN  
**Created by:** \$JES2 TRACE facility  
**Pointed to by:** Maps data starting at TTEDATA in a TTE entry  
**Serialization:** \$TRACE  
**Function:** Maps the \$TRACE data (starting at TTEDATA) in a JES2 trace buffer. Used for trace ids 34, 35, 36, 37, and 38.

### \$NTRDATA Map

#### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NTR	, NJE Trace data
0	(0)	BITSTRING	3	NTRSDVID	Server device id
3	(3)	BITSTRING	3	NTRLVID	Line device id
6	(6)	BITSTRING	1	NTRFLOW	Flow direction of record
		1... ....		NTRFFJ2M	"B'10000000" From: JES2 main addrspc
		.1... ....		NTRFFJ2N	"B'01000000" From: JES2 netsrv addrspc
		..1. ....		NTRFFIAZ	"B'00100000" From: Common netsrv code
		...1....		NTRFFTCP	"B'00010000" From: TCP/IP
		.... 1...		NTRFTJ2M	"B'00001000" To: JES2 main addrspc
		.... .1..		NTRFTJ2N	"B'00000100" To: JES2 netsrv addrspc
		.... ..1.		NTRFTIAZ	"B'00000010" To: Common netsrv code
		.... ...1		NTRFTTCP	"B'00000001" To: TCP/IP

Comment

NTRTYPE contains either one of the types below, or either the RCB or SRCB of the record indicating the type of record. The corresponding hex values for each record recognized are as follows:

- X'00' - EOT (SRCB of EOT record, from RIDXEOT)
- X'01' - NRQ (NTRTNRQ, from TBFTNRQ)
- X'02' - NMS (NTRTNMS, from TBFTNMS)
- X'03' - LREQ (NTRTLREQ, from TBFTLREQ)
- X'04' - JOB (NTRTJOB, from TBFTJOB)
- X'05' - CONN (NTRTCOMP, from TBFTCONN)
- X'40' - Transmitter cancel (SRCB of TC, from RIDXTC)
- X'90' - Request to init (RCB of RI, from RIDALOCS)
- X'B0' - Receiver cancel (RCB of RC, from RIDPDRC)
- X'C0' - Job header (SRCB of JH, from SRCBJH)
- X'C1' - ACK EOT (RCB of ACK EOT from RIDAKEOT, plus one to differentiate from job header)
- X'D0' - Job trailer (SRCB of JT, from SRCBJT)

## \$NTRDATA Cross Reference

Offsets							
Dec	Hex	Type/Value	Len	Name (Dim)	Description		
X'E0'	-	Dataset header (SRCB of DSH, from SRCBD SH)					
X'FF'	-	Data					
				End of Comment			
7	(7)	BITSTRING	1	NTRTYPE	Data type		
7	(7)	X'FF'	0	NTRDATA	"FF" Contains data only		
7	(7)	X'1'	0	NTRTNRQ	"TBFTNRQ" Contains a NRQ		
7	(7)	X'2'	0	NTRTNMS	"TBFTNMS" Contains a NMS		
7	(7)	X'3'	0	NTRTLREQ	"TBFTLREQ" Contains a LINE request		
7	(7)	X'4'	0	NTRTJOB	"TBFTJOB" Contains a JOB request		
7	(7)	X'5'	0	NTRTCNN	"TBFTCONN" Contains a CONNECT request		
8	(8)	DBL WORD	8	NTRQTIME	Queue time		
16	(10)	DBL WORD	8	NTRRTIME	Total request time		
24	(18)	ADDRESS	4	NTRDADD	Actual data address		
28	(1C)	SIGNED	2	NTRDLEN	Length of variable data		
28	(1C)	X'1E'	0	NTRBLEN	"*-NTR"		
28	(1C)	X'1E'	0	NTRDATA	***		

## \$NTRDATA Cross Reference

Name	Hex Offset	Hex Value
NTR	0	
NTRBLEN	1C	1E
NTRDADD	18	
NTRDATA	1C	1E
NTRDLEN	1C	
NTRFFIAZ	6	20
NTRFFJ2M	6	80
NTRFFJ2N	6	40
NTRFFTCP	6	10
NTRFLOW	6	
NTRFTIAZ	6	2
NTRFTJ2M	6	8
NTRFTJ2N	6	4
NTRFTTCP	6	1
NTRLDVID	3	
NTRQTIME	8	
NTRRTIME	10	
NTRSDVID	0	
NTRTCNN	7	5
NTRRTDATA	7	FF
NTRTJOB	7	4
NTRTLREQ	7	3
NTRTNMS	7	2
NTRTNRQ	7	1
NTRTYPE	7	

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## **\$NTW Information**

### **\$NTW Programming Interface information**

Programming Interface information

**\$NTW**

End of Programming Interface information

## Heading Information • \$NTW Map

### \$NTW Heading Information

<b>Common Name:</b>	HASP Network Path Manager Trace Work Area
<b>Macro ID:</b>	\$NTW
<b>DSECT Name:</b>	NTW
<b>Owning Component:</b>	JES2 (SC1BH)
<b>Eye-Catcher ID:</b>	'NTW '
	Offset: NTWID-NTW
	Length: 4
<b>Storage Attributes:</b>	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.
<b>Size:</b>	See NTWLEN
<b>Created by:</b>	JES2 Initialization JES2 Line Manager Processor
<b>Pointed to by:</b>	PCTNTW field of the \$PCT data area (for the permanent work area created during JES2 initialization.)
<b>Serialization:</b>	No special serialization other than that currently implied by the Network Path Manager.
<b>Function:</b>	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	NTWTTYPE	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
16	(10)	CHARACTER	8	NTWCONS	Where record was from: LINEnnnn, MLINEn, 'FULLPATH', 'LINEDOWN', 'CONSOLE', 'PARMLIB'

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
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	NTWRIFL	"16" Invalid NJE signon feature flags
69	(45)	X'11'	0	NTWRIPM	"17" Incorrect value for PATHMGR=
69	(45)	X'12'	0	NTWRRIPT	"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	NTWROLDLDR	"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
69	(45)	X'1A'	0	NTWRIPW	"26" Incorrect secure signon

## \$NTW Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
NTW	0		NTWOCES	18	
NTWCCESL	18	10	NTWOSTAT	B	
NTWCESL	18	4	NTWRDCES	45	19
NTWCONS	10		NTWRDUPM	45	17
NTWFLAG1	9		NTWREC	1C	
NTWID	0	D5E3E640	NTWRERR	45	D
NTWLEN	45	45	NTWRGARB	45	C
NTWMEMB	D		NTWRICR	45	4
NTWNAT	1C		NTWRICS	45	5
NTWNCCB	1C		NTWRIFF	45	10
NTWNCCI	1C		NTWRIGN	45	B
NTWNCCK	1C		NTWRIGNA	45	16
NTWNCCM	1C		NTWRILP	45	8
NTWNODE	E		NTWRIMT	45	18

## \$NTW Cross Reference

Name	Hex Offset	Hex Value
NTWRINN	45	1
NTWRINP	45	9
NTWRIPM	45	11
NTWRIPT	45	12
NTWRIPW	45	1A
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

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## **\$NVL Information**

### **\$NVL Programming Interface information**

Programming Interface information

#### **\$NVL**

End of Programming Interface information

## Heading Information • \$NVL Cross Reference

### \$NVL Heading Information

**Common Name:** Volume Allocation Table  
**Macro ID:** \$NVL  
**DSECT Name:** NVL  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** None  
**Storage Attributes:** Subpool: 0  
Key: 1  
Residency: Virtual and real storage are in 31 bit storage in the private storage of the JES2 address space.  
**Size:** See NVLTBLN  
**Created by:** HASPIRMA  
**Pointed to by:** CIRVOLTB field of the \$CIRWORK data area  
**Serialization:** None required  
**Function:** Maps the description of SPOOL volumes defined via initialization statements or discovered via a UCB scan.

### \$NVL Map

Offsets					
Dec	Hex	Type/Value	Len	Name (Dim)	Description
0	(0)	STRUCTURE	0	NVL	Allocation table entry DSECT
0	(0)	CHARACTER	6	NVLVOLID	Volume serial number
6	(6)	CHARACTER	44	NVLDSN	Data set name
50	(32)	BITSTRING	1	NVLFLAGS	Allocation request flags
51	(33)	BITSTRING	1	NVLTYPE	NVL type flag
		1.... ....		NVLINIT	"B'10000000" Init statement created
52	(34)	BITSTRING	128	NVLSYAFN	Spool system affinity name list
180	(B4)	ADDRESS	4	NVLUCBPT	Volume UCB address
184	(B8)	CHARACTER	8	NVLPTOKN	PIN token from \$GETUCBS
192	(C0)	DBL WORD	8	(0)	
192	(C0)	X'C0'	0	NVLTBLN	"*-NVL" Length of NVL table

### \$NVL Cross Reference

Name	Hex Offset	Hex Value
NVL	0	
NVLDSN	6	
NVLFLAGS	32	
NVLINIT	33	80
NVLPTOKN	B8	
NVLSYAFN	34	
NVLTBLN	C0	C0
NVLTYPE	33	
NVLUCBPT	B4	
NVLVOLID	0	

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## **\$OCR Information**

### **\$OCR Programming Interface information**

Programming Interface information

**\$OCR**

End of Programming Interface information

## Heading Information • \$OCR Map

### \$OCR Heading Information

**Common Name:** OUTPUT Control Record DSECT  
**Macro ID:** \$OCR  
**DSECT Name:** OCR  
**Owning Component:** JES2 (SC1BH)  
**Eye-Catcher ID:** None  
**Storage Attributes:** Subpool: See \$OCT  
                   Key: See \$OCT  
                   Residency: See \$OCT  
**Size:** See OCRLENG  
**Created by:** Initially created by HASPRCCS routine in HASCSRIP when a job encounters a /\*OUTPUT card.  
**Pointed to by:** OCRs reside in the OCT starting at label OCTOCR. The offset beyond the last OCR in the OCT is in OCTOFOCR.  
**Serialization:** While a job is in execution, the OCR resides in the user address space, so that no other JES2 PCE will update the OCR. At other times, the JES2 dispatcher is used.  
**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	OCRFBC	FCB SPECIFICATION
28	(1C)	CHARACTER	4	OCRUUCS	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	OCRUDST	"*-OCRDEST1" LENGTH 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	COMPACTON TABLE NUMBER
106	(6A)	SIGNED	2	OCRKPTP	NO. OF LOGICAL PAGES/CKPT
108	(6C)	SIGNED	2	OCRKPTL	NO. OF LINES/LOGICAL PAGE
110	(6E)	BITSTRING	1	OCRLINCT	LINECT

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
111	(6F)	BITSTRING	12		RESERVED
124	(7C)	SIGNED	4	OCREND (0)	END OF OUTPUT CONTROL RECORD
124	(7C)	X'7C'	0	OCRLENG	"*-OCR"

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	



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## **\$OCT Information**

### **\$OCT Programming Interface information**

Programming Interface information

**\$OCT**

End of Programming Interface information

## Heading Information • \$OCT Map

### \$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	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.

0	(0)	X'40'	0	OCTOCT	End of Comment "BUFMEMW1-BFPDSECT+OCT" Storage address of next OCT
---	-----	-------	---	--------	---

Comment

End of buffer prefix fields

0	(0)	BITSTRING	1	(0)	End of Comment BUFFER CONTROL INFORMATION
0	(0)	X'68'	0	OCTSTART	*** START OF DATA WRITTEN TO SPOOL

## Offsets

Dec	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	1	OCTVERS	OCT version:
130	(82)	X'0'	0	OCTVER0	"0" Pre-z/OS 1.12 (MTTRs)
130	(82)	X'C'	0	OCTVER12	"12" z/OS 1.12+ (MQTRs)
131	(83)	BITSTRING	1		RESERVED FOR FUTURE USE

Comment

OCTVER0 (Pre-z/OS 1.12) OCT format:

End of Comment					
132	(84)	BITSTRING	4	OCTTRACK_Z11	Track address (MTTR) of this OCT
136	(88)	BITSTRING	4	OCTOCTTR_Z11	Track address (MTTR) of next OCT
140	(8C)	SIGNED	4	OCTOCROF_Z11	Offset beyond last OCR in OCT
144	(90)	BITSTRING	4	OCTRSPV1_Z11	Reserved for future use

Comment

OCTVER12 (z/OS 1.12+) OCT format:

End of Comment					
132	(84)	BITSTRING	6	OCTCURTK	Track address (MQTR) of this OCT
138	(8A)	BITSTRING	6	OCTNXTTK	Track address (MQTR) of next OCT
144	(90)	SIGNED	4	OCTOFOCR	Offset beyond last OCR in OCT

Comment

START OF OUTPUT CONTROL RECORDS (\$OCRs)

End of Comment					
148	(94)	BITSTRING	1	OCTOOCR	START OF OUTPUT CONTROL RECORDS

## \$OCT Cross Reference

### \$OCT Cross Reference

Name	Hex Offset	Hex Value
OCT		0
OCTCURTK		84
OCTID		68
OCTJBKEY		78
OCTJBNUM		74
OCTJNAME		6C
OCTLENG		80
OCTNXTTK		8A
OCTOCR		94
OCTOCROF_Z11		8C
OCTOCT	0	40
OCTOCTTR_Z11		88
OCTOFOCR		90
OCTR SV1_Z11		90
OCTSPLNG	7C	18
OCTSTART	0	68
OCTTRACK_Z11		84
OCTVERS		82
OCTVER0	82	0
OCTVER12	82	C

## **\$ODPARM Information**

### **\$ODPARM Programming Interface information**

Programming Interface information

#### **\$ODPARM**

End of Programming Interface information

## Heading Information • \$ODPARM Map

### \$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	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
17	(11)	X'D'	0	ODPFSPL	"13" Footprint - Write SWBIT
17	(11)	X'E'	0	ODPFCLP	"14" Footprint - Merge cleanup

## Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
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	MERGE/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	ODPIOTB	Addr IOT buffers
104	(68)	SIGNED	4	ODPSJRC	SJF Service return code
108	(6C)	SIGNED	4	ODPSJRS	SJF Service reason code
112	(70)	ADDRESS	4	ODPPCE	Address of PCE
116	(74)	SIGNED	4	ODPRSVS1	Reserved for service
120	(78)	DBL WORD	8	(0)	Alignment

## \$ODPARM Cross Reference

### Offsets

Dec	Hex	Type/Value	Len	Name (Dim)	Description
120	(78)	ADDRESS	4	ODPJOAA	Address of UPDATE MODE JOA.
124	(7C)	CHARACTER	76	ODPCHJOE	Char-JOE area
200	(C8)	CHARACTER	8	ODPJUSER	Input - JOEUSER from characteristic JOE Output - Userid included in modify SWBTU or '<IP>' if new dest is in IP-format.
208	(D0)	BITSTRING	4	ODPROUT	Route code from DEST mod TU
212	(D4)	CHARACTER	84	ODPTKWRK	Security token work area
296	(128)	DBL WORD	8	(0)	Alignment
296	(128)	CHARACTER	96	ODPJQE	Work-JQE area
392	(188)	CHARACTER	56	ODPJSPLS	JESSPOOL logstring
448	(1C0)	DBL WORD	8	(0)	End on a Dblword boundary
448	(1C0)	X'1C0'	0	ODPSIZE	"*-ODPBGN" Size of parameter area

## \$ODPARM Cross Reference

Name	Hex Offset	Hex Value	Name	Hex Offset	Hex Value
ODPABND	12	10	ODPRDEST	11	10
ODPARM	0		ODPRIOE	11	8
ODPBGN	0	0	ODPRIOT	11	20
ODPCHJOE	7C		ODPRMERG	11	14
ODPCURB	48		ODPROUT	D0	
ODPDATLN	14		ODPRSASF	11	4
ODPDSAFW	18		ODPRSERV	11	C
ODPERAD	50		ODPRSPLT	11	18
ODPERBAS	12	2	ODPRSVH1	5E	
ODPERCLN	58		ODPRSVS1	74	
ODPERR8	11	8	ODPRSVW1	16	
ODPFCLP	11	E	ODPRSV1	5	
ODPFCNV	11	2	ODPRSV2	6	
ODPFDSP	11	5	ODPSERVL	38	
ODPFINB	40		ODPSERVP	34	
ODPFIOT	11	B	ODPSIZE	1C0	1C0
ODPFIRB	44		ODPSJIO	60	
ODPFLG1	12		ODPSJRC	68	
ODPFLG2	13		ODPSJRS	6C	
ODPFMGI	11	4	ODPTKWRK	D4	
ODPFMGS	11	6	ODPTUAD	54	
ODPFMTR	11	C	ODPTUCLN	5A	
ODPFOOT	10		ODPTUNUM	5C	
ODPFOOTP	11		ODPV#	4	1
ODPFSAF	11	3	ODPVER	4	
ODPFSJM	11	7	ODPWAVE	8	
ODPFSJS	11	8	ODPWRK1	2C	
ODPFSPL	11	D	ODPWRK2	30	
ODPFSTR	11	1	ODP2ERAS	13	20
ODPFTUS	11	9	ODP2IPAD	13	40
ODPFWRI	11	A	ODP2NOIP	13	80
ODPID	0				
ODPIOTB	64				
ODPJOAA	78				
ODPJOEA	C				
ODPJQE	128				
ODPJSPLS	188				
ODPJUSER	C8				
ODPMTUAD	3C				
ODPNOBAS	12	1			
ODPNOMRG	12	8			
ODPNOOVR	12	4			
ODPPCE	70				
ODPPREB	4C				
ODPPREC	11	F			
ODPRABN	11	1C			
ODPRBADP	11	24			
ODPRCUR	12	20			

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